

# FIELD GUIDE

TO DRUG DEMAND REDUCTION PROGRAM DEVELOPMENT

SECOND EDITION



# 2017

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SECOND EDITION

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The **First Edition of the FIELD GUIDE to Drug Demand Reduction Program Development** was originally created to orient and inform US Embassy personnel as they faced a range of issues related to substance use.

With greater reflection, it became clear to the Drug Demand Reduction team in the Bureau of International Narcotics and Law Enforcement Affairs (INL) that the **FIELD GUIDE to Drug Demand Reduction Program Development** had both a broader mission to fulfill and a far larger audience to reach than that of exclusively US Embassy personnel.

Over the last year, my team has worked diligently to fulfill this expanded mission and reach out globally. The **Second Edition of the FIELD GUIDE to Drug Demand Reduction Program Development** is presented in the spirit of unifying and fostering connection among the growing demand reduction community worldwide. Its primary purpose is to inform all demand reduction professionals -- both organizationally and individually -- across a spectrum of drug demand reduction challenges. A highly informed demand reduction community can better develop and implement evidence-based solutions.

# FOREWORD

**Brian A. Morales, Division Director**

Global Drug Demand Reduction Programs

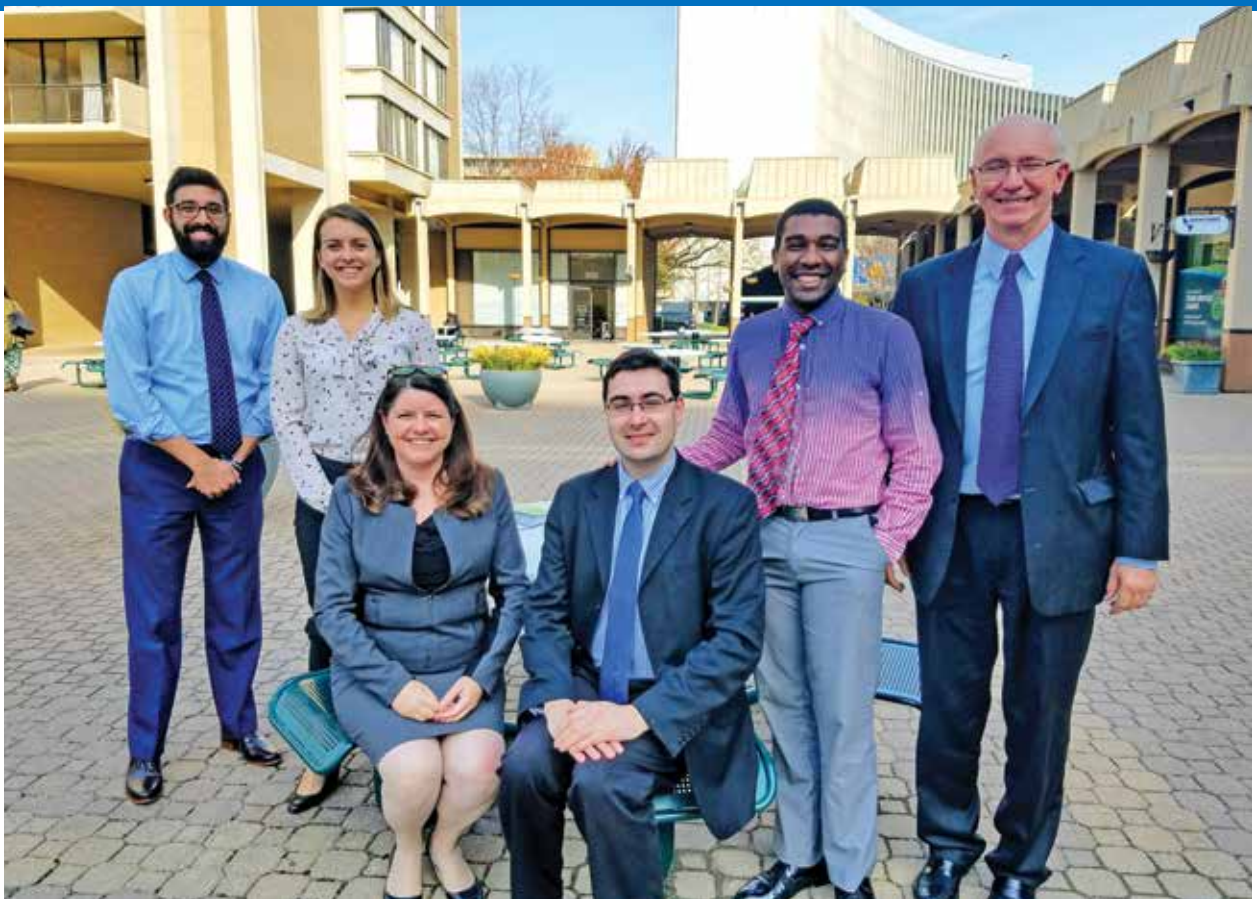
Office of Policy, Planning and Coordination

Bureau of International Narcotics and Law Enforcement Affairs

U.S. Department of State

Washington, D.C.

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The audience for the **Second Edition of the FIELD GUIDE to Drug Demand Program Development** includes U.S. Embassy personnel and additionally, the increasingly wide range of demand reduction-focused individuals and organizations, including:

1. The scientific community of researchers in the field of substance use prevention and treatment of substance use disorders;
2. Professionals involved in the development of demand-reduction related technologies, such as brain imaging and substance screening;
3. Representatives from governments and intergovernmental organizations tasked with the development, implementation, and evaluation of demand reduction policies and programs;
4. Non-governmental organizations with whom partnerships are essential for the achievement of demand reductions policy goals; and
5. Public health practitioners worldwide, who seek greater knowledge, skills and credentials to address substance use and related disorders among children, adolescents, adults, and families.

In the last decade, the scope and complexity of drug demand reduction challenges have increased, with new

threats emerging, including very young children being identified with substance use disorders, increases in availability of new psychoactive substances, and evidence of toxic adulterants in seized drugs in three continents which has triggered a need for enhanced public health responses and emergency alerts at local levels.

While the scope of the problem has expanded, so too has the range of solutions. Policymakers, program providers, and service professionals have an expanding menu of innovative approaches and successful outcomes from which to craft informed and comprehensive responses, including global prevention and treatment protocols for children, breakthrough testing technologies for tracking adulterants, enhanced training and workforce development options, and evidence-based prevention and treatment program options shown to be effective across diverse cultures.

The **FIELD GUIDE to Drug Demand Program Development**, to be produced annually, welcomes its broad-based readership. We look forward to highlighting issues, focusing efforts, inviting your collaboration, strengthening partnerships, increasing participation, and fostering unity and understanding among the ever-widening global demand reduction community.

# ACKNOWLEDGMENTS

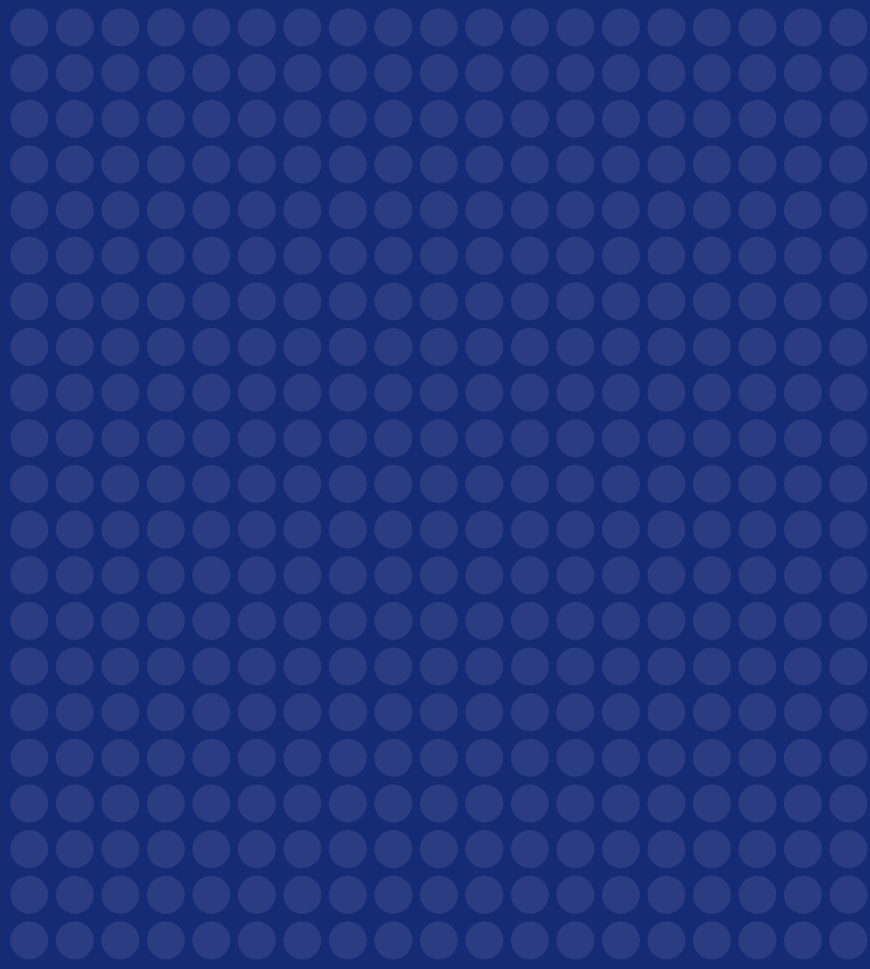
**THE FIELD GUIDE TO DRUG DEMAND REDUCTION PROGRAM DEVELOPMENT, Second Edition was developed by a team of committed individuals.**

First, at the US Department of State, thanks go to the members of the Global Drug Demand Reduction Program Division of the Office of Policy, Planning and Coordination within the Bureau of International Narcotics and Law Enforcement Affairs (INL) whose biographies are presented in the opening section of this document.

A host of individuals from various US agencies and international organizations made significant contributions to the FIELD GUIDE and their brief biographies are listed in their respective articles. In addition, special recognition goes to the outstanding production team of the Colombo Plan especially to graphic designer, Mr. Rasalingam Nagarajah who worked closely with lead editor, Nancy W. Dudley.

Above all, appreciation goes to Brian Morales, Division Director of INL's Global Drug Demand Reduction Programs, whose creativity, commitment, and vision brought the Second Edition of the FIELD GUIDE to fruition.

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# INTRODUCING THE INL DRUG DEMAND REDUCTION TEAM

**CURRENT STAFF**





## BRIAN MORALES

### PORTFOLIO

- ✦ Management of the Drug Demand Reduction (DDR) Team
- ✦ International Consortium of Universities Drug Demand Reduction (ICUDDR)
- ✦ Mapping Treatment Capacity
- ✦ Strategic Planning and Communication Products

Brian Morales is the Division Director for Global Drug Demand Reduction Programs in INL's Office of Policy, Planning and Coordination (INL/PC). He has worked on the issue of drug demand reduction for eight years, covering programs throughout the world. One of his most notable achievements was the establishment of the International Society of Substance Use Prevention and Treatment Professionals (ISSUP) in July 2015, bringing together the global treatment and prevention workforce into an association that promotes professionalization through training and credentialing. In March 2016, he collaborated with international partners to launch the International Consortium of Universities for Drug Demand Reduction (ICUDDR) to promote academic study around the world in the field of addiction science. Prior to INL/PC, he covered Afghanistan counter-narcotics issues and also served in the Bureau of Western Hemisphere Affairs at the U.S. Mission to the Organization of American States. Brian earned his Bachelor of Science in Foreign Service (2001) and a Master of Arts in Latin American Studies (2004), both from Georgetown University.



## CHARLOTTE SISSON

### PORTFOLIO

- ◇ Alternatives to Incarceration Curricula Development, Credentialing, ISSUP-3, Mapping Treatment Capacity, Humphrey Fellowship, Colombo Plan
- ◇ Special Populations: Women, Trafficking in Persons, Child Soldiers
- ◇ Intranasal Naloxone Trial, Toxic Adulterants
- ◇ Evaluation: Pakistan
- ◇ Country Programs: Mexico, Indonesia

Charlotte Sisson joined the team in February 2016 as the Team Lead for Drug Demand Reduction. She brings over 16 years of drug policy experience from working at the White House Office of National Drug Control Policy in the areas of drug supply and demand reduction. She earned her undergraduate degree from Virginia Tech in Liberal Arts and Sciences concentrating in Economics, Political Science and French and received a Master's Degree in International Policy and Practice from George Washington University in 2001. Over the past year Charlotte has integrated herself into the team working to oversee an intranasal naloxone study being conducted by UNODC and WHO. She is currently pursuing efforts to begin the development of a new curriculum aimed at building partnerships to increase access to treatment between public health and criminal justice systems.



## BILL MCGLYNN

### PORTFOLIO

- ⇒ ISSUP, Mapping Treatment Capacity, African Union
- ⇒ Special Population: Epidemiological Networks for Africa

Bill is an experienced U.S. State Department professional. From 2008 to 2011, Bill was INL's Principal Deputy Assistant Secretary. In other assignments, he served as Deputy U.S. Permanent Representative to the Organization of American States and in the U.S. embassies in Haiti, Gabon, the European Union, Austria, and Portugal. Bill received his undergraduate degree in 1976 from the University of Virginia, studied law at William and Mary, and was a member of the Executive Education program at Princeton (1995-1996). Bill has been working on drug demand reduction programs in Africa, Asia, and Latin America. As part of the drug demand reduction team, Bill has been instrumental in working with the African Union on establishing indicators as part of an epidemiological project funded by INL.



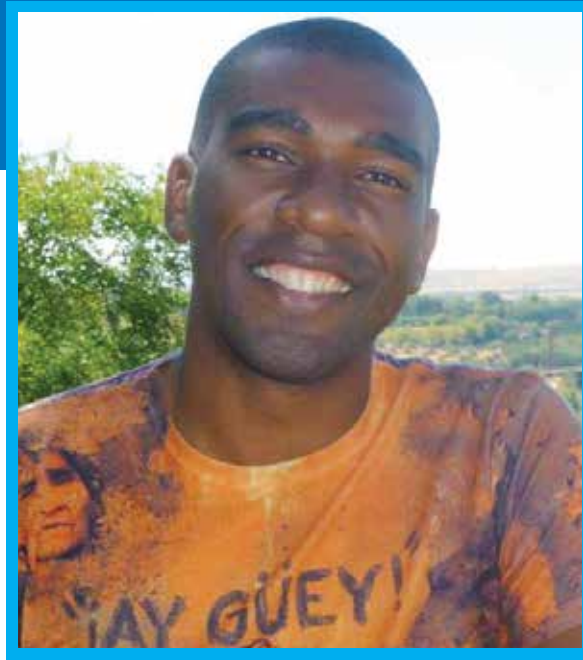
## MARIA SKIRK

### PORTFOLIO

- ◇ Universal Prevention Curriculum, Policymaker Curriculum, ISSUP Website, Mapping Prevention Capacity, “Friends of Demand Reduction” (Private Sector Donor Group) Demand Reduction Expert to the 2017 CND, OAS, CADCA
- ◇ Special Populations: Rural Populations
- ◇ Evaluations: Afghanistan & Peru UPC Evaluation
- ◇ Country Programs: Afghanistan, Pakistan, Peru

Maria Skirk joined the Drug Demand Reduction team in July 2015, covering the Universal Prevention Curriculum (UPC) development and training. She also supports the work of professionalizing the demand reduction workforce in Afghanistan and Pakistan. Her previous work at the U.S. Department of State includes creating and managing strategic communication campaigns and involvement in YSEALI (the Young Southeast Asian Leaders Initiative), YALI (the Young African Leaders Initiative), and forging partnerships with the private sector to strengthen the Department’s ability to engage with youth communities around the world. Maria first joined the Department as a Presidential Management Fellow in 2011, which included a rotation at the U.S. Embassy in Jakarta. She has a Masters Degree in International Affairs from the George Washington University, is a native speaker of Lithuanian, and is conversational in Spanish and Russian.





## JULLION COOPER

### PORTFOLIO

- ✦ Universal Treatment Curriculum (UTC) - Dissemination, Generalist Curricula, Mapping Treatment Capacity, "Friends of Demand Reduction" (Government/Public Entities Donor Group), OAS/CP/UNODC Western Hemisphere Collaboration
- ✦ Special Populations: Recovery, LGBTQI
- ✦ Evaluation: Outcome Evaluation for UTC in Philippines
- ✦ Country Program: Liberia

Jullion Cooper joined the DDR team in February 2017. He is a Foreign Service Officer with a B.A. in Criminal Justice from the University of Delaware and an M.A. in International Relations from Johns Hopkins' School of Advanced International Studies. Before joining the Department, Jullion assisted HIV+ incarcerated individuals in the Boston area with re-adjusting to life outside of prison. During his tenure at the U.S. Consulate in Guangzhou, he aided U.S. citizens in distress, promoted LGBT civil society and vetted prospective Chinese citizens for tourist visas. During the next year he will lead efforts in the Western Hemisphere working with the Colombo Plan, the United Nations Office on Drugs and Crime and the Organization of American States to increase the number of treatment professionals in the region. Jullion is an asset to the drug demand reduction team speaking fluent Chinese, Spanish, Catalan and Italian, and is working on Hebrew and Haitian Creole proficiency.



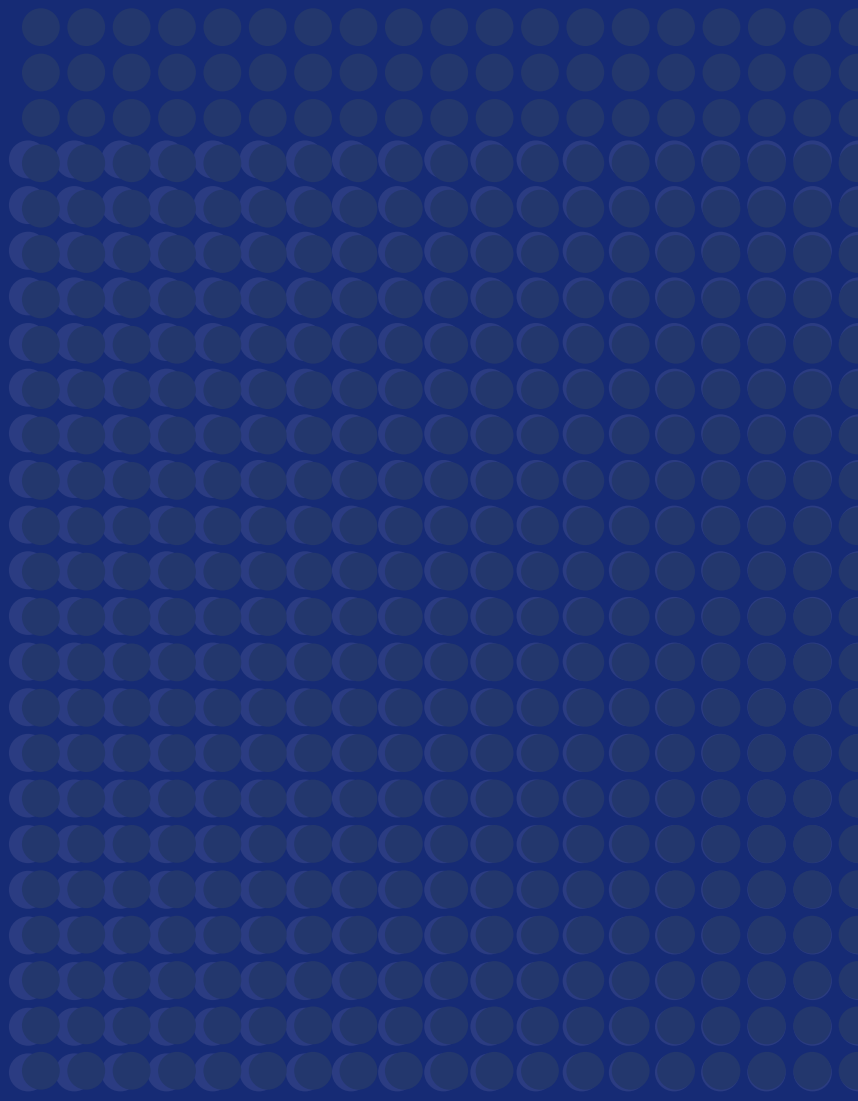
## ALAN PIRACHA

- ◇ Universal Treatment Curriculum (UTC) - Development, Mapping Treatment Capacity, Coordination with INL Embassy Focal Points, UNODC, WHO
- ◇ Special Populations: Children, Countering Violent Extremism
- ◇ Country Program: Myanmar

Alan joined the drug demand reduction team in early 2017 and covers the development of the advanced Universal Treatment Curriculum, Myanmar, and special population issues for children and countering violent extremism. Alan previously worked in several other capacities at the State Department, including in INL's Afghanistan and Pakistan office where he covered multilateral engagement for justice sector issues, including efforts that supported demand reduction programming in Afghanistan. Alan brings a wealth of background having served as the Niger Desk Officer at the State Department and working in the Office of the Chief of Protocol and Bureau of Overseas Building Operations. He completed his Master of Arts in public diplomacy at American University and his undergraduate education in political science and film production at Bowling Green State University.

# INL DRUG DEMAND REDUCTION TEAM

FORMER STAFF





## SADIE THIMSEN

For over three years, Sadie Thimsen worked in the field of global drug demand reduction in the Bureau of International Narcotics and Law Enforcement Affairs as a Foreign Affairs Officer. Sadie served as the office's lead on the Universal Treatment Curriculum development and dissemination. She also oversaw the drug-free communities grant to the Community Anti-Drug Coalitions of America (CADCA), which works with communities in over 20 countries around the world to prevent drug use based on community needs. In addition to a Masters of Public Administration from the George Washington University, Sadie attended Virginia Commonwealth University, where she studied International Addiction Science and also received a Graduate Certificate in Addiction Studies from Eastern Washington University. In 2015, Sadie obtained her credentials as an International Certified Addiction Professional I (ICAP I) at the launch of ISSUP in Bangkok, Thailand.



## NORA REYES

Nora Reyes works with U.S. Embassy in the Dominican Republic, and has an International Business degree from Northeastern University. As Program Assistant, she is responsible for supporting INL projects; in 2016 she began working on drug demand reduction. During her rotation with INL/PC she learned about evidence-based programs, and attended planning meetings to observe how INL/PC effectively elaborates strategies to align initiatives in the field. Soon after her training, a three year project with UNODC was funded to implement the "Strong Families" program. Future projects for which INL/PC continues to provide advice include: mapping of treatment centers, coordinating the UPC/UTC trainings, and implementing community coalition trainings.



## MARY "TRINA" BOLTON

Mary "Trina" Bolton works with U.S. Embassies, other bureaus, and external partners to manage people-to-people sports exchanges for delegations around the world in her role as a program officer for the U.S. Department of State's Sports Diplomacy Division. Trina focuses on the ESPN "Global Sports Mentoring Program" to empower women, as well as the "Sport for Community" program on disability rights, sports and sustainability projects. During Trina's January to April 2016 detail in INL, she maintained partnerships with UNODC, the Colombo Plan, and CADCA with an emphasis on disseminating the UTC. Building on her INL experience, Trina has since encouraged international sports alumni to create healthy alternative sports opportunities for youth who are most vulnerable to substance use.



## ROBERT WEISS

Robert Weiss served on the demand reduction team from June to September. He worked on organizing the ISSUP-2 event, providing an opportunity to collaborate with several international organizations and plan a major conference, participating in the ISSUP Board of Trustees meeting in Geneva, Switzerland and conducting an advance mission to Campinas, Brazil. He also conducted research on vulnerable, marginalized populations exposed to drug use. Working in the Bureau of Consular Affairs on the issue of International Child Abductions, his time in INL/PC helped him understand how drug use can become a problem in families where the children are victims of international abductions and face critical risk-factors.



## LEE COTTON

Lee Cotton of Birmingham, Alabama, recently completed his master's degree in international security from the University of Denver. In his coursework, Lee studied the effects of illicit markets and international drug trade with particular emphasis on Latin America. At the Department of State, he coordinated training programs and funding with the Colombo Plan Drug Advisory Programme and the Organization of American States' Inter-American Drug Abuse Control Commission.



## TINSAE GEBRIEL

Tinsae Gebriel of Maryland, is pursuing her master's degree in Public Policy at the George Washington University. She is an Ethiopian-American and received her B.A. in Criminology and Criminal Justice from the University of Maryland. Tinsae joined INL's Drug Demand Reduction team in the Spring of 2016 as an intern, providing support with the UPC Mapping Tool initiative and researching patterns of substance use among special populations. Tinsae currently works at the U.S. Department of Justice and aspires to become a policy analyst, focusing on social problems within marginalized communities.

# INTRODUCTION

The worldwide Drug Demand Reduction audience, the readership for this FIELD GUIDE, faces daunting challenges in 2017 in six continents. Patterns, trends, and consequences of psychoactive substance use differ in some respects from those of even a few years ago. New threats and new solutions are coming into focus. Information sources and innovative approaches are being communicated digitally, across communities and borders. The once familiar landscape of how to best perform drug demand reduction programming is changing, in many cases almost daily with the advent of electronically and instantly shared data, research, and outcomes. The following chapters are a repository for the latest information on drug demand reduction trends, policies, and science; and they are a hopeful testament to the value of a shared forum for common challenges. Simply put, this FIELD GUIDE sets forth for the worldwide drug demand reduction audience a “2017 snapshot” of the scope of the problem, what is working, why, and why not.

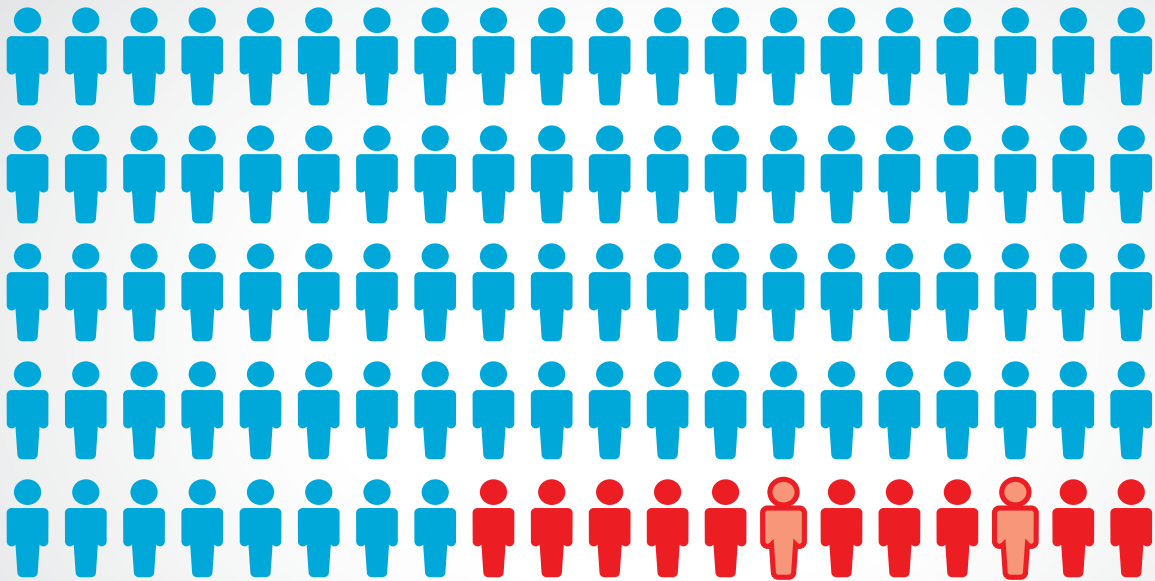


# THE WORLD DRUG PROBLEM





## 247 MILLION PEOPLE USED DRUGS IN THE PAST YEAR

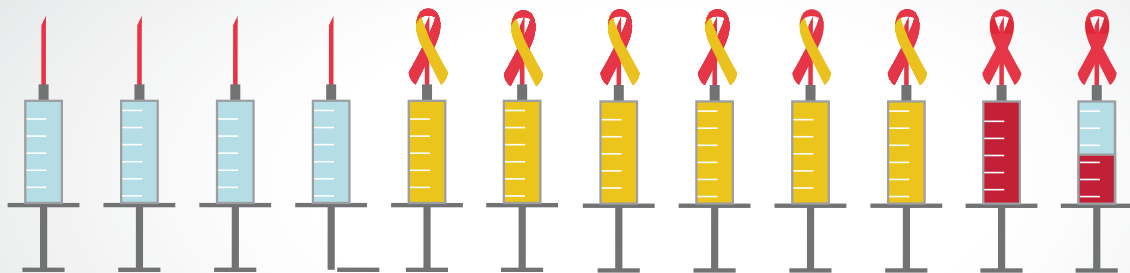


» **29 MILLION** SUFFER FROM DRUG USE DISORDERS

» **BUT ONLY 1 IN 6** PEOPLE WITH DRUG USE DISORDERS IS IN TREATMENT

Psychoactive substance use and substance use disorders (SUDs) continue to be major problems around the world, taking a toll on global health and on social and economic functioning. According to the 2016 World Drug Report of the United Nations Office of Drug and Crime (UNODC), an estimated 1 in 20 adults, or a quarter of a billion people between the ages of 15 and 64 years, used as least one drug in 2014. An estimated 29 million people who use drugs suffer from substance use disorders, and of those, there are an estimated 12 million persons who inject drugs.

## 12 MILLION PEOPLE INJECT DRUGS

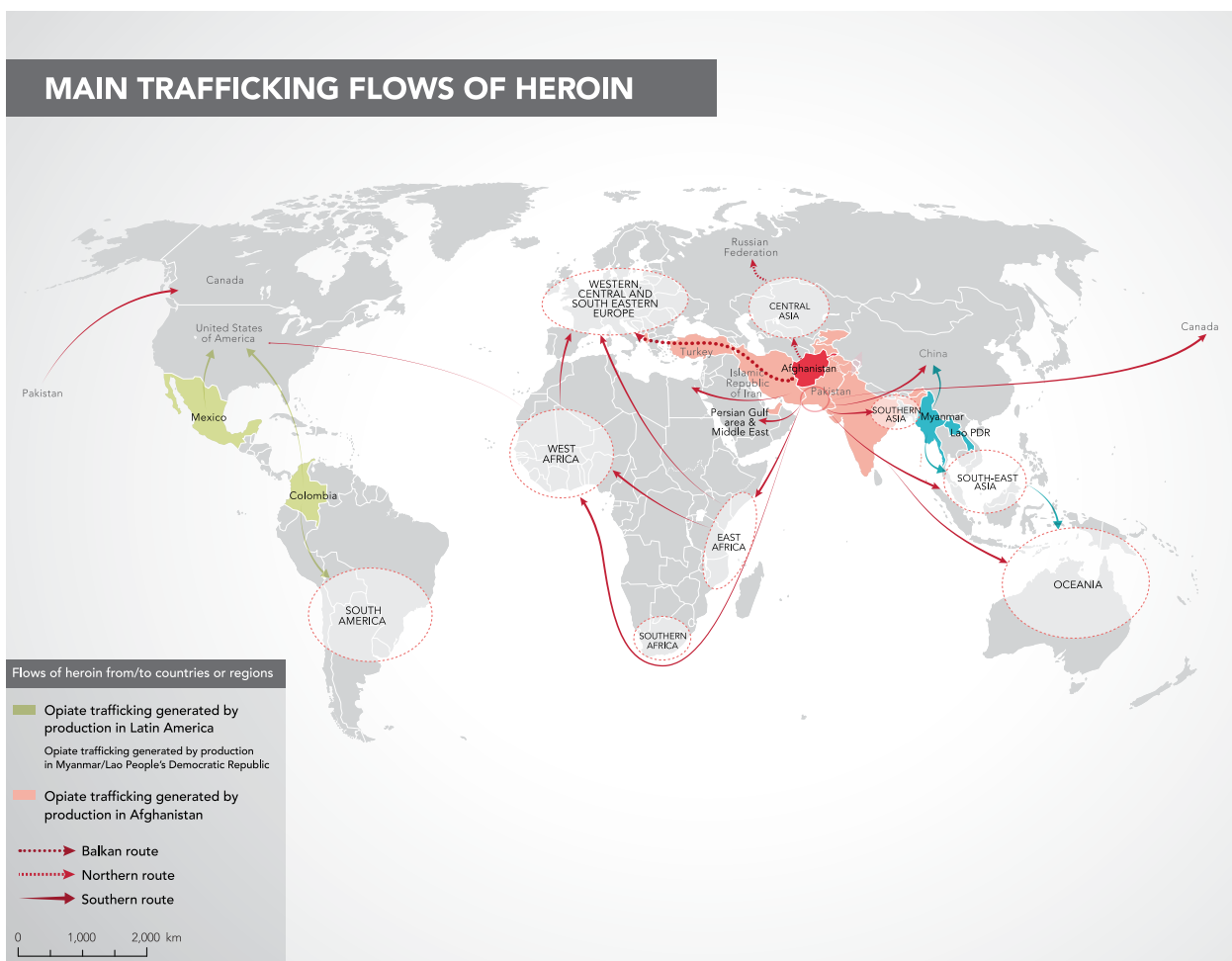


» **1.6 MILLION** PEOPLE WHO INJECT DRUGS ARE LIVING WITH **HIV**

» **6 MILLION** ARE LIVING WITH **HEPATITIS C**

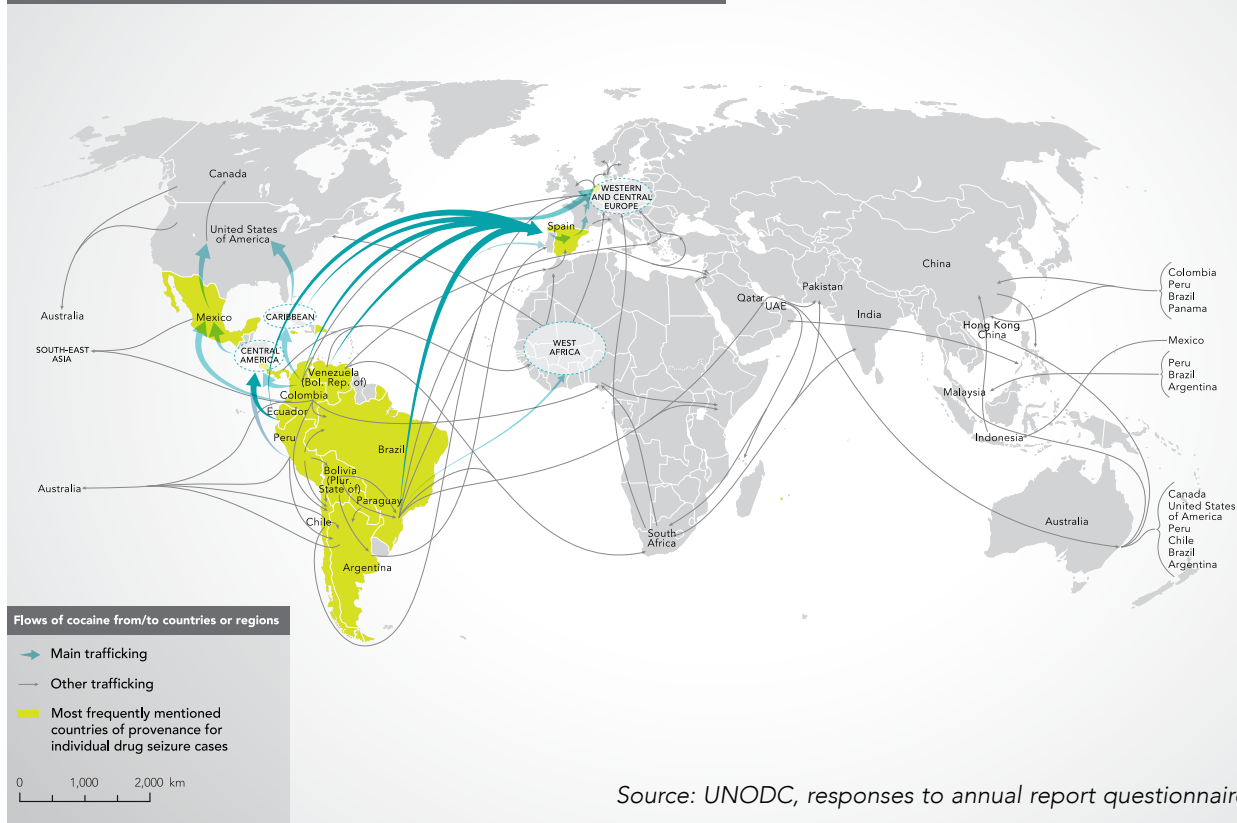
In addition, the UNODC reported that in 2014, there were an estimated 207,400 drug-related deaths worldwide among those aged 15-64.<sup>1</sup> New on the horizon of substance use issues, there is evidence that an increasing number of young children are now living in drug-life circumstances and are actively engaged in drug-using behavior. The World Health Organization reports that up to 90 percent of children in street-life situations worldwide use some kind of drug.

Ongoing trafficking of heroin, cocaine, and methamphetamine, as well as other drugs, are fueling the health and safety problems of countries worldwide and there are troubling indications of an expansion of drug supply via the internet, including via the anonymous online marketplace known as the "dark net."

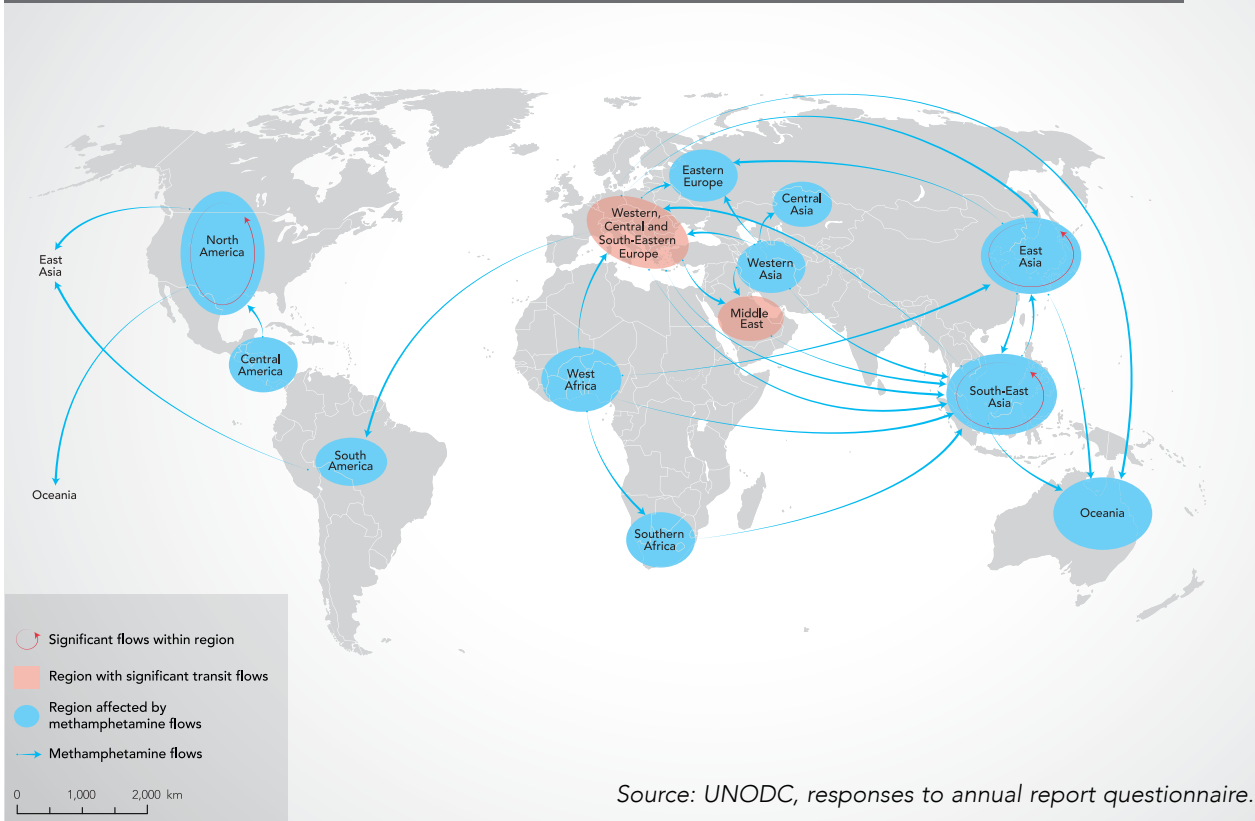


Source: UNODC, responses to annual report questionnaire.

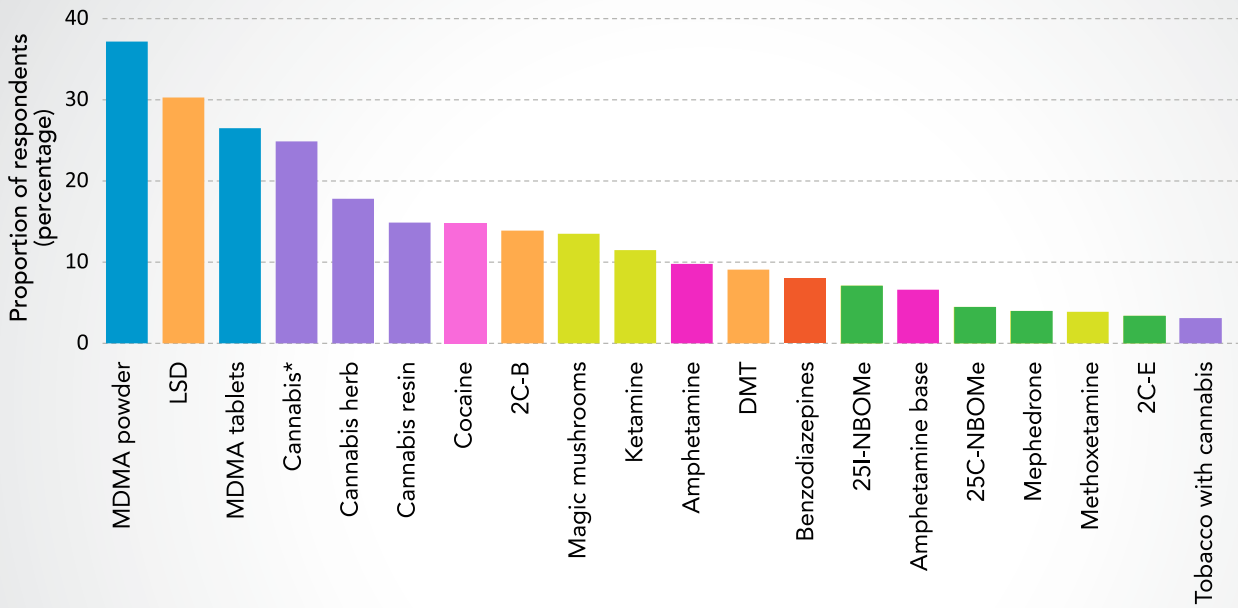
## MAIN TRAFFICKING FLOWS OF COCAINE



## INTERREGIONAL TRAFFICKING FLOWS OF METHAMPHETAMINE, 2011-2014



## DRUGS PURCHASED ON THE "DARK NET", BY TYPE OF DRUG, 2014



- "Ecstasy"-type substances
- Hallucinogens
- Cannabis
- Cocaine
- New psychoactive substances as of 2014
- Substances placed under control in 2016
- Amphetamines
- Sedatives

\*Hydroponically grown cannabis.

Source: Global Drug Survey 2015  
([www.globaldrugsurvey.com](http://www.globaldrugsurvey.com)).

Note: Proportion of survey respondents who bought each drug on the "dark net" among participants in the Global Drug Survey between November and December 2014.

## SYNTHETIC DRUGS: AMPHETAMINE-TYPE STIMULANTS AND NEW PSYCHOACTIVE SUBSTANCES

**GLOBAL SEIZURES**  
CHANGE FROM PREVIOUS YEAR

**↑21%**  
METHAMPHETAMINE

**↑15%**  
AMPHETAMINE

**↑122%**  
"ECSTASY"

**↑18%**  
SYNTHETIC NPS



**METHAMPHETAMINE**



**AMPHETAMINE**



**"ECSTASY"**



**SYNTHETIC NPS**



**2014**

The worldwide use of narcotic drugs and psychotropic substances for non-medical purposes continues to produce multiple and serious health consequences, as well as dramatic costs to society in terms of social problems, impaired family and community cohesion, lost productivity, security risks and slowdown of economic development.

Using narcotic drugs and psychotropic substances without medical supervision and for non-medical purposes, for a long or short period of time, can be dangerous. For this reason, the production, sale, distribution and use of these substances are regulated under the control of the international treaties (Conventions of 1961, 1971, 1988), with the aim to avoid negative consequences that could significantly undermine health and security.

Substance Use Disorders (SUD)s per se, in particular addictive behavior, have significant implications for mental health, inhibitory control and social relations. Behavioral and psychological changes induce the individual affected to focus exclusively on drugs in a compulsive way, weakening interpersonal contacts, reducing school and professional commitment, compromising bonding to family and developing concomitant mental health disorders.<sup>6</sup>

In addition to the symptoms of this complex disease, characterized by uncontrollable compulsive behavior, the vulnerable population affected by substance use disorders, is likely to develop other illnesses, to be exposed to blood born infections (HIV, HC) and TB, to carry a high risk of cardiovascular and liver problems, to have increased incidence of traffic accidents, to more frequently experience violence, and to be vulnerable to overdose.

When individuals are exposed to narcotic drugs and psychotropic substances during childhood and adolescence, the developmental age that is crucial for brain maturation, the risk of developing mental health consequences and behavioral problems in adulthood has been found to be significantly increased. The FIELD GUIDE, 2nd Edition discusses evidence of addiction among young children as young as 5 years of age, with many child-age users aged 9-14. Section III of the FIELD GUIDE offers a guest author article about the range of interventions being developed for addressing substance use disorders among this newly emerging population of very young children.

To aggravate the situation, in recent times, the world drug phenomenon has expanded from the common drugs illegally sold by the black market, such as cocaine, heroin, amphetamine and cannabis, to the use and misuse of prescription drugs from the pharmacies' sales, such as synthetic opioids and benzodiazepines, and to the consumption of hundreds of new psychoactive substances (NPS) which constitute a challenge to control under the Conventions as they are synthesized very quickly.<sup>7</sup>

The production and trafficking of continuously new psychoactive substances, which can be easily purchased on the web, is becoming increasingly difficult to monitor and to control. Only a minority of countries have an early warning system in place to collect and share information on these new substances. Concurrently, the mechanism of control relies on national legislations, typically requiring a long-term process to schedule new drugs under the Conventions' international control.

Among the new challenges emerging in this field, addressed in Part III of this document, is the detection of toxic adulterants in seized drugs and the implications for drug demand reduction efforts. Toxicological tests conducted in 2012 by the Brazilian Federal Police and the Drug Enforcement Administration (DEA) Special Testing Lab reveal that the current version of crack (smokeable cocaine) in the Southern Cone is being produced from raw unrefined cocaine base which often contains impurities and

toxic cutting agents. These toxic adulterants include phenacetin, an analgesic banned in many countries due to linkage with bladder cancer/ renal failure, as well as levamisole, a medication used by veterinarians for expelling worms which depresses immune systems and reduces white blood cells in humans. Health institutions are often poorly prepared and unable to appropriately respond to the different behavioral and medical problems caused by these adulterants.



# THE RESPONSE TODAY



Today we have an increasingly sophisticated and informed understanding of the nature of substance use and how to prevent and treat it. In the 1960s, drug use disorders were viewed as shameful behaviors stemming from moral deviance; our approaches consisted of “re-education” facilities and institutions of “punishment.” Today we recognize drug-seeking behavior that is obsessive and compulsive as characteristic of a brain-based disease called “substance use disorder.” And while stigmatization of drug users still exists, we have made steady progress on viewing addiction, its causes and consequences, through a broader and more compassionate lens. Perhaps most importantly, the drug demand reduction field in 2017 is guided increasingly by the empirical tools of scientific inquiry and evidence-based research.

The advantage of our current time in history is due to the great achievements of science. Today we possess modern research techniques that are progressively more effective in identifying “mechanisms of risk and resilience,” which are the social circumstances and other factors concurring to vulnerability for drug use; we also have strides in unraveling the psychobiological and social elements that constitute the pathogenesis of drug use disorders. And unlike the 1960s, today when we address substance use disorders, we take a broad range of variables and information into consideration, including, the combination of 1) inherited or genetic factors (which can predispose or contribute to addictive behavior) 2) social factors, particularly childhood adversities (trauma), and 3) the pharmacological impact of substances on

the brain. Magnetic Resonance Imaging (MRI) technology has advanced the field significantly by actually providing researchers with a “window” into the addicted brain.

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## Addiction is a Brain-Based Disorder

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The Director of the National Institute on Drug Abuse, Nora Volkow, MD, has made it clear that science has established that addiction is a brain-based disorder. She states on the NIDA website <https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/preface> that, “As a result of scientific research, we know that addiction is a disease that affects both the brain and behavior. We have identified many of the biological and environmental factors and are beginning to search for the genetic variations that contribute to the development and progression of the disease. Scientists use this knowledge to develop effective prevention and treatment approaches that reduce the toll drug abuse takes on individuals, families, and communities.” (The topic how substances effect the brain is discussed in detail in Part 1 b.)

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## Addiction is a Public Health Problem

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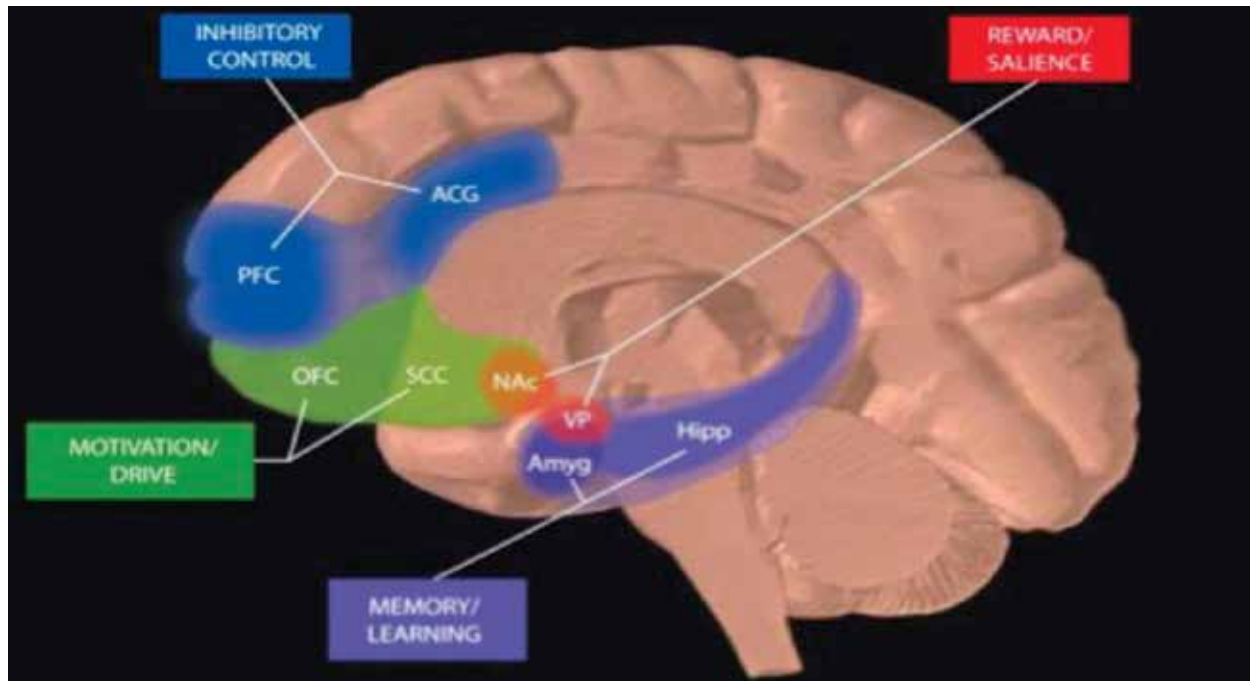
A new awareness has been disseminated throughout Member States and civil society, indicating that drug dependence is a complex psycho-socio-biological disease, a health problem that requires a multifaceted, multidisciplinary and comprehensive response from different institutions. Both State authorities and public opinion are now able to look at the condition of drug dependence not as a “self-acquired bad habit”, but as the complex disease it is. Now



## Research has Shown How Substances “Hijack” the Brain which Leads to Substance Use Disorder

The “hijacking” of the brain occurs as a result of substance use which causes a “cascade of neuro-adaptive changes” that include the creation and strengthening of new memory connections in different brain circuits.

The reward and inhibitory control circuits are shown in the figure below.



The reward systems become more dominant and the inhibitory control systems become compromised in addiction.

Key: PFC – prefrontal cortex; ACG – anterior cingulate gyrus; OFC – orbitofrontal cortex; SCC – subcallosal cortex; NAc – nucleus accumbens; VP – ventral pallidum; Hipp – hippocampus; Amyg – amygdala

society at large has the courage to look at the suffering of children and adolescents at risk, to see the difficulties of young adults affected by substance use disorders with compassion and openness.

Society recognizes the risk-conditions affecting the vulnerable populations in both western developed countries and low-income or developing countries. On one side, in developed countries, neglect and abuse, lack of bonding to family, impaired parent-child attachment, lack of engagement in school, household dysfunction, social exclusion, isolation and early onset of mental health problems are concurring to the etiology of the disease, in combination

with gene variants influencing temperament and personality traits. On the other, in developing countries, those same factors are further complicated by issues such as exposure to extreme poverty, degraded neighborhoods, displacement, exploitation, violence, hunger and work overload, which contribute to aggravate the risk condition and participate in the pathogenesis of drug use disorders.

It is becoming clearer that the issue is not whether to permit or to prohibit drugs; it is not about adopting liberal or repressive policies, but rather to build a comprehensive evidence based response to the variety of

difficulties implicit in the structure of this complex health problem.

Drug use disorders are preventable and treatable if we use appropriate methods that have been found effective by science. The strategies to reduce the risk and increase resilience for children and adolescents are known. There are good methods to improve parenting and consequently reduce experimenting with drugs. There are growing research findings on the therapy to stop or reduce the compulsive behavior induced by drugs. It is clear that drug use disorders cannot be managed with “simplified recipes” and “magic solutions”. We are aware of the necessity of integrated pharmacological and psychosocial treatment, as part of a long-term continuum of care.

The expectation of treatment outcome for drug dependence cannot be compared to those related to the treatment of acute illnesses, such as pneumonia, which may be successfully cured in one week with effective antibiotics. Drug use disorders are chronic in nature and their long-term clinical course is based on stable neurobiological changes underlying the behavioral features with the risk of relapse, in some cases even after many years of rigorous abstinence. This implies that the services for the treatment of drug use disorders have to be ready to work with the patient for a long time, maintaining the contact for years, sometimes for the entire life, similar to other chronic diseases (diabetes, asthma, high blood pressure).

### How We Viewed Substance Use in 1960

- “Once an Addict Always an Addict”
- Addiction is a Moral Deficiency
- Treatment is a Mostly Wasted Effort
- Recovery is Unlikely and Rare
- Addiction is a Criminal Behavior

In the 1960s, drug use disorders were viewed as shameful behaviors stemming from moral deviance; most approaches consisted of “re-education” facilities and institutions of “punishment.”

### How We View Substance Use in 2017

- Substance Use is Preventable
- Psychoactive Substances Change the Brain
- Substance Use Disorders are Treatable
- Recovery is a Long-Term Process
- Substance Use is a Public Health Issue

The drug demand reduction field in 2017 is guided increasingly by the empirical tools of scientific inquiry and evidence-based research.



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# INL AS A GLOBAL LEADER IN DRUG DEMAND REDUCTION



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## The Importance of INL's Drug Demand Reduction Program

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Demand reduction programming is unquestionably linked with ensuring the rule of law, the ideals of good governance, and the structures of democracy. Drug production, trafficking and use in other countries not only threatens the health and safety of their respective populations, it also destabilizes the capacity of their leaders to govern effectively and to address a host of economic or social challenges, either individually, regionally or in tandem with US support. Comprehensive prevention and treatment programming around the world ultimately serves to protect US interests and enhance opportunities for global peace and prosperity.

Substance use in other countries has broad-reaching and long-lasting social and economic impacts which affect U.S. security and other interests. Over the last two decades INL has emerged as a global leader in addressing the increasingly complex challenges posed by substance use outside our borders.

The following are key areas of concern for INL's drug demand reduction programming:

### Drug Production

The largest number of consumers of drugs by volume are found outside of U.S. borders. Afghanistan, Iran and Pakistan are the largest consumers of opiates in the world, for example. Cultivation, trafficking and production are fueled significantly by local and regional markets. While the U.S. market represents high profits for traffickers, the convenient markets closer to the source

of cultivation are becoming increasingly lucrative. This dynamic is particularly evident in the Southern Cone where crack cocaine use in Brazil and Argentina has dramatically increased at a time when U.S. consumption of cocaine has decreased by 40 percent in five years. To reduce cultivation, production and trafficking effectively, drug use in Asia, Africa, and Latin America needs to be addressed.

### Public Health

The correlation between drug use and other communicable diseases is well-documented. HIV/ AIDS, tuberculosis, and hepatitis are common among drug users who inject drugs. At the same time, non-injecting drug users have poor judgment skills as a consequence of their drug use. This compromised decision-making results in risky behavior that further exposes drug users to communicable and non-communicable diseases. Additionally, persons with substance use disorders have a high correlation with co-occurring mental health disorders, sometimes exacerbated by drug use and sometimes caused by the drug use itself. Schizophrenia, paranoia, and dissociative disorders causing an altered state of reality can result in episodes of violence which represent a public safety threat.

### Public Security

Persons who use drugs are perpetrators of theft, violence, and community deterioration as a consequence of their need to acquire funding to sustain their drug use.

Other Organized Criminal Enterprises: Drug use also helps fuel a number of trans-national threats, including trans-national organized

crime, corruption, money laundering, cybercrime (online pharmacies), border security, and trafficking in persons.

## National Security

In some post-conflict societies, drug use can represent a threat to national security. Some former child soldiers in Liberia, for example, are community leaders within slums and are involved in drug production. They motivate their armed followers with stimulants and confront law enforcement and the government. In other cases, child soldiers are actively being drugged (Afghanistan and Pakistan and formerly in Sierra Leone and South Sudan) to threaten the government.

## Economic Development

Drug use results in lost employment productivity and diminished cognitive abilities which are difficult to quantify, but ultimately compounds a country's ability to become economically stable.

## Social Impact

The social impact of drug use in developing countries can be profound. Children of persons with substance use disorders commonly neglect and abuse their children. The childrens' protective factors are destroyed while their risk factors to become drug users themselves (environmental + genetic) are high. Research demonstrates a high correlation between drug users and their parents. In this way, the cycle of drugs and violence is replicated in future generations, damaging the social fabric of the local community.

## Governance

All of these areas, taken as a whole, have an amplified effect on the ability of local and national leaders to confront multifaceted and interrelated challenges.

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## Overview of INL's Drug Demand Reduction Program

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INL's overall strategy to support countries around the world to address drug use is two-fold; first, to help countries to strengthen their respective criminal justice systems and second, to assist them in adopting a science-based public health approach to substance use. The ideal approach is for countries to have a competent prevention and treatment workforce with the capacity to deliver evidence-based services.

A top priority of INL's Drug Demand Reduction program is professionalizing staff, which consists primarily of training, testing, and credentialing treatment and prevention workers. This program is fairly advanced, with 32 countries participating in the project in 2016, and expanding interest from European countries and U.S. universities to take part in the coming years.

A second top priority is the professionalization of treatment services. INL funded the establishment of International Treatment Standards which were released in 2016 at the 59th Commission of Narcotic Drugs (CND). These Standards will eventually lead to the development of an international quality assurance system which can license treatment facilities.

A third priority for the INL Demand Reduction program is engagement in ad hoc technical assistance to specific countries facing unique challenges such as Afghanistan, Pakistan, Myanmar, Laos, Mexico, and Liberia. During 2016 INL worked with the African Union to develop data collection capabilities to better track the growing use of drugs on the continent. An article in Part III of this document addresses this effort. Certainly the goal is for such data to help triage international assistance to countries that may soon be grappling with drug use epidemics where public health systems are unable to cope with demand.

A detailed description of these priority efforts and the outlook for 2017 and beyond is presented in Part II of this document.

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## **INL's Innovations and Contributions to the Drug Demand Reduction Field**

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Over the past five years, INL has made a number of unique contributions to the field of prevention and treatment. Some of the innovations achieved over the past five years are described below.

- **First 100 Percent Toxicological National Drug Use Survey.** INL conducted the first 100% toxicological national drug use survey (Afghanistan) which determined drug prevalence rates more accurately as well as drug concentrations in the users. Independent surveys were conducted in rural and urban cities, resulting in the alarming finding that rural drug use rates are nearly three times higher than urban drug use rates.

- **Documentation of Child Addiction and Development of Training Curriculum.** After testing and documenting active child addiction (ages infancy to early adolescence), INL supported a team of international researchers and doctors to develop the world's first protocols for children with substance use disorders. These pharmacological and psychosocial protocols are now being implemented throughout South Asia and the Southern Cone.
- **Establishment of Treatment Programs around the World (Afghanistan).** INL supported the establishment of numerous treatment programs around the world, including 76 programs in Afghanistan. Of these Afghan programs, eight (8) are solely dedicated to treating mothers and their children for drug use disorders.
- **Introduction of Community-Based Treatment (Vietnam, Cambodia, Laos).** INL funding also supported UNODC to introduce community-based treatment in a public health setting for the first time in Southeast Asian countries which are otherwise only offering services through detention centers (e.g. Vietnam, Laos, and Cambodia).
- **Elimination of Treatment Barriers (programs that do not "register" clients).** INL also supported UNODC with assistance to establish the first treatment programs that did not register clients, removing a barrier to treatment (e.g. Kazakhstan).

- **Introduction of Naloxone for Overdose Prevention** (Kyrgyzstan). INL also supported the introduction of the antidote “naloxone” for opioid overdose prevention in Kyrgyzstan.
- **Toxic Adulterant Awareness** (development of quick test for adulterants). Recognizing the danger posed by toxic adulterants that are added to drugs (e.g. phenacetin and levamisole are two toxins added to crack cocaine in the Southern Cone), INL funded the development of quick tests that can easily identify whether a drug user has these toxic substances that require additional lifesaving medical support.
- **Dissemination of Science-based De-Stigmatizing Terminology.** The words one uses to describe use disorders

and their treatment matter greatly. Words can erase or underline stigma. INL has actively disseminated science-based de-stigmatizing terminology which is reflective of an evidence-based understanding of substance use, including the facts that substance use disorders are treatable, and that many individuals with substance use disorders can and do recover. Recently, in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the term and description of “addiction” was replaced with “substance use disorder (SUD)” and science-based SUD symptomatology.” Science-based terminology helps to erase stigma and INL disseminates it accordingly. (See Appendix 3 for a detailed description of science-based de-stigmatizing substance use disorder terminology.)



# DEVELOPING GLOBAL LEADERS

INL SUPPORTED FELLOWSHIPS





# VIRGINIA COMMONWEALTH UNIVERSITY (VCU)

## HUBERT HUMPHREY FELLOWS

The Hubert H. Humphrey Fellowship Program is sponsored by the US Department of State, and brings young and mid-career professionals from designated countries to the United States for a year of non-degree graduate-level study, leadership development, and professional collaboration with US counterparts.

For the 2016-2017 year, VCU welcomes 12 Fellows from Bolivia, Burundi, Ecuador, Ghana, Kazakhstan, Kenya, Mozambique, Nigeria, Uruguay, Pakistan, and Vietnam.



**MARIA ELISA  
CABRERA**  
Montevideo,  
Uruguay

Ms. Maria Elisa Cabrera, from Montevideo, Uruguay, obtained her bachelor's degree in business administration and accounting in 2010, and her post-graduate degree in health services management in 2015, both from the State University of Economics in Uruguay. She also completed several courses on quality management in health services. Ms. Cabrera has more than five years of experience in the non-profit sector, and she is currently an accountant in the Office of the Presidency of the Republic of Uruguay for the National Drugs Assembly and the National Drug Board. Among her many responsibilities, she coordinates and provides administrative assistance to drug treatment centers, assessing the unique needs of each institution and ensuring that their budgets are consistent with their program objectives. Her experience has equipped her with a variety of skills, such as project design and management, program assessment, and financial management. During her fellowship, Ms. Cabrera seeks to enhance her knowledge about substance abuse counseling, drug policy, and program evaluation, as well as establish strong contacts with organizations involved in international drug policy in the Americas. In addition, she hopes to use her fellowship experience to design and expand substance abuse programs and collaborate in the economic evaluation of cannabis legalization laws in Uruguay.



**DR. GILBERT  
HABONIMANA**  
Bujumbura, Burundi

Dr. Gilbert Habonimana, from Bujumbura, Burundi, graduated from the Faculty of Medicine at the University of Burundi with a medical degree in 2010. He is a general practitioner with a certificate in emergency surgery and obstetric care. He was assigned to Rutovu and Matana Hospitals in 2010, where he worked as a primary care physician and contributed strongly in emergency surgery and obstetric care in those remote areas. For three years Dr. Habonimana was the medical director of Matana Hospital where he acquired experience in health policy and management, addressing the health needs of under-resourced communities. Dr. Habonimana then began working with NGOs (Pathfinder International, FHI360) on various projects funded by the U.S. Agency for International Development as a maternal and child technical and program officer. He is currently working at a local non-profit organization (Burundi Development) as the medical coordinator. His main duties are to provide technical assistance to health facilities to achieve cost-effective delivery of health care services and to be an advocate to potential donors. During his fellowship, Dr. Habonimana hopes to acquire public health knowledge and skills for working in the areas of health policy and management.



**SAMUEL CUDJOE  
HANU**  
Accra, Ghana

Mr. Samuel Cudjoe Hanu, from Accra, Ghana, is a psychiatric nurse at Accra Psychiatric Hospital. Mr. Hanu began his career as a staff nurse at Accra Psychiatric Hospital in 2001, and has risen through the ranks to his current position as a nursing officer with supervisory and management responsibilities. In 2012, he earned a bachelor's degree in psychology from the University of Ghana, Legon. And, in 2016, he earned a master's degree in Addiction Studies from the International Program in Addiction Studies jointly operated by Kings College London, Adelaide University (Australia) and Virginia Commonwealth University (USA). Mr. Hanu is a part-time mental health and psychiatric nursing tutor at a private nursing training school in Accra, and an examiner for the nursing and midwifery council of Ghana. He is a member of the West African Drug Policy Network, a fellow of the West African College of Nursing, and the Ghana College of Nurses and Midwives. During his fellowship, Mr. Hanu wants to obtain practical experience in drug abuse prevention and education, and he hopes to become familiar with evidence-based treatment options as well as the use of psychotherapy in drug abuse treatment. In addition, Mr. Hanu wants to become skilled in the use of different strategies to effectively influence public policy.



**JAMES  
MONGARE KENGA**  
Nairobi, Kenya

Mr. James Mongare Kenga, from Nairobi, Kenya, is a counseling psychologist who obtained his bachelor's degree at Egerton University in 2014. Mr. Kenga serves as a social welfare officer at Kamiti Maximum Security Prison where he has been in charge of substance abuse training, counseling and program coordination since 2012. Mr. Kenga also works as a volunteer substance abuse counselor, and he participates in anti-drug campaigns sponsored by Kenya's National Authority for the Campaign Against Alcohol and Drug Abuse. Mr. Kenga is an experienced trainer, having trained inmates, peer counselors and other professionals on drug abuse and relapse prevention. In addition, Mr. Kenga works as a project coordinator with women's groups on economic empowerment, gender mainstreaming, and poverty eradication. During his fellowship, Mr. Kenga plans to design prevention and treatment programs for staff and inmates who have substance use related problems. He also hopes to develop his skills in conducting surveys on substance abuse. Mr. Kenga plans to learn more about health care systems for persons with substance use disorders, fundraising and evidence-based treatment programs. He hopes to use his new skills and knowledge to help him work with decision makers in Kenya to develop more effective drug control strategies.



**DR. OLAJUMOKE  
"JUMMY"  
KOYEJO**  
Nigeria

Dr. Olajumoke "Jummy" Koyejo, from Nigeria, is a graduate of Obafemi Awolowo University, where she earned degrees in medicine and surgery. She is a fellow of the National Post Graduate Medical College of Nigeria, in the faculty of psychiatry. Dr. Koyejo had her residency training in the Federal Neuropsychiatric Hospital Yaba, in Lagos, where she now works as a consultant psychiatrist in the largest substance abuse unit in Nigeria. She is also a regional manager and head of the mental health team for the non-governmental, non-profit, international health promotion organization Live Well Initiative. Her research is mainly in the area of substance abuse, and she is a certified trainer and user of the Addiction Severity Index (ASI). She conducts occupational mental health services in cooperation with corporate organizations, especially transport companies, in educating their drivers about the effects of drug abuse on their jobs and health. During her fellowship year, Dr. Koyejo seeks to increase her knowledge of research, addiction prevention, treatment, and rehabilitation. She hopes to learn more about cognitive behavioral therapy and telepsychiatry in the treatment of substance use disorders, and to acquire skills in outpatient drug abuse treatment and rehabilitation. Dr. Koyejo also wishes to improve her public speaking and media technology skills.



**DR. GULNAR  
MAGAUINA**  
Astana,  
Kazakhstan

Dr. Gulnar Magauina, from Astana, Kazakhstan, earned her medical degree from the State Medical Institute of Karaganda in 1987, and in 1995 she completed a specialization in allergy and immunology at the Russian Academy for Postgraduate Education in Moscow. In 2013 she was trained at the Lithuania University of Health Science on the management of family medicine. Since 2013, Dr. Magauina has been working as the head of the Department of Family Medicine in the Republican Diagnostic Center. In this position, she implemented safety and quality standards, as well as patient-centered services, and she introduced triage, tracer, and timeout concepts. As a result of these improvements, the Republican Diagnostic Center was certified by the Joint Commission on Accreditation in 2014. An allergist and immunologist for children and adults with over 20 years of experience, during her fellowship Dr. Magauina seeks to enhance her skills in evidence-based management in public health, health care and family medicine. She also plans to increase her knowledge about international insurance and to learn strategies for working with international insurance companies. Additionally, she wants to expand her knowledge about primary immunodeficiency and orphan diseases, new diagnostic and treatment methods, and anaphylaxis management.



**DANIELA  
OCAÑA-GORDILLO**  
Quito, Ecuador

Ms. Daniela Ocaña-Gordillo, from Quito, Ecuador, earned her bachelor's degree in sociology and political science from the Catholic University of Ecuador in 2010. For the past five years, she has worked in the National Drug Observatory of her country's office of drug prevention. As a researcher in the National Drug Observatory, she has been responsible for designing and conducting quantitative and qualitative studies to assess drug use patterns in specific target populations. She is the author or co-author of many reports that describe drug use patterns in Ecuador, and she has represented her organization in many national and international meetings. Ms. Ocaña-Gordillo also has extensive experience working with individual communities to identify community needs and to design and conduct interventions to address those needs. In addition, she has been active in developing public policies and laws to address Ecuador's drug problems. During her fellowship, Ms. Ocaña-Gordillo would like to improve her research skills, especially in epidemiology and biostatistics. She plans to use her new research skills to conduct studies that lead to a greater understanding of heroin and opioid use in Ecuador. Ultimately, she wants to use this information to develop more effective treatment and prevention programs and policies to reduce adolescent substance abuse.



**HUYEN PHAM**  
Hanoi, Vietnam

Ms. Huyen Pham, from Hanoi, Vietnam, has been a senior researcher for drug policy related studies with the Center for Research and Training on HIV/AIDS (CREATA) at Hanoi Medical University (HMU) since 2009. Her academic training was in the area of public health, including a bachelor's degree from HMU in 2008 and a master's degree from the University of Queensland in 2013, which she attended with the help of an Australian Agency for International Development Scholarship. Ms. Pham's work has been primarily in the areas of drug abuse and HIV/AIDS health policy, exploring opportunities for the implementation of harm reduction strategies in Vietnam. She has been implementing CREATA's goal to be a bridge between policy makers, policy implementers (including treatment and service providers), and drug users. She has worked with several international partners including the WHO, the United Nations Office on Drugs and Crime, and the U.S. Substance Abuse and Mental Health Services Administration. During her fellowship, Ms. Pham seeks to gain a comprehensive understanding of drug abuse treatment and training. Along with this, she hopes to learn about U.S. drug policies and programs, and she expects to network with other fellows and professionals to facilitate future cooperation and research on evidence-based drug policies and practices.



**DR. MARIA  
RODRIGUES**

**Maputo,  
Mozambique**

Dr. Maria Rodrigues, from Maputo, Mozambique, obtained her medical degree in Mozambique from the Universidade Eduardo Mondlane in 2004 and, in 2007, a master's degree in Infectious Disease and Tropical Medicine at the Universidade Federal de Minas Gerais in Brazil. Dr. Rodrigues is a child health advisor for the Maternal and Child Survival Program where she works to support the Ministry of Health in its efforts to improve children's health and reduce child mortality. Prior to this, Dr. Rodrigues worked for the Global Alliance for Improved Nutrition as the maternal and infant child nutrition advisor to promote improvements in infant and child nutrition in her country. She also has experience in the areas of prevention of mother to child transmission of HIV, crisis intervention, health communication, and working with underserved communities. She has worked extensively with programs funded in part by the U.S. Agency for International Development. Dr. Rodrigues is also an educator, teaching at the National Health Institute for Sciences in the departments of public policy and nutrition. The goals for her fellowship are to improve her skills in the area of evidence-based programs for maternal and child health, and nutrition. She is especially interested in social and behavior change communication and addressing health disparities.



**DR. IGOR  
SALVATIERRA**  
**La Paz, Bolivia**

Dr. Igor Salvatierra, from La Paz, Bolivia, earned his medical degree from the Universidad Mayor de San Andres of Bolivia in 1999, and his specialization in Medical Genetics and Bioethics from Pontifical Javeriana University of Colombia in 2005. He founded the Medical Genetics Unit of Arco Iris Hospital in La Paz where he provides genetic counseling to patients with hereditary disorders. He also conducts research on the causes, risks, and frequency of birth defects, including those resulting from the use of alcohol during pregnancy. His major interest is identifying patterns of epigenetic mechanisms involved in intellectual disabilities in patients with fetal alcohol syndrome (FAS). During his fellowship year, Dr. Salvatierra seeks to expand his skills and abilities in research methods. He also seeks to update his knowledge about the most recent molecular genetics techniques and share new experiences with peers in molecular genetics research. In addition, he plans to pursue other interests in public policy for alcohol use prevention during pregnancy, along with working on improving his skills in early diagnosis and treatment for patients with FAS. Dr. Salvatierra also has a long-term objective to increase the quality and quantity of research in his country.



**DR. SALMAN  
SHAHZAD**  
Karachi, Pakistan

Dr. Salman Shahzad, from Karachi, Pakistan, has a Ph.D. in clinical psychology, and he is a consultant clinical psychologist and an assistant professor in the Institute of Clinical Psychology (ICP), University of Karachi. As an internationally certified addiction trainer, he is conducting training on the treatment and prevention of SUDs and leading the research and training unit for the prevention and treatment of SUDs at the ICP. He is a member of the editorial board of a number of international scientific journals and is active as a researcher. The principal areas of Dr. Shahzad's work are monitoring and evaluation of programs, epidemiology of and psychosocial risk factors for substance use, and stigma related to SUDs and HIV/AIDS. Since 2004, he has been volunteering in charity-based community organizations that focus on the prevention and treatment of substance use, and has received awards for his service. During his fellowship program, Dr. Shahzad will focus on developing advanced skills and scientific knowledge in assessing, monitoring and evaluating substance use prevention and treatment interventions and programs, community coalition building, and epidemiological research methods. He wants to use his new skills to strengthen services for the prevention and treatment of substance use disorders and to inform drug policies in Pakistan.



**NAZISH YOUSAF**  
Muzaffarabad,  
Pakistan

Ms. Nazish Yousaf, from Muzaffarabad, Pakistan, obtained her master's degree in psychology from the University of Peshawar in 2006, and a post magistral diploma in clinical psychology from the Sarhad University of Science and Technology in 2014. She currently is pursuing a master's of science degree in clinical psychology from International Islamic University in Islamabad. Ms. Yousaf has completed her internship at the Dost Welfare Foundation and at the Pakistan Institute of Medical Sciences. As an assistant psychologist in the social welfare department of the Drug Addicts Rehabilitation Center in Muzaffarabad, her responsibilities include providing psycho-social support to female victims of domestic violence and treating ensuing psychological problems. In addition, she is involved in the assessment and diagnosis of individual cases and in the preparation of case histories, diagnostic reports, and treatment plans. Ms. Yousaf conducts psychological tests and analyzes test results to inform therapy and behavioral modification for drug addicts and their rehabilitation. During her fellowship, she plans to enhance her knowledge regarding substance abuse treatment and relapse prevention. She also wants to learn about new counseling techniques and evidence-based treatment programs for those addicted to drugs, and to learn research skills which would help inform drug policy.



DEVELOPING  
GLOBAL LEADERS

INL SUPPORTED FELLOWSHIPS





## CYBERJAYA UNIVERSITY COLLEGE OF MEDICAL SCIENCES (CUCMS) MALAYSIA

With funding from the Bureau of International Narcotics and Law Enforcement Affairs (INL), three universities, two in Asia and one in Africa, signed a Memorandum of Agreement to offer a Post-Graduate Diploma in Addiction Science (PGDAS). Cyberjaya University College of Medical Sciences (CUCMS) is one of the two participating universities in Asia offering the PGDAS one-year Fellowship program.

For the 2016-2017 year, CUCMS welcomes 12 Fellows from Afghanistan, Bhutan, Botswana, Maldives, Myanmar, Kenya, Pakistan, Samoa, Sri Lanka, and Tanzania.



## **Fatah Hamidi, MD**

**Kabul, Afghanistan**

After completing the UNITAR Fellowship 2011 in Abu Dhabi, UAE, Fatah Hamidi joined NEJAT Drug Rehabilitation Centre Kabul as the Programme Administrative Manager. One of his substantial contributions was conducting a child/adolescent treatment programme in Kabul, Nangarhar and Balkh provinces. In addition to his administrative responsibilities, he is also involved in facilitating research and policy development for various programmes conducted by the Centre.



## **Daruish Osmani, MD**

**Kabul, Afghanistan**

Daruish Osmani is the Deputy Director of the 1,500-bed Avicenna National Center for housing, treatment and rehabilitation in Afghanistan. In addition to his work role supervising and sustaining programmes implemented at the Center, he also teaches at the Afghanistan Swiss Medical University on drug-related topics. In recognition of his contribution to the field, he has been commended by His Excellency President of the Islamic Republic of Afghanistan, The Ministry of Public Health and the House of Afghan Senate.



## **Dorji Tshering, BEd**

**Bhutan**

Dorji Tshering has more than 14 years experience in the DDR field. Presently, he is the Deputy Chief Programme Officer, Demand Reduction Division, Bhutan Narcotics Control Authority (BNCA). His contributions in BNCA include piloting the drug treatment and rehabilitation programme in the prison setting for inmates convicted for drug offence.



## **Portia Diteko, BA (Psychology)** **Botswana**

Portia Diteko is a substance abuse counselor at the Botswana Substance Abuse Support Network with four years of experience in the DDR Field. She is also a global master trainer in Recovery Coach. Since 2011, she has been contributing significantly to the field through education, prevention and rehabilitation. In addition, she also works with the Southern African Alcohol Policy Youth Advocate – an organisation which advocates the development and implementation of alcohol policies in Botswana.



## **Aishath Meheryna, BSc** **Maldives**

Aishath Meheryna is a national trainer on the Universal Prevention Curriculum for Substance Use (UPC), Coordinators Series. Her first posting as a fresh undergraduate in Psychology and Counseling was to the Drug Treatment and Rehabilitation Centre, K. Himmafushi. Thereafter, she was posted to the National Drug Agency, as a senior counselor and responsible for assisting and guiding other counselors involved in assessment. With her experience in the treatment field, she has been facilitating the development of other treatment programmes.



## **Dr. Hnin Aye, MBBS** **Myanmar**

Dr. Hnin Aye was exposed to the drug demand field during her undergraduate studies at the Yangon Mental Health Hospital. Upon her graduation as a medical doctor, she pursued her post graduate studies in psychiatry. Presently, she is a consultant psychiatrist with the Ministry of Health and Sports, Myanmar.



## **Grace Muthoni, Bachelor in Counselling Kenya**

Grace Muthoni entered the drug demand reduction field as a lecturer during which she attended trainings organised by the National Authority for the Control of Alcohol and Drug Abuse (NACADA), Kenya. With the experience gained from these trainings, she proceeded to work as a college counsellor. In addition, she is also involved in training corporate staff affected by alcohol and drug abuse. One of her greatest contributions is the initiation of a higher diploma in Addiction Studies at college level.



## **Editter W. N. Mugo, MA (Counselling) Maldives**

Editter Mugo aspires to realise her dream as an ambassador in the DDR field. Upon completion of training on the Therapeutic Community Model in 2009, she initiated a workplace aftercare programme in Mombasa. In addition, she also participated in the formulation of Guidelines for Developing Workplace Alcohol and Drug Abuse Policies. Currently, she is a lead counsellor and Welfare Officer at the Kenya Ports Authority.



## **Reema Samman, Masters in Applied Psychology Pakistan**

Reema Samman takes pride working as a volunteer addiction counsellor at the Anti-Narcotics Force (ANF) Rehabilitation Centre in Islamabad where she is actively engaged in conducting group discussions and lectures with patients at the Centre. In addition, she also conducts awareness sessions related to drug issues with university students. Besides this, she also collaborates with various civil societies and volunteer youth ambassadors of the ANF to organise seminars in schools, colleges and universities to deliver accurate information on drug use.



**Racheal Dempsey**  
**Ph.D (Environmental Science and Behaviour Change)**  
**Samoa**

Dr Racheal Dempsey is Director of Connexion, a consulting firm in Faatoia, Samoa. She obtained her Ph.D in Environmental Science and Behaviour Change from the University of Flenburg, Germany. She is trained as a social scientist and her particular interest is in the drug, methamphetamine.



**Asha Hetti Arachchige, MA (Criminology)**  
**Sri Lanka**

Asha Hetti Arachchige is one of the pioneers in the implementation of Community-based Correction System in the legal system of Sri Lanka. Since 1999, she has been working as a senior community corrections officer in the Ministry of Rehabilitation and Prison Reform. Currently, she is conducting a research to identify the types of services needed, challenges faced in the implementation of these services, possible strategies to address the drug problem and suitable rehabilitation and correctional programmes for drug offenders.



**Dr. Isack C. Rugemalila, MD**  
**Tanzania**

Dr Isack has been introduced to clients with SUD since he was a medical student. Currently, he is the Head of Internal Medicine Department, where he addresses the administrative needs concerning substance use. In this department, medical professionals serve hundreds of clients with substance use disorders and other related co-morbidities. With opportunities provided in the workplace and a keen interest in the field, he aims to make significant contributions in the training and professionalising the DDR workforce in his country and the region.

**PART**

**1**



# A DRUG DEMAND REDUCTION (DDR) PRIMER

This primer section is an overview of demand reduction basics; it is intended as an orientation for Embassy personnel and other interested audiences. It is comprised of four sub-sections. First, it walks the reader through an introduction to psychoactive substances and their effects which are supplemented in detail in the Field Guide's Appendices. Secondly, this section explains the brain's response to psychoactive substances with a focus on the brain's reward circuitry and how drug dependence develops within an individual. Third, the reader is introduced to the building blocks of demand reduction, namely, epidemiology, prevention, treatment, and evaluation. Finally, the section familiarizes the reader with the overarching international drug demand reduction (DDR) framework. This framework includes the United Nations' drug control conventions as well as various international organizations engaged in the development and implementation of DDR policies and programming.



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# OVERVIEW OF PSYCHOACTIVE SUBSTANCES





## Classifying Psychoactive Substances

There are numerous systems which exist for classifying psychoactive substances. For the purpose of this drug demand reduction primer, we are presenting four main classes, or types, of psychoactive substances: Stimulants; Opioids (sometimes called narcotics); Depressants; and Hallucinogens.

These four classes are based on the substance's primary effects on the Central Nervous System (CNS).

- **Stimulants** increase the activity of the CNS. They tend to increase heart rate and breathing and offer a sense of excited euphoria.
- **Opioids** selectively depress the CNS. These analgesics reduce pain and tend to induce sleep.
- **Depressants** decrease the activity of the CNS. They tend to decrease heart rate and breathing and offer a relaxed,

sometimes sleepy, sense of well-being or euphoria.

- **Hallucinogens** produce a spectrum of vivid sensory distortions and markedly alter mood and thinking.

This classification system is intended as a general guide, and some psychoactive substances, do not fit neatly into the basic categories. For example, marijuana may be somewhat sedating or relaxing at low doses but may have some hallucinogenic effects at high doses. Miraa (khat) can induce mild euphoria and excitement at low doses but at higher doses it can also induce manic behaviors and hyperactivity. Dissociative anesthetics (or PCP) can have hallucinogenic effects but can also have depressant or stimulant effects. Inhalants generally have depressant effects but can also have stimulant or hallucinogenic effects.

Stimulants	Opioids (narcotics)	Depressants	Hallucinogens
Cocaine	Heroin	Alcohol	LSD
Amphetamine	Morphine	Barbiturates	Mescaline Peyote
Methamphetamine	Opium	Benzodiazepines	Ecstasy
Nicotine, Caffeine	Demerol	Gamma-Hydroxybutyrate (GHB); Rohypnol	Mushrooms

*For the purpose of this drug demand reduction primer, we are presenting four main classes, or types, of psychoactive substances that are based on the substance's primary effects on the central nervous system (CNS). The classification system is intended as a general guide, and some psychoactive substances, such as marijuana, do not fit neatly into the basic categories.*

The reader may consult the Appendices sections of the Field Guide for a detailed description of types of psychoactive substances, including, opioids, barbiturates and benzodiazepines, cocaine, amphetamine-type stimulants (ATS), cannabis, hallucinogens, dissociative anesthetics, and inhalants. For each type, the reader will be provided examples of the substance type, route of administration, medical use, expected effects of non-medical use, acute consequences, chronic consequences, and withdrawal. In addition, a special section is devoted to a discussion of the new psychoactive substances (NPS) and their implications for DDR efforts.

## Routes of Administration

A substance's effect depends not only on what type of substance it is, but also the amount taken, and how it is taken. How a substance is taken is called the method or "route of administration." Route of administration is such a critical factor in understanding the effect of a substance that it is looked at in greater detail here.

Psychoactive substances can enter the body through nine routes of administration:

- Swallowing;
- Snorting (inhaling through the nose);
- Smoking;
- Inhaling fumes;
- Intramuscular (IM) injection (injecting into a muscle);
- Subcutaneous (SC) injection (injecting the substance just beneath the skin);
- Intravenous injection (injecting the substance into a vein);
- Topically (applying the substance to the top layer of the skin); and
- Sublingually (dissolving the substance under the tongue and absorbing it through mouth tissue).

From fastest to slowest, the speeds of action for the various routes of administration are: smoking: 7–10 seconds; intravenous injecting: 15–30 seconds; and injecting into the muscle or under the skin: 3–5 minutes.

**The route of administration matters because it affects how quickly a substance gets to the brain; the faster the substance reaches the brain, the greater and more reinforcing its effect.**



b

# HOW THE BRAIN RESPONDS TO PSYCHOACTIVE SUBSTANCES



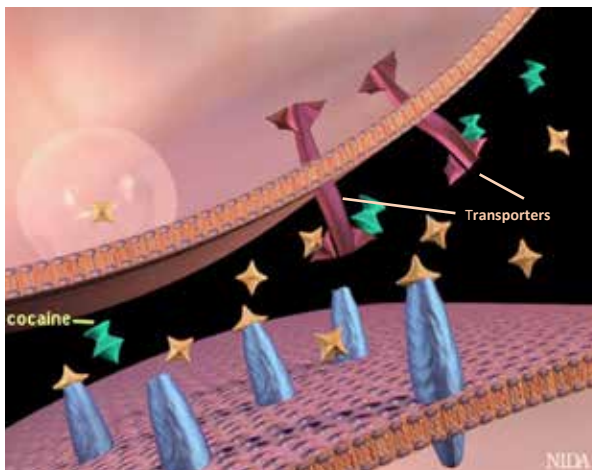
## Substance Use Changes the Brain's Communication System

Substance use affects the brain circuits involved in memory, motivation, reward, and controlling inhibition. When these circuits are disrupted, so is a person's capacity to freely choose not to use substances, even when it means violating every promise, value and relationship that a person holds close to him or her. The inability to stop using a substance is the essence of addiction. It is like riding a bike down a steep hill and not having brakes or feet to stop the forceful motion down.

*The human brain has billions of neurons, each one sending and receiving messages, and each neuron has thousands of receptor sites. Some psychoactive substances, like marijuana and heroin, can activate neurons because their chemical structure mimics*

*that of a natural neurotransmitter. This similarity in structure "fools" receptors and allows the substances to lock onto and activate the nerve cells. Meanwhile, the correct neurotransmitters are blocked from communicating with the neuron. Although these substances mimic brain chemicals, they do not activate nerve cells in the same way as a natural neurotransmitter, and they transmit abnormal messages through the network. Other psychoactive substances, like amphetamine or cocaine, can cause the nerve cells to release abnormally large amounts of natural neurotransmitters or prevent the normal reuptake of these brain chemicals. This disruption produces a greatly amplified message, ultimately disrupting communication channels.*

**Psychoactive substances are chemicals that tap into the brain's communication system and then mimic or disrupt the way nerve cells normally send, receive, and process information.**



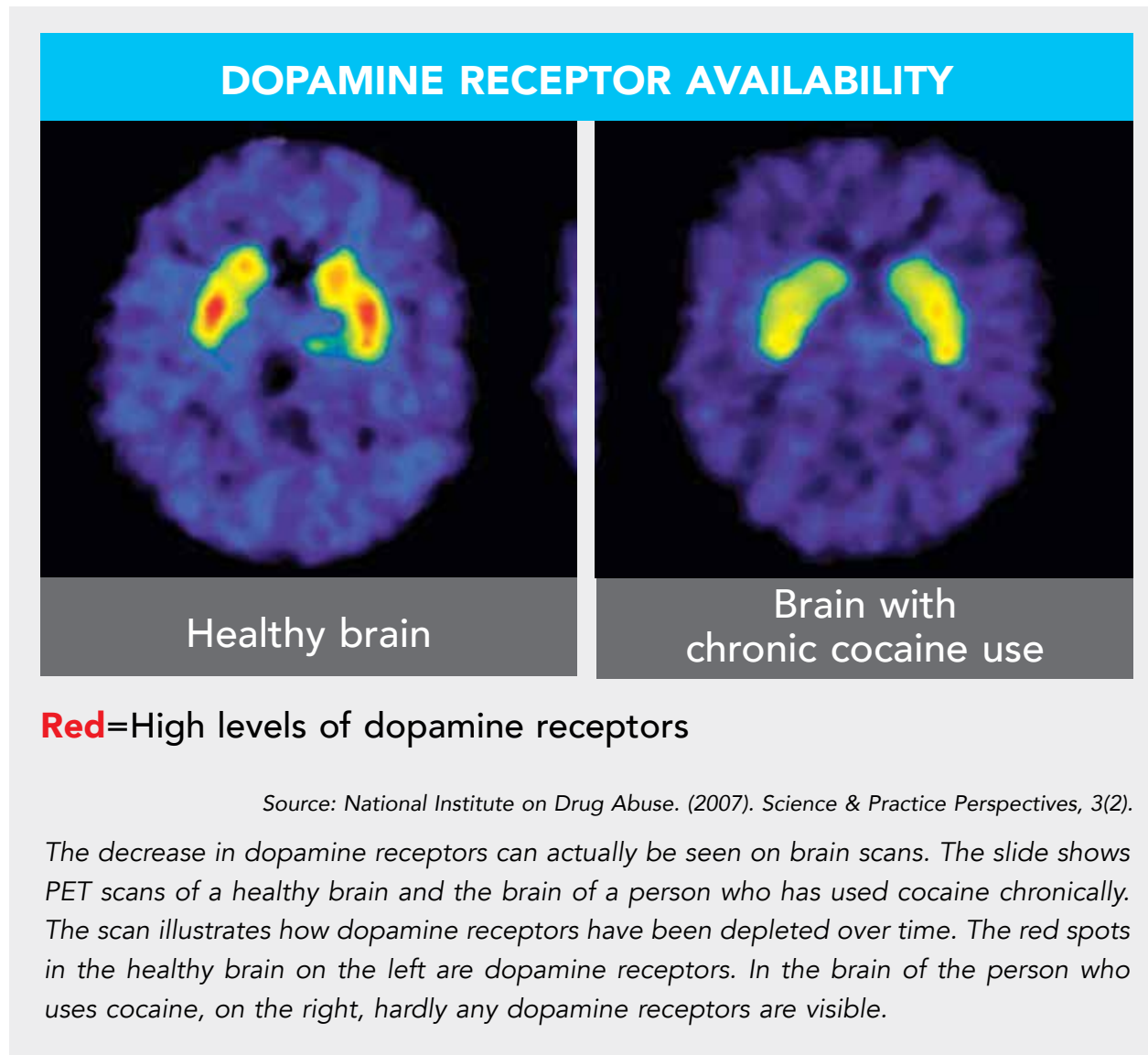
*The graphic (left) illustrates one way in which a substance (in this case, cocaine) can disrupt brain communication: Dopamine (the little orange stars) is released normally from the sending neuron and makes contact with its receptor site (blue ovals) as usual. But cocaine (green squiggles) has attached itself to the transporters, and the transporters cannot do their job of recycling the dopamine back into the sending cell. The dopamine keeps circulating and making contact with the*

*receptors. Meanwhile, the communication is not turning off, because the dopamine has not been returned to the sending cell. So, dopamine continues to be released, and the receptors are flooded. This flooding of dopamine produces cocaine's euphoric effects.*

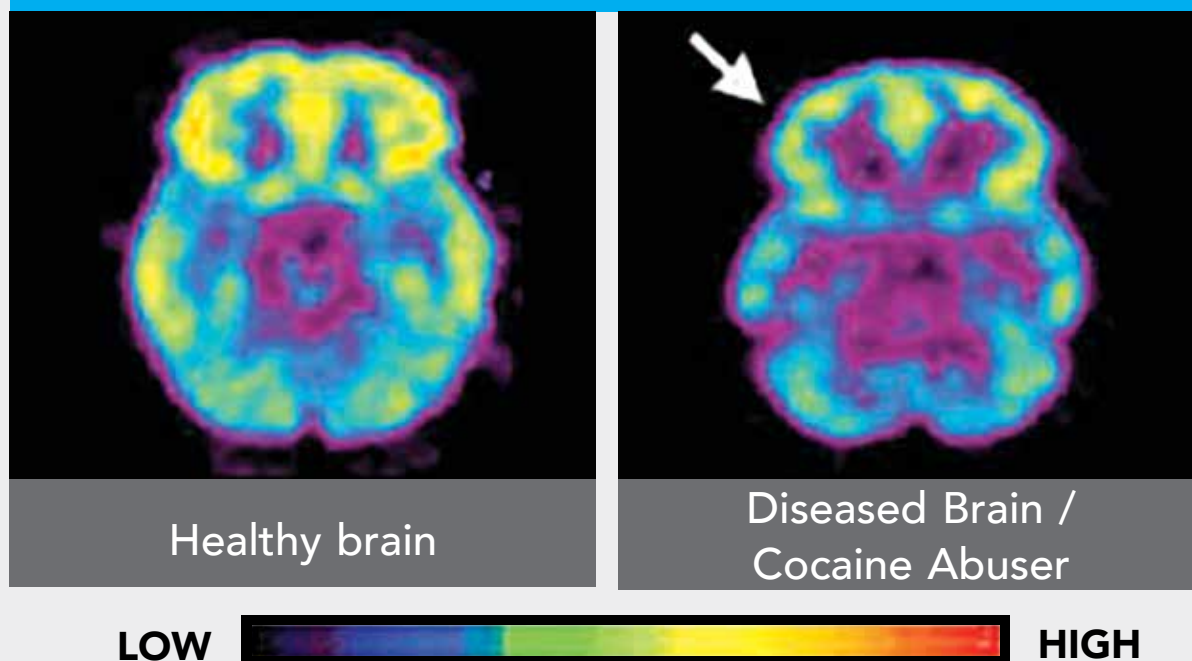
## Brain Imaging Techniques

Imaging techniques allow scientists to actually see what is happening in the brain in response to drug use and addiction. These techniques include:

- Magnetic resonance imaging (MRI);
- Positron emission tomography (PET) scan; and
- Single photon emission computed tomography (SPECT).



## DECREASED BRAIN METABOLISM IN COCAINE USER



*This accompanying graphic compares scan images to show visible brain metabolism differences between a healthy brain and the brain of someone who uses cocaine.*

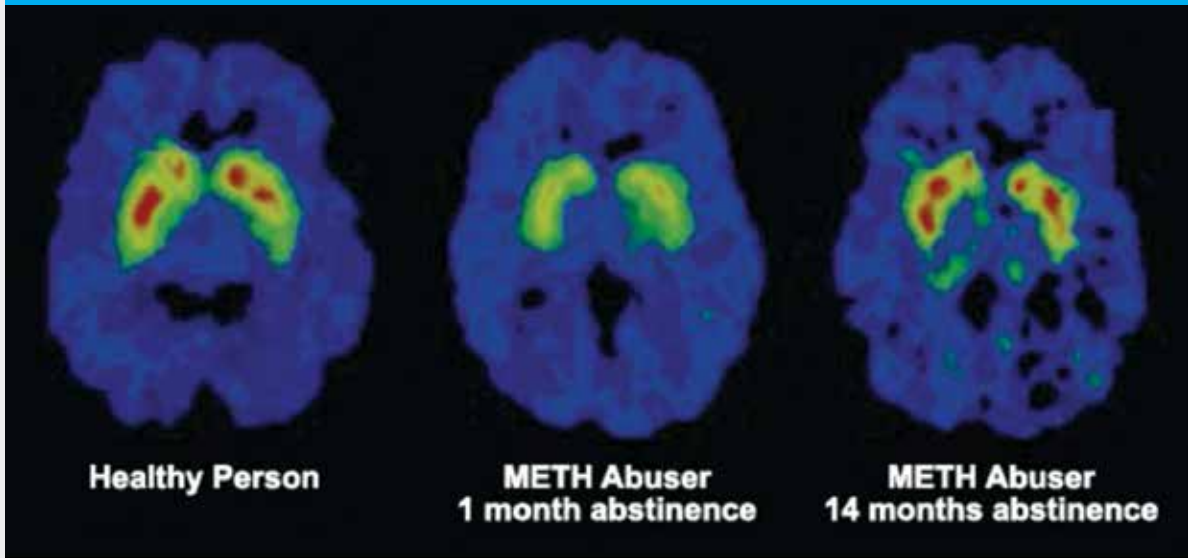
### Substance Use Changes the Brain's Reward System

What are the structures and processes in the brain that are compromised by psychoactive substances? While the science is still advancing, there are some key findings that are known. For example, the reward circuit in the brain includes areas involved with motivation and memory as well as with pleasure. Psychoactive substances and certain behaviors stimulate the same reward circuit and then overload this circuit. Repeatedly exposing the brain to a psychoactive substance results in nerve cells in an area in the brain called the nucleus accumbens (the area of the brain that governs pleasure and reward) and the prefrontal cortex (the area of the brain that governs planning and executing tasks) to communicate with each other in such a way as to pair "liking" the substance with "wanting" the substance, which in turn, "drives" an individual

towards the pleasure-producing substance even more. This process of "wanting" the substance reflects an actual physiological linking of the memory and pleasure regions of the brain, which then "motivates" an individual to act and seek out the substance/source of pleasure.

The good news is that research on brain functioning has shown that with time away from substances, the brain is capable of recovering much of its functioning capacity. The Figure on the next page shows how with continued abstinence from substances, in this case methamphetamine up to 14 months, the brain starts to regain a level of activation that is more similar to the healthy brain versus the brain only one month into substance abstinence.

## EXAMPLE OF HOW THE BRAIN CAN RECOVER FROM SUBSTANCE USE IN CERTAIN CASES



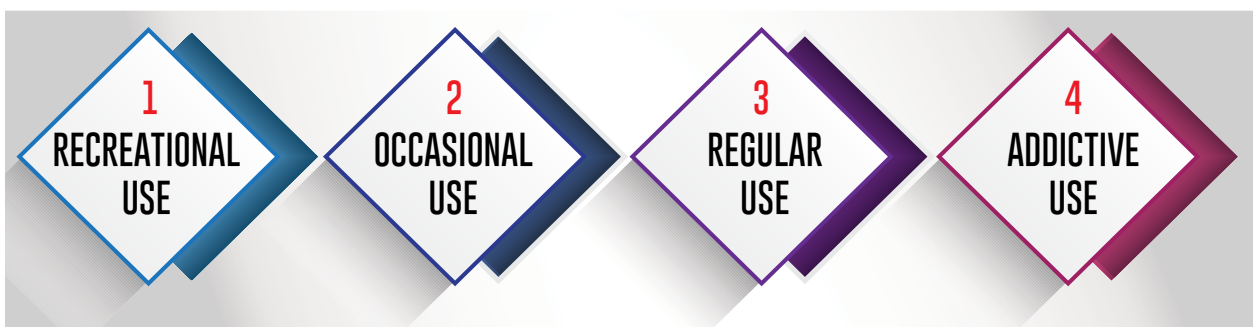
*This image is only an example of how the brain can recover from drug use. In this example we see a brain of a healthy person on the far left. When we compare the image in the middle to the healthy brain on the left you can see that the middle brain image of a person who has been not using methamphetamine for a month has much less activity with very little red and yellow. With a longer duration of drug abstinence, 14 months later it can be seen that this brain has more red and yellow and looks more like the brain of a healthy person. These images are important in that they suggest that there is hope for brain recovery after substance use disorder.*

## Development of Substance Use Disorders

Progression from use to dependence and ultimately to a diagnosable substance use disorder typically begins with the first rewarding experience with a psychoactive substance. A rewarding experience usually results in a person's seeking another rewarding experience. If the experience is

unpleasant, the individual will most likely not repeat the experience.

When substance use does progress, the progression typically follows a pattern. The pattern can be described in a number of ways, but one way to look at it is in the following four stages:



## Stage 1

### Experimental/Recreational Use

Recreational use is the least severe level. It usually occurs in a social setting among friends, does not happen very often, and typically involves consuming small to moderate amounts of psychoactive substances. It is often driven by curiosity or peer pressure. A person using recreationally rarely experiences problems related to use. A possible exception is if the substance used is illegal.

## Stage 2

### Circumstantial/Occasional Use

Circumstantial use happens often when an individual is motivated to achieve a desirable effect as a way of coping with something circumstantial. For example, a very shy person may find that smoking marijuana makes him or her more relaxed and able to talk to people, dance, or otherwise be more social. Or a person with depression may try a substance to feel livelier and better. An extreme example is that soldiers in combat have been known to use marijuana, heroin, or other available substances to help them relax and escape the stresses of war. A person at this level also may use occasionally for fun or to be social. A person may or may not experience problems because of use at this level.

## Stage 3

### Intensified/Regular Use

Some people start out with recreational or circumstantial use but begin to use more of the substance, more often. When psychoactive substances are used daily or almost daily, in low to moderate doses, the effect is intensified. At this level, a person is often motivated by a need to get regular relief from an ongoing problem, such as anxiety or depression, or to maintain a desired level of performance. At this level, a person is probably beginning to experience problems with use (e.g., being late to work on Monday mornings because of hangovers; others being concerned about the use). This level of substance use is considered "abuse."

## Stage 4

### Compulsive/Addictive Use

Compulsive use is the most dangerous and severe. At this level, high doses are needed daily or almost daily to reach a desired physical and/or psychological effect or to avoid withdrawal symptoms. At this level, the substance becomes the most important thing in a person's life, around which all other activities are organized. At this level, a person experiences problems related to use but continues using in spite of them. This level of substance use is considered addiction.





C

# BUILDING BLOCKS OF DRUG DEMAND REDUCTION PROGRAMS



## EPIDEMIOLOGY

### What is Epidemiology?

The World Health Organization defines epidemiology as “the study of the distribution and determinants of health-related states or events (including disease).”

Epidemiologists look for why certain health problems occur. They search for patterns in how often a problem occurs, where it occurs, and how many people it affects over time. They then use this information to figure out the best approaches to preventing the problem—or to at least slow down its spread. <https://www.samhsa.gov/capt/practicing-effective-prevention/epidemiology-prevention>



Epidemiologists use a variety of methods for collecting the information they need. These include surveillance systems that may consist of the requirement of doctors and other health professionals to report anyone with a specific diagnosis, such as, HIV or other infections. They also include surveys of populations that may be defined as household residents within a specific geographic region, or by some characteristic, such as, age, for school based surveys. These surveys can be conducted once, or multiple times over years.<sup>8</sup>

In addition to these surveillance and descriptive studies, epidemiologists also conduct analytical studies to understand the determinants of the health issue. For instance, perhaps a population survey shows that a specific geographic area has high rates of the particular problem; perhaps they visit the geographic site and conduct interviews and medical tests, or they might begin implementing disease control, such as immunizations and treatment. These studies are generally hypothesis driven and are also called etiologic studies.

Epidemiologic research findings help to form the foundation for the development of prevention and treatment strategies, and are the basis for the planning and the evaluation of prevention and treatment delivery.<sup>9</sup>

In addition to the characteristics of the substance use patterns and of those who use substances, epidemiologic research has provided other information that has informed the development of prevention programming.<sup>10</sup> Survey data indicate that there is an inverse relationship between perceptions of harmfulness or risks associated with use of substances, and the actual use of these substances.<sup>11</sup>

In the field of substance use, epidemiology helps prevention professionals identify and analyze community patterns of substance misuse and the various factors that influence behavior. In working to prevent substance misuse and related behavioral health problems, epidemiologists are concerned with two key questions:

1. What is the nature, extent, and pattern of substance use behaviors and their associated consequences?
2. What risk and protective factors influence these behaviors and consequences?

Data about the patterns of substance misuse in a particular population or community can help focus prevention strategies and

programs, and help decision-makers reach those populations in greatest need.

<https://www.samhsa.gov/capt/practicing-effective-prevention/epidemiology-prevention>



## Why Does Epidemiology Matter?

Epidemiology matters because it is the central science of public health as it relates to substance use. It is a cornerstone of public health responses because it provides the scientific input that shapes substance use related public health policy decisions, program directions, and activities.

By determining the “who, what, where, when, how, and why” related to substance use disorders and related health conditions, appropriate interventions and control measures can be implemented to

lessen their health impact. Epidemiology can help to shape evidence-based practice by identifying risk factors for substance use disorders (SUDs) and targets for the prevention of SUDs.

When an outbreak of overdoses occurs, immediate action may be needed to prevent or control a situation. Epidemiology can identify trends and solutions by studying and analyzing patterns, causes and effects of health and disease conditions in defined populations.

Epidemiological studies of substance use and substance use disorders (SUDs) have provided an abundance of data on the patterns of substance use in nationally representative samples across the world. However, many countries lack any epidemiological data collection mechanisms, risking the potential for substance use conditions and trends to go undetected and undiagnosed. Without

epidemiology we are limited in capacity to prevent SUDs and lessen their severity.

Simply put, the investment in data collection systems and epidemiological data is essential in effective drug demand reduction responses. Without investment in this critical research component, detection of substance use trends is hampered and design of effective programming in response is limited.

**Epidemiology is critical in the detection of substance use trends and conditions and plays a role in designing programs that are most likely to succeed.**

## UNDERSTANDING PREVENTION

### Prevention Science

Effective prevention approaches are grounded in prevention science. The primary goal of prevention science is to improve public health by identifying malleable risk and protective factors, assessing the efficacy and effectiveness of preventive interventions and identifying optimal means for dissemination and diffusion.<sup>12</sup>

- **Prevention Science** is the foundation for health education and health promotion as well as preventive interventions. It focuses on human motivation and change processes to help design effective interventions which seek change in individuals and environments to prevent or treat substance use.

There are three major components of prevention science:<sup>13</sup>

- **Epidemiology** seeks to identify the predictors and processes associated with positive and negative behavioral outcomes and their distribution in populations.
- **Interventions** focus on altering trajectories by promoting positive developmental outcomes, and reducing negative behaviors and outcomes.
- **Research Methodology** as used in prevention involved an array of tools and techniques including community entrance and engagement skills, study design, sampling methodologies, sample maintenance and retention and statistical analyses.

### Risk and Protective Factors

The process of initiation of use and progression to a diagnosable substance use disorder is influenced by a broad spectrum of vulnerability and protective factors (or precursors) in the following domains:

- **Biological** (e.g., genetic and physical traits),
- **Psychological** (e.g., cognition and emotion, temperamental traits),
- **Social** (e.g., family and peer group interactions), and
- **Environmental** (e.g., access to education and to health and social services, physical environment, national policies).

These factors are different at different developmental stages, and they are also interconnected, as exposure to one risk factor can make an individual more susceptible to other risk factors later on. “Life course” or developmental perspective illustrates how stage of development and the social context(s), such as family or school, present both protective and risk factors for drug abuse and to safe and healthy development in general. This comprehensive view of the factors contributing to substance use is sometimes referred to as the bio-psycho-social approach to prevention.

## Factors of vulnerability or protection for the initiation of drug use

Vulnerability	Protection
<p><b>Intrapersonal:</b></p> <ul style="list-style-type: none"> <li>• Irritable temperament</li> <li>• Inability to regulate emotions</li> <li>• Aggressive tendencies</li> <li>• Low intelligence</li> <li>• High sensation seeking</li> </ul>	<p><b>Intrapersonal:</b></p> <ul style="list-style-type: none"> <li>• Easy temperament, easy to soothe</li> <li>• Cooperative behaviour</li> <li>• Happy demeanour</li> <li>• Average intelligence</li> <li>• Early reader</li> <li>• Athletic ability</li> </ul>
<p><b>Interpersonal:</b> (relationships with family and peers)</p> <ul style="list-style-type: none"> <li>• Resistance to rules</li> <li>• Arguing with parents</li> <li>• Harsh discipline</li> <li>• Domestic violence</li> <li>• Maternal depression</li> <li>• Parental substance abuse</li> <li>• Association with deviant peers</li> </ul>	<p><b>Interpersonal:</b> (relationships with family and peers)</p> <ul style="list-style-type: none"> <li>• Warm supportive parenting</li> <li>• Parent involvement in child's activities</li> <li>• Parents know child's friends</li> <li>• Friends who resist drugs</li> <li>• Involvement in school activities or clubs</li> </ul>
<p><b>Environmental:</b></p> <ul style="list-style-type: none"> <li>• Classroom mismanagement</li> <li>• Lack of safe places to play</li> <li>• Drug dealing on streets</li> <li>• Adults who are publically intoxicated</li> <li>• Infestation by rodents</li> </ul>	<p><b>Environmental:</b></p> <ul style="list-style-type: none"> <li>• Safe adequate housing</li> <li>• Sidewalks and streetlights</li> <li>• Community policing</li> <li>• Clean well-resourced schools</li> <li>• Parks and recreation equipment</li> </ul>

## Prevention Programs Address Risk and Protective Factors

Preventive interventions encompass the full range of programs and policies to address these factors by:

- Identifying malleable risk and protective factors for substance use,
- Developing optimal strategies to influence these factors, and to help children and youth to reach their age-related developmental goals,
- Assessing both efficacy and effectiveness of these prevention interventions, and
- Identifying optimal strategies for the implementation of preventive interventions, as well as for adaptation of evidence-based programs, policies and practices to differing local contexts.

The earlier the substance use initiation occurs the greater the risk of developing later substance use related disorders becomes, and immature brains are also more vulnerable to other negative consequences of substance abuse than adult brains. This is also why delaying initiation is such an important public health outcome.

There are various ways to classify prevention interventions and policies. They can be differentiated according to the setting they operate in, according to the age of the targeted population, or according to the level of risk towards substance use present among the targeted population or individuals.

## Prevention Programs Support Public Health

Preventive interventions and policies aim to prevent or delay the onset of drug use and progression to disorders. These are important goals, especially as the onset and progression of drug use are preventable causes of:

- **Health Problems** (e.g., among teens with a genetically-based vulnerability to psychosis, cannabis use can contribute to the development of psychosis.
- **Injuries** (e.g., the high rates of motor vehicle injuries and fatalities among teen drivers under the influence of alcohol)
- **Lost Income and Productivity:** (e.g., substance abuse related lost productivity includes costs in the following categories: labour participation, treatment services and specialty care, government contributions to care, hospitalization, incarceration, and non-homicidal and homicidal premature mortality costs)
- **Crime and Incarceration** (e.g., 90% of acquaintance rape and sexual assault on college campuses in the United States involves the use of alcohol and other substances by the assailant, victim or both)

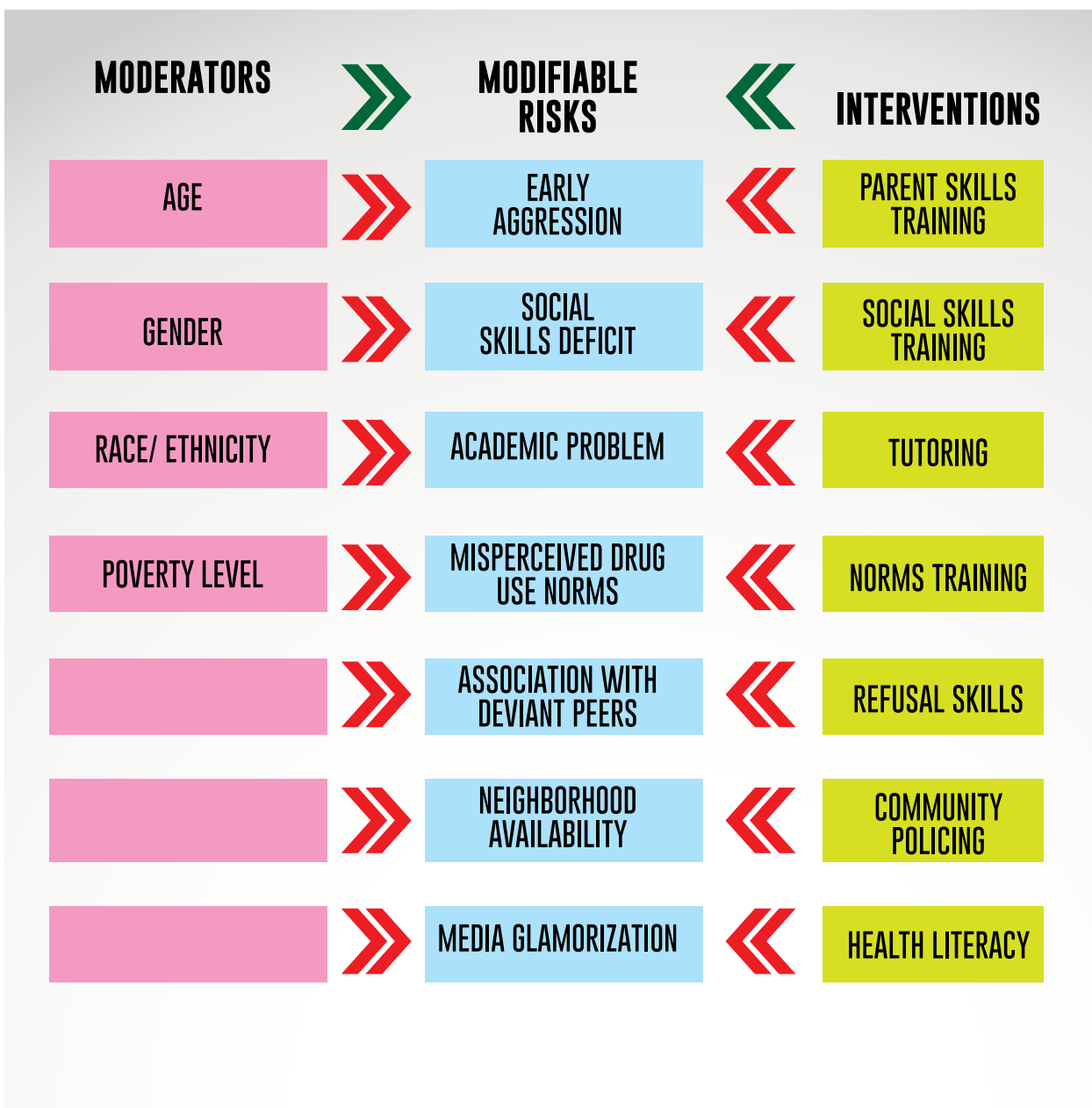
**Drug use prevention interventions and policies can have multiple positive outcomes beyond preventing substance use, such as improving road safety, preventing violence, improving mental health, supporting school attainment, and decreasing absenteeism from work, depending on the type of prevention approach. Drug use prevention based on evidence can be highly cost-effective.**

- **Family Dysfunction** (e.g., Research shows that children with parents who abuse alcohol or drugs are more likely to experience abuse or neglect than children in other households)
- **Substance Use Disorder** and other health and social drug use consequences such as HIV/AIDS or viral hepatitis.

competencies in individuals. Prevention science has made big advances during the recent years, and it can help us to think about how patterns of behavior develop, what motivates individuals to behave in specific ways, and what risk and protective factors are critical to substance use and which of them can be influenced, and how these can be best influenced in different contexts. Factors such as age or race cannot be influenced, and they are referred to as “moderators.” Intervention strategies are optimized to influence rather the malleable factors contributing to substance use as the chart below indicates.

## Outcomes of Prevention

Prevention interventions support the development of knowledge, skills, and



Interventions include components targeting the specific knowledge, skills, and competencies as well as environmental features critical to the targeted population. Often these include:

- Activities designed to promote skills in specific areas such as parenting skills, academic skills, pro-social behaviour skills
- Environmental change strategies such as modifying classroom management style to reduce the aggressive behaviour of some children
- Provision of services to help the development of specific competencies such as academic skills through tutoring
- Community level change strategies such as policies that effect minors' access to alcohol or tobacco that includes consistent enforcement

The actual outcomes of prevention are often difficult to observe because changes in substance use and related outcomes often occur long after the actual intervention.

However, a growing evidence base has allowed prevention researchers to observe and draw conclusions about the impact of intervening as early as in early childhood on outcomes across the course of development up to adulthood.

The following list provides examples of intervention outcomes.

#### **Intra-personal outcomes:**

- Increased normalization of cortisol levels among children in welfare settings
- Increased emotional self-regulation
- Increased age at first sexual experience

- Decreased attention deficit hyperactivity disorder (ADHD)
- Decreased initiation of tobacco, alcohol and/or other drug use/abuse
- Decreased substance abuse disorder diagnoses

#### **Family and relationship outcomes**

- Increased maternal prenatal and perinatal care
- Increased parental involvement in child's life
- Increased maternal graduation rates and work history
- Decreased prenatal smoking
- Decreased child abuse and neglect
- Decreased maternal role impairment due to substance use

#### **School/ work outcomes**

- Higher academic achievement (reading and math)
- Increased commitment to school and school bonding
- Higher rates of high school completion and college attendance
- Decreased harsh/critical behaviour among teachers
- Less disruptive behaviour in classrooms
- Lower rates of school absenteeism

#### **Health and other service use**

- Increased awareness of community-based services
- Increased use of prenatal services
- Decreased use of social service
- Decreases in mental health and drug abuse services usage
- Decreased criminal justice involvement



This partial list of prevention outcomes demonstrates the power of prevention to change the lives of individuals and families, to reduce human suffering, and to improve interpersonal, academic, social, work, and health outcomes.

## TREATING SUBSTANCE USE DISORDERS

### “What is Treatment?”

There are a number of ways to look at treatment: the setting; the intensity and duration; how treatment is provided; the components of treatment; the continuum of care; and treatment models or practices.<sup>14</sup>

Treatment setting refers to where treatment is provided: for example, in a drop in center, hospital, clinic, or residence.<sup>15</sup>

Treatment intensity and duration are related to one another. Intensity refers to how often treatment is provided. Duration refers to how long a person receives treatment services.<sup>16</sup>

Treatment can be provided in a number of ways. For example: one-on one with an addiction professional; in a group with peers or with other family members.<sup>17</sup>

Components of treatment refer to the elements, or pieces, of treatment: for example, assessment, counseling, education, and so on.<sup>18</sup>

The continuum of care is related to the types of treatment and the other services a person can receive over time. The continuum includes the different levels of care that are available to clients. This is another way of look at ongoing recovery management.<sup>19</sup>

The model of treatment intervention refers to the theoretical basis and specific techniques a professional uses to provide treatment interventions – for example, cognitive behavior therapy and other evidence-based practices.<sup>16</sup>

## NIDA Principles of Effective Treatment

While there are many types of approaches and programs, effective treatment is grounded in an evidenced-based understanding of substance use disorders.

The National Institute on Drug Abuse (NIDA), a federal agency that is part of the National Institutes of Health, issued 13 principles of effective treatment for drug addiction in 1999. These principles call for the treatment of the whole person:

1. No single treatment is appropriate for all individuals.
2. Treatment needs to be readily available.
3. Effective treatment attends to multiple needs of the individual, not just his or her substance use.
4. An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that the plan meets the person's changing needs.
5. Remaining in treatment for an adequate period of time is critical for treatment effectiveness.
6. Individual or group counseling and other behavioral therapies are critical components of effective treatment for addiction.

7. Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies.
8. Individuals with addictions and co-occurring mental disorders should have both disorders treated in an integrated way.
9. Medical detoxification is only the first stage of addiction treatment and by itself does little to change long-term substance use.
10. Treatment does not need to be voluntary to be effective.
11. Possible substance use during treatment must be monitored continuously.
12. Treatment programs should provide assessment for HIV/AIDS, hepatitis B and C, tuberculosis and other infectious diseases, and counseling to help patients modify or change behaviors that place themselves or others at risk of infection.

13. Recovery from substance addiction can be a long-term process and frequently requires multiple episodes of treatment.

### Evidence-Based Practices (EBPs)

Treatment for substance use disorders (or SUDs) has steadily evolved over time. Our understanding of SUDs has increased tremendously thanks to improved brain scan imaging and other research techniques. Research on treatment also has become more rigorous and science-based, and we now have a better understanding of what works in treatment. This doesn't mean one approach will show the same results for every person. It does, however, mean that we now have a much better understanding of a range of possible approaches that are most likely to be helpful. We call these approaches evidence-based practices (or EBPs).

### EVIDENCE-BASED PRACTICES (EBPs): DEFINITION

**Practices for which the evidence is strongest and most accepted—and that are most likely to have significant impact on improving care**

*Source: U.S. National Quality Forum. (2007). National voluntary consensus standards for the treatment of substance use conditions: Evidence-based treatment practices (abridged version). Washington, DC: Author.*

One basic definition of evidence-based practices (EBPs) is “practices for which the evidence is strongest and most accepted – and that are most likely to have significant impact on improving care. So, why do we need to know and care about EBPs?”

EBPs have been shown to improve treatment outcomes. International organizations have called for increased use of EBPs to improve treatment globally. For example, in 2008, the World Health Organization (WHO), in coordination with the United Nations Office on Drugs and Crime (UNODC), issued a discussion paper titled “Principles of Drug Dependence Treatment.”<sup>1</sup>

In 2007, the U.S. National Quality Forum (NQF) developed “Consensus Standards for Treatment of Alcohol, Tobacco, and Drug Use Disorders” to advocate for improving treatment for SUDs. The NQF recommended that certain empirically validated treatment practices be used with clients with SUDs. These include:

- Pharmacotherapy (the use of medications to treat SUDs);
- Cognitive-behavioral therapies;
- Motivational enhancement therapy;
- Contingency management;
- 12-Step facilitation therapy; and
- Marital and family therapies.

The consensus report also indicated that treatment delivery with an empathetic, supportive approach may be just as important as the specific practices used. This means that a counselor’s ability to engage and develop a helping relationship with a client is critical.

**An empathetic supportive approach may be just as important as the specific practices used. This means that a counselor’s ability to engage and develop a helping relationship with a client is critical.**

\* NOTE: A detailed description of a range of “Psychosocial Approaches to Treating SUDs” may be found in the Appendices section of this Field Guide.

## Pharmacological Treatment

Pharmacological treatment of substance use disorders in adults is supported by high quality clinical trial evidence. Pharmacotherapy is used in a number of ways:

- To aid in acute withdrawal or tapering from psychoactive substances;
- To replace an opioid, either short or long term;
- To discourage use of an opioid by reducing its reinforcing properties; and
- To aid early recovery by reducing cravings or counteracting some of the longer term symptoms of withdrawal.

Medications are available for treating dependence on alcohol, opioids, and nicotine. Medications for opioids need to be prescribed by a medical practitioner. One of the best-known forms of pharmacotherapy is methadone maintenance therapy. Pharmacotherapy is typically used along with counseling and other treatment services, not in place of them. International guidelines developed by the World Health Organization call for combining pharmacotherapy with

counseling (particularly cognitive-behavioral therapy and contingency management) and case management.

## PHARMACOLOGICAL TREATMENT

is one component of a comprehensive care approach. There is strong evidence in adults that allied non-pharmacological treatments reduce the intensity of withdrawal during detoxification and reduce the need for additional, or high dose, medication. Such non-pharmacological treatments assist in long-term relapse prevention by providing necessary life and coping skills to reduce cravings and avoid triggers for continued substance use. This has been demonstrated in a variety of treatment settings. Non-pharmacological treatment approaches can play an important role in complementing prescribed medications in the treatment of substance use disorders.

## Continuum of Care

One of the best ways to understand the treatment of substance use disorders is to become familiar with the meaning of "Continuum of care." It refers to the whole range of services a client can receive directly from a treatment program or coordinated by the treatment program.

The key components of a continuum of care often overlap and include the following:

- **Pretreatment;**
- **Primary treatment;**
- **Case management; and**
- **Continuing care, including ongoing recovery management.**

## Pretreatment

Pretreatment components are the parts of the continuum of care which happen before primary treatment. Pre components include:

- Outreach*
- Screening and brief intervention*
- Assessment and treatment planning*
- Detoxification*

*Outreach* can be defined as the act of reaching out in an effort to build connections from one group or program to another. It also means extending services or assistance to people or groups not previously served. SUD program outreach includes organized efforts to identify and screen individuals who might have a problem with substance use, rather than wait for them to be referred to treatment programs or to decide to enroll in a program themselves. The ultimate goals of outreach are to: establish contact; build trust; develop relationships; provide needed healthcare linkages; and engage individuals in SUD brief interventions or treatment.

Outreach is important because many people who use substances will not approach SUD treatment programs and other health services. Some reasons for this are that treatment programs are often seen as: intimidating; difficult to get to; too rigid or judgmental in their approach; irrelevant to

an individual's immediate needs; and too costly.

Outreach efforts can be conducted in a variety of ways and in different settings.

For example:

- A treatment program can offer community education about SUDs and treatment options at meetings of business and religious community leaders or community workshops.
- An addiction professional can conduct outreach in homeless shelters, HIV or other medical clinics, community centers, drop-in centers, and so on. The professional could be an employee of a local treatment program or of the shelter, clinic, or center.
- Professionals or peers (individuals who are in recovery from SUDs) can offer education and/or screening services in schools, social centers, and clinics. Additionally, outreach efforts can be provided by a variety of staff in other settings:
- Paraprofessionals can place literature and be present in dance-clubs and gambling casinos where substance use is encouraged.
- Peer educators can spend time in places frequented by people who are known to inject drugs or by sex workers.
- Medical staff in the emergency room, orthopedic centers, or primary care offices can provide brief interventions and/or referrals to SUD professionals. Although these examples involve specific settings, outreach efforts should target the cross-section of people who use substances and not focus exclusively on only the most visible populations.

**Screening** is the process of identifying individuals with possible SUDs. Screening provides an opportunity to initiate discussions with individuals about their substance use. The screening process does not exactly identify what kind of problem the person might have or how serious it might be; it simply determines whether a problem exists and whether further assessment is needed.

The difference between screening and assessment is that assessment tries to identify as closely as possible the nature of an SUD and other issues and the level of intervention that may be needed.

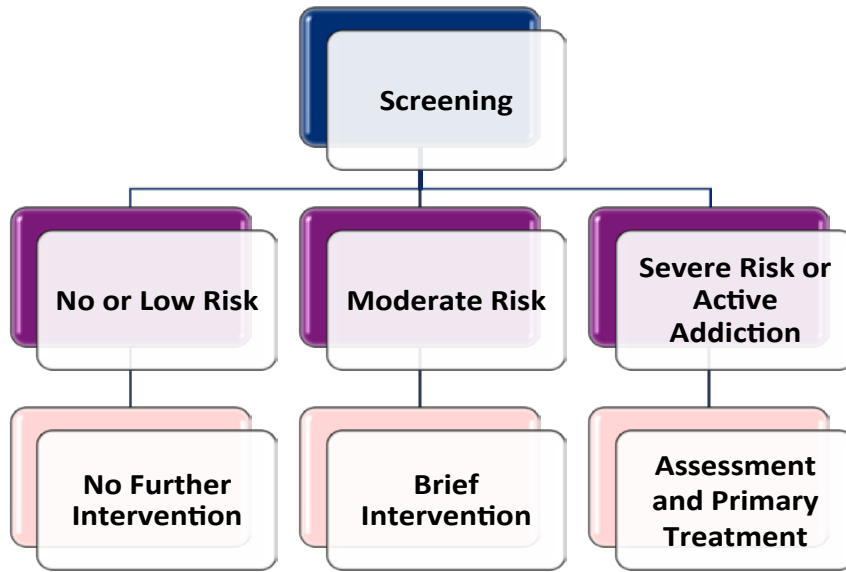
Screening should be conducted using a validated brief instrument (i.e., test) to quickly identify a person's pattern of substance use. The validity of a screening instrument is the degree to which it actually measures what it claims to measure.

In the past, screening instruments were used to identify active cases of drug dependence, but, in recent years, screening has expanded to identify individuals across the full spectrum of use – from risky substance use to addiction.

**Brief intervention** focuses on increasing a person's insight into and awareness of substance use and behavioral change. Brief intervention can be provided through a single session or multiple sessions of motivational interventions. These interventions can be provided by an SUD counselor or peer counselor. They may also be provided by trained medical or social services program staff.

**Assessment:** Individuals who have screening results that indicate a severe risk of developing SUDs or that indicate an active addiction should be referred to a program for assessment and treatment planning.

# Screening



Screening identifies individuals as having: No or low risk of an SUD; Moderate risk of an SUD; or Severe risk or active addiction

The goals of a comprehensive assessment are to: provide a foundation for treatment planning; establish a baseline for measuring a client's progress; prioritize a client's problems; set priorities for treatment and case management intervention; and identify client strengths and other "recovery capital" that can support recovery.

Thorough assessment is the basis of treatment planning. The treatment plan is an individualized outline for treatment and services based on the client's specific needs identified in the assessment process.

**Treatment planning** is a joint activity that involves the counselor, the client, other treatment providers, and sometimes the client's family members. Treatment planning includes determining whether: the program can meet the client's needs or should be referred; treatment for co-occurring mental or medical disorders is needed; or the client is in need of supervised detoxification.

**Detoxification** is the process of stopping substance use; clearing the substance from the body; and managing the withdrawal syndrome

## Case Management

The next part of the continuum of care is case management. Although case management is being discussed separately from treatment, it is actually an integral part of treatment. Case management begins with screening and assessment and continues throughout a person's treatment and into ongoing recovery. There are many definitions of case management, but one simple definition is that case management is the coordination of professional social and/or medical services to assist people with complex needs, often for long-term care and protection. Case management for people who are addicted is critical for a number of reasons.

First, treatment must be structured to ensure smooth movement between levels of care (e.g., moving from a residential center to an outpatient program) while avoiding gaps in service. Treatment services also must be prepared to respond rapidly to the threat of relapse.

Second, addiction affects so many areas of a person's life that a range of support services are typically needed to help the individual maintain long-term recovery while managing to live in the community.

Finally, case management provides the client with a single contact person who is responsible for finding and mobilizing needed resources, ensuring that the client does not "fall through the cracks."

Case management functions include: assessment; service planning; linkage and referral; monitoring; and advocacy

## Continuing Care

The continuing care process begins with discharge planning. Discharge planning is finalized as the treatment relationship enters the final stage with the client, although it should begin with the initial assessment and treatment planning. Discharge planning leads to development of a continuing care plan.

A continuing care plan is a documented plan of action developed before discharge or transfer to another level of care. It is a structured, goal-oriented list of services developed jointly by the client and the counselor. The plan's purpose is to assist in maintaining the progress a client has made by linking him or her with supportive resources in the client's environment.

The plan should incorporate elements of a client's recovery capital as well as possible limitations or challenges that will affect the client's ongoing recovery. Attention should be given to family involvement, financial constraints, physical needs, and ongoing therapy needs (for example, treatment for mental disorders, trauma, family therapy).

## Case Management

- An integral part of treatment

Screening and  
Assessment

Ongoing  
recovery



Case management begins with screening and assessment and continues throughout a person's treatment and into ongoing recovery

# MONITORING AND EVALUATION:

## KEY TO EVIDENCE-BASED PREVENTION

### What is Evaluation?

In its most general sense, evaluation is a type of research. In the context of prevention, evaluation can be defined “as a systematic way of assessing the short- and long-term outcomes of a prevention intervention, and the factors that are related to these outcomes.” In short, prevention evaluation measures impact and outcomes. It is important because it plays a role in the evidence-based practice of prevention.

#### IMPORTANCE

In the context of prevention, evaluation can be defined “as a systematic way of assessing the short- and long-term outcomes of a prevention intervention, and the factors that are related to these outcomes.”

The primary purposes for evaluation are to see which populations responded to an intervention and which did not; to look at costs to determine benefits; and to compare the effectiveness of one program versus another.

*Process evaluation (or monitoring)* describes what happened in the program—it quantifies the dosage of the intervention, the implementation fidelity and its ability to affect change. Monitoring answers questions such as: Who participated in the intervention, who delivered the intervention, how much of the intervention was delivered (e.g., number of lessons), and did the intervention make a difference in perceptions or intentions? It is

an essential part of the evaluation process, even when an outcome evaluation is not conducted.

The purpose of a process evaluation is to characterize the process through which an intervention or policy is implemented. It focuses on inputs and outputs of the program, quantifying the dosage of the intervention, the implementation fidelity, and its ability to affect change. But, it is also more. It is a way of monitoring *what* is happening, *when* it happens to be sure the intervention or policy is being implemented as intended, not only according to a manual or guidelines, but, also according to the strategic plan. As a monitoring approach, this is a very important administrative tool for any service provider to use.

A process evaluation or monitoring asks the questions:

- What did we do?
- How much did we do?
- Who participated?
- Who implemented the intervention/policy components?
- Was the intervention/policy implemented as intended?

*Outcome evaluation* characterizes the extent to which the knowledge, attitudes, beliefs, and behaviors have changed for individuals exposed to the intervention or policy compared to those who were not exposed. Long-term outcomes focus on the desired end-product of an effective intervention, which is the reduction or elimination of substance use.



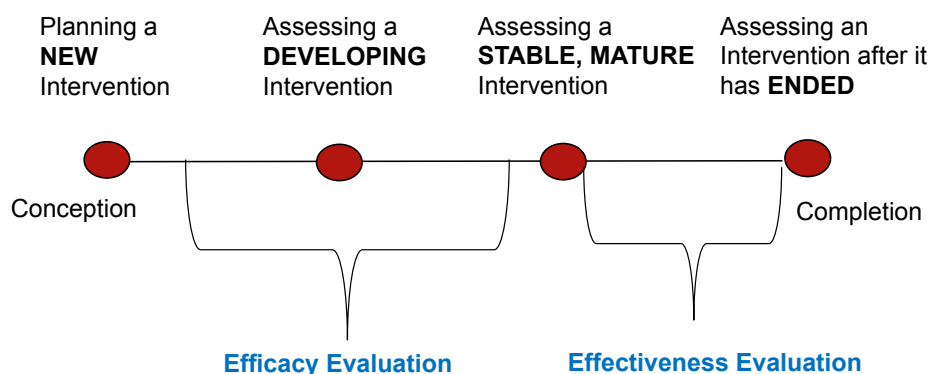
## COMPONENTS OF AN EVALUATION SYSTEM

- An evaluation system generally includes two important components
  - Process evaluation or monitoring
  - Outcome evaluation
- Process evaluation or monitoring addresses the questions:
  - What did we do?
  - How much did we do?
  - Who participated?
  - Who implemented the intervention/policy components?
  - Was the intervention/policy implemented as intended?
- Outcome evaluation addresses the question:
  - Did we achieve what we wanted to achieve with the intervention/policy components?

### When to Conduct an Evaluation

Evaluations can be conducted over the course of intervention development from planning, through early development, to full-blown implementation, and after the program is over. In reality, all prevention intervention stages should be evaluated because you learn valuable information to improve the program.

## When to Conduct Evaluation?



The stage of program development influences the reason for program evaluation.

The stage of program development influences the reason for program evaluation.

- **Efficacy studies**, generally, are conducted to determine if the intervention achieves the short-term outcomes that are desired, without doing more harm than good to the participants.

For many substance use prevention interventions, these short-term outcomes are defined by the theoretical foundation for the intervention. In other words, if the intervention is designed to improve parenting or classroom management skills, the efficacy study would determine if the intervention achieved these improvements.

- **Effectiveness studies** test whether interventions are effective in achieving short-, intermediate- and long-term outcomes under “real-world” or “natural” settings.

This means if, for instance, the intervention was desiring to reduce substance use of children by improving parenting skills, the effectiveness study would determine if children, within the intervention compared to those not in the intervention, had lower rates of substance use in adolescence. Furthermore, the effectiveness study would also determine whether these lower rates of substance use were related to improved parenting skills.

For the purposes of prevention coordinators and specialists, effectiveness studies, that is, those studies that test an intervention in “real-world” conditions are of primary interest. These studies not only look at the outcomes of the intervention, but also, address the questions: for whom was the intervention most effective and under what delivery conditions?

## Evaluation Design

Prevention coordinators need to play a major role in framing and developing the evaluation design. The primary components of the design include: research questions; the type of study needed; the target population; selection criteria for the population; measures that relate to the evaluation questions; data collection; and analysis. A prevention coordinator’s real world experience can contribute much to developing each of these components.

Further, prevention program managers should consider investing heavily in research design and evaluation and lightly in program implementation.

There are several strong research designs that are used in evidence-based evaluation; each approach has advantages and disadvantages. Design types include: The Classical Experimental Design (Randomized Control Trial (RCT)); the Interrupted Time Series Design; and the One Group Pre-test and Post-test Design.

There are also other components of evaluation design – e.g., sampling and measurements – to see how the population is defined and selected, and the measures developed to assess their attitudes, beliefs, intentions, and behaviors related to substance use. Further, both quantitative and qualitative measures are likely needed in evaluation. The quantitative primarily deal with objective numbers of things, such as, levels of use, while qualitative deal with the subjective aspects and address the “why?” and “what-does-it-mean?” type of questions. Lastly, prevention evaluation involves data collection methods and data analysis, including basic statistics.

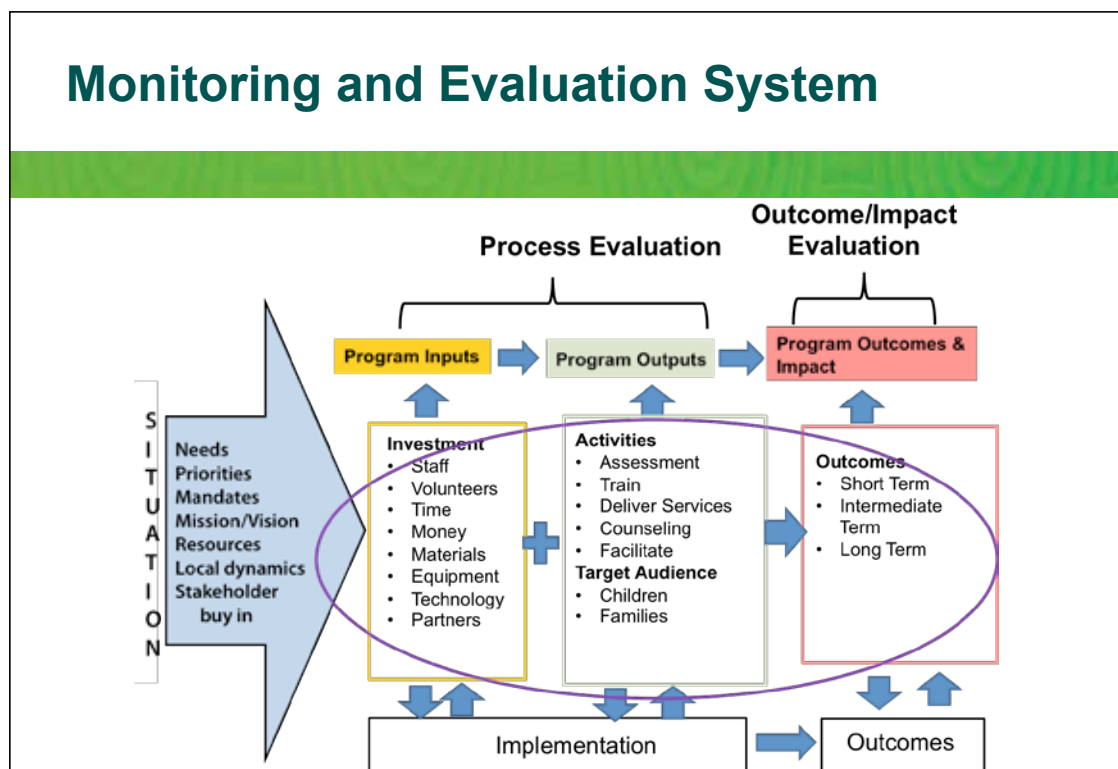
## Introduction to Evaluation Design

An evaluation design is a guide for investigating a question or hypothesis. It includes:

- Research questions or hypotheses
- Study type or research design
- Definition of the population to be studied
- Sampling method
- Variables and their measurement
- Data collection methodology
- Statistical analyses plan

### A Full Monitoring and Evaluation System

A full monitoring and evaluation system would include all of the components in the Figure below.



As the previous Figure illustrates, we see that process evaluation is related to how the prevention intervention is implemented, and that, although outcome evaluation focuses on outcomes, per se, a full evaluation of a prevention intervention should include both implementation or program inputs and outputs, as well as, short-, intermediate-, and long-term outcomes.

Please note that process evaluation or monitoring is very important even when an evaluation is not planned, as it documents the delivery of the prevention intervention. So if you are implementing any prevention program, you will want to monitor what is going on in the program, who is being reached, and how much of the prevention program was received.

## Key Points to Consider in Conducting an Evaluation

Some of the key points to consider in conducting an evaluation are as follows:

- What is the purpose of the evaluation?
- What is going to be evaluated?
- Who would be interested in the evaluation outcomes and why?
- What is your time line? Is it realistic?
- What do you intend to do with the evaluation results?
- What resources are available for the evaluation (e.g., time, money, expertise)?

Finally, no evaluation is complete until a report of the findings is made available to a variety of audiences, including stakeholders, as well as other researchers. The audience for the findings determines how the findings are to be presented. These may range from graphic representations along with tables with levels of significance.



# THE INTERNATIONAL DDR FRAMEWORK



## International Conventions

There are three major international drug control treaties which aim to ensure the availability of narcotic drugs and psychotropic substances for medical and scientific purposes, prevent their diversion into illicit channels, and provide provisions on drug trafficking and substance use disorders.

### The Single Convention on Narcotic Drugs of 1954 (as amended by the 1972 Protocol)

The Single Convention on Narcotic Drugs of 1954 was created as an update to the Paris Convention of 13 July 1931. Its main purpose was to create a mechanism for adding new substances that should be prohibited from production and supply. The Single Convention's Schedules of drugs range from most restrictive to least restrictive in this order: Schedule IV, Schedule I, Schedule II, Schedule III. The U.S. system for control of substances under the U.S. Controlled Substances Act has five Schedules ranging from Schedule I (most restrictive) to Schedule V (least restrictive). The earlier treaty controlled only opium, coca, and derivatives such as morphine, heroin and cocaine. Today the list is much more extensive with over 100 substances and growing. The UN Commission on Narcotic Drugs and the World Health Organization were charged to add, remove, and transfer drugs among the treaty's four schedules of controlled substances. The International Narcotics Control Board (INCB) was mandated to administer the controls on drug production, international trade, and distribution. As of February 2015, the Single Convention has 185 state parties.

Scheduling of drugs has become very

complex and detailed. The following list was created to show in the simplest of form the difference in the schedules and the types of drugs that are more commonly known. A complete list of substances under each Schedule is maintained on the INCB website.

#### Schedule I

- Limitation to medical and scientific purposes of all phases of narcotics trade (manufacture, domestic trade, both wholesale, retail and international trade)
- Obligation of all participants in the narcotics trade to keep detailed records of their transactions in drugs
- Requirement of a medical prescription for the supply or dispensation of drugs to individuals
- A system of limiting the quantities of drugs available, by manufacture or import or both, in each country and territory, to those needed for medical and scientific purposes. Most commonly known substances include:
  - Cannabis, Cannabis resin, extracts, etc.
  - Coca leaf, cocaine
  - Natural opioids sources: opium, poppy straw
  - Natural opioids: morphine – the principal alkaloid of opium and of opium poppy, thebaine – an alkaloid of opium

#### Schedule II

- Governments are not bound to prevent the accumulation of drugs in Schedule II in the possession of retail distributors
- Medical prescriptions for the supply or dispensation of these drugs to individuals are not obligatory

- Such drugs are also exempted from the provision though recommended – concerning the use of official prescription forms
- Parties to the Single Convention need not require that the label under which a drug in Schedule II is offered for sale. Most commonly known substances include:
  - Natural opioids: codeine — alkaloid contained in opium and poppy straw
  - Semisynthetic opioids: acetyldihydrocodeine, dihydrocodeine, ethlmorphine

### Schedule III

- Government authorizations are not required for each import or export in Schedule III
- The only estimates and statistical returns that a Party need furnish to the INCB in reference to Schedule III preparations are estimates of the quantities of drugs to be utilized for the compounding of preparations in Schedule III, and information on the amounts of drugs actually so used

For example:

- o Codeine - when compounded with one or more other ingredients and containing not more than 100 milligrams of the drug per dosage unit and with a concentration of not more than 2.5 per cent in undivided preparations)
- o Opium or morphine (containing not more than 0.2 per cent of morphine calculated as anhydrous morphine base and compounded with one or more other ingredients and in such a way that the drug cannot be recovered by readily

applicable means or in a yield which would constitute a risk to public health)

### Schedule IV (Most restrictive)

- This category of drugs includes heroin and are considered to have "particularly dangerous properties" in comparison to other drugs
- According to Article 2, "The drugs in Schedule IV shall also be included in Schedule I and subject to all measures of control applicable to drugs in the latter Schedule" as well as whatever "special measures of control"; each Party deems necessary
- Under certain circumstances, Parties are required to limit Schedule IV drugs to research purposes only

Most commonly known substances include:

- Cannabis (listed as a single position, cannabis extracts and tinctures are in Schedule I, but not in Schedule IV)
- Cannabis — the flowering or fruiting tops of the cannabis plant (resin not extracted)
- Cannabis resin — the separated resin, crude or purified, obtained from the cannabis plant
- Semisynthetic opioids: heroin
- Synthetic opioids — fentanyl and derivatives: acetyl-alpha-methlfentanyl
- Synthetic 4-phenylpiperidine opioids — prodines
- Synthetic 4-phenylpiperidine opioids — ketobemidones
- Salts of the drugs listed in this schedule whenever the formation of such salts is possible

## Convention on Psychotropic Substances of 1971

The 1961 Single Convention on Drugs was not able to include emerging psychotropic as

### NOTE

Cannabinoids (natural and synthetic) and opioids (synthetic and semisynthetic) are scheduled by Convention on Psychotropic Substances.

its scope was limited to drugs with cannabis, coca and opium like effects. Included in the Convention on Psychotropic Substances are controls on psychoactive drugs that include: amphetamine-type stimulants, barbiturates, benzodiazepines, and psychedelics. This convention also included language on efforts to combat money laundering and other drug-related offenses.

## United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988

The 1988 Convention was created to combat organized crime by mandating cooperation in seizing drug-related assets and specifically requires parties to confiscate proceeds derived from drug offenses. The convention also set forth a legal basis for extradition of drug-related cases and providing mutual legal assistance upon request for searches, seizures, service of documents, etc. Controls for two categories of precursor chemicals used in the production of narcotic drugs was also established.

## Schedule Classification of Common Narcotics

Narcotic	Schedule
Heroin	I
Morphine	II,III
Methadone	II
Fentanyl	II
Hydromorphone	II
Meperidine	II
Codeine	II, III, IV
Buprenorphine	III
Narcotics combined with nonsteroidal anti-inflammatory drugs	III

Source: Drug Enforcement Administration (DEA), Controlled Substances Act, December 1, 2016.



# Commission on Narcotic Drugs (CND)

The United Nations (UN) Commission on Narcotic Drugs (CND) was established by the UN's Economic and Social Council (ECOSOC) in supervising the application of the three international drug control treaties. Every year the world gets together to meet on the global drug issues. In 2016, the 59th CND meeting was held from March 14 to 22, 2016, with over 1,500 delegates representing member states, inter-governmental organizations, and civil society. During the first few days, countries' senior representatives focused on negotiating an outcome document in preparation for the 2016 UN Special Session on Drugs (UNGASS), which has only been held once before in 1998. U.S. senior representatives included White House Office

of National Drug Control Policy (ONDCP) representatives and INL Assistant Secretary William Brownfield. The U.S. focus was to highlight alternatives to incarceration and restrictions on New Psychoactive Substances (NPS). The U.S. demand reduction team focused on adopting the resolution on the development and dissemination of international standards for the treatment of drug use disorders which urges Member States to implement and enhance practices consistent with the international standards for the treatment of drug use disorders.

The 60th UN Commission on Narcotic Drugs (CND) which took place on March 13-17, 2017 in Vienna, Austria included a U.S. delegation of nearly two dozen inter-agency participants led by the Bureau of International Narcotics and Law Enforcement Affairs (INL) Assistant



## Resolution 59/4

### Development and dissemination of international standards for the treatment of drug use disorders

*The Commission on Narcotic Drugs,*

*Recalling* the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol,<sup>1</sup> the Convention on Psychotropic Substances of 1971<sup>2</sup> and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988,<sup>3</sup>

*Stressing*, in particular, article 38 of the 1961 Convention as amended, according to which parties to the Convention shall take all practicable measures for the prevention of the abuse of drugs, and for the provision of early identification, treatment, education, aftercare, rehabilitation and social reintegration of the persons involved and shall coordinate their efforts and promote the training of personnel in drug treatment, aftercare, rehabilitation and social reintegration of abusers of drugs,

*Bearing in mind* the Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem,<sup>4</sup> in which Member States reiterated their commitment to promoting, developing, reviewing or strengthening effective, comprehensive, integrated drug demand reduction programmes, based on scientific evidence, as part of a comprehensive, balanced and integrated approach to both supply and demand reduction,

*Recalling* the Declaration on the Guiding Principles of Drug Demand Reduction,<sup>5</sup>

*Welcoming* the outcome document of the United Nations summit for the adoption of the post-2015 development agenda, entitled “Transforming our world: the 2030 Agenda for Sustainable Development”,<sup>6</sup>

*Acknowledging* that drug use dependence and disorders are a complex, multifactorial health disorder of a chronic and relapsing nature with psychosocial causes and consequences, which can be prevented and treated,

*Convinced* of the importance of a multisectoral and fully coordinated approach under which government agencies, non-governmental organizations and other relevant stakeholders cooperate, as appropriate and in accordance with national legislation, to support the development of policies and programmes that promote

<sup>1</sup> *Ibid.*, vol. 976, No. 14152.

<sup>2</sup> *Ibid.*, vol. 1019, No. 14956.

<sup>3</sup> *Ibid.*, vol. 1582, No. 27627.

<sup>4</sup> See *Official Records of the Economic and Social Council, 2009, Supplement No. 8 (E/2009/28)*, chap. I, sect. C.

<sup>5</sup> General Assembly resolution S-20/3, annex.

<sup>6</sup> General Assembly resolution 70/1.

## Resolution 59/4

psychosocial, behavioural and medication-assisted treatment, as appropriate and in accordance with national legislation, as well as rehabilitation, social reintegration and recovery support programmes, including for people in the prison system and those recently released from prison, giving special attention to the specific needs of women, children and young people,

*Stressing* that, as with any other health disorder, the development of standards for the treatment of drug use disorders should be consistent with applicable human rights obligations,

*Emphasizing* the need to ensure non-discriminatory access to adequate, effective and scientific evidence-based treatment of drug use disorders, including for people affected by such disorders in the prison system and other closed settings, in accordance with national legislation,

*Convinced* of the importance of providing comprehensive, integrated treatment therapies aimed at preventing relapse to those affected by substance use dependence and disorders, in order to ensure that all people have access to effective treatment and supportive services that promote their recovery, and also convinced of the effectiveness of holistic approaches under which services and support are provided that are tailored to fit individuals' and families' needs, and of promoting the active participation and involvement of those affected by substance use disorders,

*Welcoming* the ongoing work of the United Nations Office on Drugs and Crime and the World Health Organization in raising awareness of drug use disorders as a public health concern and in providing technical assistance to Member States to improve the quality and ensure the availability of and increase access to effective practices for the treatment of drug use disorders,

*Noting with appreciation* the work of the United Nations Office on Drugs and Crime and the World Health Organization in developing the international standards for the treatment of drug use disorders, which is a compendium of scientific evidence-based recommendations that reflect best treatment practices for possible use in Member States, as appropriate, and which is to be updated and improved as additional scientific data is collected, including through field testing,

1. *Encourages* all Member States to consider expanding the coverage and improving the quality of drug treatment systems, interventions and policies based on scientific evidence, using the scientific evidence-based international standards for the treatment of drug use disorders developed by the United Nations Office on Drugs and Crime and the World Health Organization, as appropriate and in accordance with national legislation and the international drug control conventions;

2. *Requests* the United Nations Office on Drugs and Crime, in collaboration with the World Health Organization and other relevant stakeholders, as appropriate, to develop initiatives to support the dissemination of the international standards for the treatment of drug use disorders;

Secretary William R. Brownfield. At this most recent CND meeting, a key issue for the U.S. government was international controlling of fentanyl precursor chemicals. After robust U.S. government advocacy efforts with the 53 members of the CND, the United States secured a unanimous vote of the 51 members present in favor of international control under the UN Convention against Traffic in Narcotic Drugs and Psychotropic Substances (1988 Convention) of two precursor chemicals – ANPP and NPP – essential to the manufacture of illicit fentanyl and fentanyl-related compounds. The process leading to this vote occurred in record-setting speed – four months – due

in large part to the effective United States collaboration with the International Narcotics Control Board (INCB). The CND action is a critical step in helping to reduce opioid-related overdoses in the United States because it will require nearly 200 countries to control the production and export of these chemicals, which in turn will make it harder for criminal organizations to acquire, produce, and traffic illicit fentanyl into the United States. By voting unanimously to control fentanyl precursors, the international community demonstrated its ability to act quickly to prevent the spread of a drug-related public health crisis to other countries.

### Resolution 59/4

3. *Also requests* the United Nations Office on Drugs and Crime, in collaboration with the World Health Organization and other relevant stakeholders, as appropriate, to provide Member States, upon request, with technical and capacity-building assistance in support of their efforts to implement practices consistent with those international standards for the treatment of drug use disorders, as appropriate and in accordance with national legislation;

4. *Encourages* Member States to consider initiating systematic processes of national adaptation of the international standards for the treatment of drug use disorders and the adoption of national standards for the accreditation of services, in accordance with national legislation, to ensure a qualified and effective response to drug use disorders, and requests the United Nations Office on Drugs and Crime, in collaboration with the World Health Organization and other relevant stakeholders, as appropriate, to assist Member States in those processes, upon request;

5. *Invites* the World Health Organization, within its mandate, to support the United Nations Office on Drugs and Crime in assisting Member States, upon request, in the process of national adaptation of those international standards for the treatment of drug use disorders to ensure effective responses to drug use disorders as part of a comprehensive approach;

6. *Invites* Member States, through bilateral, regional and international cooperation, as appropriate, to collaborate in the implementation of practices, consistent with the international standards for the treatment of drug use disorders through the exchange of information and the provision of assistance, including technical assistance, upon request, with a view to enhancing their ability to implement the international standards for the treatment of drug use disorders, as appropriate and in accordance with national legislation;

7. *Encourages* Member States to provide input to the United Nations Office on Drugs and Crime and the World Health Organization on a regular basis, in accordance with national legislation, based on consultations with relevant stakeholders such as scientists, drug treatment practitioners and non-governmental organizations, and invites the United Nations Office on Drugs and Crime and the World Health Organization to use that input, in the context of their respective procedures, to regularly update the international standards for the treatment of drug use disorders, in close collaboration with Member States, to reflect the most effective practices;

8. *Invites* the United Nations Office on Drugs and Crime to support Member States, upon request, in improving the knowledge of their policymakers, as well as the capacity of their practitioners and researchers working in the area of treatment of drug use disorders, through the use of the international standards for the treatment of drug use disorders, where appropriate and applicable and consistent with national legislation;

9. *Also invites* the United Nations Office on Drugs and Crime to continue coordinating efforts with other relevant United Nations organizations, in particular the World Health Organization, to

3

### Resolution 59/4

disseminate the international standards for the treatment of drug use disorders;

10. *Invites* Member States and other donors to consider providing extrabudgetary resources for the purposes described above, in accordance with the rules and procedures of the United Nations.

4



## International Standards for the Treatment of Drug Use Disorders

Many interventions that are commonly used in working with individuals with substance use disorders worldwide do not meet standards of scientific evidence of effective treatment. Such interventions are ineffective or can even be harmful. Individuals with drug use disorders deserve nothing less than ethical and science-based standards of care that are available similar to the standards used in treatment of other chronic diseases.

The International Standards for the Treatment of Drug Use Disorders (Standards) released at the CND in March by UNODC and WHO was a first step towards professionalizing prevention and treatment services globally. The complete guide, currently being field tested before its final release can be found at:

[http://www.unodc.org/docs/treatment/UNODC-WHO\\_2016\\_treatment\\_standards\\_E.pdf](http://www.unodc.org/docs/treatment/UNODC-WHO_2016_treatment_standards_E.pdf)



The Treatment Standards were prepared to support Member States in the development and expansion of treatment services that offer effective and ethical treatment and summarize the currently available scientific evidence on the effective treatment interventions and approaches.

The Treatment Standards begin with identifying key treatment principles:

- Treatment must be available, accessible, attractive, and appropriate

- Ensuring ethical standards in treatment services
- Promoting treatment with coordination between the criminal justice system and health & social services
- Treatment must be based on scientific evidence and respond to specific needs of individuals
- Responding to the needs of special subgroups and conditions
- Ensuring good clinical governance of treatment services and programs for drug use disorders.
- Integrated treatment policies, services, procedures, approaches and linkages must be constantly monitored and evaluated

The Treatment Standards also note that an effective national system for the effective treatment of drug use disorders requires a coordinated and integrated response of many actors to deliver policies and interventions based on scientific evidence in multiple settings and the need to target different groups at different stages with regard to the severity of their drug use disorder.

**The Treatment Standards document defines a set of requirements and attributes (standards) that must be in place to initiate any form of outreach, treatment, rehabilitation, or recovery services, regardless of the treatment philosophy and setting that are used and the setting it is used in. [see the accompanying chart next page]**

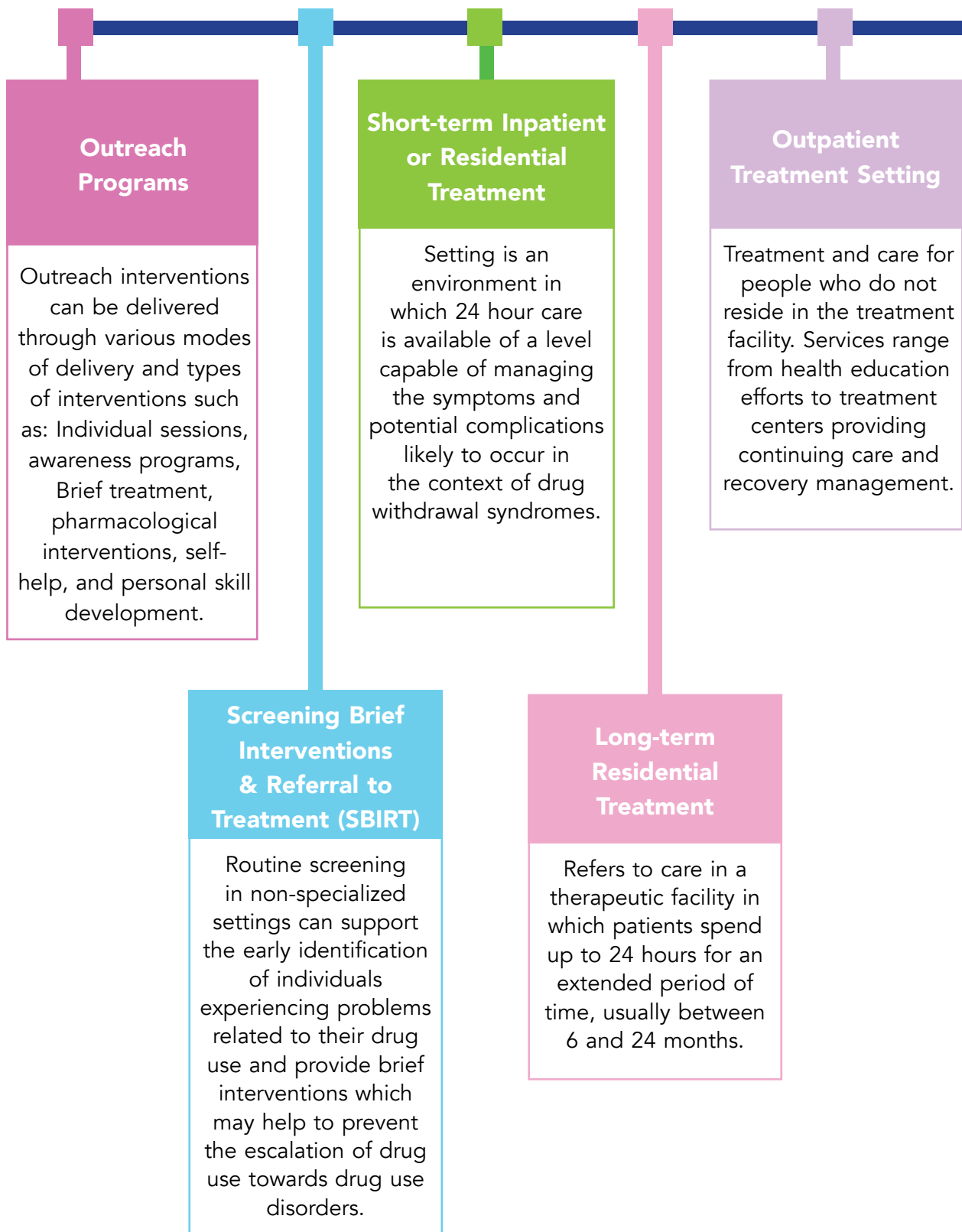
Next steps are to encourage countries to develop inspection and monitoring tools. International organizations would provide technical assistance to inspect and credential treatment facilities.



# **TREATMENT STANDARDS**

## **Definitions**

# Treatment Standards



# Definitions

## Recovery Management

Also known as “after-care” or social support represents a long-term recovery-oriented model of care for patients with drug use disorders.

This increasing focus on long-term management as opposed to single-episode treatment approach is supported by the evidence suggesting that drug dependence is best understood and managed as a chronic and relapsing disorder, similar to diseases like hypertension, asthma and diabetes, rather than acute illnesses such as injury or infection.

## Special Populations

Includes the treatment of pregnant women, treatment of newborn infants passively exposed to opioids in utero, children and adolescents with substance use disorders, and treatment in criminal justice settings.

## EVIDENCE BASED-PRACTICES (EBP)

### Cognitive Behavioral Therapy (CBT)

CBT is an effective and valuable approach in treatment of drug use disorders. CBT assumes that drug use patterns and processes are learned and may be modified. During treatment patients are introduced to new coping skills and cognitive strategies to replace the dysfunctional behaviors and thinking patterns.

### Motivational Interviewing is

collaborative, evocative, and recognizes the autonomy of the patient. The clinician assumes an advisory, rather than an authoritative role, and seeks to understand what the patient values – this process builds empathy and fosters a therapeutic alliance from which it may be possible to leverage behavioral modifications

### Family-oriented treatment

approaches have been found effective to improve engagement with treatment, reduce drug use, and improve participation in aftercare when compared to care focused on the individual patient.

### Evidence-based pharmacological

interventions: Medications (i.e. methadone, buprenorphine, naltrexone, etc.) can be very helpful in managing a variety of drug-related disorders such as treatment of drug intoxication and overdose, drug withdrawal, drug use disorder, and treatment of psychiatric complications related to drug use.

## US Drug Policy

The Office of National Drug Control Policy (ONDCP) is a component of the Executive Office of the President created by the Anti-Drug Abuse Act of 1988. ONDCP advises the President on drug-control issues and coordinates drug-control activities through the National Drug Control Strategy, which outlines the Administration's efforts to reduce illicit drug use, manufacturing and trafficking, drug-related crime and violence, and drug-related health consequences. ONDCP certifies the drug-related portions of U.S. federal agency budgets through an annual Budget Certification Process.

On March 29, 2017 President Donald J. Trump Signed an Executive Order Establishing the President's Commission on Combating Drug Addiction and the Opioid Crisis. This is in result to the public health crisis that was responsible for more than

50,000 drug related deaths in 2015 alone, most of which involved an opioid. The Commission to be headed by Governor Chris Christie will identify and report on best practices for addiction prevention, including healthcare provider education and evaluation of prescription practices, and the use and effectiveness of State prescription drug monitoring programs. The Office of National Drug Control Policy (ONDCP) will provide administrative support for the Commission. The Commission will submit a report containing its findings and recommendations by October 1, 2017 and unless extended by the President prior to that date the Commission will terminate 30 days after submitting its final report.

Following are links to the statement on the establishment of the Commission as well as links to the Executive Order, listening sessions and detailed press briefing.



*President Donald Trump meets with New Jersey Gov. Chris Christie during an opioid and drug abuse listening session on Wednesday, March 29, 2017, in the Cabinet Room of the White House in Washington. President Trump has appointed Governor Christie to lead the President's Commission on Combating Drug Addiction and the Opioid Crisis.*



- Link to the White House Statement:  
<https://www.whitehouse.gov/the-press-office/2017/03/30/president-donald-j-trump-signs-executive-order-establishing-presidents>



- 
- Link to the Executive Order: <https://www.whitehouse.gov/the-press-office/2017/03/30/presidential-executive-order-establishing-presidents-commission>



- 
- Detailed Remarks by President Trump in Listening Session on Opioids and Drug Abuse:
    - Text: <https://www.whitehouse.gov/the-press-office/2017/03/29/remarks-president-trump-listening-session-opioids-and-drug-abuse>



- Video: <https://www.whitehouse.gov/featured-videos/video/2017/03/29/president-trump-hosts-opioid-and-drug-abuse-listening-session>



- 
- Daily Press Briefing by Press Secretary Sean Spicer -- #31 on March 29, 2017:
    - Text: <https://www.whitehouse.gov/the-press-office/2017/03/29/daily-press-briefing-press-secretary-sean-spicer-31>



- Video: <https://www.whitehouse.gov/featured-videos/video/2017/03/29/32917-white-house-press-briefing>



ONDCP produces the annual National Drug Control Strategy, which outlines Administration efforts to reduce illicit drug use, manufacturing and trafficking, drug-related crime and violence, and drug-related health consequences. ONDCP coordinates

and certifies the drug-related budgets of over 30 federal agencies through a budget certification process. The following U.S. Federal Agencies are included in the U.S. National Drug Control Budget:

### **1** Department of Agriculture

- U.S. Forest Service

### **2** Court Services and Offender Supervision Agency (CSOSA) for the District of Columbia

- Drug Interdiction and Counterdrug Activities/ OPTEMPO
- Defense Health Program

### **3** Department of Education

- Office of Elementary and Secondary Education

### **4** Department of Homeland Security

- Customs and Border Protection
- Federal Emergency Management Agency
- Federal Law Enforcement Training Center
- Immigration and Customs Enforcement
- United States Coast Guard

### **5** Department of Health and Human Services

- Administration for Children and Families
- Centers for Disease Control and Prevention
- Centers for Medicare & Medicaid Services
- Health Resources and Services Administration
- Indian Health Service
- National Institute on Alcohol Abuse and Alcoholism
- National Institute on Drug Abuse
- Substance Abuse and Mental Health Services Administration

### **6** Department of Housing and Urban Development

- Community Planning and Development

### **7** Department of the Interior

- Bureau of Indian Affairs
- Bureau of Land Management
- National Park Service

**8****Department of Justice**

- Assets Forfeiture Fund
- Bureau of Prisons
- Criminal Division
- Drug Enforcement Administration
- Organized Crime Drug Enforcement Task Force Program
- Office of Justice Programs
- U.S. Attorneys
- U.S. Marshals Service
- U.S. Marshals Service - Federal Prisoner Detention

**9****Department of Labor**

- Employment and Training Administration

**10****Department of Veterans Affairs**

- Veterans Health Administration

**11****Office of National Drug Control Policy**

- High Intensity Drug Trafficking Areas

**12****Department of State**

- Bureau of International Narcotics and Law Enforcement Affairs
- United States Agency for International Development

**13****Department of Transportation**

- Federal Aviation Administration
- National Highway Traffic Safety Administration

**14****Department of the Treasury**

- Internal Revenue Service

## International Drug Policy

### The United Nations General Assembly Special Session (UNGASS)

The United Nations General Assembly Special Session on the World Drug Problem (UNGASS) was convened at the UN Headquarters in New York from 19 to 21 April 2016. This is not a meeting that occurs on an annual basis. In fact, the last special session of the UN General Assembly on the World Drug Problem was held nearly 20 years ago in 1988. Since then, there has been progress in addressing illicit drug use and advancing a more balanced and humane approach to drug policy, some successes in disrupting trafficking and production networks around the world, and many more countries developing National Drug Control Strategies to focus their efforts.

The UNGASS consisted of a plenary session, many side events, and five roundtables on the following topics: 1) Demand Reduction; 2) Supply Reduction; 3) Cross-cutting issues: drugs and human rights, youth, women, children, and communities; 4) Cross-cutting issues: new challenges, threats and realities in preventing and addressing the world drug problem; and 5) Alternative Development. The main document that was negotiated among member states was the outcome document which reaffirms the three international drug control conventions, reinforces that UN entities in Vienna – the CND, INCB, and UNODC – have the lead on international drug policy matters, and promotes better coordination and integration with other UN agencies such as the World Health Organization (WHO). The outcome document also places greater emphasis

on recognition of drug use and abuse as fundamentally public health problems, requiring evidenced-based interventions to provide treatment, reduce use, and improve the health of people who use drugs.

A copy of this 21 page document can be read at:

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/N16/110/24/PDF/N1611024.pdf?OpenElement>



The United States succeeded in achieving its core objectives for the UNGASS meeting which included promoting the consensus adoption of the UNGASS outcome document, which upholds the three international drug control conventions with no amendments; highlighting the importance of promoting public health responses to the world drug problem; ensuring the primacy of the current UN drug control architecture, which includes the CND, the International Narcotics Control Board (INCB), and the UN Office on Drugs and Crime (UNDOC); and advancing the international response to the threat from new psychoactive substances (NPS).

With the UNGASS complete, the U.S. will work with other member states and the international community to implement the recommendations in the UNGASS outcome document.

# International Organizations within the DDR Field



## Colombo Plan Drug Advisory Program (DAP)



Colombo Plan is  
Head-quartered  
in Colombo, Sri Lanka

The Colombo Plan for Cooperative Economic and Social Development in Asia and the Pacific, established in 1951, is one of the oldest intergovernmental organisations in Asia-Pacific with the goal of achieving socio-economic progress in its member countries.

The Colombo Plan Drug Advisory Programme (DAP) was established to address the growing concerns surrounding drug use in the region. It has spearheaded drug demand

and supply reduction solutions in the region since its inception in 1973. DAP has assisted its member states and non-member states to formulate effective policy and craft practical solutions through innovative science-based approaches, and strong and grass-roots partnerships.

DAP is relevant and innovative in delivering effective interventions. It is the first ever to:

- Document the existence of child addiction in three continents.
- Conduct global child SUD treatment training
- Mobilise religious leaders to engage in demand reduction to change communities.
- Initiate on-site toxicological testing to determine the toxic adulterants added as 'cut' within psychoactive substances.
- Launch an initiative specifically to address the treatment needs of rural populations.
- Reach-out to substance using women around the world with evidence-based programming, including the Afghan Women Shelter Project.

- Cost-effective implementation
- Grass-roots level support
- Experience in working in areas of conflict
- Lean management style to maximise resources
- Low administrative costs
- Access to evidence-based methodologies

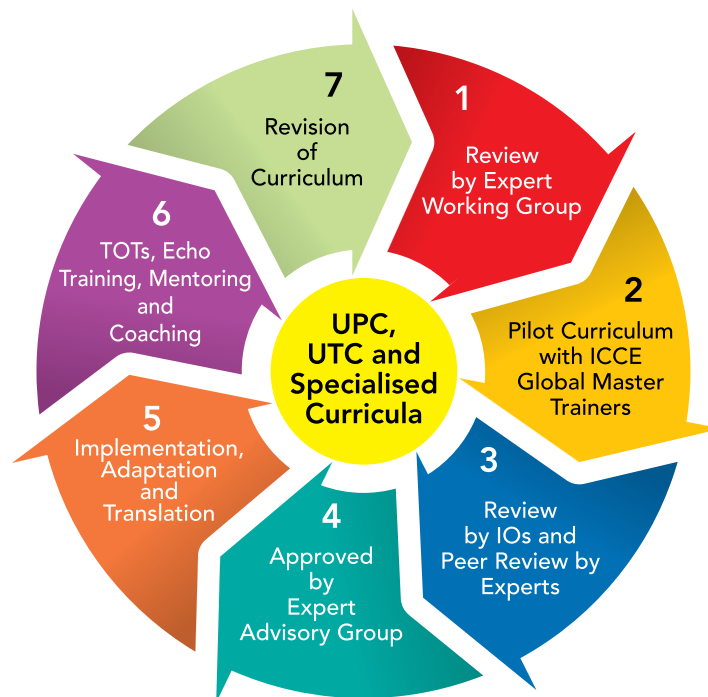
### The International Centre for Credentialing and Education of Addiction Professionals (ICCE)

The International Centre for Credentialing and Education of Addiction Professionals (ICCE) was established in February 2009 as the training and credentialing arm of DAP.

Since its inception, ICCE programmes have become a specialised technical unit for addiction professionals. Every year, ICCE

### DAP OFFERS

- Multi-lateral programmes
- Customised training packages



ICCE Curriculum Development Process, which includes the Universal Prevention Curriculum (UPC), the Universal Treatment Curriculum (UTC), and Specialized Curricula, consists of seven phases.

implements nearly 70 initiatives benefitting about 1,500 drug demand reduction professionals in 42 countries.

The ICCE Commission, formed in 2012, oversees and ensures the highest quality and standard of ICCE initiatives, inclusive of trainings, examinations and their mode of administration, and credentials. Most importantly, the ICCE Commission provides a mechanism for the participating countries to enhance the quality of prevention services and addiction treatment in the region.

Presently, ICCE offers credentials in addiction and recovery specializations as

well as prevention in the 42 countries where ICCE has training initiatives. A total of 21 ICCE Examinations for the three levels of ICAP and Recovery Coach (RC) have been conducted from 2012 to 2016 in different venues. The examinations are administered in two modes, that is: pencil and paper, and online. To date a total of 974 candidates have written the ICCE examinations, and out of this number, 609 have been credentialed.

DAP's global outreach includes innovative programming, technical assistance and substance-use related training across five continents.



*Expert Consultation Meeting at Suva, Fiji - 26-27 September, 2016*



*Training treatment practitioners from Argentina, Brazil, Chile, Paraguay, and Peru on the CHILD Curriculum series - December, 2016*



*Global workshop to address SUD in Children, Washington, DC - July 2016*



## Organization of American States (OAS)

### Inter-American Drug Abuse Control Commission (CICAD)

The Demand Reduction Section of the Inter-American Drug Abuse Control Commission (CICAD) of the Organization of American States (OAS) works with member states to build institutional and human resource capacity building through a range of demand reduction programs.

In particular, CICAD developed the dynamic Training and Certification for Drug and Violence Prevention, Treatment, and Rehabilitation (PROCCER) Model which has been utilized for implementation of various training and certification programs throughout the hemisphere that have been executed with support from the INL.

The PROCCER Model includes the following components that may be specifically tailored to meet the needs and capacity of each member state:

- ⇒ Conduct a diagnostic (institutional mapping; assessment of institutional, human resource, and user profiles and country training needs; and legal assessment);
- ⇒ Define and Develop Training Competencies, Levels, and Materials;

- ⇒ Training of Prevention and Treatment Service Providers
- ⇒ Develop and Define Protocols and Legislative Regulations for Certification;
- ⇒ Certification of Prevention and Treatment Service Providers;
- ⇒ Institutionalization of Training and Certification Mechanisms;
- ⇒ Monitoring and Evaluation; and
- ⇒ Horizontal Cooperation

The PROCCER program promotes the assurance that prevention and treatment service providers operating in participating member states have the necessary competencies, knowledge, and aptitudes to provide the appropriate interventions. PROCCER has been executed in Central America, Mexico, South America, and the



Caribbean. This program offers evidence and competency-based training to prevention and treatment service providers; and national-level (regional in the case of the Caribbean) certification of service providers who successfully complete the training and certification examinations (written and practical).

The Demand Reduction section of CICAD works directly with member state national drug commissions, government agencies,

non-government organizations, civil society, and universities in the adaptation and implementation of PROCCER to best meet the capacities and needs of that specific country (regionally in the case of the Caribbean). To-date the Demand Reduction section of CICAD, in collaboration with member states, has trained over 5,700 prevention and treatment service providers and is working with 19 universities from the region in 23 member states.



*Main Building*



*Hall of Heroes*



*Hall of the Americas*



# UNODC

United Nations Office on Drugs and Crime

## United Nations Office on Drug and Crime

UNODC operates in all regions of the world, through an extensive network of field offices to assist Member States in responding to world drug problem and dealing with crime, corruption and terrorism. UNODC's pillars of action that guide its work programme cover:

- (a) field-based technical cooperation projects to enhance the capacity of Member States to counteract illicit drugs, crime, and terrorism;
- (b) research and analytic work to increase knowledge and understanding of drugs and crime issues and expand the evidence base for policy and operational decisions; and
- (c) normative work to assist States in the ratification and implementation of the relevant international treaties, the development of domestic legislation on drugs, crime and terrorism, and the provision of secretariat and substantive services to the treaty-based and governing bodies.<sup>20</sup>

It reports to and receives its mandate from the Commission on Narcotic Drugs (CND), which is the central policy-making body for drug related matters within the UN system, and the Commission on Crime Prevention and Criminal Justice (CCPCJ) which is the UN system's central body covering crime prevention and criminal justice policy. Through its drug mandate UNODC encourages a balanced approach between drug supply and drug demand reduction activities.<sup>21</sup>

Under the Drug Demand Reduction pillar of work, the UNODC assists countries in the implementation of evidence-based drug use prevention strategies and treatment programmes for drug dependence. The approach is health-centric and is fundamentally based on respect for human rights, social protection and cohesion. The aim of prevention is to support and promote science-based approaches that target individual and environmental vulnerabilities to risky behaviors at different developmental stages of growth and in different social settings (the school, the family, the workplace and the community). Moreover, UNODC works with Member States to implement treatment, care and rehabilitation interventions for people affected by substance use disorders. Such interventions are integrated into a public health approach and offer the population affected nothing less than the highest standards of medical care available for persons with a chronic health condition. UNODC operates joint programmes on drug dependence treatment with the WHO.<sup>22</sup>

The Office also promotes the integration of drug and HIV prevention, treatment, care and support into mainstream health and social welfare systems to ensure that prevention, treatment, care and rehabilitation programmes are accessible to all who need them.<sup>23</sup>



## The World Health Organization (WHO)

The World Health Organization is the directing and coordinating authority on international health within the United Nations' system. WHO carries out this role by:

1. providing leadership on matters critical to health and engaging in partnerships where joint action is needed;
2. shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge;
3. setting norms and standards and promoting and monitoring their implementation;
4. articulating ethical and evidence-base policy options; providing technical support, catalyzing change, and building sustainable institutional capacity, and monitoring the health situation and assessing health trends.

WHO classifies the substance use disorders in its International Classification of Disease, identifies effective prevention and treatment interventions in its guidelines documents, and supports policy makers to identify and implement effective treatment and public health focused drug policies. WHO collaborates with UNODC to improve the coverage of drug dependence treatment in the UNODC/WHO Programme on Drug Dependence Treatment and Care.<sup>129</sup>





## The African Union Commission (AUC)

Among the African Union Commission's key objectives are the following four identified efforts:

- 1) *To encourage international cooperation, taking due account of the Charter of the United Nations and the Universal Declaration of Human Rights;*
- 2) *To promote democratic principles and institutions, popular participation and good governance;*
- 3) *To advance the development of the continent by promoting research in all fields, in particular in science and technology; and*
- 4) *To work with relevant international partners in the eradication of preventable diseases and the promotion of good health on the continent.<sup>130</sup>*

In keeping with these objectives, the AUC

is directing its efforts to scale up evidence-based services to address the health and social impact of substance use in member states. The AUC is engaged in a range of demand reduction efforts, including

- a) *promoting the adaptation and implementation of AU continental minimum quality standards for treatment of drug dependence;*
- b) *organizing annual demand reduction technical focal points consultative meetings for information sharing, programme development and progress review;*
- c) *strengthening research and data collection capacity for drug use prevention and treatment in Africa and*
- d) *establishment and strengthening of national and regional epidemiological networks.*





## Community Anti-Drug Coalitions of America (CADCA)

Community Anti-Drug Coalitions of America (CADCA) is a leading U.S. substance abuse prevention organization, representing over 5,000 community-based coalitions across the United States and in 22 countries who work to create safe, healthy, and drug-free communities.

### CADCA assists communities by:

- Providing the support to become stronger, more effective and better able to sustain population-level reductions in illicit drug use rates and related problems;
- Recognizing that illicit drug use is a multi-dimensional public health challenge that demands comprehensive, coordinated solutions;
- Connecting and engaging multiple sectors of the community - including businesses, parents, media, law enforcement, schools, faith organizations, health providers, social service agencies and government – to collaborate and develop plans, policies and strategies to achieve reductions in the rates of illicit drug use at the community level.

Community coalitions are a formal arrangement for collaboration among groups or sectors of a community, in which each group retains its identity but all agree to work together toward the common goal of a safe, healthy and drug free community.

Community coalitions are not prevention programs or traditional human service organizations that provide direct services. Rather, they are entities directed by local residents and sector representatives who have a genuine voice in determining the best strategies to address local problems. Effective community coalitions focus on improving systems and environments.

### CADCA's International Programs

CADCA works to reduce illicit drug use internationally through the establishment of multi-sector antidrug community coalitions. CADCA offers training, technical assistance and other resources on how to build effective community coalitions to national and local governments, non-government organizations (NGOs) and community groups in numerous countries affected by the cultivation, trafficking and use of illicit drugs and alcohol problems.

**Scientific studies indicate that the community coalition approach is an effective strategy for addressing alcohol, tobacco, illicit drug use and other related problems.**

CADCA's international trainings offer essential competencies and skills necessary to help create a culture of legality and bring about reductions – at the community level – in substance abuse rates. In carrying out all of the coalition-building activities, CADCA utilizes an evidence-based strategic planning process to foster community coalition development in selected countries. CADCA's trainings in coalition development promote community mobilization, civic engagement and the development of social capital.

The training approach CADCA uses involves two parallel processes:

1. Providing local communities with evidence-based strategies to achieve population-level reductions in substance abuse rates
2. Enabling and empowering local communities with the tools to develop the necessary social capital needed to solve their own problems through civic engagement





## Pan American Health Organization (PAHO)

PAHO is the specialized international health agency for the Americas. It works with countries throughout the region to improve and protect people's health. PAHO engages in technical cooperation with its member countries to fight communicable and non-communicable diseases and their causes, to strengthen health systems, and to respond to emergencies and disasters. PAHO is committed to ensuring that all people have access to the health care they need, when they need it, with quality and without fear of falling into poverty. Through its work, PAHO promotes and supports the right of everyone to good health.

To advance these goals, PAHO promotes technical cooperation between countries and works in partnership with ministries of health and other government agencies, civil society organizations, other international agencies, universities, social security agencies, community groups, and other partners. PAHO promotes the inclusion of health in all public policies and the engagement of all sectors in efforts to ensure that people live longer, healthier lives, with good health as their most valuable resource. Under the leadership of its 52 member countries and territories, PAHO sets regional health priorities and mobilizes action to address health problems that respect no borders and that, in many cases, jeopardize the sustainability of health systems.

PAHO wears two institutional hats: it is the specialized health agency of the Inter-American System and also serves as Regional Office for the Americas of the World Health Organization (WHO), the specialized health agency of the United Nations. From its Washington, D.C., headquarters, 27 country offices and three specialized centers in the region, PAHO promotes evidenced-based decision-making to improve and promote health as a driver of sustainable development.

### Specialized Training for Professionals of the Public Health System to Address Substance Use Disorders

In the interest of public health, social health, and social security, PAHO is collaborating with OAS/CICAD, UNODC, and WHO to develop a Specialized Training for Professionals of the Public Health System. This initiative includes the training curricula for the professions of medical doctor, psychiatrist, nurse, psychologist, and social worker, which have been identified by the Central American OAS Member States as those professionals most requiring this training to provide guidance on how to identify and address substance use disorders within the public health system.

**PART**

**2**





# **INL/DDR GLOBAL OUTREACH AND SUPPORT**



# HISTORY OF THE INL/DDR PROGRAM



The INL demand reduction program was initiated in 1978. From 1978-1990 the program provided only bilateral training and technical assistance on an ad hoc basis. The program lacked, a comprehensive, strategy, direction, goals/objectives, and performance measures. The program was enhanced in 1990 with the development of a strategic plan and the addition of regional training. Assistance was provided in four basic areas: research/epidemiology, prevention, treatment and public awareness. Programs were developed according to guidelines provided in the President's National Drug Control Strategy. In 1998, the program was further enhanced to comply with mandates of the Government Performance Results Act (GPRA) by the institution of a performance measurement system that included science-based, independent evaluations by outside experts and internal assessments by program staff.

The program was finally revised in 2002 when international demand reduction was included for the first time in the President's National Security Presidential Directive (NSPD# 25) on International Drug Control Policy. A key objective of that policy urged the Secretary of State to "expand U.S. international demand reduction assistance and information sharing programs in key source and transit countries." A related priority, addressed by ONDCP at a March 2002 inter-agency strategic review session on demand reduction, involved incorporating the President's new goals and priorities for demand reduction into the international program.

In the mid-2000s INL supported UNODC in developing the TreatNet curriculum and OAS/CICAD in developing a specialized curriculum for their PROCCER model.

In 2009, INL developed the Universal Treatment Curriculum (UTC) through a contract with Alvarez and Associates and their subcontractor JBS.

In 2013, Applied Prevention Sciences, International (APSI) began the development of a new curriculum for prevention, known as the Universal Prevention Curriculum (UPC). INL has oriented a significant part of its centrally-managed program to focus on workforce development through the dissemination of these curricula along with a credentialing process for demand reduction professionals.

In the coming years, INL will also support the development of an international quality assurance system to support the inspection of treatment and prevention programs.

## Value of International DDR

INL's program to address substance use around the world has a broad-reaching impact on a number of foreign policy and domestic objectives. Drug use around the world is the primary driver of drug production, to include cultivation, production, and trafficking. The United States does not consume the majority of the illicit drugs in the world. Many middle income and low income states are developing significant drug using populations which also fuel drug production. Proof of this broad foreign consumer base can be found in the thousands of treatment centers found in countries like Mexico and Brazil. INL's demand reduction programming has been documented to impact supply reduction by reducing drug dealing among high risk Brazilian Youth by 32% and by 25% in Peru.

International Drug Demand Reduction programming is also a direct and impactful strategy for reducing HIV/AIDS, hepatitis and other communicable diseases. The most effective way to eliminate intravenous drug use (IDU) is to stop drug use altogether. Outcome evaluations of INL-supported drug treatment programs documented a 66% and 85% reduction in IDU in Thailand and Vietnam, respectively. Additionally, mental health disorders are initiated or exacerbated by drug use. Treating substance use disorders can treat mental health disorders, improving quality of life measures and reducing associated violence. INL's demand reduction program decreased suicide attempts among women by 64% in Afghanistan.

Demand reduction programs can also address challenges with public security caused by drug use. Theft, violence, and the deterioration of communities around the globe are often caused by substance

use. As a result, law enforcement resources become stretched, courts are overwhelmed with cases, and prisons overflow with drug offenders. International drug demand reduction programming has a direct role in improving public security. INL's demand reduction program in South Africa had a recidivism (rearrest) rate of 20%, compared to 80% which was the national rate. In Thailand, the demand reduction program saw a reduction in arrest rates by 87% six months post-treatment, while the figure was 85% in Colombia.

Drug use also fuels other organized criminal enterprises, such as transnational organized crime, corruption, money laundering, cybercrime, border security, and trafficking in persons. INL's demand reduction programming contributes in addressing these cross cutting issues. Interventions to provide treatment and rehabilitation services to members of criminal gangs resulted in a 70% reduction of drug use, 83% reduction in past-month felonies, and 75% reduction in arrests and incarcerations by gang members.

Another dimension of drug use is its impact on the national security and stability of some states. Illicit drugs have been used by insurgencies to force unwilling or hesitant combatants (e.g. child soldiers in Liberia and Uganda, suicide bombers in Pakistan and Afghanistan) to commit horrific attacks. Marginalized, economically deprived, homeless and persons already suffering from substance use disorders are all vulnerable for recruitment by these insurgent and terrorist groups.

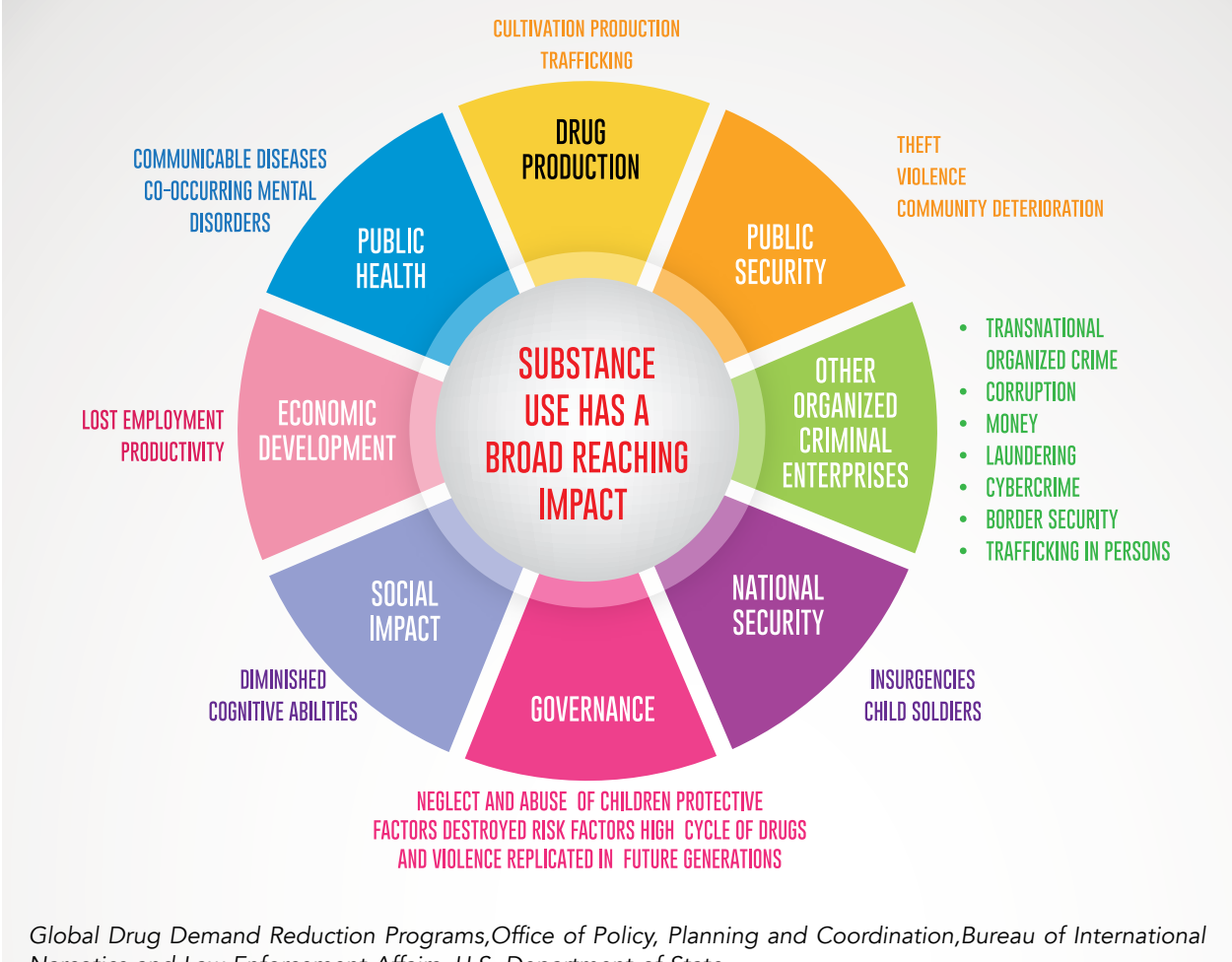
International demand reduction is also valuable in supporting economic development. Drug use has a quantifiable economic loss for society. The aggregated

lost productivity of employees as a result of substance use has a detrimental effect on foreign economies and creates a greater burden on the affected countries in devoting scarce resources to drug treatment and its consequences. As a result, these economies are less able to afford U.S. imports, both at the macroeconomic level as well as by individual consumers who have limited purchasing power as a result of their drug use. INL demand reduction programming can help create economic development opportunities for recovering persons. In Peru, over 65% of clients were able to find employment six months after finishing their treatment program.

Drug use has a damaging social impact which has many repercussions. Children of persons with substance use disorders have a greater likelihood to also use drugs and develop substance use disorders. The destruction

of protective factors and abundance of risk factors sets these children on the course for a lifetime of drug use, violence, and crime, which is then replicated in a generational cycle that becomes reinforcing and causes long term social deterioration.

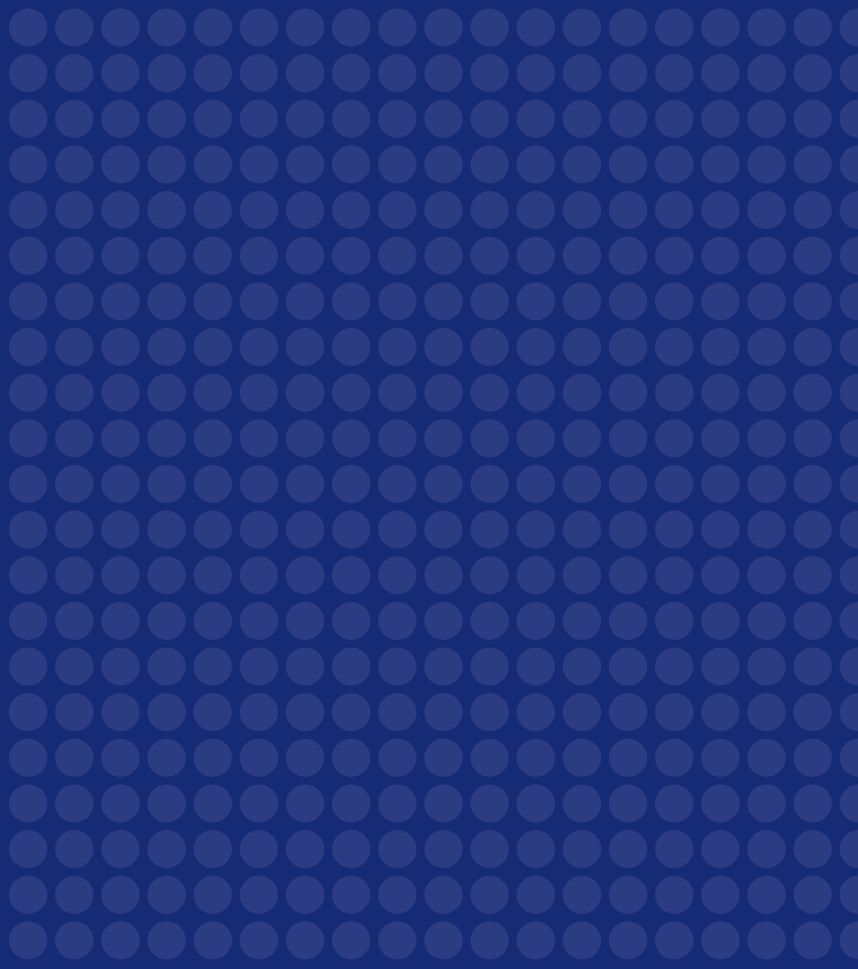
The value of supporting international demand reduction is also reflected in improved governance. The United States' relationships with other countries (governments, businesses, civil societies), is complex and multifaceted. However, the broad-reaching impact of drug use as described above both challenges political leaders and limits the U.S.'s ability to engage foreign partners effectively. Investments in international demand reduction are necessary to secure a broad range of U.S. interests relating to counternarcotics, health, crime prevention, national security, economic productivity and social development.



Global Drug Demand Reduction Programs, Office of Policy, Planning and Coordination, Bureau of International Narcotics and Law Enforcement Affairs, U.S. Department of State



# INL/DDR KEY PROGRAM AREAS



The key areas of INL's Drug Demand Reduction program reflect the nothing-less-than-revolutionary changes during the past 70 years in our understanding of the phenomenon of addiction. Innovations in behavioral and medical research, led by the US which conducts 85 percent of the world's research on substance use treatment and prevention, have demonstrated that substance use disorders are chronic and relapsing diseases, like heart disease or diabetes, and furthermore, that substance use disorders also require complex bio-psycho-social interventions to address the biological and psychological nature of the disease as well as the social context.

Despite these profound advances in science, an inaccurate understanding of substance use is still held in many parts of the world. Some studies have found that translating research into practice takes an average of 17 years. Non-evidenced based practices--which include detox only with no psychosocial support, religious education in isolation, cold showers, physical restraints, and other techniques that violate client rights and human rights – are perpetuated at a great cost to communities, cultures and countries. When unscientific practices prevail, a cycle

of cascading failures is unleashed: treatment fails, and in turn clients and families lose hope in rehabilitation and recovery, communities lose confidence in treatment as a viable measure, and governments begin considering policy alternatives that undermine a public health approach. INL/DDR priorities aim to break this cycle.

INL/DDR seeks to share life-giving research and accordingly grounds its Program areas in three key concepts:

- A scientific understanding of substance use disorders (SUDs),
- The life-giving value of behavioral and medical research, and
- The urgency for translating such research into practice.

### **INL/DDR Program Areas:**

The INL/DDR Program is comprised of four program areas or "pillars." Each is defined by distinct goals, objectives, and key deliverables. Additionally, defined outcomes for each pillar are measurable and based in a plan for sustainability.

# INL/DDR PROGRAM AREAS

01

## DEVELOP THE DDR WORKFORCE

Support the dissemination of curricula on drug prevention, treatment and recovery through a training of trainer process that includes mentoring, examination, and credentialing.

02

## PROFESSIONALIZE DRUG TREATMENT AND PREVENTION SERVICES

Professionalize treatment services by supporting the development of a global inspection and accreditation system for treatment providers.

03

## BUILD GLOBAL NETWORKS & COMMUNITY COALITIONS

Establish and strengthen an international association of treatment professionals (ISSUP) which will promote evidence-based practices, training, and professionalization in the field; connect with researchers and the latest advances in the addiction field; connect with policymakers; and form national chapters that connect workers with clients and families. Additionally, INL will promote the drug free community coalition model throughout the world.

04

## ADDRESS POPULATIONS WITH SPECIAL CLINICAL NEEDS

Identify and support vulnerable or marginalized populations through the development of specialized protocols, treatment modalities, and training packages.



# INL/DDR Program Area #1:

## DEVELOPING THE DDR WORKFORCE

The goal of Program Area #1 is to create a DDR workforce that is professionally trained, credentialed, and effectively implements evidence-based prevention, treatment and recovery practices.

This program area is built on the knowledge that:

- An evidence-based approach to drug treatment and prevention is proven to reduce drug use and improve other criminal justice and public health outcomes; and
- Internationally recognized credentials in DDR serve as an important factor in professionalization and legitimacy of the field.

### Efforts include the following primary components:

- a) Dissemination of the Universal Prevention Curriculum (UPC) and the Universal Treatment Curriculum (UTC) via the Training of Trainers (ToT) model. INL also funds Recovery Support Training for working with people in the post-treatment phase.
- b) DDR workforce receives training and mentorship from INL-funded global master trainers and UNODC mentors.
- c) DDR workforce takes an international examination on the UTC/UPC.
- d) DDR workforce earns professional credential by Colombo Plan’s International Centre for Certification and Education of Addiction Professionals (ICCE).

### Highlights of the “Developing the DDR Workforce” Effort:

To date, the UTC Basic Series and UPC Coordinator’s Series have been disseminated in 63 countries:

<b>Americas</b>	Brazil, Peru, Mexico, Guatemala, The Bahamas
<b>Africa</b>	Benin, Togo, Cote d’Ivoire, Mozambique, South Africa, Kenya, Tanzania, Botswana, Liberia, Uganda, Namibia, Ghana, Seychelles
<b>Europe</b>	Georgia
<b>Middle East</b>	United Arab Emirates

<b>Central Asia</b>	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
<b>South Asia</b>	Afghanistan, Bangladesh, Bhutan, India, Maldives, Sri Lanka, Pakistan
<b>East and Southeast Asia</b>	Philippines, Myanmar, Cambodia, Laos, Malaysia, Thailand, Vietnam, Indonesia, South Korea, Japan
<b>Australia and Oceania.</b>	Fiji

- In 2015, ICCE credentialed 252 professionals from 23 countries of Afghanistan, Bangladesh, Bhutan, Botswana, Germany, Ghana, India, Indonesia, Japan, Kenya, Liberia, Malaysia, Maldives, Pakistan, Philippines, Singapore, South Africa, South Korea, Sri Lanka, Thailand, UAE, USA, Uzbekistan among others.
- In 2016, ICCE credentialed 210 professionals from 32 countries including Argentina, the Bahamas, Brazil, Costa Rica, El Salvador, Jamaica, Kazakhstan, Mexico and Paraguay.
- Colombo Plan has 16 university and NGO education providers from Philippines (4), Pakistan (4), India (1), Indonesia (1), Japan (1), Kenya (1), Korea (1), United Arab Emirates (1), Bangladesh (1), The Bahamas (1).
- The UTC Advanced Series and UPC Implementer's Series will be piloted in 2017.
- In 2016, The INL-funded Colombo Plan ICCE implemented nearly 112 initiatives benefitting about 1,570 drug demand reduction professionals.
- ICCE is in the process of credentialing regional and national-level trainers around the world as well as 500

addiction treatment practitioners in Afghanistan with an additional 350 in 2017 for UTC, 300 treatment practitioners in Pakistan and 250 treatment practitioners in Myanmar.

- Universities in Korea (11), Thailand (1), Malaysia (1), Kenya (1), Botswana (1), Czech Republic (1), and the Philippines (2), and USA (3) have been awarded university education provider status and have begun to adapt the UTC curricula with 10 universities starting courses in 2016 and 4 planned for 2017. Universities and other tertiary institutions in the Pacific and Latin America have also expressed interest.

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### **Training in the Universal Treatment Curriculum for Substance Use Disorder (UTC)**

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Recognizing the limited curriculum worldwide to train treatment professionals, INL assembled a panel of curriculum developers who were researchers, university faculty, and practitioners to develop the Universal Treatment Curriculum for Substance Use Disorder (UTC).

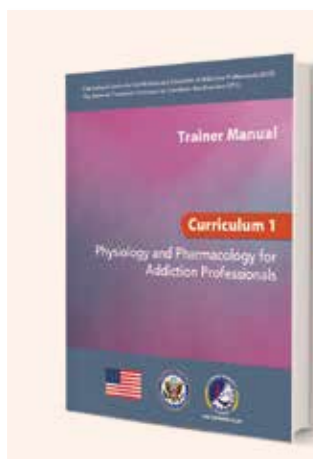
The UTC provides the most comprehensive educational materials for substance use treatment professionals, covering a broad spectrum of topics from physiology and

pharmacology to counseling skills and ethics, among others. The curriculum recognizes that education in addiction studies requires a multidisciplinary approach. It is also oriented toward experiential adult learning for both individuals with university formation as well as those recovering persons who may not have finished primary school but are working in a treatment environment.

The UTC consists of two levels: the basic level covering eight (8) courses and an advanced level covering fourteen (14) courses (under development). INL has assembled a

consortium of international organizations to review the curriculum in an expert advisory group panel, which also includes university peer reviewers.

The curriculum is translated and adapted culturally for each country and it is disseminated by international organizations, including Colombo Plan, UNODC, and the OAS. INL disseminates the UTC through a training of trainers approach. A global cadre of trainers is responsible for training national trainers. The national trainers in turn train current treatment staff.



### **Universal Treatment Curriculum for Substance Use Disorders (UTC)**

The Basic Level UTC consists of eight courses that cover the broad spectrum of addiction treatment, while the Advanced Level UTC is a set of 14 courses, which is currently being developed to provide a more comprehensive and theoretical foundation in the clinical practice of substance use disorder treatment. Each course for both these levels consists of a Trainer and Participant Manual.

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### **Universal Prevention Curriculum UPC**

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In 2013, UNODC released the International Standards on Drug Use Prevention, consolidating the existing global research on effective and ineffective prevention interventions.

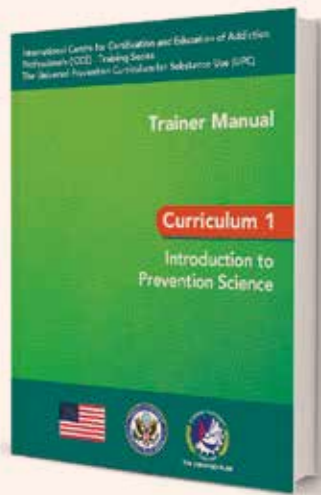
INL commissioned a new training package, the Universal Prevention Curriculum (UPC) to disseminate these evidence-based prevention practices using the International Standards as a foundation.

This curriculum covers all of the prevention settings – family, school, environmental, media, workplace, delivery systems, and research in two series:

Series one (8 courses) is developed for prevention program supervisors, government staff, and university staff and students, focusing on the full range of prevention science.

Series two (6-8 courses for each track, 50+ courses in all) is developed for prevention implementers. Each setting (e.g. school prevention, family prevention, media, and workplace) represents an independent track with 6-8 courses sharing knowledge and building skills for prevention workers in the field. This curriculum is under development and will be fully completed during 2017.

## *Universal Prevention Curriculum for Substance Use (UPC)*



UPC consists of two series, namely: Series 1 for prevention coordinators, and Series 2 for prevention specialists. The foundation of the UPC is the International Standards on Drug Use Prevention that was developed by the United Nations Office on Drugs and Crime (UNODC). The UPC is written by prevention researchers who are specialists in drug use epidemiology and evaluation, and in prevention strategies that are delivered to families; within schools, workplace and community; and through the media and regulatory policies. The primary thrust is on evidence-based interventions and policies, and implementation quality and sustainability.

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## **Credentialing**

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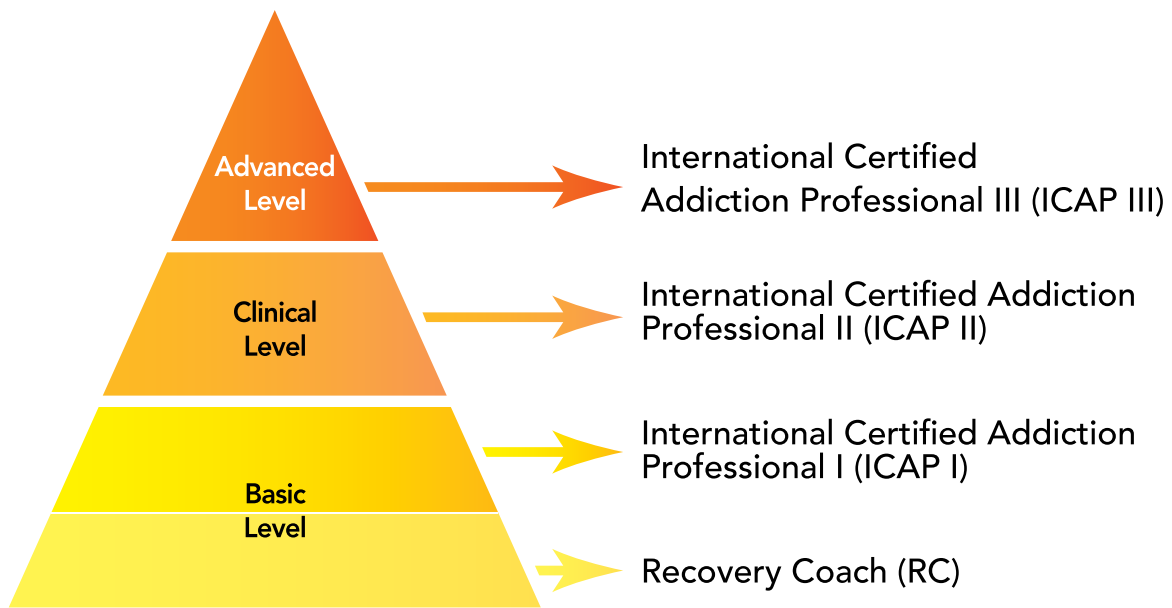
### *Treatment Credentialing*

The purpose of the UTC training is not solely to train treatment staff. Professionalization of staff is achieved through an examination and credentialing process.

The Colombo Plan's International Centre for Credentialing and Education of Addiction Professionals (ICCE), has developed an international credential at three levels (mirroring the UTC basic and advanced series), which is called, International Credentialed Addictions Professional (ICAP).

The test bank of questions and the examination is managed by Professional Testing Corporation (PTC) of New York, setting a single global standard for examination.

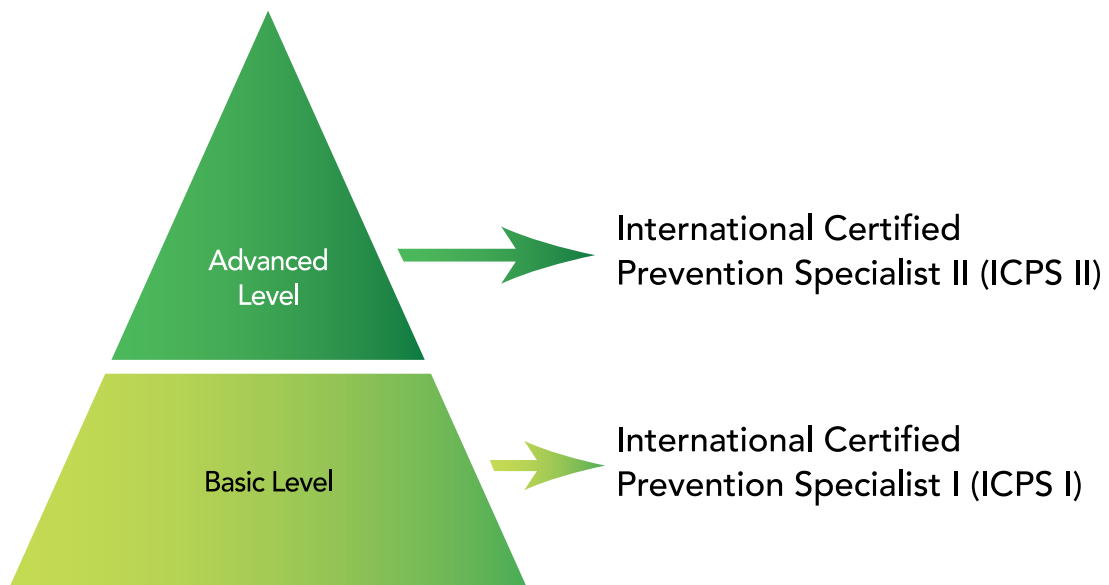
All states recognizing the credential join the ICCE Commission where they agree to recognize reciprocity of the credential and adhere to an ethical standard. In this way, a credentialed professional in one country is recognized in another.



ICCE, through the assistance of the National Association of Alcohol and Drug Abuse Counselors (NAADAC) in the US, has developed three levels of credentials and examinations for treatment professionals, that is ICAP I, ICAP II, and ICAP III. In addition, the Recovery Coach credential is designed for individuals who are competent in the service delivery of peer-to-peer support, resource systems development and community reintegration.

### Prevention Credentialing

ICCE also offers a prevention examination and credentialing process leading to a level one or level two credential called the International Credentialed Prevention Specialists (ICPS).



Presently, ICCE is developing two credentials for specialists who are involved in drug prevention, that is, ICPS I and ICPS II. Similar to the ICAP credentials, ICCE determined the eligibility criteria for these two levels of credentials to be implemented in the region. PTC will also manage the two levels of ICPS examinations.

## INL/DDR Program Area #2:

### PROFESSIONALIZING DRUG TREATMENT AND PREVENTION SERVICES

The goal of Program Area #2 is to develop both a global inspection regime and international accreditation system to ensure that treatment providers provide quality, evidence-based care.

- This program area is built on the knowledge that:
  - A common standard for prevention and treatment services needs to be established to ensure quality of care for people at-risk-for or who have developed substance use disorders.
  - Developing an accreditation framework for drug treatment services and prevention organizations will lead to a higher quality of care and improved client outcomes.

#### Efforts include the following primary components:

- a) Development of international standards for prevention and treatment.
- b) Minimum, Quality, and Center of Excellence standards are identified by international panel of researchers.
- c) Governments opt into a global accreditation program, whereby they establish a national institution responsible for accrediting services.
- d) International organizations provide technical assistance: 1) work to adopt universal inspection protocols and forms, 2) train, credential, and mentor inspectors.
- e) International organizations accredit national institutions in adequately accrediting national treatment and prevention system and upholding international standards.

#### Highlights of the "Professionalizing Drug Treatment and Prevention Services" Effort:

- INL supported UNODC assembling a panel of leading treatment experts and developed the International Standards for Substance Use Treatment. These treatment standards synthesize the 70+ years of scientific research in the field of addiction science and produce universal standards reflecting the latest research of effective practices as well as identifying ineffective practices.
- The standards, released at the 2016 CND, are being used to develop universal quality standards for treatment programs, irrespective of a country's level of economic development or cultural context. For example, all treatment programs should have trained staff, offer services that are evidence-based and do no harm and avoid further stigmatizing clients, and adhere to a code of ethics.

## INL/DDR Program Area #3:

### BUILDING GLOBAL NETWORKS AND COMMUNITY COALITIONS

The goal of Program Area #3 is continuous support to the International Society of Substance Use Prevention and Treatment Professionals (ISSUP) and to drug-free community coalitions, in order to unite professionals and grassroots organizers in the field, allowing for innovation and sharing of best practices.

This program area is built on the knowledge that:

- Prior to the establishment of ISSUP, no professional organization bringing together drug treatment and prevention professionals existed.
- A global network and community coalition component is vital to the professionalization of the drug demand reduction workforce and services.
- The community coalition strategy is adaptable universally to all communities.

#### Efforts include the following primary components:

- a) Expanding ISSUP membership by 20% of baseline per year.
  - b) Finalizing the ISSUP website to: 1) serve as a professional networking site, 2) function as a registrar for trainee data, 3) provide online training, 4) conduct research and evaluation via the website data collection platform, 5) promote dialogue between professionals via bulletin board forums, 6) disseminate developments in the field, 7) establish
- c) country profiles with national data, and 8) encourage the establishment of national chapters.
  - c) Hold a global ISSUP workshop every year.
  - d) Support a meeting of the ISSUP Board of Trustees and participate in the governance structure of the organization.
  - e) Global community coalitions continue to strengthen and expand via the drug free community coalition model.

#### Highlights of the "Building Global Networks and Community Coalitions" Effort:

#### ISSUP

- In February of 2016, ISSUP was formally constituted as an organization.
- Phase 1 and 2 of the ISSUP Website were launched in 2016. It included a redesign of the platform and content for national chapters, training, knowledge share of 240 articles posted in 2016.
- The portal to collect trainee data has been developed and will be launched in 2017 as planned.
- In July 2015 ISSUP's first event was held in Bangkok, Thailand with over 2,400 participants.

- In December 2016 ISSUP was held in Campinas, Brazil with over 2,500 in attendance.
- National Chapters of ISSUP have been established in Pakistan, Philippines and

Kenya. A National Chapter Coordinator has also been appointed to oversee the support and development of ISSUP National Chapters.



**INAUGURAL MEETING & INTERNATIONAL WORKSHOP**  
 6 - 11 July 2015  
 IMPACT Muang Thong Thani, Bangkok, Thailand



*During the inaugural meeting, INL's Acting Deputy Assistant Secretary John Brandolino unveiled the ISSUP plaque with OAS, WHO, CP, UNODC and Royal Thai Government.*

From Left to Right:  
 William McGlynn,  
 Thomas Browne,  
 Brian Morales,  
 Joanna Travis Roberts,  
 Sadie Thimsen,  
 John Brandolino,  
 Anotonius Riva Setiawan





ISSUP-II included  
**2,500 participants** comprised of **2,200 Brazilians** from  
**242 cities in 24 states**  
and  
**300 international** participants from **60 countries.**



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## Drug Free Community Coalitions

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- In the process of expanding to four new countries; Paraguay, Indonesia, Togo and Uganda
- Since 2012, INL has supported the establishment of 209 community coalitions to reach programming in 25 countries in 2017 with 6,300 active members around the world through grantee, Community Anti-Drug Coalitions of America (CADCA).
- CADCA was able to work with in-country partners to secure commitments and resources from local, regional and national governments to support the development of anti-drug community coalitions through the "Training of Leaders" DDR programs. The collaboration with local and national governments led to an increase in the number of community coalitions in country. In addition, the expansion of coalitions under this modality led to the establishment of several new networks of community coalitions and the strengthening of some existing networks in the following countries:
  - Costa Rica: 5 coalitions in the greater San Jose Metropolitan Area
  - Ghana: 8 coalitions in Accra and South Eastern Region
  - Guatemala: 5 coalitions in the Departments of Sacatepéquez and Quetzaltenango
  - Honduras: 7 coalitions in the Department of Cortez
  - Kyrgyzstan: 7 coalitions in 3 regions of the country
  - Mexico: 35 coalitions in 12 states
  - Peru: 60 coalitions in 9 provinces
  - Philippines: 16 coalitions in country
  - Tajikistan: 15 coalitions throughout the country
- In 2017, CADCA will expand the Training of Leaders strategy in Brazil, Kenya, Senegal and South Africa.



*International Participants at CADCA's Mid-Year Training Institute 2016*

## CADCA's Network of International Coalitions by Country 2017

**Summary of coalition inventory:** This document contains data pertaining to the development of community coalitions in 21 countries, with a global network of 231 coalitions comprised of 7,020 members.

Country	City	Neighborhood / District	Established Coalition	Name of Point of Contact	Date Established	INL Funds at creation (Yes/No)	INL Funds in 2016 (Yes/No)	# of Members	Coalition Update
Bolivia	La Paz	Cotahuma	1. Coalición Comunitaria del Macro Distrito de Cotahuma	Carolina Becerra	4/13/11	Yes	No	17	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Bolivia	Max Paredes	Max Paredes	2. Coalición Comunitaria del Macro Distrito de Max Paredes	Leslie Salazar	3/12/13	Yes	No		Coalition is no longer active. Training process was incomplete and ended abruptly due to political reasons.
Brazil	São Paulo state	Lorena city	1. Lorena		2013	Yes	No		Coalition is no longer active.
Brazil	São Paulo state	Pindamonhangaba city	2. Coalizão Comunitária Antidrogas de Pindamonhangaba	Eliane Prado Marcondes	2008	Yes	No	195	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Brazil	São Paulo state	Pompeia city	3. Coalizão Comunitária Antidrogas de Pompeia	Maria de Fátima Souza	2013	Yes	No	45	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Brazil	São Paulo state	Taubaté city	4. Coalizão Comunitária Antidrogas de Taubaté	Sandra Maria Duarte	2011	Yes	No	80	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Brazil	São Paulo state	Ubatuba city	5. Coalizão Comunitária Antidrogas de Ubatuba	Neilson Medeiros	2013	Yes	No	22	Coalition graduated and established partnership with the Ubatuba Municipal Secretariat of Education in projects with youth. Currently is working on a revision and update of the Logic Model and the Strategies, in order to develop a new strategic and action plans to be implemented in 2017.
Brazil	São Paulo state	São Bento do Sapucaí city	6. Coalizão São Bento	Lana Moreira	2014	Yes	No	25	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Brazil	São Paulo state	Caçapava city	7. Coalizão Comunitária Antidrogas de Caçapava	Vagner	2015	Yes	Yes	10	Coalition graduated and is working on membership and capacity building to develop an updated logic model to be implemented in 2017.
Brazil	São Paulo state	Bragança Paulista city	8. Coalizão Comunitária Antidrogas de Bragança Paulista	Juliano Marcel	2015	Yes	Yes	60	Coalition graduated and is working on a community assessment in partnership with the Anhanguera University, election of a Youth Committee and organization of an event in partnership with the Pindamonhangaba Youth Committee to promote the "1st Youth Committee Encounter" in 2017.

Country	City	Neighborhood / District	Established Coalition	Name of Point of Contact	Date Established	INL Funds at creation (Yes/No)	INL Funds in 2016 (Yes/No)	# of Members	Coalition Update
Brazil	São Paulo state	Santos city	9. Coalizão Santos	Cristhiane Neves Saraiva	2015	Yes	Yes	55	Coalition graduated and is currently in partnership with the Municipal Government of Santos, the Alcohol and Drugs Research Unit of the Federal University of the State of São Paulo (UNIAD / UNIFESP), the Youth Court, the Municipal Drug Council and other entities, recently conducted a community assessment that showed that 55% of bars and restaurants sold alcohol to minors. The coalition is currently implementing an action plan to address the findings of the recent assessment.
Brazil	São Paulo state	São Paulo city - CIC West	10. Coalizão Comunitária Antidrogas CIC Oeste	Leandro Guilherme Gabriel	2015	Yes - INL Brazil	Yes - INL Brazil	35	Coalition graduated and is working on conducting a community assessment in private and public schools in the community in partnership with the Anhanguera University.
Brazil	São Paulo state	São Paulo city - CIC South	11. Coalizão Comunitária Antidrogas CIC Sul	Fábio Moreira	2015	Yes - INL Brazil	Yes - INL Brazil		Coalition is no longer active.
Brazil	Minas Gerais state	Itabira city	12. Coalizão Comunitária Antidrogas de Itabira	Camila Araújo	2014	No	No		Coalition is no longer active.
Brazil	Rio de Janeiro state	Itaiaia city	13. Coalizão de Itaiaia	Leonardo Seixas	2013	Yes	Yes	20	Assessment on substance abuse concluded. In 2017, with the support of the new elected Mayor, plans to implement a strategic plan to reduce the use of marijuana, identified as the main drug problem. Approved a municipal law that prohibits the distribution, sale and consumption of alcohol by minors under 18.
Brazil	Rio de Janeiro state	Porto Real/Quatis city	14. Coalizão Comunitária Antidrogas de Porto Real	Macon Oliveira	2014	Yes	Yes	30	Assessment on substance abuse conducted by a local University concluded. From the total of 1944 students, 902 (46.4%) informed that have already had contact with some illegal drug. The coalition is developing a strategic plan to reduce the use of inhalants (7.4%), found to be the major drug problem in the community.
Brazil	Pernambuco state	Recife city - Santo Amaro	15. Coalizão Comunitária de Santo Amaro	Roziane Santana	2015	Yes - INL Brazil	Yes - INL Brazil	25	Santo Amaro coalition is developing a strategic plan to reduce the use of inhalants by students between 10 and 18 years old, as per official GOB assessment dated 2010.
Brazil	Pernambuco state	Recife city - Teimososa/Pina	16. Coalizão Comunitária Antidrogas de Brasília Teimososa/Pina	Marina Amorim	2015	Yes - INL Brazil	Yes - INL Brazil	10	Brasília Teimososa/Pina and Santo Amaro coalitions are working in partnership with the Municipal and the State Governments, and the State University of Pernambuco (UPE) on the development of a Substance Use Assessment to be conducted in the schools of both communities in 2017.
Cape Verde	Santiago Island - Praia city	Achada São Filipe	1. Coalizão Antidroga de Achada São Filipe	Odete Correia	2012	Yes	Yes	40	Coalition graduated and is currently developing strategic and action plans. Also working with the other four Cape Verde Coalitions on the creation of a Cape Verde Network of Coalitions.
Cape Verde	Santiago Island - Praia city	Ponta D'Água	2. Coalizão Antidroga de Ponta D'Água	Celestino Lobo	2012	Yes	Yes	25	Coalition graduated and is currently developing strategic and action plans. Also working with the other four Cape Verde Coalitions on the creation of a Cape Verde Network of Coalitions.
Cape Verde	São Vicente Island - Mindelo city	Mindelô	3. Coalizão Antidroga de São Vicente	Jessica Fonseca	2013	Yes	Yes	35	Coalition graduated and is currently developing strategic and action plans. Also working with the other four Cape Verde Coalitions on the creation of a Cape Verde Network of Coalitions.

Country	City	Neighborhood / District	Established Coalition	Name of Point of Contact	Date Established	INL Funds at creation (Yes/No)	INL Funds in 2016 (Yes/No)	# of Members	Coalition Update
Cape Verde	Santiago Island- Praia city	Calabaceira	4. Coalizão Antidroga de Calabaceira	Jessica Fonseca	2015	Yes	Yes	30	Newly developed coalition working on objectives and strategies to change their local conditions. Underage drinking and marihuana use were identified as the main problems in the community. Currently working with the other four Cape Verde Coalitions on the creation of a Cape Verde Network of Coalitions.
Cape Verde	Santiago Island- Praia city	Achada Grande Frente	5. Coalizão Antidroga de Achada Grande Frente	Paulino Delgado	2015	Yes	Yes	30	Newly developed coalition working on objectives and strategies to change their local conditions. Underage drinking and marihuana use were identified as the main problems in the community. Currently working with the other four Cape Verde Coalitions on the creation of a Cape Verde Network of Coalitions.
Costa Rica	San Jose	Pavas	1. Coalición Comunitaria de Pavas	L.C.Haydee Arce Grujalba	10/13/14	Yes	Yes	30	Coalition graduated, developed all coalition products and forged relationships with local leaders and partners to sustain DDR activities and efforts independently. The coalition is currently working on implementing strategies to change their local conditions in the community related to the issues of marihuana and underage drinking.
Costa Rica	San Jose	Alajuelita	2. Coalición Comunitaria de Alajuelita	Daniel Umaña Najera	9/1/15	Yes	Yes	40	Coalition recently graduated and formed an executive board of 15 members from various sectors and meets regularly. The coalition finalized its community assessment and is now working on its Logic Model adding data and establishing objectives in order to evaluate its impact on addressing youth use of Marihuana.
Costa Rica	San Jose	Desamparados	3. Coalición Comunitaria de Desamparados	Ronald Muñoz	9/1/2015 reorganized in 10/1/2016	Yes	Yes	12	This coalition was formed in the fall of 2016 as a result of CADCA's TOL Initiative Training. Currently this team is strengthening its membership and completing tasks on formally establishing the coalitions, community mapping, logic model and strategies. The core team is also currently designing a survey to collect substance use data within Higuitos the target community involving key sectors.
Costa Rica	San Jose	Escazu	4. Coalición Comunitaria de Escazu	Karla Rodriguez B.	10/1/16	Yes	Yes	6	This coalition was formed in the fall of 2016 as a result of CADCA's TOL Initiative Training. A core team of 6 has six active members is working to strengthen its membership in the target area of Guachipelin. Currently this group has begun meeting with several sectors (faith-based organizations, civic groups, business, NGOs and schools) to design a survey to collect substance use data from the community. The coalition is also recruiting missing sectors and is working to establish a needs assessment committee.
Costa Rica	San Jose	Moravia	5. Coalición Comunitaria de Moravia	L.C. Geannina Zuhiga Z	10/1/16	Yes	Yes	6	This coalition was formed in the fall of 2016 as a result of CADCA's TOL Initiative Training. A team of six core members have selected the target area and are working on the needs assessment. To date this group has held regular coalition meetings and are working to strengthen its membership with local government.
Ghana	Accra	La-Nkwantanag Madina Municipal	1. West Madina Coalition for Development (WEMCODE)	Hashim Abdulai	8/22/13	Yes	No	65	Coalition has organized educational campaigns through education and entertainment and has reached over 3800 young people in their community.
Ghana	Accra	La-Nkwantanag Madina Municipal	2. East Madina Coalition for Development (EMACOD)	Kamal Razak	03/06/2014	Yes	No	64	Coalition has recently organized a 2-day training workshop on drug prevention for school-aged kids.
Ghana	SWEDRO	Agona West Municipal	3. Agona West Coalition	Dorcas Apronti	9/22/15	Yes, TOL	Yes	32	Coalition has participated in a weekly radio program in partnership with local media, creating awareness about drug use and mobilizing residents for action.
Ghana	CAPE COAST	Cape Coast Metropolitan	4. Cape Coast Community Coalition for Change (C5)	Daniel Deladem Kisseih	9/22/15	Yes, TOL	Yes	66	Coalition has provided educational seminars in local schools (youth) and in the community (parents and residents).

Country	City	Neighborhood / District	Established Coalition	Name of Point of Contact	Date Established	INL Funds at creation (Yes/No)	INL Funds in 2016 (Yes/No)	# of Members	Coalition Update
Ghana	BEGORO	Fanteakwa District	5. Fanteakwa Community Coalition	Samuel Darfour	9/24/15	Yes, TOL	Yes	52	Coalition has enhanced the access between drug users and local treatment centers. They have also advocated for increased resources in the development of local youth programs.
Ghana	SOMANYA	Yilo Krobo Municipal	6. Somanaya Community Coalition	Emmanuel Asamoah	9/25/15	Yes, TOL	Yes	29	Coalition has formed youth committees in 10 different local schools.
Ghana	AMASAMAN	GA West Municipal	7. Amasaman Community Coalition	Edmund Palmer Qarshie	9/29/15	Yes, TOL	Yes	27	Recently formed coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Ghana	DODOWA	Shai Osudoku District	8. Dodowa Community Coalition	Robert Mensah Kwaku Gbley	9/28/15	Yes, TOL	Yes	49	Coalition has been advocating for an increase in local resources to support drug demand reduction.
Guatemala	San Lucas Sacatepéquez	San Lucas Sacatepéquez	1. Coalición Comunitaria de San Lucas	Carlos Alvarado	11/1/14	Yes	Yes	30	Coalition graduated and has a very active youth committee. It is impacting the local condition of marihuana use and sale in public spaces such as local parks with strategies and action plans implemented.
Guatemala	Santa Catarina Pinula	Santa Catarina Pinula	2. Coalición Comunitaria de Santa Catarina Pinula		6/1/11	Yes	No		Coalition is no longer active.
Guatemala	Secatepequez	San Bartolome	3. Coalición Comunitaria de San Bartolome	Carlos Alvarado	2/2/15	Yes	Yes	15	This coalition is currently working on the review of their community assessment in the development of a logic model and strategies. Marihuana sales in central plaza and consumption in schools were found to be areas in the community that need to be addressed.
Guatemala	Quetzaltenango	Salcaja	4. Coalición Comunitaria de Salcaja	Carlos Alvarado	11/7/16	Yes	Yes	5	This coalition was formed in the fall of 2016 as a result of CADCA's TOL Initiative Training. The core team trained is currently working on strengthening the coalition membership base and establishing a data collection committee to conduct a community assessment.
Guatemala	Quetzaltenango	Cantel	5. Coalición Comunitaria de Cantel	Carlos Alvarado	11/7/16	Yes	Yes	8	This coalition was formed in the fall of 2016 as a result of CADCA's TOL Initiative Training. The core team trained is currently working on strengthening the coalition membership base and establishing a data collection committee to conduct a community assessment.
Guatemala	Quetzaltenango	Totonicapán	6. Coalición Comunitaria de Totonicapán	Carlos Alvarado	11/7/16	Yes	Yes	9	This coalition was formed in the fall of 2016 as a result of CADCA's TOL Initiative Training. The core team trained is currently working on strengthening the coalition membership base and establishing a data collection committee to conduct a community assessment.
Haiti	Port au Prince	Carrefour	1. Coalition Anti-Drogue de La Commune de Carrefour	Lucinda Cassagnol-Laguerre 509-368-68423	11/1/14	Yes	Yes	40	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently. Coalition is also working on the strategic and action plans and has a non-profit status.
Honduras	Choloma	Lopez Arellano	1. Coalición Comunitaria Lopez Arellano	Lesy Castillo Delmis Chacon Rubio	5/1/13	Yes	Yes	35	Coalition graduated and is currently working on implementing strategies, action plan, evaluation and sustainability plans on interventions associated to marihuana use by youth and underage drinking.
Honduras	La Lima	La Lima	2. Coalición Comunitaria La Lima	Lesy Castillo Delmis Chacon Rubio	7/6/14	Yes	Yes	40	Coalition graduated and is currently working on implementing strategies, action plan, evaluation and sustainability plans on interventions associated to underage drinking.
Honduras	El Progreso	El Progreso	3. Coalición Comunitaria El Progreso	Lesy Castillo Delmis Chacon Rubio	7/6/14	Yes	Yes	63	Coalition graduated and is currently working on implementing strategies, action plan, evaluation and sustainability plans on interventions associated to marihuana use by youth.
Honduras	San Pedro Sula	Chamelecón	4. Coalición Comunitaria de Chamelecón	Lesy Margot Castillo	7/9/11	Yes	No		Coalition is no longer active.
Honduras	Villanueva	Villanueva	5. Coalición Comunitaria de Villanueva	Lesy Castillo Delmis Chacon Rubio	1/16/17	Yes	Yes	9	This coalition was formed in January 2017 as a result of CADCA's TOL Initiative Training. The core team trained is currently working on strengthening the coalition membership base and establishing a data collection committee to conduct a community assessment.

Country	City	Neighborhood / District	Established Coalition	Name of Point of Contact	Date Established	INL Funds at creation (Yes/No)	INL Funds in 2016 (Yes/No)	# of Members	Coalition Update
Honduras	Puerto Cortes	Puerto Cortes	6. Coalición Comunitaria de Puerto Cortes	Lesy Castillo Delmis Chacon Rubio	1/16/17	Yes	Yes	8	This coalition was formed in January 2017 as a result of CADCA's TOL Initiative Training. The core team trained is currently working on strengthening the coalition membership base and establishing a data collection committee to conduct a community assessment.
Honduras	Omoo	Omoo	7. Coalición Comunitaria de Omoo	Lesy Castillo Delmis Chacon Rubio	1/16/17	Yes	Yes	7	This coalition was formed in January 2017 as a result of CADCA's TOL Initiative Training. The core team trained is currently working on strengthening the coalition membership base and establishing a data collection committee to conduct a community assessment.
Honduras	San Pedro Sula	San Pedro Sula	8. Coalición Comunitaria de San Pedro Sula	Lesy Castillo Delmis Chacon Rubio	1/16/17	Yes	Yes	7	This coalition was formed in January 2017 as a result of CADCA's TOL Initiative Training. The core team trained is currently working on strengthening the coalition membership base and establishing a data collection committee to conduct a community assessment.
Iraq	Erbil	Ankawa	1. Ankawa Community Coalition	Saadiyah F. Hassoon (chair person) Hasoon (logistics)	9/5/13	Yes, INL Baghdad	No	40	Coalition has worked with local authorities to enforce local laws related to drug use and is currently working on environmental strategies to change the design of their community.
Iraq	Erbil	Ari	2. Ari Community Coalition	Kawa Perdawood (Project Manager)	9/5/13	Yes, INL Baghdad	No	40	Coalition has build a strong relationship with the community, government agencies and religious leaders.
Kenya	Mombasa	Mombasa	1. Mombasa Community Anti-Drug Coalition of Kenya (MSACADCK)	Mrs. Farida Rashid	2011	Yes	Yes	50	Coalition has enhanced the access between drug users and local treatment centers.
Kenya	Kwale	Kwale	2. Kwale Community Anti Drug Coalition (KWACADCO)	Mr. Katiba Mkungu (Coalition Chair) Mrs. Mariam Kasibai ( Secretary)	2012	Yes	Yes	45	Coalition has advocated for the improvement of systems in place, in order to provide more opportunities for the local community to access to prevention services.
Kenya	Nairobi	Nairobi	3. Community Anti-Drug Coalitions of Kenya (CADCKE)	Dr. Catherine Gatchutha (Coalition Chair) Mr. Patrick Okwarah (Coalition Secretary and Coordinator)	7/5/13	Yes	Yes	45	Coalition has launched a website (www.cadckc.org) and has officially become the umbrella coalition for all the others Kenyan community coalitions.
Kenya	Nairobi	Nairobi	4. Nairobi Community Anti-Drug Coalition (NCADC)	Dr. Catherine Gatchutha (Coalition Chair) Mr. Patrick Okwarah (Coalition Secretary and Coordinator)	7/5/13	Yes	Yes	45	Coalition has advocated for the revision of local laws that would increase local drinking age from 18 to 21 years old.
Kyrgyzstan	Bishkek	Leninski district	1. Ak-Orgo community coalition		4/1/13	No	No		Coalition is no longer active.
Kyrgyzstan	Bishkek	Leninski district	2. Ala-Too community coalition		4/1/13	No	No		Coalition is no longer active.
Kyrgyzstan	Bishkek	Sverdlovski district	3. Sverdlovski coalition #1		4/1/13	No	No		Coalition is no longer active.
Kyrgyzstan	Bishkek	Sverdlovski district	4. Sverdlovski coalition #2		9/1/14	No	No		Coalition is no longer active.
Kyrgyzstan	Bishkek	Bakai-Ata	5. Bakai-Ata Coalition	Gujamal Sultanalieva	9/1/14			32	Coalition conducted compliance checks of local retailers. Held meetings educating the retailers on the current alcohol and tobacco laws. Worked on removing spice advertisements in the community. Finalized coalition by-laws and developed coalition logo.
Kyrgyzstan	Bishkek	Keleчек	6. Keleчек Coalition	Gujamal Sultanalieva	9/1/14			30	Coalition installed signs informing about alcohol and tobacco laws at the local stores. Conducted compliance checks of local retailers. Coalition installed a video camera at one of the "hot spots." Coalition utilized community resources to renovate a soccer field.
Kyrgyzstan	Mady	Mady	7. Mady Coalition	Gujamal Sultanalieva	2/1/17				Established as a result of the Training of Leaders Initiative. Graduated in January 2017. Currently in the process of conducting community assessment and preparing for the coalition kick off event.
Kyrgyzstan	Gulcho	Gulcho	8. Gulcho Coalition	Gujamal Sultanalieva	2/1/17				Established as a result of the Training of Leaders Initiative. Graduated in January 2017. Currently in the process of conducting community assessment and preparing for the coalition kick off event.
Kyrgyzstan	Tokmok	Tokmok	9. Tokmok Coalition	Gujamal Sultanalieva	2/1/17				Established as a result of the Training of Leaders Initiative. Graduated in January 2017. Currently in the process of conducting community assessment and preparing for the coalition kick off event.
Kyrgyzstan	Kara-Balta	Kara-Balta	10. Kara-Balta Coalition	Gujamal Sultanalieva	2/1/17				Established as a result of the Training of Leaders Initiative. Graduated in January 2017. Currently in the process of conducting community assessment and preparing for the coalition kick off event.

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Kyrgyzstan	Sokoluk	Sokoluk	11. Sokoluk Coalition	Guljamal Sultanalieva	2/1/17				Established as a result of the Training of Leaders Initiative. Graduated in January 2017. Currently in the process of conducting community assessment and preparing for the coalition kick off event.
Mexico	Tijuana	Colonia 10 de mayo	1. Coalición Comunitaria 10 de Mayo	LC. Miguel Khamwonga beti_cuevas@hotmail.com	12/12/12	Yes	Yes, INL Mexico City	49	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently. Currently working to address the community problems associated with the use of crystal meth.
Mexico	Tijuana	Colonia Sanchez Taboada	2. Coalición Comunitaria de Sanchez Taboada	LC. Miguel Khamwonga President: Mrs. Nohemi Rodriguez	12/12/12	Yes	Yes, INL Mexico City	73	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently. Currently working to address the community problems associated with the use of crystal meth and underage drinking.
Mexico	Tijuana	Colonia Camino Verde	3. Coalición Comunitaria de Camino Verde	CL. Miguel Khamwonga President: Mr. Apolonio Sixtos	12/12/12	Yes	Yes, INL Mexico City	98	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently. Currently working to address the community problems associated with the use of crystal meth as well as recuperating public spaces.
Mexico	Tijuana	Colonia Valle Verde	4. Community Coalition of Valle Verde	LC. Miguel Khamwonga President: Mrs. Alejandra Garduño Salazar	8/1/14	Yes	Yes, INL Mexico City	42	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Mexico	Ciudad Juárez	Colonia Águilas de Zaragoza	5. Coalición Comunitaria de Águilas de Zaragoza	LC: Mrs. Alma Gonzalez. President: Ms. Esmeralda Fuentes	11/12/12	Yes	Yes, INL Mexico City	41	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Mexico	Ciudad Juárez	Colonia Altavista	6. Coalición Comunitaria de Altavista	LC: Mrs. Gabriela Fierro President: Mrs. Yelvia Martinez	11/12/12	Yes	Yes, INL Mexico City	41	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Mexico	Ciudad Juárez	Colonia Felipe Angeles	7. Coalición Comunitaria de Felipe Angeles	LC: Mrs. Gabriela Fierro President: Lic. José Filiberto Pinedo Irigoyen	11/12/12	Yes	Yes, INL Mexico City	41	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Mexico	Ciudad Juárez	Colonia Aztecas	8. Coalición Comunitaria de Aztecas	LC: Mrs. Gabriela Fierro President: Lic. Miguel Angel Gonzalez	8/1/14	Yes	Yes, INL Mexico City	41	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Mexico	Agua Prieta	Colonia Alamitos	9. Coalición Comunitaria de Alamitos	LC. Martha Escobar Ayala. President: Mr. Genaro Ramirez Juárez	7/12/12	Yes	Yes, INL Mexico City	58	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently. Currently working to address the community problems marihuana use among youth.
Mexico	Agua Prieta	Colonia Ferrocarril	10. Community Coalition of Ferrocarril	LC. Martha Escobar Ayala. President: Mr. René Espinoza Sidar	11/1/14	Yes, INL Mexico City	Yes, INL Mexico City	43	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Mexico	Nogales	Colonia Luis Donald	11. Coalición Comunitaria de Colosio	Mrs. Petra Sánchez Campos President: Mrs. Petra Sánchez Campos	6/12/12	Yes	Yes, INL Mexico City	70	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently.
Mexico	Nogales	Colonia Buenos Aires Heroes	12. Coalición Comunitaria de Buenos Aires - Héroes	María Dolores Coronado Muela President: María Dolores Coronado Muela	6/12/12	Yes, INL Mexico City	No	35	Coalition is no longer active.
Mexico	Chihuahua	Colonia Revolución	13. Coalición Comunitaria de Revolución	LC: Lic. Lilliana Nevarez President: Mrs. Nohemi Torres	08/28/2014	Yes, INL Mexico City	Yes, INL Mexico City	40	Graduated coalition meets weekly. Focuses on marihuana consumption among youth. Conducted an assessment activity involving visits to 80 homes, employing the Knock and Talk technique. Collaborates with Coalicion Villa Juarez on some prevention activities.
Mexico	Chihuahua	Colonia Villa Juárez	14. Coalición Comunitaria de Villa Juárez	LC: Lic. Lilliana Nevarez President: Lic. María Teresa Mamríquez Pereira	08/26/2014	Yes, INL Mexico City	Yes, INL Mexico City	42	This coalition is focusing on marihuana use by youth and works closely with the local Center on Prevention of Addiction (CAPA) to deliver a training on marihuana for community parents and youth. In addition to raising awareness this coalition is working to recover public spaces.
Mexico	Estado de Mexico	Colonia Chamizal	15. Coalición Comunitaria de Chamizal	LC. Lic. Patricia Hernández President: Mrs. María G. Fernández.	10/23/2014	Yes, INL Mexico City	Yes, INL Mexico City	39	Coalition graduated and currently focuses on addressing the use of inhalants by community youth. Planned on taking back and rehabilitating community hot-spots by cleaning up, painting murals, and placing signs in problem areas.
Mexico	Estado de Mexico	Colonia Pirules	16. Coalición Comunitaria de Pirules	LC. Lic. Patricia Hernández President: María Teresa Escobar Maya	11/27/2014	Yes, INL Mexico City	Yes, INL Mexico City	37	Coalition graduated and focuses on marihuana use among youth. Some coalitions interventions include instituting a neighborhood watch and backpack screening campaign in the local schools.
Mexico	Durango	Colonia Villas Guadiana	17. Coalición Comunitaria de Villas Guadiana	LC. Lic. Aracely Morales President: Mr. Carlos Ivan Ortega Carrillo	08/29/2014	Yes, INL Mexico City	Yes, INL Mexico City	44	Graduated coalition completed its logic model and decided to focus on the problem of crystal consumption among youth. During international prevention week, the coalition participated in several tobacco prevention campaigns and held a one-day workshop on tobacco prevention to 30 local youth and distributed anti-tobacco stickers.



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Mexico	Durango	Colonia Division del Norte	18. Coalición Comunitaria de División del Norte	Lc. Lic. Aracely Morales President: Mrs. Maria Gregoria Soto J.	08/22/2014	Yes, INL Mexico City	Yes, INL Mexico City	44	Coalition graduated and forged relationships with local leaders and partners to sustain DDR activities and efforts independently. Currently working to address the community problems associated with marijuana use among youth.
Mexico	Hermosillo	Colonia Las Arboledas	19. Coalición Comunitaria de Las Arboledas	Lc. M. Leonarda Lugo President: Mr. Rodrigo Silva Zazueta	10/15/2014	Yes, INL Mexico City	Yes, INL Mexico City	46	Coalition graduated and currently hosts several community events including: summer camp, classes and workshops for community youth to recruit new members. Works closely with key sectors such as local civic group, fire fighters, and health department to address community conditions centered on underage drink.
Mexico	Monterrey	Colonia San Bernabé	20. Coalición Comunitaria de San Bernabé	Lc. Lic. Beatriz Abrego President: Mrs. Delia Cruz	11/8/14	Yes	Yes, INL Mexico City	33	Coalition graduated and holds regular community meetings to address marijuana consumption among teens. This coalition is working closely with elected officials, judges, law enforcement and other local authorities electing a coalition member as the community judge, a local authority to address this issue. The coalition also works closely with the local prevention center CAPA to conduct workshop for community residents on the issue.
Mexico	Monterrey	Colonia Fomerrey 110-105	21. Coalición Comunitaria Colonia Fomerrey 110-105	Lc. Lic. Beatriz Abrego President: Mrs. Blanca Ortiz.	10/29/2014	Yes	Yes, INL Mexico City	39	Graduated coalition holds weekly meetings to address the problem of marijuana consumption among teens. Organized a 2-week summer camp for community children in order to provide them with enriching activities, increase parent involvement, and strengthen membership. The event, which involved the collaboration of fire fighters, police station, community center and local organizations, strengthened the relationship among the various sectors. Members handed out flyers to community residents on drug abuse.
Mexico	Nuevo Laredo	Colonia Colinas del Sur	22. Coalición Comunitaria de Colinas del Sur	Lc. Lic. Goretti Lozano. President: Mrs. Sanjuana Guadalupe Salinas Rodriguez	04/15/2015	Yes	Yes, INL Mexico City	47	Graduated coalition is composed of mostly women and enjoys the support of a CAPA organization and of CAJ, a youth-serving organization. Also has the support on coalition projects from dozens of local professionals. Coalition addresses alcohol consumption among youth. Surveyed 100 youth and 100 adults about alcohol consumption and determined that families have favorable attitudes toward alcohol use. Coalition is seeking permission from local government to transform an abandoned locale into a coalition office and meeting space.
Mexico	Tabasco	Villa Hermosa	23. Coalición Comunitaria de Macuspana	Ms. Betzabel Tobias	May, 2016	Yes	Yes	25	Board is in the process of holding an election. Coalition planning an official and public launch, after which it will begin a community assessment. Will be addressing marijuana. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Tabasco	Villa Hermosa	24. Coalición Comunitaria de Pino Suarez	Ms. Betzabel Tobias	May, 2016	Yes	Yes	12	Coalition launched publicly in May of 2016. Has a board and has almost completed an assessment. Organized a community clean up force comprised of police officers and students asked with cleaning and painting of an athletic field. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Hidalgo	Pachuca	25. Coalición Comunitaria de Los Jobs	Ms. Betzabel Tobias	December, 2016	Yes	Yes	11	Coalition has not launched publicly yet. Conducted an initial community assessment. Main drug is alcohol. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Hidalgo	San Felipe Orizatlan	26. Coalición Comunitaria Los Cubitos	Ms. Betzabel Tobias	December, 2016	Yes	Yes	32	Comprised mostly of very active female residents who meet 3x/week. Launched publicly. Completed community assessment, mapped the community and hotspots and conducted knock and talks. Formed a youth group. Will begin working on the logic model. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Quintana Roo	Playa del Carmen	27. Coalición Comunitaria de Solidaridad	Mr. Gilberto Solis	February, 2016	Yes	Yes	11	Coalition has selected an area of intervention and is focusing on marijuana. Working on securing the support and participation of municipal authorities.

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Mexico	Quintana Roo	Cancun	28. Coalicón Comunitaria 221	Mr. Gilberto Solis		Yes	Yes	10	Coalition launched publicly, established a board of directors, almost completed its community assessment, identified the target area and mapped the community with hotspots.
Mexico	Quintana Roo	Cancun	29. Coalicón Comunitaria 516	Mr. Gilberto Solis	October, 2016	Yes	Yes	11	Coalition in early stages of development. Members have just begun to meet. Have not developed a structure or products yet. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Jalisco	Lomas Verdes	30. Coalicón Comunitaria San Juan de los Lagos	Mr. Gilberto Solis	January, 2016	Yes	Yes	11	Coalition launched publicly. Meet weekly. Developed vision, mission, objectives, and working on chronogram. Following its own action plan / activities: believed to deal with the problem identified, consumption of marihuana by youth. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Jalisco	Tonalá	31. Coalicón Comunitaria El Rosario	Mr. Gilberto Solis	January, 2016	Yes	Yes	5	Coalition in early stages of development. Members have just begun to meet. Have not developed a structure or products yet. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Jalisco	Tonalá	32. Coalicón Comunitaria Santa Ana de Peñitlan	Mr. Gilberto Solis	January, 2016	Yes	Yes	5	Coalition in early stages of development. Members have just begun to meet. Have not developed a structure or products yet. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Jalisco	Tonalá	33. Coalicón Comunitaria Rey Xoloti	Mr. Gilberto Solis	January, 2016	Yes	Yes	5	Coalition in early stages of development. Members have just begun to meet. Have not developed a structure or products yet. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Jalisco	Tonalá	34. Coalicón Comunitaria Jovenes del Vergel	Mr. Gilberto Solis	January, 2016	Yes	Yes	5	Coalition in early stages of development. Members have just begun to meet. Have not developed a structure or products yet. In December 2016 attended CADCA's 2nd TOL event.
Mexico	Chiapas	Tuxtla	35. Coalicón Comunitaria San Pedro Progresivo	Ms. Betzabel Tobias	November, 2016	Yes, INL Mexico City	Yes, INL Mexico City	12	Coalition in development, completed the community mapping and logic model on marihuana use by youth, found to be the main problems in the community.
Mexico	Chiapas	Tuxtla	36. Coalicón Comunitaria Infonavit Grijalva	Ms. Betzabel Tobias	November, 2016	Yes, INL Mexico City	Yes, INL Mexico City	12	Coalition in development, completed the community mapping and logic model on alcohol use by minors, found to be the main problems in the community.
Mexico	Chiapas	San Cristobal	37. Coalicón Comunitaria Prudencio Moscoso	Ms. Betzabel Tobias	November, 2016	Yes, INL Mexico City	Yes, INL Mexico City	40	Coalition in development, completed the community mapping and two logic models on inhalants and marihuana use by minors, found to be the main problems in the community.
Mexico	Puebla	Puebla	38. Coalicón Comunitaria Cholula	Mr. Gilberto Solis	November, 2016	Yes, INL Mexico City	Yes, INL Mexico City	15	Coalition in development, completed the community mapping and logic model on marihuana use by youth, found to be the main problems in the community.
Mexico	Puebla	Puebla	39. Coalicón Comunitaria San Bartolo	Mr. Gilberto Solis	November, 2016	Yes, INL Mexico City	Yes, INL Mexico City	15	Coalition in development, completed the community mapping and logic model on inhalant use by youth, found to be the main problems in the community.
Mexico	Puebla	San Pedro	40. Coalicón Comunitaria San Pedro	Mr. Gilberto Solis	November, 2016	Yes, INL Mexico City	Yes, INL Mexico City	15	Coalition in development, completed the community mapping and logic model on inhalant use by youth, found to be the main problems in the community.
Mexico	Guanajuato	Guanajuato	41. Coalicón Comunitaria León II	Ms. Marisol Ramirez	December, 2016	Yes, INL Mexico City	Yes, INL Mexico City	14	Coalition in development, completed the community mapping and logic model on inhalant use by youth, found to be the main problems in the community.
Mexico	Guanajuato	Guanajuato	42. Coalicón Comunitaria Soledad/La Joya	Ms. Marisol Ramirez	December, 2016	Yes, INL Mexico City	Yes, INL Mexico City	14	Coalition in development, completed the community mapping and logic model on alcohol use by youth, found to be the main problems in the community.

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Mexico	Guanajuato	Leon	43. Coalicón Comunitaria Chapallita	Ms. Marisol Ramirez	December, 2016	Yes, INL Mexico City	Yes, INL Mexico City	14	Coalition in development, completed the community mapping and logic model on crystal meth use, found to be the main problems in the community along with marihuana and inhalents.
Mexico	Veracruz	Veracruz	44. Coalicón Comunitaria Buena Vista	Mr. Gilberto Solis	December, 2016	Yes, INL Mexico City	Yes, INL Mexico City	6	Coalition in development, completed the community mapping and logic model on marihuana use by youth, found to be the main problems in the community.
Mexico	Veracruz	Veracruz	45. Coalicón Comunitaria Colonia Playa Linda	Mr. Gilberto Solis	December, 2016	Yes, INL Mexico City	Yes, INL Mexico City	6	Coalition in development, completed the community mapping and logic model on alcohol use by youth, found to be the main problems in the community.
Mexico	Veracruz	Boca del Río	46. Coalicón Comunitaria Villa Rica	Mr. Gilberto Solis	December, 2016	Yes, INL Mexico City	Yes, INL Mexico City	6	Coalition in development, completed the community mapping and logic model on inhalent use by youth, found to be the main problems in the community.
Mexico	Zacatecas	Zacatecas	47. Coalicón Comunitaria Minera	Ms. Marisol Ramirez	November, 2016	Yes, INL Mexico City	Yes, INL Mexico City	15	Coalition in development, completed the community mapping and logic model on alcohol use by youth, found to be the main problems in the community.
Mexico	Zacatecas	Zacatecas	48. Coalicón Comunitaria Alma Obrera	Ms. Marisol Ramirez	November, 2016	Yes, INL Mexico City	Yes, INL Mexico City	15	Coalition in development, completed the community mapping and logic model on alcohol use by youth, found to be the main problems in the community.
Mexico	Zacatecas	Fresnillo	49. Coalicón Comunitaria Sector Lagunilla	Ms. Marisol Ramirez	November, 2016	Yes, INL Mexico City	Yes, INL Mexico City	25	Coalition in development, completed the community mapping and two logic models on inhalents and marihuana use by minors, found to be the main problems in the community.
Paraguay	Asunción	San Antonio	1. Coalicón Comunitaria San Antonio	Geraldine Willim	10/4/16	Yes	Yes	26	Coalition in development, completed the community mapping and two logic models on crack cocaine and alcohol use by minors, found to be the main problems in the community.
Paraguay	Asunción	Fernando de la Mora	2. Coalicón Comunitaria Fernando de la Mora	Geraldine Willim	10/6/16	Yes	Yes	40	Coalition in development, completed the community mapping and three logic models on crack cocaine, inhalants and alcohol use by minors, identified as the major problems in the community.
Peru	Callao area		1. Coalicón Comunitaria Callao Norte	Rolando Salazar		Yes, INL Peru	No	28	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Callao area		2. Coalicón Comunitaria Carmen de la Legua	Rolando Salazar		Yes, INL Peru	No	28	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Callao area		3. Coalicón Comunitaria Villa Señor de los Milagros	Rolando Salazar		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Callao area		4. Coalicón Comunitaria La Chalaca	Rolando Salazar		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Callao area		5. Coalicón Comunitaria Mi Peru	Rolando Salazar		Yes, INL Peru	No	24	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Callao area		6. Coalicón Comunitaria Villa Los Reyes	Rolando Salazar		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima area		7. Coalicón Comunitaria Conde de la Veiga	Carolo Sirvas		Yes, INL Peru	No	40	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima area		8. Coalicón Comunitaria Mirones	Carolo Sirvas		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima area		9. Coalicón Comunitaria Barrios Altos	Carolo Sirvas		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima area		10. Coalicón Comunitaria Lima Cuadrada	Carolo Sirvas		Yes, INL Peru	No	40	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	La Victoria		11. Coalicón Comunitaria Balconillo	Carolo Sirvas		Yes, INL Peru	No	28	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.

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Peru	La Victoria		12. Coalición Comunitaria Martute	Carolo Sirvas		Yes, INL Peru	No	32	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	El Rimac		13. Coalición Comunitaria El Rimac	Carolo Sirvas		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	El Rimac		14. Coalición Comunitaria El Manzano	Carolo Sirvas		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Villa El Salvador		15. Coalición Comunitaria Sector 2 Grupo 5	Gabriela Montoya Ponce de Leon		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Villa El Salvador		16. Coalición Comunitaria Sector 3 Grupo 8	Gabriela Montoya Ponce de Leon		Yes, INL Peru	No	40	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Villa El Salvador		17. Coalición Comunitaria Sector 7	Gabriela Montoya Ponce de Leon		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Villa El Salvador		18. Coalición Comunitaria Pachacamac	Gabriela Montoya Ponce de Leon		Yes, INL Peru	No	38	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Villa El Salvador		19. Coalición Comunitaria Sector 1	Gabriela Montoya Ponce de Leon		Yes, INL Peru	No	40	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Villa El Salvador		20. Coalición Comunitaria Asociación Distrital VES	Gabriela Montoya Ponce de Leon		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	San Juan de Lurigancho		21. Coalición Comunitaria Ciudadela Mariscal Caceres	Carolo Sirvas		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	San Juan de Lurigancho		22. Coalición Comunitaria Inca Manco Capac	Carolo Sirvas		Yes, INL Peru	No	38	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	San Juan de Lurigancho		23. Coalición Comunitaria San Hilarión	Carolo Sirvas		Yes, INL Peru	No	40	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	San Juan de Lurigancho		24. Coalición Comunitaria Santa Elizabeth	Carolo Sirvas		Yes, INL Peru	No	28	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	San Juan de Lurigancho		25. Coalición Comunitaria Jose Carlos Mariategui	Carolo Sirvas		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	San Juan de Lurigancho		26. Coalición Comunitaria Caja de Aguas	Carolo Sirvas		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	San Juan de Lurigancho		27. Coalición Comunitaria Asociación Distrital SJL	Carolo Sirvas		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Santa Anita		28. Coalición Comunitaria Coop La Universal	Rolando Salazar		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Santa Anita		29. Coalición Comunitaria Coop Chancas de Andahuaylas	Rolando Salazar		Yes, INL Peru	No	40	Coalition is no longer active.
Peru	Santa Anita		30. Coalición Comunitaria Coop Miguel Grau	Rolando Salazar		Yes, INL Peru	No	30	Coalition is no longer active.
Peru	Santa Anita		31. Coalición Comunitaria Coop Los Ficus	Rolando Salazar		Yes, INL Peru	No	38	Coalition is no longer active.
Peru	Santa Anita		32. Coalición Comunitaria La Alameda	Rolando Salazar		Yes, INL Peru	No	40	Coalition is no longer active.
Peru	Santa Anita		33. Coalición Comunitaria Asociación Distrital Sta Anita	Rolando Salazar		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	San Juan de Miraflores	34. Coalición Comunitaria Pamplona Alta	Giovanna Vargas		Yes, INL Peru	No	0	Coalition is no longer active.
Peru	Lima	San Juan de Miraflores	35. Coalición Comunitaria Pampas de San Juan	Giovanna Vargas		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	San Juan de Miraflores	36. Coalición Comunitaria Pampas de San Juan II	Giovanna Vargas		Yes, INL Peru	No	20	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	San Juan de Miraflores	37. Coalición Comunitaria Panamericana Sur	Giovanna Vargas		Yes, INL Peru	No	0	Coalition is no longer active.
Peru	Lima	Villa Maria del Triunfo	38. Coalición Comunitaria Tablada de Lurin	Giovanna Vargas		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	Villa Maria del Triunfo	39. Coalición Comunitaria Nueva Esperanza	Giovanna Vargas		Yes, INL Peru	No	0	Coalition is no longer active.

Country	City	Neighborhood / District	Established Coalition	Name of Point of Contact	Date Established	INL Funds at creation (Yes/No)	INL Funds in 2016 (Yes/No)	# of Members	Coalition Update
Peru	Lima	Villa Maria del Triunfo	40. Coalicón Comunitaria Jose Carlos Mariategui	Giovanna Vargas		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	Comas	41. Coalicón Comunitaria La Libertad	Edda Perez		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	Comas	42. Coalicón Comunitaria Año Nuevo	Edda Perez		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	Los Olivos	43. Coalicón Comunitaria Santa Ana	Edda Perez		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	Los Olivos	44. Coalicón Comunitaria Chavarría	Edda Perez		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	Los Olivos	45. Coalicón Comunitaria Villa del Norte	Edda Perez		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Lima	Surco	46. Coalicón Comunitaria Parque Bajo	Edda Perez		Yes, INL Peru	No	0	Coalition is no longer active.
Peru	Lima	Surco	47. Coalicón Comunitaria Mateo Pumacahua	Edda Perez		Yes, INL Peru	No	0	Coalition is no longer active.
Peru	Tingo Maria - East of the Andes		48. Coalicón Comunitaria Castillo Grande	Carola Sirvas		Yes, INL Peru	No	28	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Tingo Maria - East of the Andes		49. Coalicón Comunitaria Jose Carlos Mariategui	Carola Sirvas		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Toacache - East of the Andes		50. Coalicón Comunitaria Villa Mercedes	Carola Sirvas		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Toacache - East of the Andes		51. Coalicón Comunitaria Cercado Toacache	Carola Sirvas		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Ayacucho - East of the Andes		52. Coalicón Comunitaria Las Nazarenas	Liubinka Obrenovich		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Ayacucho - East of the Andes		53. Coalicón Comunitaria Miraflores - San Juan Bautista	Liubinka Obrenovich		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Pucallpa - East of the Andes		54. Coalicón Comunitaria San Fernando	Edda Perez		Yes, INL Peru	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Pucallpa - East of the Andes		55. Coalicón Comunitaria Las Palmeras	Edda Perez		Yes, INL Peru	No	40	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Pucallpa - East of the Andes		56. Coalicón Comunitaria Roberto Ruiz Vargas	Edda Perez		Yes, INL Peru	No	20	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Huánuco - East of the Andes		57. Coalicón Comunitaria Los Profundos	Edda Perez		Yes, INL Peru	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Huánuco - East of the Andes		58. Coalicón Comunitaria San Luis	Edda Perez		Yes, INL Peru	No	35	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Huánuco - East of the Andes		59. Coalicón Comunitaria Malconga	Edda Perez		Yes, INL Peru	No	38	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Huánuco - East of the Andes		60. Coalicón Comunitaria Cayhuana Alta	Edda Perez		Yes, INL Peru	No	40	Coalition is no longer active.
Peru	Cusco	Huaro	61. Coalicón Comunitaria Huaro	Edda Perez		Yes	Yes	16	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Arequipa	Cerro Colorado	62. Coalicón Comunitaria Ceerro Colorado	Giovanna Vargas		Yes	Yes	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Trujillo	Victor Larco Herrera	63. Coalicón Comunitaria Victor Larco Herrera	Edda Perez		Yes	Yes	20	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Chiclayo	Lambayeque	64. Coalicón Comunitaria Lambayeque	Mitchael Aliaga		Yes	Yes	20	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Peru	Piura	Castilla	65. Coalicón Comunitaria Castilla	Giovanna Vargas		Yes	Yes	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Philippines	Angono, Rizal	Angono, Rizal	1. CAISA CA - Community Against Illegal Substance Abuse Coalition of Angono	Angelo San Juan Lorelei Cambaliza-Corre	9/15/15	Yes, TOL	Yes	24	Coalition has conducted a drug prevention education workshop in partnership with local government, local schools and youth leaders. Approximately 80 participants have attended.

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Philippines	Bacolod City	Bacolod City	2. Community Anti-Drug Coalition of Bacolod - CADCoB	Israel Salanga Richard Nessia	9/12/15	Yes, TOL	Yes	13	Coalition has organized a school-based program in partnership with the National Government Center in Bacolod. They have organized an Anti-Drug Abuse Symposium at the Bacolod City National High School attended by 194 students.
Philippines	Basco, Batanes	Basco, Batanes	3. Batanes Anti-Drug Abuse Coalition	Demetrius Paul Narag Eleanor Abad	10/23/15	Yes, TOL	Yes	22	Graduated coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Philippines	Calapan, Mindoro	Calapan, Mindoro	4. Calapan City Anti-Drug Coalition	C. Voltaire Brucal Michelle Luzon	10/6/15	Yes, TOL	Yes	39	Graduated coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Philippines	Calumpit, Bulacan	Calumpit, Bulacan	5. CABISIG - Calumpang Bisigla Kontra Droga	Erlinda P. Pahate Jose Arnel Faustino	8/10/15	Yes, TOL	Yes	18	Coalition has focused on community activities for environmental changes (e.g.: community clean-up, etc.) as well as events for local youth.
Philippines	Marikina City	Marikina City	6. CADCA-Kalumpang	Arnoel Santos	2/10/13	Yes	No	60	Graduated coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Philippines	Marikina City	Marikina City	7. Coalitions Anti-Drug @ Malanday	Arnoel Santos	1/24/13	Yes	No	70	Graduated coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Philippines	Muntinlupa City	Muntinlupa City	8. COSAPE - Coalition for Substance Abuse Prevention and Education (formerly CADCOP)	Dr. Raquel P. Tolentino	12/2013, reorganized and registered on 7/10/14	Yes	No	98	Coalition has organized a school-based in Muntinlupa. They are now coordinating with the city administrator the possibility of developing programs for out-of-school youth.
Philippines	Muntinlupa City	Muntinlupa City	9. CADCOM Tunasan - Community Anti-Drug Coalition of Muntinlupa	Dr. Raquel P. Tolentino	01/2013, reorganized and registered on 05/2014	Yes	No	353	Coalition has developed a successful partnership with the local Rotary Club and has developed several activities focused on at-risk youth.
Philippines	Quezon City	Quezon City	10. Tandang Sora Anti-Drug Coalition	Lilybeth Seida	11/10/15	Yes	Yes	30	Graduated coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Philippines	Quezon City	Quezon City	11. Barangay Sto. Cristo Anti-Drug Coalition	Lilybeth Seida	5/21/15	Yes	Yes	55	Graduated coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Philippines	Quezon City	Quezon City	12. Greater Lagro Community Anti-Drug Coalition	Lilybeth Seida	8/28/15	Yes	Yes	65	Graduated coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Philippines	Tanay, Rizal	Tanay, Rizal	13. Community Anti-Drug Coalition of Tanay - CADCOT	Diosdado Baquiran Rolando Samaniego	8/17/15	Yes, TOL	Yes	42	Coalition is currently developing a "Anti-drug abuse program for the workplace" in partnership with the municipal government and Tanay business sectors.
Philippines	Tayabas, Quezon	Tayabas, Quezon	14. Community Anti-Drug Coalition of Tayabas - CADCT	Maide Jader Faustino A. Silang	9/3/15	Yes, TOL	Yes	50	Graduated coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
Philippines	San Pedro, Laguna	San Pedro, Laguna	15. SPADAC - San Pedro Anti-Drug Abuse Coalition	Lolito Marquez Edwin Matunog	8/21/15	Yes, TOL	Yes	125	Coalition has organized sports events, such as the "Fun Run" organized last December 17, which was attended by almost 300 runners from different sectors of San Pedro Laguna community. They have also worked in strategies to change the physical design of their community.
Philippines	Valenzuela City	Valenzuela City	16. CICALA Valenzuela - City Coalitions of Anti-Drugs Advocate	Ibarra Salonga Antonio Espiritu	9/5/15	Yes, TOL	Yes	68	Coalition is focused on conducting drug abuse awareness program for out-of-school youth and youth leaders.
Senegal	Dakar	Pikine-Dagoudane	1. Coalition Communautaire de Djiddah de Thiarye Kao	Mayoro Sambe	8/1/12	Yes	Yes	80	Coalition holds monthly meetings and has worked with local religious leaders (Imams) and has provided drug prevention awareness activities during Friday prayers.
Senegal	Dakar	HLMZ/Grand Dakar	2. Coalition Communautaire des HLM	Abdoulaye Gueye	4/1/13	Yes	Yes	90	Coalition has organized sports activities (e.g.: soccer tournaments) in order to create drug prevention awareness.
Senegal	Dakar	La Biscuiterie/Grand Dakar	3. Coalition Communautaire de la Biscuiterie	Vincent Gomis	6/1/15	Yes	Yes	55	Coalition has organized awareness events in local schools.
Senegal	Dakar	Dalffort/Grand Dakar	Coalition Communautaire de Dalffort	Astou NDIAYE	11/7/16	Yes	Yes	53	Coalition has worked on their community assessment, in partnership with local government and health authorities.
South Africa	Cape Town	Bellville	2. Delft Community Coalition	Mthukuzeli "Tu Tu" Lowlane	2012	Yes	No		Coalition is no longer active.
South Africa	Cape Town	Mitchells Plain	3. Mitchells Plain Community Coalition	Tony Khan	2013	Yes	No		Coalition is no longer active.

Country	City	Neighborhood / District	Established Coalition	Name of Point of Contact	Date Established	INL Funds at creation (Yes/No)	INL Funds in 2016 (Yes/No)	# of Members	Coalition Update
South Africa	Cape Town	Guguletu	4. Gugulethu Community Coalition			Yes	No		Coalition is no longer active.
South Africa	Cape Town	Khayelitsha	5. Kayelitsha Community Coalition	Thembeke	2013	Yes	No	30	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
South Africa	Cape Town	Delft	6. Belhar Community Coalition	Michelle Adonis	2012	Yes	No	25	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
South Africa	Cape Town	Elsie's River	7. East River Community Coalition	Tonio Gantana	2013	Yes	No	20	Graduated Coalition has forged relationships with local leaders and local partners to sustain activities and efforts independently.
South Africa	Klerksdorp	Jouberton	8. Community Coalition of Jouberton	Marina De Lange	3/1/15	Yes	Yes	28	Coalition graduated in January 2017. Coalition conducted community assessment and finalized coalition by-laws. Coalition developed Logic Models, Strategic and Action plans. Currently in the process of developing Sustainability Plan.
South Africa	Johannesburg	Eldorado Park	9. Community Coalition of Eldorado Park	Terrence Makaanisa	3/30/15	Yes	Yes	35	Coalition graduated in January 2017. Coalition conducted community assessment and finalized coalition by-laws. Coalition developed Logic Models, Strategic and Action plans. Currently in the process of developing Sustainability Plan.
Tajikistan	Dushanbe	Somoni	1. Somoni Community Coalition	Rajabova Zarrigor	12/5/13	Yes	Yes	24	Conducted a workshop for 29 policemen in June 2016. Training sessions were held in 3 schools (total 125 students) in Oct – Nov 2016. Mass awareness campaign with participation of more than 270 people – Dec. 1, 2016. Collected data from relevant organizations in Jan. 2017 – 16% decrease in the # of drug users in the last 3 years. Proposed \$5000 project supported by INL in Jan. 2017.
Tajikistan	Dushanbe	Shohmansur	2. Shohmansur Community Coalition	Dadabaeva Matluba	12/7/13	Yes	Yes	23	Conducted a workshop for 35 policemen in May 2016. Training session for 23 alcohol and tobacco vendors in Oct. 2016. Training sessions for 455 students at 6 schools were held from Oct – Dec. 2016. Mass awareness campaign with the participation of more than 230 people on Dec. 1, 2016. Collected data from relevant organizations in Jan. 2017 – an 18% decrease in the # of drug users in the last 3 years.
Tajikistan	Sogd Oblast	Kayrakkum	3. Qairoqqum Community Coalition	Iskandarov Akmal	3/1/14	Yes	Yes	12	Trainings sessions with 26 community leaders of 2 jamoats in Nov. 2016 and 1 Jamoat in Jan. 2017. Mass awareness campaign with participation of more than 260 people on Dec. 1, 2016. Training of 10 alcohol and tobacco vendors in Jan. 2017. Identified and closed for a while 2 hot spots in house basements. There is a plan to open sport and child facilities.
Tajikistan	Sogd Oblast	Gafurov	4. Bobojon Gafurov Community Coalition	Dzarkinzoda Roziya	3/1/14	Yes	Yes	25	Surveyed 500 teens and youth in Oct. 2016. Surveyed 24 alcohol and tobacco product vendors in Oct. 2016. Football tournament in Nov. 2016 for 125 players and 360 fans; speeches and EIC materials dissemination. Mass awareness campaign with the participation of more than 430 people on Dec. 1, 2016. Proposed \$5000 project supported by INL in Jan. 2017.
Tajikistan	Khatlon Oblast	Farkhor	5. Farkhor Community Coalition	Abdulloeva Farishtamoh	4/1/14	Yes	Yes	20	Surveyed 250 teenagers and youth in Oct. 2016 – 78% high awareness, 0.8% tobacco users. Surveyed 24 alcohol and tobacco product vendors in Oct. 2016. Football tournament in Oct. 2016 for 70 players and 280 fans; speeches and EIC materials dissemination. Training of 26 community leaders of 3 jamoats bordering Afghanistan from Nov. – Dec. 2016. Collected data from relevant institutions in Jan. 2017 – 5.4% decrease in # of drug users in the last 3 years. Planted trees in 3 hot spots in Feb. 2017.
Tajikistan	Khatlon Oblast	Kumsangir	6. Kumsangir Community Coalition	Gulchehra Safarova	4/1/14	Yes	Yes	21	Survey among teenagers and youth (total 300) in Oct. 2016. Survey among alcohol and tobacco production sellers (total 24) in Oct. 2016. Football tournament in Oct. 2016; 65 players and 220 fans; speeches and EIC materials dissemination. Training with bordering to Afghanistan 17 community leaders in Nov. 2016. Planted trees on "Hot spot" area in N.Makhdudov Jamoat in Nov. 2016. Collection of data from relevant institutions in Jan. 2017 – decrease of number of drug users for the 3 last years per. 25, 2%.

Country	City	Neighborhood / District	Established Coalition	Name of Point of Contact	Date Established	INL Funds at creation (Yes/No)	INL Funds in 2016 (Yes/No)	# of Members	Coalition Update
Tajikistan	Khatlon Oblast	Pyanti Rayon	7. Pyanti Community Coalition	Ganieva Barfimo	12/13/14	Yes	Yes	21	Surveyed 250 teens and youth in Oct. 2016. Surveyed 18 alcohol and tobacco product vendors in Oct. 2016. Trained 64 leaders of 3 Jamoats bordering Afghanistan in Nov. 2016. Planted trees in 2 hot spots in Nov. 2016. Collected data from relevant institutions in Jan. 2017 - a 16% decrease in the # of drug users in the last 3 years.
Tajikistan	Republican Subordinat.	Vahdat	8. Vahdat Community Coalition	Saidov Safararli	12/13/14	Yes	Yes	18	Survey of 250 teenagers and youth in Oct. 2016. Survey of 21 alcohol and tobacco product vendors in Oct. 2016. Football tournament which included 95 players and 320 fans; speeches and EIC material dissemination in Oct. 2016. 5 training sessions for 335 students at 5 schools in Nov. 2016. Planted trees in 3 hotspots in 3 Jamoats in Nov. 2016. Collected date from relevant institutions in Jan. 2017 - 6.2% decrease in the # of drug users in the last 3 years.
Tajikistan	Khatlon Oblast	Shurabad	9. Shurabad Community Coalition	Sunatulloy Iskandar	9/1/15	Yes, TOL	Yes	22	Survey of 150 teens and youth in Oct. 2016. Placed leaflets on laws in 12 stores. Identified place of storage of illegal drugs from Afghanistan in Nov. 2016. Training with 17 leaders of Jamoats bordering Afghanistan in Nov. 2016. Collected data from relevant institutions in Jan. 2017 - a 17% decrease in the # of drug users in the last 3 years.
Tajikistan	Khorog		10. Khorog Community Coalition	Azizmammadov Maram	9/1/15	Yes, TOL	Yes	21	Meetings with 215 parents at 6 schools in Nov. 2016. Training of 12 alcohol and tobacco product vendors in Nov. 2016. Mass awareness campaign with participation of more than 160 people in Dec. 2016. Survey of 250 teens and youth in Dec. 2016. Survey of 15 alcohol and tobacco product vendors in Dec. 2016. Meeting with restaurant staff and dissemination of leaflets on laws and regulations. Illumination of hot spot near river in Dec. 2016. Police visits to 4 store owners to collect penalties in Jan. 2017. Collected data from relevant institutions in Jan. 2017 - a 14% decrease in the # of drug users in the last 3 years. Proposed \$5000 project supported by INL in Jan. 2017.
Tajikistan	Republican Subordinat.	Tursunzade	11. Tursunzade Community Coalition	Kurbonov Jahongir	9/1/15	Yes, TOL	Yes	23	A round table with 45 students and educators on College Education in Nov. 2016. Mass awareness campaign with the participation of more than 270 people on Dec 1, 2016. Training session for 16 students in Dec. 2016. Survey of 125 students in Dec. 2016 - 86% have high awareness about the risk of use and only 2.3% have used tobacco and/or alcohol. Proposed \$5000 project was supported by INL in Jan. 2017.
Tajikistan	Republican Subordinat.	Shahrinai	12. Shahrinai Community Coalition	Kholov Manuchehr	9/1/15	Yes, TOL	Yes	19	25 min. radio program on consequences of drug abuse in Nov. 2016. Meetings with 240 students at 5 schools in Nov. 2016. Renovated 2 athletic fields in 2 communities in Oct. 2016. Published article in local newspaper in Nov. 2016.
Tajikistan	Republican Subordinat.	Hissar	13. Hissar Community Coalition	Radiabova Khayriniso	9/1/15	Yes, TOL	Yes	22	Training sessions with 35 community leaders of 2 Jamoats in Oct. 2016 and 22 leaders of 2 Jamoats in Nov. 2016. Training sessions with 45 youth promoters at 2 schools in Nov. 2016 and 2 training sessions with 82 students at 2 schools. Mass awareness campaign with participation of more than 320 people on Dec 1, 2016. A report meeting with the participation of 22 people in Jan. 2017.



Country	City	Neighborhood / District	Established Coalition	Name of Point of Contact	Date Established	INL Funds at creation (Yes/No)	INL Funds in 2016 (Yes/No)	# of Members	Coalition Update
Tajikistan	Republican Subordinat.	Rudaki	14. Rudaki Community Coalition	Arbobov Zainiddin	9/1/15	Yes, TOL	Yes	23	Training sessions with 35 community leaders of 3 Jamoats in Oct. 2016 and 14 leaders in 1 Jamoat in Nov. 2016. Training of 10 tobacco and alcohol vendors in Nov. 2016. Illumination of hot spot behind the central market in Nov. 2016. Training sessions with 64 youth promoters at 3 schools in Nov. 2016 and with 171 students at 5 schools. Mass awareness campaign with the participation of more than 320 people on Dec. 1, 2016. Training session with 17 alcohol and drug vendors in Dec. 2016. A report meeting with the participation of 24 people in Jan. 2017.
Tajikistan	Sogd Oblast	Khujand	15. Khujand Community Coalition	Rajabov Bokiboy	9/1/15	Yes	Yes	21	Graduated coalition is no longer active.
Tanzania	Dar es Salaam	Ilala	1. Ilala Community Coalition	Baraka Sam	3/21/15	Yes	Yes	16	Coalition is no longer active.
Tanzania	Dar es Salaam	Kinandoni	2. Kinandoni Community coalition	Baraka Sam	7/7/05	Yes	Yes	18	Coalition is no longer active.
Uruguay	Montevideo	La Unión	1. Coalicion Comunitaria La Unión	Gladys Ferrero	3/24/15	Yes	Yes	15	Graduated coalition is currently working with the local government to tackle the local condition of pasta base sales and consumption by youth. Included in the Montevideo Drug Board, the coalition was given the opportunity to share their strategic plan and comprehensive strategies to reduce drug use in La Union.
Uruguay	Maldonado	Maldonado Nuevo	2. Coalición Comunitaria Maldonado Nuevo	Gladys Ferrero	9/15/2016	Yes	Yes	25	Coalition in development, established a core team and is working on the seven comprehensive strategies. Marihuana and alcohol consumption by minors were identified and the major problems in the community.
<b>21</b>			<b>231</b>					<b>7020</b>	



*Training of Leaders Mexico*



*Training of Leaders Peru*



*Training of Leaders Philippines*

## INL/DDR Program Area #4:

### ADDRESS POPULATIONS WITH SPECIAL CLINICAL NEEDS

The goal of Program Area #4 is to develop specialized protocols, interventions, and training packages specifically for vulnerable, marginalized, or other populations with special clinical needs.

This program area is built on the knowledge that:

- Few evidence-based treatment protocols, interventions, and training programs, currently exist for many populations with special clinical needs, including women, children, and rural communities
- Populations with special clinical needs require tailored protocols and

interventions to achieve the most successful outcomes

#### Efforts include the following primary components:

- a) Create specialized protocols and interventions for special populations and advocate for governments to address vulnerable and hidden populations afflicted by substance use disorders and its impact.
- b) Develop, pilot, and evaluate training and technical assistance programs for populations with special clinical needs.

### Populations with Special Clinical Needs

Five overarching organizing categories are denoted and populations are listed in alphabetical order as each population is important. Items in italics notes that they are sub-categories of a larger category (see medical conditions as an example).

1. AGE
Adolescents
Children
Child Soldiers
Children in street circumstances
Older adults

2. GENDER AND GENDER IDENTITY
Domestic Violence Survivors
LGBTQ *There are many sub-populations within this designation that may have special clinical needs
Sex Workers (men and women)
Women including pregnant and adolescent

### 3. PEOPLE WITH PHYSICAL DISABILITIES AND MEDICAL AND PSYCHIATRIC CONDITIONS

Cognitive and Physical Disabilities

Medical Conditions

- Chronic pain
- HIV
- Hepatitis B and C
- Overdose in Opioid Drug Users
- Toxic Adulterant Exposure

Psychiatric Conditions

- Eating Disorders
- Post-Traumatic Stress Disorder

### 4. DISLOCATION/DISPLACEMENT FROM HOME ENVIRONMENT

Conflict-affected/Displaced/Forced Migration/Refugees

Criminal-justice involved

- Incarcerated
- Post-incarcerated

Homeless Adults and Youth

Human Trafficking Survivors

Military Service Members

- Active duty
- Discharge from military is a separate population
- Veterans (this is an American term)

### 5. CULTURALLY, GEOGRAPHICALLY AND PROFESSIONALLY DIVERSE GROUPS

Gangs

Law Enforcement and Criminal Justice Workers with substance use dependence

Minority Groups of Ethnic/Religious/Racial/Tribal/Nationality (includes indigenous)

People Living in Deprivation

Populations at Risk for Extremism

Rural Populations

Border Populations

## Highlights of the “Address Populations with Special Clinical Needs” Effort:

### Women

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The Guiding the Recovery of Women (GROW), a 10-course series that trains counselors on treating women with substance use disorders was fully disseminated in Peru.

### Children

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The Child Intervention for Living Drug-Free (CHILD) Curriculum, a 6-course series addressing child substance use disorders from infancy to early adolescence, based on the world’s first protocols to treat children with substance use disorders was disseminated in Afghanistan, Pakistan, India, South Africa, Kenya, Singapore, and Bangladesh. The first two courses have been translated into Spanish and disseminated in Brazil, Chile, Argentina, Paraguay and Peru. The first course has also been disseminated in the Philippines.

### Recovery

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Recovery Support Training: for working with people in the post-treatment phase took place in Thailand, Sri Lanka, Philippines, and Japan in 2015 and Tanzania and Ghana in 2016.

### Criminal Justice

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An experts meeting on the development of a curricula for a systems review of alternatives to incarceration to increase treatment option within the criminal justice system was held in November 2016.

### Toxic Adulterants

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In 2016, site visits were conducted in Brazil, Argentina, Peru, Ecuador, South Africa, and Sri Lanka to test the toxic adulterants in illicit drugs. Quick tests are also being developed using a number of different advanced technologies, depending upon the molecule for phenacetin, levamisole, and aminopyrine.

### Naloxone Study

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Study protocol was drafted in 2016 to better estimate the public health impact of the community management of opioid overdose approach, including the use of naloxone for study implementation in 2017.

### Epidemiology Project

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Five African countries joined the epidemiology project and redesigned their health systems to capture drug use data. The countries are: Angola, Cameroon, Tanzania, Uganda, and Zambia. Algeria, Botswana, Ghana, Togo, and Tunisia are expected to join the project in 2017.



# CENTRALLY-MANAGED INL/DDR EFFORTS



Drug Demand Reduction programs provide for prevention, treatment, and recovery services, as well as education and programming designed to find alternatives to using, cultivating, or trafficking drugs.

Demand Reduction Programs include any initiatives designed to address the illicit use of drugs, and abuse of licitly prescribed and licitly legislated drugs; related or co-occurring physical and mental health problems, to include prevention, outreach, screening & assessment, counseling/brief interventions, behavioral and medication assisted treatment, recovery support services; health interventions for communicable diseases;

and programs to address substance use issues by justice-involved people both within and outside of jails & prisons.

Inherent to these initiatives are development and dissemination of curricula and professional certification standards, provision of training and technical assistance, and/or support for research and evaluation designed to continually improve quality of efforts and fidelity to evidence-based programs. Essential for continued strength of programs is capacity building for countries to self-sustain demand reduction activities long-term.



PROJECT NAME/ DESCRIPTION	GOALS/FIT WITH LARGER STRATEGIC OBJECTIVES & IMPACT
<p>1. Substance Abuse Treatment Training and Certification</p>	<p>Addresses National Drug Control Strategy Funding Priorities: (1) Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan and (2) Community-based Recovery Support Program. Addresses Department Key Attributions: (1) Gender Equality/Women’s Empowerment – Primary and (2) Gender Equality/Women’s Empowerment – Secondary. Also addresses INL Funding Priorities: Guiding the Recovery of Women (GROW), CARSI, CBSI, and WACSI.</p> <p>Impact – The program is designed to raise the quality of treatment and rehabilitation services through a counselor certification mechanism that will enhance the quality of treatment services leading to reduced drug use, morbidity (HIV/AIDS), and associated violence.</p>

PROJECT NAME/ DESCRIPTION	GOALS/FIT WITH LARGER STRATEGIC OBJECTIVES & IMPACT
<p>2. Substance Abuse Prevention Training and Certification</p>	<p>Addresses National Drug Control Strategy Funding Priority: Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan. Addresses Department Key Attribution: Gender Equality/Women's Empowerment – Secondary. Also addresses INL Funding Priorities: CARSI and CBSI.</p> <p>Impact - Prevent initial on-set of drug use and reduce drug use among youth.</p>
<p>3. Child Addiction Treatment Protocol Training &amp; Technical Assistance for Southwest Asia</p>	<p>Addresses National Drug Control Strategy Funding Priorities: (1) Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan, (2) Drug Endangered Children, and (3) Family Treatment Programs. Addresses Department Key Attribution: Especially Vulnerable Children and Science, Technology and Innovation.</p> <p>Impact - Minimize an on-going public health crisis and reducing child drug addiction and associated health problems.</p>
<p>4. Outcome Evaluation of Drug Treatment Training Program (2-year study)</p>	<p>Addresses National Drug Control Strategy Funding Priority: Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan.</p> <p>Impact – The program is designed to raise the quality of treatment and rehabilitation services through an empirical-based outcome evaluation per OMB PART guidelines, leading to an enhancement in the quality of treatment services and subsequent reductions in drug use, morbidity (HIV/AIDS), and associated violence.</p>
<p>5. Toxic Drug Adulterant Study</p>	<p>Addresses National Drug Control Strategy Funding Priority: Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan. Addresses Department Key Attribution: Science, Technology and Innovation.</p> <p>Impact - Minimize on-going public health crises and improve public health and law enforcement responses to emerging drug epidemics.</p>
<p>6. Technical Assistance</p>	<p>Indonesian Stakeholder's Meeting (Jan. 2016) and support for the International Society of Substance Use Prevention and Treatment Professionals (ISSUP)</p>





PROJECT NAME/ DESCRIPTION	GOALS/FIT WITH LARGER STRATEGIC OBJECTIVES & IMPACT
7. Support to Drug Demand Reduction Infrastructure and Development of Epidemiological Systems in Africa	Addresses National Drug Control Strategy Funding Priorities: (1) Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan and (2) Community-Based Recovery Support Program. Addresses Department Key Attribution: Gender Equality/Women's Empowerment – Secondary. Also addresses INL Funding Priority: WACSI.



PROJECT NAME/ DESCRIPTION	GOALS/FIT WITH LARGER STRATEGIC OBJECTIVES & IMPACT
8. Clinical Manual for Implementing Guidelines on Identification & Management of Substance Use Disorders in Pregnancy	Addresses National Drug Control Strategy Funding Priorities: (1) Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan, (2) Drug Endangered Children, and (3) Family Treatment Programs. Addresses Department Key Attributions: Especially Vulnerable Children and Gender Equality/Women's Empowerment – Primary. Also addresses INL Funding Priorities: Guiding the Recovery of Women (GROW).  Impact - Minimize drug addiction during pregnancy and associated health and post-natal problems.
9. Substance Abuse Treatment Training: UNODC-WHO Joint Programme (Central Asia, Southeast Asia, West Africa and Mozambique)	Addresses National Drug Control Strategy Funding Priorities: (1) Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan and (2) Community-based Recovery Support Program. Addresses Department Key Attribution: Gender Equality/Women's Empowerment - Secondary. Also addresses INL Funding Priorities: WACSI and CACI.  Impact - Reductions in drug use, co-morbidity such as HIV/AIDS, and drug-related crime and violence.

PROJECT NAME/ DESCRIPTION	GOALS/FIT WITH LARGER STRATEGIC OBJECTIVES & IMPACT
<p>10. UNODC/ WHO Naloxone Overdose Prevention Demonstration Program</p>	<p>Addresses National Drug Control Strategy Funding Priority: Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan. Also addresses INL Funding Priority: CACI.</p> <p>Impact - Prevention of and reductions in opioid drug overdoses</p>
<p>11. International Drug Treatment Standards Development Initiative</p>	<p>Addresses National Drug Control Strategy Funding Priorities: (1) Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan and (2) Community-based Recovery Support Program. Addresses Department Key Attribution: Gender Equality/Women's Empowerment - Secondary.</p> <p>Impact – Enhanced guidelines for licensing treatment facilities that will help facilitate reductions in drug use, co-morbidity such as HIV/AIDS, and drug-related crime and violence.</p>
<p>12. UNODC Technical Seminar on Drug Research and Evaluation</p>	<p>Addresses National Drug Control Strategy Funding Priority: Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan. Addresses Department Key Attribution: Gender Equality/Women's Empowerment - Secondary.</p> <p>Impact – More national drug policies and prevention/treatment program decisions based on evidence and science, as opposed to ideology or misinformation. Support for USG positions at UNGASS.</p>



PROJECT NAME/ DESCRIPTION	GOALS/FIT WITH LARGER STRATEGIC OBJECTIVES & IMPACT
<p>13. Drug Treatment Courts</p>	<p>Addresses National Drug Control Strategy Funding Priorities: (1) Expand global prevention and treatment initiatives through cooperation with the UN, OAS, and Colombo Plan and (2) Drug Treatment Courts.</p> <p>Impact – More national drug policies based on a public health versus punitive approaches.</p>



PROJECT NAME/ DESCRIPTION	GOALS/FIT WITH LARGER STRATEGIC OBJECTIVES & IMPACT
<p>14. Drug-Free Community Coalitions</p>	<p>Addresses National Drug Control Strategy Funding Priority: Drug Free Communities Support Program. Addresses Department Key Attribution: Gender Equality/Women’s Empowerment - Secondary. Also addresses INL Funding Priorities: CACI, WACSI, CARSI, and CBSI.</p> <p>Impact - Prevent initial on-set of drug use and reduce drug use among youth.</p>



PROJECT NAME/ DESCRIPTION	GOALS/FIT WITH LARGER STRATEGIC OBJECTIVES & IMPACT
<p>15. INL Program Administration</p>	<p>Program Development, Project Implementation Assessments, Staff Support, SAMS Bill</p>



# US INTER-AGENCY EFFORTS IN DRUG DEMAND REDUCTION



The devastating consequences of substance use know no geographic, economic, social or ethnic boundaries. Each year hundreds of thousands of people around the world die from substance use and millions are victims of addiction and drug-fueled violence. Beyond the toll drugs take on health and welfare, substance use disorders undermine economic development, diminish social and political stability, and reduce security in countries around the world.

In order to address U.S. efforts abroad, the Office of National Drug Control Policy (ONDCP) in collaboration with the U.S. Department of State co-chair an International Demand Reduction Working Group with the key U.S. Inter-agency partners to review global efforts to reduce substance use and its devastating consequences.

Agencies of the working group co-chaired by US State and ONDCP include:

## Executive Office of the President

### **Office of National Drug Control Policy:**

The Office of National Drug Control Policy (ONDCP), part of the Executive Office of the President, was created by the Anti-Drug Abuse Act of 1988 and advises the President on drug-control issues, coordinates drug-control activities and related funding across the Federal government.

## Department of State

### **Bureau of International Narcotics and Law Enforcement Affairs (INL/DDR):**

The Drug Demand Reduction program seeks to decrease the worldwide demand for illicit drugs by implementing programs that have measurable outcomes in preventing and reducing drug use in society as well as decreasing other impacts of drug use, such as crime and violence. Since its inception three decades ago, the demand reduction program has responded to new global drug challenges worldwide by developing national level treatment and prevention systems, the world's first treatment protocols for children who use drugs, novel intervention services for women with substance use disorders, instant test kits for toxic cutting agents in drug users' systems, and scientific outcome evaluations that document concrete measurable results (for example, reductions in drug use, criminality, violence, and improvements in quality of life measures).

### **United States Agency for International Development:**

USAID is the lead U.S. Government agency that works to end extreme global poverty and enable resilient, democratic societies to realize their potential. USAID plays a critical role in our nation's effort to stabilize countries and build responsive local governance through long-term development by investing in agriculture, health systems and democratic institutions.

## Department of Health and Human Services

**Centers for Disease Control (CDC) and Prevention** - CDC committed to protect America from health, safety and security threats, both foreign and in the U.S. As the nation's health protection agency, CDC saves lives and protects people from health threats. To accomplish its mission, CDC conducts critical science and provides health information that protects the nation against expensive and dangerous health threats, and responds when these arise.

(<https://www.cdc.gov/24-7/index.html>)



**National Institute on Drug Abuse (NIDA)** - NIDA is the lead federal agency supporting scientific research on drug use and its consequences. NIDA's mission is to advance science on the causes and consequences of drug use and addiction and to apply that knowledge to improve individual and public health.


**Substance Abuse and Mental Health Services Administration (SAMHSA):** SAMHSA is the agency within the U.S. Department of Health and Human Services that leads public health efforts to advance the behavioral health of the nation. SAMHSA's mission is to reduce the impact of substance abuse and mental illness on America's communities. SAMHSA's current international efforts include support to the International Addiction Technology Transfer Center (ATTC) Network comprised of four Centers: two Centers in Vietnam located at the Hanoi Medical University (HMU) and at the Ho Chi Minh University of Medicine

and Pharmacy (UMP); one Regional Center in Thailand at the Chiang Mai University (CMU); and the most recently funded Center in Ukraine, at the Ukrainian Institute of Public Health Policy (UIPHP), in Kiev. The international ATTC sites provide support to build the in-country and regional capacity and to increase the skills and abilities of the President's Emergency Plan for AIDS Relief (PEPFAR) implementing partners in the national HIV/AIDS programs from several countries around the world.

## Department of Justice

### **Drug Enforcement Administration:**

The mission of the Drug Enforcement Administration (DEA) is to enforce the controlled substances laws and regulations of the United States and bring to the criminal and civil justice system of the United States, or any other competent jurisdiction, those organizations and principal members of organizations, involved in the growing, manufacture, or distribution of controlled substances appearing in or destined for illicit traffic in the United States; and to recommend and support non-enforcement programs aimed at reducing the availability of illicit controlled substances on the domestic and international markets. DEA also has a drug demand reduction office that provides drug awareness education to parents, teachers, and community leaders.



# HOW TO ASSESS A STATE'S DRUG DEMAND REDUCTION SYSTEM



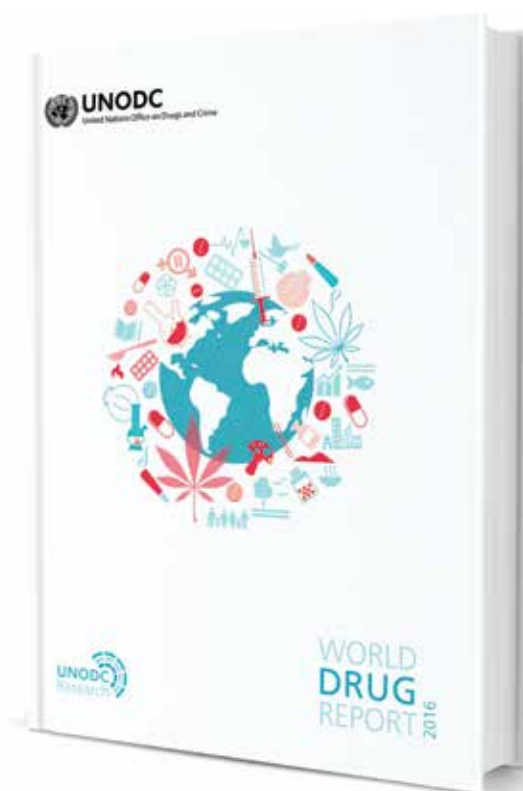
This section presents guidance for how to assess a state's drug demand reduction system from the levels of policy, research, prevention, and treatment. This section opens with a discussion of the components for consideration when assessing a state's drug demand reduction system from the level of the treatment.

### Perspectives on Assessing a Comprehensive Treatment System.

The following is an overview of considerations for developing a comprehensive treatment system.



Drug use disorders can be described on a spectrum from lower to higher severity and complexity. The International Statistical Classification of Diseases and Related Health Problems (ICD), a medical classification list by the World Health Organization (WHO), differentiates (in the ICD 10 document <sup>24</sup>) in the section on mental and behavioral disorders due to psychoactive substance use (F10-F19) between acute intoxication, harmful use and dependence syndrome. Thorley (1980) differentiates in a similar way between intoxication, regular or excessive use and dependence. According to the 2016 World Drug Report of the United Nations Office of Drug and Crime (UNODC) (see right), an estimated 1 in 20 adults, or a quarter of a billion people between the ages of 15 and 64 years, used as least





one drug in 2014. An estimated 29 million people who use drugs suffer from substance use disorders, and of those, there are an estimated 12 million persons who inject drugs.

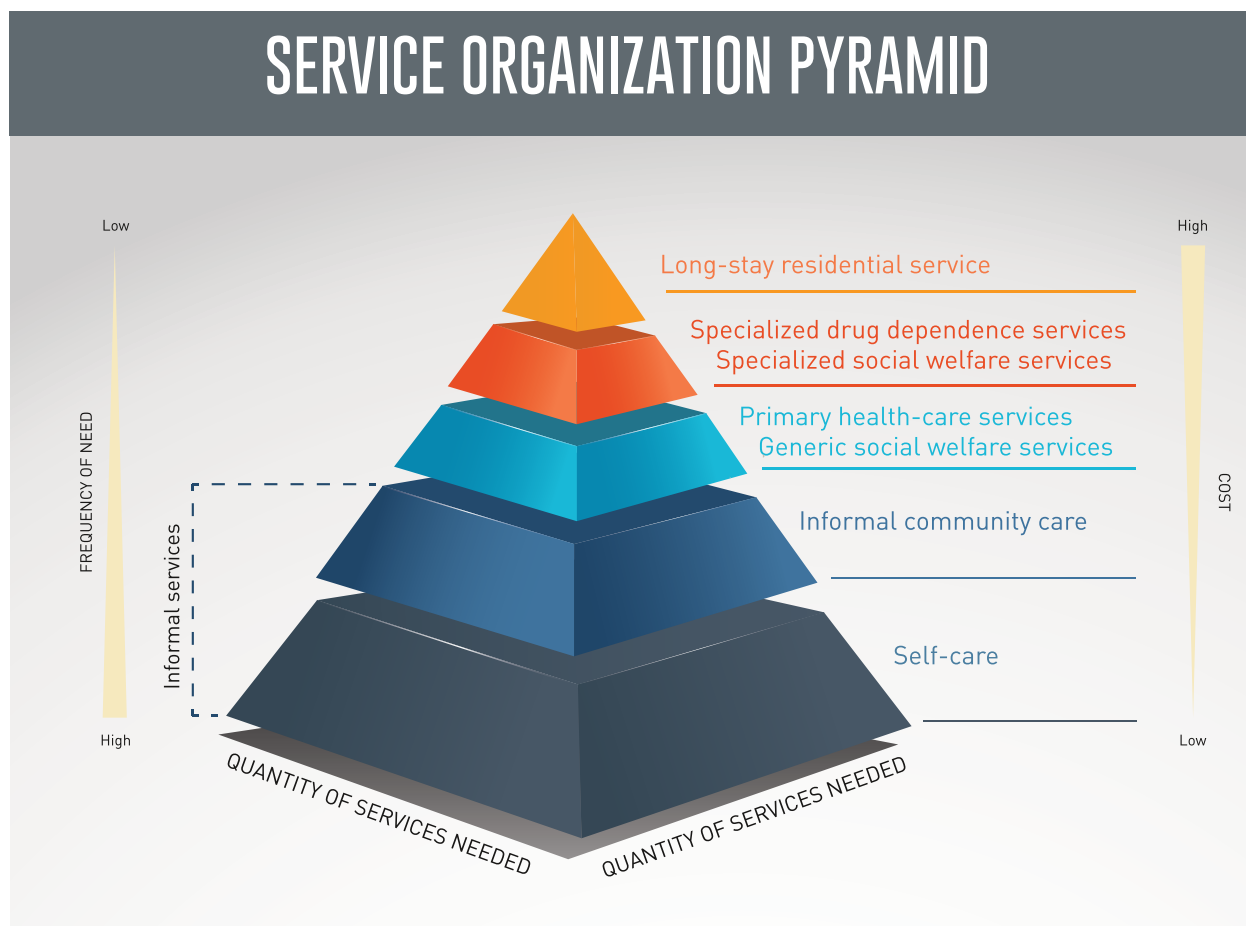
When developing a comprehensive treatment system to wisely allocate available resources and respond best to patients' needs, the key public health principle to apply is offering the least invasive intervention with the highest level of effectiveness.



Drug treatment services at the outpatient level are in general less interruptive for patients and less costly for the health system. As long as the addiction severity of the patient allows, it is therefore recommended from a public health perspective to deliver treatment services at the outpatient level.

Overall, the intensity and level of specialization of services should be corresponding to the addiction severity of patients – not one size fits all. Someone who has been taking drugs occasionally will need a different type and intensity of support than someone with a long history of drug use and other related health and social problems.

As captured in the service organization pyramid below, most services are required at levels of lower intensity and if implemented well can prevent people from developing more complex drug use disorders. While more services will be required at the less intensive spectrum of the pyramid, these services are usually also less specialized and less costly, which makes a treatment system designed in line with the service delivery pyramid more cost-effective, always given that the actual services offered are implemented based on available scientific evidence



## Availability of Drug Treatment Services

SERVICE LEVEL	POSSIBLE INTERVENTIONS
<b>Self-care (Informal)</b>	
<b>Community care (Informal)</b>	<ul style="list-style-type: none"> <li>• Outreach</li> <li>• Self-help groups</li> </ul>
<b>Primary health care services</b>	<ul style="list-style-type: none"> <li>• Screening, brief interventions, basic health care, referral</li> <li>• Continued support to people in treatment/contact with a specialized treatment service</li> </ul>
<b>Generic social welfare</b>	<ul style="list-style-type: none"> <li>• Housing/shelter</li> <li>• Food</li> </ul>
<b>Specialized drug dependence treatment</b>	<ul style="list-style-type: none"> <li>• Assessment</li> <li>• Case management</li> <li>• Treatment planning</li> <li>• Detoxification</li> <li>• Psychosocial interventions</li> <li>• Medication-assisted treatment</li> <li>• Relapse prevention</li> </ul>
<b>Specialised health care services</b>	<ul style="list-style-type: none"> <li>• Mental health treatment</li> <li>• Internal medicine</li> <li>• Dental treatment</li> <li>• Treatment of HIV and Hep C</li> </ul>
<b>Specialized social welfare services</b>	<ul style="list-style-type: none"> <li>• Family support and reintegration</li> <li>• Child care support</li> <li>• Vocational training/Education programmes</li> <li>• Income generation/micro-credits</li> <li>• Leisure time planning</li> <li>• Legal support</li> </ul>
<b>Long-term residential services</b>	<ul style="list-style-type: none"> <li>• Housing</li> <li>• Vocational training</li> <li>• Protected environment</li> <li>• Life skills training</li> <li>• Ongoing therapeutic support</li> </ul>

However, in reality investments are often made in highly intensive treatment services at the top of the pyramid. This may lead to a situation where people with low addiction severity end up in highly intensive services. The World Drug Report (UNODC, 2016) data show that globally a gap exists between the number of people who want or could benefit from treatment for drug use disorders and the number of people who actually receive services.<sup>25</sup> The non-existence of services at the lower threshold and lower intensity (such as brief interventions at the primary health

care level) may also lead to a situation where people who use drugs only get in contact with the health system only when they have already developed highly severe drug use disorders instead of having received less intensive (and less costly) support in earlier stages of their disease. Data shows that individuals are rarely screened by primary care practitioners.<sup>26</sup> However, providing screenings and initial services in primary healthcare settings is feasible and helps screen those in most need of further support from specialized drug dependence treatment services, thus contributing to reduced overall health-care costs.

## One-stop-shop for the treatment of substance use disorders

Given the multiple needs of people affected by drug use disorders ideally a wide range of medical and social services should be available “under one roof.” Such an integrated service provision could be described as a “one-stop-shop” that improves accessibility to comprehensive drug dependence treatment and care services.<sup>27</sup>

In order to ensure access, there should be always a low-threshold entry level (outreach,

drop-in) services with defined referral mechanisms to the actual clinical treatment services and the accompanying social services.

Policy makers can be supportive in setting up networks and one-stop-shops, especially with a view to the facilitation of coordination between different sectors that need to come together to allow for the implementation of a full package of services.

# ONE-STOP-SHOP



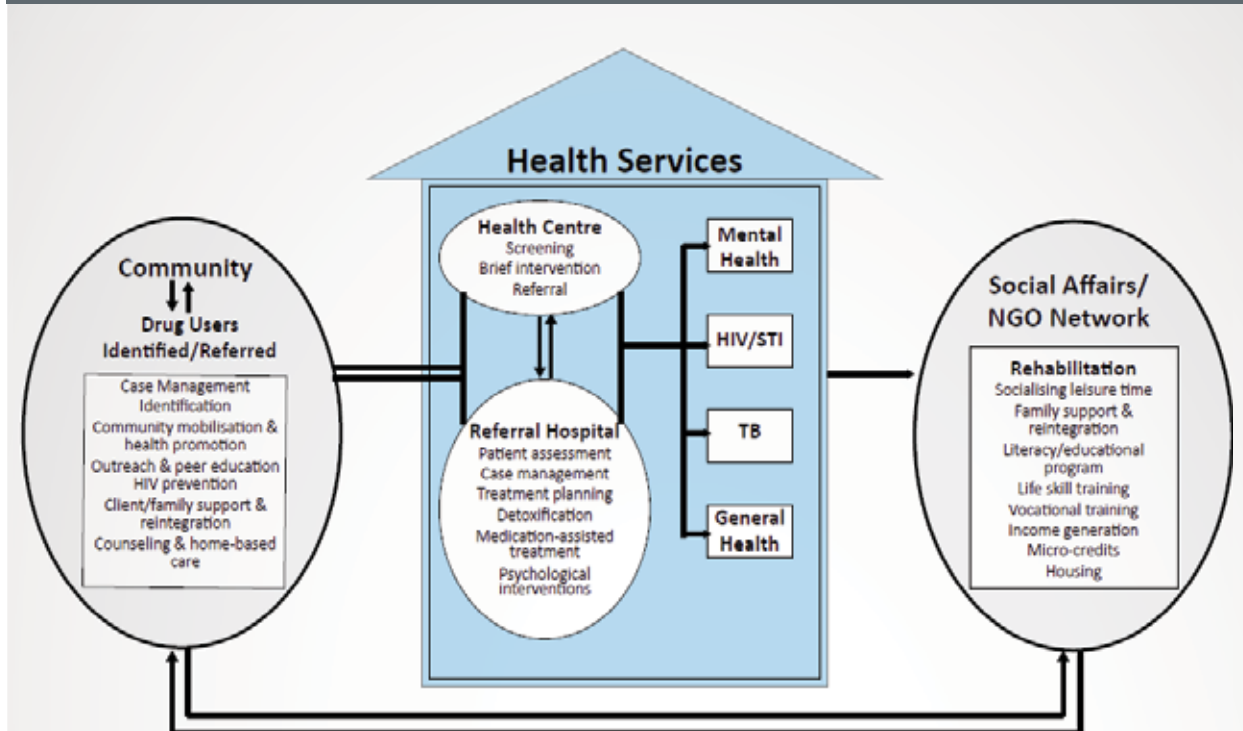
*Given the multiple needs of people affected by drug use disorders ideally a wide range of medical and social services should be available "under one roof."*

## Community-based drug dependence treatment and care

As it will not always be possible to set up a one-stop-shop for the treatment of drug use disorders, a network of services at the municipality/community level that works in close coordination and with established referral mechanisms is another option.

UNODC has published a good practice document on community-based drug dependence treatment<sup>28</sup> and a guidance note<sup>29</sup> on the same topic, which provide examples from around the world and detailed practical guidance on the elements of a community-based treatment network.

# MODEL OF COMMUNITY BASED TREATMENT



*In a community-based network broad partnerships can be formed not only between different services from the public health and public social sector but also with other community stakeholders. (UNODC has published a good practice document on community-based drug dependence treatment which presents the model above)*

In a community-based network broad partnerships can be formed not only between different services from the public health and public social sector but also with other community stakeholders. To coordinate all the services that are provided, it is beneficial to develop a locally effective community-based treatment approach, which aims to provide services utilizing all resources already available in the community. Community-based treatment services form a multifactorial and multi-sectorial approach to drug related problems that may affect persons with drug dependence. Such perspective encourages the use of a variety of paths to treatment, recovery and increased quality of life. Partners in a community-based network of services.<sup>30</sup> need to work in close collaboration and coordination

to provide the best possible support for a patient through effective referral and case management strategies to guarantee a continuum of care. The advantage of the community-based treatment model is that it provides a low-threshold entry point and facilitates access to different services.

Key principles of community-based drug dependence treatment and care include:

- Continuum of care from outreach, basic support and reduction of the negative consequences associated with drug use, to social reintegration, with no “wrong door” for entry into the system
- Delivery of services in the community – as close as possible to where drug users live

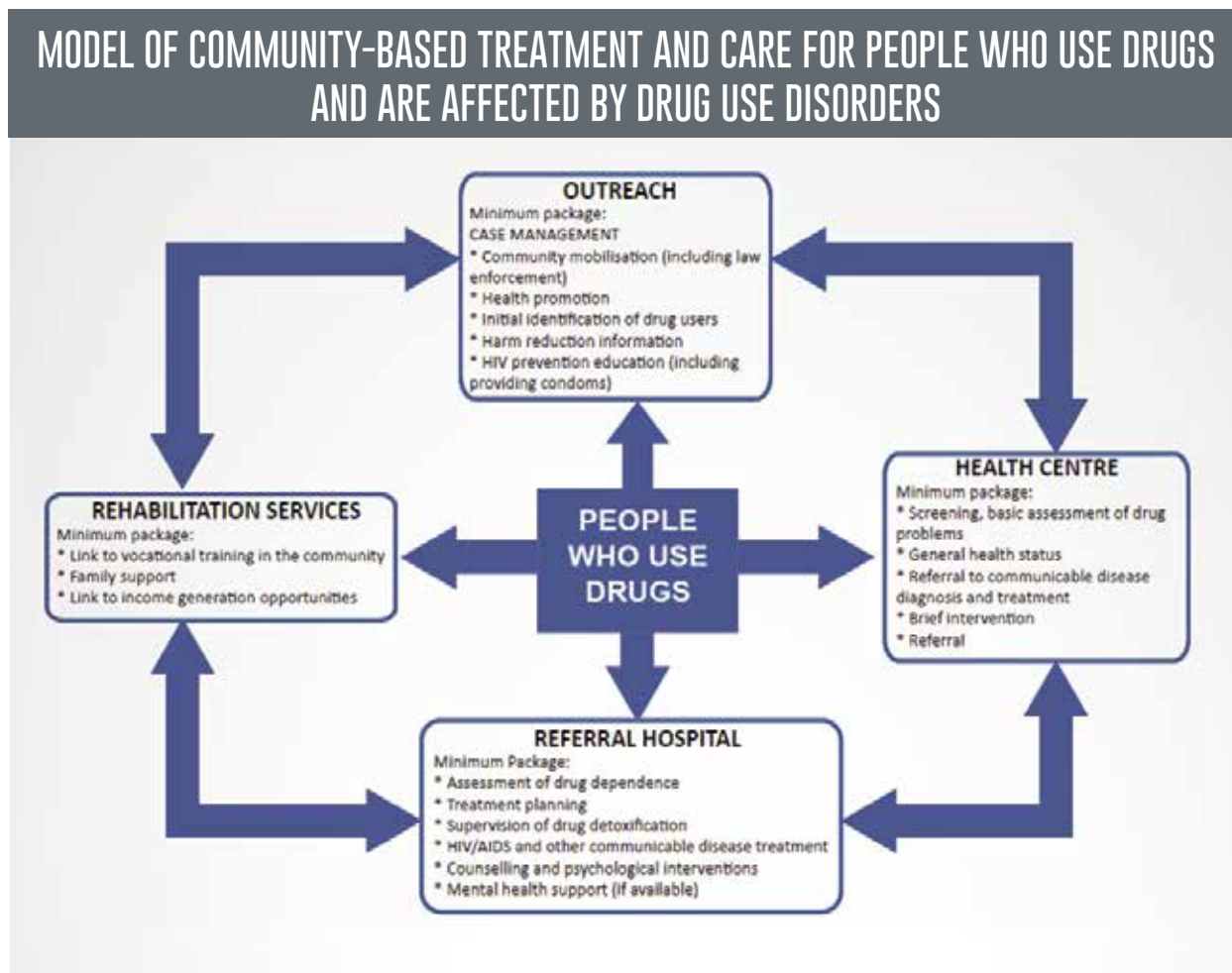
- Minimal disruption of social links and employment
- Integrated into existing health and social services
- Involve and build on community resources, including families
- Participation of people who are affected by drug use and dependence, families and the community-at-large in service planning and delivery
- Comprehensive approach, taking into account different needs (health, family, education, employment, housing)
- Close collaboration between civil society, law enforcement and the health sector
- Provision of evidence-based interventions
- Informed and voluntary participation in treatment
- Respect for human rights and dignity, including confidentiality
- Acceptance that relapse is part of the treatment process and will not stop an individual from re-accessing treatment services
- Civil society/NGOs (e.g. providing outreach services, vocational training, some aftercare activities)
- Police (role in screening, referral to health system)
- Criminal justice system (for the provision of treatment in prisons, to arrange follow-up services in the community)
- Neighbourhood associations
- Organized groups of drug users and people in recovery
- Family members
- Organized groups who identify themselves based on gender and ethnicity
- Educational and research institutions
- Professional organizations (e.g. to provide legal support)
- Religious and community leaders
- Trade and services establishments (for the creation of vocational opportunities)
- Religious organizations (e.g. offering places for overnight stays)
- Youth organizations and youth leaders

Partners for the delivery of community-based treatment are in the health services such as primary health care, specialized drug treatment services, hospitals and clinics and social services (access to housing and shelter, food vouchers, etc.). In a community-based network, broad partnerships can be formed not only between different services from the public health and public social sector but also with other community stakeholders such as:

To make sure patients are linked and referred to the appropriate services that meet their needs, case management is an essential component. Case managers work with the client, other members of the treatment team, and other services or organisations, to select the mix of interventions and support. Case management ensures that the network of referral and other ancillary support services become accessible and are utilized

efficiently. Case managers also provide a continuous assessment of the treatment progress. The following graphic depicts a functioning case management system from

the perspective of a person with a drug use disorder accessing the system. An important feature is that there is “no wrong door” to enter or to re-enter treatment.



## Continuum of care

A continuum of care from outreach, basic support and reduction of the negative consequences associated with drug use to social reintegration, is necessary in order to support people with drug use disorders in their recovery process. Such services can be called “sustained recovery management services”; some of these services might be similar to the services offered in a functional community-based drug dependence treatment and care network, but the emphasis is stronger on rehabilitation, reintegration

and of course recovery itself. Also there is a possible reduction in the frequency and intensity in which such services are used by people in recovery. In any case, such services (like any other drug dependence treatment service outside of emergency situations) should be voluntary and have the aim to be non-disruptive for the person in recovery. There are a variety of definitions for what is meant by recovery, for example “Recovery is a continuum process and experience through which individuals, families, and



communities utilize internal and external resources to address drug dependence and substance abuse problems, actively manage their continued vulnerability to such problems, and develop a healthy, productive and meaningful life.” (Adapted from W. White, 2007). A very practical definition would be the following one: “Recovery may be the best word to summarize all the positive benefits to physical, mental, and

social health that can happen when alcohol- and other drug- dependent individuals get the help they need.” (Betty Ford Institute Consensus Panel, 2007)

Recovery services can include for example aftercare, peer support groups, half-way houses and vocational training. Further more, there are eight broad domains (see below) which make-up the structure of recovery support known as “recovery capital.”



# INL Tool for Diagnosing a State's DDR System

## Diagnosing the Level of Development of the DDR System

### POLICY LEVEL

I. Policy Framework	<ul style="list-style-type: none"><li>o National Drug Policy</li><li>o Master Plan for Drug Demand Reduction (detailed activities)</li><li>o Development or Revision of laws and regulations</li><li>o Development of national quality standards<ul style="list-style-type: none"><li>■ For prevention</li><li>■ For treatment</li></ul></li><li>o Development of national quality guidelines<ul style="list-style-type: none"><li>o For prevention</li><li>o For treatment</li></ul></li></ul>
II. Institutional Mandates	<ul style="list-style-type: none"><li>o National institution is identified by the government as having the lead on drug demand reduction issues<ul style="list-style-type: none"><li>■ Drug prevention lead</li><li>■ Drug treatment lead</li></ul></li><li>o Drug demand reduction focal point (position title and individual) are identified by the government<ul style="list-style-type: none"><li>■ For drug prevention</li><li>■ For drug treatment</li></ul></li><li>o Drug demand reduction national coordinating body (e.g. stakeholders group) is established and meets regularly<ul style="list-style-type: none"><li>■ For drug prevention</li><li>■ For drug treatment</li></ul></li></ul>

## Diagnosing the Level of Development of the DDR System

### RESEARCH LEVEL

I. Mapping	<ul style="list-style-type: none"><li>o Mapping of prevention organizations and the programs that they offer</li><li>o Mapping of treatment services</li></ul>
II. Assessments	<ul style="list-style-type: none"><li>o Rapid assessment survey of the drug use situation, capacity and needs</li><li>o Targeted drug use surveys of limited areas (e.g. cities) or specific populations (e.g. schools)</li><li>o National drug use prevalence survey</li><li>o National drug observatory</li><li>o Participate in regional drug observatory</li></ul>
III. Evaluations	<ul style="list-style-type: none"><li>o Conduct outcome evaluations to determine the effectiveness of programs</li><li>o Prevention evaluations</li><li>o Treatment evaluations</li><li>o Research is peer reviewed and published</li></ul>

## Diagnosing the Level of Development of the DDR System

### PREVENTION LEVEL

<p>II. Diversity of interventions and policies by age of the target group</p>	<ul style="list-style-type: none"> <li>o Prenatal and infancy</li> <li>o Early childhood</li> <li>o Transition to school and middle childhood</li> <li>o Transition to adolescence</li> <li>o Late adolescence</li> <li>o Adulthood</li> </ul>
<p>III. Diversity of interventions and policies by context (setting)</p>	<ul style="list-style-type: none"> <li>o Family</li> <li>o School</li> <li>o Community</li> <li>o Workplace</li> <li>o Health Care</li> </ul>
<p>IV. Diversity of interventions and policies by levels of risk</p>	<ul style="list-style-type: none"> <li>o Universal (general public or population at large)</li> <li>o Selective (groups at risk for substance use)</li> <li>o Indicated (individuals at high risk for substance use)</li> </ul>
<p>V. Workforce Development</p>	<ul style="list-style-type: none"> <li>o Training of Prevention Specialists</li> <li>o Credentialing of Prevention Specialists                             <ul style="list-style-type: none"> <li>o Gov't agency identified as responsible for regulating prevention workforce</li> <li>o Gov't agency recognizes international credential (e.g. Colombo Plan ICCE Credential)</li> <li>o Gov't agency offers national credential</li> </ul> </li> <li>o Development of National Professional Association for the Prevention workforce</li> </ul>
<p>VI. Regulatory System for the Provision of Prevention Services (Note: "programs" are organizations that conduct prevention interventions)</p>	<ul style="list-style-type: none"> <li>o Government agency identified for regulating prevention programs</li> <li>o Gov't agency opts into international regulatory program based on International Standards on Prevention (system under development 2016-2017)</li> <li>o National inspection system o Inspection Forms</li> <li>o Inspection Teams Established and Trained o Policy and Program</li> <li>o Accreditation of Programs</li> </ul>

## Diagnosing the Level of Development of the DDR System

### TREATMENT LEVEL

<p><b>I. Diversity of Providers and Coverage:</b> A healthy drug treatment system has services offered by multiple sectors of society and with broad coverage throughout the country. Note: coverage gaps are best identified in examining the ability of any person with a different composition from the adjacent column to access treatment services.</p>	<ul style="list-style-type: none"> <li>o Government             <ul style="list-style-type: none"> <li>o Specialized centers (stand alone)</li> <li>o Integrated into public health facilities</li> </ul> </li> <li>o Civil Society             <ul style="list-style-type: none"> <li>o Non governmental organizations (secular)</li> <li>o Faith based organizations</li> </ul> </li> <li>o Private Sector (fee-for-service programs)</li> <li>o Coverage             <ul style="list-style-type: none"> <li>o Access for segments of the population with different socio- economic status:                 <ul style="list-style-type: none"> <li>• Homeless</li> <li>• Low-economic</li> <li>• Middle-income</li> <li>• High-income (note: quality services within the country where this class does not necessarily seek services abroad)</li> </ul> </li> <li>o Access administrative divisions within country</li> <li>o Urban and rural setting</li> </ul> </li> <li>o Minority groups (e.g. ethnic, religious)</li> <li>o Programs for women and adolescents are accessible to entire country</li> </ul>
<p><b>II. Diversity of Settings:</b> Drug users require different types of interventions with different levels of intensity.</p>	<ul style="list-style-type: none"> <li>o Outreach (informal community care)</li> <li>o Self-help groups (informal community care)</li> <li>o Primary health care services (e.g. in clinics or hospitals): screening, brief interventions</li> <li>o Specialized high-intensity/low-intensity outpatient and drug dependence treatment: assessment, case management, treatment planning, detoxification, psychosocial interventions, medication- assisted treatment, relapse prevention</li> <li>o Long term residential service: housing, vocational training, protected environment, life skills training, ongoing therapeutic support</li> </ul>
<p><b>III. Diversity of Evidence-Based Modalities (Techniques and Interventions)</b></p>	<ul style="list-style-type: none"> <li>o Social skills training</li> <li>o Contingency management</li> <li>o Motivational interviewing</li> <li>o Cognitive Behavioral Therapy (CBT)</li> <li>o Therapeutic community</li> <li>o Group therapy o Family therapy</li> </ul>

## Diagnosing the Level of Development of the DDR System

### TREATMENT LEVEL

<p><b>IV. Specialized Services for Special Populations</b></p>	<ul style="list-style-type: none"> <li>○ Women</li> <li>○ Adolescents</li> <li>○ Children</li> <li>○ Criminal Justice Populations</li> <li>○ Gangs</li> <li>○ Child Soldiers</li> <li>○ Homeless Populations</li> <li>○ HIV Positive, Hepatitis B &amp; C, TB Populations</li> <li>○ Sex Workers</li> <li>○ Trafficking Victims or Refugees</li> <li>○ Rural Populations</li> <li>○ Culturally Distinct Populations (e.g. Indigenous)</li> <li>○ LGBT</li> <li>○ Peoples with Physical Disabilities and Chronic Pain Management</li> </ul>
<p><b>V. Diversity of Support Services:</b> Drug users require a broad range of services to support the treatment and recovery process. These services range from general to specialized and serve to reduce the harms associated with drug use.</p>	<ul style="list-style-type: none"> <li>○ Primary health care services (e.g. in clinics or hospitals): basic health care, referral, continued support to people in treatment/ contact with a specialized treatment service</li> <li>○ Generic social welfare: housing/shelter, food</li> <li>○ Specialized health care services: mental health treatment, internal medicine, dental treatment, treatment of HIV and Hepatitis C</li> <li>○ Specialized social welfare services: family support and reintegration, vocational training/education programs, income generation/micro- credits, leisure time planning</li> </ul>
<p><b>VI. Integration of Services</b></p>	<ul style="list-style-type: none"> <li>○ Integration of drug treatment and public health systems (seamless referral linkages between general medical services and specialized treatment services)</li> <li>○ Community-based treatment model of treatment</li> <li>○ One-stop-shop for the treatment of drug use disorders (for advanced systems)</li> </ul>
<p><b>VII. Continuum of Care Support</b></p>	<ul style="list-style-type: none"> <li>○ Recovery services: peer support groups, halfway houses, vocational training</li> <li>○ Recovery capital support</li> <li>○ Crisis Intervention</li> </ul>

## Diagnosing the Level of Development of the DDR System

### TREATMENT LEVEL

<p><b>IV. Specialized Services for Special Populations</b></p>	<ul style="list-style-type: none"> <li>o Training of Treatment Specialists</li> <li>o Credentialing of Treatment Specialists             <ul style="list-style-type: none"> <li>o Gov't agency identified as responsible for regulating treatment workforce</li> <li>o Gov't agency recognizes international credential (e.g. Colombo Plan ICCE Credential)</li> <li>o Gov't agency offers national credential</li> </ul> </li> <li>o Training of Recovery Coaches</li> <li>o Credentialing of Recovery Coaches             <ul style="list-style-type: none"> <li>o Recognition of international credential</li> <li>o National credential offered</li> </ul> </li> <li>o Training of Health Practitioners (generalists) in identification/referral of drug use</li> <li>o Development of National Professional Association for the Treatment workforce</li> </ul>
<p><b>IX. Regulatory System for the Provision of Treatment Services</b></p>	<ul style="list-style-type: none"> <li>o Government agency identified for regulating treatment services/ centers</li> <li>o Gov't agency opts into international regulatory program based on International Standards on Treatment (system under development 2016-2017)</li> <li>o National inspection system             <ul style="list-style-type: none"> <li>o Inspection Forms</li> <li>o Inspection Teams Established and Trained</li> <li>o Policy and Program</li> </ul> </li> <li>o Accreditation of Programs</li> </ul>

The following is a survey for facilitating the assessment of a State's Drug Demand Reduction System from the various levels, including policy, research, prevention and treatment.

## DRUG DEMAND REDUCTION SURVEY

Thank you for participating in the Bureau for International Narcotics and Law Enforcement (INL) survey on global drug demand reduction. The survey is intended to provide a preliminary review of the addiction prevention and treatment system. You will be asked less than 30 questions about relevant partner-government policies and research.

Please work with applicable partner-government officials to complete the survey. We recommend you print out the survey questions to discuss with each respondent and then submit the information through this site.

For questions, please contact [demandreduction@state.gov](mailto:demandreduction@state.gov)



1. For which country are you reporting?
2. Please provide the partner-government point of contact who assisted with responding to this survey. Include the name, title, ministry/department, e-mail, and phone number.
3. Does the country have a National Drug Control Strategy? Key Definitions: National Drug Control Strategies are a country's efforts to address the prevention and treatment of abuse of narcotic drugs or psychotropic substances in addition to supply reduction efforts, including drug trafficking, money laundering and even efforts to combat organized crime.
4. Is the country drafting a National Drug Control Strategy? Key Definitions: National Drug Control Strategies are a country's efforts to address the prevention and treatment of abuse of narcotic drugs or psychotropic substances in addition to supply reduction efforts, including drug trafficking, money laundering and even efforts to combat organized crime.
5. Which of the following drug demand reduction activities are included in the national drug control strategic guidance:
  - a. Prevention
  - b. Education/Awareness
  - c. Early Identification/Screening
  - d. Aftercare/Rehabilitation
  - e. Alternatives to Incarceration Reintegration/Recovery
6. What government agency, department, or ministry has the lead responsibility for drug demand reduction efforts in the country? If a lead agency has not been designated, enter "None Designated"



7. Which government agency is designated as responsible for regulating drug prevention specialists? If a specific government agency has not been designated, please enter "None Designated"
8. Which government agency is designated as responsible for regulating drug prevention programs? If a specific government agency has not been designated, please enter "None Designated"
9. Which government agency is designated as responsible for regulating treatment specialists? If a specific government agency has not been designated, please enter "None Designated"
10. Which government agency is designated as responsible for regulating treatment programs? If a specific government agency has not been designated, please enter "None Designated"
11. Is there a drug demand reduction coordinating body, structure, group or stakeholders that meet regularly?
12. How frequently do the stakeholders meet?
13. Has the country conducted a national drug use prevalence survey in the past 7 years? If formal evaluations have not been conducted, e-mail any national drug assessments to [demandreduction@state.gov](mailto:demandreduction@state.gov) Key Definitions: National Drug Use Surveys adhere to a rigorous methodology and will provide nation-wide drug use data figures for a given period of time (e.g. past year use, lifetime use).
14. For each national drug use prevalence survey, please enter the Publishing Date, Title, and Author below. If electronic versions of the evaluations are available, please e-mail them to [demandreduction@state.gov](mailto:demandreduction@state.gov) Key Definitions: Drug Use Surveys adhere to a rigorous methodology and will provide nation-wide drug use data figures for a given period of time (e.g. past year use, lifetime use). Multiple lines of text
15. Which states/provinces have had a drug use survey in the past 7 years? Write "None" if a formal survey has not been conducted. Enter the name of each state/province on a separate line in the space below. Include the Publishing Date, Title, and Author when possible. (Example: Montana; January 1, 2017; "Drug Use in Montana"; Doe, John.) If electronic versions of the evaluations are available, please e-mail them to [demandreduction@state.gov](mailto:demandreduction@state.gov) If formal evaluations have not been conducted, e-mail any state/province drug assessments to [demandreduction@state.gov](mailto:demandreduction@state.gov) Key Definitions: Drug Use Surveys adhere to a rigorous methodology and will provide drug use data figures for a given period of time (e.g. past year use, lifetime use).

16. Which cities have had a drug use survey in the past 7 years? Write "None" if a city drug use survey has not been conducted. Enter the name of each city on a separate line of the space below. Include the Publishing Date, Title, and Author when possible. (Example: Seattle; January 1, 2017; "Drug Use in Seattle"; Doe, John.) If electronic versions of the evaluations are available, please e-mail them to [demandreduction@state.gov](mailto:demandreduction@state.gov) If formal evaluations have not been conducted, please e-mail any city drug assessments to [demandreduction@state.gov](mailto:demandreduction@state.gov) Key Definitions: Drug Use Surveys adhere to a rigorous methodology and will provide drug use data figures for a given period of time (e.g. past year use, lifetime use).
17. Which of the following populations with special clinical needs have had a drug use survey in the past 7 years? If formal evaluations have not been conducted, select "None" and e-mail any city drug assessments to [demandreduction@state.gov](mailto:demandreduction@state.gov) Key Definitions: Drug Use Surveys adhere to a rigorous methodology and will provide drug use data figures for a given period of time (e.g. past year use, lifetime use).
- a. Women
  - b. Adolescents (ages 13-18)
  - c. Children (under age 12)
  - d. Rural Populations
  - e. Low Income Populations
  - f. Users at risk of recruitment for violent extremism
  - g. Gangs
  - h. Refugees
  - i. Users of opioid drugs
  - j. Users in the Criminal Justice System
  - k. Culturally Distinct Populations (Indigenous)
  - l. LGBT
  - m. Peoples with Physical Disability and Chronic Pain Management
  - n. Homeless Populations
  - o. Child Soldiers
  - p. Trafficking victims
  - q. Sex workers
  - r. People living with HIV+, Hep B & C, TB
  - s. None
18. Does the country have a designated national drug observatory? Key Definitions: A national drug observatory is a research center that can be housed within a government agency, academic institution, or private organization which has a mandate to research drug use patterns over time. They conduct surveys, rapid assessments, and more extensive research studies. An example of an observatory could be the U.S. Center for Disease Control (CDC).

19. Does the country participate in a regional drug observatory? Key Definitions: A regional drug observatory is a research center that can be housed within a government agency, academic institution, or private organization which has a mandate to research drug use patterns over time. They conduct surveys, rapid assessments, and more extensive research studies. An example of a regional observatory could be the West Africa Epidemiological Network Drug Use Observatory (WENDU).
20. In which regional drug observatory does the country participate?
21. Does the government recognize Colombo Plan ICCE credentials?
22. Does the government offer a national drug prevention license/credential for individuals?
23. Does the government offer a national license/credential for treatment specialists?
24. Does the government evaluate drug prevention programs?
25. Does the government evaluate addiction treatment programs?
26. Does the government have standardized evaluation forms for addiction treatment programs?
27. How many people have been trained to inspect addiction treatment programs?
28. Does the government provide national accreditation of treatment programs? Choice

**What are the three most active non-governmental organizations in the country supporting efforts to reduce drug demand?** Include organization name, address, and contact information if available. (Example: Communities to Prevent Addiction (CPA); St. Paul, MN; 555-555-5555; John Doe, Director; [doej@cpa-org.net](mailto:doej@cpa-org.net)) Key Definitions: Non governmental organizations may include churches, community based efforts, schools and educational providers such as universities and medical drop in centers engage in and supporting the reduction of drug

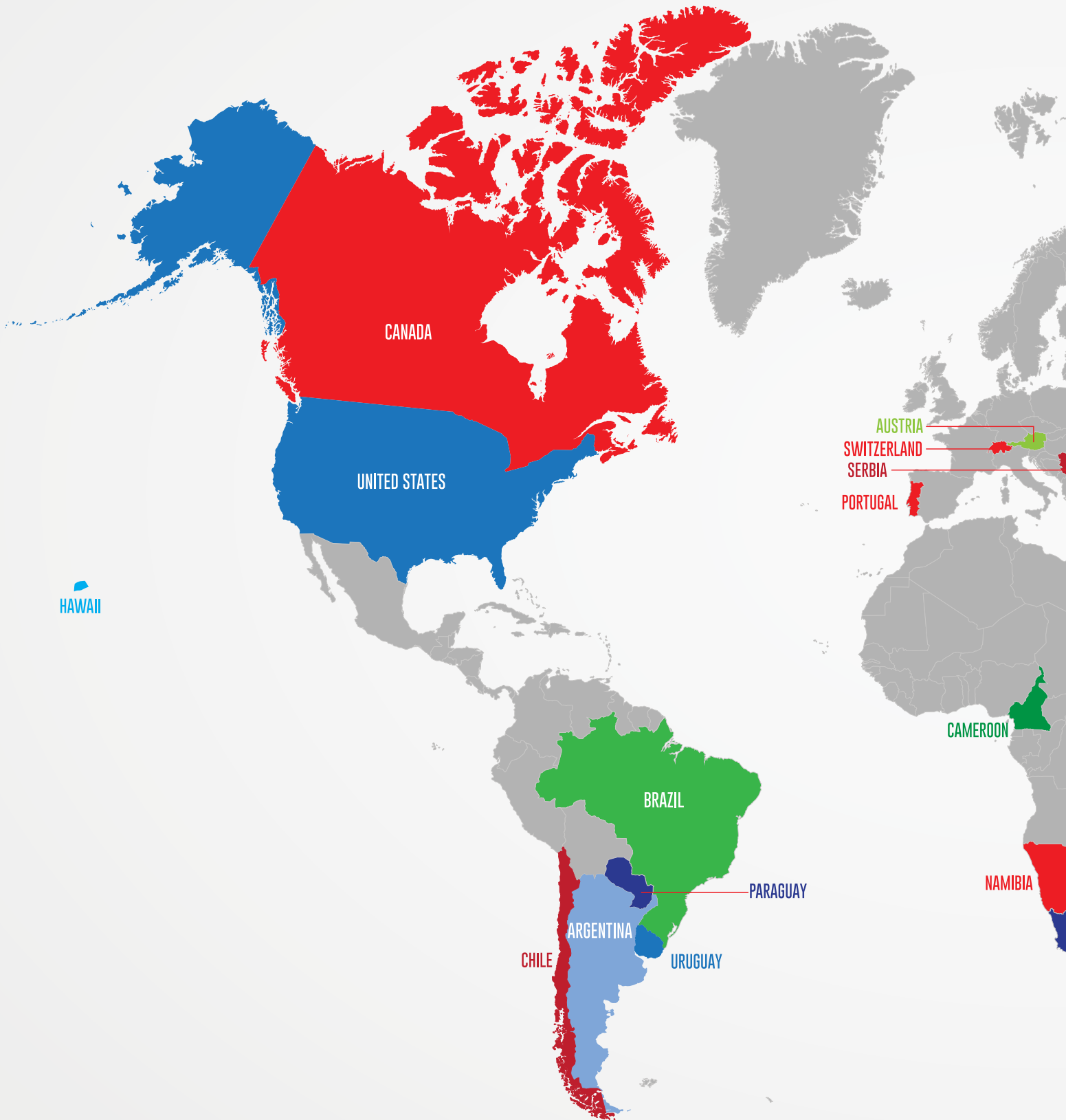
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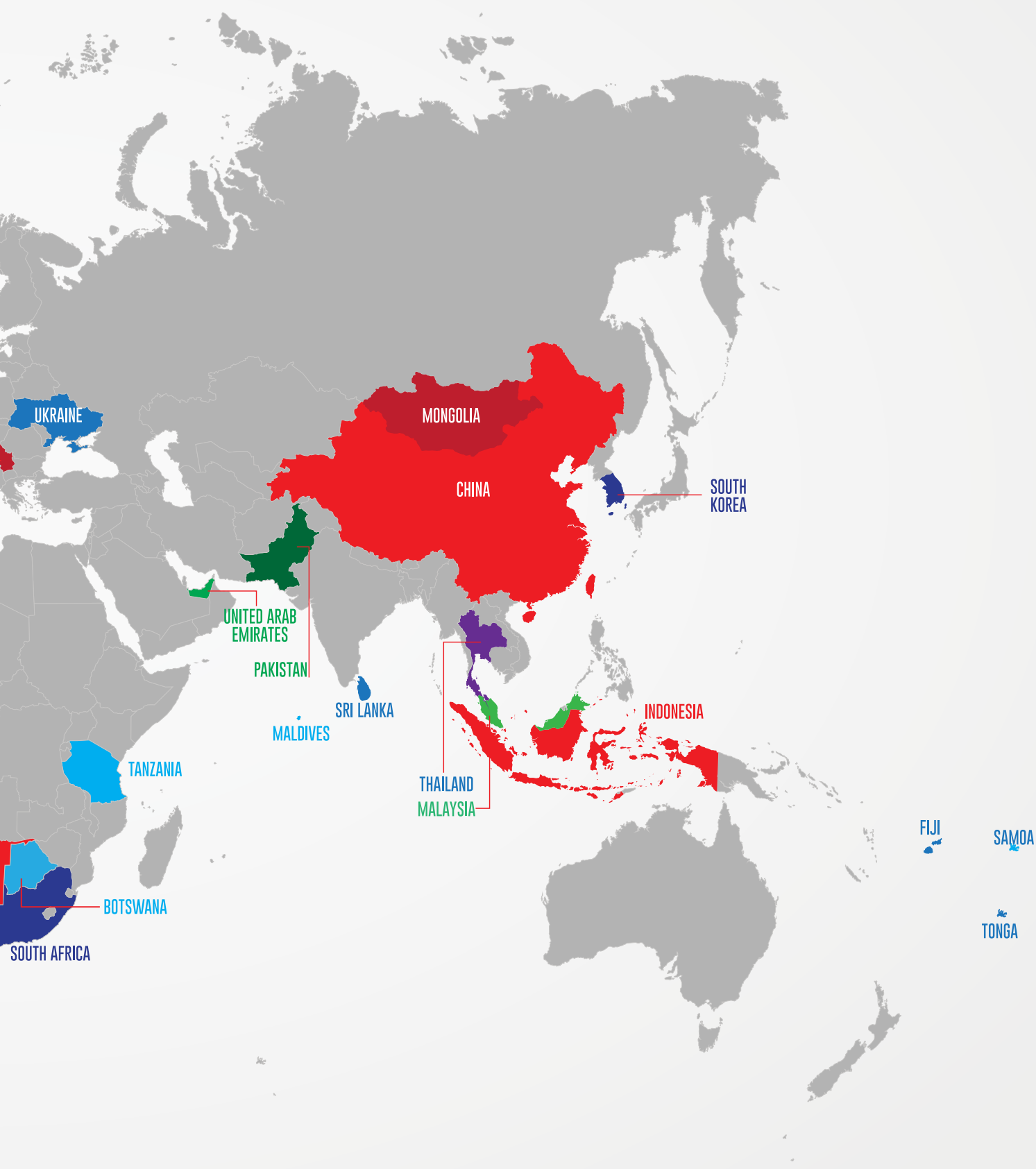
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# **FEATURES FROM THE GLOBAL DDR COMMUNITY**

# INL DRUG DEMAND REDUCTION ACTIVITIES - 2016







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# INL DRUG DEMAND REDUCTION ACTIVITIES - 2016





The INL  
**Drug Demand Reduction Team**  
conducted

**50 MISSIONS**

to

**30 COUNTRIES**

**in 2016**

in an effort to deliver programmatic services, support Embassy personnel, participate in national and regional events, and complete assessments of emerging issues. The following pages summarize the missions.

## WESTERN HEMISPHERE

### 1. Montreal, Canada

INL Addresses ISAM Annual Meeting: INL presented at the joint meeting of the International Society of Addiction Medicine (ISAM) and the Canadian Society of Addiction Medicine (CSAM), inviting members to partner with INL and participate in its programs, including joining the International Society of Substance Use Professionals (ISSUP). (October 20)

### 2. Washington, D.C.

**U.S. Interagency Coordination on Demand Reduction:** The White House Office of National Drug Control Policy (ONDCP) and INL co-hosted the U.S. Interagency Working Group on International Demand Reduction four times throughout the year. Interagency representatives from the Department of State, National Institute of Drug Abuse, Department of Health and Human Services, Drug Enforcement Administration, Department of Defense, and U.S. Agency for International Development shared their agencies' current efforts and explored how to coordinate their efforts in the field.

### 3. Washington, D.C.

**INL Organizes Drug Demand Reduction Study Tour for the Colombian Government:** Embassy Bogota collaborated with INL's Demand Reduction team to organize a study tour for Colombian National and Local Government officials to conduct site visits related to substance use treatment and prevention programming in Washington, D.C., New York, and Los Angeles. The Colombian delegation began the visit with a day-long familiarization of substance use prevention, where top experts were flown in from across the U.S. to share the latest advances in family, school, workplace, media, community, and environment-based prevention as well as monitoring and evaluation. (April 6)

#### 4. Washington, D.C.

##### **INL Hosts Global Workshop to Address Substance Use Disorder (SUD) in Children:**

Representatives from five international organizations, U.S. researchers and curriculum developers, and practitioners from nine countries (Afghanistan, Pakistan, India, Bangladesh, Argentina, Brazil, Paraguay, Chile, and Peru) met to discuss the phenomenon of children below the age of 12 who are using harmful substances (e.g. opioids, cocaine) and the protocols and training programs that have been developed for the addictions workforce to address the situation. The workshop offered practitioners an opportunity to share global best practices in preventing the initiation of drug use, treating children with SUDs, and resulted in the development of a program model to include workforce training, community involvement, technical assistance, and aftercare to complement the INL-funded curriculum. (July 25-27)



#### 5. Washington, D.C.

**SAMHSA Hosts National Meeting to Explore UTC:** The U.S. Department of Health and Human Services' (HHS) Substance Abuse and Mental Health Services Administration (SAMHSA), and their Center for Substance Abuse Treatment (CSAT) hosted a national meeting to explore the applicability of the INL-supported Universal Treatment Curriculum. Representatives from several U.S. universities and federal partners, including INL and the Addiction Technology Transfer Center (ATTC), explored the applicability of the materials and how best to make these available nationally. University of South Florida reiterated its commitment to serve as a coordinating center in disseminating the materials with universities. Community colleges were discussed as a potential vehicle for dissemination. (September 28)

#### 6. Baltimore, Maryland

**SAMHSA Addiction Technology Transfer Center (ATTC) Meeting:** INL provided a presentation at the ATTC meeting to share the opportunities for sharing international products in the U.S. Additionally, delegates were invited to participate in ISSUP-3 workshop in Cancun, Mexico. (April 11-12)

## 7. New York, New York

**UNGASS Successful and Groundbreaking:** The United Nations General Assembly Special Session (UNGASS) on drugs resulted in the adoption of a groundbreaking document approved unanimously by 193 out of 193 member states of the United Nations, endorsing a balanced approach that is grounded in the understanding of addiction as a chronic and relapsing disease requiring public health interventions. The theme of alternatives to incarceration were also explored by delegations and INL promoted the International Standards for Substance Use Treatment, hosting a special side event to promote the field testing of the standards along with the potential for many activities which would utilize the standards as a foundation. (April 19-21)



## 8. Chicago, Illinois

**Expanding Treatment Opportunities in the Criminal Justice System:** INL led a mission with ONDCP, the Organization of American States' (OAS) Inter-American Drug Abuse Control Commission (CICAD), and a representative from the Supreme Court of India to explore how to implement alternatives to incarceration through criminal justice system. The NGO, Treatment Alternatives for Safe Communities (TASC), shared their model of building collaborative system with law enforcement, health professionals, and legal professionals to advance a public health approach for treating those with substance use disorders. (September 13-16)



## 9. Las Vegas, Nevada

**Record-Breaking CADCA Mid-Year Institute:** The Community Anti-Drug Coalitions of America (CADCA) held their annual Mid-Year Training Institute (MYTI) with a record 45 international participants representing anti-drug community coalitions from 16 countries around the world. INL took the opportunity to meet with coalition members and U.S. embassy representatives and explore new opportunities for collaboration. (July 18-21)

## 10. Palm Springs, California

**NIDA International Forum:** INL encouraged the international research community to participate in INL's activities at the U.S. National Institute of Drug Abuse's (NIDA) International Forum. The forum hosted more than 200 participants from over 32 countries. NIDA researchers were also invited to join ISSUP, which promotes dialogue between researchers and practitioners to more rapidly disseminate evidence-based practices. (June 11-14)

## 11. Honolulu, Hawaii

**Formation of the International Consortium of Universities for Drug Demand Reduction (ICUDDR):** INL led a meeting of representatives from 25 universities in 12 countries and two international organizations (Colombo Plan and OAS), resulting in the formation of the ICUDDR network. The purpose of this group will be to accomplish the following:

- 1) Promote the field of addiction science as an independent and multidisciplinary field and encourage other universities to develop addiction studies programs;
- 2) Adopt INL's UTC and UPC curriculum as a primary academic resource;
- 3) Collect training data on students for purposes of research and evaluation; and
- 4) Develop academic exchanges between faculty, student international study programs; and internships between universities and treatment programs.

This university consortium on addiction studies is the first of its kind and will facilitate the sustainable dissemination of INL's curriculum. As part of ICUDDR, universities in the United States and Europe will form their own regional consortium and operate without INL funding, complementing INL efforts in Asia, Africa, and Latin America. (March 29-31)



## LATIN AMERICA AND THE CARIBBEAN

### 12. Brasilia & Sao Paulo, Brazil

**Evaluating Toxic Adulterants and Building Community Partnerships:** INL's mission to Brazil was extensive in its efforts to address the crack cocaine epidemic beginning with testing to confirm the presence of toxic adulterants in drug samples from the cities of Brasilia, Sao Paulo and Campinas. The team of experts also conducted a site visit to Cracolândia—one of Sao Paulo's most concentrated open-air crack bazaars and stronghold for users. INL also facilitated an introduction between on-the-ground CADCA contacts and an outstanding Brazilian alumna



from the State Department's Sports Diplomacy program on potential collaboration on youth outreach and community anti-drug coalition initiatives in Sao Paulo. (February 22-27)

### 13. Campinas, Brazil

**ISSUP-2 Workshop:** The second annual workshop of the International Society of Substance Use Professionals (ISSUP) represented the culmination of the year's work by five international organization and three Brazilian NGOs to organize a global event that included the participation of 2,200 Brazilians from 242 cities in 24 states and 300 international participants from 60 countries. Thirteen simultaneous trainings and plenary workshops took place in the convention center and three trainings were conducted in a separate hotel. UNODC pilot-tested a training course for policymakers which will be disseminated over the coming years. (December 7-11)



## 14. Asuncion, Paraguay

**New Partnership with Paraguay:** INL's Mission to Paraguay consisted of visits to several government ministries, universities and civil society organizations. The mission team, which also included representatives from the OAS and University of North Carolina at Chapel Hill, noted with concern the reported increase in consumption of smokeable cocaine, particularly among children under the age of 12 who find the drug more affordable than paint thinners and glues. The social conditions are further strained by flooding that resulted in the displacement of Paraguayans and the improvised construction of plywood homes with galvanized roofs along city boulevards and central squares. INL's partnership will include addressing children's treatment, partnering with the government and universities to disseminate the Universal Treatment Curriculum (UTC) and Universal Prevention Curriculum (UPC), and supporting the establishment of CADCA Coalitions. (January 31-February 3)



## 15 & 16. Santiago, Chile

**Formation of a Strong Partnership with the Government of Chile:** Two INL missions to Chile and several follow-up lines of action with SENDA (National Service for Prevention and Rehabilitation of Drugs and Alcohol), the country's anti-drug commission, has resulted in Chile becoming one of INL's most important partners to address drug demand reduction. Chile held a meeting of over 20 drug treatment experts from across the continent to review and adapt the UTC into Spanish for Latin America. They also co-hosted a meeting of universities to promote the development of academic programs in UTC and UPC. SENDA also donated office space to house Colombo Plan staff members and committed their own staff resources in disseminating the materials in Chile and abroad. (February 8)



## 17 & 18. Buenos Aires, Argentina

**Intensified Collaboration with Argentina:** INL conducted two demand reduction missions to Buenos Aires, with one taking place in advance of President Obama's visit. The U.S.-Argentina partnership offered several deliverables in the area of demand reduction: 1) UTC and UPC training, 2) examination and credentialing of the workforce, 3) testing of toxic adulterants, and 4) addressing drug use in children under 12. The missions included site visits to government agencies, children's centers, and to meet with civil society representatives, including religious leaders. Through Colombo Plan's toxic adulterant project, DEA tested over 60 drug samples for added non-traditional cutting agents with over 30 representatives from the Security Ministry of the Buenos Aires province and prosecutors office. One significant finding was that "fly wing" – a highly pure form of cocaine hydrochloride (HCL) is being used by traffickers as a new marketing scheme to charge eight times the price for a freeze-dried version of cocaine (HCL) made from common salt and sulfuric acid from car batteries. INL hosted a community forum with senior representatives from SEDRONAR (Argentina's drug secretariat), the federal police, Ministry of Security, and other experts to explain the new phenomena of adding cutting agents and the public health effects associated with them. (February 3-6, May 16-20)



## 19. Montevideo & Maldonado, Uruguay

**Assessment of Community Coalition Development:** The INL mission to the two major cities of Montevideo and Maldonado examined the progress in forming community coalitions to address drug use through the CADCA grant. The meetings also provided an opportunity to share other potential areas of collaboration, including the dissemination of the UTC, UPC and participation



in ISSUP. Uruguayan civil society expressed interest in mobilizing more effectively to prevent drug use in the country through a multi-sectoral approach that includes the involvement of community leaders, law enforcement, medical professionals, the Catholic Church, and civic organizations (Rotary), among others. (December 5)



## 20. Yaounde, Cameroon

**Cameroon Demonstrates Strong Interest in Demand Reduction:** Health Minister Fouda expressed strong support for the African Union (AU) project to improve data collection on substance use throughout the continent. Cameroon is the first of ten site visits planned for the project. The Government of Cameroon also organized meetings with over 20 agencies and other partners such as non-governmental organizations (NGOs) explaining their role and what information they collect. Cameroon is also very interested in the UTC and the government has created a demand reduction unit within the Ministry of Health for follow-up. NGOs are also playing a key role in the field and are interested in the UTC. (November 20-23)

## 21. Dar es Salaam, Tanzania

**Expanded Cooperation with the African Union and the Colombo Plan:** The Government of Tanzania also believes that the African Union project will help it address substance use disorders. Based on the excellent site visits to official agencies and NGOs, Tanzania is collecting a great deal of information that will be relevant to developing an epidemiological network on illicit drug use. Tanzania is also launching an expanded national initiative on drug prevention, and the Colombo Plan will expand its close cooperation with Tanzania to begin training of the UPC in 2017. (November 28-30)

## 22. Zanzibar, Tanzania

**Substance Use Centers Welcome Training, Face Increased Challenges:** The Detroit sober house and other substance use disorder treatment facilities in Zanzibar say the UTC has been very helpful to their efforts. They plan to continue to participate in national and regional training. Trafficking of opiates from Afghanistan appears to have disproportionately affected the Islamic communities of Eastern Africa, from Somalia to Zanzibar.

## 23. Gaborone, Botswana

**Vibrant Treatment Network Enthusiastic about the UTC:** During the INL mission, Botswanan government health officials expressed their eagerness to begin the UTC as soon as possible. Some African regional trainers are from Botswana and the country has a good base of experience. The University of Botswana expressed interest in serving as an UTC educational provider. Visits to BOSASNet, the NGO providing drug treatment services, the Sbrana Psychiatric Hospital, and International Law Enforcement Academy (ILEA) provided ideas for potential partnerships. (February 29-March 1)

## 24. Windhoek, Namibia

**Exploring Partnership Opportunities:** Namibian government officials and substance use professionals welcomed the introduction of the UTC. Ms. Petronella Masabane, Director of Social Welfare, Ministry of Health and Social Services, noted it would be an important addition to the government's overall plan to improve training of addiction professionals. INL visited Namibia's main rehabilitation center, the Etegmento Rehabilitation and Resources Centre and an outreach and counseling center in Rehoboth. (March 3-5),

## 25. Cape Town, South Africa

**African Countries to Improve Drug Use Information Systems:** The African Union Commission (AUC) organized the first meeting of the INL-funded project to improve drug use data collection across the African continent. Kenya, Nigeria, Senegal, and South Africa shared their existing epidemiological systems, which can be harmonized into a single system that other countries can model. In order to ensure sustainability, no funding will be provided to maintain the epidemiological system, but resources will be available for training national partners in collecting the data. Ten countries were selected among the many volunteers to participate as the first pilot countries of this multi-year project. (July 30 – August 9)

## 26. Lisbon, Portugal

**The Substance Use Prevention Expert Advisory Group meets at the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA):** INL convened the 4th Drug Prevention Expert Advisory Group on substance use disorders (PEAG) at the EMCDDA to review updates in the field of substance use prevention and guide the development of the Universal Prevention Curriculum (UPC). Experts included the curriculum developers of the UPC Implementers Series, prevention specialists from Belgium, Lebanon, Peru, Turkey, and the UK, as well as representatives from the Colombo Plan, UNODC and COPOLAD. The group discussed next steps for introducing the UPC in Europe via the recently-awarded European Commission grant to the University College in Ghent. (July 13-14)

## 27. Geneva, Switzerland

**First ISSUP Board of Directors Meeting:** The professional association for the demand reduction workforce (ISSUP) held its first Board of Directors meeting, with 15 members representing all regions of the world. The directors made decisions regarding the administration and structure of the organization. Five international organizations and INL participated in an observer status role. INL also took the opportunity to meet with WHO to discuss how INL and WHO could further collaborate on demand reduction. (June 27- July 1)



## 28. Vienna, Austria

**59th Session of the Commission on Narcotic Drugs (CND), UNODC:** INL hosted a side event where UNODC and WHO released the International Standards for Substance Use Treatment. These standards represent the best summary of evidence-based practices in the treatment field and serves as a foundation for the development of quality standards to monitor treatment facilities. The Standards were released in draft form for field testing. The U.S. also sponsored a resolution in support of the International Standards. (March 14-23)

## 29. Vienna, Austria

**The Next Phase in Implementing International Treatment Standards:** Experts in treatment service quality assurance met at UNODC headquarters to develop a global system to assess and accredit drug treatment facilities. The experts from Canada, Chile, Germany, South Africa, Sweden, Switzerland, the United Kingdom, and the United States will develop universal quality assessment forms which will later be adapted on a country-by-country basis to build national accreditation and licensing systems for treatment services. (November 14-16)



### 30. Vienna, Austria

**First Retreat for Demand Reduction Stakeholders:** Leaders of demand reduction programming from UNODC, WHO, Colombo Plan, OAS, ISSUP, and curriculum developers participated in an INL-moderated discussion on developing a five year operational plan of activities. The meeting helped the international partners understand how their programs were connected to INL's broader work in demand reduction, and also identified areas of potential collaboration. During this time in an adjacent room, a group of European trainers were prepared in the Universal Treatment Curriculum (UTC) to expand our pool of global trainers. (November 17-18)



### 31. Belgrade, Serbia

**Paris Pact on DDR Focuses on Narcotics in the Balkans:** The Paris Pact Expert Working Group on “Integrating Drug Dependence Treatment and Care in the Public Health System” discussed existing capacities and needs among the partners represented, which included South Asian, Central Asian, and Eastern European states. Several Balkan states expressed interest in adopting the UTC and UPC curricula, working in collaboration with INL. The new cadre of European trainers, many from the Balkans, will greatly facilitate the dissemination of the UTC in Eastern Europe in 2017. (October 9-11)



### 32. Kyiv, Ukraine

**Intranasal Naloxone Assessment in Ukraine:** INL, UNODC, and WHO conducted the first assessment for supporting a community-level Intranasal Naloxone Feasibility Study to reverse the death rate caused by opioid overdose. Meetings were held with multiple stakeholders, notably Ukraine's Ministry of Health, government officials from the city of Kiev, and also representatives from the local police force. The purpose of the initial visit was to socialize the feasibility study of the use of intranasal naloxone as well as collect current data on opioid use and treatment modalities in order to draft the study protocol. (June 19-26)

## NORTH AFRICA AND THE MIDDLE EAST

### 33. Abu Dhabi, United Arab Emirates

**The 5th Commission Meeting of International Centre for Certification and Education of Addiction Professionals (ICCE):** Dr. Hamad-Al-Ghaferi of the United Arab Emirates' National Rehabilitation Center hosted the annual meeting of national focal points (commissioners) that recognize the ICCE credential. The meeting agreed that Commissioners would help determine if specific educational providers in their country were appropriate for ICCE training; strengthen language that recovery coaches should not be sponsors and that they should not be involved personally or economically with a client; and that credentials should continue to remain valid for two years. (March 10-11)

### 34. Dubai, United Arab Emirates

**Afghanistan Expert Working Group Updates the Transition Plan:** INL has remained the largest donor to Afghanistan drug demand reduction services, funding 80% of its treatment and prevention system. The U.S. and Afghan governments and civil society and international organizations have partnered to develop a transition plan that will ensure sustainability of the existing system by prioritizing strengthening and securing of the addictions workforce. This meeting reviewed the current progress of the transition plan as it reaches the mid-point of its four-year plan, and made modifications. (December 14-16)

### 35. Dubai, United Arab Emirates

**2nd Pakistan Drug Demand Reduction Stakeholder Meeting:** INL and the Colombo Plan co-hosted this meeting to discuss the issue of substance use in Pakistan and develop coordinated strategies in response. Pakistani Provincial Government representatives and NGOs were joined by international experts, including those from WHO and UNODC. Participants focused on gaps in treatment coverage and strategies to address it. (April 13-14)

### 36. Islamabad, Pakistan

**Drug Demand Reduction Program Review in Pakistan:** Washington-based INL program officers as well as INL-Islamabad staff visited INL- funded NGOs in Islamabad, Lahore and Karachi for a firsthand look at how they operate prevention and treatment programs. Program staff presented on successes and challenges in the field and conveyed great dedication to their programs. INL also attended Pakistan's Anti-Narcotics Forces (ANF) Annual Youth Convention which consisted of presentations by ANF leadership and ANF's Youth Ambassadors. (April 7-11)

### 37. Colombo, Sri Lanka

**289th Colombo Plan Council Meeting:** INL covered this quarterly session of the Colombo Plan Council which included Mongolia's intention to pay its arrears and reinstate its membership with the Colombo Plan. The U.S. strongly supports Mongolia's presence in the Colombo Plan. Other items included a discussion on Colombo Plan's MOU to establish a field office in Bangkok and preparations for the 45th Consultative Committee Meeting in September. (July 25-30)

### 38. Bandos, Maldives

**INL Adapts Innovative Rural Treatment Modality for Afghanistan:** Afghanistan drug demand reduction stakeholders met in Male, Maldives to shape the development of evidence-based prevention, treatment and recovery programs for rural communities. The first three days of the meeting involved international experts briefing Afghanistan's ministries of Public Health, Counternarcotics, Women's Affairs and Education on the newly established global framework and related training. The final two days involved interactive discussions with rural community leaders, NGO demand reduction implementers, and the Ministry of Rural Rehabilitation and Development. Community leaders learned about drug use in rural Afghanistan, discussed their village's experience with substance use, and explored the feasibility of conducting the pilot study in their communities. (August 15-19)

### 39. Bangkok, Thailand

**Engagement with Afghan Government Leadership on Drug Treatment Concerns:** The annual Afghanistan drug demand reduction stakeholders meeting was co-hosted by INL and Afghanistan's Minister of Health, Dr. Ferozudin Feroz. Deputy Ministers from the Ministries of Counter-narcotics, Social Development and nine NGO organization partners also participated. Concerns regarding the Hope Treatment Center (formerly Camp Phoenix) were addressed in a candid, collegial, and productive discussion. A plan was developed to permit the community to have monitoring access and initiate a dialogue on clinical aspects of treatment. Other themes that were covered included treatment in rural communities, the designing a methadone program, and the plan to transition unsustainable centers from NGOs to the Ministry of Public Health. (May 15-23)



### 40. Kuala Lumpur, Malaysia

**4th Treatment Expert Advisory Group (TEAG) Meeting:** INL chaired the 4th TEAG meeting in Kuala Lumpur, Malaysia. The TEAG is the final stage in the UTC development process comprised of high-level experts who guide UTC development and dissemination. Among the outcomes, the group formally approved updates to the UTC Basic Course, along with eight new UTC Advanced courses that INL will begin disseminating around the world in January 2017. (October 5-7)





## 41. Melaka, Malaysia

**2nd INL Drug Demand Reduction Workshop for U.S. Embassy Staff on the Margins of a Region Conference:** More than 500 treatment and prevention professionals from 26 countries attended the 7th Colombo Plan-Asian Cities Against Drugs (ASCAD) International Conference on Addiction where they received training on the UTC, UPC, and Recovery Curriculum. The Philippines had the largest group of international participants followed by Pakistan. Over 120 people also received the International Certified Addictions Professional and Recovery Coach exams. On the margins of this conference, INL-Washington hosted a workshop for U.S. Embassy representatives to share INL programming in the field and discuss U.S. drug policies. (October 9-13)



## 42. Jakarta, Indonesia

**U.S.-Indonesia Workshop on Drug Demand Reduction:** The Indonesian president challenged his government to treat 100,000 drug users in 2016. INL offered to support a bilateral workshop to discuss strategies in achieving this goal. Drug prevention and treatment-focused officials from Indonesia's National Narcotics Board (BNN) and the Ministries of Health, Education and Culture, as well as other stakeholders were among the estimated 80 people who took part in the workshop. BNN Deputy for Law and Cooperation Aidil Chandra Salim welcomed the event, which was aimed at exploring further bilateral cooperation to reduce demand for illegal drugs. INL proposed ten areas for partnership in expanding and strengthening treatment capacity and prevention interventions. INL is currently engaged in seven areas of collaboration on drug demand reduction with the Government of Indonesia. (February 23-25)



### 43. Jakarta, Indonesia

**Progress on Implementing Drug Demand Reduction Programs in Indonesia:** INL conducted a follow-up mission to review progress on INL-Indonesian collaboration. BNN presented its efforts to identify a location in Jakarta and Surabaya for the establishment of their first Drug Free Community Coalitions. On October 29th, Colombo Plan administered the examinations for the International Certified Addictions Professional (ICAP) and Recovery Coach credentials to over 50 drug treatment professionals in Indonesia. (October 14)

## EAST ASIA

### 44. Ulaanbaatar, Mongolia

**INL held meetings with Mongolia:** National Center for Mental Health, the National Police Agency's Criminal Police Division and the Ministry of Foreign Affairs to discuss the current state of drug demand reduction training and programming in the country. With the opening of its borders and the increase in per capita income, drug consumption in Mongolia is on the rise. Both the health workers that treat addiction disorders and the police that interact with drug users expressed concern with the matter and admitted that they lack knowledge on evidence-based drug treatment and prevention. They expressed great interest in working with INL through the Colombo Plan to professionalize treatment and prevention practices. (May 17-18)

### 45. Beijing, China

**Engagement with China on Drug Demand Reduction:** INL briefed the Ministry of Public Security, Ministry of Health and other representatives of the National Narcotics Control Commission on its global drug demand reduction program. Chinese counterparts expressed interest in obtaining copies of INL's curriculum, learning more about how the U.S. regulates treatment programs, and receiving updates on INL's program with UNODC to develop universal accreditation standards for treatment facilities. Conversations between both governments will continue through a bilateral Joint Liaison Group (JLG) forum. (May 16-17)



## 46. Seoul, South Korea

Sahmyook University Hosts Conference on Building Capacity and Competency in Addiction Studies: The aim of the conference was to share information about training opportunities and degree programs for professionals working in addiction treatment, prevention, and research. Most presenters were members of the International Confederation of Addiction Research Associations (ICARA). They proposed a 12-year project - "Human Resources for Prevention and Management of Substance Use and Related Disorders: Workforce 2030" working with the World Health Organization (WHO). (June 19-20)

## AUSTRALIA AND OCEANIA

## 47. Nuku'alofa, Tonga

**Discussion with Pacific Community on Drug Demand Reduction Cooperation:** The Pacific Community (SPC) organized a Non-Communicable Diseases (NCD) Summit for its member states in Tonga. Ministers of Health, medical experts, other officials and NGOs attended. The SPC offered INL an opportunity to brief the 24 Pacific countries and territories represented on the issue of drug use and partnership opportunities with INL. Delegations were also invited to participate in a Pacific Sub-Regional Drug Focal Points Meeting hosted by the Colombo Plan in September. INL subsequently explored with SPC whether the issue of substance use could be added as a permanent feature of the NCD summits. (June 20-23)

## 48. Apia, Samoa

**Samoa Launches the First Drug Court in Oceania:** INL's mission to Samoa included a meeting with the Ministry of Justice and Courts Administration, which began operating a drug court in January 2016 based on the New Zealand and U.S. models. To date, seven individuals have graduated from the program out of 25 participants. With no formal substance use treatment in the country, the Ministry of the Courts is helping to screen for substance use. Methamphetamine use is a growing concern, as highlighted by civil society representatives. One worker noted that Samoan prison returnees deported from the U.S., Australia, and New Zealand arrive at the airport, sometimes with no family or government agency to provide them with any assistance. The NGO staff is providing temporary resettlement services and is noting that many former convicts have serious substance use issues, but then disappear into society making follow-up difficult. (September 23)



## 49. Suva, Fiji

**First Asia Pacific Drug Focal Points Meeting Held:** Ministry of Health and Justice representatives from Australia, New Zealand, Fiji, Samoa, Marshall Islands, Tonga, Kiribati, and Nauru attended a drug focal points meeting by the Colombo Plan's Drug Advisory Plan in Fiji. Recommendations from the meeting included the need for additional development of treatment professionals in the workforce, creation of a regional Pacific network of demand reduction professionals, and to hold more meetings on a regular basis. INL considers that this is an important network to continue to organize, but the costs of a regional annual meeting are prohibitive. A more feasible event would be three sub-regional trainings (for Melanesian, Micronesian, and Polynesian states) in a workshop format involving ministries and NGOs responsible for implementing specific substance use prevention and treatment interventions. (September 26-27)



## 50. Suva, Fiji

**Forty-fifth Colombo Plan Consultative Committee Meeting (CCM):** Twenty of Colombo Plan's member states met in Suva, Fiji for the CCM to provide oversight and recommendations for the Colombo Plan's scheduled activities over the next two years. The CCM theme was in addressing climate change and environmental degradation; however, the key outcomes included: (1) deferring the construction of a new Headquarters building, (2) urging CP to move forward with the establishment of a regional office in Bangkok, and (3) continuing support among member states for key INL-funded programming. The mission to Fiji also offered the INL team an opportunity to meet with university, government, and NGO partners to explore opportunities for collaboration. The Fiji School of Medicine could potentially disseminate the UTC regionally given their diverse student population from many Pacific islands. (October 5-7)



## GUEST AUTHORS

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# SUBSTANCE USE DISORDERS, NEUROSCIENCE, AND NEUROIMAGING IN ARGENTINA



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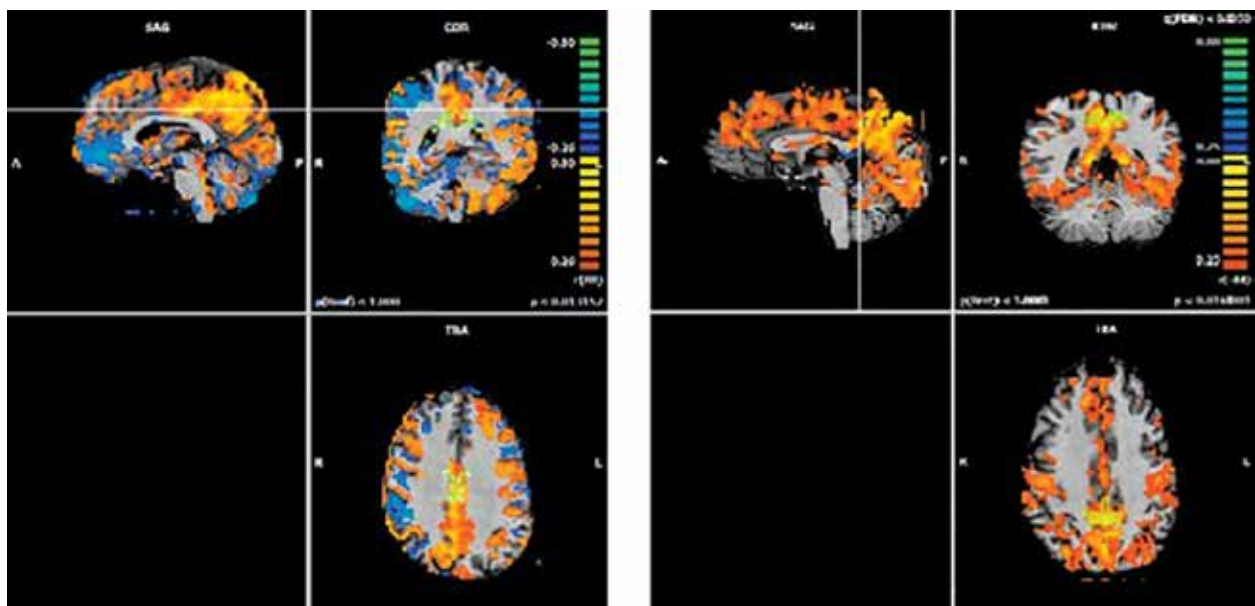
## **Hendree Jones, Ph.D.**

is a Professor in the Obstetrics and Gynecology Department, School of Medicine, University of North Carolina, Chapel Hill and Executive Director of the Horizons Program. She is an internationally recognized expert in the behavioral and pharmacologic treatments for pregnant women and children in risky life situations.

The neurobiology of substance use disorders as a brain disease has undergone many scientific breakthroughs. These advances have been crucial for the understanding of the disorders and the treatment of substance use disorders.

Groundbreaking discoveries about the brain have revolutionized our understanding of substance use disorders,<sup>31</sup> indicating they are illnesses of changed brain biology that result in behavioral disorders. Research and clinical observation of patients converge and attest to the devastating changes in the behavior of a person that has an active substance use disorder. Such changes often include damage to their physical and mental health status that, in turn, impact social life, academics and/or occupation, and family life. Further, these devastating changes in the lives of individuals often translate into social bond difficulties, increased health costs, increased violence, abuse and neglect, lower academic results, and diminished work performance, all of which take a toll on the society and culture in whichever nation they occur.

In Argentina, drug addiction has become a major public concern. In terms of statistics, 3.4% of urban households in the country suffer from substance use disorders, with alcohol use disorders being the most prevalent (2.5%), while illegal drug use affects 1.9% of families. Over the period 2010-2015, the drug sales reported in “one’s own neighborhood” had an increase of almost 17 points (from 30% in 2010 to 47% in 2015), implying an increase of more than 50% in 5 years. Thus by 2015, 47% of households declared that illegal drugs were sold in the neighborhood where their home was located. Another concerning fact is that in 2015, 57% of households in which at least one of their members had a severe substance use disorder, did not seek any kind of professional help. As for those who did seek some kind of assistance, 22% said that they sought help only once and 21% reached for professional help at least two times.<sup>32</sup>



Cocaine abuse (right), control (left). This fMRI, resting-state images illustrates, in consonance with scientific research, and compared with neuropsychological tests in each case, a hyperconnected but less efficient functional connection in the cocaine abuser brain.

Advances in neuroscience have illuminated substance use disorders as chronic brain diseases with strong genetic, neurodevelopmental, and sociocultural components,<sup>33</sup> which is evidence for the need for a multidimensional understanding of the person with the disorder. Interdisciplinary diagnostic evaluations represent the patient as a whole, providing valuable information regarding the most affected and altered areas: cognitive skills, planning, work performance, academics, money management, family relationships, routines, daily habits, social interaction, and level of craving. This specific information is key to assess and determine appropriate care and intervention.

## Why Use Neuroimaging for Treatment Purposes?

Advances in brain imaging science make it possible to see inside the brain of a person with a substance use disorder and pinpoint the parts of the brain affected by alcohol and/ or other drugs. The changes that occur in the reward and emotional circuits of the brain are accompanied by changes in the function of the prefrontal cortical regions, which are involved in executive processes, such as self-regulation, decision-making, and flexibility. Specifically, the down-regulation of a specific chemical in the brain called “dopamine” (a major component in the feeling of pleasure) dulls the reward circuits’ sensitivity to pleasure in prefrontal brain regions, and seriously impairs executive processes.<sup>34</sup> Thus, decisions may be more made impulsively and emotional control is diminished.

**Neuro-images present as a major asset—first, they can be part of a complete evaluation process to understand brain functioning before treatment, then they can be instrumental in helping to assign appropriate care interventions, and finally, neuro-images can be useful to monitor response to therapy.**

Neuroimaging is already being used to address functional and structural integrity of the brain in patients with substance use disorders. One form of imaging is called magnetic resonance imaging (MRI). It uses a strong magnetic field and radio waves to create detailed images of the brain. In some cases, MRI images may show no significant structural damage; however, brain connectivity could still be impaired even when physical structures are not. Thus, it is important to use functional magnetic resonance imaging (fMRI) to look at blood flow in the brain and to detect areas of activity. FMRI scans can show whether the connectivity of neural circuits are being as efficient as they should be. When these connections suffer alterations due to substance use disorders, the consequences can be observed in the person’s behavior such as diminished inhibition, cognitive inflexibility, and impaired decision making and planning. These impaired connections and their potential behavioral consequences are very important, not only in predicting certain behaviors, such as relapse, but also in rehabilitating them effectively.



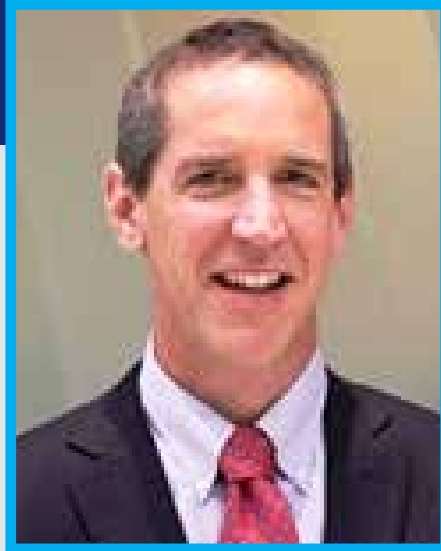
## **The INECO MODEL: Neuro-Imaging as a Component of Assessment**

Substance use disorders impact every aspect of the person, effectively “hi-jacking” the brain, and making the person feel that he or she has no power over their actions or thoughts. Thus, it is important to comprehend the aspects of the patient that are most affected. In Rosario, Argentina at the Institute of Translational and Cognitive Neuroscience, neuroimaging (MRI and fMRI) results are matched with neurocognitive assessments, including inhibitory control tests, executive function, and cognitive tests. The interrelation between these two complementary assessment tools, combined with psychological, psychiatric and functional consultations, plus nutritional and clinical assessments, all give our team a very acute perspective of every patient, which is then

taken into account in prescribing treatment. Because substance-induced impairments are long-lasting, group neurocognitive rehabilitation techniques, such as impulse control, attention and decision-making exercises, are frequently necessary to mitigate the damages. Fortunately, this comprehensive approach has garnered positive results with beneficial impact in everyday life, particularly for those patients who are willing to re-integrate themselves to academics and work life.

In conclusion, substance use disorders as complex diseases deserve to receive all the resources available in mitigating damages. Neuroimaging and clinical assessments can best be viewed as powerful complements, not only for treatment of SUDs, but also in the development of effective methods of prevention.

# MONITORING THE FUTURE SURVEY: A BEST PRACTICE AND SCIENTIFICALLY VALID MODEL



**Richard Miech Ph.D.**

Richard Miech is Research Professor at the University of Michigan's Institute for Social Research. He received his Ph.D. degree in Sociology from the University of North Carolina at Chapel Hill and a Master of Public Health (MPH) degree from Johns Hopkins University. His work focuses on trends in substance use, with an emphasis on disentangling how these trends vary by age, historical period, and birth cohort membership. Other research interests include identification of the factors that widen or narrow disparities in substance use over historical time, as well as the causes and consequences of substance use over the life course.

A powerful tool for demand reduction is knowledge of a country's level of youth alcohol, tobacco, and other drug use. Scientific documentation of the rise of a new drug or increasing use of an existing one can provide a strong rationale for a country to allocate resources to drug prevention and treatment, as well as to help prioritize the drugs to target. Scientific documentation of a decrease in drug use can provide strong evidence for the effectiveness and on-going need of a specific national policy/intervention that reduces drug use.

Surveys of youth in school are a cost-effective and straightforward way to monitor and document youth drug use at the national level. Monitoring the Future is a school-based, scientific, nationally-representative survey that has interviewed approximately 40,000 youth age 13 to 17 in about 400 schools for each of the past 42 years. It includes questions on a wide variety of drugs, including alcohol, tobacco, illegal drugs, and prescription drug abuse. Results from the survey have in the past directly informed national U.S. drug policy and continue to do so today.

Several steps are important to ensure the validity and maximize the impact of a school-based drug survey. One key step is to use scientific methods to draw a sample of schools that is nationally-representative, so that the results from the sample are a very close approximation to what a census

of all schools would find. Another step is to develop procedures to ensure that responses remain confidential. And a third step is to create the drug survey. Surveys that contain widely-used drug questions allow direct comparison with results from other countries, often including neighboring ones. At the

## MEASURING DRUG USE IN YOUR COUNTRY



### Advantages of a school-based drug survey

- Know the level of alcohol, tobacco, and other drug use among youth in your country, based on scientific procedures.
- Make informed decisions about resource distribution for drug prevention and treatment.
- School-based surveys are cost-efficient and straightforward to conduct.
- Early assessment of surges or other changes in drug use.
- Examine impact of country-level policies on population drug use.
- Inclusion of standardized drug measures allows direct comparison with more than 60 other countries that use school-based surveys - often neighboring countries.

### Potential assistance

- Technical assistance in setting up new drug surveys or improving existing drug surveys.
- Sharing of measures.

### An Invitation to Measure Drug Use in Your Country

#### Send an official country government letter of interest stating:

- Type of assistance requested (e.g. setting up a new study or improving an existing one)
- In-country funding source for survey
- Contact person who will arrange meeting for initial consultation

Please send this information to: [mtfinformation@umich.edu](mailto:mtfinformation@umich.edu)



same time, it is important for drug surveys to also include additional, country-specific drug questions to take into account country-specific types of drug use, predictors, and drug language. The Investigators that run Monitoring the Future provide technical

assistance in setting up new drug surveys or improving existing ones. They also are pleased to provide the project's survey measures, which to date have been used by school-based drug surveys in more than 60 countries.

## MONITORING THE FUTURE SURVEY



We conduct the Monitoring the Future study, which is a survey of the behaviors, attitudes, and values of American secondary school students. Each year, a total of approximately 50,000 8th, 10th and 12th grade students are surveyed.

- MTF is the gold standard for national, school-based surveys of student drug use.
- MTF has provided annual, national U.S. estimates of student drug use for more than 40 years.
- A survey is administered to students in schools- by far the most cost-efficient method to produce valid estimates of in-country, student drug use.
- Ever year MTF surveys about 40,000 students in about 400 schools.
- MTF surveys students in 8th grade (age 13-14), 10th grade (age 15-16), and 12th grade (age 17-18).
- Includes questions on a wide variety of drugs, including alcohol, tobacco, illegal drugs, and prescription drug abuse.
- Includes questions on important predictors of drug use, including perceived risk, disapproval and perceived availability.
- See: <http://monitoringthefuture.org> for more information, including publications.

# THE AFRICAN UNION DRUG EPIDEMIOLOGY PROGRAM



**Isidore S. Obot, Ph.D, MPH**

Isidore Obot is Professor of Psychology, University of Uyo and Executive Director, Centre for Research and Information on Substance Abuse (CRISA), Uyo, Nigeria. He is a widely published author on drug and alcohol epidemiology and policy and edits the African Journal of Drug and Alcohol Studies. Professor Obot has served as consultant to the UNODC, Economic Community of West African States (EOWAS) and the African Union on different drug-related projects.



## Introduction

One of the factors inhibiting rapid and effective responses to the drug problem in many countries around the world is the lack of reliable data on various aspects of drug use and drug-related harm. Such is the case in most low- and middle-income countries but also true in some high-income countries where the dearth of data remains a critical issue in national efforts to curb illicit drug supply and demand. This situation is widely recognized as a limitation in effective global responses including views expressed at the UN General Assembly Special Session on the world drug problem held in April 2016.

There are of course several reasons for this data drought especially in low income countries, one of which is the low availability of human and financial resources needed to initiate and sustain a program of regular data collection. Considerations of cost and capacity have led policy makers and researchers in different countries to tackle this problem from two related fronts. One is the use of rapid assessment methodologies in data collection and the other related approach is the establishment of epidemiology networks that often depend on data from secondary/existing sources of relevant information.

One of the earliest epidemiologic networks on drug use is the U.S. National Institute on Drug Abuse (NIDA) Community Epidemiology Work Group (CEWG), which has been running since the late 1970s. Other national and regional networks that use similar methodologies are the Inter-American Drug Use Data System (SIDUC), the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) program, the South African Community Epidemiology Network on Drug Use (SACENDU), the Canadian

Community Epidemiology Network on Drug Use, and the Southern African Development Community Epidemiology Network on Drug Use (SENDU, which has ceased to operate).

## Addressing the drug data gap in Africa

In Africa there are two developing drug epidemiology programs outside South Africa. One is the national project currently being piloted in Nigeria known as the Nigerian Epidemiologic Network on Drug Use (NENDU), and the other is the West Africa Epidemiology Network on Drug Use (WENDU) initiated by the Economic Community of West African States (ECOWAS), which is being implemented in several countries in the region. In line with both NENDU and WENDU, the African Union (AU) has launched a Drug Epidemiology Program as part of its work on “strengthening research and data collection capacity for drug use prevention and treatment in Africa” with support from the US Bureau of International Narcotics and Law Enforcement (INL) within the US Department of State. In effect, this program will serve as the driver of a broader effort to make available continent-wide data on drug use, drug supply and related problems that are reliable and comparable across the continent. It is anticipated that this drug epidemiology network will help to shed light on the following aspects of the drug problem:

- The extent of drug use in as many countries as possible in the African region,
- The nature of and factors associated with drug use,

- The health, psychological and social consequences of drug use and abuse in the general population and in specific groups,
- The types of drugs used, cost per unit, purity and availability,
- Number of arrests and quantities of drugs seized,
- Changes in the pattern of drug use and problems, and
- The economic impact of drug use

The AU program will function as a sentinel drug surveillance system known as the African Epidemiology Network on Drug Use that will involve the development of national networks to: (1) monitor trends in drug use, production and trafficking, (2) develop capacity through training and field experience, (3) report back at a specified time frame (every six months); and (4) make reliable information available to prevention and treatment professionals, policymakers and the public on the drug situation in each country and the continent as a whole. What is envisaged is a continent-wide and seamless program with as many countries as possible sharing information through their semi-annual reports to the AU. The overall project goal is the establishment and smooth functioning of national and regional drug “epidemiology networks on drug use in Africa to provide much needed evidence for policy formulation and service delivery”.

## Project highlights

Initial project sites: Ten countries in different African regions have been identified to participate in the first stage of the program with initial work already taking place in five of these countries. The ten countries are:

Algeria, Tunisia (North), Angola, Cameroon (Central), Ghana, Togo (West), Tanzania, Uganda (East), and Botswana and Zambia (South). The five countries in which national networks will be set up first are Botswana, Cameroon, Ghana, Tanzania, and Tunisia.

Types of data to be collected: Following the recommendations of experts who attended the Continental Consultation for Drug Demand Reduction National Focal Points in August 2016 and guided by the Lisbon Consensus, the minimum set of data to be collected in the AU program are listed below.

- Prevalence and incidence of drug use in the general population,
- Extent of drug use among youth,
- Estimates of high-risk/problematic drug use, including number of drug injectors, frequent users, and number engaging in other high risk behaviors,
- Number of persons seeking help for drug use disorders,
- Drug-related morbidity (e.g., HIV, HBV and HCV prevalence among illicit drug consumers), and
- Mortality directly attributable to drug consumption (e.g., death from overdose).

Most items on this list are on consumption and the health consequences of drug use. Participating countries may also collect additional data as required, including data on drug supply (availability), problematic alcohol use, and abuse of other drugs that are not under international control.

Sources of data: The above types of data to be collected are more or less a “wish list”

for the AU project because few countries in Africa routinely collect and store all of these types of data. However, information on the drug situation in every country can be obtained from the health care sector (drug treatment facilities), law enforcement records, published scientific papers, grey literature and reports.

## Challenges

The establishment and operation of an epidemiologic network in Africa rests on the assumption that within each country there are sources of secondary data on different aspects of the drug problem and that these data can be accessed with little effort. Based on initial reports from national experts this seems to be the case though types and quality of available data and access to such data will vary from country to country. This project will not only assist in organizing existing data from various sources in each participating country, it will contribute to the development of interest in drug-related research and, more important, the enhancement of local capacity for research on drug issues through participation in project training workshops. For example, a

crucial first step for each country program will be a workshop on methodology (including identification of sources of data, indicators, development of data form), training in use of draft data form, data analysis, national report writing (using a standardized format), and dissemination of data. Some of the expected technical, administrative and ethical challenges will also be addressed in such a forum, for example, reliability and validity of available data, confidentiality and other ethical issues.

## Conclusion

It is essential to address these challenges in the course of developing this important mechanism for gathering and disseminating basic data on drug availability, use and consequences. A drug surveillance system is a relatively inexpensive way of making data available for policymakers and practitioners and is generally sustainable once it is up and running. The network is a good investment not only because of the information it makes available, but because of its potential positive impact on research capacity and infrastructure development in countries with no long-term tradition of research on drugs.





## LIONS QUEST: A GLOBAL LEADER IN SCHOOL-BASED PREVENTION



**Matthew Kiefer**

Author Bio: Matthew Kiefer is the manager of the Lions Quest Educational Programs for the Lions Clubs International Foundation. Matt joined Lions Quest in 2007 and has overseen the program's growth to more than 90 countries. As manager, he oversees all aspects of program development and implementation. Prior to joining Lions Quest, Matt worked as a program director for Amigos de las Americas, managing youth development projects in Panama and Mexico.

With over 46,000 clubs and 1.35 million members, Lions Clubs International (LCI) is the largest service organization in the world. The Lions Clubs International Foundation (LCIF) was founded in 1968 to elevate the mission of LCI by tackling global problems and assisting Lions with large-scale humanitarian projects. Since its founding, LCIF has granted more than \$950 million in four key areas of service: sight, youth, disaster relief, and humanitarian efforts.



Within the youth category lies Lions Quest, the flagship youth development curriculum of LCIF. Over the last 30 years, the Lions Quest program has been implemented in more than 95 countries for the benefit of more than 14 million youth. The K-12 Lions Quest curricula are based in social and emotional learning, character education, drug and alcohol prevention, and service learning.

## Why SEL? Why Schools?

Social and emotional learning (SEL) involves the process through which children, adolescents, and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. The

Collaborative for Academic, Social and Emotional Learning (CASEL) has identified five clusters of SEL competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision making.

High-quality SEL implementation includes explicit skills development with repeated opportunities for practice; skills infuse into all aspects of instruction and competencies embedded into the core curriculum; and a positive classroom and school environment.

In their "Lessons from Prevention Research," the National Institute for Drug Abuse identified school-based prevention programs as a key part of a comprehensive prevention strategy. Specifically, prevention programs for elementary and middle school students should target improvements in academic and social emotional skills. Key skills include:

- Communication
- Peer relationships
- Self-efficacy and assertiveness
- Drug resistance and refusal skills
- Strengthening of personal commitments against drug use
- Social problem-solving
- Emotional awareness and regulation<sup>31</sup>

## The Lions Quest Approach to Substance use Prevention

Through quality training of educators, and research-based curriculum materials, Lions Quest intentionally and proactively builds these skills.

Implementation begins by training educators in both the concepts of social emotional learning and positive prevention, as well as in how to execute the curriculum itself. Training workshops are interactive and are focused on empowering educators to model positive behaviors for their students. Lions Quest is proud to work with a network of more than 200 trainers worldwide, who conduct more than 750 workshops a year.

Upon receiving training, educators return to their classrooms and begin to implement the program. LCIF works with country-level stakeholders to identify the ideal implementation model most appropriate for the cultural context.

Lions Quest programs reflect these best practices in substance abuse prevention through:

- **Sequential, universal K-12 prevention curriculum** that includes age-appropriate information dedicated to substance abuse prevention lessons within a skills-building SEL curriculum for all students, providing long-term instruction in protective and resistance skills;
- **Highly interactive, student-centered instructional design that** encourages critical thinking and leadership in becoming healthy role models;
- **Positive classroom and school climate** that establishes clear norms of behavior;
- **Parent and community materials** to support the creation of a home-school-community partnership united in creating a healthy community;
- **Service-learning and civic engagement opportunities** that provide all students with opportunities for highly rewarding, collaborative learning experiences;
- **Ongoing professional learning** to prepare implementers to help reduce risk factors and promote protective factors in young people through skillful teaching of prevention skills.

When external conditions – positive environment, skill instruction, and information – are addressed by caring adults in a young person’s life, they influence the internal conditions – self-perception, motivation, cognition – that lead to positive behaviors, including an increased ability to refuse negative influences and decisions. The result is a young person who is more resilient and likely to engage in healthy behaviors.

## Global Reach, Global Results

Lions Quest programs have been rigorously evaluated in real-world implementation contexts, and have been examined in both developed and developing countries. This body of research helps strengthen the evidence linking social emotional skill-building with effective prevention, while also adding to the depth of research of prevention programs in low-income environments.

A two-year study in multiple US cities indicated that exposure to Lions Quest helped reduce instances of lifetime and monthly marijuana use, especially helpful in reducing the prevalence of binge drinking among middle school students.<sup>32</sup> A year-long study of Lions Quest implementation in Germany showed improved protective factors including stronger communication, stronger developments in self-esteem and improved emotional regulation. Improved refusal skills, and reduced use rates of psychoactive substances (tobacco.)<sup>33</sup>

A meta-analysis compared results of program implementation in three Latin American countries. Cultural adaptation was deepest in Colombia, mid-range in Paraguay, and minimal in Peru. Of those three, Colombia had the strongest results in terms of reducing alcohol and tobacco use rates, and in improving resistance factors like perception of harm and connection to school. Adaptation is critical for success.<sup>34</sup>

## Case Study: Successful Collaboration Between LCIF and UNODC

Lions Quest and UNODC signed an agreement in 2012 to pilot the middle school version of the program. A review of Lions Quest showed it to be aligned with the International Standards for Drug Use Prevention's recommendation on the use of school-based programs for prevention purposes.

Lions Quest was piloted in three countries (Serbia, the Former Yugoslav Republic of Macedonia, and Montenegro.) The program had a significant effect on four indicators: refusal skills; normative belief; substance use and intention to use; perception of harm.)

<sup>35</sup>

## Conclusion

With implementation in nearly 100 countries spanning all continents, Lions Quest represents one of the most well-researched, well-developed school-based prevention programs. In addition to offering excellent program development for educators, and interactive, research-based materials, Lions Quest is able to offer a unique connection to civil society through collaborations with the members of Lions Clubs International.

For more information about how to implement Lions Quest in your region, please contact Matthew Kiefer at [matthew.kiefer@lionsclubs.org](mailto:matthew.kiefer@lionsclubs.org).

# INTERNATIONAL CONSORTIUM OF UNIVERSITIES FOR DRUG DEMAND REDUCTION (ICUDDR):

**A NEW CONSORTIUM OF UNIVERSITIES  
TO PROMOTE ADDICTION SCIENCE & WORKFORCE  
DEVELOPMENT**



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## A Multidisciplinary Training Approach to SUDs

The interrelated fields of addiction treatment and prevention have produced decades of empirical evidence demonstrating the complex, biopsychosocial nature of substance use disorders. Considering this complex reality, a comprehensive strategy for addiction treatment and prevention clearly is warranted. Hundreds of existing academic programs in addiction treatment studies around the world often are embedded in a relevant discipline, such as psychology, public health, medicine, or social work. However, such an approach sometimes overlooks the unique needs for, and benefits of, a multidisciplinary approach to substance use disorders. In parallel, the field of prevention science can draw from the fields of psychology, public health, communication, and even business, especially concerning application of empirical research findings to positively influencing human behavior.

In order to effectively train both treatment and prevention practitioners on evidence-based knowledge and skills for best practices, INL supported the development of two training series – the Universal Treatment Curriculum (UTC) and Universal Prevention Curriculum (UPC). These comprehensive curricula have motivated faculty from universities to incorporate the curricula in their coursework.

### Adopting UTC AND UPC for University Settings

In April 2016, INL joined with the Colombo Plan and the Organization of American States (OAS) to convene a panel of 20 university representatives from 12 countries in Honolulu, Hawaii to discuss how to best adopt the UTC and UPC for university

settings. The conversation was far reaching and university leaders, enthusiastic about promoting addiction studies programs, sought greater collaboration through this forum. The group founded the International Consortium of Universities for Drug Demand Reduction, or ICUDDR.

## **ICUDDR Goals: Promoting Addiction Studies and Collaboration**

Participants agreed on the following goals and objectives for this consortium:

- I. Promote Education and Training in the Field of Substance Use Prevention and Treatment**
  - a. Support the formation of academic programs at a time when demand is at an all-time high. For example, U.S. medical colleges are in the process of establishing addiction specialties in medicine because of the opioid epidemic, and nearly 1 million existing American physicians and other medical or clinical professionals could benefit from continuing education to prevent and treat substance use disorders.
  - b. Better integrate educational programs with practice by developing a network of treatment and prevention organizations that can engage students in field placement settings.
  - c. Support an international network for exchange programs for students (e.g., ERASMUS), teachers, and trainers (e.g., SOCRATES), and organize joint working groups for the development of scientific projects.
- II. Advance Applied Addictions-Related Treatment and Prevention Research**
  - a. Support research guiding the adoption and adaptation of the Universal Treatment Curriculum (UTC), the Universal Prevention Curriculum (UPC), and their specialized series, in whole or in part, in order to support new and existing academic programs. (Materials are provided free of charge by the establishing Education Provider (EP) agreements with coordinating centers or international organizations.)
  - b. Contribute to translational science through the conduct of evaluations of the dissemination of the UTC and UPC within academic settings and beyond (e.g., governmental and non-governmental agencies, employers of health professionals). As a function of EP agreements, collect data-rich trainee/student information that can be examined through this university consortium.
- III. Credentialing of Professionals in the Workforce**
  - a. Offer the optional examination and credentialing program for professionals in the substance use treatment and prevention fields through the International Center for Credentialing and Education of Addiction Professionals (ICCE) of the Colombo Plan. EP agreements ensure recognition of students' credit hours of education
- d. Develop relationships with international bodies in the field to serve as a resource for supporting career development programs (e.g., early career platforms for young professionals).

and clinical hours of experience for the purpose of qualifying for the exam.

#### **IV. Support University Networking and Coordination Worldwide**

- a. Develop and support community-university partnerships and networks for the purpose of strengthening national labor markets for treatment and prevention professionals, as well as advocating for the recognition and promotion of careers in addiction science within economic and political points of influence. The partnerships could develop consensus regarding how to optimally develop career tracks for practitioners. The networks also could facilitate opportunities for employers and professionals to connect via vacancy announcements in a shared portal.
- b. Facilitate the exchange of information among participating countries, including the exchange of students and/or faculty across countries, where students can earn credits or undertake fellowships, and faculty can take sabbaticals.

#### **V. Facilitate Enhanced Multidisciplinary Integration in the Applied Addiction Fields**

- a. Connect ICUDDR with professional organizations and societies comprised of addiction practitioners and researchers from multiple disciplines, in particular the International Society of Substance Use Professionals (ISSUP) and International Society of Addiction Journal Editors (ISAJE). ISSUP offers forums for dialogue between the areas of academia and clinical practice.

- b. Capitalize on the growing awareness that new and enhanced public and private prevention and treatment systems and services require a workforce educated and trained in the delivery of quality prevention and treatment services, programs and practices.

### **An Invitation to Universities to Join ICUDDR**

Universities from around the world are invited to join ICUDDR in this endeavor. The second meeting of this consortium and associated networks will be hosted by Charles University in Prague, Czech Republic, June 20-21, 2017. All universities are welcome to join the consortium and access the training materials, at no cost. At this second meeting, ICUDDR will work to formalize a collaborative partnership. This will entail efforts to better define its structure and targeted membership, as well as the design for a work plan with concrete activities for the coming years.

INL looks forward to supporting this initiative as an important component in building a global drug demand reduction community of practice that creates and supports a partnership of researchers and practitioners in the addiction fields.



## INTEGRATING PUBLIC HEALTH AND LAW ENFORCEMENT:

### DETECTION OF TOXIC ADULTERANTS IN DRUGS OF ABUSE AND DEVELOPMENT OF TECHNOLOGY TO ASSIST RELATED PUBLIC HEALTH RESPONSES



### Thom Browne

Thom Browne is an internationally recognized expert in the field of drug demand reduction. He is currently President and CEO of Rubicon Global Enterprises which provides global technical assistance on drug prevention, treatment, recovery, and criminal justice issues. He is also currently serving as the Chief Executive Officer of the Colombo Plan Secretariat. His expertise builds on a foundation of over three decades of experience within the US State Department, where he served as Deputy Director of the Office of Anti-Crime Programs within the Bureau of International Narcotics and Law Enforcement Affairs, as well as within the US Department of Justice, where he served as a Senior Program Analyst within the Drug Enforcement Administration. Mr. Browne was recognized in 2014 by the US Secretary of State as a finalist for the Samuel J. Heyman Service to America Medal career achievement award, the highest possible recognition for excellence and inspiration of public service by any Federal employee.

## Background

It has long been a practice of drug traffickers and dealers to “cut” illicit drugs of abuse (e.g., cocaine, heroin) with diluents and/or adulterants in order to increase profits by diluting the drug with cheaper alternatives.

**Diluents** are basically inert substances added to provide bulk that are relatively cheap and in low doses relatively safe (e.g., sugars such as lactose and mannitol).

**Adulterants** are pharmacologically active ingredients (e.g., lidocaine, phenacetin, levamisole) which not only add bulk and look the same, but can also give similar effects or feelings as the drugs they’re being added to, in addition to increasing the potency of the drug. For instance, synthetic local anesthetics (lidocaine) may be used to create the same oral numbness that pure cocaine causes, so the customer will gain the impression of high-quality cocaine whereas, in actuality, the user is receiving a diluted product. Phenacetin also closely resembles pure cocaine and has a numbing effect similar to cocaine, which disguises that the drug being sold to the user is impure.

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## “Cutting” of Drugs: Nineteenth Century to the Early Twenty-first Century

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In 1854, the Analytical sanitary commission reported that only one of 32 samples of powdered opium contained no additional adulteration; the drug was mostly adulterated with wheat flour. A review of opium use in the nineteenth century found that “foreign substances” were often added to opium post-importation into the United Kingdom. In 1969, analysis of the stages of heroin distribution in New York found that a bag of heroin bought on the street in a small quantity was adulterated approximately 24 times.

Up until the first decade of the twenty-first century, these “cuts or adulterants” to illicit drugs have commonly been fairly innocuous materials like diluents sugars mentioned above. Periodically, health threatening substances such as strychnine (rat poison) and quinine were added to street drugs. It is important to note that cutting of drugs rarely took place in the source country and primarily took place on the streets of the

target/consuming country.

Alarming, in recent years, there has been an upsurge in the use of more pharmacologically active chemicals as adulterants to traditional drugs of abuse, many of these chemicals posing serious public health hazards. At the same time, source countries began to cut drugs with hazardous substances.

Levamisole-tainted cocaine has been detected in the United States and Western Europe, resulting in numerous public health alerts in these affected countries.

In 2009, the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) announced that levamisole had been identified as an adulterant in over 70 percent of the illicit cocaine analyzed by DEA (the source country being Colombia). SAMHSA, in collaboration with Centers for Disease Control (CDC) issued the first in a series of nationwide public health alerts. Following

the SAMHSA/CDC alert, the European Monitoring Center for Drugs and Drug Addiction (EMCDDA) also issued an alert, which claimed that levamisole was found in over 50 percent of cocaine samples tested in the United Kingdom and the Netherlands in 2009. In fact, the Netherlands reported a significant increase in the percentage of adulterants present in imported illicit drugs between 1999 (6.5%) and 2007 (57%). Since the mid-2000s, phenacetin has also appeared as the main adulterant in studies of cocaine hydrochloride powder in the UK, Denmark, and the Netherlands (41%).

In 2009, the Afghanistan CNPA laboratory reported in the UN World Drug report that cutting of heroin was taking place at the source, most notably with phenolphthalein – an acid or base indicator removed from the market because of concerns over its carcinogenicity (i.e., its potential to cause or increase the risk of cancer by altering cellular metabolism).

According to the DEA Special Testing Lab's (STL) July 2014 Cocaine Signature Report, 72% of domestically seized cocaine HCl exhibits (representing 4.8 metric tons) in the United States contained levamisole. That amount has now increased to over 90% in 2016.

It is also important to note that in 2013 the DEA Heroin Signature Program reported that approximately 70 percent of South American heroin exhibits smuggled into the United States contained diltiazem, a pharmaceutical drug commonly used to treat irregular heart rate and high blood pressure.

The Southern Cone region of South America continues to experience an unprecedented outbreak of crack cocaine use, with Brazil representing the epicenter of this epidemic. Paraguay, Uruguay, Chile, and Argentina are also experiencing increased problems

with crack use, with Paraguay and Argentina (like Brazil) reporting usage by children and young adolescents, an ominous trend. Drug traffickers and dealers continue to add toxic cutting agents/adulterants to the crack such as phenacetin, aminopyrine, and levamisole. In addition to rapid addiction from cocaine base/crack, these adulterants can cause additional serious health problems, further challenging over-stretched public healthcare and drug treatment delivery systems in affected countries.

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## **"Cutting" of Drugs: 2010 to Present**

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Since 2010, Brazil has been a focal point for the widespread outbreak of crack cocaine use in the Southern Cone region of South America. Unlike the previous Brazilian outbreak, however, in the mid-1990s when crack was processed from a purer form of cocaine hydrochloride, several versions of crack were processed from raw, unrefined cocaine base and impure coca paste. These crude forms of cocaine base/paste contain many toxic impurities from the cocaine manufacturing process (e.g., kerosene, gasoline, caustic soda, sulfuric acid). In addition, it was suspected that drug traffickers from Bolivia and dealers were also adding toxic cutting agents/adulterants to the crack such as phenacetin and aminopyrine which can cause neurological and other complicated health problems in addition to rapid addiction from cocaine base/crack.

At an OAS CICAD Commission meeting in Suriname in May 2011, Chile, Argentina, and Brazil pointed to the overproduction of cocaine in Bolivia as the reason for inexpensive forms of crack and coca paste (paco) ravishing impoverished communities throughout the Southern Cone.

In order to verify the addition of toxic adulterants to cocaine, the Brazil federal Police analyzed a sample of 642 street cocaine samples seized in five different Brazilian States between 2011 and 2014. They discovered that 53% of the samples were cut with phenacetin (decreases red blood cells; causes renal failure and bladder/kidney cancer).

In March 2012, INL and DEA convened a forum on crack cocaine in Tampa, Florida among regions of the world affected by the new toxic forms of adulterated crack cocaine (the Southern Cone and West Africa). Prior to the symposium, four Southern Cone countries sent samples of crack cocaine to the DEA Special Testing Lab (STL) for analysis. The analysis showed that 73% of the 40 samples sent from Brazil were cut with a combination of phenacetin, aminopyrine, and levamisole. Analysis of Uruguay's nine samples revealed over 50% were cut with combinations of phenacetin, levamisole, and benzocaine. Eighty-five (85) percent of Paraguay's 20 samples were cut with combinations of phenacetin, aminopyrine, levamisole, and benzocaine. Chile's analysis revealed only one of 20 samples (5%) were cut with phenacetin. Subsequent, to the symposium, Argentina sent 15 exhibits to DEA STL for analysis. All 15 exhibits (100%) were found to contain phenacetin.

In 2015, the Brazil Federal Police analyzed 1,144 samples of cocaine from the city of Sao Paulo. Half (50%) of the cocaine hydrochloride samples contained levamisole and 6% contained phenacetin, while 60% of all crack samples contained phenacetin and 25% contained aminopyrine. In the city of Curitiba, Brazil Federal Police analysis revealed that 24% of cocaine hydrochloride in that city contained levamisole, while 87% of crack contained phenacetin and 10% contained aminopyrine.

It is important to note that at the same time the problem with crack cocaine adulterants was breaking in Brazil and the Southern Cone, a Colombian chemist from DNE delivered a presentation on synthetic drugs and adulterants in Colombia at the May 2010 OAS CICAD Commission meeting in Washington, D.C. His presentation revealed that street dealers were producing drugs from a toxic combination of two or more controlled substances and adulterants (e.g., meth, MDMA, cocaine, levamisole; and MDMA, ketamine, levamisole, xylazine).

Finally, a study made by the Social Technical Action (ATS) Corporation in Colombia on over 1,200 samples of street drugs revealed that cocaine was the most adulterated drug on the streets of Bogota, containing levamisole, phenacetin, and local anesthetics. In addition, the study highlighted a lethal combination of drugs called "2-CB" or "pink cocaine", which was composed of ketamine, cocaine, MDMA/ecstasy).

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## The Global Toxic Adulterant Project

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In response to multiple reports from several countries around the globe on the toxic new form of drug preparation involving the cutting/adulteration of drugs with banned pharmaceuticals, veterinary products, and other toxic substances (e.g., industrial chemicals), INL, the DEA Educational Foundation, and the Colombo Plan joined together in January 2016 initiate a project to address this emerging public health problem.

The objectives of the project are to;

1. Improve public health and law enforcement ability to detect toxic adulterants added to drugs of abuse and understand their effects.

2. Determine the chemical composition of drugs of abuse that are producing severe health reactions and life-threatening consequences in selected regions around the globe.
3. Develop an early warning system and public health alerts to identify toxic adulterants, prevent public health crises, and respond immediately to contaminated drugs of abuse.
4. Develop the world's first instant test kits of these toxic adulterants in urine and saliva of drug users to aid public health authorities in the timely detection of emerging health crises and epidemics.
5. Develop a diagnostic check-list for medical practitioners and public health workers to assist in the diagnosing of exposure to multiple toxic adulterants and recommended treatment options for various types of exposure.

Early detection is the key to addressing any public health emergency. An early warning system to identify adulterants and report adverse effects rapidly would enhance understanding of, and public health responses to, illicit drug adulteration. As such, it is imperative that law enforcement authorities from affected countries periodically test drug samples for toxic adulterants, alerting public health authorities when these adulterants and similar toxic substances are detected. However, up until now, such testing could only be conducted by sophisticated labs utilizing expensive "GC-MS" technology that took weeks to several months to produce results. The Global Toxic Adulterant Team has acquired and are researching several state-of-the-art portable technologies for detecting drugs of abuse and toxic adulterants in the field. This technology will save on the time it takes

drug samples to be collected and sent to specialized forensic laboratories for testing.

The project has already purchased a portable drug testing device called the Gemini Analyzer, a 4-pound device that can detect up to 16,000 substances (drugs, adulterants, chemicals, etc.) and has successfully utilized this device in Peru, Ecuador, Argentina, and South Africa. The results from the Gemini Analyzer are available within 1 – 3 minutes. [NOTE: It is important to note that the Gemini can successfully detect substances that compose at least 5 – 7 % of a drug sample. It does not detect trace components, but it is the only instant field drug testing device that can detect toxic adulterants in drugs.]

In order to detect adulterants at the trace level and levels below 5 – 7 %, the project has initiated research on the development of the first portable GC-MS drug testing device; a 32-pound portable machine that can be utilized in the field for instant test results. It is expected to be ready for field testing in June 2017.

When such toxic adulterants are detected in a given country, it is equally important to conduct appropriate toxicological and medical screening of affected drug users to ensure that proper health care services are provided and public health alerts are issued as a preventive measure. However, many health authorities and treatment centers lack the financial resources to conduct requisite tests on all patients/clients entering their programs in areas where these adulterated drugs are prevalent. Such sophisticated and expensive tests include: complete blood counts, CT scan of the kidney, intravenous pyelogram (IVP), toxicology screen, urinalysis, and kidney ultrasound, to name a few.

Inexpensive and rapid assessment test technology is urgently needed to initially

screen potentially affected drug users for further referral to more expensive and sophisticated testing procedures. Whereas instant tests kits are readily available to test biological samples (i.e. urine, saliva) for drugs of abuse (e.g., heroin, cocaine, cannabis, etc.), only one such instant biological test kit exists for the toxic adulterants and cutting agents added to drugs of abuse (e.g., phenacetin). This instant urine test kit for phenacetin was developed by the project and successfully piloted in Brazil. The project expects to have instant urine test kits developed for aminopyrine and levamisole by June 2017, and will develop additional test kits for other toxic adulterants as they are detected in the field.

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## Countries Tested Since Inception of Project

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In the first six months of 2016, the Global Toxic Adulterant Team has been to Argentina, Ecuador, Peru, and South Africa.

**Argentina** was selected for testing as health authorities noted the country is experiencing

serious public health problems caused by different types of cocaine that is believed to be cut with phenacetin. Health authorities report a new form of cocaine called “fly wing.” It is rumored to be composed of high-purity cocaine hydrochloride and phenacetin. The substance is called fly wing because it is small and light and semi-transparent like a fly wing. The pearlescence of the substance is believed to be due to phenacetin. The substance seriously depletes red blood cells and causes neurological damage according to health authorities.

Paco, a cheaper version of crack cocaine (i.e. cocaine base) is popular among street children and populations living in poor neighborhoods. Paco (crack) is also rumored to be cut with phenacetin and causes similar effects to “fly-wing” cocaine. In addition, due to its cheap price (less than a dollar), street children (ages 7 -13) who traditionally use paint thinners and glues now use Argentine-produced paco.

Drug detoxification and treatment centers are increasingly seeing children ages 9 -12 years old being brought to treatment by their mothers in an effort to get the children to



stop their paco use. Girls in a social outreach center are reporting their age of first paco use as 10 years old. A maternity home that treats 13-18-year-old pregnant girls notes that they also started using paco at 10 years old. Paco and paco cut with phenacetin not only affects the pregnant mother, it also seriously affects the unborn fetus.

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## Results of Argentina Testing

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Testing of street-level cocaine samples was conducted in conjunction with Buenos Aires Provincial Police and Argentine Federal Police at a site provided by the Provincial police in La Plata, Argentina. Testing on the Gemini Analyzer confirmed the presence of levamisole in cocaine hydrochloride samples, and the presence of multiple adulterants in samples of coca paste/paco. The paco samples contained combinations of diprona (metamizole), aminopyrine, and phenacetin.

No “fly wing” samples were available for testing. Argentine police noted that fly wing consists of high purity cocaine hydrochloride (94% - 98%) that is washed with a solution of hydrochloric acid gas made from sulfuric acid (battery acid) and common table salt. This solution converts the powder into a translucent substance that literally looks like a fly wing. [NOTE: the project will return to Argentina to test fly wing samples, as hospital emergency rooms have detected high levels of phenacetin in body fluids of fly wing users]

Both Provincial and Federal Police noted they each have databases of 4,000 samples of various drugs analyzed over the last year. The project will review these databases when it returns to Argentina. They also noted that beginning in 2011 – 2012 their labs detected levamisole in high concentrations in cocaine hydrochloride (HCl). During this time period,

cocaine HCl was 80% pure. However, cocaine HCl today is only 50 – 60 percent pure, with 40 to 50 percent of each sample adulterated with levamisole. Paco, on the other hand, is principally cut with phenacetin.

Ecuador was selected for testing because law enforcement and health authorities reported severe health-related problems with a new drug called “H.” It was rumored to be a mixture of methamphetamine that contained 25% heroin, in addition to cement waste, rat poison, and anesthetics for cattle.

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## Results of Ecuador Testing

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Testing of street-level drug samples was conducted in collaboration with Ecuadoran National Police. Four samples of drugs were tested: three purported to be “H” and one of suspected cocaine:

### Exhibit 1

#### Net Amount Submitted: 0.25 grams

The brown powder was found to contain 63.2% heroin hydrochloride as well as a trace amount of cocaine. The following adulterants were also identified: caffeine, diltiazem, and phenacetin.

### Exhibit 2

#### Net Amount Submitted: 1.0 milliliters

The clear liquid was found to contain 38.9% cocaine hydrochloride. The following adulterants were also identified: caffeine, lidocaine, and levamisole.

### Exhibit 3

#### Net Amount Submitted: 0.10 grams

The tan powder was found to contain 35.3% heroin (calculated as the hydrochloride) as well as a trace amount of cocaine. The

following adulterants were also identified: caffeine, diltiazem, and phenacetin.

## Exhibit 4

### Net Amount Submitted: 0.11 grams

The tan powder was found to contain 45.3% heroin (calculated as the hydrochloride) as well as a trace amount of cocaine. The following adulterants were also identified: caffeine and diltiazem.

[NOTE: It is important to note that "H" was confirmed to be heroin (not methamphetamine) principally cut with highly toxic adulterants such as diltiazem and phenacetin. The combination of diltiazem and heroin is considered life-threatening as diltiazem lowers heart rate and when combined with heroin can lead to cardiac arrest]

Peru was selected for preliminary testing as the toxic adulterant team was attending the annual DEA IDEC global law enforcement conference in Lima at the time, in addition to the fact that Peruvian health authorities wanted to confirm the presence of phenacetin in their smoked cocaine. The project conducted a one-day trial collection of street cocaine samples prior to the start of the International Drug Enforcement Conference (IDEC).

## Results of Peru Testing

As the toxic adulterant phenacetin was found in all but one coca paste/base sample tested (i.e., six of seven samples), a more extensive one-week follow-up visit will be scheduled for Peru. The seven samples were collected and analyzed in coordination with NAS-Lima; a local street kids NGO, Instituto Mundo Libre; and the Peruvian National Police. Of

additional concern, phenacetin levels in the six paste/base samples approached 20 percent, representing extremely toxic levels and public health threats.

**South Africa** was selected for testing as the drug situation has reached a crisis stage. Health authorities in Cape Town and other parts of South Africa (Johannesburg, Durban) are overwhelmed with the effects of the drug concoction known as "whoonga" or "nyaope." The drug is smoked, reported to cause violent behavior, and purported to contain cannabis, heroin, strychnine, and anti-retroviral drugs. Testing was conducted in collaboration with the South African National Police (SAPS) in Pretoria/Johannesburg and Cape Town, in addition to the NGO, Ihata Shelter, in Cape Town.

## Results of South Africa Testing

The testing results on the Gemini proved to be the most toxic to date detected in any country. Adulterants considered **neurotoxins** (substances that are poisonous or destructive to nerve tissue/central nervous system that produces behavioral, emotional, or body movement (motor) abnormalities) and **carcinogens** (a substance capable of causing cancer in living tissue) were detected in multiple drug samples.

The project uncovered the production of a new substance (sold as crack cocaine) that contained only two adulterants (i.e., no traditional drugs such as cocaine). The adulterants were benzocaine and phenacetin. These adulterants have serious effects on red blood cells which carry oxygen to the brain, in addition to the ability of benzocaine to cause cardiac arrest when smoked in high doses.





A substance sold in gyms as morphine (pink powder colored pills) was found to contain diethyl methyl phosphonate, a flame retardant that is also used in the production of chemical weapons such as sarin and soman nerve gas.

A sample of nyaope was found to contain heroin, nitroethane (a neurotoxin harmful to the nervous system suspected of causing genetic damage, liver, and kidney injury), and chinomethionate (a fungicide considered both a neurotoxin and carcinogen that causes cancer and damage to body organs through repeated exposure).

A new substance sold as "Swipe" that contained only Maneb, a fungicide that is neurotoxic and linked with Parkinson's Disease.

A sample of methamphetamine was found to contain the herbicide diphenamid, a neurotoxin that causes ataxia (loss of full control of body movement) and posterior paresis (loss of sensation over a region of the body).

A sample of ecstasy was found to contain 2,2-Bis (bromomethyl)-1,3 propanediol, a flame retardant and neurotoxin.

A sample of crack cocaine was found to contain high levels of phenacetin and di(ethylene glycon)dibezoate, an industrial solvent that is a neurotoxic that causes neurologic dysfunction, CNS depression, and liver/kidney damage.

Several heroin samples were found to be highly adulterated with acetaminophen. This combination (known as cheese heroin) caused numerous overdose deaths in Dallas, Texas in 2005 - 2007. The danger of this combination lies in its double depressant effect. The mixture can significantly slow down – and sometimes completely stop – critical body functions, including respiration and heart rate.

Finally, several crack cocaine samples were found to contain high concentrations of phenacetin.

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## Public Health Issues Addressed by the Project

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Supply of crack is so abundant that it now sells for as little as 25 cents to 1 dollar per dosage unit (e.g., a rock-like substance weighing 10 milligrams), resulting in significant addiction among children as young as five to eight years of age. Street kids who traditionally use solvents and glue now find crack to be a cheaper alternative with more pleasurable mind altering effects. Exposure to illicit drugs and toxic chemical impurities during childhood can result in lifelong problems with learning, behavior and development. Toxic chemicals can cause greater harm and at lower doses in the child and adolescent brain than those of adults. Children's metabolisms and developing immune systems mean that their bodies are less able to get rid of contaminants or reduce

the toxicity of selected adulterants and cutting agents to crack cocaine. Adulterants that depress the immune system are an especially ominous threat to these children.

When child and adolescent exposure to toxic adulterants are verified, the current project is designed to pass such information to the INL-funded global child addiction project (which also involves Colombo Plan) that is developing protocols and related training curricula for treating child drug addiction.

Finally, significant information is well known about the effects of individual toxic adulterants such as levamisole or aminopyrine (reduction of white blood cells) and phenacetin (reduction of red blood cells). However, little to no information is available on the combined effects from exposure to multiple adulterants, such as effects on drug users from both red and white blood cell depletion.

### APPENDIX: Primary Adulterants of Concern and Health-related Effects

**Phenacetin** – is an analgesic and fever reducer. It is increasingly being found as the primary adulterant in crack cocaine samples, and more recently cocaine hydrochloride. Phenacetin was introduced in 1887 and was principally used as an analgesic/synthetic fever reducer. It was widely used until the third quarter of the twentieth century as a remedy for fever and pain. The U.S. Food and Drug Administration, however, ordered the withdrawal of drugs containing phenacetin in November 1983, owing to its carcinogenicity and kidney toxicity. Phenacetin reduces bone marrow and also induces hemolytic anemia, a disorder in which red blood cells are destroyed prematurely, affecting oxygen transfer and cognitive impairment. Other countries officially banned phenacetin from

general use after it was linked to bladder cancer, kidney failure, and renal failure. The ban was later revoked, but its legal use is highly restricted because of the danger it poses.

**Levamisole** – is a pharmaceutical veterinary de-wormer. It was once used in North America for rheumatoid arthritis and as an adjuvant therapy in the treatment of colorectal cancer. It is no longer available for human use but is available in the United States and South America for veterinary administration. As a cocaine adulterant, levamisole is dangerous primarily because it suppresses the body's immune system (massive reduction of white blood cells) affecting the body's defense mechanism making it less resistant to infections, a

condition known as agranulocytosis, which has also been found to cause blackening of the skin or dark purple patches on the skin which is caused by lack of white blood cells. It can lead to infections throughout the body, high fever, painful sores, and wounds that don't heal. Levamisole has been detected in over 80% of post mortem exams performed on cocaine overdose deaths in the State of Florida.

**Aminopyrine** – was introduced into medicine in the late nineteenth century as an antipyretic, and subsequently was also widely available as an analgesic and anti-inflammatory agent. However, clinical use of aminopyrine was sharply curtailed in 1938 after its potentially fatal bone marrow toxicity and agranulocytosis (a dramatic decrease in white blood cells, which increases the risk of serious infections). Of special concern is the danger of heating adulterants, as with crack cocaine (which is often cut with aminopyrine) and which can only be smoked. When heated to decomposition, aminopyrine emits toxic fumes of nitrogen oxides.

**Xylazine** - was discovered as an antihypertensive agent in 1962 in Germany. Results from early human clinical studies confirmed that xylazine has several central nervous system depressant effects. It causes a significant reduction in blood pressure and heart rate. Due to hazardous side effects, including hypotension and bradycardia, xylazine was not approved by the Food and Drug Administration (FDA) for human use. Xylazine was approved by the FDA for veterinary use and is now used as an animal tranquilizer.

The most common side effects in humans associated with xylazine administration include bradycardia, respiratory depression, hypotension, and other changes in cardiac output. Chronic use is reported to be

associated with physical deterioration, dependence, abscesses, and skin ulceration, which can be physically debilitating and painful.

**Metamizole or dipyrone** - is an analgesic pain reliever, spasm reliever, and fever reducer similar to paracetamol (acetaminophen) in that it has minimal anti-inflammatory effects and which is most commonly given orally or by injection to prevent and treat pain related to surgery or for the treatment of acute pain. It was first introduced into clinical use in Germany in 1922 and for many years it was available over-the-counter in most countries, until its toxicities became apparent. Although in some countries it is available over-the-counter, its use is usually restricted in developed countries, due to its potential for causing toxic reactions such as blood-related toxicity, including agranulocytosis (depletion of white blood cells), suppression of the immune system, aplastic anemia, hypersensitivity reactions, and toxic epidermal necrolysis.

Metamizole is banned completely in several countries, available by prescription in others (sometimes with strong warnings, sometimes without them), and available over the counter in yet others, based on the judgment of regulators of the risk of drug-induced agranulocytosis and the level of development of the regulatory system. For example, it is not available in the United States, but is recommended and used as a first line treatment for postoperative pain in Germany.

**Diltiazem** – is used to treat high blood pressure and to control angina (chest pain) and is in a class of medications called calcium-channel blockers. It can cause adverse cardiovascular reactions, fainting, vomiting, and nausea. Diltiazem lowers

heart rate and when combined with heroin can lead to cardiac arrest.

**Benzocaine** – is a local anesthetic commonly used as a topical pain reliever. When smoked in high doses benzocaine can cause cardiac arrest. It also causes lungs to fill up with fluid. Regular ingestion can bring about very serious results, including a potentially life-threatening condition called ‘methemoglobinemia,’ wherein the user will have dangerously abnormal levels of hemoglobin in the bloodstream. Hemoglobin is the protein in red blood cells that carries and distributes oxygen to the body. With ‘methemoglobinemia,’ the hemoglobin can carry oxygen but is unable to release it effectively to body tissues (causing bluish coloring of the skin).

**Lidocaine** – is a common local anesthetic. It is used topically to relieve itching, burning, and pain from skin inflammations, injected as a dental anesthetic or as a local anesthetic for minor surgery. It mimics the numbing effect of cocaine, giving the impression of high purity and can cause dizziness, vomiting, tremors, and convulsions. It also increases toxicity of cocaine.

**Acetaminophen (Paracetamol)** – is a metabolite of phenacetin and a common analgesic and fever reducer. It can cause liver damage at higher doses, particularly when combined with alcohol. Combined with drinking excessive amounts of alcohol, users are also at high risk for renal failure. The medical community has issued strict guidelines on the amount of acetaminophen to use in a 24-hour period, with strict warnings not to mix acetaminophen with other drugs and alcohol, otherwise severe damage can occur to the liver and kidneys. When combined with heroin, acetaminophen

has a double depressant effect. The mixture can significantly slow down – and sometimes completely stop – critical body functions, including respiration and heart rate.

**Hydroxyzine** – is used as a sedative to treat anxiety and tension and is also used to treat allergic skin reactions. It can cause difficulty breathing and dizziness.

**Paramethoxyamphetamine (PMA) and Paramethoxymethamphetamine (PMMA)** - are stimulants with hallucinogenic effects similar to MDMA, which is the main ingredient in ecstasy. Most people who take PMA or PMMA think they are taking ecstasy. However, drugs sold as ecstasy may not contain any MDMA. They can be a mix of amphetamines, PMA, PMMA, ketamine, or other substances.

This is potentially harmful as PMA and PMMA have more toxic effects (and are less euphoric) than MDMA. It also takes longer to feel these effects, so people may take another pill in the mistaken belief that the first has not worked, sometimes resulting in overdose.

If a large amount or a strong batch of PMA or PMMA is taken, the following effects may also be experienced: kidney failure, extremely high body temperature, vomiting, convulsions and seizures, coma, and death. PMA and PMMA have been around since the 1970s and have been associated with a number of deaths over the years worldwide including in Australia in 1998 and Germany in 2003. In 2012 and 2013 there was a spike in deaths directly attributable to PMA or PMMA in England and Wales. In April 2016, 5 deaths and 6 overdoses were attributed to PMMA-tainted ecstasy (sold as ‘Superman’) at an electronic music festival in Argentina.

## Protecting the Future:

### Treating Children with Substance Use Disorders through the Child Intervention for Living Drug-Free (CHILD) Curriculum



### Hendree E. Jones, Ph.D.

is a Professor in the Obstetrics and Gynecology Department, School of Medicine, University of North Carolina, Chapel Hill and Executive Director of the Horizons Program. She is an internationally recognized expert in the behavioral and pharmacologic treatments for pregnant women and children in risky life situations.

A growing number of children around the world are the victims of drug-trafficking and drug use within their families, friends and communities. The Child Intervention for Living Drug-Free (CHILD) Curriculum responds to this expanding threat against an innocent population and is an important focus of INL's international drug demand reduction efforts. A range of verifiable toxicological test data have enabled INL to document alarming levels of substance exposure in infants, elementary school age and children up to 12 years old. Previous studies of the effects of substances on children have traditionally focused on in utero drug exposure or on the social impact of family and community substance use. This evidence of continued drug exposure post-delivery and identification of child substance use disorder among the very young is a unique and important contribution to the field of substance use disorder treatment.

More and more young children are now living in drug-life circumstances and are actively engaged in substance-using behavior. Recent data show that incidence and prevalence rates of substance use and substance use disorders among young children are increasing across a range of socio-economic strata. The World Health Organization reports that up to 90 percent of children living in street-life circumstances worldwide use some kind of substance. As summarized below, INL started this work in Afghanistan, further refined it in Brazil, and then expanded it to South Asia including Bangladesh, India and Pakistan as well as Southern Cone countries. For illustrative purposes, only two examples of the documented health crisis are provided below.

## **Documenting the Public Health Crisis of Child Substance Use Disorder**

In 2010, with INL's support, child substance exposure and substance use disorder was documented. Children from newborns through 12 years old were observed to be dependent on opioids like heroin and opium. Many children were found to be prenatally opioid-exposed and then exposed to opioids throughout their childhood with parents giving them opioids to prevent withdrawal, stave off hunger and control their children's behavior. INL and its partners provided the first scientific evidence that children were exposed to extremely high levels of opioids from first-hand (e.g., parents blowing opium smoke in their faces), second-hand (e.g., breathing the air where their parents are smoking opium) and even tertiary level exposure (e.g., touching walls, floors and toys with opioid residue and then placing their hands in their mouths). In some cases

over 40% of all children in a village were found to be opioid-dependent. Further, the Afghanistan National Urban Drug Use Survey (ANUDUS) published in 2012 is the largest laboratory-based substance use study in the world and shows that between 59,100 and 70,500 children in the country are affected by drug use. Over 80 percent of children testing positive for opioids are most likely not active substance users. Most are probably being provided opioids by adults or exposed to second-hand opium/heroin smoke and third-hand residues in the home. Most striking, when the results of the ANUDUS study are extrapolated to the total population of Afghanistan, the number of children affected by adult substance use is nearly 300,000. Toxicological tests performed by INL between 2010 and 2012 from a total of 242 Afghan children in residential substance use disorder treatment, reveal that the concentrations of opium products in children's bodies are striking; in some cases, they are higher than those observed in US adult heroin/opioid users.

In the Southern Cone region of South America, crack cocaine is so abundant that it now sells for as little as one US dollar per dosage unit (e.g., a rock like substance weighing approximately ten milligrams which is smoked). Widely available on the streets, crack is attracting thousands of children, who are turning to the stimulant as an alternative to the glue and solvents that many children living in street-life circumstances have traditionally used. Surges in the use of crack cocaine within Southern Cone countries are resulting in urban "cracolandas" (cracklands) where hundreds of users gather to smoke the drug and where children are frequently used as runners or decoys to avoid law enforcement. Fifty-four treatment providers, representing eight regions within Brazil, were surveyed in 2012 about crack

use by youth in the respective cities in which they work. When asked about the age of crack initiation among males and females in their local “crackland,” the mean age was reported as 9 and 11 years, respectively. In a 2013 survey of 32 youth attending a drug treatment prevention program in Campinas, Brazil, 84 percent reported seeing children 4-8 years old using crack in the city’s open air drug markets; 44 percent reported “friends” using crack; and 47 percent reported a family member using crack. The developing brains and bodies of children are extremely vulnerable to the effects of toxic additives being identified in seizures of crack within the Southern Cone. Toxicological tests conducted in 2012 by the Brazilian Federal Police and the Drug Enforcement Administration (DEA) Special Testing Lab reveal that the current version of crack in the Southern Cone is being produced from raw unrefined cocaine base which often contains impurities and toxic cutting agents. These toxic adulterants include phenacetin, an analgesic banned in many countries due to linkage with bladder cancer/ renal failure, and levamisole, a medication used by veterinarians for expelling worms that depresses immune systems and reduces white blood cells in humans.

## **Treatment Providers are Challenged and Need Tools to Respond**

Treatment providers who work in countries where child substance use disorders are a growing concern are faced with a range of daunting challenges on the social, cultural

and individual levels (see Figure 1). Providers face a range of individual child’s needs that requires responses from multiple agencies which must be coordinated and managed over time. Perhaps most challenging is how to effectively reach out to children whose substance use involvement is occurring against the background of intense socio-political stress, such as in conflict intense areas, where sustained violence and/or terrorism have impacted generations of children.

Thousands of young children in drug-life settings are clearly at high risk for trauma that includes physical, sexual, and emotional abuse as well as neglect. Treatment providers who intervene with such children are routinely faced with unraveling the complex relationship between substance use and trauma. More often than not they are doing so without the benefits of either trauma-specific programming or trauma-informed staff, a challenge made even more daunting since treating the extent and severity of the effects of trauma is a complex, recursive, and dynamic process. Furthermore, treatment providers must not only be capable of addressing trauma in relationship to substance use disorders, but also of understanding how to address it within the broader context of families and communities. Research indicates that to effectively treat the individual child, attention must be given to rehabilitating all relevant individuals from trauma and substance use disorder, as well as bolstering the entire community’s capacity to prevent traumatic experiences and substance use disorder.

## CHALLENGES FACING TREATMENT PROVIDERS

- Providers currently work within treatment systems that are targeted to address the needs of adult or adolescent substance users; age-appropriate services simply do not exist as part of the substance use disorder treatment infrastructure.
- While evidence-based guidance exists on how to address substance exposure in newborns and substance use disorders in adolescents, there is an important guidance gap for the child who has a substance use disorder and who falls in age between infancy and adolescence.
- Even for countries that recognize the urgency of establishing age-specific substance use disorder treatment services for very young to pre-adolescent children, a lack of evidence-based training materials and professional training opportunities has left most treatment providers unprepared to effectively address the unique needs of this highly vulnerable and growing population.
- Treatment providers are increasingly being challenged by the broad array of complex social, cultural, legal, and political settings in which they must reach out to intervene with substance-using children.
- Children must be identified and engaged within social service settings, school classrooms, street shelters, hospital emergency wards, open-air drug markets, child labor markets, opium dens, urban “cracklands,” and a multitude of juvenile court systems which often ignore the basic rights of children or fail to protect them while in custody.
- Treatment outreach requires practitioners to follow-up with children over long periods, even years, and demands interaction with caregivers or other individuals within the community who are extremely fearful and highly resistant to intervention strategies.
- Children have complex treatment presentations --- children with co-occurring psychiatric disorders and/or with multiple physical health complications; legal, and cultural variables involved in child substance use disorder intervention

To address the growing evidence of child substance use disorder and to support treatment providers in meeting the challenges, INL advanced a partnership with leading universities to implement and evaluate global child-substance use disorder prevention and treatment protocols, with a longer range intention of developing multiple child-substance use disorder treatment training teams. As a first step in assembling

such treatment teams, INL engaged an internationally recognized panel of experts to work together over eighteen months to develop a comprehensive evidence-based-training curriculum that would offer practical tools and skills to prepare dedicated providers who are working on the front lines with children around the world.

The INL expert panel was spearheaded by Hendree E. Jones, Ph.D., author of INL’s



global child substance use disorder treatment protocols, and an internationally recognized expert in the development and examination of both behavioral and pharmacologic treatments for pregnant women and their children in risky life situations. Dr. Jones was supported by an international panel of experts from Brazil, Paraguay, Pakistan, India, Afghanistan, Australia, the United States, and the United Nations. The experts represent a wide range of fields and specializations, including substance use prevention and treatment, psychology, education, pharmacology, public health, pediatric medicine, psychiatry, human rights, public policy, social integration, and community development. Experts were selected based on their prestige in the field and their first-hand experience in working directly with children with substance use disorder and their caregivers in a host of socioeconomic conditions and cultural settings.

The expert panel's efforts have culminated in The Child Intervention for Living Drug-Free (CHILD) Curriculum, encompassing six courses, which empowers providers to respond to the needs of children facing drug-life circumstances in varying social, cultural, economic, and political settings. The Curriculum represents the world's first evidenced-based training program for guiding treatment professionals on how to screen, assess and treat substance use disorder in children. The "realities" and underlying assumptions of working with children were integrated throughout the courses as cross-cutting themes and unifying perspectives.

## The Six Courses of the Child Intervention for Living Drug-Free (CHILD) Curriculum

### Course 1:

#### **Interventions for Children with Substance Use Disorders**

This first foundational course addresses the uniqueness of treating children with substance use disorder, beginning with the need for treatment professionals to alter intervention techniques to accommodate the child's level of cognitive and emotional development. It introduces major topics for expansion in later courses, including basic counseling skills, motivational interviewing, treatments for children exposed to trauma, pharmacological options as a part of treatment, and ethical considerations. In addition, Course 1 introduces the components of a unique intervention (*Suitcase For Life*) for working directly with the child which was initially developed by working with children in Afghanistan and then tailored for children in street circumstances in Brazil. This intervention is presented in full detail in Course 6.

### Course 2:

#### **Treating Children with Substance Use Disorders: Special Considerations and Counseling with Children**

Course 2 builds on the theoretical foundations set forth in Course 1 and effectively translates theoretical constructs into hands-on practices for use in the field. Child substance use disorder is presented through the lens of health care in which substance use disorder is seen as a complex, but treatable disease in

which co-occurring disorders are common. Treatment providers are then introduced to practical applications of 12 key underlying concepts of effective child substance use disorder treatment. As the first critical step in developing an individualized treatment plan, participants will learn how to perform screening and assessment procedures. Finally, the quality of professionalism – as an acquired skill, a code of conduct, an attitude, and an adherence to ethical standards-- is explored as the basis for all effective counseling relationships. The set of universal treatment tools found in Course 2 can be adapted by treatment practitioners according to their specific settings, substances used by children, minority populations, culture, and other local needs.

**Course 3:**  
**Motivational Interviewing for Children with Substance Use Disorders**

This course builds on the key concepts set forth in Course 2 and explores basic counseling skills in greater detail. Course 3 focuses on the development of the Motivational Interviewing (MI) technique, a skill which can permeate and bolster all of the practitioner's efforts in the field. MI is recognized as a practical technique for developing empathy in the treatment provider; empathy which he or she then extends to the child and caregiver(s) experiencing the impact of drug-life circumstances. The course identifies the MI key concepts and the application of MI techniques, including FRAMES, OARS, EARS and DARN-CATS. It also guides participants towards assessing and determining the level of motivation in the child as well as how to respond to children in different stages of change.

**Course 4:**  
**Attachment Theory and Principles of Treating Children with Substance Use Disorders Affected by Trauma and Distress**

The critical premise of this extensive course is that relationships form a child's world, including relationships with the mother, the family, and the community. It addresses relationships in the context of "Attachment Theory" and "Styles of Attachment" and further explores the complex link between a child's "style of attachment" and substance use. Research indicates that while the link between a child's attachment style and substance use is not causal, it is highly correlated and is thus a critical lens for understanding and treating substance use disorders in children. This course offers specific interventions for working with children whose relationships are disrupted as well as practical tools for providers to examine if their staff is trauma-informed and their program trauma-specific.

**Course 5:**  
**Principles of Pharmacological Treatments for Children with Substance Use Disorders: A Menu of Options**

This course focuses on pharmacology as one part of a holistic and systems approach to managing substance use disorders in children. It is designed for two primary audiences; first, medically-trained individuals who are qualified to prescribe and supervise the administration of pharmacological agents to children, and second, non-medically trained professionals for whom an increased understanding of pharmacological interventions can enhance the capacity

to observe, assess, monitor, and help children with substance use disorders. The course presumes that not all children will need pharmacological treatment, and that pharmacological approaches will be used in tandem with psychosocial interventions, with the latter as the first and preferable option. However, for those children for whom medications can interrupt the disease process and ease symptoms, Course 5 offers practical guidance for identifying and responding to signs and symptoms of intoxication and overdose in children for a range of substance classes. In addition, pharmacological protocols are set forth for managing detoxification and relapse-prevention.

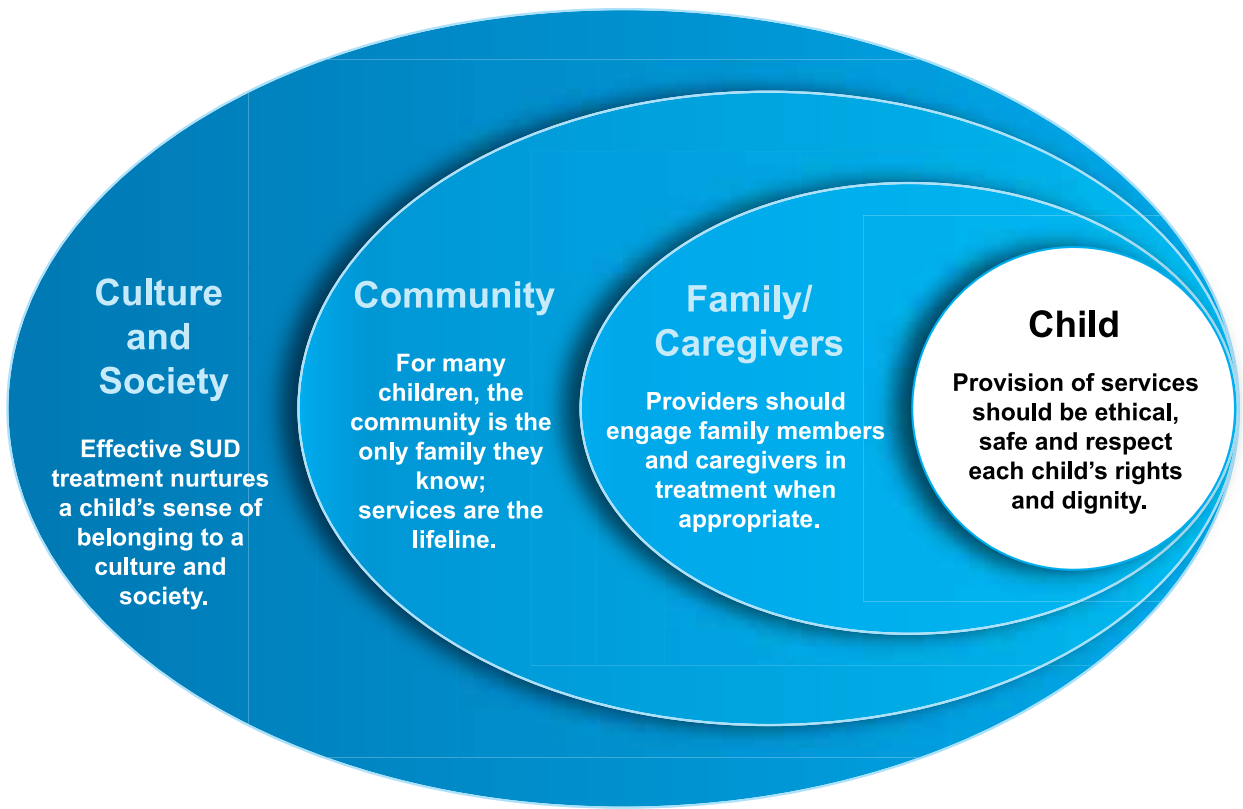
#### **Course 6:**

#### **The “Suitcase For Life” Intervention Tool**

This course offers practitioners a unique intervention tool for working directly with children in the field. The highly mobile and culturally adaptable Suitcase For Life is informed by the broad range of evidenced-based principles and efficacious treatment practices set forth in Courses 1-5. Sophisticated intervention approaches have been adapted for children’s varying cognitive and developmental levels and seamlessly incorporated into games, story-telling, and other activities. The Suitcase For Life intervention tool consists of eight modules which develop

strengths and skills in the child in eight areas of functioning: Artistic Expression; Communicating and Relating; Dealing with Stress; Understanding the Harms of Drugs; Keeping the Body and Mind Healthy; Keeping Yourself and Others Safe; How to Be a Good Citizen; and Dreaming and Planning for the Future. Each module is expected to be tailored to each unique cultural context (e.g., words, pictures and activities need to reflect the local community). The “Suitcase For Life” Intervention tool does not supplant treatment; it is a highly flexible adjunct tool for both prevention and treatment efforts from which practitioners can pick and choose elements according to where the child falls within the at-risk continuum.

All six courses are based on the critical premise that a child must be treated with a rich understanding of the context in which the child lives and experiences the world. This context includes macro-factors such as culture, region, country, community, and socio-economic standing. Micro-factors must also be considered such as family, caregivers, primary social networks, home and other living environments, as well as the child’s “internal factors,” such as how he or she interprets, responds to, and interacts with the outside world.



*The participants, trainers and Colombo Plan support staff at the CHILD Curriculum training held in Campinas, Brazil in December 2016*

The Child Intervention for Living Drug-Free (CHILD) Curriculum is child-focused and considers the child's needs for safety and dignity, first and foremost. In addition, all six courses are written in the context of the many micro- and macro-factors that make up a child's world. Family, community, and broader culture must be integrated into a child's treatment plan; they are vehicles through which effective services can be delivered and through which healing can occur.

The Child Intervention for Living Drug-Free (CHILD) Curriculum represents an important first step in response to child substance use and its attendant suffering in countries around the world. This Curriculum offers treatment providers a tangible evidence-based tool that significantly enhances their capacity to address the needs of substance-using children and their caregivers. It offers highly diverse communities a straight forward

'how-to' method for the development and implementation of effective interventions. Looking ahead, as treatment providers begin to put into place a more skilled and highly trained workforce to respond to substance-using children, additional evidence-based instruments and guidelines for designing, implementing, and evaluating effective interventions will likely be required.



*The participants, trainers and Colombo Plan support staff at the CHILD Curriculum training held in Dhaka, Bangladesh in August 2015*

**PART**

**4**



# APPENDICES

This section provides an overview of the types and mechanisms of action of the main groups of psychoactive substances.

## Opioids

Opioids include powerful drugs derived from the poppy plant that have been used for centuries to relieve pain. They include opium, heroin, morphine, and codeine. In addition, this group includes substances that are also agonists of the opioid receptors in the brain, but that have been produced synthetically, such as methadone, buprenorphine, hydrocodone, oxycodone, hydromorphone, and fentanyl. This section discusses opioids in general, whilst a separate section is devoted solely to heroin that is the most commonly abused and most rapidly acting of the opioids.

The brain itself produces endogenous opioids – endorphins—that have an important role in the natural relief or modulation of pain and are very important for survival. Opioids attach to specific proteins called opioid receptors, which are found on the surface of brain cells, in spinal cord, in gastrointestinal tract and in many other organs. When opioid drugs attach to opioid receptors, they block painful stimuli transmission and pain perception in the brain.

Even centuries after their discovery, opioids are still the most effective pain relievers available to physicians for treating pain. When used as directed by a physician, opioids are safe and generally do not result in a drug use disorder. However, opioids also possess very strong reinforcing properties

and can quickly trigger the disorder when used improperly.

### Route of administration

Oral (tablets, liquid preparations) or injecting

### Medical use

Morphine, codeine, oxycodone and fentanyl are used in the treatment of pain related to illnesses (e.g. cancer) and medical and dental procedures. Codeine is used in cough syrups. Methadone and buprenorphine are used in the long-acting maintenance therapy of opioid dependence.

### Expected effects of non-medical use

Opioids tend to induce euphoria by affecting the brain regions that mediate reward. Users generally report feeling warm, drowsy, and content. Opioids relieve stress and discomfort by creating a relaxed detachment from pain, desires, and activity.

### Acute consequences

Nausea and vomiting; confusion; slowed breathing; constipation; blurred or double vision; pinpoint pupils; dizziness, faintness, floating feeling, light-headedness; uncoordinated muscle movements, rigid muscles; rash, hives, itching; facial flushing; dry mouth; weakness; agitation; headache; appetite loss; memory loss. Opioids also tend to produce drowsiness, reduce heart



rate, cause constipation, cause a widening of blood vessels, and depress coughing and breathing reflexes.

Overdose is a major risk of opioid abuse. Signs and symptoms of opioid overdose include: cold, clammy skin; weak, floppy muscles; fluid in the lungs; greatly lowered blood pressure and heart rate; pinpoint" or dilated pupils; stupor; coma; slow and difficult breathing; bluish-colored fingernails and lips from reduced oxygen intake; muscle cramping. Overdose is a particular risk when opioids are combined or are used with other depressant drugs (including alcohol).

### Chronic consequences

Infection of the heart lining and valves; liver or kidney diseases; neuroendocrine dysfunction affecting gonads and adrenals; pulmonary complications, including various types of pneumonia, resulting from the poor health of the user as well as from the depressing effects on respiration; intestinal complications resulting from chronic constipation; consequences directly associated with injecting, including abscesses and collapsed veins; spontaneous abortion; babies born to women who use opioids may have low birth weight and/or go through withdrawal, with symptoms lasting 5 to 8 weeks (unlike adults, babies can die from opioid withdrawal).

### Withdrawal

Withdrawal symptoms can begin as early as a few hours after the last drug administration. Major withdrawal symptoms peak between 48 and 72 hours after the last dose and typically subside after about a week. Withdrawal from opioids is usually not medically dangerous for adults (except individuals with serious medical conditions), but is very painful and unpleasant. For this reason, medically managed withdrawal

using medications to control symptoms is recommended.

## Heroin

Heroin is diacetylmorphine – a laboratory semi-synthetic derivative of morphine and is the most commonly abused and most rapidly acting of the opioids. In the brain, heroin is converted to morphine and binds rapidly to opioid receptors. Heroin is particularly addictive because it enters the brain so rapidly.

To produce heroin from opium, acetic-anhydride is necessary as a precursor substance. Heroin is typically illegally sold as a white or brownish powder or as a black sticky substance known on the street as "black tar" heroin. Most street heroin is "cut" with other drugs or with substances such as sugar, starch, powdered milk, or quinine. Street heroin can also be cut with strychnine or other poisons.

### Route of administration

Heroin is typically injected, sniffed/snorted, or smoked. A heroin user may inject up to 4 times per day. Intravenous injection provides the greatest intensity and the most rapid onset of euphoria (high) (7 to 8 seconds). Intramuscular injection produces a relatively slow onset of euphoria (5 to 8 minutes). When heroin is sniffed or smoked, peak effects are usually felt within 10 to 15 minutes.

### Medical use

In a small number of countries, heroin is used as maintenance therapy for a minority of people who are dependent on heroin, but do not respond to maintenance therapy with methadone or buprenorphine.

## Expected effects of non-medical use

As with all opioids, heroin induces euphoria by affecting the brain regions that mediate reward and users generally report feeling warm, drowsy, and content.

## Acute consequences

The rush of the drug is usually accompanied by warm flushing of the skin, dry mouth, and a heavy feeling in the extremities; this rush may or may not be accompanied by nausea, vomiting, and severe itching. After the initial effects of heroin have faded, users will be drowsy for several hours. Mental function is clouded by heroin's effect on the central nervous system. It also slows cardiac function and breathing, which presents a life threatening condition (overdose).

## Chronic consequences

Possible long-term effects of heroin and intravenous needle use include physical and psychological dependence, infectious diseases such as HIV/AIDS and Hepatitis B and C, collapsed veins, bacterial infections, abscesses, infection of heart lining and valves, and arthritis.

## Withdrawal

Withdrawal from heroin can be extremely painful, although is not life threatening. Withdrawal effects of heroin appear within a few hours after the last dose, reach peak intensity in 24 to 48 hours, and usually subside within 72 hours. During withdrawal, the person experiences anxiety, restlessness, generalized body aches, insomnia, yawning, tearing from the eyes, runny nose, perspiration, dilation of the pupils, hot flashes, goose bumps, vomiting, dehydration, nausea, diarrhea, elevation of body temperature and respiratory rate, abdominal and other muscle cramps, and loss of body weight.

## Barbiturates and Benzodiazepines

Barbiturates and Benzodiazepines are depressants of the Central Nervous System (CSN) and are sometimes referred to as sedatives, tranquilizers or sedative-hypnotics. They are substances that can slow brain activity and this property makes them useful for treating anxiety and sleep disorders.

## Route of administration

Oral (tablets) or injecting (vials).

## Medical use

Benzodiazepines, such as diazepam and alprazolam, are sometimes prescribed to treat anxiety, acute stress reactions, and panic attacks. The more sedating benzodiazepines, such as triazolam and estazolam are prescribed for short-term treatment of sleep disorders. Benzodiazepines should not be prescribed for long term use because of the risk for developing tolerance and dependence. Non-benzodiazepine sleep medications, such as zolpidem, eszopiclone, and zalepon, have a different chemical structure, but act on some of the same brain receptors as benzodiazepines.

Barbiturates, such as mephobarbital, phenobarbital, and pentobarbital sodium, are used less and less frequently in recent years to reduce anxiety or to help with sleep problems. The primary reason for less frequent use is their high risk of overdose and addiction propensity. However, they are still used in surgical procedures and for seizure disorders.

## Expected effects of non-medical use

Relaxation; decreased anxiety; decreased inhibitions; sense of well-being; mild euphoria.

## Acute consequences

Poor concentration; muscle weakness; impaired coordination; slurred speech; dizziness; slower reflexes; nausea and vomiting; impaired judgment; mental confusion; memory loss; emotional blunting; overdose.

Respiratory depression can occur at high doses or when combined with other depressant drugs, particularly alcohol. Barbiturate overdose is a factor in nearly one-third of all reported drug-related deaths. These include suicides and accidental drug poisonings.

## Chronic consequences

Most CNS depressants have a high propensity toward abuse and eventually development of drug use disorder, including physical and psychological dependence.

Moreover, they may cause or aggravate depression and those who use benzodiazepines chronically may experience paradoxical effects at high doses; these effects include aggressive behavior, agitation, and lack of inhibition instead of the typical sedation and anti-anxiety effects.

CNS depressants are sometimes primary drugs of abuse. However, they are most commonly abused along with other substances to enhance desired effects or to counter undesirable effects. For example Benzodiazepines have effects similar to alcohol, and some people take them when they drink to enhance the effect. This use is highly dangerous because the risk of potentially fatal respiratory depression is greatly increased.

People who abuse stimulant drugs often take a depressant to “come down” from excess stimulation or to sleep following a stimulant

binge. This combination is associated with spasms of coronary heart muscle that can damage the heart.

People who use heroin often use depressants when they can't get heroin to ease withdrawal symptoms.

CNS depressants affect an unborn fetus: babies born to mothers who abuse sedatives during their pregnancy may be physically dependent on the drugs and show withdrawal symptoms shortly after they are born.

## Withdrawal

Depressant withdrawal can be medically dangerous and difficult to manage, in part because the drugs tend to stay in body tissues for long periods. There are relatively short- and long-acting barbiturates and benzodiazepines, and the timing of expected symptoms varies depending on which type has been abused. Withdrawal symptoms may begin within 1 day for short-acting depressants but may be delayed for up to 5 days with longer acting benzodiazepines. Symptoms tend to last for 7 to 20 days for short-acting drugs and up to 28 days for longer acting drugs. Symptoms include: drug craving; headache; tremors and muscle twitches; nausea and vomiting; anxiety; restlessness; yawning; rapid heart rate and increased blood pressure; muscle cramps; sleep problems; hallucinations; multiple seizures, which can be fatal. The worst symptoms occur when the drug is stopped abruptly. Depressants need to be carefully tapered over time (up to a month) to avoid severe problems.

## Cocaine

Cocaine (benzoylmethylecgonine) also known as “coke” is a strong stimulant of the

central nervous system. Cocaine is made from the leaves of the coca plant, which are mostly grown in South America.

## Route of administration

### Orally

Many users rub the powder along the gum line, or onto a cigarette filter which is then smoked, which numbs the gums and teeth – hence the colloquial names of "numbies", "gummers", or "cocoa puffs" for this type of administration. This is mostly done with the small amounts of cocaine remaining on a surface after insufflation (snorting). Another oral method is to wrap up some cocaine in rolling paper and swallow it.

### Insufflation ("snorting")

Nasal "insufflation" (known as "snorting," "sniffing or "blowing") is a common method of using of powdered cocaine. The drug coats and is absorbed through the mucous membranes lining the sinuses. When insufflating cocaine, absorption through the nasal membranes is approximately 30–60%, with higher doses leading to increased absorption efficiency.

### Injection

Drug injection provides the highest blood levels of drug in the shortest amount of time. Subjective effects include a ringing in the ears moments after injection (usually when in excess of 120 milligrams) lasting 2 to 5 minutes. This is often referred to as a "bell ringer".

### Inhalation or smoking

Inhalation or smoking is one of the several means cocaine is administered. Cocaine is smoked by inhaling the vapor by sublimating solid cocaine by heating. Smoking freebase or crack cocaine is most often accomplished

using a pipe made from a small glass tube. Crack smokers also sometimes smoke through a soda can with small holes in the bottom. Crack is smoked by placing it at the end of the pipe; a flame held close to it produces vapor, which is then inhaled by the smoker. The effects, felt almost immediately after smoking, are very intense and do not last long – usually 5 to 15 minutes. When smoked, cocaine is sometimes combined with other drugs, such as cannabis, often rolled into a joint or blunt. Powdered cocaine is also sometimes smoked, though heat destroys much of the chemical.

### Medical use

Topical cocaine can be used as a local "numbing agent" to help with painful procedures in the mouth or nose. Cocaine was historically useful as a topical anesthetic in eye and nasal surgery, although it is now predominantly used for nasal and lacrimal duct surgery. The major disadvantages of this use are cocaine's intense vasoconstrictor activity and potential for cardiovascular toxicity.

### Acute effects

Cocaine sold on the street is commonly mixed with local anesthetics, corn starch, or sugar which can result in additional toxicity.<sup>40</sup> Following repeated doses a person may have decreased ability to feel pleasure and be very physically tired. After a short period of use, there is a high risk of dependence. Its use also increases the risk of stroke, myocardial infarction, lung problems in those who smoke it, blood infections, and sudden cardiac death.<sup>41</sup>

Nosebleeds after cocaine insufflation are due to irritation and damage of mucus membranes by foreign particles and adulterants and not the cocaine itself; as a vasoconstrictor, cocaine acts to reduce

bleeding. A 2001 study reported that the sharing of straws used to "snort" cocaine can spread blood diseases such as Hepatitis C.<sup>42</sup>

As with all injected illicit substances, there is a risk of the user contracting blood-borne infections if sterile injecting equipment is not available or used. Additionally, because cocaine is a vasoconstrictor, and usage often entails multiple injections within several hours or less, subsequent injections are progressively more difficult to administer.

An injected mixture of cocaine and heroin, known as "speedball" is a particularly dangerous combination, as the converse effects of the drugs actually complement each other, but may also mask the symptoms of an overdose.

With excessive or prolonged use, the drug can cause itching, fast heart rate, hallucinations, and paranoid delusions.<sup>43</sup> Overdoses cause hyperthermia and a marked elevation of blood pressure, which can be life-threatening arrhythmias and death.<sup>44</sup> Anxiety, paranoia and restlessness can also occur, especially during the comedown. With excessive dosage, tremors, convulsions and increased body temperature are observed. Severe cardiac adverse events, particularly sudden cardiac death, become a serious risk.

### Chronic consequences

Cocaine is highly addictive due to its effect on the reward pathway in the brain. Chronic cocaine intake causes strong imbalances of transmitter levels in order to compensate extremes. Thus, receptors disappear from the cell surface or reappear on it, resulting more or less in an "off" or "working mode" respectively, or they change their susceptibility for binding partners – mechanisms called downregulation

and upregulation. Possible side effects include insatiable hunger, aches, insomnia/oversleeping, lethargy, and persistent runny nose. Depression with suicidal ideation may develop in heavy users. The lack of normal amounts of serotonin and dopamine in the brain is the cause of the dysphoria and depression felt after the initial high.

Physical side effects from chronic smoking of cocaine include coughing up blood, bronchospasm, itching, fever, diffuse alveolar infiltrates without effusions, chest pain, lung trauma, sore throat, asthma, hoarse voice, shortness of breath, and an aching, flu-like syndrome. Cocaine constricts blood vessels, dilates pupils, and increases body temperature, heart rate, and blood pressure. It can also cause headaches and gastrointestinal complications such as abdominal pain and nausea. Additionally, stimulants like cocaine, methamphetamine, and even caffeine cause dehydration and dry mouth. Chronic intranasal usage can degrade the cartilage separating the nostrils (the septum nasi), leading eventually to its complete disappearance. Cocaine may also cause a wide array of kidney diseases and kidney failure.<sup>45</sup>

Cocaine misuse doubles both the risks of hemorrhagic and ischemic strokes, as well as increases the risk of other infarctions, such as myocardial infarction.<sup>46</sup>

### Withdrawal

Physical withdrawal is not dangerous. Physiological changes caused by cocaine withdrawal include vivid and unpleasant dreams, insomnia or hypersomnia, increased appetite and psychomotor retardation or agitation.<sup>47</sup>

## Amphetamine-Type Stimulants (ATS)

Amphetamine-type stimulants are a group of substances including amphetamine (methylamphetamine), methamphetamine (N-methylamphetamine), as well as a range of other substances such as: methcathinone, fenethylamine, ephedrine, pseudoephedrine, methylphenidate and 3,4-methylenedioxymethamphetamine (the short form of which is MDMA). The one major difference between amphetamine and methamphetamine is that the effects of the latter are much stronger and their onset is much quicker. MDMA (or 'Ecstasy') is an amphetamine-type derivative with hallucinogenic properties.

### Route of administration

ATS type-stimulants are mostly taken orally (tablets) with the exception of methamphetamine that can be inhaled, smoked or injected.

### Medical use

Amphetamines are used to treat Attention Deficit Hyperactivity Disorder (ADHD), narcolepsy (a sleep disorder), and obesity. There are no other recognized medical uses for the other Amphetamine-Type Stimulants.

### Expected effects of non-medical use

As the name implies, the substances in this group stimulate the Central Nervous System (CNS).

Methamphetamine effects usually last 4 to 6 hours. When smoked, its effects may last 8 hours or longer.

MDMA is chemically similar to both the stimulant methamphetamine and the hallucinogen mescaline and the expected effects of non-medical use include:

heightened feelings of emotional warmth and increased empathy for self and others; distortions in time perception; heightened sensation; and visual distortions and hallucinations.

### Acute consequences

The use of both amphetamine and methamphetamine carries a high risk of overdose characterized by seizures, severely elevated body temperature, stroke, and cardiac incidents.

Ecstasy has its own medical risks, including severe dehydration (especially when mixed with alcohol), leading to heatstroke, muscle damage, and kidney failure, as well as seizures. In high doses, MDMA can interfere with the body's ability to regulate temperature. On some unpredictable occasions, it can lead to a sharp increase in body temperature, which can result in liver, kidney, and cardiovascular system failure and death. Increased heart rate and blood pressure can cause serious cardiovascular problems in susceptible individuals.

MDMA can interfere with its own metabolism (breakdown within the body), allowing potentially harmful levels to be reached by repeated MDMA administration in short periods. Research in animals and humans indicates that MDMA can be harmful to the brain. One study in nonhuman primates showed that exposure to MDMA for only 4 days caused damage to serotonin nerve terminals that was evident 6 to 7 years later.

### Chronic consequences

A heavy amphetamine use can result in a stimulant psychosis that may involve a variety of symptoms, such as paranoia and delusions.<sup>48</sup> A Cochrane Collaboration review on treatment for amphetamine, dextroamphetamine, and methamphetamine

psychosis states that about 5–15% of users fail to recover completely.<sup>49</sup>

In addition, because the effects of methamphetamine on the body are so much faster and stronger, they are often accompanied by other severe physical consequences including:

- Acute cardiovascular or cerebrovascular emergencies, such as a heart attack or stroke, which may cause sudden death;
- Severe dental problems, including cracked teeth from extreme jaw clenching when intoxicated and severe tooth decay;
- Severe allergic reactions at injection sites;
- Serious respiratory complications, including pneumonia, haemorrhage, and respiratory failure from smoking;
- Facial and body sores from scratching, sometimes leading to infections;
- Extreme weight loss and malnutrition;
- Heart infections;
- Lung disease;
- Kidney damage;
- Liver damage.

When used by a pregnant woman, ATS increase the risk of placental separation and hemorrhage, premature birth, birth defects (including cardiac defects, cleft palate, and club foot), and fetal brain hemorrhage and stroke.

## Withdrawal

When chronic heavy users abruptly discontinue amphetamine use, many

report a time-limited withdrawal syndrome that occurs within 24 hours of their last dose.<sup>50</sup> This review noted that withdrawal symptoms in chronic, high-dose users are frequent, occurring in up to 87.6% of cases, and persist for three to four weeks with a marked "crash" phase occurring during the first week. The withdrawal symptoms can be very unpleasant but is not inherently dangerous. They can include anxiety, drug craving, depressed mood, fatigue, increased appetite, increased movement or decreased movement, lack of motivation, sleeplessness or sleepiness, and lucid dreams.<sup>51</sup>

## Cannabis

Cannabis sativa is a plant, whose flowers, stems, seeds, and leaves are dried, shredded and mixed to constitute marijuana. The concentrated sticky resin of the plant is called hashish and it can be pressed into cakes or further concentrated into oil. Tetrahydrocannabinol (THC) is the main ingredient in cannabis that causes people who use it to experience a calm euphoria.

### Route of administration

Marijuana or hashish are typically rolled into cigarette papers or cigars, or smoked in a pipe. Hashish oil is often dripped onto dry marijuana to increase potency. The effects of smoking are typically felt within a few minutes and generally wear off within 2 to 3 hours. Cannabis can also be mixed with food or brewed into tea. In this case, effects typically do not appear for 30 to 60 minutes but can last up to 6 hours.

### Medical use

Cannabis contains a great number of

psychoactive substances that could be utilized in medicine. In particular, positive preliminary results have been obtained for the use of THC and cannabidiol in the treatment of nausea due to chemotherapy, of seizures, of pain and in the control of anxiety. These very preliminary results should be confirmed by sound research and consolidated findings. The approval for medical use and registration for marketing should be obtained through the normal process of accreditation of medicines, which includes pre-clinical trials, trials on small human samples, trials related to side effects and long-term side effects, and pre- and post- marketing trials with larger samples. For sure, the approval of the medical use of cannabis derivatives should not be obtained by referendum, acclamation by the media, or court decisions.

Expected effects of non-medical use

These include:

- Physical relaxation, sedation;
- Exaggerated mood;
- Heightened empathy for others;
- Heightened suggestibility;
- Heightened novelty (i.e. objects seem interesting);
- Giddiness;
- Changes in sensory and time perception;
- “Trailing” phenomenon (i.e. seeing afterimages of a moving object); and
- Increased appetite.

## Acute consequences

Cannabis changes brain messages that affect sensory perception and coordination, memory, cognitive ability and emotions. The action of THC on brain and behavior is based on interfering with the system of endogenous cannabinoids. Our brain produces natural cannabinoids such as anandamide. These natural cannabinoids are in charge of very complex functions and interactions, including rewarding and relaxing feelings, learning abilities, anxiety control, inhibitory tone and emotional threshold. THC substitutes itself to the natural cannabinoids and disrupts the system.

Because cannabinoid receptors are in so many parts of the brain and body, the effects of THC are wide-ranging: It can slow down a person’s reaction time (which can impair driving or athletic skills), disrupt the ability to remember things that just happened, cause anxiety, and affect judgment. THC also affects parts of the brain that make a person feel good—this is what gives people the feeling of being “high.”

Other effects include:

- Increased heart rate and blood pressure;
- Bloodshot eyes (resulting from increased blood flow through mucous membranes in the eyes);
- Decreased muscular coordination;
- Poor depth perception and tracking (ability to follow a moving object);
- Lung irritation and coughing;
- Difficulty thinking and solving problems; and
- Panic reactions (pounding heart, extreme anxiety and fear, sweating, dizziness).



## Chronic consequences

Respiratory problems are most severe in those who also smoke cigarettes and include:

- Chronic cough and bronchitis;
- Damaged lung tissue;
- Increased phlegm production and reduced ability to clear it; and
- Frequent respiratory illnesses.

In addition, the immune function can be suppressed, leading to increased susceptibility to viral and bacterial infections and can accelerate progression of HIV/AIDS.

At high doses, acute psychotic reactions can be triggered in susceptible individuals, including chronic schizophrenia in those genetically predisposed. Clinical depression might also be worsened.

Long-term use can lead to decreased cognitive/intellectual functioning; delayed emotional development; and problems with short-term memory and learning that can last for days or weeks after last use. It can also lead to amotivational syndrome, which is characterized by reduced energy and ability to concentrate, reduced desire to work, and reduced interest in social or other activities.

## Withdrawal

In addition to drug craving, people who use cannabis over a long term report: irritability, sleeplessness, and decreased appetite. Symptoms begin within about 1 day after last use, peak at 2 to 3 days, and subside within 1 or 2 weeks. Withdrawal from cannabis is not physically dangerous and does not require treatment.

## Hallucinogens

Hallucinogens are drugs which cause altered states of perception and feeling and which can produce flashbacks. They include natural substances, such as mescaline and psilocybin that come from plants (cactus and mushrooms), and chemically manufactured ones, such as LSD. MDMA, a synthetic substance that has both stimulant and hallucinogenic effects, is normally classified as part of Amphetamine-Type Stimulants and is discussed in the relevant section above.

Almost all hallucinogens contain nitrogen and are classified as alkaloids. Many hallucinogens have chemical structures similar to those of natural neurotransmitters (e.g. they are similar to acetylcholine, serotonin, and catecholamine). Because there are different types of hallucinogens and their effects are so widespread, there is still much that is unknown. Many of the hallucinogens are acting through a massive stimulation of the serotonin system, or modulating the glutamate receptor and the k-opioid receptors systems. Some of the main hallucinogens discuss in this section are:

### Peyote and mescaline

Peyote is a spineless cactus with small grey-green protrusions called buttons that have psychoactive properties. Mescaline is the principal active psychedelic compound in peyote (and in a few other varieties of cactus). Mescaline can also be chemically synthesized in a laboratory, usually a white or brown powder in capsules.

### Psilocybin mushrooms

Psilocybin mushrooms are fungi that contain the psychoactive compounds psilocybin and psilocin.

## D-lysergic acid diethylamide (LSD)

LSD is manufactured from lysergic acid, which is found in ergot, a fungus that grows on rye and other grains. It is manufactured as a liquid and then converted to different forms, such as tablets or capsules of varying sizes, shapes, and colors; liquid on blotter paper; and powder.

## Synthetic cannabinoids

Synthetic cannabinoids are usually added to plant material by soaking or spraying, but in some cases their solid form (crystalline powder) was added to plant material. They are sold as 'Spice Gold', 'Spice Silver', 'Spice Diamond', 'K2', 'Bliss', 'Black Mamba', 'Bombay Blue', 'Blaze', 'Genie', 'Zohai', 'JWH -018, -073, -250', 'Kronic', 'Yucatan Fire', 'Skunk', 'Moon Rocks', 'Mr. Smiley'. They are usually smoked, but oral use has also been reported.

## Route of administration

Hallucinogenic drugs are usually taken orally. Peyote buttons or psilocybin mushrooms can be chewed or brewed into tea.

The psychoactive effects of hallucinogens begin within about 1 hour and last up to 12 hours.

## Medical use

None.

## Expected effects of non-medical use.

Hallucinogenic compounds found in some plants and mushrooms (or their extracts) have been used (mostly during religious rituals) for centuries. Effects vary widely based on dose size, setting, and the expectations and personality of the user. They can include:

- Heightened sensory experiences (e.g., brighter colours, sharper visual definition, increased hearing acuity, more distinguished taste);
- Vivid mental images and distorted vision;
- Altered space and time perception;
- Joy, exhilaration;
- Distorted sense of body (feeling either weighed down or weightless);
- Loss of sense of reality; melding past experiences with present;
- Preoccupation with trivial thoughts, experiences, or objects;
- Intense emotions;
- Altered sense of time and self;
- Synesthesia (i.e. experiences seem to cross over different senses, giving the user the feeling of hearing colours and seeing sounds);
- Dreaminess; and
- Hallucinations.

## Acute consequences

- Intense nausea and vomiting (very common with peyote);
- Appetite suppression;
- Elevated body temperature and sweating;
- Chills and shivering;
- Highly adverse reactions ("bad trip"), including frightening hallucinations, confusion, disorientation, paranoia, agitation, depression, panic, and/or terror;

- Impaired reasoning and loss of judgment, leading to extremely dangerous behaviour;
- Difficulty focusing, maintaining attention, concentrating, and thinking;
- Dilated pupils;
- Increased body temperature;
- Increased heart rate and blood pressure;
- Sweating;
- Sleeplessness;
- Dry mouth;
- Tremors.

### Chronic consequences

In a susceptible individual, the use of hallucinogens may worsen symptoms of existing mental illness, cause earlier onset of psychosis or a prolonged psychotic state similar to that of paranoid schizophrenia.

LSD can cause flashbacks or recurrences of certain aspects of the drug experience; flashbacks occur suddenly, often without warning, and may occur within a few days or more than a year after LSD use; in some individuals, the flashbacks can persist and cause significant distress or impairment in social or occupational functioning, a condition known as hallucinogen-induced persisting perceptual disorder.

### Withdrawal

Unknown.

## Dissociative Anaesthetics

Dissociative anesthetics include phencyclidine (PCP) and ketamine. Both are synthetic. PCP is a white crystalline powder; often processed into a liquid, tablets, or capsules. Ketamine is manufactured as a liquid and typically evaporated into a powder for illicit use.

### Route of administration

Oral, sprinkled on marijuana and smoked, and inhaled intranasal.

### Medical use

PCP and ketamine are used as anesthetics in veterinary medicine. Ketamine is used in human medicine in some cases, particularly for pain medication in low income countries, where morphine is not available. PCP was never approved for human use because of extreme side effects.

### Expected effects of non-medical use

Both are dissociative drugs, meaning that they distort perceptions of sight and sound and produce feelings of detachment (dissociation) from the environment and self, as well as feelings of strength and power, relaxation and mild euphoria.

### Acute consequences

Mood disturbances: anxiety and depression; shallow breathing and increased breathing rate; flushing; sweating; numbness; nausea and vomiting; loss of coordination; decreased pain response; blurred vision; delirium (hallucinations or disorientation); increased heart rate and blood pressure; impaired motor function; dizziness; and anger, aggression, and violence.

## Chronic consequences

Seizures; severe depression with suicidal thoughts and attempts; injuries from accidents and fights. PCP causes symptoms that mimic schizophrenia, such as delusions, hallucinations, paranoia, disordered thinking, and a sensation of distance from one's environment. Because PCP can have depressant effects, interactions with other depressants, such as alcohol and benzodiazepines, can lead to respiratory depression and coma. People who have abused PCP for long periods have reported memory loss, difficulties with speech and thinking, depression, and weight loss; these symptoms can persist up to 1 year after stopping PCP abuse.

## Withdrawal

None.

## Inhalants

Most inhalants are common household products that give off mind-altering chemical fumes when sniffed. These common products include paint thinner, fingernail polish remover, glues, gasoline, cigarette lighter fluid, and nitrous oxide. They also include fluorinated hydrocarbons found in aerosols, such as whipped cream, hair and paint sprays, and computer cleaners. A special class of inhalants that are used primarily as sexual enhancers are volatiles organic nitrites that include cyclohexyl, butyl, and amyl nitrites, and are commonly known as "poppers".

## Route of administration

As the name implies, these substances are inhaled in a variety of ways: sniffing fumes directly from the container; spraying aerosols directly into the nose or mouth; placing an inhalant-soaked rag in the mouth; inhaling

fumes from a balloon or a plastic or paper bag that contains the inhalant.

The intoxication produced by inhalants usually lasts just a few minutes. Users often try to extend the "high" by continuing to inhale repeatedly over several hours.

## Medical use

None, with the exception of amyl nitrite, which is still used in certain diagnostic medical procedures, and nitrous oxide, used as an anesthetic, particularly for dental procedures.

## Expected effect of non-medical use

Euphoria; giddiness; lessened inhibition and anxiety; hallucinations.

## Acute consequences

The chemical structure of the various types of inhalants is diverse, making it difficult to generalize about their effects. It is known, however, that the vaporous fumes can change brain chemistry and may be permanently damaging to the brain and central nervous system.

Inhalant users are also at risk for Sudden Sniffing Death (SSD), which can occur when the inhaled fumes take the place of oxygen in the lungs and central nervous system.

Inhalants also alter the functioning of the nervous system. Some of these effects are transient and disappear after use is discontinued. But inhalant use can also lead to serious neurological problems, some of which are irreversible.

Other side effects include: headache, confusion; nausea and vomiting; drowsiness; slurred speech; lack of coordination;

## Chronic consequences

- Hearing loss (spray paints, glues, de-waxers, dry-cleaning chemicals, correction fluids);
- Peripheral neuropathies or limb spasms (glues, gasoline, whipped cream dispensers, gas cylinders);
- Central nervous system or brain damage (spray paints, glues, de-waxers);
- Bone marrow damage (gasoline);
- Liver and kidney damage (correction fluids, dry-cleaning fluids); and
- Blood oxygen depletion (varnish removers, paint thinners).

Long-term inhalant abuse can also break down myelin, a fatty tissue that surrounds and protects some nerve fibers. Damage to myelin can lead to muscle spasms and tremors or permanent difficulty with basic actions such as walking, bending, and talking.

Sniffing highly concentrated amounts of the chemicals in solvents, butane, propane, or aerosol sprays can directly induce heart failure and death within minutes of a session of repeated inhalation, even in a single session by an otherwise healthy young person. High concentrations of inhalants may also cause death from suffocation by displacing oxygen in the lungs, causing the user to lose consciousness and stop breathing. Deliberately inhaling from a paper or plastic bag or in a closed area greatly increases the chances of suffocation.

## Withdrawal

Nausea, loss of appetite, sweating, tics, problems sleeping, and mood changes.

## Steroids

Anabolic steroids are chemicals that are similar to the male sex hormone testosterone and are used by an increasing number of young people to enhance their muscle size. While anabolic steroids are quite successful at building muscle, they can damage many body organs, including the liver, kidneys, and heart. Some studies suggest that steroids can trigger dependence in users,<sup>52</sup> particularly when taken in the large doses that have been known to be used by many bodybuilders and athletes. They can also have a profound effect on reproductive organs and hormones, with significant risk for sexual dysfunction. People who take anabolic steroids can exhibit violent behavior, impairment of judgment, and even psychotic symptoms.

## New Psychoactive Substances<sup>53</sup>

New Psychoactive Substances (NPS) are in some cases not so new, as they include drugs used for non-medical purposes since the 60s. What characterizes NPS is that they are neither under control per the Conventions nor, in many instances, per the national legislation at the country level. A particular group of NPS are “designer drugs”; these are in fact new and continuously produced in illegal laboratories by criminal organizations.

A large diversity of substances with different pharmaceutical properties exist, however they can be loosely categorized in three main subgroups: stimulants, entactogens and hallucinogens. This categorization illustrates the main expectations of NPS users who are consuming these medications: to provide energy, to facilitate interpersonal relationships or to provoke a distortion of reality.

The main categories of NPS are listed here below:

- piperazines
- phenethylamines
- tryptamines
- piperidines
- cathinones
- naphthoylindoles (synthetic cannabinoids)
- ketamine
- salvia divinorum

From the epidemiological point of view, the prevalence of NPS users is still low at the global level, though growing significantly in the last years. NPS are used life-time in around 8% in the general population of some countries and in less than 1% in others. A significant difference has been noted between Northern European countries and the UK in comparison with South Europe. The problem of NPS has been found extremely problematic in New Zealand and Australia. High prevalence for some NPS has been reported in the United States.

The EMCDDA Report 2015 has indicated a significant increase in the use of cathinone, synthetic cannabinoids and phenethylamines in the last years. On the basis of this evidence policy makers should expect that NPS could become a serious problem in the next future.

In some countries, injecting drug users have been found to replace heroin with mephedrone carrying an equal risk for HIV and hepatitis infections. In other countries, the use of NPS seems to be limited to a subgroup of youth, particularly those who have already experimented with ecstasy.

In Sweden, a study focusing on emergency room interventions for drug intoxication and intensive care unit found a high prevalence of NPS involved with cardiovascular disorders, behavioral problem and acute psychiatric reactions.

As mentioned, most of these substances are not under control. The Commissions of Narcotic Drugs started scheduling under the conventions, the first ten NPS during its 58th Session in 2015. These were mephedrone (methyl-cathinone) and 9 phenethylamines. Other hundreds of NPS used by young people are de facto legal for both the international law and the national legislations. This lack of normative related to the new phenomenon is making the job of law enforcement agencies in counteracting production and trafficking very difficult.

New psychoactive substances are common used as adulterants of controlled drugs, particularly MDMA, amphetamine, ketamine, cocaine or methamphetamine.

After the enforcement of the generic scheduling for NPS at the national level, these substances have been completely replaced by other types of drugs, suggesting the necessity of continuous and dedicated monitoring for the emergence of always new psychoactive substances. The EMCDDA of Lisbon and the project ReDnet classified more than 600 NPS.

The risk of health related to NPS use is becoming a big concern considering the possible cardiovascular disorders, uncontrolled behavior, induced depression and suicide thinking, inability to drive, derealization/depersonalization, serotonin syndrome with hyperthermia and fatal rhabdomyolysis. Among these drugs, Phencyclidine (PCP or angel dust) may provoke dramatic dissociative hallucinogenic

effects. Ketamine, similarly, has been found to induce dizziness, double vision/ blurred vision, euphoria, finding it hard to express emotions, feeling sick and vomiting, nightmares, illusions, hallucinations, changed body image, impaired memory and attention. Piperazines are also able to produce hallucinogenic effects and have been used also as anti-worm medications.

"Party pills" benzylpiperazine and trifluoromethylphenylpiperazine have been found to produce palpitations, agitation, anxiety, confusion, headache, tremor, mydriasis, insomnia, urine retention, vomiting, and seizures. Mephedrone was reported to be responsible for deadly arrhythmias and acute heart failure.

The sources from which NPS can be purchased are:

- Street/disco club/after-hour dealers,
- Herbal medicine shops,
- Prescriptions / diversion,
- Internet and
- Clandestine laboratories

In particular, the market on the web seems to be one of the most active and difficult to counteract. In the recent times, NPS appear to be sold on the Dark-net that is permitting transactions that cannot be traced.

NPS production can be developed in different settings and at different level of organizations. NPS production range from garage labs, with limited impact, to large scale involvement of criminal organizations, with diversion of precursors from the legal market to the illegal one. Unemployed professionals, particularly from east European countries, have been recruited by criminal organizations to produce always new substances.

It is clear in front of this apparently uncontrollable situation, the necessity to establish National Early Warning Systems and appropriate national legislation. The early warning system has to rely on the coordinated work of laboratories, emergency rooms, forensic toxicology labs, law enforcement reports, poison control centers, primary care health professionals, and mental health services.

Psychosocial treatment for substance use disorders is a broad “umbrella” term for a large variety of counseling strategies and techniques for effective treatment of drug use disorders. Being psychosocial by nature, this does not mean, however, that psychosocial treatment has any conflict with pharmacological treatment. Quite on the contrary, it has been documented that each modality of treatment helps the other.<sup>54, 55</sup> Specifically, psychosocial interventions can enhance pharmacological treatment efficacy by increasing medication compliance, retention in treatment, and acquisition of skills that reinforce the effects of medications.<sup>56</sup> Psychosocial treatment serves the even more important long-term goal of recovery maintenance. Getting detoxified from the drug is relatively much easier than staying away from the drug in the long run, as evidenced by the world-wide high rate of relapse in treated patients with drug use disorders. Long-term recovery requires a process of accompanying the patient with psychosocial packages and interventions preventing relapse.

## Common principles

This section discusses certain principles and issues that are common to all psychosocial treatment therapies.

## Developing a therapeutic relationship

The importance of a positive relationship between therapists and patients in treatment has long been emphasized.<sup>57</sup> In a large review of the literature on therapist differences in treatment of drug use disorders, Najavitz and Weis (2010) concluded that “The only consistent finding has been that therapist’s interpersonal functioning is positively associated with greater effectiveness”.<sup>58</sup> Among indicators of interpersonal skills are the ability to form a helping alliance, level of accurate empathy, and a measure of “genuineness”, “concreteness” and “respect”. Unconditional positive regard, accurate empathy, genuineness, and therapist congruence as necessary conditions for positive change. Additionally, there is evidence that patients have poorer treatment outcome when clinicians use a confrontational style.<sup>59, 60</sup> Finally, review found that the formation of positive working alliance in the initial sessions of substance abuse treatment, was associated with increased patient engagement, treatment retention, and treatment improvement. In developing positive collaborative relationship with a patient, the clinician should spend time focusing on key aspects of therapeutic relationships. One aspect includes exploring patient expectations about treatment.<sup>61</sup> It may be the case that patients have undergone previous treatment for their alcohol or drug use. Because of past difficulties in treatment or the experience of relapse, patients may begin a new treatment episode with low expectations. Thus, it is



important for clinicians to inquire about any expectations at the outset of treatment and discuss any factor that the client believes contributed to the lack of success with the previous treatment.<sup>62</sup>

## Enhancing motivation to change

For more than 20 years motivational aspects of substance abuse treatment have been subject to much discussion and research. The development of motivational interviewing (MI) and subsequently motivational enhancement therapy (MET) brought attention to the importance of addressing the patient motivation through behavioral treatment. Today, MI and MET are viewed as an effective treatments as stand alone or in combination with other treatment models.<sup>63</sup> Recent findings also suggest that the simple use of motivational-enhancement techniques during treatment influenced the development of a positive therapeutic alliance. For purposes of this section, it is sufficient to say that motivation is a key part of engaging clients in behavioral therapy.<sup>64</sup>

## Developing and implementing treatment goals

Developing individualized treatment plans has been a hallmark of behavioral treatment. However, historically in treatment of drug use disorders the traditional approach was to prescribed a genetic treatment plan for all.<sup>65</sup> With the current science we know how ineffective confrontational approaches are, and the total abstinence is not necessarily the only acceptable treatment goal.

From the behavioral perspective, it is important that treatment goals are

determined collaboratively. Regardless of the preferences of treatment providers, studies have shown that patients will ultimately decide on treatment goals that suit them, at least initially. Over time, with increased trust and relationship between the treatment provider and the client, the goals are likely to change and become deeper and more meaningful to the client, but this will never happen if a relationship is started the relationship by “prescribing” the goals of treatment based just on our believe that we know what is best for the client. Behavioral treatment plans are increasingly emphasizing the importance of providing multiple options, in order to facilitate long-term treatment gains. Also, allowing patients to self-select their own goal is an important way to increase motivation, commitment, and engagement in treatment. Goal choice has become more popular as studies have suggested that successful outcomes are more likely if the treatment goals are consistent with the patient’s goal preference.<sup>66</sup>

## Addressing concomitant issues

Individuals with drug use disorders come into treatment with a variety of concomitant problems. Stress related to unemployment, financial problems, relationship difficulties, pending legal action, or severe psychiatric symptomatology is often found into those who present for substance abuse treatment. Individuals may feel depressed, guilty, and ashamed as they recount the toll their substance use has taken on themselves and others. In addition, some patients have pre-existing psychiatric conditions that become more prominent as the patients begin abstaining from alcohol and/or drugs.

If at all possible, the initial focus of treatment should be on ensuring physical and emotional safety of the client, for instance

by attending immediately to potential withdrawal symptoms.

As soon as the client is out of the immediate danger, a large variety of problems could be the next target, not necessarily drug use by itself. Some patients come into sessions each week with crisis that is begging for immediate attention. Other times, patients insist on dealing with relationship problems, depression, or anxiety rather than their substance use. For instance, it is understandably difficult for a caring clinician not to become engaged with a patient who begins to talk painfully about the abuse/trauma that he or she has suffered.

## Addressing denial, resistance, and lack of progress

The concept of denial has long been the cornerstone of traditional drug dependency treatment. Denial has been said to be the “cardinal and integral feature of chemical dependency and the fatal aspect of drug dependencies”. Likewise, a substance abuse patient’s lack of motivation or resistance has often been used to explain failure to enter, comply with, and succeed in treatment. Although confrontation of denial has been viewed historically as the first step in resolving substance abuse problems, this method has increasingly fallen out of favor in behavioral treatment approaches.<sup>67</sup>

From a behavioral perspective, “denial” and “resistance” are not patient traits, but rather states in which the patient and therapist disagree on the definition of the problem. In this state, progress in treatment will inevitably stall. Thus rather than defining “resistance” as a patient characteristic, it is more accurate (and helpful) to define it as a problem in the therapeutic process. Adapting a process

perspective of treatment resistance makes it easier for both the therapist and patient to distance themselves from their defensive stances and to reengage in the collaborative process of resolving differences in treatment goals. It is also important for clinicians to keep in mind that a patient’s motivation is likely to fluctuate during the course of treatment.

## Addressing lapses/relapses

Drug use disorders, including dependence are characterized by episodes of relapse, and return of the symptoms (drug use) is not currently viewed as failure of treatment, but rather as a stage of change.

From behavioral perspective, clinicians should address the potential of relapse in the early stages of treatment. The clinician should initially discuss with the patient the distinction between a “lapse” and a “relapse”. The cognitive and affective reactions to the first lapse after a period of abstinence exert a significant influence over whether or not the lapse is followed by a return to the former level of use – a relapse. The clinician should emphasize that a relapse is not an inevitable result of a lapse. Rather, the clinician should advise the patient that lapses, or “slips”, are part of the recovery process for many individuals. If one was to occur, the patient should have an “emergency plan” ready to implement that would keep the lapse from becoming a full-blown relapse. The clinician should convey the patient the message that a lapse can be used as a learning experience by reviewing what happened, identifying where the patient may have been caught off-guard, and re-examining the patient’s decisions to change.

The advantage of this open discussion of lapse and relapse is that it provides an honest appraisal of what the patient might expect. For patients who slip, all is not lost. Rather, they can use the slip as a way of learning more about themselves and their plans to stay sober.

## **Integrating other treatment approaches such as self-help groups and medication**

Research in the area of social support and recovery suggests that individuals have better treatment outcomes when they are involved with social networks supportive of recovery. Thus, support groups can be a valuable adjunct to behavioral oriented substance abuse treatment.

Twelve-step-oriented groups such as AA and NA have been a prominent part of the treatment field for many years.<sup>68</sup> In addition, the availability for alternative self-help groups has broadened in recent years with the emergence of Self-Management and Recovery Training (S.M.A.R.T.) and Rational Recovery groups to offer alternatives that are more theoretically compatible with the behavioral/social learning model.

As mentioned above, medication is always an additional treatment option in the framework of general drug treatment, but also for patients with concurrent psychiatric disorders. With regard to medically-assisted therapies, the reader is referred to Chapter 6. In dually diagnosed patients, severe anxiety, depression, sociopathy, or psychotic symptomology may become a significant part of treatment. The use of psychotropic medications will be appropriate in many cases in order to effectively treat the psychiatric disorder. Because symptoms

resulting from the chronic use of substances often mimic psychiatric symptoms (such as depression, anxiety, and paranoia), it is important to conduct a thorough assessment of the patient's psychiatric history and allow for sufficient drug-free periods to determine whether the psychiatric symptoms resolve. There will be instance in which patients have a pre-existing psychiatric condition that, during recovery from substance use, may increase in severity. Referral to a psychiatrist who has experience treating patients with drug use disorders would be ideal, as long as the psychiatrist is a part of the drug treatment team. Those patients who participate in 12-step recovery meetings may feel uncomfortable in taking medications, as they might believe they are not totally drug-free. However, today, most 12-step groups accept the need for some individuals to be taking medications for psychiatric conditions. There are even specific trainings available that integrate the recovery perspective with medication assistance, such as the Medication Assisted Recovery Services (MARS) training.

## **Evaluating treatment progress, preparing a relapse prevention plan, and terminating treatment**

As treatment progresses, the therapist and patient must continually evaluate the progress of the work, or, if there is a lack of progress, immediately address the issue. By regularly assessing progress, both therapist and patient can see concrete evidence of positive change and the patient's sense of self-efficacy can be strengthened. When progress is not being made, the therapist and patient can identify and discuss obstacles to reaching treatment goals and

positive solutions to overcome them. It may be true that the goals of treatment are initially unrealistic, that the patient has become ambivalent toward them, or that the assessment of the patient's circumstances was not accurate. Additionally, these continued progress evaluations allow the therapist to provide realistic feedback regarding the normative "ups and downs" of treatment progress and combat any helpful expectations the patient may hold.<sup>69</sup>

In situations when treatment plan is not followed and the patient is unable to maintain remission and continue relapsing – this is the sign that treatment intensity should be increase. The worst thing that we can do is to discharge the patient from treatment, thus leaving him or her on their own facing the problem that they came to us for help. Remember – relapses in patients with chronic conditions are common, they are not signs of treatment or personal failure, and we all need to be trained how to approach relapses with the best interest of the patient in mind.

## **Specific behavioural treatment techniques and interventions**

### **Social skills training**

Social skills training addresses not only a patient's substance use, but also other problem areas that might be associated with drug use. The rationale for providing social skills training is the belief that the initiation and maintenance of drug use disorders is often related to problems with coping.<sup>70</sup> That is, addictive behavior is seen as a maladaptive way of coping with stressful life events that can be alleviated in part through training in alternative approaches. This way we can modulate or even extinct the compulsion to use drugs.

In social skills treatment, patients identify situations that might place them at risk of substance use, such as negative emotional states, social pressure, and interpersonal conflicts. Patients are taught to use behavioral strategies to cope with these situations. Common strategies might include examining and challenging thoughts about substance use, developing drug refusal skills, learning problem-solving skills, planning ahead for emergencies or anticipating high risk situation, increasing pleasant activities not associated with substance use, developing a support network and training in assertiveness, relaxation, and effective communication. As with other behavioral treatments, it is important to have the patient practice these skills in vivo with the therapist and with members of their social network in order to enhance self-efficacy.

## **Contingency Management**

Contingency management (CM) treatments are based upon a simple behavioral principle -- if a behavior is reinforced or rewarded, it is more likely to occur in the future.<sup>71</sup> These behavioral principles are used in everyday life. For example, parents use allowances or dessert to encourage their children to make their beds or eat their dinners. Employers use salaries and bonuses to reward good job performance. In the case of substance abuse treatment, drug abstinence, as well as other behaviors consistent with a drug-free lifestyle, can be reinforced using these principles.

Environmental contingencies have an extremely powerful effect on behavior. Drug treatment that uses the operant conditioning paradigm emphasizes reinforcing desirable behavior (no drug use) and review and avoidance of undesirable behavior (drug

use). Many patients enter treatment as part of an implicit contract, such as a spouse who comes to treatment rather than face divorce, or a motorist who enters treatment in order to get his or her driver's license back. However, at the same time it is ironic that in spite of strong contingencies, people often continue to use substances. The effectiveness of contingency management programs will be mixed, depending on the type of contingency being used (e.g., revocation of professional licenses, increase in methadone dosage) and the consistency with which they are applied. Nonetheless, these approaches have begun to garner significant research support, particularly when combined with cognitive-behavioral therapy.

Research has demonstrated the effectiveness of treatment approaches using contingency management (CM) principles, which involve giving patients tangible rewards to reinforce changes toward recovery.<sup>72</sup> Studies conducted in both methadone programs and psychosocial counseling treatment programs demonstrate that incentive-based interventions are highly effective in increasing treatment retention and promoting remission, for instance provision of take-home methadone following several months of positive treatment dynamics as evident by negative urine toxicology.

Voucher-Based Reinforcement (VBR)<sup>73</sup> augments other community-based treatments for adults who primarily use opioids (especially heroin) or stimulants (especially cocaine) or both. In VBR, the patient receives a voucher for every drug-free urine sample provided. The voucher has monetary value that can be exchanged for food items, movie passes, or other goods or services that are consistent with a drug-free lifestyle. The voucher values are low at first, but increase as the number of consecutive drug-free urine samples increases; positive

urine samples reset the value of the vouchers to the initial low value. VBR has been shown to be effective in promoting recovery in patients undergoing methadone detoxification.

Prize Incentives CM<sup>74</sup> applies similar principles as VBR but uses chances to win cash prizes instead of vouchers. Over the course of the program (at least 3 months, one or more times weekly), participants supplying drug-negative urine draw from a bowl for the chance to win a prize worth between \$1 and \$100. Participants may also receive draws for attending counseling sessions and completing weekly goal-related activities. The number of draws starts at one and increases with consecutive negative drug tests and/or counseling sessions attended but resets to one with any drug-positive sample or unexcused absence. The practitioner community has raised concerns that this intervention could promote gambling—as it contains an element of chance—and that pathological gambling and substance use disorders can be comorbid. However, studies examining this concern found that Prize Incentives CM did not promote gambling behavior.

## Motivational Interviewing

Motivational Interviewing (MI) is a research supported intervention and a well-recognized counseling style that has been widely disseminated and implemented in a variety of physical and behavioral health practices.<sup>75, 76</sup> MI is a client-centered method for enhancing intrinsic motivation to change by exploring and resolving ambivalence. This communication style is both a philosophy and a broad collection of tools and techniques to help clients resolve their hesitations about possible behavioral change

and find their own reasons for change. One of the basic MI assumptions is that people change their behavior with varying levels of readiness, and the role of helping professionals is to assist people in making choices and in their understanding of the results of both “change” or “no-change”. This could be accomplished through a non-judgmental interview process that involves strategic use of questions and statements. Motivation in general is very dynamic, fluid, and constantly changing, and the directions of the change are mostly defined by the client–practitioner interaction. It is important to recognize that no patient is completely motivated or unmotivated for change. MI works from the assumption that many clients who seek treatment are ambivalent about change and that motivation will fluctuate during the course of therapy. Therapists therefore should be aware of such variations, working with them rather than against them. Ambivalence (i.e. contradictory thoughts about change – “should I, or shouldn’t I”) is completely normal and is always present to various degrees even with the slightest and safest changes that you can think of. One of the expressions of the ambivalence is the impulse for homeostasis, or a desire to keep things the same.

Change is difficult; we all have mixed feelings and thoughts about it, and this hesitation is not a problem. Instead, this is a critical part of the process and something that gives us a lot of material to work through with the client to assist him/her to resolve. For helping professionals, it is also important to accept that there is a constant “change-no change” struggle in patients, leading to periodic setbacks and even possible returns to old behaviors. In other words, the process of change is not linear and goes through successes and steps back, and this “back

and forth” dynamic is normal as well. A simple illustration of that would be if we ask participants in this training to put their watch on the wrist of the hand opposite from where they usually wear it. Most of you will feel certain discomfort and an almost immediate impulse to put it back (homeostasis).

In health care settings, the range of possible health behavioral changes with patients is considerable – medication compliance, weight control, fluid intake, healthy diet and exercise, smoking, drinking, drug use, job finding, safe housing arrangements, and multiple others. The way practitioners discuss these issues with patients can have a significant influence on their initiation and maintenance of healthy behavioral changes, and MI provides a conceptual framework, style, spirit, and tools for such conversations.

### **Efficacy of Motivational Interviewing**

The efficacy of MI has been evaluated in more than 300 randomized clinical trials, and meta-analytical research in a large variety of settings and in multiple populations.<sup>77</sup> MI has been used and carefully studied not only in the treatment of drug use disorders, but also in the treatment of various other life problems, psychological and physical conditions and shows that approximately 75% of those studied do obtain an effect.<sup>78</sup> One of the important findings is that there are no apparent harmful or adverse effects of MI, which suggests that this is a method with an important potential effect, from which patients very well may benefit. There are variations in MI efficacy depending on the type of behavioral problems, cultural context, staff training, patients’ attributes, and other factors.

MI is more than just a counseling style or a number of techniques. In large measure, MI is a way of interacting, a way of being with

people. A significant correlation between the interpersonal skills of helping practitioners and clients' engagement in the change (treatment) process has been established in many studies.<sup>79</sup> Thinking about and understanding of others are integral and crucial components of effective interviewing, and they are described in the context of the spirit of MI. Motivational Interviewing is a collaborative process between a patient and a professional. This interaction is based on partnership rather than the more traditional roles of the professional being the expert and the patient being the recipient of the expertise—an interaction that is common in most traditional health settings. From the partnership perspective, practitioners avoid argumentation or persuasion with clients, thus the whole interaction is based on exploration of the clients' viewpoints rather than instilling the counselors' ideas about what is the best course of action for the client. Therefore, MI is a truly client-centered approach. Consistent with the collaborative nature of MI, the counselor is trying to evoke the client's ideas about the nature of the problem, possible ways toward more functional behavioral changes, client's hesitations, and ambivalence about making or not making any change. In general, MI is just the opposite of the more traditional counseling style in which the counseling process involves direct confrontation, education, or telling the client what to do from the authoritarian position of being a counselor or expert.

### Principles of Motivational Interviewing

The four basic principles of MI are express empathy, develop discrepancy, roll with resistance, and support self-efficacy.

**EXPRESS EMPATHY.** Empathy is the counselor's ability to understand the sources

of and reasons for client's perspective, emotions, thoughts and actions. Empathy also involves an effort to draw out concerns and reasons for change from the client, instead of relying on the practitioner's agenda as the sole persuasion strategy. The ability to understand the client's feelings and hesitations in general is critically important for any client-centered counseling style. Through reflective listening the counselor tries to understand the client's feelings and ideas without criticizing, judging, or arguing. It is important to emphasize that understanding is not equal to agreement or approval. Ambivalence toward behavioral change is accepted by the counselor as normal human behavior rather than a symptom or sign of any pathology or denial.

**DEVELOP DISCREPANCY.** The easiest way to think about MI is that it assists people to make a decision to change. People change when they decide they are ready to change, or at least understand that this is the right thing to do even though a part of them does not want to do it. Even when patients do not explicitly talk about their hesitations, the internal dialog is still ongoing, at least privately, in their minds, and the MI helps to bring this conversation to the surface, discuss it openly, and help the person move alone toward decision-making. Instead of the professional taking responsibility for the patient's change, telling them how important it is, how they could accomplish it, and why it is important for them to want to do it, it is critical to hear their own rationale, hesitations, and discrepancies.

**ROLL WITH RESISTANCE.** Resistance to change is a normal human behavior. It illuminates patients' desires and fears, and multiple expressions of resistance are valuable sources of information about the dynamics in the client – counselor interaction. Resistance is not a psychological

trait of anyone, neither is it a symptom of any pathology. Resistance is a result of interaction between two or more people, and increased resistance is a good sign to the therapist that he/she need to change the strategy.<sup>80</sup> The therapist's impulse to take the side of the "good side" of the ambivalence is understandable. However, this could be a profound experience to the client to find the therapist listening to their argument for and against behavioral change empathetically and compassionately without pushing them to make the change. That is how the ambivalence gets resolved. If a practitioner uses his/her power as the "expert" to make them change, the patients will immediately favor homeostasis, i.e. no change, and this is likely to become a power struggle rather than effective counseling.

**SUPPORT SELF-EFFICACY.** It has been noted that the client's outcomes are typically better if the client is actively engaged in the treatment process. In order to engage patients and maintain their level of active participation, it is important to support their belief that they are actually capable of making the change, and if they decide to do so, they may have a number of good ideas about how it can be done. Without this belief, a combination of awareness of the problem and inability to find a solution will trigger defensiveness and resistance to change. In fact, at least in drug treatment, this treatment roadblock is well known and often referred to as the "learned hopelessness" phenomenon. From the MI standpoint the belief is that most people do have necessary knowledge and resources to make desired change, and could come up with good solutions if provided the opportunity to verbalize them.

## Cognitive-Behavioural Therapy

Cognitive-Behavioral Therapy (CBT) is a therapeutic intervention based on psychological theories of thinking (cognition) and behavior. The purpose of CBT is to help the client understand the relationships between thoughts, feelings, and behaviors. Cognitive theory assumes that dysfunctional thinking precedes maladaptive behavior and negative emotions; therefore, problematic behaviors and feelings can be changed by changing the way we think. Behavior theory explains the way learning and the environment influences behavior, and assumes that problematic behaviors can be replaced with more adaptive behaviors through learning and changing one's environment. CBT utilizes a combination of cognitive and behavioral techniques to improve a client's dysfunctional thinking patterns and learn new ways of behaving, which will cause the client to experience more positive emotions.

Large-scale meta-analytical and randomized studies of the effectiveness of psychosocial interventions for drug use disorders found that treatments that incorporated both cognitive behavioral therapy and contingency management had a greater treatment impact than both cognitive behavioral therapy alone and relapse prevention.<sup>81</sup> However, relapse prevention, along with other common treatment models utilize many CBT principles and techniques and are therefore often lumped together as psychosocial interventions. When CBT was compared to treatment as usual (12-step) in community populations, it was found to be equally effective in achieving sustained recovery.<sup>82</sup> Thus in the general population of people with drug use disorders, CBT has been found to be highly effective,



especially when applied in combination with contingency management treatments.

High quality implementation, as indicated by lower treatment dropout rates, close monitoring of quality of treatment implementation and ample CBT training have been identified as the strongest characteristics of an effective CBT intervention.

### Components of Cognitive-Behavioural Therapy

CBT has the following two critical components: functional behavioral analysis and skills training. For each instance of drug use the therapist and patient do a functional analysis, that is, they identify the patient's thoughts, feelings, and circumstances before and after the drug use. Early in treatment, the functional analysis plays a critical role in helping the patient and therapist assess the determinants, or high-risk situations, that are likely to lead to drug use and provides insights into some of the reasons the individual may be using drugs (e.g., to cope with interpersonal difficulties, to experience risk or euphoria not otherwise available in the patient's life). Later in treatment, functional analyses of episodes of drug use may identify those situations or states in which the individual still has difficulty coping.

Skills development involves identifying a client's strengths and weaknesses in certain areas, and improving or learning new skills where his/hers are weak. Areas commonly targeted in CBT include coping skills (dealing with difficult situations), decision-making and problem-solving skills (thinking through possible consequences before acting), identifying and managing emotions (anger management, assertiveness training), and relapse prevention (identifying and avoiding triggers, controlling cravings, how to say

"no"). These skills are practiced in individual or group counseling sessions through role-playing and homework assignments that help prepare the client to use a new skill in real-world situations.

CBT can be thought of as a highly individualized training program that helps individuals unlearn old behaviors associated with drug use and learn or relearn healthier skills. By the time the level of substance use is severe enough to warrant treatment, patients are likely to be using drugs as their single means of coping with a wide range of problems. This may occur for several reasons:

- The individual may have never learned effective strategies to cope with the challenges and problems of adult life, as when substance use begins during early adolescence.
- Although the individual may have acquired effective strategies at one time, these skills may have decayed through repeated reliance on substance use as a primary means of coping. These patients have essentially forgotten effective strategies because of chronic involvement in a drug-using lifestyle in which the bulk of their time is spent in acquiring, using, and then recovering from the effects of drugs.
- The individual's ability to use effective coping strategies may be weakened by other problems, such as drug use with concurrent psychiatric disorders.

Because drug users are a heterogeneous group and typically come to treatment with a wide range of problems, skills training in CBT is made as broad as possible. The first few sessions focus on skills related to initial control of drug use (e.g., identification of

high-risk situations, coping with thoughts about drug use). Once these basic skills are mastered, training is broadened to include a range of other problems with which the individual may have difficulty coping (e.g., social isolation, unemployment). In addition, to strengthen and broaden the individual's range of coping styles, skills training focuses on both intrapersonal (e.g., coping with craving) and interpersonal (e.g., refusing offers of drug) skills. Patients are taught these skills as both specific strategies and general strategies that can be applied to a variety of other problems. Thus, CBT is not only geared to helping each patient reduce and eliminate substance use while in treatment, but also to imparting skills that can benefit the patient long after treatment.

## Therapeutic community

The therapeutic community (TC) is a residential model providing treatment 24 hours a day, 7 days a week and where the community is the main pillar of the therapeutic process. The model was developed for use with adults, but has also been modified successfully to treat adolescents with substance use disorders. TCs for the treatment of drug use disorders originated in 1958, a time when other systems of therapy, such as psychiatry and general medicine, were not successful in treating alcohol or substance use disorders.<sup>83</sup> The core goal of TCs has always been to promote a more holistic lifestyle and to identify areas for change such as negative personal behaviors--social, psychological, and emotional--that can lead to substance use. Residents make these changes by learning from fellow residents, staff members, and other figures of authority. In the earliest TCs, punishments, contracts, and extreme peer pressure were commonly used. Partly because of these methods,

TCs had difficulty winning acceptance by professional communities. They are now an accepted modality in the mainstream treatment community. The use of contracts and similar tools has been greatly modified, although peer pressure has remained an integral and important therapeutic technique. Over the last two decades the TC model has been modified to include a variety of additional services not provided in the early years, including various types of medical and mental health services, family therapy and education, and educational and vocational services. In the beginning, nearly all staff members were paraprofessionals recovering from drug use disorders; over the years, increasing numbers and types of professionally trained specialists have been employed by TCs and are now serving in staff or consultant positions.

TC as a long-term residential programs are best suited for individuals who require intensive and continuing treatment to address the whole person, with particular focus on managing complex psychological and social problems associated with drug use disorders, and initiating changes in multiple life domains to facilitate transition to the process of recovery.

The available evidence suggests that longer-term treatment is the most appropriate for people who have:<sup>84</sup>

- Severe drug use problems that pose a significant risk to the health and welfare of the individual and others
- Failed outpatient or short term residential treatment options, and were not able to achieve sustainable abstinence and/or successful resolution of difficulties in psycho-social functioning

- Home or social circumstances that are not supportive of outpatient treatment options or a short-term residential treatment, to the extent that such treatment options are unlikely to succeed
- Significant physical and/or major psychiatric co-morbid disorders (such as severe personality disorder, bipolar disorder or psychotic disorder).

People who meet all four of these criteria should be given the highest priority for admission to longer-term residential treatment, such as TC.

A foundational approach utilized in therapeutic community programs is the social-learning approach which postulates that learning occurs in a social context through observation and the direct instruction. This approach uses strategies such as therapeutic alliance, peer tutoring, goal attainment, and behavior modification delivered by peers. Therapeutic methods used in TCs generally include: individual and group counseling, life skills and parenting skills training, psychoeducation and case management. Perhaps the most widely and frequently used therapeutic component or method used in TC is structured group-therapy approach-often using principles of cognitive behavior therapy and motivational interviewing.

Like all other residential forms of treatment, therapeutic communities focus on the social, psychological and behavioral dimensions that precede or arise from chronic drug use. In addition all residential treatments provide a safe, supportive environment for residents to experience and respond to emotions and gain understanding of issues relating to their drug use. Finally, therapeutic communities contain and utilize most of

the therapeutic methods common to other residential treatment settings. However, the unique and defining characteristic of the therapeutic community is its emphasis on the community created by the staff and residents as both the forum and catalyst for individual behavior change. In therapeutic communities, the social environment, peer support and staff guide residents through the recovery process.<sup>85, 86</sup> In this way therapeutic communities emphasize “community as method” where the community has a role “to teach individuals to utilize the community to change themselves.” The “community” is thought of as both the context and mediator of social and psychological change, where both staff and other residents assist the resident to deal with his or her drug dependence. They utilize the community to encourage therapeutic involvements between residents and staff and among residents (especially senior and junior residents), combined with the experience of living in a caring and challenging community as the principal mediums to encourage change and personal development. For many patients the experience of living in a therapeutic community and a gradual internalization of core TC components such as supportive relationships, open communication, collective learning, culture and language help them to overcome often traumatic and impoverished experience of their childhood.

Each of the therapeutic community programs share many common characteristics such as:

- Use of community as therapeutic method where community is seen as more important than individual and the community is self-regulating and self-supporting
- Staff facilitates rather than directs treatment and residents participate

in program structure. Accountability extends to staff and peers and residents are community members rather than clients or patients;

- Residents providing role modelling and support each other with the “buddy” system, where two residents monitor and help each other;
- Community values include mutual respect with a strong emphasis on self-help and self-responsibility and a holistic view of person;
- Community meetings of various types form the core of program. Structures are clearly defined and peer driven and progress in the program based on peer evaluation and support
- Daily plans, bill of rights, and cardinal rules are integral to treatment. Residents are involved in continuing care support and the reintegration process.

Treatment is multidimensional, involving therapy, education, values and skills development. Analyzing patterns of drug use can be used to understand underlying issues, but are not the primary focus of treatment. Discussions and interactions between residents outside of structured program activities are an important component of therapy. The self-contained nature of therapeutic communities, with residents performing routine chores such as cooking and cleaning, is important in encouraging residents to become self-sufficient and responsible for themselves and others.

## Group therapy<sup>87</sup>

Because our need for human contact is biologically determined, we are, from the start, social creatures. This propensity to

congregate is a powerful therapeutic tool. Formal therapy groups can be a compelling source of persuasion, stabilization, and support. Groups organized around therapeutic goals can enrich members with insight and guidance; and during times of crisis, groups can comfort and guide people who otherwise might be unhappy or lost. In the hands of a skilled, well-trained group leader, the potential curative forces inherent in a group can be harnessed and directed to foster healthy attachments, provide positive peer reinforcement, act as a forum for self-expression, and teach new social skills. In short, group therapy can provide a wide range of therapeutic services, comparable in efficacy to those delivered in individual therapy. In some cases, group therapy can be more beneficial than individual therapy.<sup>88</sup>

Group therapy and drug treatment are natural allies. One reason is that people with drug use disorders often are more likely to remain abstinent and committed to recovery when treatment is provided in groups, apparently because of rewarding and therapeutic forces such as affiliation, confrontation, support, gratification, and identification. This capacity of group therapy to bond patients to treatment is an important asset because the greater the amount, quality, and duration of treatment, the better the client's prognosis.<sup>89</sup>

The effectiveness of group therapy in the treatment of substance abuse also can be attributed to the nature of dependence and several factors associated with it, including (but not limited to) depression, anxiety, isolation, denial, shame, temporary cognitive impairment, and character pathology (personality disorder, structural deficits, or a problematic sense of self).

Some of the numerous advantages to using groups in substance abuse treatment have been well-established through research.<sup>90, 91</sup>

- Groups provide positive peer support and pressure to abstain from substances of abuse. Group therapy, from the very beginning, elicits a commitment by all the group members to attend and to recognize that failure to attend, to be on time, and to treat group time as special disappoints the group and reduces its effectiveness. Therefore, both peer support and peer pressure are strong.
- Groups reduce the sense of isolation that most people who have substance abuse disorders experience. At the same time, groups can enable participants to identify with others who are struggling with the same issues. For some people the more formal and deliberate nature of participation in process group therapy increases their feelings of security and enhances their ability to share openly.
- Groups enable people with drug use disorders to witness the recovery of others. From this inspiration, people gain hope that they, too, can achieve and maintain recovery. Furthermore, an interpersonal process group, which is of long duration, allows a magnified witnessing of both the changes related to recovery as well as group members' intra-and interpersonal changes.
- Groups help members learn to cope with their drug use and other problems by allowing them to see how others deal with similar problems. Groups can accentuate this process and extend it to include changes in how group members relate to parents, spouses, siblings, children, and people in general.
- Groups can provide useful information to clients who are new to recovery. For example, clients can learn how to avoid certain triggers for use, the importance of abstinence as a priority, and how to self-identify as a person recovering from drug use disorder. Group experiences can help deepen these insights. For example, self-identifying as a person recovering from drug use disorder can be a complex process that changes significantly during different stages of treatment and recovery.
- Groups offer family-like experiences. Groups can provide the support and nurturance that may have been lacking in group members' families of origin. The group also gives members the opportunity to practice healthy ways of interacting with their families.
- Groups encourage, coach, support, and reinforce as members undertake difficult or anxiety-provoking tasks. This is particularly important from the perspective of relapse prevention skills building.
- Groups offer members the opportunity to learn or relearn the social skills they need to cope with everyday life instead of resorting to drug abuse. Group members can learn by observing others, being coached by others, and practicing skills in a safe and supportive environment.
- Groups allow a single treatment professional to help a number of clients at the same time. In addition, as a group develops, each group member eventually becomes acculturated to group norms and can act as a quasi-therapist himself, thereby ratifying and extending the treatment influence of the group leader.
- Groups can add needed structure to the lives of people with drug use disorders,

who often enter treatment with their lives in chaos. Therapy groups can establish limitations and consequences, which can help members learn to clarify what is their responsibility and what is not.

- Groups instill hope, a sense that “If he can make it, so can I.” Process groups can expand this hope to dealing with the full range of what people encounter in life, overcome, or cope with.
- Groups often support and provide encouragement to one another outside the group setting. For interpersonal process groups, though, outside contacts may or may not be disallowed, depending on the particular group contract or agreements.

It is important to recognize that group therapy also is not equivalent to 12-Step

program practices. Many therapists who lack full qualifications for group work have adapted practices from AA and other 12-Step programs for use in therapeutic groups. The 12-step approach and group therapy, while have a lot in common, are still two different and very complimentary approaches. In fact, many people achieve recovery from drug use disorders through participation in 12-steps groups or similar programs. Most effective treatment programs make attendance at AA/NA or another 12-Step program a critical part of the treatment process. By the same token, AA/NA and other 12-Step programs are not group therapy. Rather, they are complementary components to the recovery process. Twelve-Step programs can help keep the individual to maintain recovery while group therapy provides opportunities for these individuals to understand and explore the emotional and interpersonal conflicts that can contribute to drug use.

**The table below describes the differences between self-help groups and group therapy.<sup>92</sup>**

Differences between Self-Help Groups and Group Therapy		
VULNERABILITY	SELF-HELP GROUP	INTERPERSONAL PROCESS GROUP
Size	Unlimited (often large)	Small (8–15 members)
Leadership	Peer leader or individual in recovery Leadership is earned over time Implicit hierarchical leadership structure	Trained professional Appointed leader Formal hierarchical leadership structure
Group Government	Self-governing	Leader governed

VULNERABILITY	SELF-HELP GROUP	INTERPERSONAL PROCESS GROUP
Content	Environmental factors, no examination of group interaction  Emphasis on similarities among members  Focus on the here and now	Examination of intragroup behaviour and extra group factors  Emphasis on differences and similarities among members  Focus on the here and now, but also on the historical
Screening Interview	None	Always
Group Processes	Universality, empathy, affective sharing, self-disclosure (public statement of problem), mutual affirmation, catharsis, immediate positive feedback, high degree of persuasiveness	Cohesion, mutual identification, education, catharsis, use of group pressure to encourage recovery and retention of group membership, outside socialization (depending on the group contract or agreement)
Group Goals	Positive goal setting, behaviourally oriented  Focus on the group as a whole and the similarities among members	Ambitious goals: immediate problem plus individual personality issues  Individual as well as group focus
Leader Activity	Educator/ role model, catalyst for learning	Responsible for directing therapeutic group experience
Use of Psychodynamic Techniques	No	Yes
Confidentiality	Anonymity preserved	Anonymity strongly emphasized and includes everything that occurs in the group, not just the identity of group members
Sponsorship Program	Yes (usually same sex)	None
Determination of Time in Group	Members may leave group at their own choosing  Members may avoid self- disclosure or discussion of any subject	Predetermined minimal term of group membership  Avoidance of discussion seen as possible "resistance"

VULNERABILITY	SELF-HELP GROUP	INTERPERSONAL PROCESS GROUP
Time Factors	Unlimited group participation possible over years	Often time-limited group experiences
Frequency of Meetings	Active encouragement of daily participation	Meets less frequently (often once or twice weekly)

## Family therapy

The family has a central role to play in the treatment of any health problem, including treatment of individuals with drug use disorders. Family work has become a strong and continuing theme of many treatment approaches.<sup>93</sup> Family therapy addresses the interdependent nature of family relationships and how these relationships affect the patient and other family members. The focus of family therapy treatment is to intervene in these complex relational patterns and to alter them in ways that bring about productive change for the entire family.

It is important to understand the complex role that families can play in substance abuse treatment. They can be a source of help to the treatment process, but they also must manage the consequences of the client's addictive behavior. Individual family members are concerned about the patient's drug use, but they also have their own goals and issues. Providing services to the whole family can improve treatment effectiveness.

### Family as a system

Family therapy is based on the systems perspective. As such, changes in one part of the system can and do produce changes in other parts of the system, and these changes can contribute to either problems or solutions. Meeting the challenge of working together will call for mutual understanding,

flexibility, and adjustments among the treatment provider, family therapist, and family. This shift will require a stronger focus on the systemic interactions of families. For example, the counselors typically facilitate treatment goals with the client; thus the goals are individualized, focused mainly on the client. This reduces the opportunity to include the family's perspective in goal setting, which could facilitate the healing process for the family as a whole.<sup>94</sup>

While the definition of family may change according to different circumstances, several broad categories encompass most families:

- Traditional families, including couples, single parents, and families including blood relatives, adoptive families, foster relationships, grandparents raising grandchildren, and stepfamilies.
- Extended families, which include grandparents, uncles, aunts, cousins, and other relatives.
- Elected families, which are self-identified and are joined by choice and not by the usual ties of blood, marriage, and law. For many people, the elected family is more important than the biological family. Examples would include emancipated youth who choose to live among peers; godparents and other non-biologically related people who have an emotional tie (i.e., fictive kin).



The idea of family implies an enduring involvement on an emotional level. Family members may disperse around the world, but still be connected emotionally and able to contribute to the dynamics of family functioning. In family therapy, geographically distant family members can play an important role in treatment and need to be brought into the therapeutic process despite geographical distance.

### Goals of Family Therapy

Family therapy has two main goals. First, it seeks to use the family's strengths and resources to help find or develop ways to live without drugs. Second, it ameliorates the impact of drug dependency on both the client and the family. Frequently, the process of reinforcing the family's strengths requires the provision of basic support for the family.

In family therapy, the unit of treatment is the family, and/or the individual within the context of the family system. The person who uses drugs is regarded as a subsystem within the family unit, the person whose symptoms have severe repercussions throughout the family system. The familial relationships within this subsystem are the points of therapeutic interest and intervention. The therapist facilitates discussions and problem-solving sessions, often with the entire family group or subsets thereof, but sometimes with a single participant, who may or may not be the person with the drug use disorder.

A distinction should be made between family therapy and family-involved therapy. Family-involved therapy attempts to educate families about the relationship patterns that typically contribute to the formation and continuation of drug use. It differs from family therapy in that the family is not the primary therapeutic grouping, nor is there intervention in the system of family

relationships. Most drug treatment centers offer such a family educational approach. It typically is limited to psychoeducation to teach the family about drug use, related behaviors, and the behavioral, medical, and psychological consequences of use. Children also need age-appropriate psychoeducation programs prior to being grouped with other family members in either education or therapy.

Most family therapy meetings take place in clinics or private practice settings. Home-based therapy breaks from the traditional clinical setting, reasoning that joining the family where it lives can help overcome shame, stigma, and resistance. It is a return to the practices of social workers who, in the early 20th century, did their work in clients' homes. Meeting the family where it lives also provides valuable information about how the family really functions.

### Therapeutic factors in Family Therapy

Because of the variety of family therapy models, the diverse schools of thought in the field, and the different degrees to which family therapy is implemented, multiple therapeutic factors probably account for the effectiveness of family therapy. Among them might be acceptance from the therapist; improved communication; organizing the family structure; determining accountability; and enhancing impetus for change, which increases the family's motivation to change its patterns of interaction and frees the family to make changes. Family therapy also views substance abuse in its context, not as an isolated problem, and shares some characteristics with 12-Step programs, which evoke solidarity, self-confession, support, self-esteem, awareness, and smooth re-entry into the community.

Still another reason that family therapy is effective in drug treatment is that it provides a neutral forum in which family members

meet to solve problems. Such a rational venue for expression and negotiation often is missing from the family lives of people with a drug problem. In the supportive environment of family therapy, this silence can be broken in ways that feel emotionally safe. As the therapist brokers, mediates, and restructures conflicts among family members, emotionally charged topics are allowed to come into the open. The therapist helps ensure that every family member's voice is heard. In the safe environment of therapy, feelings such as fear and shame can be expressed, identified, and validated. Often family members are surprised to learn that others share their feelings, and new lines of communication open up. Family members gain a broader and more accurate perspective of what they are experiencing, which can be empowering and may provide enough energy to create positive change. Each of these improvements in family life and coping skills is a highly desirable outcome, whether or not the patient's drug problems are immediately resolved. It is clearly a step forward for the family of a person using drugs to become a stable, functional environment within which recovery can be sustained.

To achieve this goal, family therapy facilitates changes in maladaptive interactions within the family system. The therapist looks for unhealthy relational structures (such as parent-child role reversals) and faulty patterns of communication (such as a limited capacity for negotiation). In contrast to the peripheral role that families usually play in other therapeutic approaches, families are deeply involved in whatever changes are effected. In fact, the majority of changes will take place within the family system, subsequently producing change in the individual affected by drug use.

Family therapy is highly applicable across many cultures and religions, and is compatible with their bases of connection and identification, belonging and acceptance. Most cultures value families and view them as important. This pre-eminence suggests how important it

is to include families in treatment. It should be acknowledged, however, that a culture's high regard for families does not always promote improved family functioning. In cultures that revere families, people may conceal drug use within the family because disclosure would lead to stigma and shame.

Additionally, the definition, or lack of definition, of the concept of "rehabilitation" varies greatly across cultural lines. Cultures differ in their views of what people need in order to heal. The identities of individuals who have the moral authority to help (for example, an elder or a minister) can differ from culture to culture. The effectiveness of family therapy is very difficult to study because it is costly, and because of the large variability of definitions of family between different cultures and even within the same cultural environment. While there are limited studies of the effectiveness of family therapy in the treatment of drug use disorders, important trends suggest that family therapy approaches should be considered more frequently.<sup>95, 96</sup>

There are evidence-based models of family-therapy for young people with substance abuse, namely, Brief Strategic Family Therapy (BSFT), Multi Dimension Family Therapy (MDFT<sup>97</sup>), Multi-Systemic Treatment (MST) and others. Those mentioned here all come from a structural family therapy school (based on Salvador Minuchin). While all of these models have been developed in the US, often with Latino populations, there is already first evidence of their effectiveness in other settings, e.g. MDFT has been transported to Europe (INCANT study<sup>98</sup>) and BSFT has been applied in Latin America. As all of these models require a rather highly trained family therapist, it might be a goal for future research to identify the active ingredients in these treatments and see if they could be made applied also be a less specialized group of professionals.

The term “addiction” describes compulsive drug seeking despite negative consequences. However, “addiction” is not considered a specific diagnosis in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) - a diagnostic manual used by clinicians that contain descriptions and symptoms of all mental disorders classified by the American Psychiatric Association.<sup>99</sup> Recently, the term “addiction” was replaced throughout the categories of substances abuse and substance dependence with a single category: substance use disorder (SUD). The symptoms associated with a substance use disorder fall into four major groupings: impaired control, social impairment, risky use, and pharmacological criteria (i.e., tolerance and withdrawal).<sup>100</sup>

### What You Say Matters: Reducing Stigma

#### How is Stigma Defined?

Social stigma may be experienced by an individual in three forms: enacted stigma (overt behaviors), perceived stigma (awareness of stereotype), and internalized stigma (personal value).

- Enacted stigma refers to overt acts of discrimination and humiliation directed at a person because of his or her stigmatized status, which captures the interpersonal aspect of stigma.
- Perceived stigma and internalized stigma captures the intrapersonal aspect of stigma. Perceived stigma

refers to the subjective awareness of social stigma.

- Internalized stigma, also known as self-stigma, describes the process when an individual accepts society’s negative evaluation and incorporates it into personal value and sense of self. In other words, self-stigma is an internalization of this public stigma. An extended definition describes it as “the product of internalization of shame, blame, hopelessness, guilt and fear of discrimination associated with the public’s perception of what is a “unacceptable” or “disgraceful” about an illness or disorder.”

Stigma is formed and reinforced through exposure to the disorder without any understanding of the problem. People often draw incorrect inferences about a disorder based on exposure to the behavior of a single individual when that person is behaving in an atypical or threatening way.

Often, media depictions that are inaccurate or un-informed serve to reinforce stigma. Descriptions and presentations of substance use disorders typically contain either one or two main fallacies, or both, that lead to creation of and/or reinforcement of a negative stereotype regarding the disorder.

#### The Power of Words

The words one uses to describe those with substance use disorders, the factors related to substance use disorders and their treatment matter greatly. Words can erase or underline the stigma. The following material shows the

commonly used stigmatizing terms, followed by the preferable terminology which is reflective of an evidence-based understanding of substance use, including the facts that substance use disorders are treatable, and that many individuals with substance use disorders can and do recover.

### Addict, Abuser, Junkie, Frequent Flyer, Druggie

**Problem with the terms:** These terms are demeaning because they label a person by his/her illness. By making no distinction between the person and the disease, they deny the dignity and humanity of the individual. In substance use disorders, these labels imply a permanency to the condition, leaving no room for a change in status.

**Preferred terminology:** Person in active addiction, person with a substance use disorder, person experiencing an alcohol/drug problem, patient (if referring to an individual receiving treatment services).

### Abuse

**Problem with the term:** Although “abuse” is a clinical diagnosis in the DSMI-5 and ICD10, it is stigmatizing because: (1) it negates the fact that addictive disorders are a medical condition; (2) it blames the illness solely on the individual with the illness, ignoring environmental and genetic factors, as well as the ability of substances to alter brain chemistry; (3) it absolves those selling and promoting addictive substances of any wrong doing; and (4) it feeds into the stigma experienced not only by individuals with addictive disorders, but also family members and the addiction treatment field.

**Preferred terminology:** Misuse, harmful use, inappropriate use, hazardous use, problem use, risky use.

### Clean, Dirty (when referring to drug test results)

**Problem with the terms:** Commonly used to describe drug test results; also used to refer to the anniversary of date of one’s abstinence from substances; these terms are stigmatizing because they associate illness symptoms (i.e. positive drug tests) with filth.

**Preferred terminology:** Negative, positive, substance-free.

### Habit or Drug Habit

**Problem with the terms:** Calling addictive disorders a habit denies the medical nature of the condition and implies that resolution of the problem is simply a matter of willpower in being able to stop the habitual behavior.

**Preferred terminology:** Substance misuse disorder, alcohol and drug disorder, alcohol and drug disease, active addiction.

### Replacement or Substitution Therapy

**Problem with the terms:** This implies that treatment medications such as buprenorphine are equal to street drugs like heroin. The term suggests a lateral move from illegal addiction to legal addiction, and this does not accurately characterize the true nature of the treatment. The essence of addiction is uncontrollable compulsive behavior. The first goal of addiction treatment is to stop this dangerous addictive behavior. With successful buprenorphine therapy, as part of a comprehensive treatment plan, the dangerous addictive behavior is stopped not replaced.

**Preferred terminology:** Treatment, medication-assisted treatment, medication.

## User

**Problem with the term:** The term is stigmatizing because it labels a person by his/her behavior. It is also misleading because the term user has come to refer to one who is engaged in risky misuse of substances, but 'use' alone is not necessarily problematic.

**Preferred terminology:** Referring to use: person who misuses alcohol/drugs. Referring to misuse: person engaged in risky use of substances.

**PART**

**5**



# REFERENCES

1. [https://www.unodc.org/doc/wdr2016/WORLD\\_DRUG\\_REPORT\\_2016\\_web.pdf](https://www.unodc.org/doc/wdr2016/WORLD_DRUG_REPORT_2016_web.pdf)Cannot locate the Footnote in the text
2. [https://www.unodc.org/doc/wdr2016/WORLD\\_DRUG\\_REPORT\\_2016\\_web.pdf](https://www.unodc.org/doc/wdr2016/WORLD_DRUG_REPORT_2016_web.pdf)Cannot locate the Footnote in the text
3. [https://www.unodc.org/doc/wdr2016/WORLD\\_DRUG\\_REPORT\\_2016\\_web.pdf](https://www.unodc.org/doc/wdr2016/WORLD_DRUG_REPORT_2016_web.pdf)
4. [https://www.unodc.org/doc/wdr2016/WORLD\\_DRUG\\_REPORT\\_2016\\_web.pdf](https://www.unodc.org/doc/wdr2016/WORLD_DRUG_REPORT_2016_web.pdf)
5. [https://www.unodc.org/doc/wdr2016/WORLD\\_DRUG\\_REPORT\\_2016\\_web.pdf](https://www.unodc.org/doc/wdr2016/WORLD_DRUG_REPORT_2016_web.pdf)
6. [https://www.unodc.org/doc/wdr2016/WORLD\\_DRUG\\_REPORT\\_2016\\_web.pdf](https://www.unodc.org/doc/wdr2016/WORLD_DRUG_REPORT_2016_web.pdf)
7. [https://www.unodc.org/doc/wdr2016/WORLD\\_DRUG\\_REPORT\\_2016\\_web.pdf](https://www.unodc.org/doc/wdr2016/WORLD_DRUG_REPORT_2016_web.pdf)
8. International Centre for Credentialing and Education of Addiction Professionals (ICCE), Introduction to Prevention Science Curriculum 1, p.124 (Feb. 2015).
9. International Centre for Credentialing and Education of Addiction Professionals (ICCE), Introduction to Prevention Science Curriculum 1, p.124 (Feb. 2015).
10. International Centre for Credentialing and Education of Addiction Professionals (ICCE), Introduction to Prevention Science Curriculum 1, p.127 (Feb. 2015).
11. International Centre for Credentialing and Education of Addiction Professionals (ICCE), Introduction to Prevention Science Curriculum 1, p.127 (Feb. 2015).
12. International Centre for Credentialing and Education of Addiction Professionals (ICCE), Introduction to Prevention Science Curriculum 1, p.131 (Feb. 2015).
13. International Centre for Credentialing and Education of Addiction Professionals (ICCE), Introduction to Prevention Science Curriculum 1, p.188 (Feb. 2015).
14. International Centre for Certification and Education of Addiction Professionals, The Universal Treatment Curriculum for Substance Use Disorders (UTC), Treatment for Substance Use Disorders=The Continuum of Care for Addiction Professionals Curriculum 3, p.213 (2014).
15. International Centre for Certification and Education of Addiction Professionals, The Universal Treatment Curriculum for Substance Use Disorders (UTC), Treatment for Substance Use Disorders=The Continuum of Care for Addiction Professionals Curriculum 3, p.214 (2014).
16. International Centre for Certification and Education of Addiction Professionals, The Universal Treatment Curriculum for Substance Use Disorders (UTC), Treatment for Substance Use Disorders=The Continuum of Care for Addiction Professionals Curriculum 3, p.215 (2014).
17. International Centre for Certification



- and Education of Addiction Professionals, The Universal Treatment Curriculum for Substance Use Disorders (UTC), Treatment for Substance Use Disorders=The Continuum of Care for Addiction Professionals Curriculum 3, p.216 (2014).
18. International Centre for Certification and Education of Addiction Professionals, The Universal Treatment Curriculum for Substance Use Disorders (UTC), Treatment for Substance Use Disorders=The Continuum of Care for Addiction Professionals Curriculum 3, p.218 (2014).
  19. International Centre for Certification and Education of Addiction Professionals, The Universal Treatment Curriculum for Substance Use Disorders (UTC), Treatment for Substance Use Disorders=The Continuum of Care for Addiction Professionals Curriculum 3, p.219 (2014).
  20. [https://www.unodc.org/documents/southeastasiaandpacific//cbtx/cbtx\\_guidance\\_EN.pdf](https://www.unodc.org/documents/southeastasiaandpacific//cbtx/cbtx_guidance_EN.pdf)
  21. [https://www.unodc.org/docs/treatment/CBTS\\_AB\\_24\\_01\\_09\\_accepted.pdf](https://www.unodc.org/docs/treatment/CBTS_AB_24_01_09_accepted.pdf)
  22. UNODC (2014) Guidance for Community-Based Treatment and Care Services for People Affected by Drug Use and Dependence in Southeast Asia (p.7).
  23. International Society of Substance Use Prevention and Treatment Professional, Organizational Partners, p. 67, available at <http://www.issup.net/images/pdf/150706ISSUPProfile.pdf>
  24. Mutter R, Ali MM, Smith K, Strashny A. (2015) Factors associated with substance use treatment completion in residential facilities. Elsevier Ireland Ltd, Drug and Alcohol Dependence, 19-28.
  25. [http://www.who.int/substance\\_abuse/terminology/ICD10ClinicalDiagnosis.pdf](http://www.who.int/substance_abuse/terminology/ICD10ClinicalDiagnosis.pdf)
  26. United Nations Office on Drugs and Crime, World Drug Report 2015 (United Nations publication, Sales No. E.15.XI.6).
  27. Adapted from [http://www..org/documents/southeastasiaandpacific/cbtx/cbtx\\_guidance\\_EN.pdf](http://www..org/documents/southeastasiaandpacific/cbtx/cbtx_guidance_EN.pdf) (p.7)
  28. United Nations Office on Drugs and Crime, World Drug Report 2015 (United Nations publication, Sales No. E.15.XI.6).
  29. D. Ernst, W. R. Miller and S. Rollnick, "Treating substance abuse in primary care: a demonstration project", International Journal of Integrated Care, vol. 7 (2007).
  30. Constance Weisner and others, "Integrating primary medical care with addiction treatment: a randomized controlled trial", Journal of the American Medical Association, vol. 286, No. 14 (2001), pp. 1715-1723.
  31. Fowler et al; Imaging the addicted human brain; Sci Pract Perspect. 2007 Apr; 3(2): 4-16.
  32. Observatorio de la deuda social Argentina; INFORME ESPECIAL SOBRE EL NARCOTRÁFICO Y LAS ADICCIONES EN LA ARGENTINA: 2010-2015. AMPLIACIÓN DEL INFORME N° II DE MARZO 2016.

33. Volkow ND, Morales M; The Brain on Drugs: From Reward to Addiction;Cell. 2015 Aug 13;162(4):712-25
34. Volkow N et al; Neurobiologic Advances from the Brain Disease Model of Addiction; N Engl J Med 2016; 374:363-371
35. NIDA (1969). Lessons from Prevention Research. Retrieved October 31, 2016, from <https://www.drugabuse.gov/publications/drugfacts/lessons-prevention-research>
36. Eisen, M., Zellman, G. L., & Murray, D. M. (2003). Evaluating the Lions-Quest "Skills for Adolescence" drug education program: Second-year behavior outcomes. *Addictive Behaviors*, 28,883–897.
37. Kähnert, H. (2002) Evaluation of the Lions-Quest Program "Erwachsen Werden" (German Version of 'Skills for Adolescence'). University of Bielefeld.
38. Salazar, F., Luna Jiménez, M., Barreto Castro, G. (2015). Implementación y Adaptación del Programa Lions Quest (Leones Educando) en Perú, Paraguay, y Colombia. Presentation at the annual meeting of the Socidrogalcohol, Logroño, Spain.
39. Maalouf, W., Stojanovic M., Kiefer, M., Campello, G., Heikkila H., Ziad, E. (2016, October). Lions Quest Skills for Adolescence in South East Europe: case-control changes across students exposed to this life skills based program. Poster session presented at the annual meeting of the European Society for Prevention Research, Berlin, Germany.
40. Goldstein, RA; DesLauriers, C; Burda, AM (January 2009). "Cocaine: history, social implications, and toxicity—a review.". *Disease-a-month : DM* 55 (1): 6–38.
41. Sordo, L; Indave, BI; Barrio, G; Degenhardt, L; de la Fuente, L; Bravo, MJ (1 September 2014). "Cocaine use and risk of stroke: a systematic review.". *Drug and alcohol dependence* 142: 1–13.
42. Bonkovsky HL, Mehta S (2001). "Hepatitis C: a review and update". *Journal of the American Academy of Dermatology* 44 (2): 159–82.
43. Zhao, Wei (2008). Mechanisms Mediating Sex Differences in the Effects of Cocaine. ProQuest. p. 3.
44. O'Leary, ME; Hancox, JC (May 2010). "Role of voltage-gated sodium, potassium and calcium channels in the development of cocaine-associated cardiac arrhythmias". *British Journal of Clinical Pharmacology* 69 (5): 427–42.
45. Jared A. Jaffe; Kimmel, PL (2006). "Chronic Nephropathies of Cocaine and Heroin Abuse: A Critical Review". *Clinical Journal of the American Society of Nephrology (American Society of Nephrology)* 1 (4): 655–67.
46. Vasica G, Tennant CC (2002). "Cocaine use and cardiovascular complications". *Med. J. Aust.* 177 (5): 260–2.
47. Lowinson, Joyce, H; Ruiz, Pedro; Millman, Robert B. (2004). *Substance abuse: a comprehensive textbook* (4th ed.). Lippincott Williams & Wilkins. p. 204.

48. Shoptaw SJ, Kao U, Ling W (January 2009). Shoptaw SJ, Ali R, ed. "Treatment for amphetamine psychosis". *Cochrane Database Syst. Rev.*
49. Hofmann FG (1983). *A Handbook on Drug and Alcohol Abuse: The Biomedical Aspects* (2nd ed.). New York, USA: Oxford University Press. p. 329.
50. Shoptaw SJ, Kao U, Heinzerling K, Ling W (April 2009). Shoptaw SJ, ed. "Treatment for amphetamine withdrawal". *Cochrane Database Syst. Rev.*
51. "Dexedrine Prescribing Information" (PDF). United States Food and Drug Administration. Amedra Pharmaceuticals LLC. October 2013.
52. Kanayama, G, Brower, K, Wood, R., Hudson, J, Pope, H (2009) Anabolic-Androgenic Steroid Dependence: An emerging Disorder, *Addiction*, Dec: 104 (12): 1966-1978.
53. [https://www.unodc.org/documents/drugs//printmaterials2013/NPS\\_leaflet/WDC13\\_NPS\\_leaflet\\_EN\\_LORES.pdf](https://www.unodc.org/documents/drugs//printmaterials2013/NPS_leaflet/WDC13_NPS_leaflet_EN_LORES.pdf)
54. Mee-Lee D., McLellan A. T., Miller S. D. What works in substance abuse and dependence treatment. In: Duncan B. L., Miller S. D., Wampold B. E., Hubble M. A., editors. *The Heart and Soul of Change*, 2nd edn. Washington, DC: American Psychological Association; 2011, pp. 393–417. *Society for the Study of Addiction*, 110, 401–413
55. Magill M., Ray L. A. Cognitive-behavioural treatment with adult alcohol and illicit drug users: a meta-analysis of randomized controlled trials. *Journal on Studies of Alcohol and Drugs* 2009; 70: 516–27.
56. Tai B., Straus M. M., Liu D. S., Sparenborg S., Jackson T. R., McCarty D. The first decade of the National Drug Abuse Treatment Clinical Trials Network: bridging the gap between research and practice to improve drug abuse treatment. *Journal of Substance Abuse Treatment* 2010; 38: S4–13.
57. Moyers T. B., Manuel J. K., Hendrikson S. M., Houck J. M., Miller W. R. (2009) Therapeutic processes in the Combined Behavioural Intervention. *Alcohol Clinical and Experimental Research*; 33: 752-198.
58. Najavits, L, & Weiss, R, (2010) Variations in therapist effectiveness in the treatment of patients with substance use disorders: An empirical review. *Addiction*, 89 (6): 679-688
59. Baldwin S. A., Wampold B. E., Imel Z. E. (2007) Untangling the alliance–outcome correlation: exploring the relative importance of therapist and patient variability in the alliance. *Journal of Clinical Psychology*; 75: 842–52.
60. White W. L., Miller W. R. (2007) The use of confrontation in addiction treatment: history, science, and time for a change. *Counselor*; 8: 12–30.
61. McLellan A. T., Alterman A. I., Metzger D. S., Grissom G. R., Woody G. E., Luborsky L. et al. (1994) Similarity of outcome predictors across opiate, cocaine and alcohol treatments: role of treatment services. *Journal of Clinical Psychology*; 62: 1141–58.
62. Deitch, D., Koutsenok, I. and Marsolais, K., (2004) Education and Training of Clinical Personnel, In.: Lowinson, J.,

- Ruiz, P., Millman, R., & Langrod, J. (Eds.) Substance Abuse, A Comprehensive Textbook, IVth Edition, Lippincott, Williams & Wilkins, 1286-1300
63. Witkiewitz K., Hartzler B., Donovan D. (2010) Matching motivation enhancement treatment to client motivation: re-examining the Project MATCH motivation matching hypothesis. *Addiction*; 105: 1403–13.
  64. Meier P. S., Barrowclough C., Donmall M. C. (2005) The role of the therapeutic alliance in the treatment of substance misuse: a critical review of the literature. *Addiction*; 100: 304–316.
  65. Horvath A. O., Del Re A. C., Flückinger C., Symonds D. (2011) Alliance in individual psychotherapy. *Psychotherapy*; 48: 9–16.
  66. Longshore D., Teruya C. (2006) Treatment motivation in drug users: a theory-based analysis. *Drug and Alcohol Dependence*; 81: 179–88.
  67. Miller W. R., Rollnick S. (2014) The effectiveness and ineffectiveness of complex behavioural interventions: impact of treatment fidelity. *Contemporary Clinical Trials*; 37: 234–41.
  68. Kadden R. M., Litt M. D. (2011) The role of self-efficacy in the treatment of substance use disorders. *Addictive Behaviour*; 36: 1120–6.
  69. Bohart A. C., Tallman K. (2010) Clients: the neglected common factor in psychotherapy. In: Duncan B. L., Miller S. D., Wampold B. E., Hubble M. A., editors. *The Heart and Soul of Change: Delivering What Works in Therapy*, 2nd edn. Washington, DC: American Psychological Association; pp. 83–112.
  70. Miller, W. R. (1992), The effectiveness of treatment for substance abuse: Reasons for optimism, *Journal of Substance Abuse Treatment*, 9, 93-102.
  71. Litt M. D., Kadden R. M., Petry N. M. (2013) Behavioural treatment for marijuana dependence: randomized trial of contingency management and self-efficacy enhancement. *Addictive Behaviour*; 38: 1764–1775
  72. Miller W. R., Meyers R. J., Tonigan J. S., Grant K. A. (2001) Community reinforcement and traditional approaches: findings of a controlled trial. In: Meyers R. J., Miller W. R., editors. *A Community Reinforcement Approach to Addiction Treatment*. Cambridge, UK: Cambridge University Press, pp. 79–103.
  73. Lussier, JP., Heil, SH, Mongeon, JA., Badger, GJ, Higgins, ST, (2006) A meta-analysis of voucher-based reinforcement therapy for substance use disorders. *Addiction*. 2006 Feb;101(2):192-203.
  74. Petry NM1, Peirce JM, Stitzer ML, Blaine J, Roll JM, Cohen A, Obert J, Killeen T, Saladin ME, Cowell M, Kirby KC, Sterling R, Royer-Malvestuto C, Hamilton J, Booth RE, Macdonald M, Liebert M, Rader L, Burns R, DiMaria J, Copersino M, Stabile PQ, Kolodner K, Li R. Effect of prize-based incentives on outcomes in stimulant abusers in outpatient psychosocial treatment programs: a national drug abuse treatment clinical trials network study. *Archives of General Psychiatry*. 2005 Oct;62(10):1148-56.

75. Hetteema J., Steele J., Miller W. R. (2005) Motivational interviewing. *Annual Review of Clinical Psychology*; 1: 91–111.
76. Koutsenok, I., (2012), Motivational Interviewing, In: McQuiston, H., Sowers, W., Ranz, J., Feldman, J.M. (Eds), *Handbook of Community Psychiatry*, Springer, New York; 201-211.
77. Amrhein P. C., Miller W. R., Yahne C. E., Palmer M., Fulcher L. (2003) Client commitment language during motivational interviewing predicts drug use outcomes. *Journal of Clinical Psychology*; 71: 862–78.
78. Lundahl BW, Kunz C, Brownell C, Tollefson D, Burke BL.(2010) A meta-analysis of motivational interviewing: twenty-five years of empirical studies. *Research on Social Work Practice*; 20(2): 137-160.
79. Moyers T. B., Miller W. R. (2013) Is low therapist empathy toxic? *Psychology of Addictive Behaviour*; 27: 878–84.
80. Longabaugh R., Magill M., Morgenstern J., Huebner R. (2013) Mechanisms of behaviour change in treatment for alcohol and other drug use disorders. In: McCrady B. M., Epstein E. E., (Eds) *Addictions: A Comprehensive Guidebook*, 2nd edn. New York: Oxford Press, pp. 572–96.
81. Magill M., Ray L. A. (2009) Cognitive-behavioural treatment with adult alcohol and illicit drug users: a meta-analysis of randomized controlled trials. *Journal of Studies on Alcohol and Drugs*; 70: 516–527.
82. Tai B., Straus M. M., Liu D. S., Sparenborg S., Jackson T. R., McCarty D. (2010) The first decade of the National Drug Abuse Treatment Clinical Trials Network: bridging the gap between research and practice to improve drug abuse treatment. *Journal of Substance Abuse Treatment*, 38: S4–13.
83. De Leon, G. (1994) The therapeutic community: Toward a general theory and model. In: Tims, F.; De Leon, G.; and Jainchill, N., eds. *Therapeutic Community: Advances in Research and Application*. NIDA Research Monograph Series, Number 144. DHHS Pub. No. (ADM) 94-3633. Rockville, MD: National Institute on Drug Abuse. pp. 16-53.
84. De Leon G, Melnick G, Cleland CM. (2008) Client matching: a severity-treatment intensity paradigm, *Journal of Addictive Disorders*, 27(3):99-113.
85. Rosenthal, M.S., and Biase, D.V. Phoenix houses: Therapeutic communities for drug addicts. In: Kaplan, H.I., and Sadock, B.J., eds. *Modern Group Book III: Groups and Drugs*. New York: E. P. Dutton and Company, 1971.
86. Mutter R, Ali MM, Smith K, Strashny A. (2015) Factors associated with substance use treatment completion in residential facilities. Elsevier Ireland Ltd, *Drug and Alcohol Dependence*, 19-28.
87. Adopted from "Substance Abuse Treatment: Group Therapy"(2005). Treatment Improvement Protocol (TIP) Series, No. 41. Center for Substance Abuse Treatment. Rockville (MD): Substance Abuse and Mental Health Services Administration (US)

88. Scheidlinger S. (2000) The group psychotherapy movement at the millennium: Some historical perspectives. *International Journal of Group Psychotherapy*;50(3):315–339.
89. Project MATCH Research Group. Matching Alcoholism Treatments to Client Heterogeneity: Project MATCH post-treatment drinking outcomes, (1997) *Journal of Studies on Alcohol*,(58), 1- 72.
90. Brown S., Yalom I.D. (1977) Interactional group therapy with alcoholics. *Journal of Studies on Alcoholism*, ;38(3):426–456
91. Vannicelli, M. (1992) *Removing the Roadblocks: Group Psychotherapy with Substance Abusers and Family Members*. New York: Guilford Press.
92. Riordan, R., Beggs, M. (1988) Some critical differences between self-help and therapy groups. *The Journal for Specialists in Group Work*, Vol. 13, Iss. 1.
93. Kaufmann, P., & Kaufman, E. (1992) From multiple family therapy to couples therapy. In: Kaufman, E., and Kaufmann, P., eds. *Family Therapy of Drug and Alcohol Abuse*. 2d ed. Boston: Allyn and Bacon, pp. 85–93
94. Liddle, H.A., & Hogue, A. (2001) Multidimensional family therapy for adolescent substance abuse. In: Wagner, E.F., and Waldron, H.B., eds. *Innovations in Adolescent Substance Abuse Interventions*. New York: Pergamon, pp. 229–261
95. O'Farrell, T.J., and Fals-Stewart, W. (1999) Treatment models and methods: Family models. In: McCrady, B.S., and Epstein, E.E., eds. *Addictions: A Comprehensive Guidebook*. New York: Oxford University Press, pp. 287–305.
96. Sexton, T.L., and Alexander, J.F. (2002) Functional family therapy for adolescents and their families. In: Patterson, T., ed. *Comprehensive Handbook of Psychotherapy*. New York: Wiley & Sons.
97. <http://www.nrepp.samhsa.gov/Viewintervention.aspx?id=16>
98. <http://www.mdft.org/Proven-Success/International>, <http://www.incant.eu/index.php?id=1,0,0,1,0,0>
99. [ii] Substance Abuse and Mental Health Services Administration. Highlights of the 2010 Drug Abuse Warning Network (DAWN) Findings on Drug-Related Emergency Department Visits. U.S. Department of Health and Human Services. [July 2012]. Available: <http://www.samhsa.gov/data/2k12/DAWN096/SR096EDHighlights2010.pdf>
100. [iii] CDC, National Center for Health Statistics. Underlying Cause of Death 2000-2010 on CDC WONDER Online Database. Extracted October, 2012.

## Countries where INL Collaborates on Drug Demand Reduction

1. *Canada*
2. *United States*
3. *The Bahamas*
4. *Jamaica*
5. *Haiti*
6. *Dominican Republic*
7. *Antigua and Barbuda*
8. *St. Kitts and Nevis*
9. *St. Lucia*
10. *Dominica*
11. *St. Vincent and the Grenadines*
12. *Grenada*
13. *Barbados*
14. *Trinidad and Tobago*
15. *Mexico*
16. *Belize*
17. *Guatemala*
18. *Honduras*
19. *El Salvador*
20. *Nicaragua*
21. *Costa Rica*
22. *Panama*
23. *Colombia*
24. *Ecuador*
25. *Peru*
26. *Chile*
27. *Paraguay*
28. *Argentina*
29. *Uruguay*
30. *Brazil*
31. *South Africa*
32. *Namibia*
33. *Angola*
34. *Botswana*
35. *Mozambique*
36. *Tanzania*
37. *Seychelles*
38. *Kenya*
39. *Uganda*
40. *Cameroon*
41. *Nigeria*
42. *Benin*
43. *Togo*
44. *Ghana*
45. *Cote d'Ivoire*
46. *Liberia*
47. *Senegal*
48. *Cabo Verde*
49. *Portugal*
50. *Spain*
51. *Belgium*
52. *United Kingdom*
53. *Italy*
54. *Germany*

55. *Poland*
56. *Austria*
57. *Czech Republic*
58. *Slovenia*
59. *Croatia*
60. *Serbia*
61. *Kosovo*
62. *Albania*
63. *Estonia*
64. *Ukraine*
65. *Lebanon*
66. *United Arab Emirates*
67. *Georgia*
68. *Turkmenistan*
69. *Uzbekistan*
70. *Kazakhstan*
71. *Kyrgyzstan*
72. *Tajikistan*
73. *Afghanistan*
74. *Pakistan*
75. *India*
76. *Nepal*
77. *Bhutan*
78. *Bangladesh*
79. *Sri Lanka*
80. *The Maldives*
81. *Burma*
82. *Laos*
83. *Vietnam*
84. *Cambodia*
85. *Thailand*
86. *Malaysia*
87. *Singapore*
88. *Brunei*
89. *Indonesia*
90. *Timor-Leste*
91. *Philippines*
92. *Japan*
93. *South Korea*
94. *China*
95. *Mongolia*
96. *Marshall Islands*
97. *Nauru*
98. *Fiji*
99. *Samoa*
100. *Tonga*
101. *Kiribati*





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