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United Nations Office on Drugs and Crime

Global SMART  
Programme

# **2014 GLOBAL SYNTHETIC DRUGS ASSESSMENT**

## **Amphetamine-type stimulants and new psychoactive substances**

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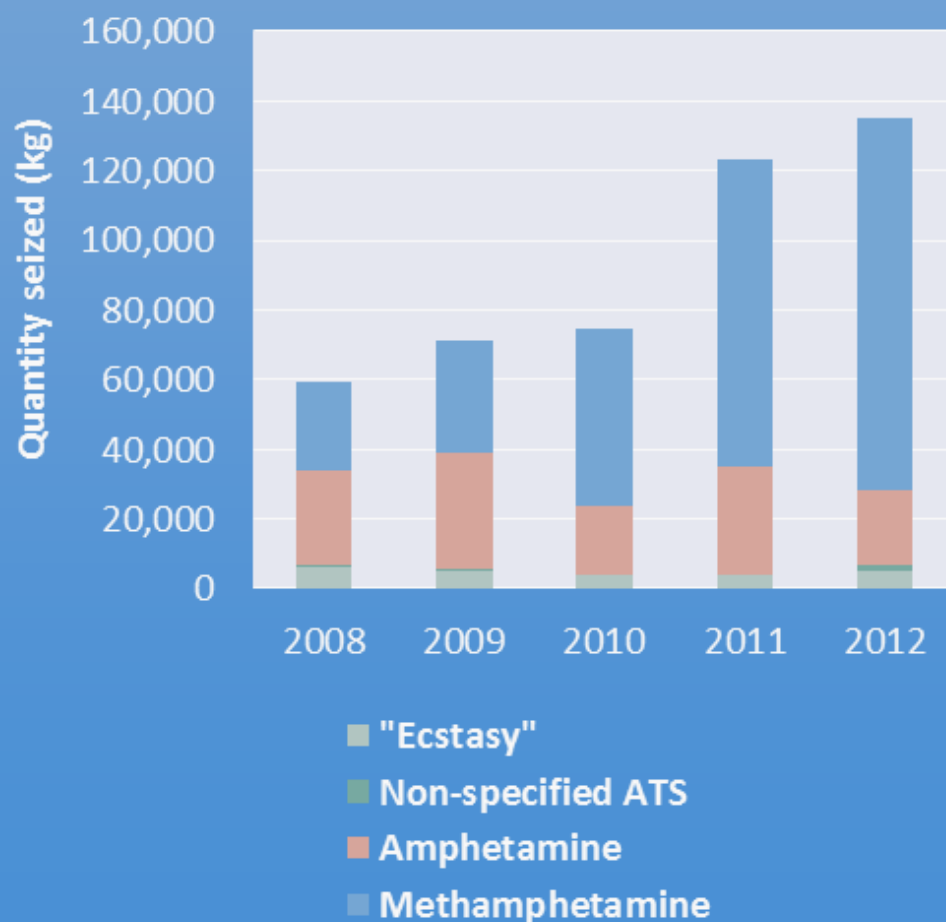
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## Growing global markets for ATS

- Surging ATS seizures reaching more more than 135 tons in 2012 point to a rapid expansion of the global market.
- This is primarily attributable to the increase in methamphetamine seizures mostly in East and South-East Asia and North America.
- Amphetamine continues to be the main ATS of use in the Middle East where seizures annually account for more than 55% of amphetamine seized worldwide.

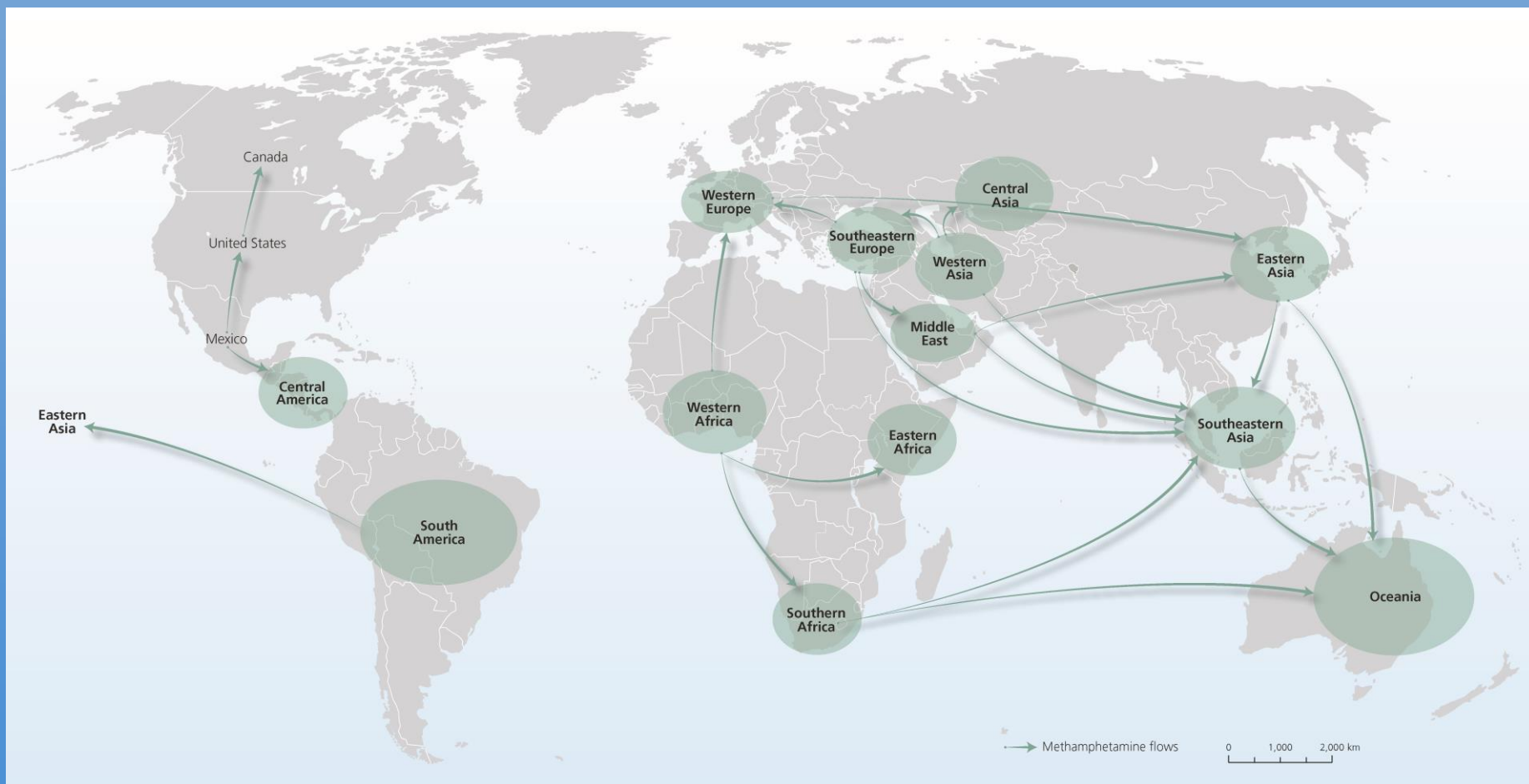
Total ATS seizures reported worldwide, 2008-2012





# Expansion of global methamphetamine trafficking

## Methamphetamine flows as perceived by recipient country, 2008-2012



• West Africa has become a prominent region for methamphetamine trafficked either directly or via Southern Africa and Western Europe to East and South-East Asia and Oceania, mostly to Australia, Japan, Malaysia and Thailand.



# **ATS trafficking to and from South America, Central America and the Caribbean: Amphetamine**

- For some time, there have been indications that ATS trafficking routes from the region have been extended to Western Europe and Eastern Asia, though these have mostly involved the trafficking of amphetamine.
- In Western Europe, Spain reported the arrest of nationals from various South and Central American and Caribbean countries relating to amphetamine over the years.
- Moreover, between 2007 and 2010 small quantities of less than 1 kg and up to 2 kg of amphetamine perceived to have originated in or trafficked via Brazil and Nicaragua were reported to have been seized in Italy and Portugal.



# ATS trafficking to and from South America, Central America and the Caribbean: Methamphetamine

- In Eastern Asia, methamphetamine perceived to have originated in Peru and Brazil have been reported seized in the Philippines in 2012, possibly intended for onward trafficking to mainland China and Hong Kong, China.
- Between 2010 and 2012, methamphetamine seized in Mexico was perceived to have been intended for the domestic market as well as for onward trafficking to the United States, and to a lesser extent, Canada and countries in Central America, such as El Salvador.



# Methamphetamine trafficking from Mexico

- Methamphetamine has been trafficked from Mexico to the United States for a number of years.
- The United States Drug Enforcement Administration (DEA) has reported that the increased manufacture of methamphetamine in Mexico has heightened the supply of methamphetamine to the United States in recent years.
- Seizures of methamphetamine that had been trafficked from Mexico across the south-west border of the United States have annually increased, from about 2.3 tons in 2008 to more than 10.6 tons in 2012.

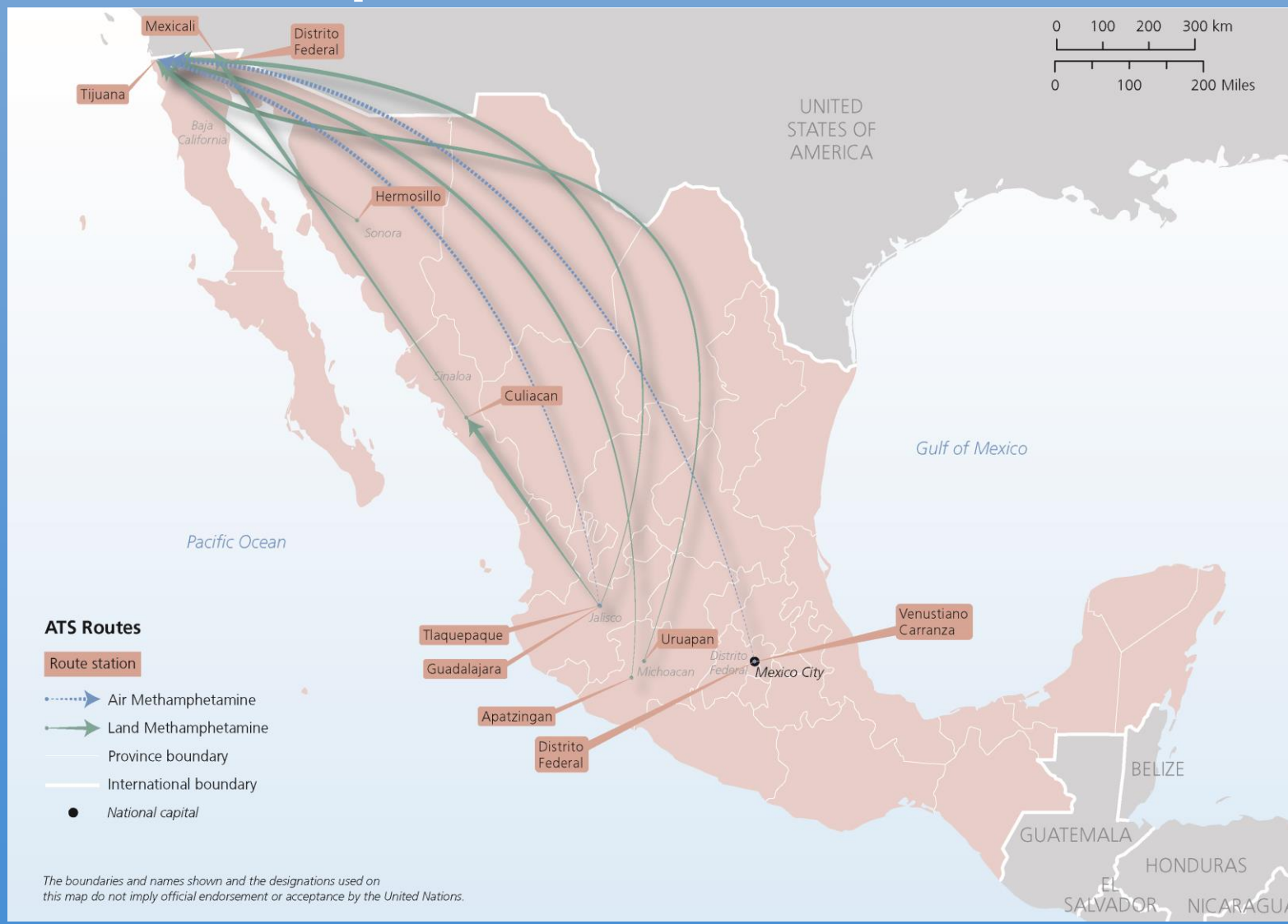


# Methamphetamine trafficking from Mexico

- Jalisco is one of the main states in Mexico in which methamphetamine laboratories have been discovered, in addition to Michoacan and Sinaloa state.
- According to the Mexican authorities methamphetamine is trafficked through Mexico to the United States along land routes and by plane.
- In the United States, increasing amounts of methamphetamine are reportedly being trafficked to San Ysidro, in San Diego, in the south-west of California in the United States.
- Between 2010 and 2012, methamphetamine seizures reported at San Ysidro more than doubled from almost 1.0 ton to around 2.4 tons.



# Reported methamphetamine flows by mode of transportation in Mexico, 2013



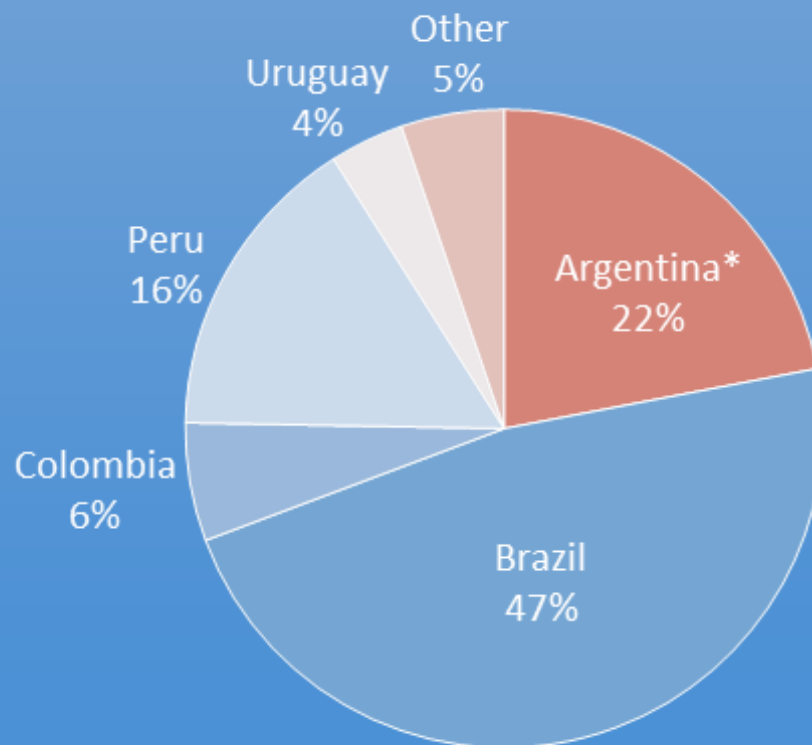




# Ecstasy in South America, Central America and the Caribbean

- “Ecstasy” seizures have been steadily increasing in the region and more than tripled between 2008 and 2012.
- “Ecstasy” seizures accounted for more than 95% of ATS seizures in Brazil, almost 50% of ATS seizures in Argentina and all ATS seizures reported in Peru for a number of years.
- Though there are indications that “ecstasy” use is higher than that of other ATS in Argentina, Brazil and Colombia their market share still appears to be relatively low in comparison to other drugs under international control.

“Ecstasy” seizures reported in South America, Central America and the Caribbean, by country, 2008-2012





# ATS use in South America, Central America and the Caribbean among youths

- ATS use among the general population remains relatively low in most countries in the region.
- In the last few years, “stimulants” have become one of the most widely used drugs under international control among students in some countries, sometimes exceeding cannabis and/or cocaine use.
- Stimulants were identified as the:
  - Most used drug among students aged 10 to 19 in Bolivia in terms of annual prevalence in 2008
  - Most used drug among students aged 13 to 25 in Honduras in terms of lifetime prevalence in 2008
  - Drug with higher levels of use than cocaine among school students aged 15 to 16 in Costa Rica in terms of annual prevalence in 2012, but lower than that of cannabis
- In 2010, use of amphetamine and methamphetamine was identified as being higher than that of cocaine but below that of cannabis use among school students aged 15 to 16 in Jamaica.

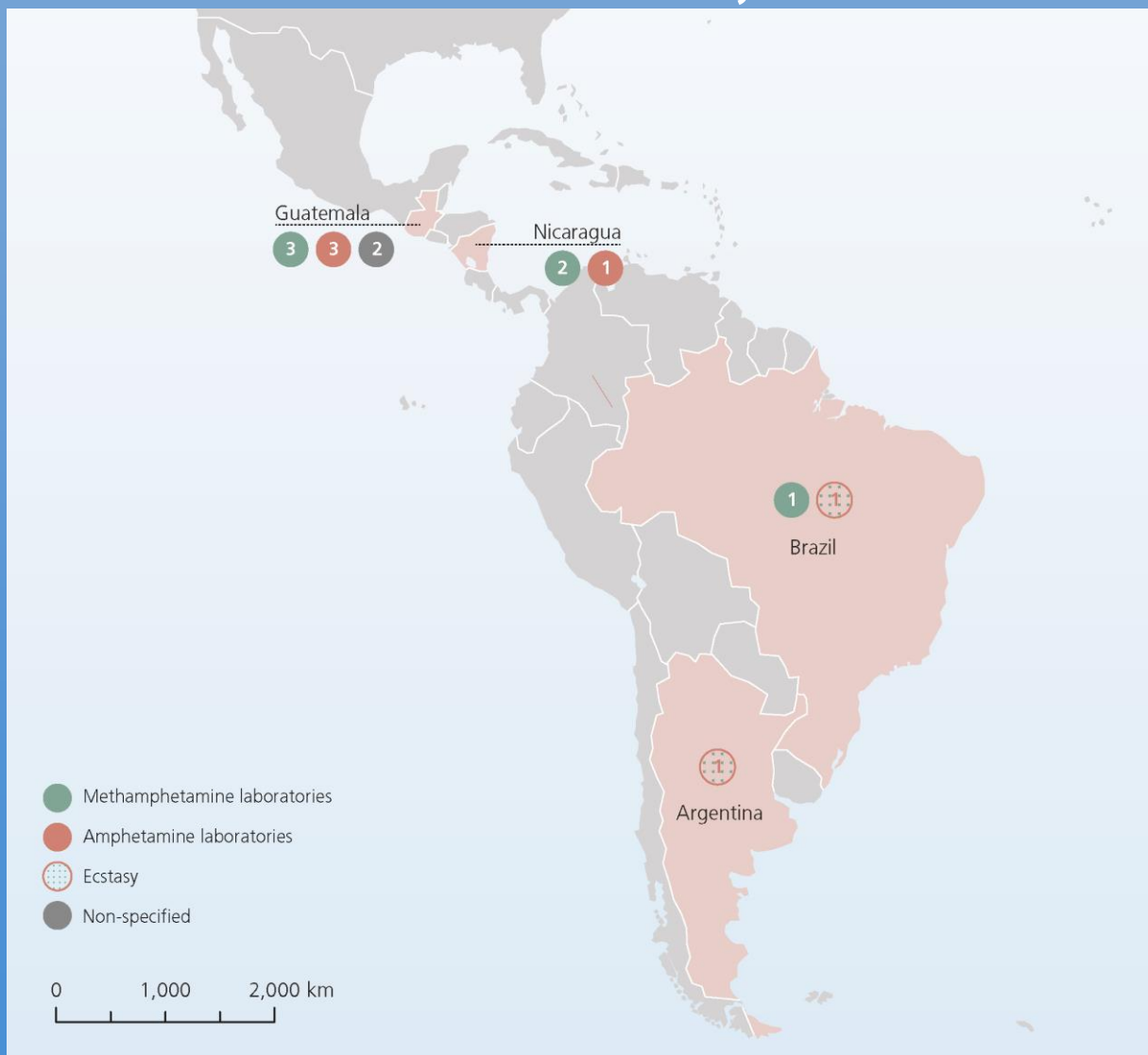


# ATS manufacture in South America, Central America and the Caribbean

- Since 2009, ATS laboratories have been discovered in Argentina, Brazil, Guatemala and Nicaragua.
- According to seizure data, large amounts of precursor chemicals, such as ephedrine and pseudoephedrine, used in the manufacture of ATS are also being trafficked in the region.
- Between 2007 and 2012, an estimated total of up to 79 tons of ephedrine and pseudoephedrine were seized in the region, of which 47 tons consisted of ephedrine and the remaining 32 tons of pseudoephedrine.
- Over the years, by far the largest amount of these precursor chemicals was estimated to have been seized in El Salvador, followed by Guatemala, Argentina, Honduras and Panama.
- It remains unclear to what extent ATS is being manufactured for domestic use or being trafficked to other regions of the world.

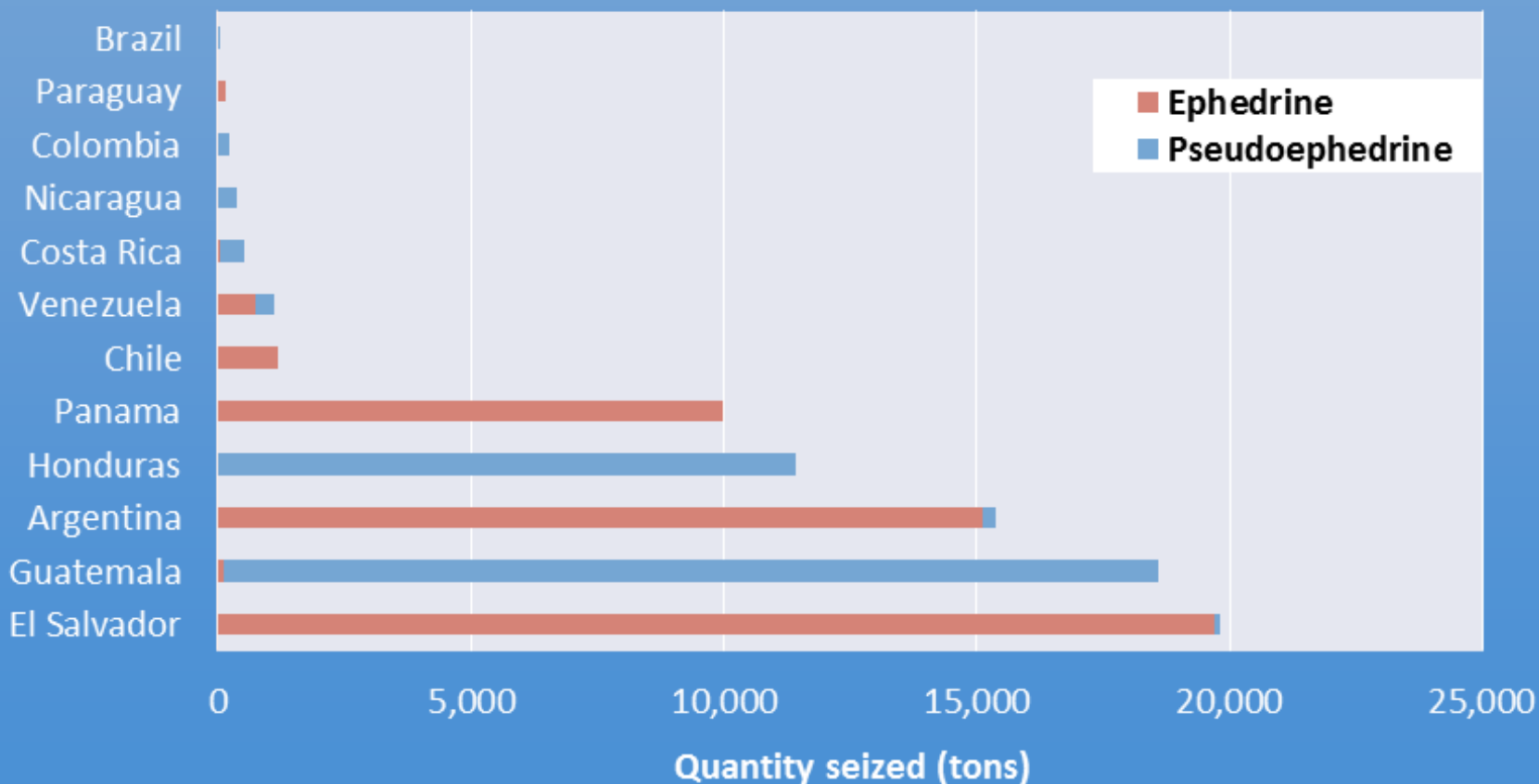


# Dismantled ATS laboratories reported in South and Central America, 2009-2012





# Total estimated ephedrine and pseudoephedrine seizures by country in South America, Central America and the Caribbean, 2007-2012





# Trends in precursor chemicals used in the manufacture of synthetic drugs

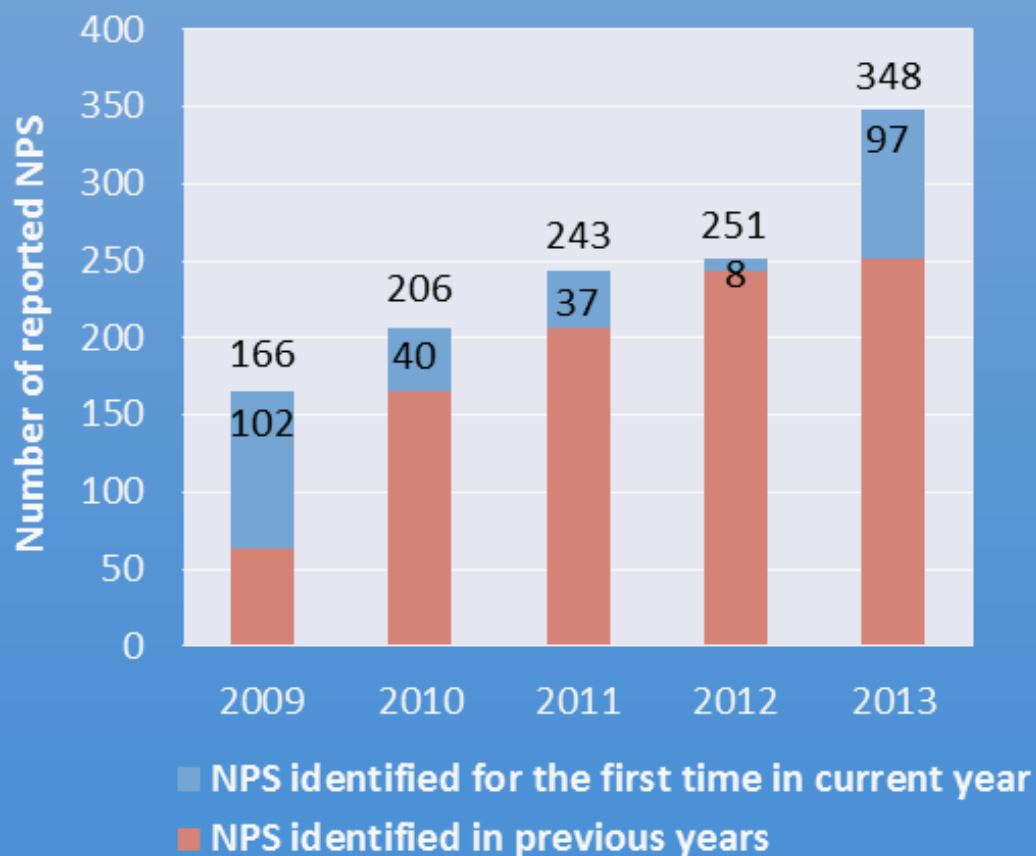
- Most precursor chemicals used in the manufacture of synthetic drugs have widespread legitimate use, e.g. ephedrine and pseudoephedrine.
- Diversion from licit trade is a primary source of precursors.
- There is an increase in national legislation to track and monitor precursors leading to the use of alternate forms of precursors in certain regions of the world.
  - Pharmaceutical preparations containing pseudoephedrine or ephedrine
  - Manufacturing methods based on phenyl-2-propanone (P-2-P)
  - Use of novel precursor chemicals
- In recent years there has been an increased international response (rescheduling of phenylacetic acid (2011) and scheduling of APAAN (2014) to control alternate precursors).



## Rapid expansion of NPS

- By 2013, the emergence of 348 NPS had been reported to UNODC globally.
- NPS have emerged in every region of the world, in a total of 94 countries worldwide.
- By 2013, the total number of synthetic cannabinoids surged to 110 from 60 in mid-2012.
- The NPS problem appears to be particularly prevalent in Europe where a total of 73 NPS were identified by EU Member States through the EU Early Warning System (EWS) in 2012 alone, of which synthetic cannabinoids made up the largest share.

Number of NPS reported at the global level, 2009 to 2013 (cumulative)



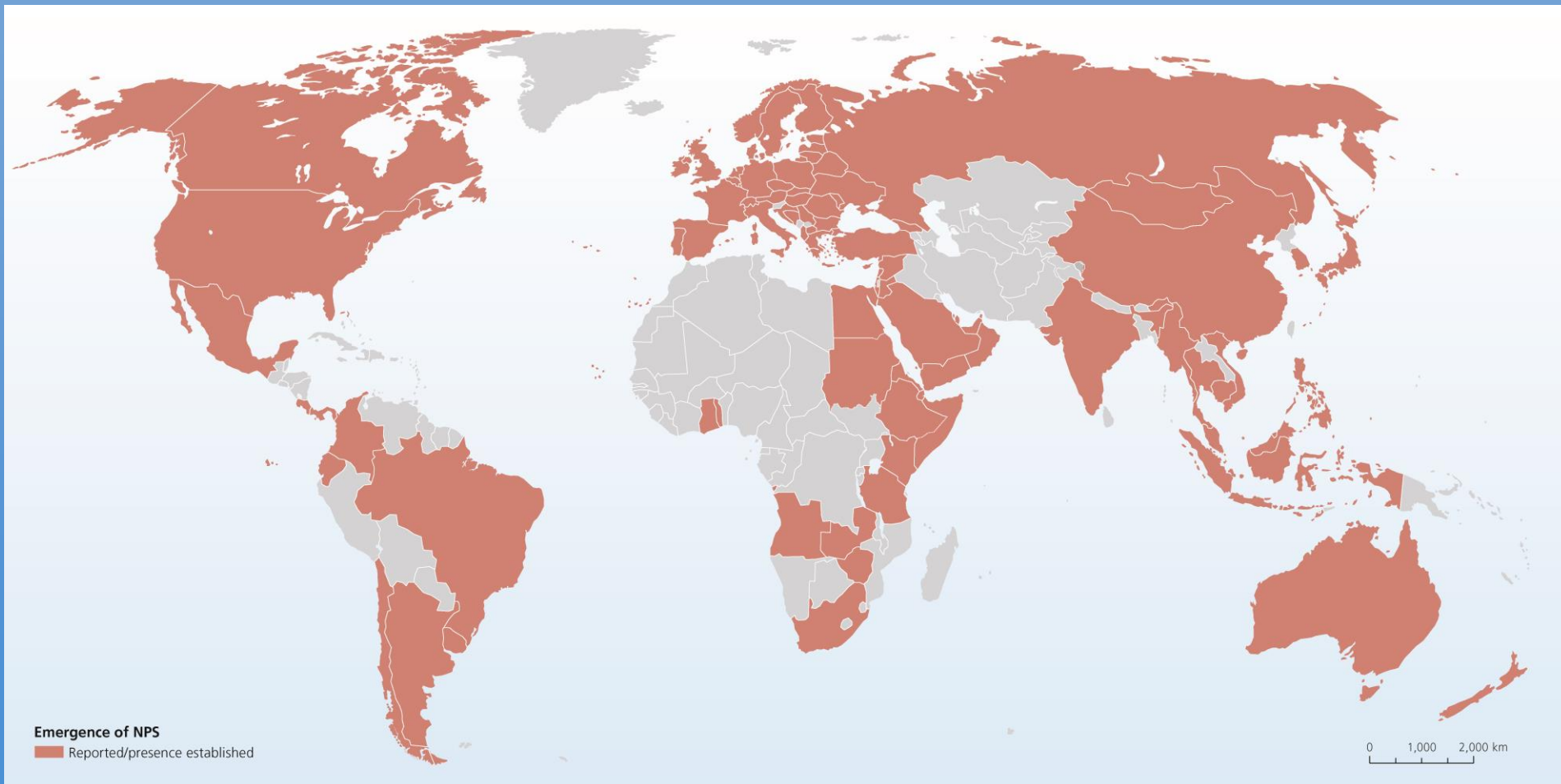


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# Global emergence of NPS, 2008 to 2013





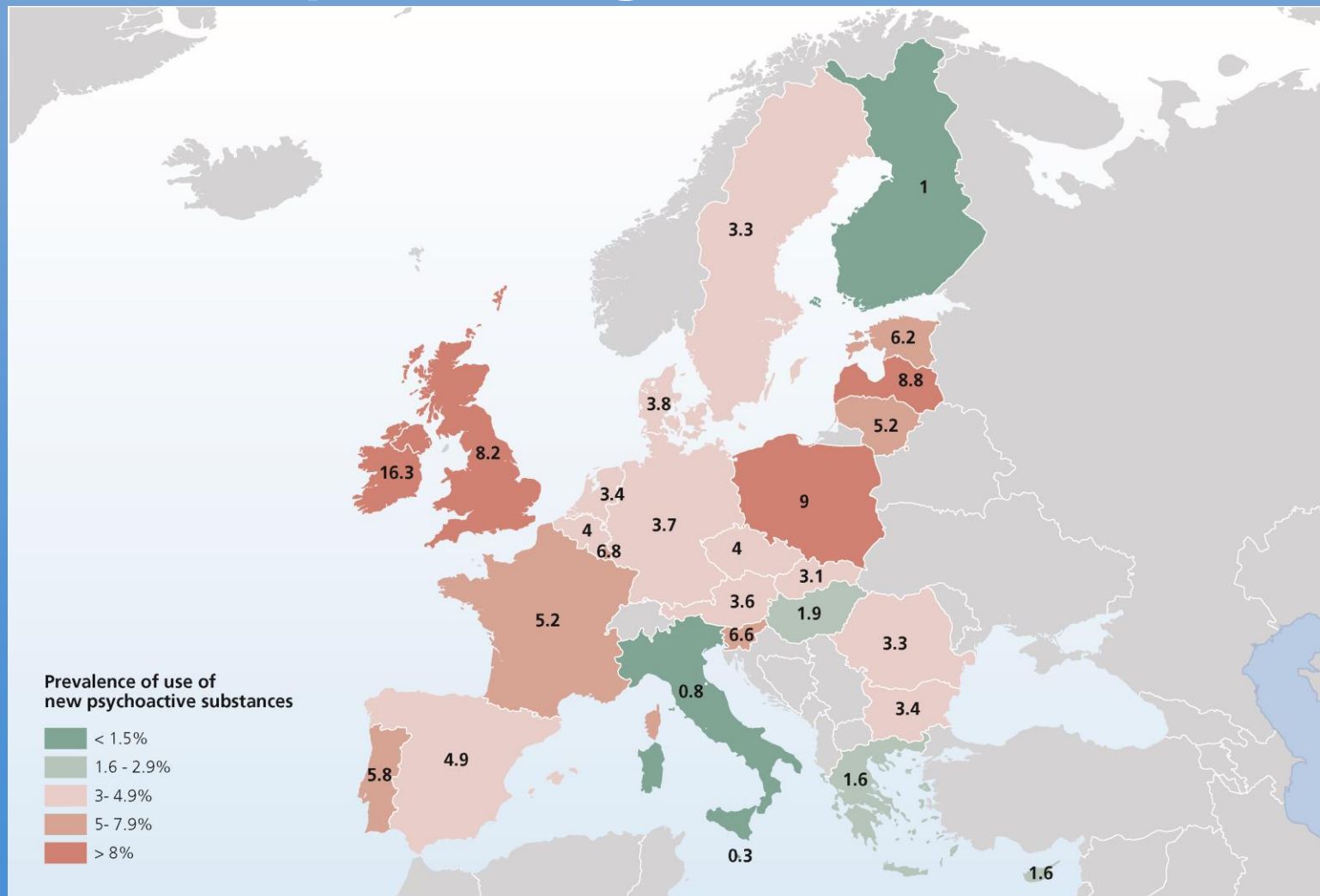


## High levels of NPS use in Europe

- The Eurobarometer survey conducted among 12,000 youths aged 15-24 across the EU in 2011 revealed that the lifetime prevalence of youths that had experimented with “legal substances that imitate the effects of illicit drugs” display results that are not far from use rates of some controlled drugs.
- NPS use in the EU appears to be slightly lower than the use rates for amphetamines but similar to the rate for “ecstasy” use and larger than the rates for cocaine, LSD or heroin.
- The highest NPS use rates were reported by Ireland at 16.3%, followed by Poland at 9%, Latvia at 8.8% and the United Kingdom at 8.2%.
- Visitors at nightclubs display high use rates, but these findings are not generalizable to other groups and populations on a nation-wide scale.



# Lifetime prevalence of legal substances that imitate the effects of illicit drugs in the EU among persons aged 15-24, 2011





# NPS are being sold on illicit drug markets

- A recent feature has been that there have been several cases in which NPS have been sold on ATS and other illicit drug markets.
- Countries in almost every region of the world have reported of various NPS sold as “ecstasy”, which is traditionally synonymous with MDMA.
- Recently, law enforcement authorities in some countries in South America have reported that the substance is being sold as “LSD” on the illicit drug market.
- In May 2013, the Chilean National Police seized 800 stamps believed to contain the hallucinogenic substance LSD from a consignment that had been trafficked from Spain, but which actually consisted of 25I-NBOMe.



# NPS are being sold on illicit drug markets

- In June 2013, the Drug Observatory of Colombia reported through its early warning system (SAT) that substances sold as LSD were actually found to contain two NBOMe compounds, 25B-NBOMe and 25C-NBOMe.
- Therefore, reports of high LSD use among students in some countries of the region, such as Colombia and Ecuador may be misleading.
- Overall, it remains unclear whether these new substances are replacing other controlled substances, in either the short or long term, or whether they are simply being used as a supplement to the range of existing drugs under international control.



# Substances found in pills sold as “ecstasy”, 2009-2012

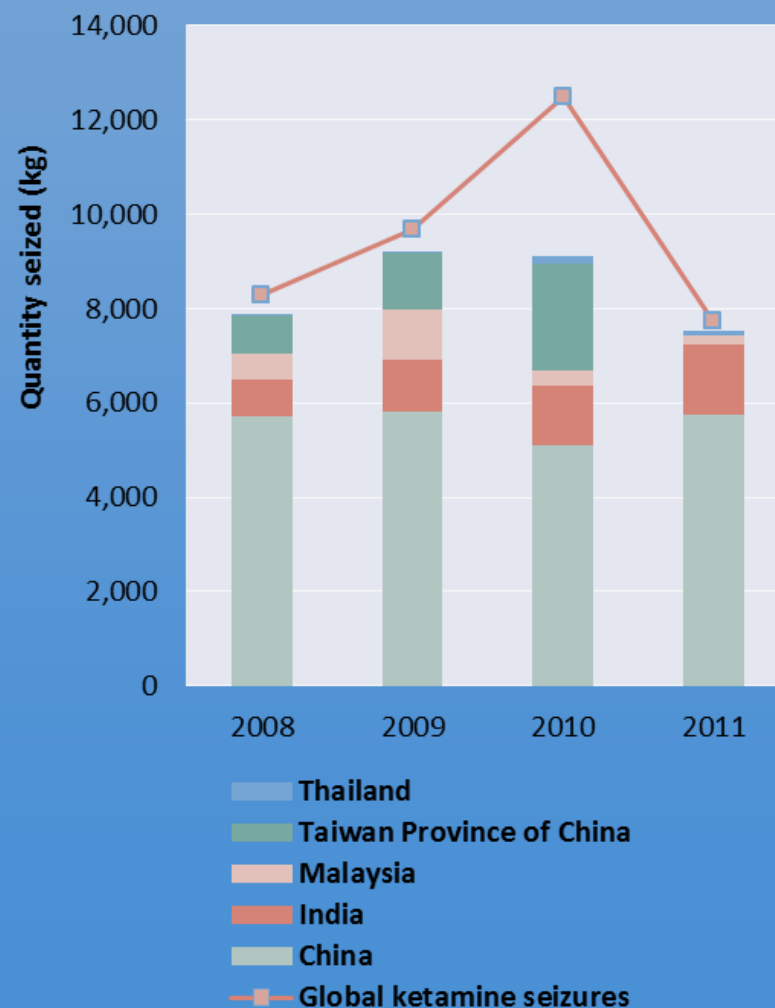
Substances	Asia	Americas	Europe	Oceania
<b>2C-B</b>		•		
2C-E		•		
α-PVP		•	•	
<b>Amphetamine</b>			•	
BTCP		•		
BZP		•		•
CPP*	•			
<b>DMT</b>		•		
Eutylone (bk-EBDB)				•
Fluoro-methcathinone	•			
JWH-018	•			
Ketamine	•	•	•	
mCPP			•	
<b>MDA</b>	•			
MDPBP				•
MDPV	•	•		
Mephedrone	•			
<b>Methamphetamine</b>	•	•	•	
Methoxetamine			•	
Methylethcathinone	•			•
Methylone	•			
<b>N-ethylamphetamine</b>				•
Pentedrone	•			
PMMA	•	•	•	
TFMPP	•	•		•



# Ketamine trafficking and manufacture

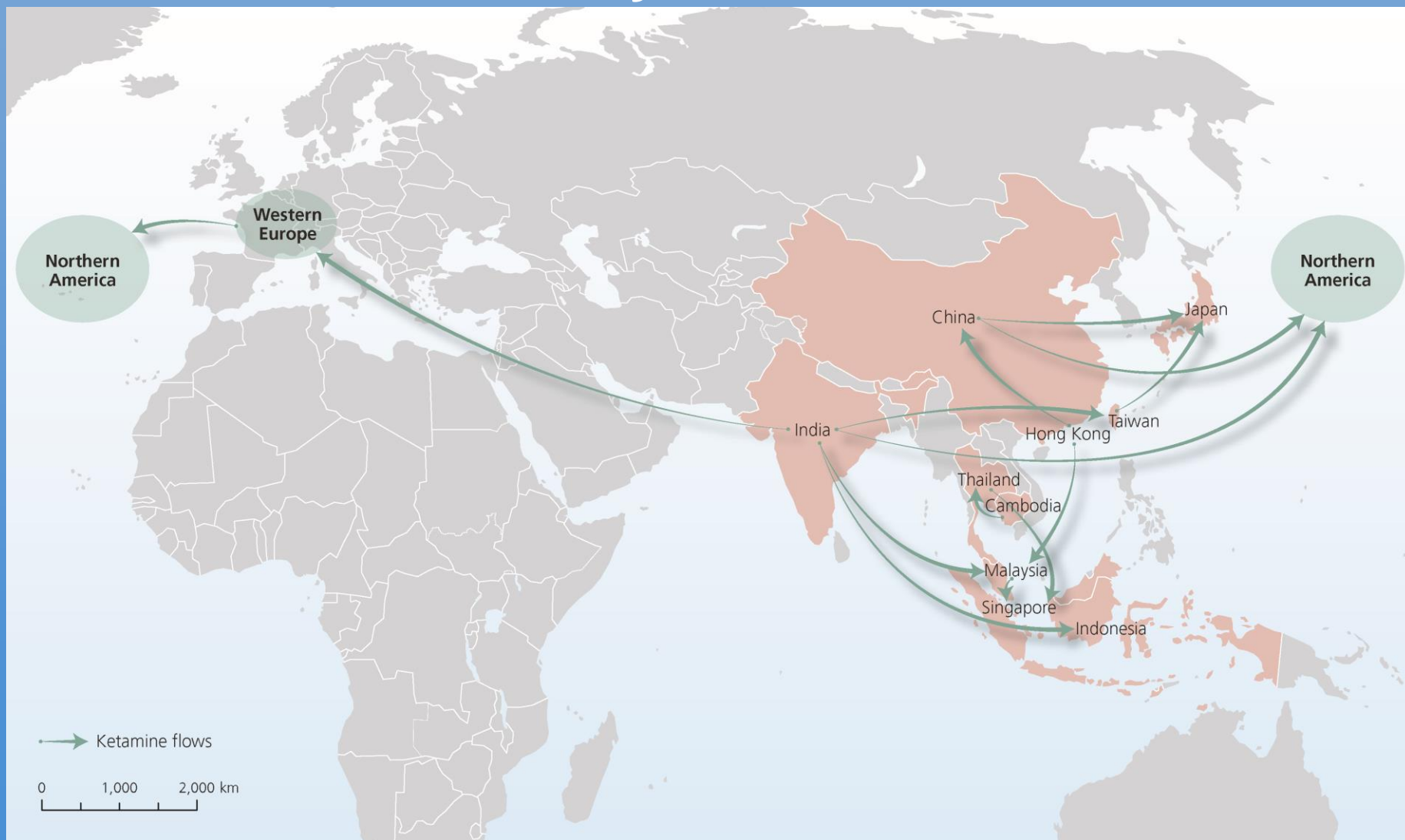
- Except for 2010, between 5 to 6 tons of ketamine have been annually seized in mainland China and Hong Kong, China, since 2009, accounting for almost 60% of global ketamine seizures.
- Illicit ketamine manufacture has been reported by countries in East Asia, such as in China and Hong Kong, China.
- Most ketamine seized in countries world-wide is perceived to originate from China and India, as well as Cambodia and the Taiwan Province of China.
- Recently, ketamine has also been found in tablets sold as methamphetamine in Indonesia and Australia.

**Global ketamine seizures and ketamine seizures reported in East and South-East Asia, 2008-2012**





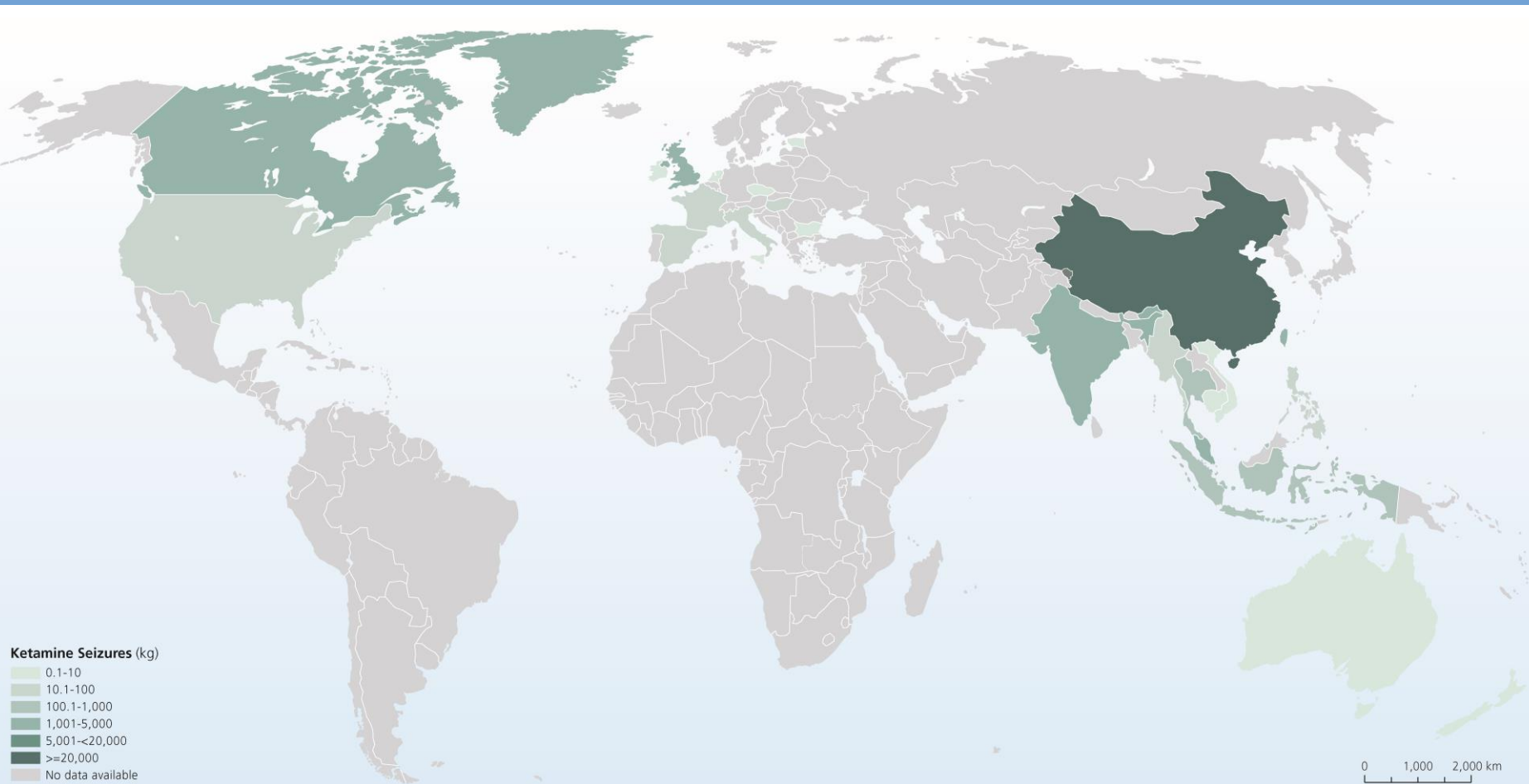
# Ketamine flows as perceived by recipient country, 2008-2012







# Ketamine seizures reported worldwide, 2008-2012







# High levels of ketamine use in East and South-East Asia

- A large market for ketamine appears to be present in a number of Asian countries, notably in East Asia.
- In 2011, ketamine was identified as:
  - The 2<sup>nd</sup> most widely used substance in Hong Kong, China, and Macao, China
  - The 3<sup>rd</sup> most widely used substance in China
  - The 4<sup>th</sup> most widely used substance in Brunei Darussalam
  - The 6<sup>th</sup> most widely used substance in Singapore
- Ketamine was the 5<sup>th</sup> most widely used substance in India and Myanmar in 2010.



# Ketamine use in South America, Central America and the Caribbean

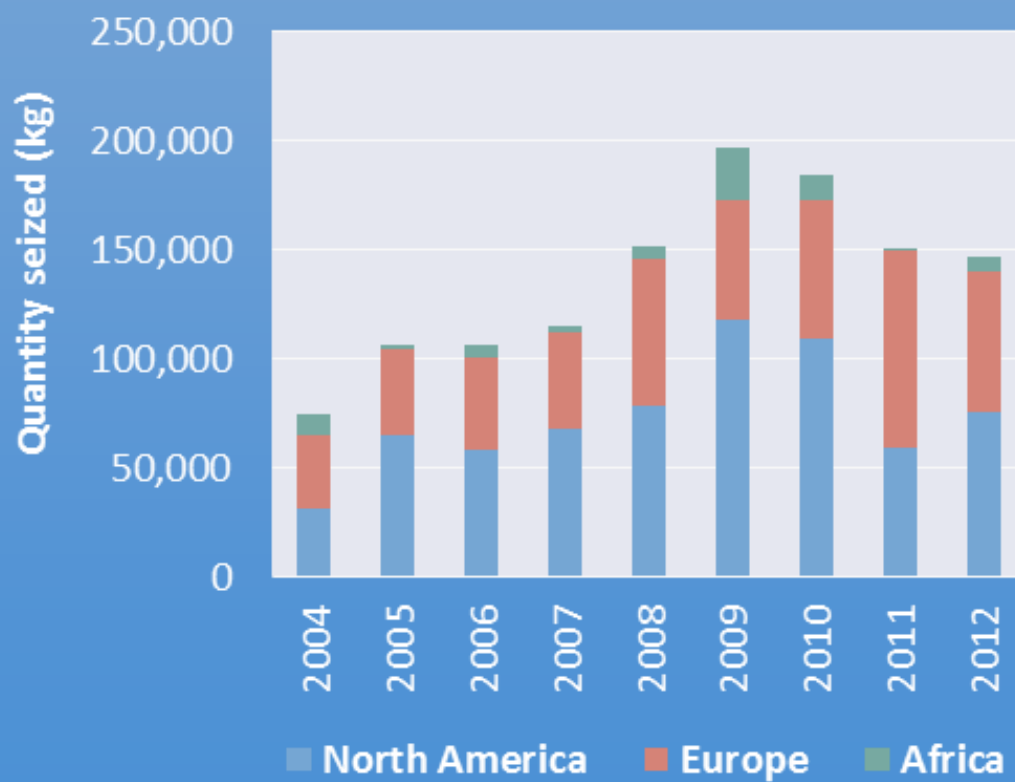
- Though there have been comparatively few reports of ketamine in the region, some seizures of substances under international control were also found to contain ketamine.
- In June 2013, Columbia reported the seizure of 7,000 tablets sold as 2C-B an internationally controlled drug, but which, according to the Colombian Drug Observatory was found to contain ketamine and small quantities of other unidentified substances.
- In 2012, Brazil also reported to UNODC to have discovered ketamine within substances sold as “ecstasy”.
- In Argentina, Colombia and Uruguay, ketamine use rates have been reported at higher levels than those of some other substances under international control, such as heroin, methamphetamine, opiates and prescription stimulants.



# Global khat trafficking

- Seizure data indicate that large amounts of khat, a plant-based NPS, are being trafficked to Europe and North America.
- Khat is primarily transported from East Africa to the United Kingdom and the Netherlands by plane (where until recently it has not been under national control in either country) for onward trafficking to countries in Western and Northern Europe and even as far as North America.
- High use rates have been identified among Somali and Yemeni communities in the United Kingdom.

**Khat seizures reported in Africa, Europe and North America, 2004-2012**



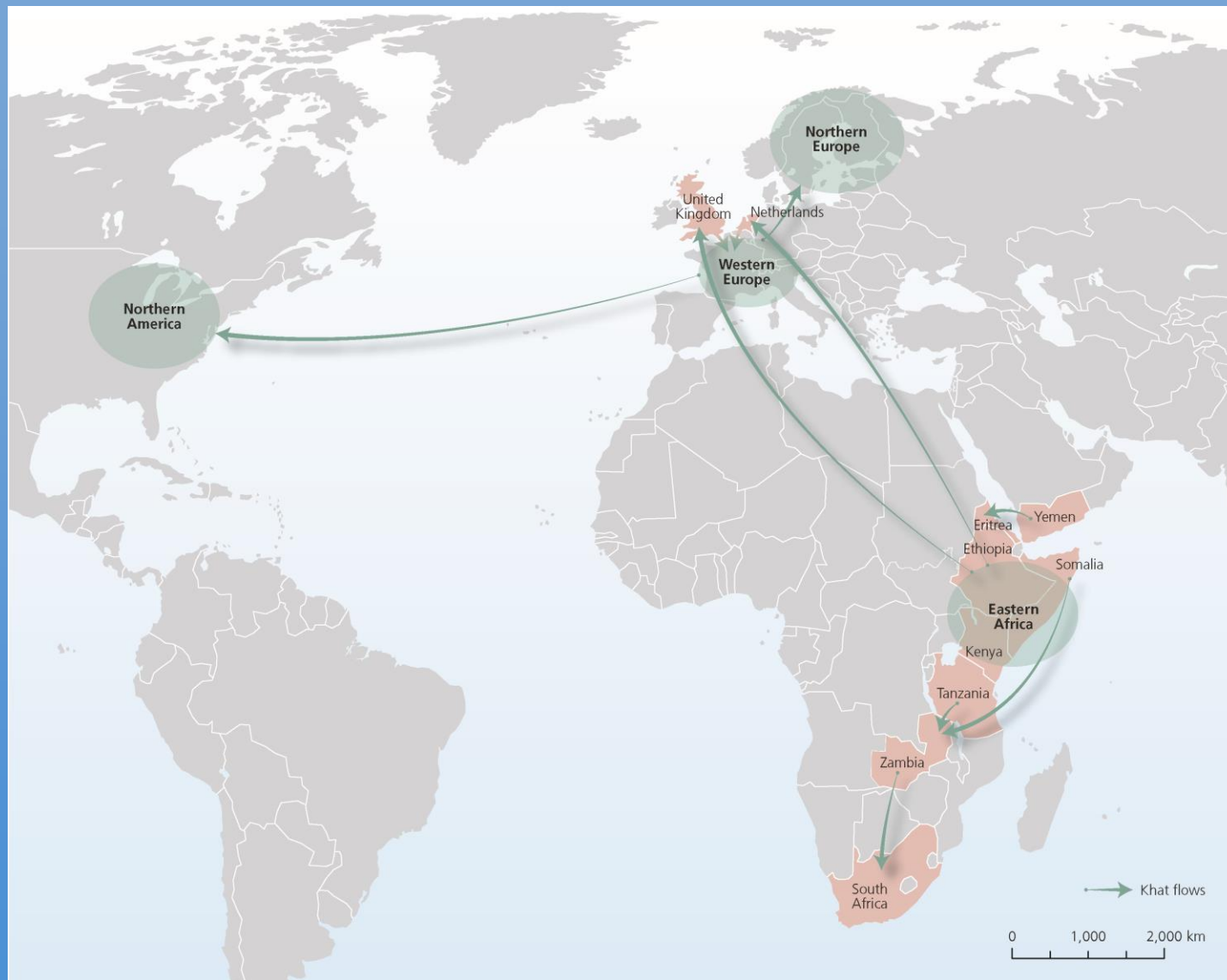


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# Khat flows as perceived by recipient country, 2008-2012



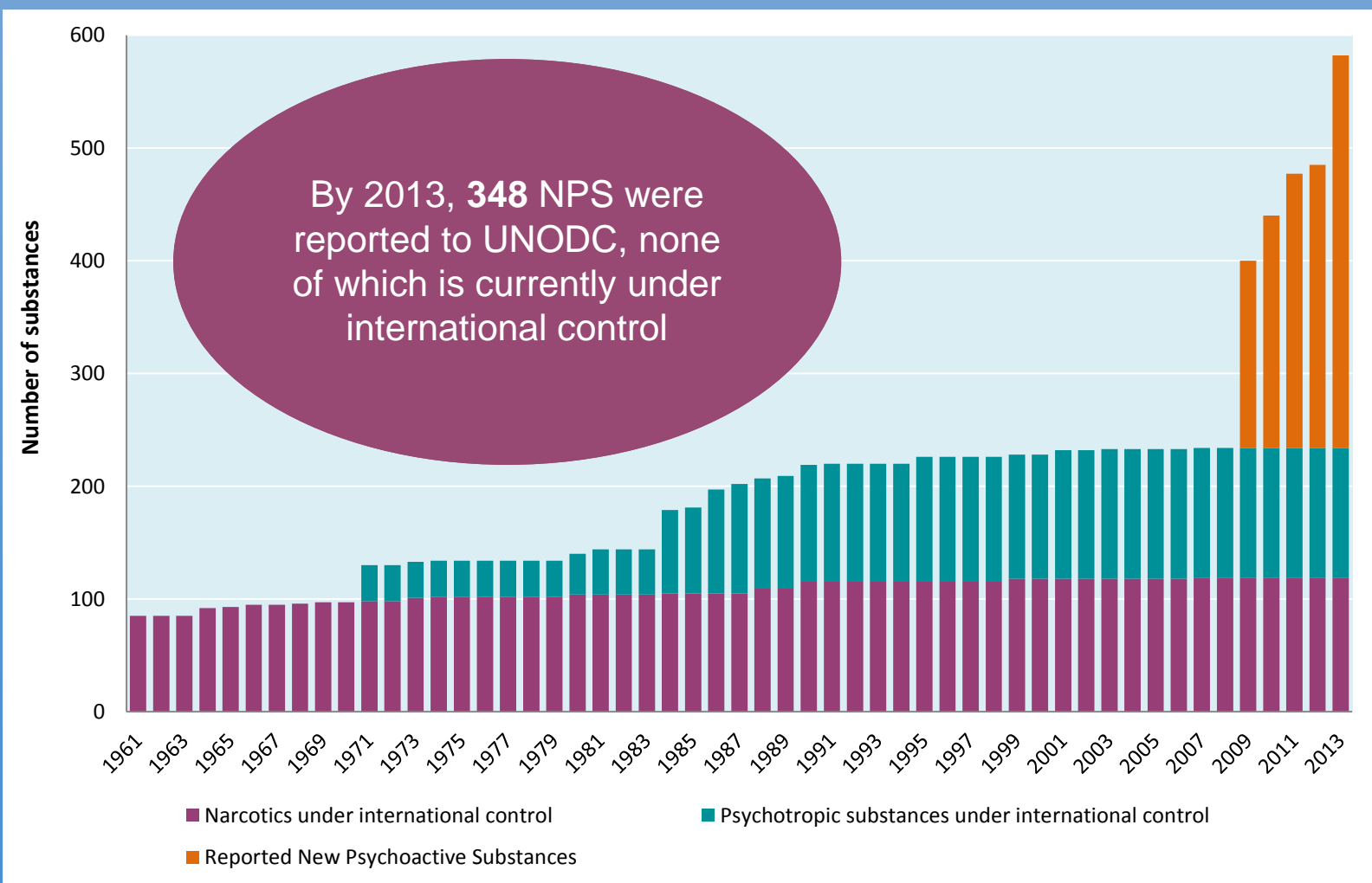


# Responding to the rapid expansion of NPS

- Currently, 234 psychoactive substances are under the governance of the 1961 Single Convention on Narcotic Drugs and the 1971 Convention on Psychotropic Substances.
- Over the last century, there has been an upward trend in the number of internationally scheduled substances.
- In spite of the significant increase in NPS reported over the last few years and growing concerns about the health risks associated with them, no psychoactive substances have been internationally scheduled since 2009.
- In the absence of an international framework, Member States have developed different national legislative responses to NPS.
- There is not yet sufficient evidence available to fully understand the effect of different legislative approaches on NPS markets.
- However, there are some cases that have shown a decline in NPS use after the implementation of national regulatory measures.



# Number of internationally controlled and non-controlled substances, 1961-2013

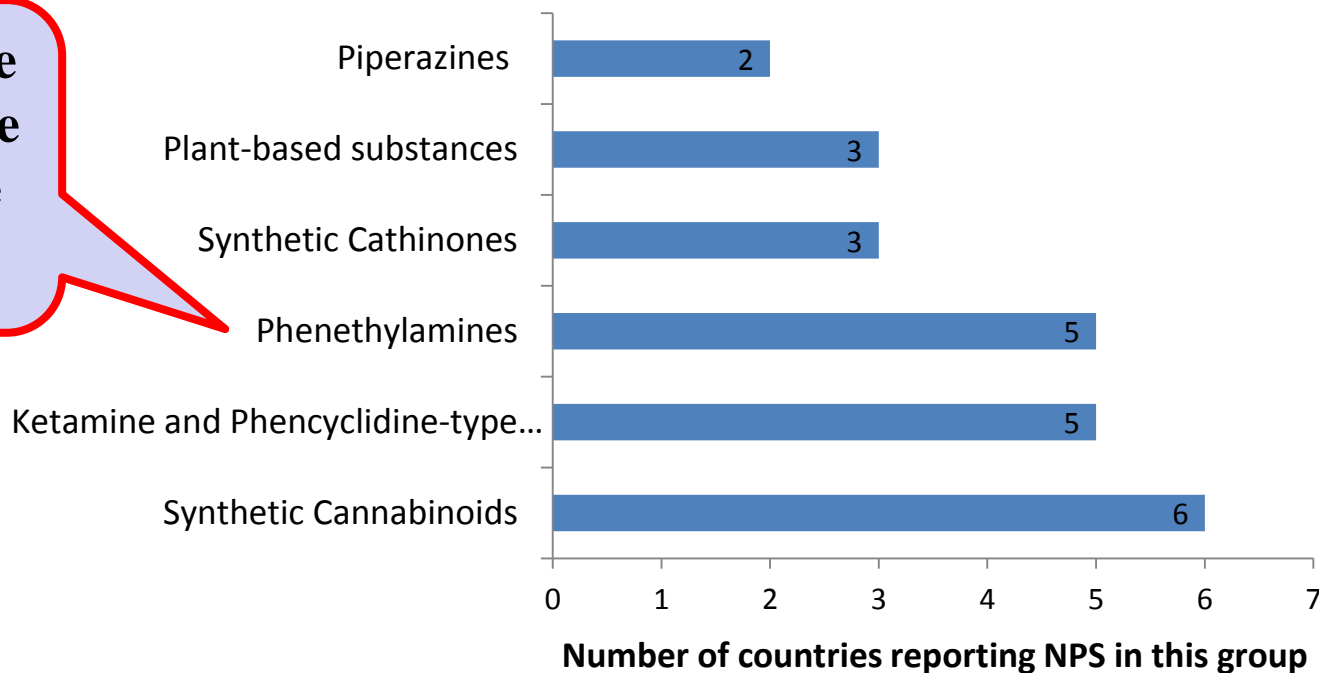




## NPS emergence in Latin America

- Until Dec 2013, 9 countries in Central and South America reported NPS.
- Total of 26 different NPS reported.
- Highest number of reports received from Chile, Colombia and Costa Rica.

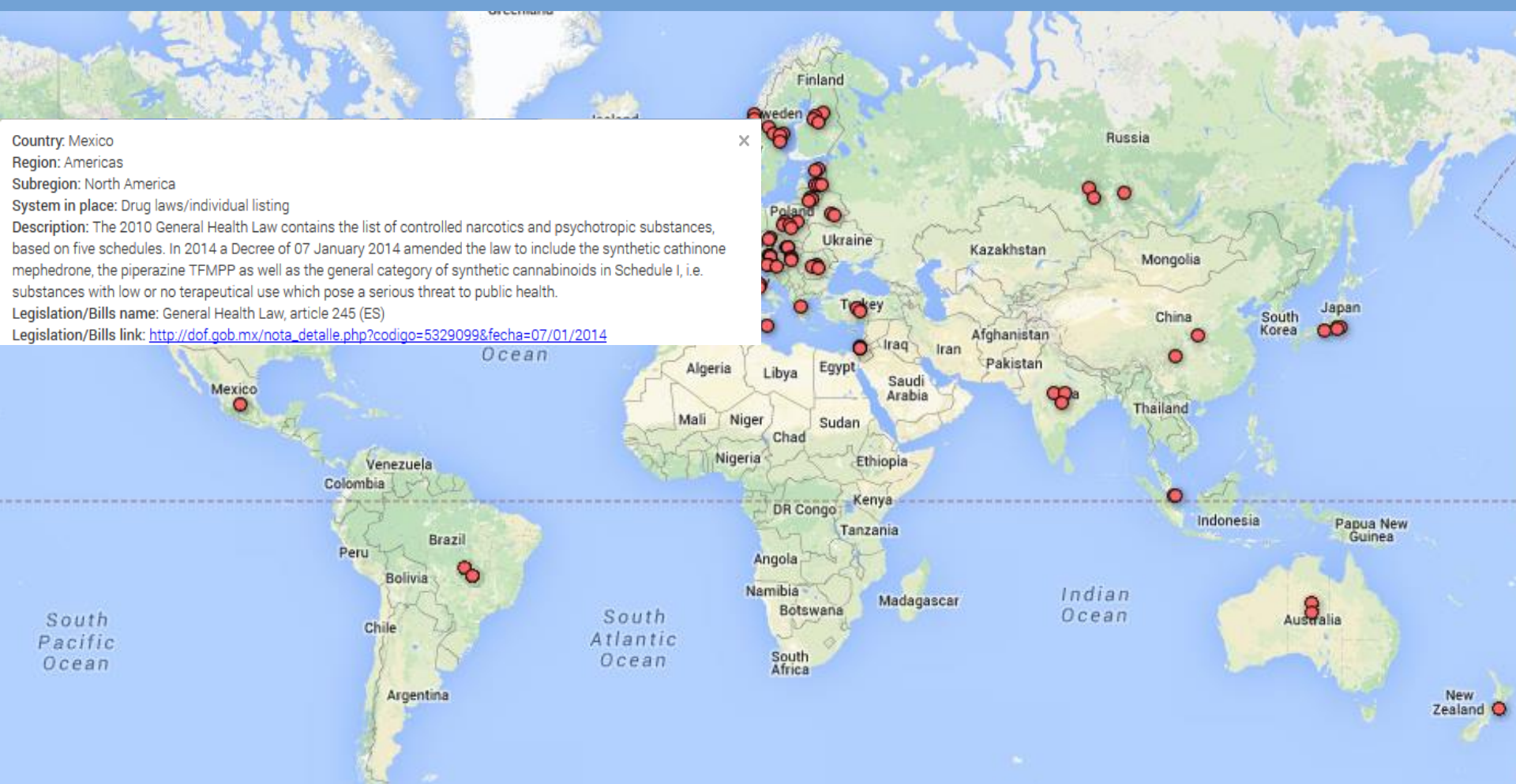
**25B-NBOMe**  
**25C-NBOMe**  
**25I-NBOMe**  
**2C-I**







# Legislative responses to NPS early-2014








## Challenges resulting from the NPS emergence in Latin America

- Drug users: may not be aware that they are taking an NPS instead of LSD, ecstasy or 2C-B: possible overdose, severe negative health effects, effects on the body not yet fully understood.
- Health services: may not be aware of range of NPS on the market, their pharmacology and toxicology, how to identify them, how to best help emergency cases.
- National drug laboratories: may not be in a position to identify the range of NPS already available to users.
- Law enforcement: may not have the means to detect NPS with current methods.
- Legislative systems: may not offer sufficient tools for interventions.



## What does the Early Warning Advisory Offer?



### UNODC Early Warning Advisory on New Psychoactive Substances

**Filter:**

Year:

Means of Identification:

Regions:   
-- Test Region --  
Africa  
Americas

Show Own/All:

Description:

Countries:   
-- TESTING -- (Europe)  
AFGHANISTAN (Asia)  
ÅLAND ISLANDS (Europe)

(Ctrl+Click to select individual country for filter)

Substance Group:


Substance:

Selected Countries (ISO-codes):

Page Size:

[Substance Finding List](#) [Map](#)

#### Reported Emergence of New Psychoactive Substances



Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.



# UNODC Support to Member States



Training on portable  
device for rapid NPS  
detection



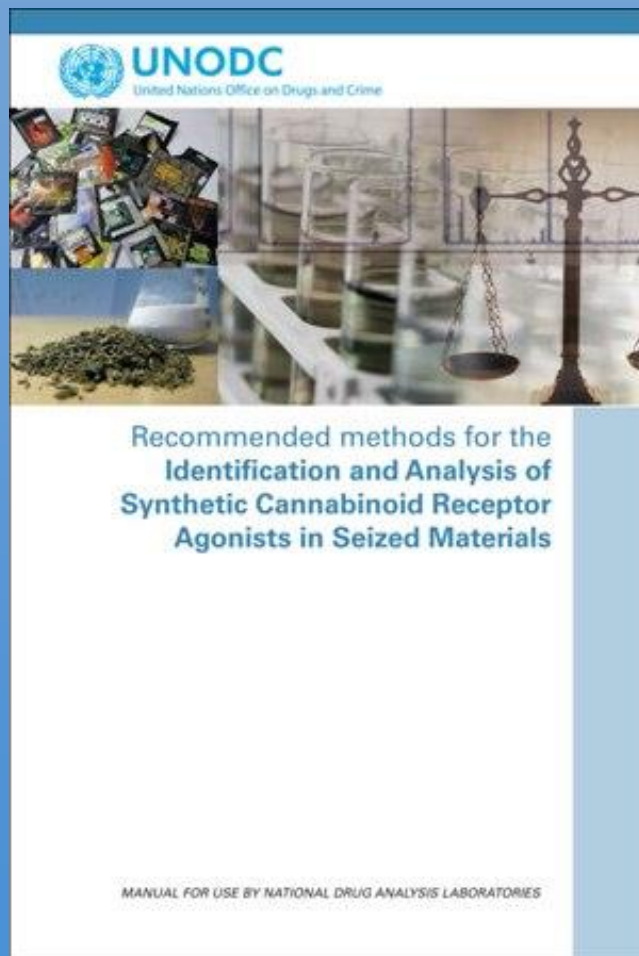


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# Guidelines for NPS identification in forensic laboratories



(available in English, French, Russian and Spanish)



# Global monitoring and information-sharing

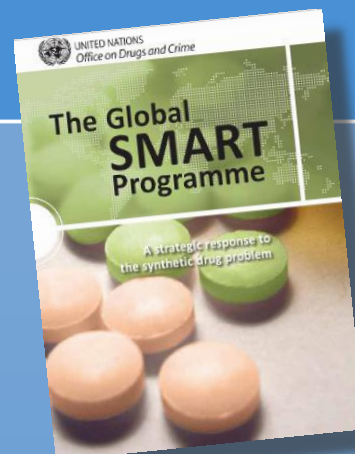
- The global expansion of the ATS market and the dynamic nature of the NPS situation enhance the need for global monitoring and knowledge-sharing from the experiences of individual Member States.
- The examination of scientific evidence, forensic data and information are essential to generate an effective response to the rapidly growing synthetic drug market.
- To complement the currently available mechanism for global synthetic drugs monitoring, such as the Global SMART (Synthetics Monitoring: Analyses, Reporting and Trends) Programme, the UNODC Early Warning Advisory on NPS was launched in June 2013.
- The Early Warning Advisory is designed to enable timely and comprehensive sharing of information on NPS including analytical methodologies, reference documents and trend analysis data, with a view to providing a global reference point.



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**Thank you very much**

**UNODC/CICAD Global SMART Programme**

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