

Synthetic Drugs in East and Southeast Asia

Latest developments and challenges

May 2020



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The term "region" unless specified, generally refers to the geographical area that includes the countries and territories in East and Southeast Asia. The term "lower Mekong region" refers to the geographical area that includes five countries, Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam. The term "maritime Southeast Asian countries" includes Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore, and Timor Leste.

Reference to dollars (\$) are to United States dollars, unless otherwise stated.

Reference to tons are to metric tons, unless otherwise stated.

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Abbreviations

ARQ Annual report questionnaire
AFP Amphetamine-type stimulants

APAA alpha-phenylacetoacetamide (2-phenylacetoacetamide)

APAAN *alpha*-phenylacetoacetonitrile ATS Amphetamine-type stimulants

BNN National Narcotics Board (Indonesia)

CCDAC Central Committee for Drug Abuse Control (Myanmar)

CNB Central Narcotics Bureau (Singapore)

DAINAP Drug Abuse Information Network for Asia and the Pacific

DDB Dangerous Drugs Board (Philippines)

EWA UNODC Early Warning Advisory on New Psychoactive Substances

GBL gamma-butyrolactone

GHB gamma-hydroxybutyric acid

HONLEA Heads of National Drug Law Enforcement Agencies (Asia and the Pacific)

INCB International Narcotics Control Board

KCS Korean Customs Service

LCDC Lao National Commission for Drug Control and Supervision

MAPA methyl *alpha*-phenylacetoacetate (methyl 3-oxo-2-phenylbutanoate)

MDMA 3,4-methylenedioxymethamphetamine

MHLW Ministry of Health, Labour and Welfare (Japan)

NACD National Authority for Combating Drugs (Cambodia)

NADA National Anti-Drugs Agency (Malaysia)

NCB Narcotics Control Bureau (Brunei Darussalam)

NDSB Narcotics Division, Security Bureau (Hong Kong, China)

NNCC National Narcotics Control Commission (China)

NPA National Police Agency (Japan)
NPS New Psychoactive Substances

ONCB Office of the Narcotics Control Board (Thailand)

P-2-P 1-phenyl-2-propanone

PDEA Philippine Drug Enforcement Agency

RMP Royal Malaysian Police

SMART Synthetics Monitoring: Analyses, Reporting and Trends

SODC Standing Office on Drugs and Crime (Viet Nam)
SPO Supreme Prosecutors' Office (Republic of Korea)

UNODC United Nations Office on Drugs and Crime

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The potential impact of COVID-19 on the drug markets of East and Southeast Asia

At the time of writing this report, East and Southeast Asia is experiencing the full-blown effects of the COVID-19 pandemic. The pandemic's profound implications, including a reduced volume of trade and travel, widespread economic recession, imposition of strict social distancing policies and a reordering of governments' imperatives and resources, will more likely than not have a far-reaching impact on the drug markets in the region. There are three considerations which are highlighted for readers to keep in mind when assessing and responding to the impact of the pandemic on the ever-expanding regional drug market in the upcoming months and possibly years.

Recognizing the flexibility of illicit markets to quickly reconstitute themselves in times of crisis, we should first exercise caution in quickly attributing drugrelated trends as a direct or indirect consequence of the pandemic. A significant statistical change observed during this period may not necessarily equate to a real change in demand or supply, and may imply changes to drug trafficking-related methods or other factors. Efforts will be required at the national, regional and international levels to carefully and accurately interpret the situation and understand how the regional drug market evolves in the wake of the pandemic. Secondly, given that extreme levels of synthetic drug and methamphetamine manufacture take place within the region, in-part a result of economies of scale and limited government control in the Golden Triangle, supply will continue. In particular, illicit supply chains of precursor chemicals for the manufacture of illicit drugs in the Golden Triangle are not expected to be disrupted for the foreseeable future, as sourcing of chemicals largely involves direct diversion from industry and trafficking, not diversion from licit trade channels. However,

stringent social distancing policies and economic hardship may have an adverse impact on localized (street level) supply and demand patterns. Thirdly, the re-ordering of governments' imperatives and resources towards the pandemic may jeopardize recent efforts to strengthen drug prevention and treatment programmes. A reduction in resources to these programmes may render those at the margins of society even more vulnerable and undermine drug demand reduction efforts.

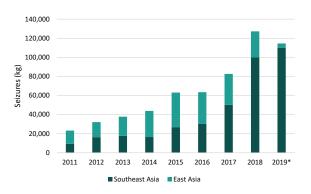
Major developments in the regional synthetic drug market

Methamphetamine

Recent developments clearly demonstrate that the ongoing expansion of the methamphetamine market in East and Southeast Asia has been driven by supply. The growing signs of an intensification methamphetamine manufacturing activity within and around the Golden Triangle, as well as nearby countries like Cambodia and Viet Nam, and a corresponding decrease in the number of production facilities dismantled in other parts of the region, indicates that methamphetamine manufacture is now consolidated into the lower Mekong region. This trend should be of concern to the international community given vital institutional integrity, capacity and resource deficits which make several countries in the region attractive targets for organized crime groups.

Countries in East and Southeast Asia have collectively witnessed sustained increases in seizures of methamphetamine over the last decade, more than any other part of the world. At the time of writing, countries in the region have already confirmed seizures of 115 tons of the drug in 2019. It is important to note that the figure does not include any data from China, which seized nearly 30 tons on average over the last five years.

Figure 1. Seizures of methamphetamine in East and Southeast Asia, 2011-2019*



Note: Data for 2019 include only those confirmed by countries in the region. For more information, see footnote 13 of the regional chapter.

Source: UNODC, responses to the annual report questionnaire; Official communication with the Supreme Prosecutors' Office (SPO) of the Republic of Korea, February 2020; National Police Agency (NPA) of Japan, "Drug Control in Japan", presented at the 25th Asia-Pacific Operational Drug Enforcement Conference, Tokyo, Japan, February 2020; Comparison of 2019 and 2018 crime situation, Hong Kong Police Force, (accessed at https://www.police.gov.hk/info/doc/overcrim.pdf).

One of the major developments observed in the methamphetamine market is the increase in supply of methamphetamine in crystalline form, particularly in Southeast Asia, which has been more pronounced and persistent compared to methamphetamine in tablet form. Preliminary data show that at least 63 tons of the drug were seized in Southeast Asia in 2019, more than a 50 per cent increase compared to the preceding year.

Organized crime groups have adapted major methamphetamine trafficking routes in response to law enforcement operations. In 2019, increases in trafficking along the western border of Thailand were observed by the authorities, while at the same time, increased quantities of methamphetamine were trafficked through Lao PDR and Viet Nam, which reported record seizures. The increases demonstrate that both countries have become major gateways for trafficking of the drug within the region. Maritime drug trafficking remained active throughout 2019, in particular along the Andaman Sea and Malacca Strait, to reach crystalline methamphetamine markets in Indonesia and Malaysia as well as onward trafficking to Australia, Japan and New Zealand.

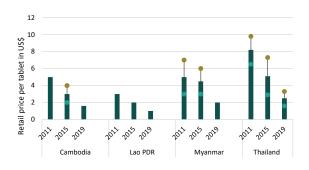
Growing methamphetamine manufacture in East and Southeast Asia would not be possible

without a matching surge in precursor chemical diversion and trafficking. However, recent seizure trends of methamphetamine precursor chemicals are not commensurate with the trends in methamphetamine seizures, signaling difficulties in coping with increasing diversion, trafficking and illicit manufacture of key precursor chemicals. A vast majority of recent seizures reported by Myanmar authorities point to areas bordering China as being heavily exploited by transnational organized crime groups for precursor trafficking. Another significant entry point for chemicals to Myanmar is the southern Shan State on the border with Thailand.

The types of chemicals seized in Myanmar in recent years also point to new synthesis methods being used for the manufacture of methamphetamine. However, drug forensic profiles reported by countries in the region indicate that ephedrine and pseudoephedrine remain the major precursor chemicals used for the manufacture of methamphetamine in the region. This shows significant intelligence gaps in addressing diversion, trafficking and illicit manufacture of these key precursor chemicals.

Beyond this, methamphetamine has become cheaper, reaching its lowest price points in the last decade in East and Southeast Asia. Decreases in prices of crystalline methamphetamine were also observed in Australia, New Zealand, and the Republic of Korea, all of which have been important destinations for the drug from the region. While prices of methamphetamine have decreased substantially, purities remain high and have even increased in a few countries. Simply put, organized crime groups have been able to provide better quality methamphetamine products at cheaper prices, indicating reduced production costs and a change in the business model.

Figure 2. Changes in typical prices of methamphetamine tablets of selected countries in Southeast Asia, 2011, 2015 and 2019



Note: The high-low bars represent the upper and lower limits of the price range for those countries which reported such range in addition to the typical price; data in the table are not adjusted with purities. For the purpose of this figure, a mid-point of upper and lower limit was used when data were reported in a range format.

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with NACD of Cambodia, LCDC of Lao PDR, CCDAC of Myanmar, and ONCB of Thailand, February 2020.

The decreasing price of methamphetamine occurring during a time of economic growth and rising income levels has potentially increased affordability of the drug in East and Southeast Asia. A practical consequence now affecting individual users is that some can afford to purchase larger quantities and or higher purity versions of the drug. If caught, those with larger quantities may pass national legal thresholds that differentiate between amounts intended for personal consumption and those indicating intent to supply (trafficking) – potentially leading to a larger number of drug users charged with trafficking offences.

Ecstasy

MDMA manufacture does not appear to be significant in East and Southeast Asia, however, as with methamphetamine there are strong indications of increased production in the lower Mekong region, indicating a migration of MDMA manufacture from maritime Southeast Asian countries. In addition to "ecstasy" being manufactured within the region, trafficking of the drug originating in other regions, in particular from Europe, continues to be reported in East and Southeast Asia.

Increases in seizures of "ecstasy" were observed in several countries in East and Southeast Asia, including Cambodia, Japan, Malaysia, the Republic of Korea, and Thailand. Based on preliminary data for 2019, at least 4.7 million "ecstasy" tablets were seized in the region, with about 90 per cent of the total seized by Cambodia, Indonesia, Hong Kong, China, and Malaysia.

While the use of "ecstasy" is not yet widespread in East and Southeast Asia, there are indications of increased use of the drug. Expert perceptions of "ecstasy" use reported from countries including Brunei Darussalam, Cambodia, Hong Kong, China, Japan, Singapore, and Viet Nam, indicate its increased use in recent years. One notable development in the region's "ecstasy" market is the high proportion of female users as opposed to other major illicit drugs consumed in the region, such as methamphetamine and heroin.

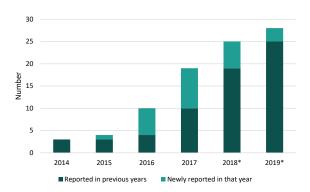
"Ecstasy" has also reportedly become purer, and crystalline MDMA, associated with an increased risk of overdose events in other regions, appears to be available in East and Southeast Asia. In addition, drug products in liquid form containing MDMA in combination with other synthetic drugs have been found in the region.

New Psychoactive Substances (NPS)

The number of NPS, including potent synthetic opioids, reported from the region has increased steadily. By the end of 2019, a total of 461 different NPS were reported by countries in East and Southeast Asia. However, the number of NPS detected in some countries in the region, including Cambodia, Lao PDR, and Myanmar remain limited, in part attributable to their limited capacity to identify these substances.

The number of NPS with opioid effects identified in East and Southeast Asia has increased gradually in recent years. While there were only three synthetic opioids identified in the region by 2014, the number increased to 28 substances by 2019. Some synthetic opioids identified in the region are extremely potent and have been implicated in overdose deaths outside the region, particularly in North America and to a lesser extent in Europe.

Figure 3. Emergence of NPS with opioid effects in East and Southeast Asia, 2014-2019*



Note: * Data for 2018 and 2019 are preliminary. Source(s): UNODC EWA on NPS.

There is little information relating to overdose deaths associated with the non-medical use of synthetic opioids in East and Southeast Asia despite their steady emergence in recent years. However, there are already some indications of the availability of potent NPS with opioid effect in the regional drug market, and recent retrospective forensic data of autopsy cases from Thailand have shown the concurrent use of fentanyl with benzodiazepines and methamphetamine. Although it is unclear what proportion was associated with the non-medical use of synthetic opioids, the findings should be cause for concern.

While the non-medical use of ketamine has long been a challenge for East and Southeast Asia, there have been changes in the ketamine market in recent years. As with methamphetamine, seizures of ketamine have increased significantly in Southeast Asia since 2015. The steep surge in seizures of ketamine in Southeast Asia has been primarily driven by substantial quantities of the drug being illicitly manufactured in, and trafficked from, Myanmar. Although most of the ketamine available in the regional drug market is being supplied from within the region, there are also indications pointing to supply routes from other regions, including South Asia and Europe.



Introduction



INTRODUCTION

This report presents the most current information available on synthetic drug manufacture, trafficking and demand in East and Southeast Asia with data from 2019 and in some cases up to the first quarter of 2020, when COVID-19 became a pandemic. The region has experienced a massive expansion of illicit drug supply in recent years as illicit manufacturing has become more sophisticated and the scale of facilities has expanded, the purity of drugs has increased, and prices have dropped - a worrisome scenario in a region where drug treatment has not always been available or affordable for those who need it.

Against this backdrop, it needs to be considered how the implications of the COVID-19 pandemic, including reduced trade flows and different scrutiny of travellers, economic fallout due to lost income and lost jobs, and personal movement restrictions, impact illicit drug supply and demand in the region. What are the opportunities for organized crime offered by a refocussing of government attention to public health and screening at borders, the closure and slowdown of many government services, home-office arrangements for many parts of the workforce, and an increase in on-line activities and business? And what will the impact be on those who are already in drug treatment or urgently need it?

First, not every fluctuation encountered in the coming months in terms of drug seizures, prices, drug-related arrests or deaths, will be a direct or indirect consequence of the COVID-19 pandemic. Organized crime groups active in the region have shown a high degree of flexibility to respond to shortages of supplies, raising risk levels on certain trafficking routes. The flexibility of the illicit economy, which does not have to wait for new rules and regulations to enter into force, should also not be underestimated. As the report finds, a large proportion of methamphetamine, still the

main synthetic drug of concern in the region, is manufactured, trafficked and consumed in the region, without the need for globalized supply chains. Trafficking in the lower Mekong region also takes place in a variety of ways across borders which are porous and difficult to control, and cross-border movements in many places will not be significantly hindered by COVID-19 measures. While containerized trafficking exists, it is just one of many methods used, and the impact of reduced container trade may be limited. Where movements are significantly affected, e.g. couriers and body packing through airports, routes and methods will change quickly, leading to an initial statistical reduction in seizures but without a real change in terms of supply. Additional efforts will be required at the national, regional and international level to carefully analyse methods and trends to understand changes to drug markets in the wake of the COVID-19 pandemic.

Secondly, given that extreme levels of synthetic drug production take place within the region, in-part a result of limited government control in the Golden Triangle, trafficking will continue at high volumes. In particular, the supply of precursor chemicals is not likely to be disrupted for the foreseeable future because sourcing of chemicals by major organized crime groups is largely through direct diversion from industry within the region and subsequent trafficking, not diversion from licit overseas trade channels. At the same time, due to social and movement restrictions within countries, local distribution (street dealing) may be significantly impacted and altered and users' methods to access drugs will change. Economic hardship may also reduce the disposable income of some people who use drugs, and result in increased crime.

Thirdly, recent advances in the region to introduce community-centred elements into drug treatment and prevention approaches may be jeopardized. An already vulnerable population of drug users may be exposed to additional risks as funding is re-prioritized, access to programmes and services becomes difficult, activities of treatment providers are hampered, and communities concentrate on coping with the repercussions of the COVID-19 pandemic.

Readers are encouraged to keep all three dimensions - changing trafficking and distribution patterns, and increased vulnerabilities - in mind when reading this report.





Overview of the methamphetamine market

The methamphetamine market in East and Southeast Asia has been expanding continuously over the last decade, driven by an unprecedented supply of the drug. The growth in supply has led to decreases in prices of methamphetamine throughout the region, increasing its affordability and, likely, demand, as indicated by increasing numbers of drug users brought into formal contact with authorities. This development is posing serious challenges for criminal justice and public health in the region.

The manufacture of methamphetamine has been further consolidated to the lower Mekong region, in particular to the Golden Triangle

The growing signs of an intensification of methamphetamine manufacturing activity within and around the Golden Triangle, including countries like Cambodia and Viet Nam, and a corresponding decrease in the number of methamphetamine manufacturing facilities dismantled in East and maritime Southeast Asia indicates that methamphetamine manufacture is now being consolidated in the lower Mekong region.

In recent years, the Golden Triangle has become the epicentre for the illicit manufacture of methamphetamine in East and Southeast Asia, which reaches markets as far as Australia and New Zealand. The area has long been known for manufacturing large volumes of illicit drugs, mainly heroin and methamphetamine tablets, and has recently shifted towards producing increasing amounts of crystalline methamphetamine and other synthetic drugs, including ketamine. This shift in the Golden Triangle has been observed since late

2015 when Myanmar authorities started seizing substantial quantities of these synthetic drugs.¹

With the surge in methamphetamine manufactured in and trafficked from the Golden Triangle, the Government of Myanmar has intensified its responses, leading to successful dismantling and several methamphetamine manufacturing facilities of an unprecedented scale. Between 2018 and 2019, a total of 14 clandestine drug laboratories were seized in Myanmar, which is a significant development compared to 2017 when no manufacturing sites were dismantled.2 Of interest is one trafficking case reported in July 2019 in Kayah State, where authorities seized 500 kg of crystalline methamphetamine, 649 kg of ketamine and 1,150 kg of concentrated caffeine, a typical bulking agent for methamphetamine tablets3, which may indicate possible methamphetamine sites outside Shan State.

In 2019, seizures of methamphetamine manufacturing sites were also reported in other lower Mekong countries. In July, authorities in Viet Nam dismantled the largest ever methamphetamine manufacturing facility in Kon Tum province, located near the border with Cambodia and Lao PDR.⁴ 20 tons of laboratory equipment and 13 tons of various chemicals, including more than 1,050 litres of P-2-P, 14 litres of benzyl cyanide, and 213 kg of tartaric acid, were found at the site.⁵

¹ For more information, see the Myanmar country chapter in the report.

The Central Committee for Drug Abuse Control (CCDAC) of Myanmar, "2019 Precursor Situation in Myanmar", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

³ CCDAC, "Drug trends and precursor control in Myanmar", presented at the 43rd Meeting of Heads of National Drug Law Enforcement Agencies, Asia and the Pacific (HONLAP), Bangkok, Thailand, October 2019.

⁴ Standing Office on Drugs and Crime (SODC) of Viet Nam, "Precursor chemical control in Viet Nam", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

⁵ Ibid.

Largest ever methamphetamine manufacturing sites dismantled in the Golden Triangle

The Government of Myanmar conducted a series of operations in North Shan, Myanmar throughout early 2020. As of 14 March, Myanmar authorities dismantled several methamphetamine manufacturing sites and warehouses leading to seizures of over 143 million methamphetamine tablets, which is more than the entire amount



Map 1. Locations of methamphetamine manufacturing facilities dismantled in Myanmar, between February and March 2020



Note: Boundaries, names and designations used do not imply official endorsement or acceptance by the United Nations.

seized in the country in 2019, as well as 441 kg of crystalline methamphetamine.⁶ In addition, 246 different types of chemicals and laboratory equipment were also seized during the operations.⁷ The case demonstrates the sheer scale of methamphetamine manufacturing capacity in the Golden Triangle.

For the first time since 2015, a synthetic drug refinery was dismantled in Phnom Penh, Cambodia in April 2019, resulting in seizures of 18 kg of methamphetamine, 52 kg of ketamine, 80 kg of MDMA, all in powder form, as well as 173 kg of pyrovalerone, tableting moulds and laboratory equipment.⁸

In China, the number of clandestine methamphetamine dismantled laboratories decreased from 526 in 2015 and to 85 in 2018, the latest year available.9 Although amounts of methamphetamine manufactured in and trafficked from China appear to have significantly decreased in recent years, Chinese authorities continued dismantle clandestine methamphetamine laboratories in 2019. For instance, in November, Chinese authorities dismantled a total of four methamphetamine manufacturing facilities and

There are also indications that the level of illicit manufacture of methamphetamine in maritime Southeast Asian countries may be decreasing. For instance, there was no seizure of methamphetamine laboratories in the Philippines in 2019, which is a first for the country in recent years. Additionally, in 2019, the number of methamphetamine laboratories dismantled respectively in Indonesia and Malaysia was the lowest since 2014.¹²

three warehouses containing precursor chemicals in multiple provinces, including Fujian, and seized 450 kg of ephedrine and more than 77 tons of other chemicals. Osome of the dismantled laboratories were used for the illicit manufacture of ephedrine and 2-bromopropiophenone, a precursor for ephedrine. The National Narcotics Control Commission (NNCC) of China noted that organized crime groups based in Fujian province, remain active in the illicit trade of drugs and chemicals.

Office of the Commander-in-chief of Defence Services, "More narcotic drugs, related materials used in drug production seized in Lwekham Village, Kutkai Township", March 2020.

⁷ Ibid

⁸ National Authority for Combating Drugs (NACD) of Cambodia, "Precursor chemical control in Cambodia", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020; DAINAP.

⁹ UNODC, responses to the annual report questionnaire.

¹⁰ NNCC, China, "Seven Provinces Jointly Solved "9 · 25" Extraordinary Drug Manufacturing cases", official press release, November 2019 (accessed at http://www.nncc626.com/2019-11/14/c_1210353398.htm).

¹¹ Ibid.

¹² DAINAP.

Figure 1. Number of methamphetamine manufacturing facilities dismantled in Indonesia, Malaysia, and the Philippines, 2014-2019



Note: The figures refer to all laboratories, regardless of the size of the facility or the scale of the output. At present, there is no comprehensive data to assess the scale of the dismantled manufacturing facilities.

Source: DAINAP.

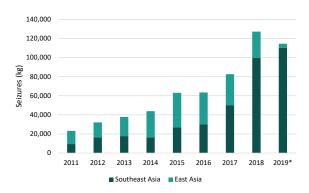
The consolidation of methamphetamine manufacture in the lower Mekong region increases the challenges for Governments to respond to this development as it takes place in an area where some countries are lacking vital institutional capacity and resources, which makes them comparatively attractive target for organized crime groups.

Seizures of methamphetamine in East and Southeast Asia have reached record levels every year over the last decade

Countries in East and Southeast Asia have collectively witnessed sustained increases in seizures of methamphetamine over the last decade, more than any other part of the world. The observed seizure trends and decreases in prices of the drug (see page 18 of the chapter) indicate that the greater availability of methamphetamine in the market has been a major factor for the increases in seizures.

While the annual seizures of methamphetamine have increased over the last 10 years, a major observation is the significant increase in the rate of seizures in the latter part of the decade. Between 2011 and 2014, seizures of methamphetamine almost doubled, increasing from 23 to 44 tons. In the following years, however, seizures of methamphetamine almost tripled and increased by more than 60 tons between 2015 and 2018, reaching more than 127 tons of the drug in 2018. At the time of writing, countries in the region have

Figure 2. Seizures of methamphetamine in East and Southeast Asia, 2011-2019*



Note: * Data for 2019 include only those confirmed by countries in the region. For more information, see footnote 13 of the report.

Source: UNODC, responses to the annual report questionnaire; Official communication with the Supreme Prosecutors' Office (SPO) of the Republic of Korea, February 2020; National Police Agency (NPA) of Japan, "Drug Control in Japan", presented at the 25th Asia-Pacific Operational Drug Enforcement Conference, Tokyo, Japan, February 2020; Comparison of 2019 and 2018 crime situation, Hong Kong Police Force, (accessed at https://www.police.gov.hk/info/doc/overcrim.pdf).

already confirmed seizures of 115 tons of the drug in 2019. It should be noted that the figure does not yet include any data from China, which seized nearly 30 tons on average over the last five years. It is probable that the 2019 total will be higher than 2018.¹³

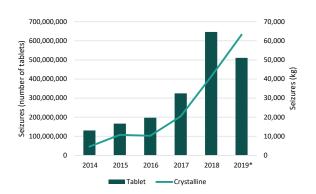
The steep increase in seizures of methamphetamine in recent years has been primarily driven by Southeast Asia, which increased its share of the regional total in East and Southeast Asia from 40 per cent in 2011 to 80 per cent in 2018, further illustrating the geographic shift described above.

Organized crime groups in the Golden Triangle have intensified supply of crystalline methamphetamine

One of the major developments observed in the methamphetamine market in East and Southeast Asia is the increase in supply of methamphetamine in crystalline form, particularly in Southeast Asia,

¹³ At the time of writing, Brunei Darussalam, Cambodia, Indonesia (preliminary), Japan (preliminary), Hong Kong, China (preliminary), Lao People's Democratic Republic (PDR), Malaysia, Myanmar, the Philippines, the Republic of Korea, Singapore, Thailand, Taiwan Province of China, and Viet Nam (preliminary) have provided the drug seizure data for all of 2019. No data was available for China, including Macau, China, the Democratic People's Republic of Korea, Mongolia, and Timor Leste for 2019.

Figure 3. Changes in methamphetamine tablet and crystalline methamphetamine seizures in Southeast Asia, 2014-2019*



Note: * Data for 2019 are preliminary and subject to change. For more information, see footnote 13 of the report.

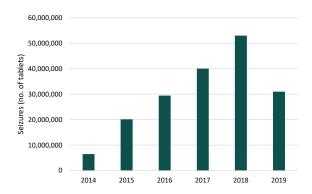
Source: UNODC, responses to the annual report questionnaire; DAINAP.

which has been more pronounced and persistent compared to methamphetamine in tablet form.

While in 2019, seizures of methamphetamine tablets in Southeast Asia decreased for the first time in years, by a fifth, from 647 million to 511 million tablets, seizures of crystalline methamphetamine continued to increase in 2019. Preliminary data show that at least 63 tons of the drug were seized in that year, more than a 50 per cent increase compared to 2018.

For a better understanding of the methamphetamine tablet trends, it is necessary to take into account trafficking from Myanmar to South Asia, which has evolved into an important destination for methamphetamine tablets outside the Mekong region. While seizures of methamphetamine tablets in Bangladesh in 2019 decreased by 42 per cent to 31 million tablets compared to the preceding year, after several years of continuous increases,14 India reported a substantial increase in seizures of amphetamine-type stimulants (ATS), up from 431kg in 2018 to more than 2.2 tons in 2019. This could, at least partially, be the consequence of the emergence of a new trafficking route from Myanmar through India's border for trafficking to Bangladesh. However, more information on the type of ATS seized and seizure locations will be needed to interpret these trends.15

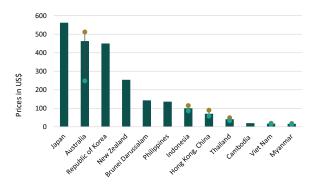
Figure 4. Seizures of methamphetamine tablets in Bangladesh, 2014-2019



Source: Department of Narcotics Control of Bangladesh (DNC).

At this point in time, it is uncertain what the main driver for the increased supply of crystalline methamphetamine from the Golden Triangle would be, and whether the trend will continue. According to UNODC's latest assessment, the methamphetamine market in East and Southeast Asia and neighbouring countries is as large as US\$ 61.4 billion annually.¹⁶

Figure 5. Retail prices of crystalline methamphetamine per 1 gram among selected countries in East and Southeast Asia, Australia and New Zealand for 2019 or latest year available



Source: UNODC, responses to the annual report questionnaire; DAINAP; National Drug Intelligence Bureau of New Zealand (NDIB), "Illicit Drug Pricing Report", February 2020; Official communication SPO of the Republic of Korea, February 2020; NPA of Japan, "Drug Control in Japan", presented at the 25th Asia-Pacific Operational Drug Enforcement Conference, Tokyo, Japan, February 2020.

¹⁴ Department of Narcotics Control of Bangladesh (DNC), "Drug control in Bangladesh", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

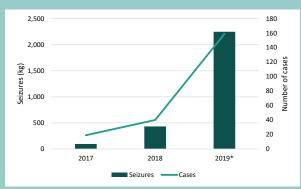
¹⁵ Narcotics Control Bureau (NCB) of India, "Country briefing" presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020; Data for 2019 are preliminary according to the NCB.

¹⁶ UNODC, "Transnational Organized Crime in Southeast Asia: Evolution, Growth and Impact", July 2019.

The impact of the East and Southeast Asian methamphetamine market expansion on South Asia

Amidst growing connectivity within Asia, the impact of the expanding synthetic market in East and Southeast Asia has affected neighbouring South Asia. Substantial quantities of methamphetamine from Southeast Asia have been seized in South Asia. While trafficking flows of methamphetamine tablets from the Golden Triangle to Bangladesh continue to be observed, India has also reported increased seizures of ATS, most of which are suspected to be methamphetamine, in recent years. Two explanations have been suggested by experts: first, a growth in trafficking of methamphetamine tablets from the Golden Triangle overland to Bangladesh, with some routes crossing India.¹⁷ Secondly, the use of a maritime trafficking routes from Myanmar along the Andaman Sea, some of which cross Indian territorial waters. 18 Meanwhile, methamphetamine precursor chemicals and ketamine¹⁹ trafficked from or via South Asia to Southeast Asia have also been observed.²⁰

Figure 6. Number of cases and seizures of ATS in India, 2017-2019*



Note: Data for 2019 are preliminary and subject to change. Source: Narcotics Control Bureau (NCB), India, "Country briefing on drug and precursor situation in India", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

There has been a significant reduction in the amount of pseudoephedrine, mainly in the form of pharmaceutical preparations (see Figure 9) seized in Myanmar.²¹ However, the large quantities of solvents like sulphuric acid seized during special operations conducted in northern Shan State in March 2020 and believed to originate from India, confirmed continuing flows of chemicals from India to Myanmar. In addition, Malaysian authorities seized 200 kg of pseudoephedrine shipped from Bangladesh en route to Australia in November 2019.²²

Organized crime groups have shifted major methamphetamine trafficking routes in response to law enforcement operations

In 2019, there were major shifts in trafficking routes of crystalline methamphetamine observed across the region, demonstrating agility and flexibility of organized crime in response to intensified law enforcement operations in 2018.

In Myanmar, almost all crystalline methamphetamine (98.2 per cent) were seized in Shan State in 2018, which was also the case in 2017.²³ However, in 2019, while Shan State continued to account for the largest amount of crystalline methamphetamine seizures (4,167 kg), one-third of the 2019 total (3,145 kg) was seized

¹⁷ DNC, "Drug Control in Bangladesh", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

¹⁸ For instance, in September 2019, Indian authorities seized 1,156 kg of crystalline methamphetamine in Nicobar Island, located at the juncture of the *Bay of Bengal* and the Andaman Sea. The drug was destined from Malaysia and Thailand, and concealed in distinctive teabag packaging used in the Golden Triangle; Narcotics Control Bureau (NCB), India, "Country briefing on drug and precursor situation in India", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

¹⁹ For more information, see the ketamine section in the report (p. 28).

²⁰ Royal Malaysian Police, National Anti-Drug Agency (NADA), and the Ministry of Health of Malaysia, "Country briefing" presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

²¹ Official communication with CCDAC on seizures of precursor chemicals during the 1511 Operation, March 2020.

²² Royal Malaysian Police, National Anti-Drug Agency (NADA), and the Ministry of Health of Malaysia, "Country briefing" presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

²³ UNODC, "Transnational Organized Crime in Southeast Asia: Evolution, Growth and Impact", July 2019.

in Tanintharyi Region, located in the southern part of the country.²⁴ In 2018, Tanintharyi Region accounted for merely 0.1 per cent of the total seizures, amounting to just 3.5 kg.²⁵

This shift corroborates with sub-national seizure data reported from Thailand and indicates that a new trafficking route from the Golden Triangle to the western border of Thailand has emerged. In 2019, western and central provinces of Thailand, such as Bangkok, Pathum Thani and Tak, were listed in the top five provinces for crystalline methamphetamine seizures.26 In 2018, a large majority of the drug was seized in northern and southern provinces of the country, such as Chiang Rai and Chumphon, showing direct trafficking flows through the northern border to the southern border. Interestingly, there was no significant changes observed in entry points of methamphetamine tablet trafficked from the Golden Triangle to Thailand between 2018 and 2019.²⁷ The disparity is likely due to different organized crime groups financing trafficking in the two drug types and their intended destinations.

Thailand remains a major transit for crystalline methamphetamine trafficked to Oceania. For instance, in June 2019, Australian authorities reportedly seized 1.6 tons of crystalline methamphetamine trafficked via Bangkok, Thailand 28, the largest ever reported by Australia.29 In September 2019, New Zealand authorities also seized 452 kg of crystalline methamphetamine trafficked via Bangkok, Thailand, the largest amount ever seized at its border.30

Map 2. Proportion of crystalline methamphetamine seizures in Myanmar by State and Region, 2019



Note: Figures are rounded to the first decimal place; the sum of figures for each 2018 and 2019 does not add up to 100, as data for States or Regions with marginal seizures are not included. Boundaries, names and designations used do not imply official endorsement or acceptance by the United Nations.

Source: Official communication with CCDAC, Myanmar, February 2019 and March 2020.

Both Lao PDR and Viet Nam reported substantial increases in seizures of crystalline methamphetamine in 2019. The increases demonstrate that both countries have become new major gateways for trafficking of the drug. There were no crystalline methamphetamine trafficking cases involving more than 100 kg of the drug in Viet Nam prior to late 2018 and this changed in 2019, indicating intensified flows of the drug to the country likely due to the change in trafficking routes.31 In addition, authorities noted that a vast majority of crystalline methamphetamine seized in the country in 2019 was trafficked from the Golden

²⁴ Official communication with CCDAC, Myanmar, February 2019 and March 2020.

²⁵ Ibio

²⁶ Official communication with ONCB, Thailand, February 2020.

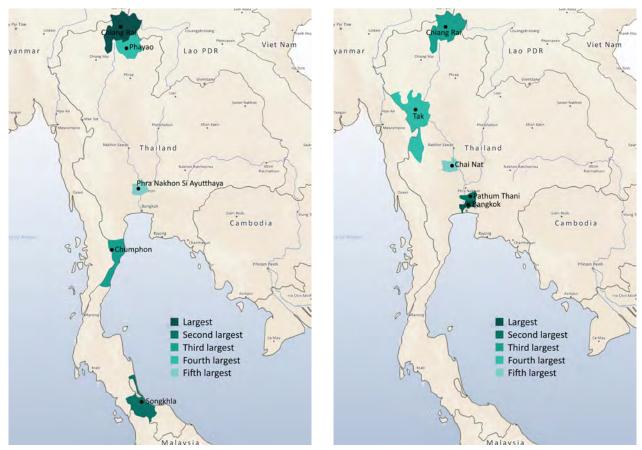
²⁷ For instance, four provinces in Thailand, Chiang Rai, Chiang Mai, Bangkok and Lampang were listed in the top five provinces for methamphetamine tablet seizures in 2018 and 2019; Official communication with ONCB, February 2020 and ONCB "Synthetic drug situation in Thailand", presented at the 2019 SMART Regional Workshop, Singapore, August 2019

²⁸ Australian Federal Police (AFP), "Authorities make largest ever onshore ice seizure", official press release, June 2019 (accessed at https://www.afp.gov.au/news-media/media-releases/ authorities-make-largest-ever-onshore-ice-seizure).

²⁹ Ibid.

³⁰ New Zealand Customs Service, "Customs' biggest methamphetamine seizure", official press release, September 2019 (accessed at https://www.customs.govt.nz/about-us/ news/media-releases/customs-biggest-methamphetamineseizure/).

³¹ SODC, "Latest situation on synthetic drugs and responses to the threats in Viet Nam" presented at the 2019 Regional SMART Workshop for East and Southeast Asia, Singapore, August 2019.

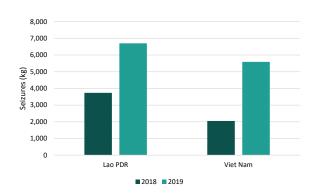


Map 3. Top five provinces of crystalline methamphetamine seizures in Thailand in 2018 and 2019

Note: Boundaries, names and designations used do not imply official endorsement or acceptance by the United Nations. Source: Official communication with ONCB, Thailand, February 2020.

Triangle via Lao PDR for subsequent trafficking to other destinations, including China, the Philippines and Taiwan Province of China.³²

Figure 7. Seizures of methamphetamine in Lao PDR and Viet Nam, 2018 and 2019



Source: DAINAP; Official communication with Lao PDR and Viet Nam, February 2020.

Several crystalline methamphetamine trafficking cases reported from the Philippines in 2019 also show the role of Viet Nam as a major transit point for drugs trafficked from the Golden Triangle. For instance, in March 2019, Philippine authorities seized 276 kg of crystalline methamphetamine trafficked via Ho Chi Minh City, Viet Nam.³³ A trade company established in Viet Nam by an organized crime group was used to ship the drug from the Philippines and destined to Taiwan Province of China.³⁴

Furthermore, there are growing indications that the coastal province of Sihanoukville, Cambodia, is gaining importance as a transhipment point for regional and inter-regional methamphetamine trafficking. According to Cambodian authorities,

³³ Dangerous Drugs Board (DDB) and Philippines Drug Enforcement Agency (PDEA), "Latest situation on synthetic drugs and responses to the threats in Philippines", presented at the Regional SMART Workshop for East and Southeast Asia, Singapore, August 2019.

³⁴ SODC, "Latest situation on synthetic drugs and responses to the threats in Viet Nam" presented at the 2019 Regional SMART Workshop for East and Southeast Asia, Singapore, August 2019.

³² Ibid.

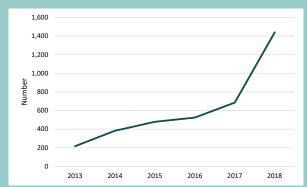
Trafficking of methamphetamine to Australia and New Zealand and its impact on the Pacific

For years, organized crime groups have exploited Pacific island countries and territories (PICTs) as a transhipment point for methamphetamine trafficked from East and Southeast Asia and North America to Australia and New Zealand. PICTs are also increasingly targeted as destination markets and for the illicit manufacture of methamphetamine. This is a worrying yet anticipated trend, as there have been many instances of growing illicit drug markets in countries located along major drug trafficking routes.

The number of drug-related offences in Fiji had increased by more than 560 per cent between 2013 and 2018. Fiji authorities also noted that seizures of parcel posts containing illicit drugs, including methamphetamine, and originating from China, the United States and South American countries, had increased substantially during the same period.³⁷ Tonga is another country that has been seriously impacted by increased

flows of methamphetamine in recent years. In response, a task force specialising in illicit drugs was established in April 2018, and has led to seizures of 33.8 kg of methamphetamine and 2.4 kg of cocaine, as of August 2019. The amount of methamphetamine seized in Tonga is substantial considering that the size of the population is estimated to be around 103,020.³⁸

Figure 8. Number of drug-related offences in Fiji



Source: Crime statistics, Fiji Bureau of Statistics (accessed at https://www.statsfiji.gov.fj/index.php/statistics/other-statistics/crimes-offences); Fiji Police Force, "Fiji's Drug Trend", presented 43rd meeting of the Heads of National Drug Law Enforcement Agencies, Asia and the Pacific (HONLAP), Bangkok, Thailand, October 2019.

crystalline methamphetamine has been trafficked by sea from the Sihanoukville port to countries such as the Philippines and Australia.³⁹ In addition, in March 2020, Thai authorities seized more than 600 kg of the drug in several islands of Trat Province,⁴⁰ located at the far east region of Thailand, believed to be destined for Sihanoukville for onward trafficking.

Maritime drug trafficking remained active throughout 2019, in particular along Andaman Sea and Malacca Strait, to reach crystalline methamphetamine markets in Indonesia and

Malaysia as well as onward trafficking to Australia and Japan. Seizures reported in early 2020 indicate new maritime trafficking routes. For instance, in January 2020, Myanmar authorities seized about 200 kg of crystalline methamphetamine together with 490 kg of ketamine on a fishing vessel leaving from Maung Taw, Rakhine State.41 While the departure point has been used for trafficking in methamphetamine tablets to Bangladesh, it is an unusual departure point for crystalline methamphetamine as there was no reported seizures of this particular drug form in Rakhine state between 2018 and 2019.42 In addition, there have been increasing amounts of crystalline methamphetamine being trafficked to South Kalimantan since early 2020.43 For instance, Indonesia authorities reported to have seized 200 kg of the drug together with 14 kg of "ecstasy" in the area in March 2020.44

UNODC, Transnational Organized Crime in the Pacific: A Threat Assessment, July 2016.

³⁶ State Services in French Polynesia, "ICE: A long fight ahead of us", official press release, January 2019 (accessed at http:// www.polynesie-francaise.pref.gouv.fr/Actualites/Communiquesde-presse/2019/20-janvier-ICE-un-long-combat-devant-nous).

³⁷ Fiji Police Force, "Fiji's Drug Trend", presented at the 43rd HONLAP, Bangkok, Thailand, October 2019.

³⁸ World Bank, Population data for Tonga (accessed at https://data.worldbank.org/indicator/SP.POP.TOTL?locations=TO).

³⁹ NACD, "Precursor chemical control in Cambodia", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

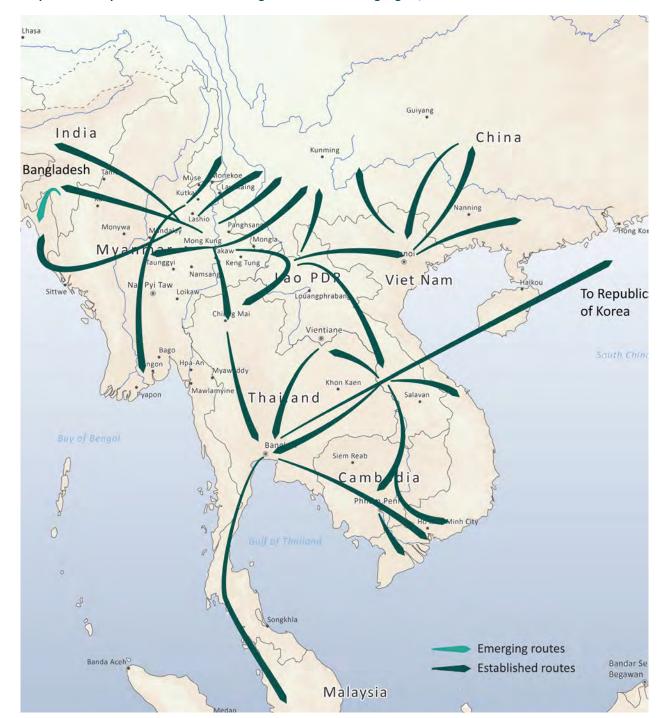
⁴⁰ Official communication with ONCB, March 2020.

⁴¹ CCDAC, "Current situation and trafficking trends in Myanmar", presented at the 25th Asia-Pacific Operational Drug Enforcement Conference (ADEC), Tokyo, Japan, February 2020.

⁴² Official communication with CCDAC, March 2020.

⁴³ Indonesian National Police (INP), "Country briefing", presented at the Virtual Western Maritime Route Forum on Drug Trafficking: Enhancing Inter-Agency Coordination, March 2020.

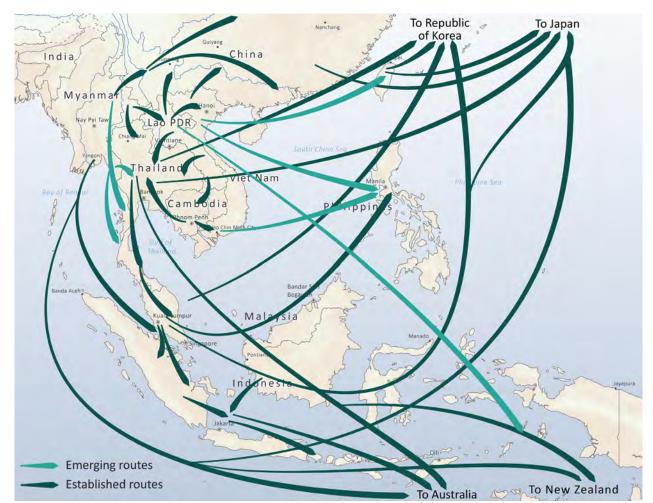
⁴⁴ Ibid.



Map 4. Methamphetamine tablet trafficking flows in the Mekong region, 2019

Note: Flows arrows represent the general direction of trafficking and do not coincide with precise sources of production or manufacture, are not actual routes, and are not weighed for significant/scale. Boundaries, names and designations used do not imply official endorsement or acceptance by the United Nations.

Source: UNODC elaboration based on information presented at the 2019 SMART Regional Workshop, Singapore, August 2019 and the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.



Map 5. Crystalline methamphetamine trafficking flows in East and Southeast Asia, 2019

Note: Flows arrows represent the general direction of trafficking and do not coincide with precise sources of production or manufacture, are not actual routes, and are not weighed for significant/scale. Boundaries, names and designations used do not imply official endorsement or acceptance by the United Nations.

Source: UNODC elaboration based on information presented at the 2019 SMART Regional Workshop, Singapore, August 2019 and the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

East and Southeast Asia has not been successfully curbing diversion of and trafficking in precursor chemicals

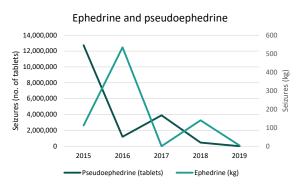
The manufacture of methamphetamine requires key precursor chemicals, such as ephedrine, pseudoephedrine, and P-2-P.⁴⁵ In East and growing methamphetamine Southeast Asia, manufacture would not be possible without a matching surge in precursor chemical diversion and trafficking. However, recent seizure trends of methamphetamine precursor chemicals are not commensurate with the trends in methamphetamine seizures, and might

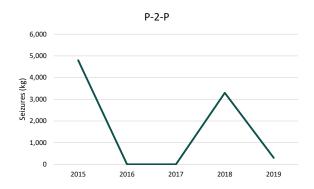
indicative of difficulties in coping with increasing diversion, trafficking and the illicit manufacture of those key precursor chemicals.

As the Golden Triangle has been the major methamphetamine manufacture centre in East and Southeast Asia, it is important to identify and monitor trends and types of precursor chemical trafficking destined to Myanmar. Since 2015, seizures of ephedrine and pseudoephedrine have decreased significantly in Myanmar. There has been no recent seizure of pseudoephedrine and only 4 kg of ephedrine were seized in 2019 in the country. At the same time, seizures of P-2-P have greatly fluctuated with only insignificant amounts (300 lt) of the chemical seized in 2019.

Ephedrine, pseudoephedrine and P-2-P are listed in Table I of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.

Figure 9. Seizures of ephedrine, pseudoephedrine, and P-2-P in Myanmar, 2015-2019





Note: The amount of pseudoephedrine found in tablets varies.

Source: DAINAP; CCDAC, "2019 Precursor Situation in Myanmar", at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

Excluding Myanmar and Viet Nam, only three other countries in Southeast Asia, Indonesia, Malaysia and the Philippines, reported to have seized either ephedrine, pseudoephedrine or P-2-P in 2019. However, the amounts seized in these countries were very small, ⁴⁶ and is illustrative of the increasing challenges in detecting methamphetamine related precursor chemicals in the region and beyond. ⁴⁷

A vast majority of recent seizures reported by the Myanmar authorities point to areas bordering China, as being heavily exploited by transnational organized crime groups for precursor trafficking.⁴⁸ To stop flows of precursors to Myanmar, the Government of China has intensified its law enforcement efforts. Between January to early October 2019, Chinese authorities seized a total of 873.4 tons of various illicit drug making materials, including precursor chemicals and auxiliaries along all border check points in Yunnan province of China, bordering Myanmar.⁴⁹ Another entry point for chemicals to Myanmar is Tachileik, in the southern Shan State on the border with Thailand, where large quantities of hydrochloric acid and sodium

cyanide⁵⁰ have been seized in recent years.⁵¹

The types of chemicals seized in Myanmar in recent years point to new synthesis methods being used for the manufacture of methamphetamine. Since 2017, increasing quantities of sodium cyanide and, very recently, benzyl cyanide, have been seized in Myanmar and Thailand en route to the Golden Triangle.52 Myanmar authorities reported significant amount of seizures of about 8,000 It of benzyl cyanide and more than 12 tons of sodium ethoxide in separate incidents during the first quarter of 2020,53 both of which can be also used for synthesizing P-2-P. It may not be a coincidence that seizures of such chemicals have increased over the past few years when the region started witnessing a surge of methamphetamine manufactured in the Golden Triangle, indicating the growing sophistication and flexibility of organized crime groups in using non-traditional chemicals to engineer the expansion of the market.

⁴⁶ For instance, Malaysia reported to have seized 200 kg of pseudoephedrine and 12 kg of ephedrine while only 46 g and 76.8 g of ephedrine were seized respectively in Indonesia and in the Philippines. Data for Indonesia for 2019 are preliminary and subject to change.

⁴⁷ See also UNODC, An expanding synthetic drugs market implications for precursor control, Global SMART Update, Vol. 23. March 2020.

⁴⁸ CCDAC, "2019 Precursor Situation in Myanmar", at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

⁴⁹ NNCC, China, "Yunnan Entry-Exit Border Inspection Station Commends Advanced Groups and Individuals", official press release, November 2019.

⁵⁰ A combination of benzyl chloride and sodium cyanide is required for the synthesis of benzyl cyanide and subsequently P-2-P. The absence of seizures of benzyl chloride makes it difficult to determine if the sodium cyanide seized in recent years is intended as precursors for the production of P-2-P.

⁵¹ CCDAC, "2019 Precursor Situation in Myanmar", at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

⁵² Sodium cyanide and benzyl cyanide are not listed as controlled substances under the 1988 UN Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, and both these substances can be used to synthesize P-2-P.

⁵³ CCDAC, "2019 Precursor Situation in Myanmar", at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

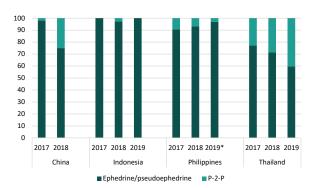
Substantial quantities of chemicals have been seized in Lao PDR en route to the Golden Triangle. In 2019, 13.4 tons of chemicals, by far the largest amount on record, were seized in the country.⁵⁴ A vast majority of the total was due to a case reported in May 2019, involving 10 tons of an unspecified chemical seized in Bokeo province destined for the Golden Triangle.⁵⁵ In addition, in November 2019, Lao PDR authorities reported to have seized 13 kg of methylamine, a chemical that can be used for the manufacture of a number of synthetic drugs, as well as ephedrine.⁵⁶

There are indications that precursor chemicals being increasingly diverted and trafficked from and within Viet Nam. A large-scale methamphetamine laboratory dismantled in September 2019 resulted in seizures of more than 13 tons of various chemicals, including P-2-P. Viet Nam authorities reported that seized chemicals were known to have been diverted within the country.⁵⁷ Countries in Europe noted seizures of alpha-phenylacetoacetonitrile (APAAN), a designer precursor chemical for P-2-P, which either originated from or transited through Viet Nam between 2018 and 2019.⁵⁸

Recent information on methamphetamine profiling reported from countries in the region indicate the increased use of P-2-P methods for the manufacture of methamphetamine. For instance, China reported that 25 per cent of crystalline methamphetamine samples analysed in 2018 were manufactured with the reductive animation method, which uses P-2-P as a key precursor chemical while the corresponding figure for 2017 was only 2 per cent. 59 However, it is important to note that ephedrine and pseudoephedrine remain the major precursor chemicals used for the manufacture of methamphetamine in the

region (see Figure 10). Despite this, seizures of ephedrine, pseudoephedrine and their precursors in the region remains extremely low in recent years. This mismatch in drug profiling information and seizure trends might be indicative of significant intelligences gaps and difficulties in coping with diversion, trafficking and the illicit manufacture of those key precursor chemicals.

Figure 10. Crystalline methamphetamine forensic profiles reported from China, Indonesia, the Philippines and Thailand, 2017-2019*



Note: Data for the Philippines for 2019 are preliminary.

Source: NNCC "Latest situation of synthetic drugs in China" and BNN "Latest situation of synthetic drugs in Indonesia" presented the 2019 Regional SMART Workshop for East and Southeast Asia, Singapore, August 2019; DDB & PDEA, "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019; Official communication with ONCB, February 2020.

⁵⁴ DAINAP.

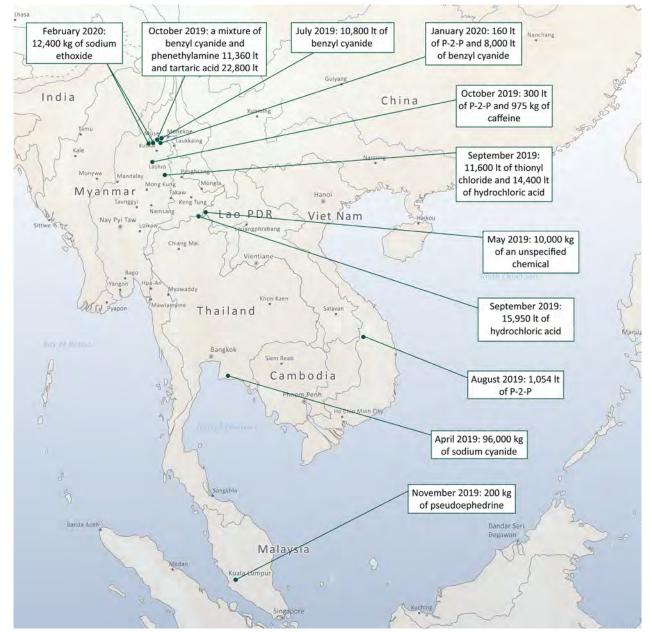
⁵⁵ LCDC, "Latest situation of synthetic drugs in Lao PDR", presented the 2019 Regional SMART Workshop for East and Southeast Asia, Singapore, August 2019.

⁵⁶ INCB; Official communication with the Lao PDR Customs, November 2019.

⁵⁷ SODC, "Country briefing", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

⁵⁸ INCB, "Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs psychotropic substances 2019", February 2020.

⁵⁹ NNCC, "Latest situation of synthetic drugs in China", presented at the Global SMART Programme Regional Workshop, Singapore, August 2019.



Map 6. Selected methamphetamine precursor chemical trafficking cases in Southeast Asia, 2019-2020*

Note: Boundaries, names and designations used do not imply official endorsement or acceptance by the United Nations; *Information reported up-to February 2020.

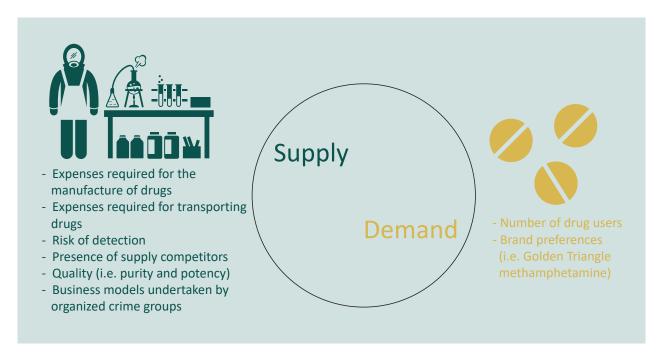
Source: UNODC elaboration based on information presented at the 2019 SMART Regional Workshop, Singapore, August 2019 and the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

Methamphetamine has become cheaper, reaching its lowest points in the last decade

Monitoring changes in prices of illicit drugs can provide insights into the interaction between supply and demand (see Figure 11).

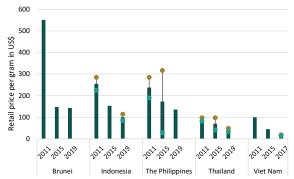
The increases in annual seizures amounts of methamphetamine in East and Southeast Asia over the last decade, were accompanied by decreases in retail prices of methamphetamine. As the purity of methamphetamine products remains high and the limited information available on drug use trends does not indicate a reduction in demand, this development suggests a supply-driven increase in availability.

Figure 11. Major factors influencing prices of methamphetamine in East and Southeast Asia



The latest available typical retail prices of 1 g of crystalline methamphetamine in East and Southeast Asia, Australia and New Zealand vary significantly. Reported prices range from under US\$ 20 in Myanmar and Viet Nam to US\$ 562 in Japan (see Figure 5). Notwithstanding this, the decrease in retail prices can be observed among a large number of countries in the region, including Indonesia, Thailand, and Viet Nam, where retail prices of 1 g of crystalline methamphetamine more than halved over the last decade. Decreases in retail prices of crystalline methamphetamine were also observed in Australia, New Zealand, and the Republic of Korea, all of which have been major destinations for the drug manufactured in and trafficked from the Southeast Asia region. Retail prices in Australia and New Zealand have dropped at an even faster rate since 2015 when the steep surge in the manufacture of methamphetamine started in the Golden Triangle.

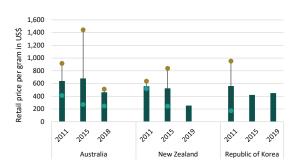
Figure 12. Changes in typical retail prices of crystalline methamphetamine of selected countries in East and Southeast Asia, 2011, 2015 and 2019 or latest year available



Note: The high-low bars represent the upper and lower limits of the price range for those countries which reported such range in addition to the typical price; data in the table are not adjusted for purity. For the purpose of this figure, a mid-point of upper and lower limit was used when data were reported in a range format.

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with NACD of Cambodia, LCDC of Lao PDR, CCDAC of Myanmar, and ONCB of Thailand, February 2020.

Figure 13. Changes in typical retail prices of crystalline methamphetamine of Australia, New Zealand and the Republic of Korea, 2011, 2015 and 2019 or latest year available



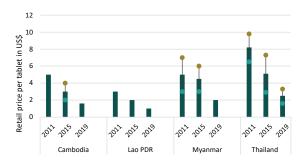
Note: The high-low bars represent the upper and lower limits of the price range for those countries which reported such range in addition to the typical price; data in the table are not adjusted with purities. For the purpose of this figure, a mid-point of upper and lower limit was used when data were reported in a range format.

Source: UNODC, responses to the annual report questionnaire; DAINAP; NDIB, "Illicit Drug Pricing Report", February 2020; Official communication with SPO, February 2020.

The four countries in the Mekong region, Cambodia, Lao PDR, Myanmar and Thailand, which account for the vast majority of annual methamphetamine tablet seizures in Southeast Asia every year, reported sharp decreases in typical retail prices of the drug over the last decade. In Thailand, the reported price for a methamphetamine tablet in 2019 was at US\$ 2.5, marking a 70 per cent decrease compared to 2011 (US\$ 8.2).60

A similar trend is also observed in Myanmar where the retail price of the drug has more than halved from US\$ 5 to US\$ 2.61 In Lao PDR, the average price for a methamphetamine tablet in 2019 was reported to be only one-third of the corresponding figure reported in 2011.62 Thai authorities also reported that the retail price of a methamphetamine tablet in the northern part of Thailand, the main entry point of the drug trafficked from the Golden Triangle, is as low as US\$ 1.63

Figure 14. Changes in typical prices of methamphetamine tablets of selected countries in Southeast Asia, 2011, 2015 and 2019



Note: The high-low bars represent the upper and lower limits of the price range for those countries which reported such range in addition to the typical price; data in the table are not adjusted with purities. For the purpose of this figure, a mid-point of upper and lower limit was used when data were reported in a range format.

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with NACD of Cambodia, LCDC of Lao PDR, CCDAC of Myanmar, and ONCB of Thailand, February 2020.

While prices of the drug have decreased, purities of methamphetamine have been stable in several countries, including Brunei Darussalam and China, or even increased in a select few cases. For instance, almost all (99 percent) crystalline methamphetamine samples analysed in Thailand in 2019 had purities over 90 per cent (on average 94.9 per cent), while average purities of the drug reported in 2011 and 2015 were 90 per cent.⁶⁴ Typical purities of crystalline methamphetamine analysed in Indonesia and Malaysia in 2019 also show increases in relation to the purities reported in 2011.⁶⁵

Simply put, organized crime groups have been able to provide better quality methamphetamine products with cheaper price tags, indicating reduced cost of manufacturing the drug. All in all, tablet and crystalline methamphetamine prices in several countries in the region have reached their lowest points over the last decade despite a record number of seizures made every year during the same period. It indicates that the current level of methamphetamine seizures does not seem to have much impact on the availability of the drug in the market as reflected in price and purity data.

⁶⁰ DAINAP.

⁶¹ Ibia

⁶² Official communication with LCDC, February 2020.

⁶³ Official communication with ONCB, February 2020.

⁶⁴ UNODC, responses to the annual report questionnaire; Official communication with ONCB, April 2020.

⁶⁵ UNODC, responses to the annual report questionnaire; DAINAP.

As prices of methamphetamine get cheaper, use and affordability of the drug increase

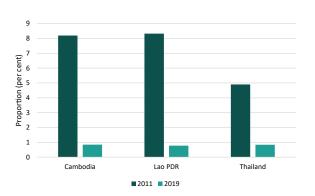
As methamphetamine becomes cheaper in East and Southeast Asia, it may have an impact on changes in the total number of methamphetamine users and quantities of the drug consumed by existing users in recent years. Due to a significant lack of drug demand data in the region, it is difficult to assess changes in methamphetamine market demand. To assess trends in the use of methamphetamine and other illicit drugs and in the absence of representative, population-based prevalence of use surveys in most countries, countries in the region mainly rely on the number of drug users brought into formal contact with authorities and/or treatment admissions, although both indicators should be used with caution for that purpose. Changes in the number of methamphetamine related treatment admissions reported from several countries in the region show sharp increases. For instance, in Malaysia, the number of treatment admissions for the use of methamphetamine increased by 31 times between 2011 and 2018, from 528 to 16,384 admissions. 66 The number of registered ATS users in Viet Nam also increased significantly from 11,140 in 2011 to 140,000 as of the first half of 2019, and the surge has been highly likely due to the use of methamphetamine considering the drug being the most frequently used form of ATS in the country. 67

The decreases in prices of methamphetamine in a decade of economic growth with rising income levels have potentially increased affordability of the drug in East and Southeast Asia. This becomes evident when comparing prices for methamphetamine tablets, a drug typically used by people in 'blue collar' jobs⁶⁸, with monthly minimum wage as a benchmark for their income level. In Lao PDR, the monthly minimum wage increased by nearly 260 per cent over the last decade, while the typical price for a methamphetamine tablet decreased by one-third.⁶⁹ In 2019, methamphetamine user in Lao PDR would have had to spend less than one per

cent of their monthly minimum wage to purchase one methamphetamine tablet, while in 2011, a tablet would cost them 9 per cent of the monthly minimum wage in that year. 70 A similar trend can be observed in other lower Mekong region countries as well (see Figure 15). These stark changes in hypothetical affordability at the macro-level should not be interpreted as factors directly influencing the decision of individuals to use or not to use methamphetamine. However, they may serve as an illustration of a general picture of increasing availability of methamphetamine and decreasing barriers to affordability and therefore use, which falling methamphetamine prices form part of. A practical consequence affecting individual users is that some can afford to buy larger drug quantities in a single purchase event. If caught these quantities may exceed thresholds set in national law to differentiate between amounts intended for personal consumption and those indicating intent to supply (trafficking) - potentially leading to a larger number of drug users with trafficking

Figure 15. Proportion of monthly minimum wage needed to purchase one methamphetamine tablet in Cambodia, Lao PDR, and Thailand, 2011 and 2019

offences.



Note: Minimum wages reported in local currencies were converted to US\$ based on average representative currency exchange rates for 2011 and 2019. A mid-point wage was used when there were more than one minimum wages for different industries or regions in assessed countries; This analysis does not take into consideration of other factors that could influence affordability of methamphetamine tablets for users in the assessed countries, such as increases in the cost of essential commodities and services (i.e. rent, food and transportation). Source: DAINAP; Ministry of Labour and Vocational Training of Cambodia; Lao National Chamber of Commerce and Industry; Ministry of Labour of Thailand; International Labour Organization (ILO), Database of national labour, social security and related human rights legislation (NATLEX).

⁶⁶ DAINAP.

⁶⁷ Ibid; SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

⁶⁸ See UNODC, Methamphetamine continues to dominate synthetic drug markets. Global SMART Update, Vol. 20, Sept. 2018.

⁶⁹ For instance, the monthly minimum wage for 2011 in Lao PDR was 348,000 kip while in 2019 it was 1,100,000. During the same period, the typical retail price for one methamphetamine decreased from 3 to 1 US\$.

⁷⁰ DAINAP; Lao National Chamber of Commerce and Industry.

Overview of the ecstasy market

The "ecstasy"⁷¹ market in East and Southeast Asia is fed by locally manufactured products as well as imported MDMA in various forms, usually from Europe. The market remains relatively small compared to the regional methamphetamine market, but domestic manufacture of MDMA appears to be spreading in the lower Mekong countries. Precursor chemicals for the manufacture of MDMA are being diverted within the region for domestic manufacture as well as subsequent trafficking to Europe.⁷²

Although the reported use of "ecstasy" is limited, the proportion of female users is generally higher in comparison to other major drugs consumed in the region, such as methamphetamine and heroin.

There have been noticeable increases in MDMA contents in ecstasy tablets found in East and Southeast Asia in recent years. In addition, seizures of liquid and crystalline MDMA, perceived by drug users as 'purer' than "ecstasy" in tablet form, is now being reported in the region, adding further complexity to the regional "ecstasy" market.

As with methamphetamine, the manufacture of MDMA is spreading to the lower Mekong region

MDMA manufacture does not appear to be significant in East and Southeast Asia, however, there are strong indications of increased production in the lower Mekong region.

In April 2019, Cambodian authorities dismantled a laboratory in Phnom Penh and seized 80 kg of MDMA together with 18 kg of methamphetamine and 52 kg of ketamine, all in powder form. Moreover, 173 kg of pyrovalerone, prepared to be

sold as "ecstasy" tablets were seized at the site.⁷³ Another laboratory was also dismantled in Phnom Penh in December, resulting in seizures of 74.8 kg of MDMA in crystalline and liquid form as well as 10 kg of methamphetamine.⁷⁴

There are also indications of MDMA manufacture in Myanmar. For instance, in May 2019, Myanmar authorities seized 1,400 lt of safrole, a precursor for MDMA, in Shan State near the border with China. To In addition, China reported Myanmar as one of top three embarkation points for "ecstasy" trafficked to the country in 2018.

Malaysian authorities dismantled just one clandestine MDMA manufacturing facility in 2019, after having dismantled a total of 33 facilities between 2014 and 2018. Indonesia did not dismantle any MDMA manufacturing facilities in 2019, after having dismantled 8 ecstasy manufacturing facilities between 2014 and 2018 and at least one in each of these reporting years.⁷⁷ These trends may possibly indicate a shift in MDMA manufacture from the maritime Southeast Asian sub-region to the lower Mekong countries.

Figure 16. Number of MDMA manufacturing facilities dismantled in Cambodia, Indonesia, Malaysia, and Viet Nam 2014-2019



Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with BNN, February 2020; Official communication with NADA, February 2020; Official communication with SODC, April 2020.

⁷¹ Ecstasy tablets sold in East and Southeast Asia may contain a range of substances in varying composition and quantities in addition or instead of MDMA.

^{72 3,4-}MDP-2P-methylglycidate (PMK glycidate), mainly sourced from China, appears to be the most widely used chemical for the manufacture of MDMA in Europe (European Monitoring Centre for Drugs and Drug Addiction and EUROPOL, "EU Drug Markets Report 2019", November 2019). The substance was placed under international control in Table I of the Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 at the 62nd Commission on Narcotics Drugs held in March 2019.

⁷³ NACD, "Precursor chemical control", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

⁷⁴ Ibio

⁷⁵ CCDAC, "2019 Precursor Situation in Myanmar", at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

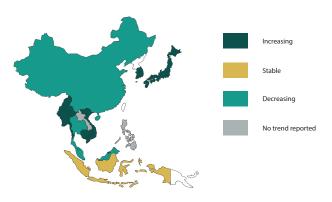
⁷⁶ UNODC, responses to the annual report questionnaire.

⁷⁷ Ibid.

While the use of "ecstasy" remains not yet widespread in East and Southeast Asia, there are indications of increased use of the drug and the proportion of female users is higher than other major drugs

Apart from Indonesia, none of the countries in East and Southeast Asia reported "ecstasy" as one of top three commonly used drugs in 2019 or latest year available.78 The number of "ecstasy" users admitted to treatment facilities in the region remain insignificant compared to that of methamphetamine. For instance, in 2019 less than 1 per cent of the total number of drug treatment admissions in the Philippines, Singapore and Thailand were due to the use of "ecstasy". However, expert perceptions on "ecstasy" use reported from countries including Brunei Darussalam, Cambodia, Hong Kong, China, Japan, Singapore, and Viet Nam, indicate its increased use in recent years.⁷⁹ Some countries in the region also reported an increase in the number of "ecstasy" users brought into formal contact with authorities in recent years, including Malaysia and Singapore.80

Map 7. Perceived "ecstasy" use trends, 2019 or latest year available

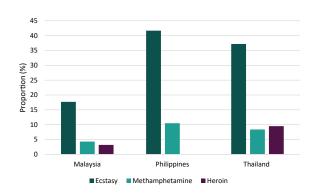


Note: Based on expert perception provided by national authorities in East and Southeast Asia; Boundaries, names and designations used do not imply official endorsement or acceptance by the United Nations.

Source: UNODC, responses to the annual report question naire; $\ensuremath{\mathsf{DAINAP}}.$

One notable development in the region's "ecstasy" market is the high proportion of female users as opposed to other major illicit drugs consumed in the region, such as methamphetamine and heroin.

Figure 17. Proportion of female "ecstasy", methamphetamine and heroin related treatment admissions among all treatment admissions in Malaysia, the Philippines and Thailand, 2019*



Note: * Data for 2019 for Malaysia and the Philippines cover the first half of the year; data for Malaysia in this figure also include amphetamine users; heroin related treatment admission data for the Philippine were not included due to the small sample number (two admissions) reported as of the first half of 2019.

Source: DAINAP; NADA, PDEA & DDB and ONCB, "Country briefing", presented at the Regional SMART Workshop for East and Southeast Asia, Singapore, August 2019.

The underlying reason for this phenomenon is unclear and requires further study.

Steep increases in seizures of "ecstasy" observed in several countries in East and Southeast Asia

In 2018, a total of 4 million "ecstasy" tablets were seized in East and Southeast Asia. Though it is an increase compared to amounts reported between 2013 and 2016, seizures in 2018 represent a substantial decrease compared to 2017 when more than 9.2 million tablets were seized in the region. The sharp drop was primarily due to figures reported from China and Indonesia, in which combined seizures of "ecstasy" decreased from 6.6 million to 1.8 million tablets between 2017 and 2018.81 However, several countries in the region, including Cambodia, Hong Kong, China, Japan, Malaysia, the Republic of Korea, and Thailand reported steep increases in seizures of the drug in recent years.82 Based on preliminary data for 2019, at least 4.7 million ecstasy tablets were seized in East and Southeast Asia, with about 90 per cent of these seized by Cambodia, Indonesia, Hong Kong, China, and Malaysia.

⁷⁸ DAINAP; UNODC, responses to the annual report questionnaire.

⁷⁹ Ibid

⁸⁰ For more information, see the Malaysia and Singapore country chapters in the report.

⁸¹ UNODC, responses to the annual report questionnaire.

⁸² For more information, see the respective country chapter in the report.

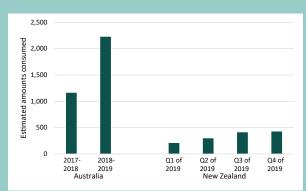
Latest developments in "ecstasy" markets in Australia and New Zealand and possible implications for East and Southeast Asia

There are strong indications suggesting the rapid expansion of the "ecstasy" market in Australia and New Zealand. According to the national drug monitoring programme in Australia, an estimated 2,226 kg of pure MDMA was consumed between July 2018 and June 2019. The figure represents almost a two-fold increase compared to the amount estimated in the preceding year (1,162 kg).83 In New Zealand, the latest wastewater analysis conducted during the fourth quarter of 2019 shows that MDMA was the second most commonly detected illicit drug across the country⁸⁴ and on average 8.2 kg of the drug was consumed per week (426.4 kg per year).85 This is a significant increase compared to the first quarter of 2019 when 4 kg of the drug was estimated to be consumed per week in the country (208 kg per year).86

Although currently, MDMA manufactured in East and Southeast Asia does not seem to play a major role in supplying the expanding "ecstasy" market in Australia and New Zealand, these lucrative markets have the potential to attract the interest of drug trafficking syndicates in the region, which already command supply networks for methamphetamine. Indeed, a recent "ecstasy"

trafficking case reported by Australia in March 2020, when authorities seized 1,053 kg of MDMA suspected to have originated in Europe and

Figure 18. Estimated amounts of pure MDMA consumed in Australia between 2017-2018 and 2018-2019 and New Zealand between the first and fourth quarter of 2019



Source: Australian Criminal Intelligence Commission, National Wastewater Drug Monitoring Programme Report 9, March 2020; New Zealand Police, National Wastewater Testing Programme Quarter 1, April 2019, Quarter 2, August 2019, Quarter 3, October 2019 and Quarter 4 February 2020.

trafficked via the Republic of Korea, involved a suspected syndicate member from Hong Kong, China.⁸⁷ It is not unreasonable to imagine that the increasing sophistication achieved by syndicates with regard to methamphetamine manufacture would allow them to also produce larger amounts of MDMA, given the opportunities for diversion of its main precursors in the region.

"Ecstasy" flows from other regions, in particular Europe, continue to be reported in East and Southeast Asia. The Netherlands, Germany, Belgium, and France were among major embarkation points for "ecstasy" seized in Hong Kong, China, Indonesia, Myanmar, the Philippines,

and the Republic of Korea in 2018. Strafficking flows of "ecstasy" from North America to the region were also reported by China and the Republic of Korea in the same year. Malaysia and Viet Nam reported that their "ecstasy" markets had also been supplied by domestic manufacture. On the same year.

⁸³ Australian Criminal Intelligence Commission (ACIC), National Wastewater Drug Monitoring Programme Report 9, March 2020

⁸⁴ Tested substances were methamphetamine, MDMA, cocaine, heroin and fentanyl.

⁸⁵ New Zealand Police (NZP), National Wastewater Testing Programme.

⁸⁶ Ibid.

⁸⁷ AFP, "More than one tonne of MDMA seized, five people charged", press release, March 2020 (accessed at https://www.afp.gov.au/news-media/media-releases/more-one-tonne-mdma-seized-five-people-charged); Official communication with the Supreme Prosecutors' Office of the Republic of Korea and Korean Customs Services, March 2020.

⁸⁸ UNODC, responses to the annual report questionnaire.

⁸⁹ Ibid

⁹⁰ Ibid; SODC, "Country briefing", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

Figure 19. Seizures of "ecstasy" in East and Southeast Asia, 2014-2019*



Note: * Data for 2019 are preliminary and include only those confirmed or officially reported by countries in the region, and for more information see footnote 13 of the report; figures reported in units other than number of tablets were converted into estimated tablet equivalent at 300 mg per tablet.

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with SPO of the Republic of Korea, February 2020; National Police Agency (NPA) of Japan, "Drug Control in Japan", presented at the 25th Asia-Pacific Operational Drug Enforcement Conference, Tokyo, Japan, February 2020; Comparison of 2019 and 2018 crime situation, Hong Kong Police Force, (accessed at https://www.police.gov. hk/ppp_en/09_statistics/csc_2018_2019.html).

Ecstasy has become purer and the emergence of crystalline MDMA is now reported in Southeast Asia

In recent years, there have been noticeable increases in the MDMA content of "ecstasy" tablets in several countries in East and Southeast Asia. For instance, the average MDMA content of "ecstasy" tablet samples analysed in Malaysia during the first ten months of 2019 was 50 per cent compared to only 30 per cent in 2018. In Cambodia, the average MDMA content of "ecstasy" tablet samples analysed in 2019 was 37.6 per cent, which is a significant increase compared to three preceding years. The Philippines also reported an increase in the average MDMA purity from 25.2 per cent in 2015 to 40 per cent in 2019.

91 Ecstasy tablets seized in different countries in East and Southeast Asia may differ in weights and sizes.

Moreover, Cambodian authorities also seized 20 kg of crystalline MDMA at a synthetic drug laboratory dismantled in Phnom Penh in April 2019.⁹⁶ It is not yet clear, if MDMA in crystalline form is also sold at the street level and consumed in that form. However, other regions, including Oceania, Europe and South America, have experienced this phenomenon,⁹⁷ which has been associated with an increased risk of overdose events.⁹⁸

In addition to "ecstasy" tablets and crystalline MDMA, drug products in liquid form containing MDMA in combination with other synthetic drugs have been found in countries in East and Southeast Asia. For instance, a growing concern in China is a drug marketed as 'happy water', which is sold in bottles containing varying amounts of MDMA, methamphetamine and ketamine in solution. The varying amount and composition of substances from bottle to bottle have been associated with an increased risk of overdose events. 99 Cambodian authorities have also noted an increased use of liquid MDMA in entertainment settings. 100

Overview of the new psychoactive substances (NPS)¹⁰¹ market

Beyond methamphetamine and "ecstasy", there is a diversity of other synthetic drugs, including NPS, being consumed in East and Southeast Asia. One key persistent trend relates to the non-medical use of ketamine, which has been a major challenge primarily for China, including Hong Kong, China. In

⁹² Department of Chemistry Malaysia, "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

⁹³ According to NACD of Cambodia, the average MDMA content for 2016, 2017 and 2018 were respectively 25.4, 24.9 and 30.6 per cent; Official communication with NACD, March 2020.

⁹⁴ DDB and PDEA, "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

⁹⁵ Data on the absolute amount of MDMA per tablet were not reported from Cambodia, Malaysia and the Philippines.

⁹⁶ NACD, "Precursor chemical control", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

⁹⁷ UNODC, "Global Synthetic Drugs Assessment. Amphetaminetype stimulants and new psychoactive substances", 2017.

⁹⁸ UNODC, "Global SMART Newsletter for Latin America and the Caribbean, Issue No. 3", March 2019.

⁹⁹ NNCC, "Latest situation of synthetic drugs in China", presented at the Global SMART Programme Regional Workshop, Singapore, August 2019.

¹⁰⁰ NACD, "Country briefing", presented at the Meeting of drug forensic specialists, Beijing, China, December 2019.

¹⁰¹ New psychoactive substances (NPS) are generally defined as substances of abuse, either in a pure form or a preparation, that are not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances, but which may pose a public health threat. The term "new" does not necessarily refer to new inventions but to substances that have recently emerged on the market. For the purpose of this report and ease of analysis, the term "NPS" is extended to include also substances that have been recently scheduled in the 1961 or 1971 Conventions.

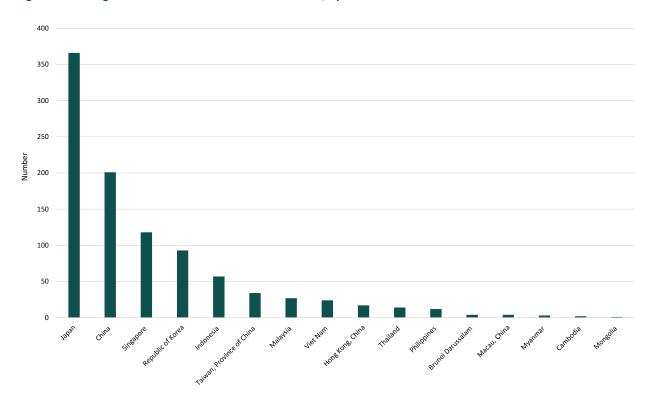


Figure 20. Emergence of NPS in East and Southeast Asia, up to December 2019*

Note: *Data for 2018 and 2019 are preliminary; Based on analysis of 461 NPS; Boundaries, names and designations used do not imply official endorsement or acceptance by the United Nations.

Source: UNODC Early Warning Advisory (EWA) on NPS.

recent years, countries in Southeast Asia, located along major trafficking routes of ketamine, are also witnessing its increased non-medical use. While most of the ketamine consumed in East and Southeast Asia is manufactured within the region, there is some supply from other parts of the world.

Similar to North America and Europe, East and Southeast Asia is observing an increase in the number of potent synthetic opioids, including fentanyl analogues, reported annually. While the extent of non-medical use of synthetic opioids in the region remains unclear, their emergence can potentially lead to serious health harms for users in the region, as developments in other parts of the world have shown.

The number of NPS, including potent synthetic opioids, reported from the region has increased steadily

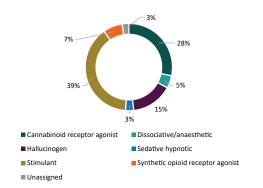
By the end of 2019, a total of 461 different NPS were reported by countries in East and Southeast Asia, almost half of the total number reported at the global level. ¹⁰² Japan reported the largest number of NPS (366 substances), followed by China (201),

Singapore (118), and the Republic of Korea (93). The number of NPS detected in some countries in the region, including Cambodia, Lao PDR, and Myanmar remain limited and may, in part, be attributed to their limited capacity to identify these substances.

By chemical substance group, synthetic cannabinoids account for the largest share of the total NPS reported with 142 different substances followed by synthetic cathinones (102 substances). Between 2018 and the first half of 2019, 5F-MDMB-PINACA, MMB-FUBINACA, and 5F-MDMB-PICA were reported as the most frequently identified substances by several counties in the region, including China, Singapore, and Viet Nam. 103 During the same period, several synthetic cathinones, including *N*-ethylpentylone and β-keto-N,Ndimethylbenzodioxolylbutanamine (dibutylone) were also frequently identified. 104 In terms of the pharmacological effects, the majority of substances reported have stimulant effects, followed by synthetic cannabinoid receptor agonists and hallucinogens.

¹⁰³ Country reports presented by at the Regional SMART workshop for East and Southeast Asia, Singapore, August 2019.104 *Ibid.*

Figure 21. Proportion of NPS in East and Southeast Asia by pharmacological effect, up to December 2019*

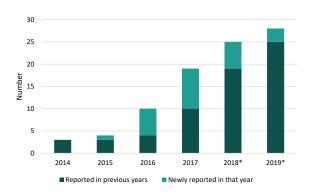


Note: * Data for 2018 and 2019 are preliminary; Based on analysis of 451 synthetic NPS reported to the EWA; Plant-based substances were excluded from the analysis as they usually contain a large number of different substances some of which may not even be known and whose effects and interactions are not fully understood. Percentage sum may exceed 100% due to rounding of decimals.

Source: UNODC EWA on NPS; Country reports presented by national authorities at the Regional SMART workshop, Singapore, August 2019.

The number of NPS with opioid effects identified in East and Southeast Asia has increased steadily in recent years. While there were only three synthetic opioids identified in the region by 2015, this figure has increased to 28 substances by 2019. Some synthetic opioids identified in the region are extremely potent and have been implicated in overdose deaths outside the region, particularly in North America and to a lesser extent in Europe. 105

Figure 22. Emergence of NPS with opioid effects in East and Southeast Asia, 2014-2019*



Note: * Data for 2018 and 2019 are preliminary. Source: UNODC EWA on NPS.

There is little information relating to overdose deaths associated with the non-medical use of synthetic opioids in East and Southeast Asia, despite the steady emergence of NPS with opioid effects in recent years. However, given the large heroin market in the region, there is a risk that organised crime groups may substitute or adulterate the heroin supply with synthetic opioids to potentially lower cost and maximise their profits, or during a supply shock event. This highlights the need to improve the forensic capacity of several countries in the region to enable them to identify synthetic opioids and respond early on should these substances emerge on the drug market.

There are already some indications of the availability of synthetic opioids in the regional drug market. For instance, in January 2018, Canadian authorities reported a seizure of fentanyl¹⁰⁶ trafficked via an express cargo from Thailand, which was the first fentanyl seizure in connection with the country.¹⁰⁷ In addition, the UNODC EWA on NPS has received reports of the identification of a number of potent NPS with opioid effect, in particular fentanyl analogues, in East and South East Asia over the past couple of years.

According to retrospective forensic data of autopsy cases from Thailand, fentanyl or norfentanyl (a metabolic product of fentanyl) was detected in 31 cases between 2016 and 2018 in the country. Of the 31 cases, about 42 per cent (13 cases) were found with benzodiazepines, such as diazepam and clonazepam, and two of them showed the concurrent use of fentanyl with methamphetamine. Although it is unclear what proportion of cases was associated with the non-medical use of synthetic opioids, the findings show the need for more research on this topic, considering the limited information on drug overdose across countries in the region.

¹⁰⁵ UNODC, "Understanding the global opioid crisis", Global SMART Update vol 21, 2019.

¹⁰⁶ Fentanyl is not an NPS, however, the information on fentanyl was included in the NPS section due to the coincidence of the non-medical use of fentanyl and the emergence of NPS with opioid effects observed in other parts of the world.

¹⁰⁷ Official communication with the Canada Border Service Agency, October 2018.

¹⁰⁸ Official communication with the Forensic Drug Addict Network of Thailand, April 2020; The network is composed of 29 institutes operating in the field of forensic medicine in Thailand with support from Thai authorities, including the Office of Narcotics Control Board (ONCB).

¹⁰⁹ Official communication with the Forensic Drug Addict Network of Thailand, April 2020.

Table 1. Synthetic opioids identified for the first time in East and Southeast Asia, 2018-2020

Year reported	Substance name
2018	Tetrahydrofuranylfentanyl
	isopropyl-U-47700
	4-Chloroisobutyrfentanyl
	Benzoylfentanyl
	N-Methylnorfentanyl
	Benzylfuranylfentanyl
2019	Cyclopentylfentanyl
	2-Fluorofentanyl
	4-Methoxybutyrfentanyl
2020	Crotonylfentanyl

Source: UNODC EWA on NPS.

The non-medical use of benzodiazepine-type NPS in East and Southeast Asia remains a concern, with the region reporting a total of 11 benzodiazepine-type substances between 2013 and 2019. It appears that many of these substances have been detected in "Erimin-5" tablets. For instance, Singapore authorities identified several benzodiazepines, including phenazepam, etizolam, clozapine and carbamazepine, in tablets sold as "Erimin-5" in recent years. 111

Available data, albeit limited, reported from countries in East and Southeast Asia indicate interas well as intra-regional NPS trafficking. Indonesia reported China as the main embarkation point for synthetic cannabinoids consumed in the country in 2018. Moreover, Hong Kong authorities reported that several synthetic cathinones with stimulant effect, such as 3,4-methylenedioxypyrovalerone (MDPV), 4-methylmethcathinone (mephedrone), and methylone (bk-MDMA)¹¹³, mainly sourced from the mainland China, were destined for the United States, France, and the United Kingdom. In the country i

The non-medical use and supply of ketamine persist in East and Southeast Asia

While the non-medical use of ketamine has long been a challenge for East and Southeast Asia, there have been changes in the ketamine market in recent years. As with methamphetamine, seizures of ketamine have increased significantly in Southeast Asia since 2015. In 2019, at least four tons of the drug were seized, representing a 14-fold increase compared to the amount seized in 2014. Almost all ketamine seizures in 2019 was reported from one of four countries in the region: Malaysia, Myanmar, Thailand, and Viet Nam. Another notable trend was observed in Taiwan Province of China where seizures of ketamine in 2019 amounted to nearly 4.2 tons, larger than the combined amount of ketamine seizures reported in the three preceding years. 115 In contrast to the trends observed in Southeast Asia and Taiwan Province of China, seizures of ketamine in China decreased significantly in recent years. In 2018, Chinese authorities seized 5.7 tons of the drug, more than an 80 per cent decrease compared to its peak in 2015 (19.6 tons)

The steep surge in seizures of ketamine in Southeast Asia has been primarily driven by substantial quantities of the drug being illicitly manufactured in, and trafficked from, Myanmar. In 2019, a number of large shipments of ketamine packaged in distinctive teabags originating from the Golden Triangle were seized in several countries, including China, Malaysia, Thailand and Viet Nam. Authorities in China noted that about a quarter of ketamine seized in 2018 was sourced from the Golden Triangle. 116 The steep increases in seizures of ketamine in Taiwan Province of China also appear to have been driven in part by intensified flows of ketamine trafficked from Southeast Asia. For instance, in January 2019, authorities of Taiwan Province of China seized about 320 kg of the drug trafficked from Thailand. 117

¹¹⁰ Erimin 5 is a proprietary product of Sumitomo corporation, and its licit production has been discontinued since 2015. The proprietary product contains nimetazepam, a benzodiazepine, which is controlled in Schedule IV of the Convention on Psychotropic Substances of 1971. It is probable that current 'Erimin 5' seizures are manufactured illicitly and may or may not contain nimetazepam as well as a range of other substances.

¹¹¹ Health Sciences Authority (HSA) of Singapore, "Unusual exhibits found in Singapore", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

¹¹² ARQ data.

^{113 3,4-}Methylenedioxypyrovalerone (MDPV), 4-Methylmethcathinon (mephedrone), and methylone (bk-MDMA) were added to the list of Schedule II of the Convention on Psychotropic Substances of 1971 at the 2015 Commission on Narcotic Drugs.

¹¹⁴ UNODC, responses to the annual report questionnaire.

¹¹⁵ Ministry of Justice of Taiwan Province of China, "Annual drug statistics", February 2020.

¹¹⁶ NNCC, "Latest situation of synthetic drugs in China", presented at the Global SMART Programme Regional Workshop, Singapore, August 2019.

¹¹⁷ Ministry of Justice Investigation Bureau, "Taiwan Province of China, Thailand, and the United States cooperate to jointly seize 52 kilograms of Ketamine from international drug trafficking organization", official press release, May 2019.

Figure 23. Seizures of ketamine in East and Southeast Asia, 2014-2019*



Note: * Data for 2019 include only those confirmed by countries in the region. For more information, see footnote 13 of the report.

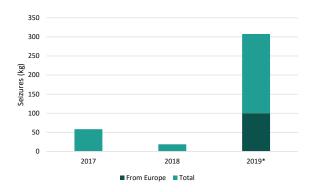
Source: UNODC, responses to the annual report questionnaire; DAINAP; Comparison of 2019 and 2018 crime situation, Hong Kong Police Force, (accessed at https://www.police.gov.hk/ppp_en/09_statistics/csc_2018_2019.html).

Data on non-medical use of ketamine, albeit limited, paint a mixed picture in relation to trends in demand for illicit ketamine in East and Southeast Asia. For instance, the number of treatment admissions due to the non-medical use of ketamine in Thailand increased by more than 20 times over the last five years, from just over 50 people in 2014 to 1,069 in 2019. In contrast, the number of registered ketamine users in China decreased significantly. By the first half of 2019, there were 50,000 registered ketamine users, which is almost one-fifth of the number reported in 2015 (236,000 users). In painting the property of the second proper

Sources of ketamine found in East and Southeast Asia have diversified

Although most of the ketamine available in the regional drug market is being supplied from within the region, there are also indications that supply routes from other regions exist as well. According to the Hong Kong Customs and Excise Department, of the 307.8 kg of ketamine seized during the first eleven months of 2019, about one-third (99.9 kg) was trafficked from countries in Europe, including Belgium, France, Germany, the Netherlands and Spain. 120

Figure 24. Seizures of ketamine by the Hong Kong Customs and Excise Department, 2017-2019*



Note: * Data for 2019 cover the first eleven months of the year. Source: Official communication with the Hong Kong Customs and Excise Department, January 2020.

Ketamine manufactured at clandestine laboratories in South Asia is another source for the East and Southeast Asia market. For instance in May 2019, Indian authorities dismantled a clandestine ketamine laboratory in Bengaluru and arrested members of a syndicate involved in trafficking ketamine to Malaysia. ¹²¹ In addition, in March 2019, Malaysian authorities seized 322 kg of ketamine trafficked from Pakistan. ¹²²

¹¹⁸ DAINAP; Official communication with ONCB, February 2020.

¹¹⁹ NNCC, "Ketamine abuse and illicit manufacture", presented at the Global SMART Programme Regional Workshop, Beijing, China, August 2015; NNCC, "Update on Efforts to Achieve Mekong MOU SAP X Thematic Areas Outputs at the National Level", presented at the 2019 Mekong MOU SOC Meeting, Bangkok, Thailand, November 2019.

¹²⁰ The Hong Kong Customs and Excise Department, "Seizures of ketamine by Hong Kong Customs", shared with UNODC through the official communication in January 2020.

¹²¹ Narcotics Control Bureau (NCB), India, "Country briefing on drug and precursor situation in India", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

¹²² Royal Malaysian Police, National Anti-Drug Agency (NADA), and the Ministry of Health of Malaysia, "Country briefing" presented at Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.



National Trends



Summary of major trends and emerging concerns

Methamphetamine

- Crystalline methamphetamine continues to account for the largest proportion of the total number of drug related offences and treatment admissions in recent years (see Figure 1 and Table 2).
- The amount of crystalline methamphetamine seized annually has increased significantly in 2019, with annual seizures in 2019 almost double the combined annual seizures in the last four years (see Table 3).

"Ecstasy"1

• The use of "ecstasy", as evidenced by data for seizures and arrests, remains low (see Figure 1 and Table 3).

New psychoactive substances (NPS)

- While the non-medical use of ketamine and other NPS was not reported in 2019, seizures and price data suggest that it might exist (see tables 3 and 4).
- In 2019, national authorities seized bottles suspected to contain a synthetic cannabinoid.² The country also made its first seizures of khat, which originated from Ethiopia, and also of kratom (see Table 3).³

Other drugs

'Erimin 5' continues to be marketed and used in the country.⁴

^{1 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of

² Drug Abuse Information Network for Asia and the Pacific (DAINAP); National authorities have not provided a name of the suspected synthetic cannabinoid at the time of writing.

³ *Ibid*; Official communication with the Narcotics Control Bureau (NCB), Brunei Darussalam, February 2020.

⁴ Erimin 5 is a proprietary product of Sumitomo corporation, and its licit production has been discontinued since 2015. The proprietary product contains nimetazepam, a benzodiazepine, which is controlled in Schedule IV of the Convention on Psychotropic Substances of 1971. It is probable that current 'Erimin 5' seizures are manufactured illicitly and may or may not contain nimetazepam as well as a range of other substances.

Key facts and figures

Drug demand indicators

Table 1. Trend in use of selected drugs in Brunei Darussalam, 2014-2019*

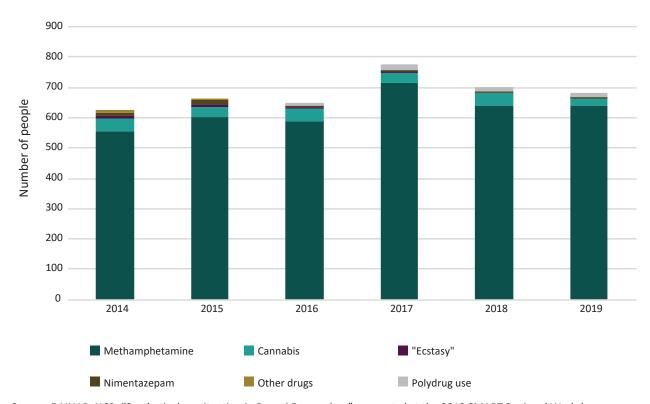
Drug type	2014	2015	2016	2017	2018	2019
Crystalline methamphetamine	1	↔	1	1	1	1
"Ecstasy"	1	1	Ţ	1	1	1
Cannabis herb	1	↔	1	1	1	1
Inhalants	1	Ţ	1	•	↔	↔
Ketamine	1	1	1	1	1	•
Nimetazepam	•	↔	1	↔	Ţ	1

Note: * Based on expert perception provided by NCB, Brunei Darussalam.

1 = Increase, ↓ = Decrease, ↔ = Stable, • = Not reported

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with NCB, February 2020.

Figure 1. Number of people brought into formal contact with authorities for drug-related offences in Brunei Darussalam by drug type, 2014-2019



Source: DAINAP; NCB, "Synthetic drug situation in Brunei Darussalam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with NCB, February 2020.

Table 2. Number of people who use drugs receiving treatment by gender and selected drug types, 2017-2019

	2017			2018				2019		
Drug type	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Methamphetamine	190	30	220	218	32	250	195	31	226	
Cannabis	2	0	2	3	0	3	4	0	4	
Inhalants	2	0	2	0	0	0	1	0	1	
Polydrug use	1	0	1	2	0	2	1	0	1	
Total	195	30	225	223	32	255	201	31	232	

Source: DAINAP; NCB, "Synthetic drug situation in Brunei Darussalam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Drug supply indicators

Table 3. Seizures of selected drugs in Brunei Darussalam, 2014-2019

Drug type	Unit	2014	2015	2016	2017	2018	2019
Crystalline methamphetamine	kg	4.3	1.4	0.7	0.8	0.8	6.4
"Ecstasy"	tablet /g	25 tablets and 0.5 g	42 tablets and 30.4 g	21 tablets	31 tablets and 1.6 g	0	42 tablets
Cannabis herb	kg	8.7	3.8	6	1.1	0.4	1.4
Heroin	kg	8.1	•	•	•	•	•
Ketamine	tablet /g	14 tablets and 123.1 g	10.2 g	17.6 g	50 tablets and 54.5 g	21 g	1.6 g
Nimetazepam	tablet/g	570 tablets	243 tablets and 4.1 g	457 tablets and 1.4 g	453 tablets and 11.8	275 tablets	503 tablets and 0.3 g
Kratom (liquid)	litre	0	0	0	0	0	9
Khat	kg	0	0	0	0	0	80

Note: ●= Not reported.

Source: UNODC, responses to the annual report questionnaire; DAINAP; NCB, "Synthetic drug situation in Brunei Darussalam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with NCB, February 2020.

Table 4. Retail prices of selected illicit drugs in Brunei Darussalam in BN\$ (US\$), 2019

Drug type	Unit	2019
Crystalline methamphetamine	per g	195 (144)
"Ecstasy"	per tablet	30-50 (22-37)
Cannabis herb	per g	15 (11)
Ketamine	per g	50 (37)
Benzodiazepines (Erimin 5)	per tablet	10 (7)

Note: NCB reported the same retail prices for the selected illicit drugs in BN\$ for 2017 and 2018; The conversion ratio used is 1 BN\$ = 0.74 US\$ (as of 03 February 2020).

Source: DAINAP; Official communication with NCB, February 2020.



CAMBODIA

Summary of major trends and emerging concerns

Methamphetamine

- The market for crystalline methamphetamine continues to expand, with seizures in 2019 (385 kg) being the largest amount on record (see Table 3).
- The number of drug users brought into formal contact with authorities in Cambodia in 2019 has almost doubled since 2014 (see Figure 1) with users of crystalline methamphetamine forming the largest proportion of users in drug treatment centers in 2018 (latest year available, see Table 2).
- Notwithstanding the significant annual seizures of methamphetamine in tablet and crystalline forms, average retail prices have dropped to their lowest level on record, indicating widespread availability (see Figures 3 and 4).

"Ecstasy"1

- The amount of "ecstasy" tablets seized annually has seen significant increases in recent years (see Table 3), alongside a noticeable increase in its typical MDMA content (see Table 4).
- In December 2019, national authorities dismantled a clandestine laboratory for tableting "ecstasy" in Phnom Penh, resulting in seizures of 74.8 kg of MDMA in crystalline and liquid form.²

New Psychoactive Substances (NPS)

- The annual amounts of ketamine seized in 2018 and 2019 were a multiple of the amounts seized in previous years (see Table 3) and the non-medical use of ketamine seems to be on the increase in the country (see Table 1).
- There is no reported use of other NPS in the country.

Other drugs

• In April 2019, Cambodian authorities dismantled a clandestine laboratory producing pyrovalerone tablets. Follow-up investigations revealed that the drug was meant to be sold as "ecstasy" in the country.³

^{1 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of MDMA.

² National Authority for Combating Drugs (NACD), "Country briefing", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

³ NACD, "Country briefing", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019; Bilateral meeting between NACD and UNODC, February 2020. Pyrovalerone is a substance listed under Schedule IV of the Convention on Psychotropic Substances of 1971.

Key facts and figures

Drug demand indicators

Table 1. Trends in use of selected drugs in Cambodia, 2014-2019*

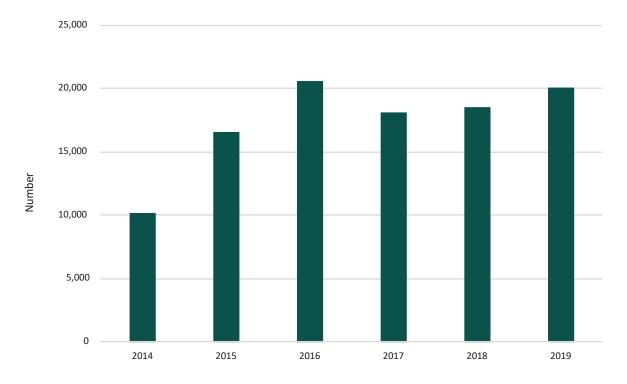
Drug type	2014	2015	2016	2017	2018	2019
Methamphetamine tablets	1	1	1	1	1	1
Crystalline methamphetamine	1	1	Ţ	1	1	1
Ecstasy	•	Ţ	1	1	1	1
Cannabis herb	•	1	1	1	1	1
Cocaine	•	Ţ	1	1	•	1
Heroin	•	1	†	1	Ţ	1
Ketamine	•	1	•	1	•	1

Note: * Based on expert perception provided by NACD, Cambodia.

 \uparrow = Increase, \downarrow = Decrease, \leftrightarrow = Stable, • = Not reported.

Source: Drug Abuse Information Network for Asia and the Pacific (DAINAP).

Figure 1. Number of people who use drugs brought into formal contact with authorities in Cambodia, 2014–2019



Source(s): DAINAP; NACD, "Synthetic drug situation in Cambodia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; NACD, "Report on achievements during January-September 2019", December 2019; Official communication with NACD, March 2020.

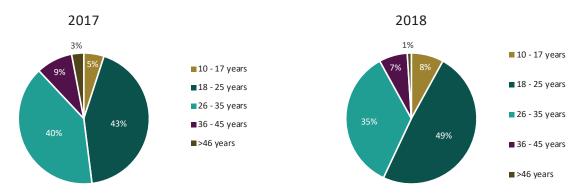
Table 2. Number of treatment admissions in Cambodia by drug type and gender, 2018*

Drug type	Male	Female	Total
Crystalline methamphetamine	3,540	147	3,687
Methamphetamine tablet	462	9	471
"Ecstasy"	163	0	163
Heroin	21	4	25
Ketamine	25	1	26
Cannabis herb	17	0	17
Other drugs	148	6	154
Total	4,376	167	4,543

Note: * Data in the table only cover drug users admitted to temporary treatment centres; The total number of admissions for temporary drug treatment centres in 2018 was 4,746 and included those admitted for poly-drug use.

Source: DAINAP; NACD, "Synthetic drug situation in Cambodia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Figure 2. Drug treatment centre admissions in Cambodia by age group, 2017 and 2018



Note: * Data in the graph only cover drug users admitted to temporary treatment centres.

Source: DAINAP; NACD, "Synthetic drug situation in Cambodia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Drug supply indicators

Table 3. Seizures of selected drugs in Cambodia, 2014-2019

Drug type	Unit	2014	2015	2016	2017	2018	2019
Methamphetamine tablets ^a	tablets	87,000	265,760	490,689	371,556	77,000	483,402
Crystalline methamphetamine	kg	29	72.9	66.3	80.1	306.6	384.9
"Ecstasy"b	tablets	10,533	70	5,509	83,533	599,200	382,728
Cannabis herb	kg	19.9	1,511.5	37	116.3	74.0	102.8
Cocaine	kg	7.9	5.3	14	12.8	5.4	61.1
Heroin	kg	1.8	2.5	6.2	22.5	1.3	47.9
Ketamine	kg	0.0°	0.1	1.1	6.3	36.3	33.1

Note: "These figures include quantities reported as grams; all of which were converted into estimated tablet equivalent at 90 mg per tablet. "These figures include quantities reported as grams; all of which were converted into estimated tablet equivalent of 300 mg per tablet. "Less than 0.05 kg of ketamine was seized.

Source(s): UNODC, responses to the annual report questionnaire; DAINAP; NACD, "Synthetic drug situation in Cambodia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019 and previous years; Official communication with NACD, March 2020.

Table 4. Typical purities of selected drugs in Cambodia, 2018-2019

		20	18			20	19	
	Number of samples analysed	Minimum	Average	Maximum	Number of samples analysed	Minimum	Average	Maximum
Crystalline methamphetamine	4,097	1.5	52.2	80.5	5,237	2.3	58.5	96.9
Methamphetamine tablets	154	12.7	14.6	21.2	203	10.8	19.1	29.9
"Ecstasy" tablets (MDMA)	88	14.6	26.4	43.5	203	27.4	37.6	54.7
Ketamine (powder)	55	25.9	46.2	70.2	181	0.7	38.9	88.8
Heroin	4	62.6	77.2	79.7	4	44.1	71.5	90.2
Cocaine	11	65.3	73.7	80.4	3	•	•	88.7

Note: • = Not reported. Data in this table refer to the weight/weight (w/w) % expressed as the hydrochloride salt of these substances.

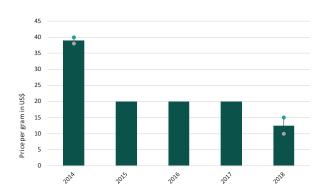
Source: Official communication with NACD, March 2020.

Figure 3. Retail prices of methamphetamine tablets in Cambodia in US\$, 2014-2019*

Note: *The high-low bars represent the upper and lower limits of the price ranges reported in addition to the typical price.

Source: NACD, "Synthetic drug situation in Cambodia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with NACD, March 2020.

Figure 4. Retail prices of crystalline methamphetamine in Cambodia, 2014–2018*



Note: *The high-low bars represent the upper and lower limits of the price ranges reported in addition to the typical price.

Source: NACD, "Synthetic drug situation in Cambodia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Summary of major trends and emerging concerns

Methamphetamine

- Data on drug use, together with supply indicators such as arrests, manufacture and seizures, indicate a possible decrease in the illicit synthetic drug market in China. The amount of crystalline methamphetamine seized in 2018 the latest year available for example, was the lowest reported since 2014 (see Table 1).
- While the number of registered drug users of synthetic drugs has been decreasing in recent years (see Figure 1), methamphetamine continues to account for the nearly 60 per cent of the total number of registered drug users in China (see Figure 2).
- In an apparent shift, increasing quantities of crystalline methamphetamine have been trafficked from the Golden Triangle to China. For instance, seizures of crystalline methamphetamine trafficked from the Golden Triangle have more than quadrupled from 1.1 tons to 4.6 tons between 2017 and 2018.
- China remains vulnerable to the risk of diversion of precursor chemicals used in the illicit manufacture of methamphetamine. Transnational organized crime groups in China continue to circumvent existing domestic and international legal frameworks using non-scheduled precursor chemicals.²

"Ecstasy"3

• The amount of "ecstasy" tablets seized in 2018 was the lowest ever reported from the country since 2015 (see Table 1).

New Psychoactive Substances (NPS)

- Seizures of ketamine in China continue to decrease. The amount of ketamine seized in 2018 was less than one-third of the record quantity reported in 2015 (see Table 1).
- Despite national measures to restrict NPS, new substances including potent synthetic opioids continue
 to emerge in the country. Between June 2018 and June 2019, synthetic cannabinoids accounted for
 the largest proportion of the total number of NPS samples detected by the country's NPS Monitoring
 Programme, followed by synthetic cathinones (see Figure 5).

Other drugs

- The number of registered users of opiates has decreased every year since 2014 (see Figure 1). However, national authorities noted increased concomitant use of opiates and synthetic drugs in recent years.⁴
- A mixture of various substances, such as methamphetamine, ketamine and MDMA, packaged in a bottle and sold as 'happy water' is a growing concern in China, as composition and concentration of the drugs differ from bottle to bottle, posing a risk of overdose for users.⁵

¹ National Narcotics Control Commission (NNCC) of China, "Latest situation of synthetic drugs in China", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

For instance, methyl alpha-phenylacetoacetate (MAPA) has been increasingly used as a substitute for alpha-phenylacetoacetonitrile (APAAN), a substance scheduled in Table I of 1988 UN Drug Convention since 2014.

^{3 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of MDMA

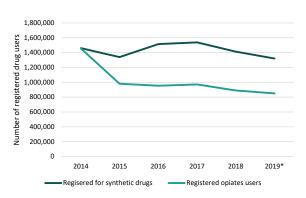
⁴ NNCC, "Latest situation of synthetic drugs in China", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

⁵ Ibid.

Key facts and figures

Drug demand indicators

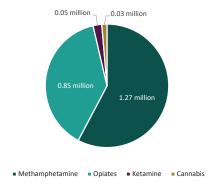
Figure 1. Number of people who were registered for using synthetic drugs and opiates in China, 2014 – 2019*



Note: * Data cover the first half of the year.

Source: NNCC, "Latest situation of synthetic drugs in China", presented at the 2019 SMART Regional Workshop, Singapore, August 2019 and previous country briefings presented at past workshops.

Figure 2. Proportion of registered drug users by type of drug used in China, 2019*



Note: * Data cover the first half of the year.

Source: NNCC, "Update on Efforts to Achieve Mekong MOU SAP X Thematic Areas Outputs at the National Level", presented at the Mekong MOU Senior Officials Committee, Bangkok, Thailand, November 2019.

Drug supply indicators

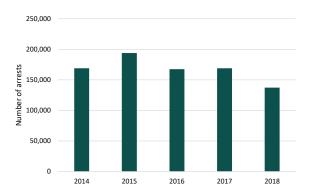
Table 1. Seizures of selected drugs in China, 2013-2018

2045 2045 2045										
Drug type	Unit	2014	2015	2016	2017	2018				
Crystalline methamphetamine	kg	13,754.2	22,663.8	17,361.8	17,033.6	10,654.8				
Methamphetamine tablets ^a	tablets	126,278,556	134,126,000	129,123,556	122,410,444	138,888,888				
Methamphetamine powder	kg	282.2	393.9	399.7	332.4	354.4				
Methamphetamine liquid	lt	455.4	1,443.7	1,323.8	2,195.9	921.3				
"Ecstasy" b	tablets	165,333	632,100	1,200,267	3,481,233	213,600				
Ketamine	kg	11,212.9	19,600	10,361.1	7,292.6	5,742.9				
Cannabis herb	kg	3,398.6	8,721.8	5,833.3	4,919.1	6,059.8				
Cannabis resin	kg	0.2	5.9	34.4	8.0	0.3				
Cocaine	kg	114.4	97.7	430.6	311.7	1,365.8				
Heroin	kg	9,302.4	8,796.1	8,777.4	9,519.9	8,070.3				
Opium	kg	1,728.0	2,451.9	3,104.3	3,909.3	2,515.9				

Note: Some of figures reported in previous reports have been updated with revised data shared by NNCC in March 2020; ^a Figures reported other than the number of tablets converted into estimated tablet equivalents at 90 mg per tablet. ^b Figures reported other than the number of tablets converted into estimated tablet equivalents at 300 mg per tablet.

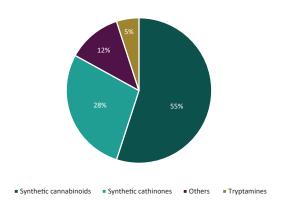
Source: UNODC, responses to the annual report questionnaire; DAINAP; NNCC, "Annual Report on Drug Control in China 2019" and previous reports; Official communication with NNCC March 2020.

Figure 3. Number of drug-related arrests in China, 2014-2018



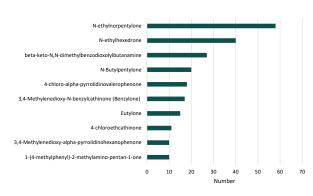
Source: NNCC, "Annual Report on Drug Control in China 2019" and previous reports.

Figure 5. Types of NPS identified by the NPS Monitoring Programme of China, June 2018 - June 2019



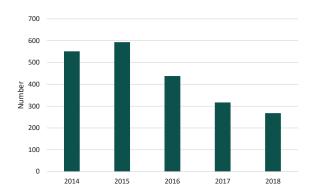
Source: NNCC, "Latest situation of synthetic drugs in China", presented at the Global SMART Programme Regional Workshop, Singapore, August 2019.

Figure 7. Top 10 synthetic cathinones identified by the NPS Monitoring Programme of China, June 2018-June 2019



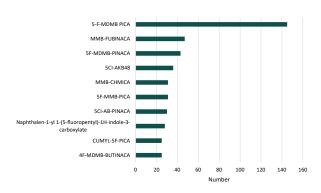
Source: NNCC, "Latest situation of synthetic drugs in China", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Figure 4. Number of illicit drug manufacturing facilities dismantled in China, 2014-2018



Source: NNCC, "Annual Report on Drug Control in China 2019" and previous reports.

Figure 6. Top 10 synthetic cannabinoids identified by the NPS Monitoring Programme of China, June 2018-June 2019



Source: NNCC, "Latest situation of synthetic drugs in China", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Table 2. Typical retail purities (per cent) of methamphetamine and ketamine in China, 2016 – 2018

Drug type	2016	2017	2018
Crystalline methamphetamine	94	94	89
Methamphetamine tablet	15	15.5	15.6
Ketamine	90	87	95

Note: Data in this table refer to the weight/weight (w/w) % expressed as the hydrochloride salt of these substances.

Source: NNCC, "Latest situation of synthetic drugs in China", presented at the Global SMART Programme Regional Workshop, Singapore, August 2019.

Hong Kong (Special Administrative Region of China)

Summary of major trends and emerging concerns

Methamphetamine

- The number of reported users of crystalline methamphetamine in Hong Kong, China, has decreased significantly in recent years (see Figure 1). While there is no clear trend in seizures of the drug, an increase in the retail price has been reported (see Tables 1 and 2).
- Preliminary data for 2019 show the proportion of female methamphetamine users brought into formal contact with authorities was higher than for any other drug (see Figure 2).

Ecstasy⁶

Record amounts of "ecstasy" were seized in Hong Kong, China, in 2019, but the number of "ecstasy" users accounted for only 0.5 per cent of the total reported drug users in 2018.⁷

New Psychoactive Substances (NPS)

- The number of reported persons with non-medical use of ketamine has declined strongly in Hong Kong, China, in recent years (see Figure 1). However, the typical retail price and amount of ketamine seized annually have generally increased since 2016 (see Tables 1 and 2). The Hong Kong Customs and Excise Department has also reported increasing quantities of the drug being trafficked from Europe since 2019.⁸
- Hong Kong, China, remains a major transit point for NPS, specifically synthetic cathinones being trafficked from China en route to other regions, including Europe and North America. In 2018, a total of 187kg of synthetic cathinones were seized by the Hong Kong Customs and Excise Department, making it the second largest seizure by quantity after cocaine.⁹

Other drugs

- Although there has been a downward trend in the number of heroin users since 2014 (see Figure 1), the drug remains the most commonly reported substance of abuse in Hong Kong, China.
- The use of cocaine has been on the rise in Hong Kong, China, evidenced by increases in the number of reported cocaine users and annual seizures (see Figure 1 and Table 1).

^{6 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of MDMA.

⁷ Narcotics Division, Security Bureau (NDSB), "Newly/previously reported drug abusers by age group by common type of drugs abused (T3)" (accessed at http://www.nd.gov.hk/text/en/stat/statistics_list.htm).

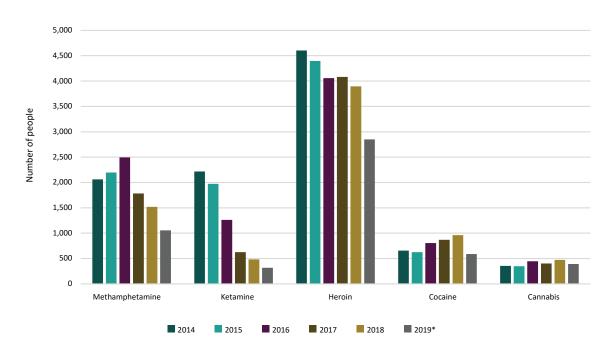
⁸ Ibid

⁹ The Hong Kong Customs and Excise Department, "Drug Trafficking Trend in Hong Kong, presented at the Pre-Operational Meeting of Operation ICE Break", Seoul, the Republic of Korea, October 2019.

Key facts and figures

Drug demand indicators

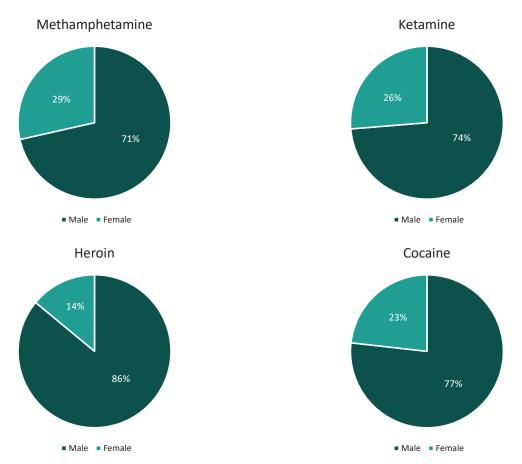
Figure 1. The number of reported users of methamphetamine, ketamine, heroin, and cocaine in Hong Kong, China, 2014 – 2019*



Note: * Data cover the first nine months of the year.

Source: NDSB, Hong Kong, China, "Newly/previously reported drug abusers by age group by common type of drugs abused (T3)" (accessed at http://www.nd.gov.hk/text/en/stat/statistics_list.htm).

Figure 2. The number of people who use methamphetamine, ketamine, heroin, and cocaine in Hong Kong, China, by sex, 2019*



Note: * Data cover the first nine months of the year.

Source: Narcotics Division, Security Bureau (NDSB), "Newly/previously reported drug abusers by age group by common type of drugs abused (T3)" (accessed at http://www.nd.gov.hk/text/en/stat/statistics_list.htm).

Drug supply indicators

Table 1. Seizures of selected drugs in Hong Kong, China, 2014-2019*

Drug type	Unit	2014	2015	2016	2017	2018	2019*
Crystalline methamphetamine	kg	1,027.5	355.5	359.0	144	164.1	410
"Ecstasy" ^a	tablets	2,167	2,833	6,400	98,467	104,633	1,127,709
Ketamine	kg	509.3	499.4	281.7	94.5	152.7	388
Cannabis	kg	37.9	52.9	181.6	661.4	226.6	402
Cocaine	kg	272.0	226.9	433.5	454	827.5	1,317
Heroin	kg	88.9	27.4	73.5	29.5	43.9	62

Note: * Data for 2019 were reported by the Hong Kong Police Force and are preliminary. Some of the figures reported in previous reports have been updated with revised data shared by the Hong Kong Customs and Excise Department in March 2020; a Figures reported other than in number of tablets were converted into estimated tablet equivalents at 300 mg per tablet.

Source: UNODC, responses to the annual report questionnaire; Official communication with the Hong Kong Customs and Excise Department, March 2020; Comparison of 2019 and 2018 crime situation, Hong Kong Police Force, "Comparison of 2019 and 2018 Crime Situation", (accessed at https://www.police.gov.hk/ppp_en/09_statistics/csc_2018_2019.html).

Table 2. Wholesale and retail prices of selected drugs in Hong Kong, China, in US\$, 2016 – 2018

Drug type	Unit	2016	2017	2018
Crystalline methamphetamine	Per kg	8,180	11,820	22,325.3 (17,886-26,347)
Crystalline methamphetamine	per gram	42	45.6	70 (57.3-89.2)
"Ecstasy"	per tablet	7.7	10.2	10.2 (9.6-10.7)
Heroin	per gram	96	90.1 – 109	108.3 (90.2-126.6)
Ketamine	per gram	28.2	48.7	65.4 (51.9-77.8)
Cocaine	per gram	141	148.4 – 178.5	•

Note: • = Not reported.

Source: UNODC, responses to the annual report questionnaire; Hong Kong Police Force, "Narcotics Bureau Territory Report", shared at the 2018 ADLOMICO meeting, Busan, the Republic of Korea, September 2018.



Summary of major trends and emerging concerns

Methamphetamine

- The amounts of crystalline methamphetamine seized annually have increased significantly in recent years, with the record amount of seizures in 2019 (17.9 tons) exceeding the combined amounts recorded for two previous years (see Table 3).
- Despite substantial seizures, the typical price for 1 gram of crystalline methamphetamine has nearly halved over the last four years to US\$ 85.7-114.3 in 2019 (see Table 5), while demand is assessed as stable and products of a consistently high purity (see Tables 1 and 4), indicating a high availability.
- Methamphetamine also accounts for the largest proportion of drug-related arrests (see Figure 2) and persons placed in drug treatment in the country (see Table 2) in recent years.

"Ecstasy"1

- Indonesia continues to account for the largest amount of "ecstasy" seized in Southeast Asia.²
- Although the drug appears to have been largely supplied from overseas, Indonesian authorities have dismantled clandestine "ecstasy" laboratories in recent years (see Figure 3).

New Psychoactive Substances (NPS)

• Synthetic cannabinoids dominate the NPS market in Indonesia, a trend observed since 2017 (see Figure 4). According to the latest drug use survey among workers conducted in 2018, a synthetic cannabinoid product known as 'Gorilla Tobacco' is the fifth most widely used drug, after cannabis, methamphetamine, analgesics, and "ecstasy".³

Other drugs

- Demand for clandestinely manufactured tablets containing paracetamol, carisoprodol, and caffeine, sold as "PCC"⁴, appears to have increased in recent years. In November 2019, Indonesian authorities dismantled a clandestine PCC tableting facility resulting in seizures of 1.8 million PCC tablets, as well as its precursor chemicals.⁵
- Annual seizures of barbiturates have remained at elevated levels with a concomitant increase in demand in recent years (see Table 3).

^{1 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of

² For more information, see the Regional Overview of the report.

³ National Narcotics Board (BNN), "Latest situation on synthetic drugs and responses to the threats in Indonesia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

⁴ Carisoprodol is a centrally acting muscle relaxant, available as a prescription drug since 1959. Due to its abuse potential, Indonesia has revoked the distribution of pharmaceutical products containing carisoprodol in 2013 and listed carisoprodol as a Class I Narcotic in 2018.

⁵ BNN, "Precursor chemical situation in Indonesia", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

Key facts and figures

Drug demand indicators

Table 1. Trends in use of selected drugs in Indonesia, 2014-2018*

Drug type	2014	2015	2016	2017	2018
Crystalline methamphetamine	↔	↔	↔	+	↔
"Ecstasy"	1	1	↔	†	↔
Barbiturates	↔	1	1	†	1
Benzodiazepines	↔	1	↔	↔	1
Cannabis herb	↔	↔	↔	+	↔
Cannabis resin	1	1	†	•	•
Cocaine	1	•	1	+	Ţ
Heroin	↔	↔	1	†	1
LSD	•	•	↔	+	1
Ketamine	†	↔	•	•	•

Note: * Based on expert perception provided by the BNN, Indonesia.

 \uparrow = Increasing, \downarrow = Decreasing, \leftrightarrow = Stable, \bullet = Not reported

Source: UNODC, responses to the annual report questionnaire; Drug Abuse Information Network for Asia and the Pacific (DAINAP).

Table 2. Drug treatment admissions by drug type and gender in Indonesia, 2018

Drug tuno	All admissions				
Drug type	Male	Female	Total		
Methamphetamine*	5,439	599	6,038		
Opiates**	529	47	576		
Cannabis	1,764	55	1,819		
Cocaine	28	3	31		
Benzodiazepines	782	104	886		
Barbiturates	115	8	123		
LSD	473	87	560		
Inhalants	441	37	478		
Poly-drug use	274	0	274		
Other drugs	25	0	25		
Total	9,870	940	10,810		

Note: * Includes few "ecstasy" related admissions. ** Include heroin, morphine and methadone.

Source: BNN; "Latest situation on synthetic drugs and responses to the threats in Indonesia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Drug supply indicators

Table 3. Seizures of selected drugs in Indonesia, 2014-2019*

Drug type	Unit	2014	2015	2016	2017	2018	2019*
Crystalline methamphetamine	kg	1,125.1	4,420.2	2,630	7,544.8	8,231.3	17,900
Methamphetamine powder	kg	•	•	•	•	4	26
Amphetamine	kg	•	1.1	•	0.0°	65.4	239.2
"Ecstasy"	tablets	489,311	1,995,240	1,694,970	3,102,679	1,594,084	1,635,852
"Ecstasy" powder	kg	•	4.3	0.9	21.1	2.3	41.8

Barbiturates	tablets	9,571	7,332	273,201	264,107	138,516	226,711
Benzodiazepines	tablets	356,631	1,247,895	475,860	64,962	10,703	9,472
Cannabis herb	kg	68,542	29,389.3	15,700	151,670.9	41,266.75	7,675.5
Cannabis plants	plants	92,481	101,815	2,171,841	205,708	1,047,915	4,520
Cocaine	kg	0.4	0.0ª	0.4	0.1	8.39	2
Heroin	kg	12.2	13.3	2.2	0.5	1.4	16.4
Prescription opioid (tramadol)	tablets	•	•	•	•	7,477	3,476
Ketamine	kg	13.4	3.5	0	1.8	22.2	5.1
Synthetic cannabinoids	kg	•	•	10.5	45.2	5.4	12.1
PCC (paracetamol, carisoprodol, and caffeine)	tablet	•	•	•	•	1,652,864	3,967

Note: * Data cover the first nine months of the year, excluding crystalline methamphetamine and "ecstasy" which cover the whole year of 2019 (preliminary). ● = Not reported. ^a Less than 0.05 kg of the substance was seized.

Source: UNODC, responses to the annual report questionnaire; DAINAP; BNN; "Latest situation on synthetic drugs and responses to the threats in Indonesia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with BNN, April 2020.

70,000
60,000
40,000
20,000
10,000
0
2014
2015
2016
2017
2018
2019*

Figure 1. Number of drug-related arrests by drug type, 2014-2019*

Methamphetamine

Note: * Data cover the first nine months of the year. Other drugs include other psychotropic drugs and dangerous substances.

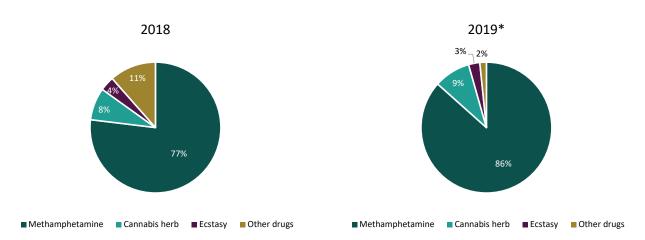
Source: DAINAP; BNN, "Latest situation on synthetic drugs and responses to the threats in Indonesia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Ecstasy

Other drugs

Cannabis Herb

Figure 2. Proportions of drug-related arrests in Indonesia by drug type, 2018 and 2019*



Note: * Data cover the first nine months of the year. Other drugs include other psychotropic drugs and dangerous substances.

Source: DAINAP; BNN, "Latest situation on synthetic drugs and responses to the threats in Indonesia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Figure 3. Number of illicit ATS manufacturing facilities dismantled in Indonesia, 2014-2019

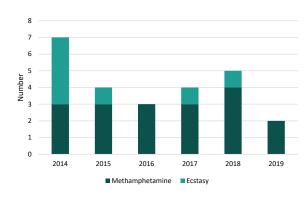


Table 4. Typical purities of crystalline methamphetamine in Indonesia, 2017-2018

Year	Number of samples analysed	Purity (%)*
2017	8	67.05 (61.66-97.55)
2018	38	91.92 (75.33-95.48)

Note: *Data in this table refer to the weight/weight (w/w) % expressed as the hydrochloride salt of methamphetamine.

Source: BNN, "Latest situation on synthetic drugs and responses to the threats in Indonesia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Source: DAINAP; Official communication with BNN, April 2020.

Table 5. Typical retail prices (US\$) of selected drugs in Indonesia, 2016-2019*

Drug type	Unit	2016	2017	2018	2019*
Crystalline methamphetamine	per g	185 -190	153 – 185	124-185	85.7-114.3
"Ecstasy"	per tablet	18	18 -31	18-28	24.3-28.6
Amphetamine	per g	30	30	30	•
Ketamine	per g	•	77	•	50-71.4
Cannabis herb	per kg	185 – 191	185 – 191	185	•
LSD	Per stamp	•	•	•	10.7-21.4
Synthetic cannabinoids	Per bag (5 grams)	•	•	•	28.6-35.7
Heroin	per g	111 - 115	111 - 115	185	214.3
Cocaine	per g	74	74	74-241	179

Note: * Data cover the first nine months of the year. \bullet = Not reported. Indonesia reported prices with a conversion ratio of 1 USD = IDR 13,500 – 14,500 during the reporting period.

Source: UNODC, responses to the annual report questionnaire; DAINAP.

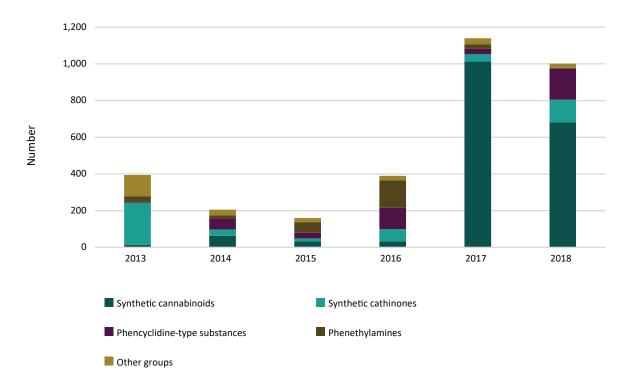


Figure 4. Number of NPS samples identified and analysed in Indonesia by substance group, 2013-2018

Source: BNN, "Latest situation on synthetic drugs and responses to the threats in Indonesia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.



JAPAN

Summary of major trends and emerging concerns

Methamphetamine

- In 2019, a record high of 2.3 tons of crystalline methamphetamine was seized in Japan (see Table 2). This increase was driven primarily by large maritime interdictions of approximately 1 ton of methamphetamine in June and another 600 kg of the drug in December 2019.¹
- Several countries in Southeast Asia, especially Thailand and Malaysia are perceived as primary embarkation points in terms of number of cases involving methamphetamine seized in Japan in 2018. (see Figure 6).
- The typical price of crystalline methamphetamine in Japan remains the highest in East and Southeast Asia, making the country an attractive target for local and transnational organized crime groups (see Figure 5 in the regional chapter).

"Ecstasy"2

• While the number of people brought into formal contact with authorities for "ecstasy" remains low in Japan (2018: 57 people), seizures of the drug have increased six-fold between 2018 and 2019 to more than 74,000 tablets (see Table 2).

New Psychoactive Substances (NPS)

- Although the smuggling and use of NPS remains a concern for Japan, the number of people brought into formal contact with authorities for NPS has been rapidly decreasing in recent years (see Figure 9), in parallel with the introduction of national legislative controls on NPS.
- Synthetic cannabinoids continue to account for the largest proportion of the total number of NPS reported from the country (see Figure 10). The Government of Japan scheduled several synthetic cannabinoids in 2019, including ADB-CHMICA and MAB-CHMICA.³

Other drugs

- Both the number of people brought into formal contact with authorities for cannabis and the amount of cannabis herb seized annually have been rising rapidly in Japan in recent years. (see Table 2 and Figure 5).
- The latest drug use survey amongst high school students in Japan indicates that lifetime and pastyear use of cannabis is more prevalent than the use of other substances such as methamphetamine, cocaine, NPS and MDMA (see Figure 1)
- There are indications of Japan being increasingly targeted by organized crime groups for cocaine trafficking.⁴

¹ Ministry of Health, Labour and Welfare (MHLW) of Japan, "Latest situation on synthetic drugs and responses to the threats in Japan", presented at the SMART Regional Workshop, Singapore, August 2019; National Police Agency (NPA) of Japan, "Drug Control in Japan", presented at the 25th Asia-Pacific Operational Drug Enforcement Conference, Tokyo, Japan, February 2020.

^{2 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of MDMA.

³ MHLW of Japan, "Latest situation on synthetic drugs and responses to the threats in Japan", presented at the SMART Regional Workshop, Singapore, August 2019.

⁴ For instance, Japanese authorities reported to have seized 177 kg and 400 kg of cocaine respectively in August and October 2019; NPA, "Drug Control in Japan", presented at the 25th Asia-Pacific Operational Drug Enforcement Conference, Tokyo, Japan, February 2020.

Drug demand indicators

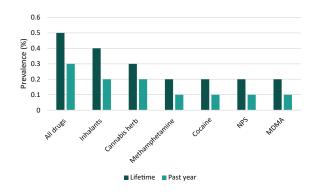
Table 1. Trends in use of selected drugs in Japan, 2009-2017

Drug type	2009	2011	2013	2015	2017
Crystalline methamphetamine	1	1	1	↔	↔
Ecstasy	↔	Ţ	1	1	1
Cannabis	1	1	↓	↓	1
NPS	•	•	•	Ţ	1

Note: \uparrow = Increase, \downarrow = Decrease, \leftrightarrow = Stable, \bullet = Not reported.

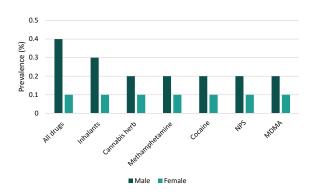
Source: UNODC, responses to the annual report questionnaire; MHLW, "Latest situation on synthetic drugs and responses to the threats in Japan Part II", presented at the SMART Regional Workshop, Chiang Rai, Thailand, August 2018 and corresponding reports presented at 2016 and 2017 SMART Regional Workshops; National Center of Neurology and Psychiatry (NCNP), "2017 Nationwide General Population Survey on Drug Use in Japan", March 2018.

Figure 1. Estimated lifetime and past year drug use prevalence of high school students in Japan by drug type, 2018



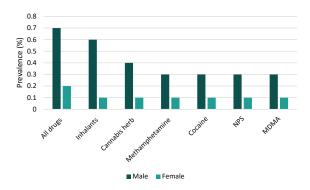
Source: National Center of Neurology and Psychiatry (NCNP), "2018 Nationwide High School Survey on Drug Use in Japan", 2018 (accessed at https://www.ncnp.go.jp/nimh/yakubutsu/report/pdf/highschool2018.pdf).

Figure 3. Estimated past-year drug use prevalence of male and female high school students in Japan by drug type, 2018



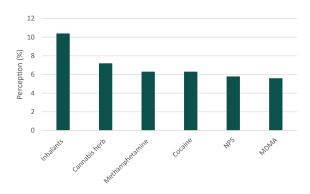
Source: NCNP, "2018 Nationwide High School Survey on Drug Use in Japan", 2018 (accessed at https://www.ncnp.go.jp/nimh/yakubutsu/report/pdf/highschool2018.pdf).

Figure 2. Estimated lifetime drug use prevalence of male and female high school students in Japan by drug type, 2018



Source: NCNP, "2018 Nationwide High School Survey on Drug Use in Japan", 2018 (accessed at https://www.ncnp.go.jp/nimh/yakubutsu/report/pdf/highschool2018.pdf).

Figure 4. Perceived availability of drugs among Japanese high school students by drug type, 2018



Note: 'Perceived availability' means either easily obtainable or known ways to get drugs.

Source: NCNP, "2018 Nationwide High School Survey on Drug Use in Japan", 2018 (accessed at https://www.ncnp.go.jp/nimh/yakubutsu/report/pdf/highschool2018.pdf).

Drug supply indicators

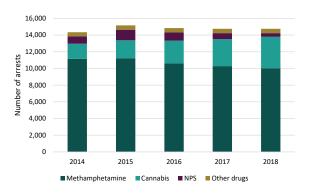
Table 2. Seizures of selected drugs in Japan, 2014-2019*

Drug type	Measurement	2014	2015	2016	2017	2018	2019*
Crystalline methamphetamine	kg	570.2	431.8	1,521.4	1,136.6	1,206.7	2,316.5
"Ecstasy"	tablets	608	1,074	5,122	3,244	12,307	74,057
Cannabis herb	kg	166.6	104.6	159.7	270.5	337.3	344.7
Cannabis resin	kg	36.7	3.9	1.0	21.9	3.1	•
Cocaine	kg	2.3	18.6	113.3	11.6	157.4	34.9
Heroin	kg	0	2.0	0	70.3	0	0
Opium (included)	kg	0.2	0	0.7	0	0	0

Note: * Data are preliminary and only cover those reported from NPA; ● = Not reported

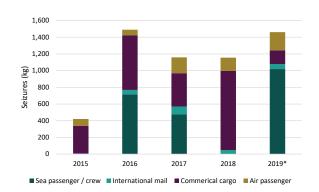
Source: UNODC, responses to the annual report questionnaire; NPA, "Latest situation on synthetic drugs and responses to the threats in Japan", presented at the SMART Regional Workshop, Singapore, August 2019; NPA, "Drug Control in Japan", presented at the 25th Asia-Pacific Operational Drug Enforcement Conference, Tokyo, Japan, February 2020.

Figure 5. Number of drug-related arrests in Japan, 2014-2018



Source: MHLW, "Latest situation on synthetic drugs and responses to the threats in Japan", presented at the SMART Regional Workshop, Singapore, August 2019.

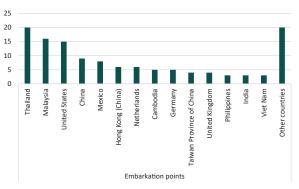
Figure 7. Seizures of methamphetamine by mode of trafficking in Japan by weight, 2015-2019*



Note: * Data cover the first half of the year.

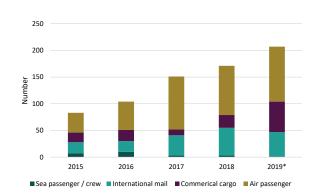
Source: Japan Customs, "Recent methamphetamine smuggling interdiction", presented at Pre-operational meeting for Operation Ice Break, October, Seoul, the Republic of Korea; Official communication with Japan Customs, February 2020.

Figure 6. Embarkation points of methamphetamine trafficking to Japan by number of cases, 2018



Source: Data from NPA presented by MHLW at the 2019 SMART Regional Workshop, Singapore, August 2019.

Figure 8. Seizures of methamphetamine by mode of trafficking in Japan by number, 2015-2019*



Note: * Data cover the first half of the year.

Source: Japan Customs, "Recent methamphetamine smuggling interdiction", presented at Pre-operational meeting for Operation Ice Break, October, Seoul, the Republic of Korea; Official communication with Japan Customs, February 2020.

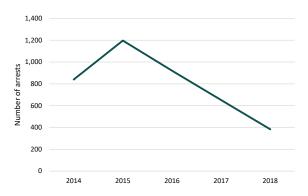
Table 3. Retail prices of selected drugs in Japan in US\$, 2015-2018

Drug type	Unit	2015	2016	2017	2018
Crystalline methamphetamine	Per gram	581	588	560	562
"Ecstasy"	Per tablet	33.2	36.7	36	37.5
Cannabis herb	Per gram	41.5	55	55	47
Heroin	Per gram	498.1	276	270	281.4
Cocaine	Per gram	•	•	•	187.6

Note: • = Not reported

Source: UNODC, responses to the annual report questionnaire; NPA, "Latest situation on synthetic drugs and responses to the threats in Japan", presented at the SMART Regional Workshop, Singapore, August 2019.

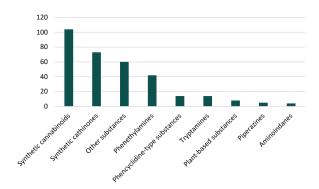
Figure 9. Number of arrests related to NPS in Japan, 2014-2018



Note: Data for each year in the figure 1 represent data collected during the period of April 1 – March 31 of that year based on the fiscal year of Japan.

Source: MHLW, "Latest situation on synthetic drugs and responses to the threats in Japan", presented at the SMART Regional Workshop, Singapore, August 2019 and previous years.

Figure 10. Number of NPS reported by Japan by substance group, 2014-2019*



Note: * Data as of 31 January 2020.

Source: UNODC Early warning advisory on NPS.



Summary of major trends and emerging concerns

Methamphetamine

- Lao PDR is experiencing an increasing inflow of drugs trafficked from the Golden Triangle. The amount of crystalline methamphetamine seized annually has increased exponentially in recent years. The seizures of more than 5 tons of crystalline methamphetamine in 2019, the largest ever reported in the country, represents a more than a thirty-fold increase since 2015. (see Table 2).
- Despite an increase in seizures in recent years, the average retail price of methamphetamine tablets
 has dropped to a record low of US\$ 1 per tablet in 2019, indicating its wide availability on the market
 (see Figure 6).
- The country remains a significant transit country for chemicals suspected to be used for illicit drug manufacture, with the amount of seizures reaching a record high in 2019 (see Table 2). Significantly in May 2019, authorities seized 10 tons of unspecified chemicals suspected to be methamphetamine precursors, which were destined for Myanmar.¹

"Ecstasy"2

• There is limited information on "ecstasy" use in Lao PDR. However, MDMA has been detected in some of the drug samples analysed by the authorities.³

New Psychoactive Substances (NPS)

• There has been no reported use and trafficking of NPS in Lao PDR.

Other drugs

• Lao PDR remains a producer of opium, although its area under illicit opium poppy cultivation represents only a small proportion of the global total. Latest data show that the area under opium poppy cultivation has stabilised at low levels.⁴

¹ Lao National Commission for Drug Control and Supervision (LCDC), "Latest situation on synthetic drugs and responses to the threats in Lao PDR", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

^{2 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of MDMA

³ LCDC, "Country briefing", present at the Meeting of Drug Forensic Specialists, Beijing China, December 2019.

⁴ According to LCDC, in 2018, the estimated area under opium poppy cultivation in the country was 4,925 hectares, marking an 8% decrease compared to 2017.

Drug demand indicators

Table 1. Trend in use of selected drugs in Lao PDR, 2014-2019*

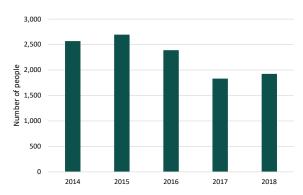
Drug type	2014	2015	2016	2017	2018	2019
Methamphetamine tablets	1	1	1	1	1	1
Crystalline methamphetamine	1	1	1	Ţ	1	1
Cannabis herb	1	1	Ţ	1	Ţ	1
Opium	1	1	†	1	Ţ	Ţ
Heroin	1	Ţ	1	Ţ	1	Ţ

Note: * Based on expert perception provided by LCDC, Lao PDR.

 \uparrow = Increasing, \downarrow = Decreasing, \leftrightarrow = Stable, • = Not reported

Source: Drug Abuse Information Network for Asia and the Pacific (DAINAP).

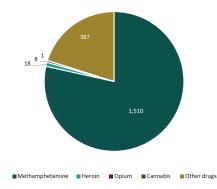
Figure 1. Number of drug users admitted for treatment, 2014-2018



Note: The data here only represent drug users admitted to the Somsanga Treatment and Rehabilitation Centre, and it should be interpreted with caution to understand the drug use situation in the country.

Source: LCDC, "Latest situation on synthetic drugs and responses to the threats in Lao PDR", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Figure 2. Drug treatment centre admissions by drug type, 2018



Note: The data here only represent drug users admitted to the Somsanga Treatment and Rehabilitation Centre, and it should be interpreted with caution to understand the drug use situation in the country.

Source: LCDC, "Latest situation on synthetic drugs and responses to the threats in Lao PDR", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Drug supply indicators

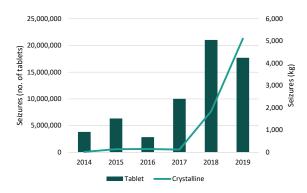
Table 2. Seizures of selected drugs and chemicals in Lao PDR, 2014-2019

	•						
Drug type	Unit	2014	2015	2016	2017	2018	2019
Methamphetamine tablets	tablets	3,832,895	6,331,692	2,849,414	10,019,643	21,036,045	17,703,036
Crystalline methamphetamine	kg	19.4	141.9	150.1	124.5	1,841.5	5,106
Cannabis herb	kg	1,233.3	3,258	466	4,810.0	450.9	2,577
Cocaine	kg	0	0	0	0	8.3	3
Heroin	kg	181.7	134.8	221.0	149.5	281.3	174
Opium	kg	12.8	51.6	137.7	142.9	103.8	89
Unspecified chemicals*	kg	1,494.4	4,372.2	1,102.6	189.2	5,016.3	13,141

Note: * Include precursor chemicals; ● = Not reported

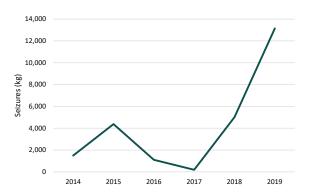
Source: DAINAP; LCDC, "Latest situation on synthetic drugs and responses to the threats in Lao PDR", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; LCDC, "Law enforcement statistics for 2019", February 2020.

Figure 3. Seizures of crystalline methamphetamine and methamphetamine tablets in Lao PDR, 2014-2019



Source: DAINAP; LCDC, "Latest situation on synthetic drugs and responses to the threats in Lao PDR", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; LCDC, "Law enforcement statistics for 2019", February 2020.

Figure 5. Seizures of unspecified chemicals suspected to be intended for illicit drug manufacture, 2014–2019



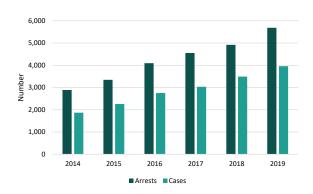
Source: DAINAP; LCDC "Law enforcement statistics for 2019", February 2020, and corresponding reports reported from previous years.

Table 3. Average wholesale or retail prices of selected drugs in Lao PDR, 2019

drugs in Edo i Dit, 2015								
Drug type	Unit	Price (US\$)						
Methamphetamine tablets (retail)	tablet	1						
Crystalline methamphetamine (wholesale)	kg	6,000						
Heroin (wholesale)	kg	14,500						
Opium (wholesale)	kg	600						
Cannabis herb (wholesale)	kg	70						

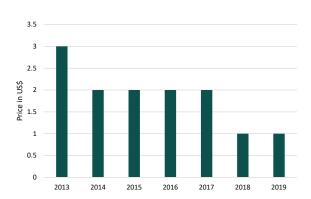
Source: LCDC, "Latest situation on synthetic drugs and responses to the threats in Lao PDR", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with LCDC, February 2020.

Figure 4. Number of cases and arrests for drug-related offences in Lao PDR, 2014-2019



Source: DAINAP, LCDC, "Latest situation on synthetic drugs and responses to the threats in Lao PDR", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; LCDC, "Law enforcement statistics for 2019", February 2020.

Figure 6. Average retail prices of methamphetamine tablets in Lao PDR in US\$, 2013-2019*



Source: DAINAP; Official communication with LCDC, February 2020.



Summary of major trends and emerging concerns

Methamphetamine

- The number of methamphetamine users brought into formal contact with authorities has been increasing in recent years, (see Figure 1), with the drug accounting for the largest proportion of treatment admissions in 2018 (see Table 2).
- There is a sharp increase in the amount of methamphetamine seized in recent years, with quantities of crystalline methamphetamine (almost 6 tons) and methamphetamine tablets (more than 1.6 million) seized in 2019 being the second largest on record (see Table 3).
- Despite increased seizures, wholesale prices of the drug have declined while purity remained stable in recent years (see Tables 5 and 6).
- There has been a downward trend in the number of methamphetamine manufacturing facilities dismantled in the country (see Table 4), which could indicate that the drug is increasingly being sourced from overseas.

"Ecstasy"1

• The available data for "ecstasy" show a mixed picture: while the number of "ecstasy" manufacturing facilities dismantled in 2019 decreased significantly in comparison to the preceding year (see Table 4) and the use trend is perceived to have declined (Table 1), seizures remain comparatively high and number of users brought into formal contact with authorities has been increasing in recent years (see Tables 2 and 3).

New Psychoactive Substances (NPS)

- The amount of ketamine seized annually has increased substantially in recent years and the country dismantled a clandestine ketamine laboratory in 2019 for the first time since 2016 (see Tables 3 and 4).²
- The amount of kratom leaves seized annually has increased significantly in recent years, with seizures of more than 180 tons in 2019 being the largest ever reported, constituting a six-fold increase since 2015 (see Table 3).
- Between 2018 and July 2019, a total of 29 NPS were identified in the country, a majority of which were synthetic cathinones and synthetic cannabinoids (see Table 7).³

Other drugs

• While available data indicate that the local market for cocaine in Malaysia is small, national authorities seized a total of approximately 15 tons of cocaine in two separate seizures in 2019.⁴

^{1 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of

² National Anti-Drug Agency (NADA), Royal Malaysian Police (RMP), and the Department of Chemistry Malaysia (KIMIA), "Latest situation on synthetic drugs responses to the threats in Malaysia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

³ Ibid

⁴ Royal Malaysian Police (RMP), "Country drug situation briefing", presented at the Operation Ice Break Pre-Operational Meeting, Seoul, the Republic of Korea, October 2019.

Drug demand indicators

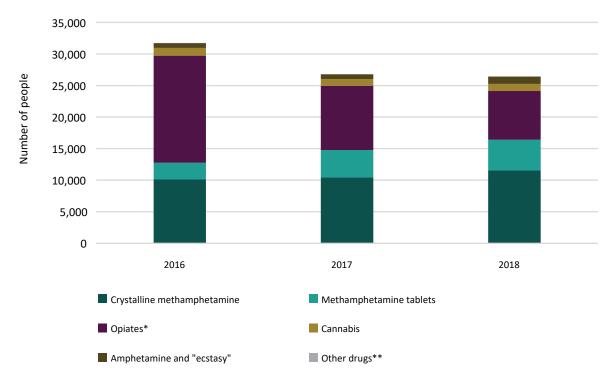
Table 1. Trend in use of selected drugs in Malaysia, 2015-2019*

Drug type	2015	2016	2017	2018	2019
Crystalline methamphetamine	1	1	1	1	1
Methamphetamine pills	Ţ	1	1	1	1
"Ecstasy"	1	Ţ	1	1	1
Amphetamine	1	1	1	1	•
Benzodiazepines	1	1	1	1	•
Cannabis herb	1	Ţ	Ţ	†	Ť
Heroin	1	1	1	1	1
Ketamine	1	Ţ	Ţ	Ţ	Ţ
Cocaine	•	•	•	•	1
Kratom	•	†	1	†	1

Note: * Based on expert perception provided by the NADA, Malaysia.

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with NADA, February 2020.

Figure 1. Number of people who use drugs brought into formal contact with authorities in Malaysia by drug type, 2016-2018



Note: * Includes heroin and morphine. ** Mainly composed of ketamine and benzodiazepines.

Source: DAINAP; NADA, RMP, and KIMIA, "Latest situation on synthetic drugs responses to the threats in Malaysia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

^{1 =} Increase, ↓ = Decrease, ↔ = Stable, • = Not reported

Table 2. Drug treatment admissions by drug type and gender in Malaysia, 2018

Duverture		New admissions	S	All admissions			
Drug type	Male	Female	Total	Male	Female	Total	
Crystalline methamphetamine	8,118	457	8,575	10,998	533	11,531	
Methamphetamine tablets	3,248	83	3,311	4,734	119	4,853	
"Ecstasy"	57	16	73	79	17	96	
Amphetamine	836	50	886	1,000	56	1,056	
Opiates*	4,527	181	4,708	7,500	246	7,746	
Cannabis	811	32	843	1,089	33	1,122	
Benzodiazepines	14	9	23	16	10	26	
Ketamine	3	0	3	30	0	3	
Kratom	12	0	12	16	0	16	
Total	17,626	828	18,434	25,462	1,014	26,449	

Source: DAINAP; NADA, RMP and KIMIA, "Latest situation on synthetic drugs responses to the threats in Malaysia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Drug supply indicators

Table 3. Seizures of selected drugs in Malaysia, 2014-2019

Drug type	Unit	2014	2015	2016	2017	2018	2019
Crystalline methamphetamine	kg	1,212.7	1,138.5	718.5	1,553.3	6,851.8	5,831.4
Liquid methamphetamine	lt/kg	41.8 lt	539.2kg	429 kg	460.0 lt	296.9 lt	249 lt
Methamphetamine tablets ^a	tablets	557,337	538,176	895,499	847,334	2,512,444	1,672,778
"Ecstasy" ^b	tablets	117,702	407,475	200,763	329,594	146,758	260.01
"Ecstasy" powder	kg	53.7	267.9	•	430.6	337.4	260.0 kg
Ketamine	kg	240.3	48.4	380.0	506.4	217.1	1,261
Heroin	kg	455.8	742.6	742.6	1,441.4	731.5	709.5
Benzodiazepines	tablets / kg	467,133 tablets	4,038,733 tablets	1,891,852 tablets	2,756,552 tablets	912.4 kg	85 kg
Cannabis herb	kg	578.2	1,844.2	2,945.5	2,696.3	1,894.8	651.8
Cocaine	kg	33.4	18.0	253.1	23	12.1	15,247.3
Codeine	lt	1,548.5	3,169.1	5,616	10,216.3	37,263.9	13,312.6
Kratom leaf	kg	15,541.4	28,961.4	124,717.9	81,028.6	87,564.8	180,181.1
Kratom liquid	lt	45,429.9	206,175.8	274,421	89,060.1	233,525.9	101,516.7
Opium (raw and prepared)	kg	0.1	0.1	0.7	0.1	0.2	0.4
Psychotropics	Tablets/ kg	1,248,472 tablets	56,279 tablets	39,979 tablets	13,944 tablets	0.8 kg	4.03 kg

Note: ^a Figures reported other than the number of tablets converted into estimated pill equivalents at 100 mg per tablet. ^b Figures reported other than the number of tablets converted into estimated tablet equivalents at 300 mg per tablet.

Source: UNODC, responses to the annual report questionnaire; DAINAP; NADA, RMP and KIMIA, "Latest situation on synthetic drugs responses to the threats in Malaysia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Table 4. Number of illicit drug manufacturing facilities dismantled in Malaysia by drug type, 2015–2019

Drug type	2015	2016	2017	2018	2019
Methamphetamine	16	14	9	10	7
Heroin	15	4	4	12	12
Ecstasy	7	5	4	11	1
Benzodiazepines	1	0	2	1	1
Ketamine	0	1	0	0	1
Other drugs	0	0	0	1	0

Source: UNODC, responses to the annual report questionnaire; DAINAP; NADA, RMP and KIMIA, "Latest situation on synthetic drugs responses to the threats in Malaysia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; KIMIA, "Country briefing", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

Table 5. Trends in wholesale / retail prices of selected drugs in Malaysia in US\$, 2015–2019

		_	-			
Drug type	Unit	2015	2016	2017	2018	2019
Methamphetamine Tablet (retail)	per tablet	5.3	3–5	3.6	4.8	2.4-3.6
Crystalline methamphetamine (wholesale)	per kg	28,080	16,000 – 26,800	16,800	12,000	12,000
"Ecstasy" (retail)	per tablet	11	8.4 – 10.8	12	7.2	7.2
Heroin ^a (wholesale)	per kg	4,704	3,744 – 4,368	5,880	2,667	3,240
Ketamine (wholesale)	per kg	4,800	6,000 – 10,800	10,800	12,720	14,400
Cannabis (wholesale)	per kg	632	486 – 681	586	576	480-600

Note: Prices reported in Malaysian Ringgit were converted with a conversion ratio of 1 MYR = 0.24 USD as of 1st March 2020; a Refers to heroin no.3.

Source: DAINAP; NADA, RMP and KIMIA, "Latest situation on synthetic drugs responses to the threats in Malaysia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Table 6. Typical purities (base form) of selected drugs in Malaysia, 2018-2019

Drug type	2018	2019
Crystalline methamphetamine	75 (40 – 80)	75 (20 – 80)
"Ecstasy"	15 - 40	50 (10 – 60)
Heroin (No.3)	3 (1 – 5)	4 (3 – 70)
Ketamine	75 (70 – 85)	80 (50 – 85)

Source: NADA and Royal Malaysian Police, "Latest situation on synthetic drugs responses to the threats in Malaysia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; KIMIA, "Country briefing", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019; Official communication with NADA, February 2020.

Table 7. Types of NPS identified in Malaysia, 2018-2019*

Number	Substance Group	Substance Name
1	Synthetic cathinones	4-methylmethcathinone (Mephedrone / 4MMC)
2		Methylone (3,4-Methylenedioxymethcathinone / MDMC)
3		Ethylone (3,4- methylenedioxy-N-ethylcathinone / MDEC)
4		4-Methylethcathinone (4-MEC)
5		Methylenedioxy-N,N-dimethcathinone (Dimethylone)
6		3-fluoromethcathinone
7		4-chloromethcathinone
8		4-methylbuphedrone
9		4-Methyl-α-pyrrolidinobutiophenone (MPBP)
10	Synthetic cannabinoids	JWH-018
11		AM-2201
12		JWH-250
13		XLR-11
14		MMB-FUBINACA (AMB – FUBINACA)
15		5F-INPB-22 (5-fluoro-NPB-22)
16		MDMB-CHMICA
17		5F-MDMB-PINACA (5-fluoro-ADB)
18	Piperazines	1-(3-Trifluoromethylphenyl)piperazine (3-trifluoromethylphenylpiperazine / TFMPP)
19		N-benzylpiperazine (Benzylpiperazine / BZP)
20		1-(4-Fluorophenyl)piperazine
21	Phencyclidine-type substances	Ketamine
22		Methoxetamine
23		Deschloro-N-ethyl-ketamine
24	Tryptamines	5-methoxy-N,N-diisopropyltryptamine
25		5-Methoxy-N-isopropyl-N-methyltryptamine (5-methoxy-N,N-methylisopropyltryptamine)
26	Phenethylamines	para-Methoxymethylamphetamine (para-methoxy-N-methylamphetamine / PMMA)
27	Other substances	Etizolam
28	Plant-based substances	Kratom
29		Khat

Note: * Data cover the first seven months of the year; Some of substances in the table have been under the international control but listed here for a monitoring purpose.

Source: DAINAP; NADA, RMP and KIMIA, "Latest situation on synthetic drugs responses to the threats in Malaysia", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with KIMIA, March 2020.

Summary of major trends and emerging concerns

Methamphetamine

- Methamphetamine manufacture in the north eastern part of Myanmar has expanded in recent years, with record seizures of the drug and some of its precursor chemicals in 2019 (see Tables 2 and 3).
- Annual seizures of methamphetamine, in both crystalline and tablets forms, have increased significantly since 2017 (Table 2 and Figure 3).
- The types of chemicals seized in the country have diversified over the last two years and point to an increase in use of pre-precursors and/or non-scheduled precursor chemicals in the illicit manufacture of drugs in the Golden Triangle (see Table 3).¹
- The number of methamphetamine related treatment admissions decreased in 2019.² However, expert perception indicates an increasing trend in its use over the last five years (see Table 1 and Figure 1).

"Ecstasy"3

• In 2019, national authorities seized some quantities of safrole, a precursor for MDMA, in the Shan State. However, its use in the manufacture of "ecstasy" in the country has not been established.⁴

New Psychoactive Substances (NPS)

- Seizures of ketamine in Myanmar remained high with more than 1 ton seized in 2019 (see Table 2).
- Substantial quantities of kratom⁵ were seized in Myanmar in 2019 (see Table 2), which were largely intended for use in the southern part of the country.⁶

Other drugs

• Opium poppy cultivation in Myanmar continued to decline in 2019 and reached only 33,100 hectares (ha), marking a 42 percent decrease compared to 2014.⁷

¹ For more information, please see the regional chapter for methamphetamine in this report.

² Data from Government operated Drug Treatment Centres only.

^{3 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of

⁴ Central Committee for Drug Abuse Control (CCDAC), "2019 Precursor Situation in Myanmar", at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

⁵ Kratom (*Mitragyna speciosa*) is a large tree found in tropical and sub-tropical regions of Southeast Asia. This plant-based substance contains many alkaloids, and when consumed can result in stimulant and sedative effects.

⁶ Chemical Examiner's Office of the Myanmar Police Force, "Country briefing", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

⁷ UNODC, "Myanmar Opium Survey 2019: Cultivation, Production and Implications", February 2020.

Drug demand indicators

Table 1. Trend in use of selected drugs in Myanmar, 2014-2019

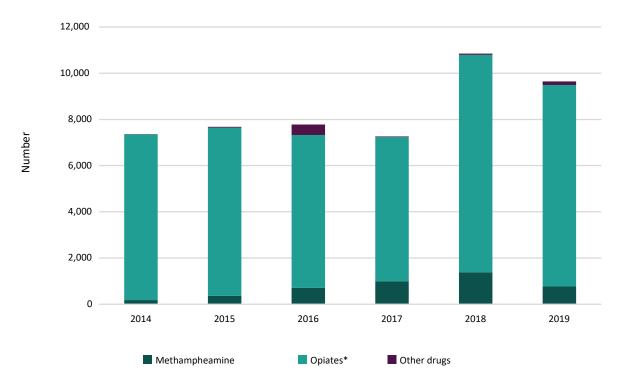
Drug type	2014	2015	2016	2017	2018	2019
Heroin	1	↔	↔	1	1	1
Opium	↔	↔	↔	↔	↔	\leftrightarrow
Methamphetamine tablets	1	1	1	1	1	1
Crystalline methamphetamine	•	1	†	•	†	•
Cannabis	Ţ	1	•	1	↔	↔

Note: * Based on expert perception provided by CCDAC, Myanmar.

1 = Increase, ↓= Decrease, ↔ = Stable, • = Not reported

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with CCDAC, February 2019.

Figure 1. Number of people admitted to drug treatment centres in Myanmar by drug type, 2014 – 2019



Note: * Include opium and heroin.

Source: DAINAP; CCDAC, "Synthetic drug situation in Myanmar", presented at the 2019 SMART Regional Workshop, Singapore, August 2019 and previous country reports presented at past SMART Regional Workshops; Official communication with CCDAC, March 2020.

Drug supply indicators

Table 2. Seizures of selected drugs in Myanmar, 2014-2019

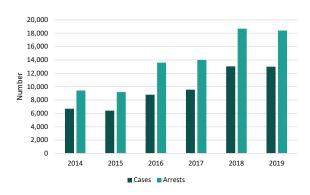
Drug type	Unit	2014	2015	2016	2017	2018	2019
Methamphetamine tablets	tablets	12,650,000	49,950,000	98,353,463	74,001,667	106,702,365	108,719,071
Crystalline methamphetamine	kg	47.1	2,261.7	2464.1	1,107.5	2,877.5	9,426.2

Methamphetamine powder ^a	kg	108.4	197.9	54.8	106.9	45.2	477.6
"Ecstasy"	tablets	2,388,953	1	22	645,882	2,686	27,995
Heroin ^b	kg	435.5	186.0	769.3	570.6	1,099.1	690.2
Opium (raw)	kg	1,828.4	888.8	945.7	1,256.2	2,829.0	1,552.7
Cannabis ^c	kg	205.5	87.7	188.8	99.4	142.4	364.8
Kratom	kg	605.3	687.4	1409.4	652.1	1,833.9	2,542.6
Ketamine ^d	kg	4.2	3.1	940.2	75.1	2,360.2	1,096

Note: \bullet = Not reported. ^a Methamphetamine for processing into methamphetamine tablets. ^b Reported as heroin No.4. ^c Combined herb and resin. ^d Figures reported in It were converted into kg with the ratio 1 It = 1 kg.

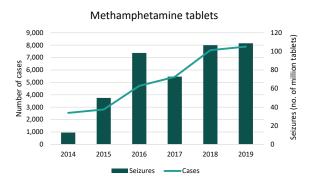
Source: UNODC, responses to the annual report questionnaire; DAINAP; CCDAC, "Synthetic drug situation in Myanmar", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; CCDAC, "2019 Precursor Situation in Myanmar", at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, March 2020.

Figure 2. Drug related arrests and number of cases, 2014–2019



Source: DAINAP; CCDAC, "Synthetic drug situation in Myanmar", presented at the 2019 SMART Regional Workshop Singapore, August 2019; Official communication with CCDAC, Mach 2020.

Figure 3. Trends in the number of cases and seizures for methamphetamine, 2014-2019



Source: UNODC, responses to the annual report questionnaire; DAINAP; CCDAC, "Synthetic drug situation in Myanmar", presented at the 2019 SMART Regional Workshop Singapore, August 2019; Official communication with CCDAC, Mach 2020.

Table 3. Seizures of selected chemicals used in the illicit manufacture of drugs in Myanmar, 2014-2019

Drug type	Unit	2014	2015	2016	2017	2018	2019
Ephedrine	Kg	32.1	112.0	534.2	0	139.7	4.0
Pseudoephedrine ^a	tablets	19,452,000	12,720,000	1,192,000	3,901,000	450,000	0
Phenylacetic acid	lt	0	0	0	950	4,000	0
P-2-P	lt	•	4,800	0	0	3,298	300
Acetic anhydride	lt	1,297.5	260.0	16.0	1,318.3	40.0	4,140.1
Safrole	lt	0	0	0	0	0	1,440
Thionyl chloride	lt	0	0	0	0	16	11,600
Methyl Ethyl Ketone	lt	•	•	•	•	7,860	9,600
Sodium cyanide	lt	•	•	•	19,000	23,550	4,640
Benzyl cyanide	lt	•	•	•	•	•	22,160
Tartaric acid	lt	•	•	•	•	1,520	22,800
Caffeine	Kg	431.5	9,532.3	19,847.5	5,885	20,759.5	19,226

Note: ●= Not reported; ^a The amount of pseudoephedrine found in tablets varies.

Source: DAINAP; CCDAC, "Synthetic drug situation in Myanmar", presented at the 2019 SMART Regional Workshop Singapore, August 2019; CCDAC, "2019 Precursor Situation in Myanmar", at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

Table 4. Typical purities of selected drugs in Myanmar (percentage), 2017-2019

	2017	2018	2019
Methamphetamine tablet	7.8 -23.6	9.1-18.8	5.2-17.2
Crystalline methamphetamine	86.2-97.4	80-97.9	44.4-80.4
"Ecstasy"	46.2	43.3	42.8
Heroin	75.5	80.1	78.5

Note: Data in this table refer to the weight/weight (w/w) % expressed as the hydrochloride salt of methamphetamine.

Source: DAINAP; Chemical Examiner's Office of the Myanmar Police Force, "Country briefing", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

Table 5. Typical wholesale and retail prices of selected drugs in Myanmar in US\$, 2017 – 2019

Drug type	Unit	2017	2018	2019
Methamphetamine tablet (retail)	tablet	2.0	2.0	2.1
Crystalline methamphetamine (retail)	g	20-24	14-18	•
"Ecstasy" (retail)	tablet	31	30	32.1
Cannabis herb (wholesale)	kg	207	200	214

Note: • = Not reported

Source: DAINAP; CCDAC "Synthetic drug situation in Myanmar", presented at the 2018 SMART Regional Workshop, Chiang Rai, Thailand, August 2018; Official communication with CCDAC, March 2020.



PHILIPPINES

Summary of major trends and emerging concerns

Methamphetamine

- Crystalline methamphetamine remains the primary drug of concern in the Philippines, and accounts for a large majority of drug-related arrests and treatment admissions in 2019 (see Figures 1 and 3).
- There are no reports of the dismantling of clandestine methamphetamine laboratories in the Philippines in 2019. However, the amount of crystalline methamphetamine seized in 2019 remains high and large-scale shipments trafficked from countries in the Mekong region continue to be intercepted in the country.¹
- An analysis of methamphetamine samples seized in the Philippines between 2014 and 2019 showed that over 90 per cent of the samples were manufactured from either ephedrine or pseudoephedrine.²

"Ecstasy"3

• Between 2018 and the first six months of 2019, less than 1 per cent of the total number of treatment admissions were due to the use of "ecstasy".⁴

New Psychoactive Substances (NPS)

- Some quantities of synthetic cannabinoids, including 5-Fluoro-MDMB-PINACA and 5-Fluoro-MDMB-PICA, smuggled through parcel posts were seized between 2018 and the first half of 2019.⁵
- Seizures of *gamma*-hydroxybutyrate (GHB) and *gamma*-butyrolactone (GBL), albeit limited, have been reported in the Philippines, where they are sold under the street name of 'liquid ecstasy'.⁶

Other drugs

• Although the use of cocaine is limited in the Philippines, increasing amounts of cocaine were intercepted at sea and along the coastline of the Philippines in recent years (see Table 2).⁷

¹ For instance, national authorities seized 276 kg of crystalline methamphetamine in Manila in March 2019, and the drug was trafficked from the Golden Triangle via Viet Nam. Another case involving 147 kg of the drug originating from the Golden Triangle via Cambodia was reported in May 2019. In both cases, drugs were found in typical teabag packages used by organized crime groups operating in the Golden Triangle.

² Dangerous Drugs Board (DDB) and Philippines Drug Enforcement Agency (PDEA), "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

³ Dangerous Drugs Board (DDB) and Philippines Drug Enforcement Agency (PDEA), "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

⁴ DDB and PDEA, "Latest situation on synthetic drugs and responses to the threats in Philippines", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

⁵ Ibid.

⁶ Ibid

⁷ PDEA, "PDEA: 'Floating Cocaine' A Diversionary Tactic.", Press Release # 064/19, February 2019 (accessed at https://pdea.gov.ph/2-uncategorised/1328-pdea-floating-cocaine-a-diversionary-tactic).

Drug demand indicators

Table 1. Trend in use of selected drugs in the Philippines, 2014-2019

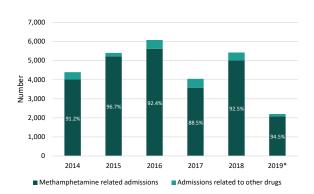
Drug type	2014	2015	2016	2017	2018	2019
Crystalline methamphetamine	1	1	1	1	•	•
Benzodiazepine	1	1	1	Ţ	•	•
Cannabis herb	1	1	1	1	•	•
Inhalants	1	1	Ţ	1	•	•

Note: Based on expert perception provided by the Dangerous Drugs Board (DDB). Expert perception data is not available for 2018 and 2019.

 \uparrow = Increasing, \downarrow = Decreasing, \leftrightarrow = Stable, \bullet = Not reported.

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with DDB, October 2018.

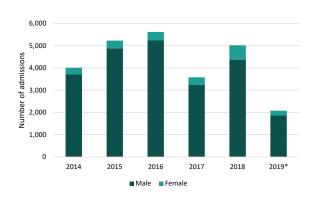
Figure 1. Proportions of methamphetamine-related treatment admissions among all treatment admissions, 2014-2019*



Note: * Data cover the first six months of the year.

Source: UNODC, responses to the annual report questionnaire;
DAINAP; DDB and PDEA, "Latest situation on synthetic drugs
and responses to the threats in Philippines", presented at the
2019 SMART Regional Workshop, Singapore, August 2019.

Figure 2. Number of methamphetamine-related treatment admissions by gender, 2014–2019*



Note: * Data cover the first six months of the year.

Source: UNODC, responses to the annual report questionnaire;
DAINAP; DDB and PDEA, "Latest situation on synthetic drugs
and responses to the threats in Philippines", presented at the
SMART Regional Workshop, Singapore, August 2019.

Drug supply indicators

Table 2. Seizures of selected drugs and precursor chemicals in the Philippines, 2014 - 2019

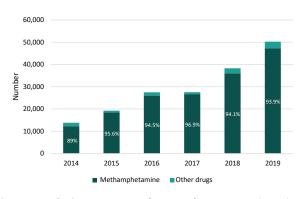
and in solitaries of solitation and productor silentification and in the ramppines, in the solitaries and in t									
Drug type	Unit	2014	2015	2016	2017	2018	2019*		
Crystalline methamphetamine	kg	718.5	350.8	2,210.5	1,053.9	785.8	1,996		
Liquid methamphetamine	lt	17.6	856.5	1,805.7	50.2	110.8	0		
"Ecstasy"	tablets	3,599	2,902	21,736	591	16,713	13,108		
Benzodiazepine	tablets	216	2,304	120	83	876	3		
Cannabis herb	kg	897.8	1,032.4	1,334.6	431.7	257.8	612.6		
Heroin	kg	0	2.0	0	0	0	0		
Cocaine	kg	69.9	11.5	70.6	9.9	94.6	344.8		
Ketamine	kg	0.1	•	0.0ª	•	0.0ª	0.2		

GHB	lt	•	3.1	•	0 a	•	O ª
GBL	lt	•	•	•	0.9	0.7	2.3
Pseudoephedrine	kg	•	2.1	•	209.5	0	•
Ephedrine	kg	510.1	49.8	9.9	0.2	0.53	0.1

Note: • = Not reported.

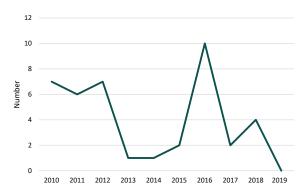
Source: UNODC, responses to the annual report questionnaire; DAINAP; DDB and PDEA, "Latest situation on synthetic drugs and responses to the threats in Philippines", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with PDEA, February 2020.

Figure 3. Number of drug-related arrests in the Philippines by drug type, 2014–2019



Source: UNODC, responses to the annual report questionnaire; DAINAP; DDB and PDEA, "Latest situation on synthetic drugs and responses to the threats in Philippines", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with PDEA, February 2020.

Figure 4. Number of illicit methamphetamine facilities dismantled in the Philippines, 2010 – 2019



Source: DAINAP; DDB and PDEA, "Latest situation on synthetic drugs and responses to the threats in Philippines", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with PDEA, February 2020.

Table 3. Retail prices of selected drugs in the Philippines in US\$, 2015-2019

Drug type	Unit	2015	2016	2017	2018	2019
Crystalline methamphetamine	per gram	29.6 – 317.6	25.8 – 236.6	163.7	130.1	136
"Ecstasy"	per tablet	19 – 63.5	30	37.7	32.5	34
Cocaine	per gram	•	•	99.3	101.4	106
Cannabis herb	per gram	•	•	3.2	2.3	2.4

Source: UNODC, responses to the annual report questionnaire; DAINAP; DDB and PDEA, "Latest situation on synthetic drugs and responses to the threats in Philippines", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; DDB and PDEA, "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019; Official communication with PDEA, February 2020.

Table 4. Purities of selected drugs analysed in the Philippines (percentage), 2015-2019*

	2015	2016	2017	2018	2019
Crystalline methamphetamine	67.3	82.4	87.7	72.5	78.2
MDMA ("ecstasy")	-	47.5	31.4	45.5	40.1

Note: * Data in this table refer to the weight/weight (w/w) % expressed as the hydrochloride salt of these substances.

Source: DDB and PDEA, "Latest situation on synthetic drugs and responses to the threats in Philippines", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; DDB and PDEA, "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019; Official communication with PDEA, February 2020.

Table 5. Types of NPS and emerging synthetic substances identified in the Philippines, 2018-2019*

Number	Substance group	Substance name
1.	Synthetic cathinones	4-methylethcathinone (4-MEC); 3,4-Methylenedioxy-N,N-dimethcathinone; 4-chloro cathinone
2.	Synthetic cannabinoids	5F-MDMB-PINACA; 5F-MDMB-PICA
3.	Tryptamines	Dimethyltryptamine (DMT)
4.	Phenethylamines	4-bromo-2,5-dimethoxyphenethylamine (2C-B)
5	Others	Gamma-Butyrolactone (GBL)

Note: * Data cover the first seven months of the year.

Source: DDB and PDEA, "Latest situation on synthetic drugs and responses to the threats in Philippines", presented at the 2019 SMART Regional Workshop, Singapore, August 2019



Summary of major trends and emerging concerns

Methamphetamine

- The number of users of psychotropic substances¹ brought into formal contact with authorities, mostly in relation to crystalline methamphetamine, reached a record high in 2019 (see Figure 1).
- The quantities of methamphetamine seized annually remained high in 2019, with seizures of crystalline methamphetamine being the second largest on record and seizures of methamphetamine tablets reaching a record high (see Table 3).
- An overwhelming majority of methamphetamine trafficked into the country in 2018 and 2019 originated from Southeast Asia (see Table 4), and nearly 80% of the total amount of methamphetamine seized in 2019 were trafficked by air passengers (see Figure 4).
- Small-scale methamphetamine manufacturing facilities continued to be dismantled in 2019 (see Figure 2).

"Ecstasy"2

- The amount of "ecstasy" seized annually in the Republic of Korea has increased significantly since 2016 (see Table 3).
- The number of trafficking cases of the drug detected by national authorities has also been on the rise, with more than half reported to have originated from the Netherlands.³

New Psychoactive Substances (NPS)

• National authorities continued to intercept several shipments of new psychoactive substances in recent years (see Table 3).

Other drugs

- The amount of cocaine seized annually reached a record high in 2019, primarily due to a trafficking case involving 100 kg of the drug believed to have originated from Colombia (see Table 3).4
- The illicit market of cannabis remains a concern for the country, with annual quantities of cannabis seized in the last two years being the largest on record (see Table 3), and the number of cannabis users and suppliers brought into formal contact with authorities having increased significantly in recent years (see Table 2 and Figure 3).

¹ Synthetic drugs, such as methamphetamine, 'ecstasy', LSD and NPS, are categorised as psychotropic substances according to the Government of Republic of Korea.

^{2 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of MDMA

³ Supreme Prosecutors' Office (SPO), "White paper on illicit drugs-related crime for 2018", August 2019.

⁴ Korean Coast Guard, "Combat against drugs in the sea", presented at the Maritime Drug Trafficking in Southeast Asia, Bangkok, Thailand, October 2019.

Drug demand indicators

Table 1. Trend in use of selected drugs in the Republic of Korea, 2014-2019*

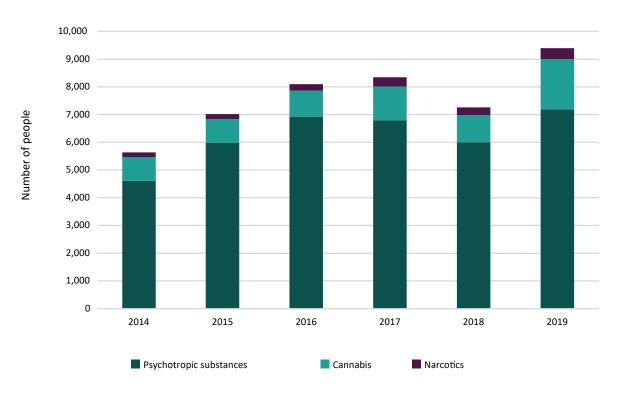
Drug type	2014	2015	2016	2017	2018	2019
Crystalline methamphetamine	↔	1	1	1	1	1
Cannabis herb	+	↔	1	1	1	1
Other narcotics	+	1	1	1	1	1

Note: * Based on expert perception provided by the Supreme Prosecutors' Office (SPO)

 \uparrow = Increase, \downarrow = Decrease, \leftrightarrow = Stable, • = Not reported

Source: UNODC, responses to the annual report questionnaire; Official communication with SPO, January 2020.

Figure 1. Number of people who use drugs brought into formal contact with authorities in the Republic of Korea by drug type, 2014–2019



Source: SPO, "White paper on illicit drugs-related crime for 2018", and previous reports; SPO, "Monthly report on illicit-drug related crime for November 2019", January 2020; Official communication with SPO, January 2020.

Table 2. Number of people admitted to drug treatment centres in the Republic of Korea, 2014-2018

Drug type	2014	2015	2016	2017	2018
Psychotropic substances ^a	96	216	258	295	248
Cannabis	0	1	15	23	16
Narcotics ^b	5	4	4	28	3
Total	101	221	277	346	267

Note: ° Synthetic drugs, such as methamphetamine, 'ecstasy', LSD and NPS, are categorised as psychotropic substances according to the Government of Republic of Korea; b Drugs that have a natural constituent plant, such as opiates and cocaine are categorised as narcotics according to the Government of Republic of Korea.

Source: SPO, "White paper on illicit drugs-related crime", Seoul, August 2015; Official communication with SPO, May 2016; Official communication with SPO, October 2018; Official communication with SPO, January 2020.

Drug supply indicators

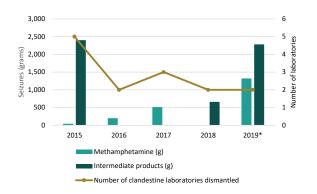
Table 3. Seizures of selected drugs in Korea, 2014-2019

Drug type	Unit	2014	2015	2016	2017	2018	2019
Crystalline methamphetamine	kg	47.7	56.6	28.7	30.5	187.9	87.3
Methamphetamine tablets ^a	tablets	10,333	7,889	6,667	28,667	94,889	193,333
Ecstasy ^b	tablets	720	637	3,690	1,633	9,393	10,464
Cannabis herb	kg	23.3	22.0	75.5	40.1	89.1	81.9
Cannabis resin	kg	0.3	0.3	0.1	1.3	0.1	2.7
Cannabis seed	kg	4.4	2.9	1.9	1.2	1.2	0.4
Synthetic cannabinoids	kg	0.1	0.4	0.2	0.2	0.5	1.7
Cocaine	kg	0.0°	0.0°	10.9	0.1	88.3	106.9
Heroin	g	1	5	0.0	3.7	2	0
Raw opium	g	110	235	0	537	190	0
Khat	kg	0	3,169	0	0	132.5	0

Note: ^o Figures reported other than the number of tablets converted into estimated tablet equivalents at 90 mg per tablet; ^b Figures reported other than the number of tablets converted into estimated tablet equivalents at 300 mg per tablet; ^c Less than 0.05 kg of the substance was seized.

Source: UNODC, responses to the annual report questionnaire; SPO, "Synthetic drug situation in the Republic of Korea", presented at the SMART Regional Workshop, Singapore, August 2019; Official communication with SPO, January 2020.

Figure 2. Number of methamphetamine manufacturing facilities dismantled, and amounts seized in the Republic of Korea, 2014-2019*



Note: * Data cover the first eleven months of the year.

Source: SPO, "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

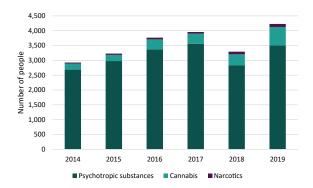
Table 4. Number of cases and amounts of methamphetamine seized in the Republic of Korea by embarkation point, 2018 and 2019

Region	Number of Cases	Amounts Seized (kg)		
Southeast Asia	121	260		
North America	30	8		
Europe	17	2		
Africa	1	1		

Note: Embarkation points do not necessarily mean source regions.

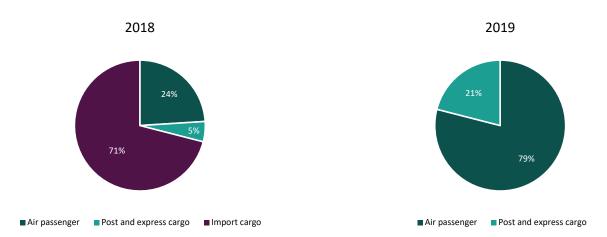
Source: Korean Customs Service (KCS), "Combat against methamphetamine trafficking", presented at the Operation Ice Break Pre-Operational Meeting, Seoul, the Republic of Korea, October 2019; Official communication with KCS, February 2020.

Figure 3. Number of people brought into formal contact with authorities for supplying drugs in the Republic of Korea (by drug type, 2014–2019)



Source: SPO, "White paper on illicit drugs-related crime for 2018", and corresponding previous reports; SPO, "Monthly report on illicit-drug related crime for November 2019", January 2020; SPO, "Synthetic drug situation in the Republic of Korea", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with SPO, January 2020.

Figure 4. Trends in modes of trafficking in methamphetamine by weight in the Republic of Korea, 2018-2019



Source: KCS, "Combat against methamphetamine trafficking", presented at the Operation Ice Break Pre-Operational Meeting, Seoul, the Republic of Korea, October 2019; Official communication with KCS, February 2020.

Table 5. Purities* of crystalline methamphetamine samples analysed in the Republic of Korea, 2014-2019

Year	20 <p≤80< th=""><th>80<p≤90< th=""><th>90<p≤98.5< th=""><th>P≥98.5</th></p≤98.5<></th></p≤90<></th></p≤80<>	80 <p≤90< th=""><th>90<p≤98.5< th=""><th>P≥98.5</th></p≤98.5<></th></p≤90<>	90 <p≤98.5< th=""><th>P≥98.5</th></p≤98.5<>	P≥98.5
2014	1	4	37	1
2015	1	17	62	8
2016	3	0	55	8
2017	16	5	18	2
2018	0	1	47	16
2019**	4	9	39	11

Note: * Data in this table refer to the weight/weight (w/w) % expressed as the hydrochloride salt of methamphetamine. **Data for 2019 cover the first eleven months of the year.

Source: SPO, "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

Table 6. Retail prices of selected drugs in the Republic of Korea in US\$, 2016-2019

Drug type	Unit	2016	2017	2018	2019
Crystalline methamphetamine	Per gram	422.5 (140.8 – 740.1)	363	388.8	450
"Ecstasy"	Per tablet	70.4 (26.4 – 114.4)	89.1 (26.7 – 116)	77.1 (26.7 – 115.7)	11-180
Cannabis herb	Per gram	49.3 (10.6 – 88.0)	89.1 (35.7 – 98.0)	80 (35.6 – 133.5)	27-200
Heroin	Per gram	116	116	116	130
Cocaine	Per gram	•	•	•	250-400
Ketamine	Per gram	•	•	•	350
LSD Notes a - Not reported	Per sheet	•	•	•	21-42

Note: • = Not reported.

Source: UNODC, responses to the annual report questionnaire; SPO, "Country report", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019.

Table 7. Types of synthetic cannabinoids smuggled to the Republic of Korea, 2016-2018

2016	2017	2018
1-Adamantyl-THPINACA	5F-APINACA (5F-AKB-48)	MMB-FUBINACA (AMB-FUBINACA)
ADB-CHMINACA	N-Adamantyl-1-fluoropentylindole-3-carboxamide (STS-135)	5-fluoro-APINAC
AB-CHMINACA	5F-MDMB-PINACA (5F-ADB)	5F-AKB57 (5-fluoro APINAC)
5F-APINACA (5F-AKB-48)	AB-CHMINACA	5F-MDMB-PICA
N-Adamantyl-1-fluoropentylindole-3-carboxamide (STS-135)	5F-MMB-PICA (MMB-2201)	ADBA-CHMINACA
5F-MDMB-PINACA (5F-ADB)	5F-AKB57 (5-fluoro APINAC)	
5F-PB-22	5F-PB-22	
MDMB-CHMICA	MMB-FUBINACA (AMB-FUBINACA)	
XLR-11 (5F-UR-144)		
JWH-073		

Note: The table lists only newly reported substances.
Source: SPO, "White paper on illicit drugs-related crime for 2018".



Summary of major trends and emerging concerns

Methamphetamine

- In 2019, methamphetamine users continue to account for the largest proportion of drug treatment admissions (see Table 2) and drug users brought into formal contact with the authorities for the first time (see Figure 1).
- The amount of crystalline methamphetamine seized annually has more than doubled since 2014 (see Table 4).

"Ecstasy"1

- The amount of "ecstasy" seized annually in Singapore has increased steadily in recent years. In 2019, the number of "ecstasy" users making their first formal contact with the authorities surpassed the number of heroin users for the first time.²
- "Ecstasy" tablets found in Singapore are typically a mixture of MDMA and other psychoactive substances, including methamphetamine, amphetamine, ketamine, and various new psychoactive substances.³

New Psychoactive Substances (NPS)

- The NPS market in Singapore continues to evolve with synthetic cannabinoids making up a large majority of NPS identified in the samples analyzed (see Figures 2 and 3).
- NPS users account for the second largest proportion of the total number of drug users brought into formal contact with the authorities for the first time in 2019, surpassing other traditional drug types such as cannabis, "ecstasy" and heroin.
- Singapore has reported the emergence of illicitly manufactured Erimin 5 tablets⁴ containing several other benzodiazepines apart from nimetazepam, including phenazepam and etizolam.⁵

^{1 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of MDMA.

² Central Narcotics Bureau (CNB), "Drug situation report 2019", February 2020.

³ Health Sciences Authority (HSA) of Singapore, "Drug Analysis in Singapore.", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

⁴ Erimin 5 is a proprietary product of Sumitomo corporation, and its licit production has been discontinued since 2015. The proprietary product contains nimetazepam, a benzodiazepine, which is controlled in Schedule IV of the Convention on Psychotropic Substances of 1971. It is probable that current 'Erimin 5' seizures are manufactured illicitly and may or may not contain nimetazepam as well as a range of other substances.

⁵ CNB & Health Sciences Authority (HSA), "Latest situation on synthetic drugs and responses to the threats in Singapore", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Drug demand indicators

Table 1. Trend in use of specific drugs in Singapore, 2014-2019*

Drug type	2014	2015	2016	2017	2018	2019
Methamphetamine	1	1	1	1	1	1
"Ecstasy"	1	1	1	1	↔	†
Cannabis herb	1	1	1	1	1	1
Heroin	1	Ţ	1	1	Ţ	Ţ
Ketamine	1	Ţ	1	1	1	1
Nimetazepam	1	Ţ	1	1	•	•
Cocaine	Ţ	1	↔	1	1	↔
Synthetic cannabinoids	•	•	•	•	†	†

Note: * Based on expert perception provided by CNB.

↑ = Increase, \downarrow = Decrease, \leftrightarrow = Stable, \bullet = Not reported

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with CNB, February 2020.

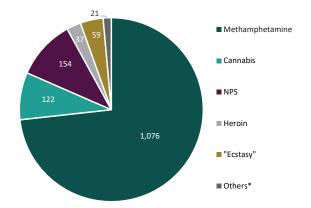
Table 2. Drug treatment admissions by drug type in Singapore, 2014-2019

Drug type	2014	2015	2016	2017	2018	2019
Methamphetamine	660	837	936	870	949	1,250
Amphetamine	1	0	0	0	•	•
Ecstasy	7	0	1	8	8	19
Buprenorphine	0	0	0	0	•	•
Cannabis	73	85	97	71	77	69
Heroin	342	225	149	141	91	473
Ketamine	8	5	3	4	1	8
Benzodiazepines	16	18	7	2	•	•
Other drugs*	32	43	70	56	131	261
Total*	1,139	1,213	1,263	1,152	1,257	2,080

Note: * Figures include other unspecified drugs; • = Not reported; Data for 2019 are not directly comparable with data reported in previous years due to revisions to how repeat drug users will be managed under the rehabilitation-focused approach. As announced in Parliament on 15 Jan 2019, repeat drug users who do not face other concurrent drug or criminal charges and who admit to their drug abuse would be channeled towards the rehabilitation regime instead of being charged for their drug consumption offence.

Source: UNODC, responses to the annual report questionnaire; DAINAP; CNB and HSA, "Latest situation on synthetic drugs and responses to the threats in Singapore", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; Official communication with CNB, February 2020.

Figure 1. People who use drugs brought into formal contact with authorities for the first time in Singapore by drug type, 2019



Note: * Others include cocaine, ketamine, LSD and methadone.

Source: DAINAP; CNB, "Drug situation report 2019", February 2020, and previous years; CNB and HSA, "Latest situation on synthetic drugs and responses to the threats in Singapore", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Table 3. Number of people who use drugs admitted to treatment centres by gender and drug type, 2019

			• 11 1	
Drug type	Male	Female	Total	
Methamphetamine	961	289	1,250	
Ecstasy	17	2	19	
Cannabis	56	13	69	
Heroin	404	69	473	
Ketamine	7	1	8	
Unclassified / other drugs	216	45	261	
Total	1,661	419	2,080	

Source: Official communication with CNB, February 2020.

Drug supply indicators

Table 4. Seizures of selected illicit drugs in Singapore, 2014-2019*

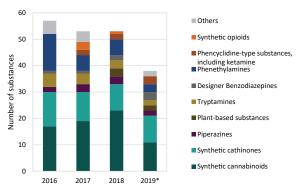
Drug type	Unit	2014	2015	2016	2017	2018	2019
Crystalline methamphetamine	kg	12.5	15.6	18.3	22.2	19.3	31.1
Methamphetamine tablets	tablets	248	142	242	827	5,236	775
"Ecstasy"	tablets / g	3,874 tablets	2,943 tablets /2.49 g	3,891 tablets / 97.9 g	4,744 tablets / 11.4 g	4,127 tablets / 5.5 g	5,485 tablets / 25.9
Cannabis herb	kg	35.0	44.3	54.0	44.1	61.8	27.8
Heroin ^a	kg	67.5	53.7	52.4	36.9	58	37.8
Ketamine	kg	2.5	2.3	1.5	1.0	1.1	3.4
Benzodiazepines	tablets	17,682	33,686	19,550	19,580	7,873	8,454
Cocaine	g	0.5	0	2	66.4	2,746.8	59.6
LSD	stamp	4	130 ^b	704	180	166	17
Synthetic cathinones	tablets / g	18 tablets / 0.1 g	2,444 tablets / 490.9 g	957 tablets / 3.3 g	219 tablets / 1.6 g	257 tablets /8.6 g	329 tablets / 1.4 g
Synthetic cannabinoids	tablets / g	452 tablets / 114.1 g	114 tablets / 145.9 g	13 tablets /13.5 g	1 tablet / 2506.8 g	72 tablets / 8162 g	0 tablets / 10,484.3 g

Note: * Data for 2019 are preliminary.

Source: UNODC, responses to the annual report questionnaire; DAINAP; CNB and HSA, "Latest situation on synthetic drugs and responses to the threats in Singapore", presented at the 2019 SMART Regional Workshop, Singapore, August 2019; CNB, "Drug situation report 2019", February 2020; Official communication with CNB, February 2020.

^a Refers to Heroin No. 3. ^b Some of these stamps contain NBOMe compounds and other NPS.

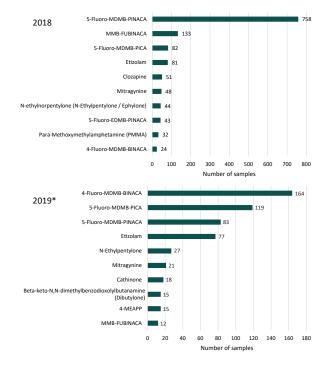
Figure 2. Number of NPS identified from drug samples analysed by the Health Sciences Authority in Singapore by substance group 2016-2019*



Note: * Data cover the first half of the year.

Source: CNB and HSA, "Latest situation on synthetic drugs and responses to the threats in Singapore", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Figure 3. Top 10 NPS and other emerging synthetic substances identified in drug samples analyzed in Singapore, 2018 and 2019*



Note: * Data cover the first half of the year.

Source: CNB and HSA, "Latest situation on synthetic drugs and responses to the threats in Singapore", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Summary of major trends and emerging concerns

Methamphetamine

- Methamphetamine remains the primary drug of concern in Thailand and continues to account for a large majority of treatment admissions in recent years (see Table 2).
- Thailand recorded the largest seizures of methamphetamine by a single country in East and Southeast Asia during the period 2018-2019 with over 116 tons, as a result of the recent surge in the illicit manufacture of methamphetamine in the Golden Triangle.
- Despite the substantial seizures, retail prices for both tablet and crystalline methamphetamine have decreased by about two-thirds over the last decade (see Figures 4 and 5) suggesting a widespread availability of these drugs.
- While the typical content of methamphetamine in tablet form has been decreasing since 2017, the typical purities of crystalline methamphetamine remain at very high levels (see Figures 2 and 3).
- In recent years, increasing quantities of sodium cyanide, a starting material for the controlled methamphetamine precursor P-2-P, have been seized in Thailand en route to the Golden Triangle (see Table 4).

"Ecstasy"1

• The market for "ecstasy" remains insignificant in comparison to methamphetamine. However, quantities of the drug seized annually have been increasing since 2016 (see Table 3).

New Psychoactive Substances (NPS)

• The non-medical use of ketamine has been increasing in the country, as evidenced by increases in the number of treatment admissions and seizures of the drug (see Tables 2 and 3). The use of synthetic NPS² remains limited in Thailand.

Other drugs

• The number of treatment admissions related to opiates has been stable over the last five years. The market for cocaine remains insignificant in the country.

^{1 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of MDMA.

² Synthetic NPS excludes ketamine and plant-based substances.

Drug demand indicators

Table 1. Trend in use of selected drugs in Thailand, 2014-2019*

Drug type	2014	2015	2016	2017	2018	2019
Crystalline methamphetamine	1	1	1	1	1	1
Methamphetamine tablets	1	1	1	↔	1	ţ
Ecstasy	↔	1	•	1	1	Ţ
Ketamine	•	•	•	1	1	ţ
Cannabis herb	1	1	1	1	1	ţ
Heroin	1	1	1	1	1	ţ
Kratom ^a	1	1	1	1	1	Ţ
Cocaine	1	•	•	•	1	↔

Note: * Expert perception based on the number of drug users brought into formal contact with authorities; \uparrow = Increasing, \downarrow = Decreasing, \leftrightarrow = Stable, \bullet = Not reported.

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication the Office of Narcotics Control Board (ONCB), February 2020.

Table 2. Drug treatment admissions in Thailand by drug type, 2014-2019

Drug type	2014	2015	2016	2017	2018	2019
Methamphetamine	197,802	101,360	130,364	172,847	202,201	181,803
"Ecstasy"	224	202	8,422	524	560	409
Cannabis	13,360	8,720	15,206	14,616	12,976	15,514
Heroin	2,994	3,691	3,767	3,383	3,819	3,522
Opium	3,191	3,691	3,165	3,841	3,481	3,020
Ketamine	51	•	•	381	704	1,069
Cocaine	32	30	84	25	22	12
Inhalants	7,033	1,787	1,693	1,456	1,288	1,038
Kratom ^a	5,687	1,727	5,327	6,828	5,384	4,429
Total	229,654	121,208	172,518	205,147	230,435	210,816

Note: ^a Includes users of kratom in leaf and liquid form. ● = Not reported.

Source: UNODC, responses to the annual report questionnaire; DAINAP; Official communication with ONCB, February 2020.

Drug supply indicators

Table 3. Seizures of selected drugs in Thailand, 2014-2019

Drug type	Unit	2014	2015	2016	2017	2018	2019
Methamphetamine tablets	tablets	112,910,000	108,300,000	93,700,000	240,051,853	515,146,570	381,243,123
Crystalline methamphetamine	kg	1,017	1,122.4	1,161	8,113.9	18,441.4	17,076.8
Ecstasy ^a	tablets	31,381	11,467	8,807	80,433	203,407	264,317
Cannabis herb	kg	32,199.4	24,554.3	3185.5	13,395.9	39,997	25,999.0
Cocaine	kg	28.6	45.7	50.1	54.7	49.7	41.4
Heroin	kg	480.0	202.5	147.5	599.4	1,085.4	667.2
Ketamine	kg	40.1	25.8	95.1	617.4	720.2	1,175.4

Kratom leaves	kg	60,211.6	75,097.0	91,006.2	97,993.0	50,422.7	85,707.7
Kratom liquid	lt.	22,181.6	27,648.6	27,088.6	40,280.1	25,961.3	28,525.0

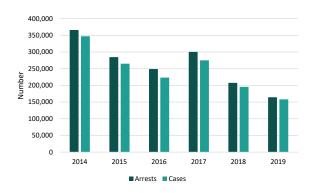
Note: ^a Figures reported in units other than number of tablets are converted into estimated tablet equivalent at 300 mg per tablet. Source: UNODC, responses to the annual report questionnaire; DAINAP; ONCB, "Synthetic drug situation in Thailand", presented at the 2019 SMART Regional Workshop, Singapore, August 2019 and previous years; Official communication with ONCB, February 2020.

Table 4. Seizures of selected precursor chemicals and substances used as adulterants in illicit drugs in Thailand, 2014-2019

Drug type	Unit	2014	2015	2016	2017	2018	2019
Pseudoephedrine (preparation)	tablets	0	51,600	0	0	0	0
Pseudoephedrine (raw material)	kg	6	0	0	0	0	0
Hydrochloric acid	kg	0	0	0	0	0	15,950
Caffeine	kg	0.1	0	0	0	0	0
Methylene chloride	kg	0	20,000	0	0	0	0
Ammonium chloride	kg	600	0	0	0	0	0
Sodium carbonate	kg	1,800	0	0	0	0	0
Sodium cyanide	kg	5,550	0	0	4,000	77,000	99,750
Ammonium hydroxide	lt.	0	0	0	0	90	0
Carbon	kg	0	0	0	0	160	0

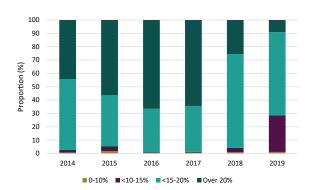
Source: ONCB, "Drugs and precursor chemical situation in Thailand", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

Figure 1. Number of drug-related cases and arrests, 2014-2019



Source: DAINAP; ONCB, "Synthetic drug situation in Thailand", presented at the 2019 SMART Regional Workshop, Singapore, August 2019 and previous years; Official communication with ONCB, February 2020.

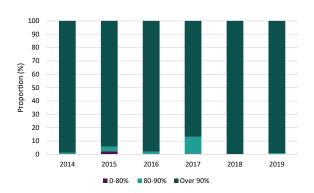
Figure 2. Distribution of content of methamphetamine in tablet samples analysed in Thailand, 2014-2019



Note: * Data in this figure refer to the weight/weight (w/w) % expressed as the hydrochloride salt of methamphetamine; The average content of methamphetamine in tablet samples analysed in 2019 was 16.8 %.

Source: ONCB, "Precursor chemical and drug profiling in Thailand", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019; Official communication with ONCB, February 2020.

Figure 3. Distribution of purities of crystalline methamphetamine samples analysed in Thailand, 2014-2019*



Note: * Data in this figure refer to the weight/weight (w/w) % expressed as the hydrochloride salt of methamphetamine. The average purity of crystalline methamphetamine samples analysed in 2019 was 94.9%.

Source: ONCB, "Precursor chemical and drug profiling in Thailand", presented at the Meeting of Drug Forensic Specialists, Beijing, China, December 2019; Official communication with ONCB, February 2020.

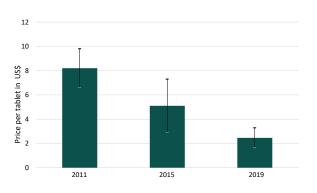
Table 5. Typical wholesale and retail prices of selected illicit drugs in Thailand in US\$, 2019

Drug type	
Methamphetamine tablet (per 2,000 tablets)	820 - 1,147
Methamphetamine tablet (per tablet)	1.64 - 3.28
Crystalline methamphetamine (per kg)	8,197 - 13,115
Crystalline methamphetamine (per gram)	33 - 49
"Ecstasy" (per tablet)	10 - 16
Heroin (per 700 gram)	9,836 - 13,115
Heroin (per g)	33 - 66
Cannabis herb (per kg)	164 - 262
Cannabis (per unit*)	1.64 - 3.28
Ketamine (per kg)	11,475 - 13,115
Ketamine powder (per gram)	16 - 33

Note: * Approximately 5 g; Thailand reported prices with a conversion ratio of 30.5 THB = 1 US\$

Source: Official communication with ONCB, February 2020.

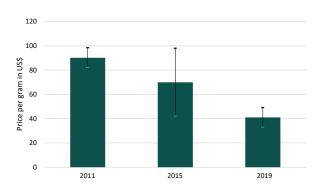
Figure 4. Retail prices of methamphetamine tablets per tablet, 2011, 2015 and 2019



Note: The high-low bars represent the upper and lower limits of the price range reported in addition to typical prices. When the typical price was not available, the mid-point was used.

Source: UNODC, responses to the annual report questionnaire; Official communication with ONCB, February 2020.

Figure 5. Retail prices of crystalline methamphetamine per gram, 2011, 2015 and 2019



Note: The high-low bars represent the upper and lower limits of the price range reported in addition to typical prices. When the typical price was not available, the mid-point was used.

Source: UNODC, responses to the annual report questionnaire; Official communication with ONCB, February 2020.



VIET NAM

Summary of major trends and emerging concerns

Methamphetamine

- Increasing trends in seizures and number of registered people who use drugs (see Figure 1 and Table 2) indicate a rapid expansion of the methamphetamine market.
- The record seizure of over 5.5 tons of crystalline methamphetamine in 2019, which exceeds the combined seizures reported in the preceding five years (see Table 2), illustrates the significant increase in the scale of methamphetamine trafficking targeting the country since late 2018.¹
- The diversion and trafficking of precursor chemicals within and from Viet Nam is a growing concern. Chemicals discovered in a large-scale clandestine methamphetamine laboratory dismantled in September 2019 had been diverted from sources within the country.² In addition, the two largest shipments of APAAN intercepted at points of entry in Europe in 2018 had originated in or transited Viet Nam.³

"Ecstasy"4

- Clandestine "ecstasy" manufacturing facilities continued to be dismantled in 2019.5
- The content of MDMA found in some of "ecstasy" tablets in Viet Nam is high, with over 50% of the total weight.⁶

New Psychoactive Substances (NPS)

- Several NPS have been identified in Vietnam in recent years, a large proportion of which were synthetic cannabinoids (see Figures 5 and 6).
- Record amounts of ketamine were seized in Viet Nam in 2019, driven by a single trafficking case involving more than 500 kg of the drug.⁷

Other drugs

 Several heroin trafficking cases indicate that Viet Nam continues to be used as a transit country for heroin trafficked into China.

¹ According to the Standing Office on Drugs and Crime (SODC) of Viet Nam, there was no crystalline mthemaphetamine trafficking case involving more than 100 kg of the drug prior to late 2018; SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

² SODC, "Country briefing", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

³ International Narcotics Control Board (INCB), "Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotrophic substances 2019", February 2020.

^{4 &}quot;Ecstasy" tablets sold in the country may contain a range of substances in varying composition and quantities in addition or instead of MDMA.

⁵ SODC, "Country briefing", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

⁶ SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

⁷ SODC, "Country briefing", presented at the Meeting of Drug and Precursor Intelligence Specialists, Mandalay, Myanmar, February 2020.

⁸ SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Drug demand indicators

Table 1. Trend in use of selected drugs in Viet Nam, 2014-2019*

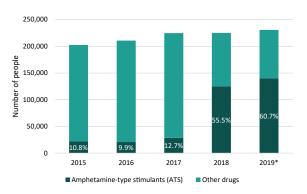
Drug type	2014	2015	2016	2017	2018	2019
Crystalline methamphetamine	1	1	•	1	•	•
Methamphetamine tablets	1	1	•	1	•	•
Ecstasy	↔	•	•	1	•	•
Cannabis herb	↔	1	•	↔	•	•
Heroin	1	1	•	1	•	•
Opium	1	•	•	1	•	•

Note: * Based on expert perception provided by SODC. ↑ = Increase, ↓ = Decrease, ↔= Stable, •= Not reported

Expert perception data is not available for 2018 and 2019.

Source: Drug Abuse Information Network for Asia and the Pacfiic (DAINAP).

Figure 1. The number of registered drug users in Viet Nam, 2014–2019*

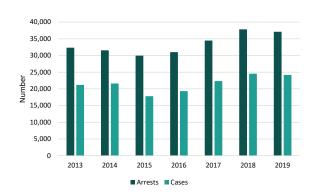


Note: * Data cover the first eleven months of 2019; ATS are a group of substances comprised of synthetic stimulants, including amphetamine, methamphetamine, and ecstasygroup substances.

Source: DAINAP; SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

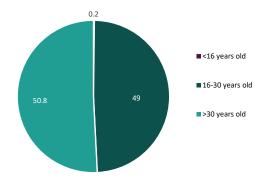
Drug supply indicators

Figure 3. Number of drug-related cases and arrests in Viet Nam, 2014-2019



Source: DAINAP; Official communication with SODC, February 2020.

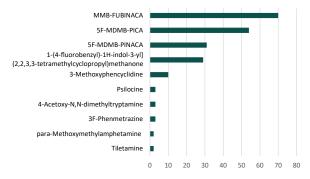
Figure 2. Registered drug users in Viet Nam by age group, 2019*



Note: * Data cover the first half of 2019.

Source: SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019.

Figure 4. Top 10 synthetic NPS and other emerging synthetic substances identified in Viet Nam by substance, 2018



Note: Excluding ketamine and plant-based substances.

Source: SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019, and previous country reports presented at past SMART Regional Workshops.

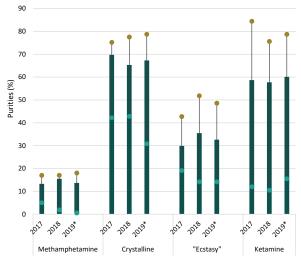
Table 2. Seizures of selected drugs in Viet Nam, 2014-2019*

Drug type	Unit	2014	2015	2016	2017	2018	2019*
Methamphetamine tablets	tablets	297,285	696,632	427,655	979,487	1,363,495	987,913
Crystallline methamphetamine	kg	352	983	839.6	856.9	1,929	5,500.6
Cannabis herb	kg	442	4,500	479.8	111 kg of 'fresh' and 376.4 kg of 'dried'	254.4 kg of "dried"	586
Cocaine	kg	42.6	178	14.5	2.4	137	•
Heroin	kg	922	1,510	607.8	906.7	1,584.4	1,494
Ketamine	kg	•	•	4	17.6	6.2	507.5
Opium	kg	32	133.8	92.1	167.1	196.7	600
Khat	Kg	•	•	•	5,600	2,500	•
NPS (XLR-11, synthetic cannabinoids)	kg	•	•	1.6	108	103.3	•

Note: * Data For 2019 are preliminary and subject to change.

Source: UNODC, responses to the annual report questionnaire; DAINAP; SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019, and previous country reports presented at past SMART Regional Workshops.

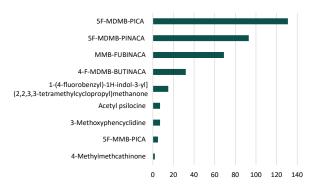
Figure 5. Purities of selected drugs analysed in Viet Nam, 2017-2019*



Note: * Data refer to the weight/weight (w/w) % expressed as the free base of these substances and is as of August 2019.The high-low bars represent the upper and lower limits of the purity ranges report in addition to the typical purity.

Source: SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019, and previous country reports presented at past SMART Regional Workshops.

Figure 6. Top 10 synthetic NPS and other emerging synthetic substances identified in Viet Nam by substance, 2019*



Note: * Data cover the first half of the year; Excluding ketamine and plant-based substances.

Source: SODC, "Synthetic drug situation in Viet Nam", presented at the 2019 SMART Regional Workshop, Singapore, August 2019, and previous country reports presented at past SMART Regional Workshops.

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