For discussion on
9 April 2021

Legislative Council Panel on Security

Proposed Amendments to the
First Schedule to the Dangerous Drugs Ordinance and
Schedule 2 to the Control of Chemicals Ordinance

PURPOSE

This paper seeks Members' views on the Government's proposal to –

(a) bring eight dangerous drugs, namely 4F-MDMB-BINACA [1], 5F-AMB-PINACA [2], 5F-MDMB-PICA [3], crotonylfentanyl, etizolam, flualprazolam, mitragynine and 7-hydroxymitragynine, under control in Part I of the First Schedule to the Dangerous Drugs Ordinance ("DDO") (Cap. 134); and

(b) bring one precursor chemical, namely methyl alpha-phenylacetoacetate ("MAPA"), under control in Schedule 2 to the Control of Chemicals Ordinance ("CCO") (Cap. 145).

JUSTIFICATIONS

2. As a regular exercise, the Government has from time to time proposed amendments to DDO and CCO as appropriate to include new substances under statutory control, having regard to a host of relevant factors, including international control requirements, the uses and harmful effects of the substances, severity of abuse in the local and overseas contexts, advice of the Action Committee Against Narcotics ("ACAN") and relevant authorities, etc. This is to ensure that law enforcement agencies in Hong Kong could respond effectively to the latest drug developments.

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[1] Also known as 4F-MDMB-BUTINACA.
[2] Also known as 5F-AMB and 5F-MMB-PINACA.
[3] Also known as 5F-MDMB-2201.

Eight Dangerous Drugs

Six Substances under International Control

3. At the 63rd Session of the United Nations Commission on Narcotic Drugs ("UNCND") held in March 2020, Member States adopted the recommendation by the World Health Organisation ("WHO") to place 12 dangerous drugs under international control. Six[4] of them are already controlled under DDO in Hong Kong. For the remaining six substances, their adverse effects as elaborated in the 42nd report of the WHO Expert Committee on Drug Dependence are as follows –

(a) **4F-MDMB-BINACA, 5F-AMB-PINACA and 5F-MDMB-PICA**: they are synthetic cannabinoids which affect the central nervous system and have higher potency than that of tetrahydrocannabinol ("THC")[5]. For 4F-MDMB-BINACA, the reported adverse effects include auditory and visual hallucinations, vomiting, paranoia, euphoria, irregular heartbeat, agitation, confusion, insomnia and chest pain. It had been detected in biological specimen obtained from cases involving deaths and impaired driving in the United States ("US"). For 5F-AMB-PINACA, reported clinical symptoms of abusing the substance include cognitive impairment, slowed movement, verbal slur, anxiety and incoordination. It was associated with at least three deaths, and was identified as a causal factor in more than 20 motor accidents in Japan involving deaths in 2012 to 2014. As regards 5F-MDMB-PICA, the reported adverse effects include decreased mental status, agitated delirium, and seizures. In August to September 2018, numerous overdose cases related to it had been reported in US;

(b) **Crotonylfentanyl**: crotonylfentanyl's chemical structure is similar to that of fentanyl[6] and its pharmacology and toxic effects are likely to be similar. Preclinical studies suggest that it is less potent than fentanyl and more potent than oxycodone[7]. The data available show that the

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[4] Namely 4-CMC (also known as 4-chloromethcathinone and clephedrone), AB-FUBINACA, alpha-PHP (also known as alpha-pyrrolidinohexanophenone), DOC (also known as 4-chloro-2, 5-DMA or 2,5-dimethoxy-4-chloroamphetamine), N-ethylhexedrone and valerylfentanyl.

[5] THC, a major psychoactive cannabinoid in cannabis, is controlled under the First Schedule to DDO.

[6] Fentanyl, which is an opioid analgesic, is a dangerous drug controlled under the First Schedule to DDO and Schedule 10 (Poisons List) to the Pharmacy and Poisons Regulations (Cap. 138A).

[7] Oxycodone is a dangerous drug controlled under the First Schedule to DDO.

substance has high abuse potential and poses a serious public health threat;

(c) **Etizolam**: etizolam is chemically related to benzodiazepine [8]. Frequently reported adverse effects of etizolam include drowsiness and muscle weakness; it may also cause sedation, sleepiness, ataxia, slurred speech, and loss of consciousness. Scotland in particular saw an increasing number of deaths related to etizolam in recent years, with more than 540 deaths related to the substance in 2018; and

(d) **Flualprazolam**: flualprazolam belongs to the benzodiazepine family. It has a relatively high potency with comparatively short onset of action, and likely has adverse reactions similar to alprazolam[9]. It is likely to cause disinhibition and sedation that would impair driving, and when combined with substances such as opioids, would contribute to increased overdose through benzodiazepine-potentiated of opioid-induced respiratory depression. The substance was reported to be found in 26 death cases since 2017.

4. Other than etizolam which is known to be used clinically in three countries[10], all of the remaining five substances have no known medical use or therapeutic application. There is no registered pharmaceutical product containing any of the six substances in Hong Kong. As regards trade declarations, from 2016 to 2020, there is no record of import and export of the above substances except for 65 import consignments and 17 export consignments of etizolam tablets.

Mitragynine and 7-hydroxymitragynine

5. In addition to the substances above which are under the United Nations' control, it is proposed to place two substances, namely mitragynine and 7-hydroxymitragynine, under the control of DDO. The two substances are the major compounds available in a plant known as *mitragyna speciosa* or kratom, and interact with opioid receptors in the brain, producing sedation, pleasure and decreased pain, especially when users consume large amounts of the plant. Mitragynine also interacts with other receptor systems in the brain to produce stimulant effects. With clear abusive potential, reported health effects of kratom use include nausea, itching, sweating, dry mouth, constipation, increased urination, loss of appetite, seizures, hallucinations and withdrawal symptoms.

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[8] Certain benzodiazepines, such as triazolam and midazolam, are dangerous drugs controlled under the First Schedule to DDO.

[9] Alprazolam is a dangerous drug controlled under the First Schedule to DDO.

[10] Namely India, Italy and Japan for treating anxiety and psychiatric pathologies.

Symptoms of psychosis have also been reported in some users. In the US, there were 91 reports of deaths in people who had ingested kratom between 2016 and 2017; and 44 deaths reported to be associated with the use of kratom in 2018. A number of overseas jurisdictions have controlled mitragynine and 7-hydroxymitragynine or *mitragyna speciosa* (kratom), such as Australia, Singapore, the United Kingdom and several states of the US.

6. Currently, mitragynine and 7-hydroxymitragynine are not controlled under DDO in Hong Kong. They have no known medical use or therapeutic application[11], and there is no registered pharmaceutical product containing the two substances or kratom in Hong Kong. As regards trade declarations, from 2016 to 2020, there were no import or export consignments for both mitragynine and 7-hydroxymitragynine. For kratom, there were three import consignments amounting to 15 000 kg in 2020.

7. Under DDO, substances included in Part I of the First Schedule are dangerous drugs and are subject to the control of a licensing scheme administered by the Department of Health ("DH"). The manufacture, import, export and supply of these substances will require respective licences issued by DH. Trafficking and manufacturing of the substances in contravention of DDO will be subject to a maximum penalty of life imprisonment and a fine of $5 million. Possession and consumption of the substances in contravention of DDO will be subject to a maximum penalty of seven years' imprisonment and a fine of $1 million.

8. In view of the adverse effects of the eight dangerous drugs, namely 4F-MDMB-BINACA, 5F-AMB-PINACA and 5F-MDMB-PICA, crotonylfentanyl, etizolam, flualprazolam, mitragynine and 7-hydroxymitragynine outlined in paragraphs 3 to 6 above, the Government **proposes** including them in Part I of the First Schedule to DDO so as to bring these drugs under proper control.

One Precursor Chemical

9. At the same UNCND Session mentioned in paragraph 3 above, Member

[11] According to the National Institute on Drug Abuse of the US, some people use kratom in recent years as a herbal alternative to medical treatment in an attempt to control withdrawal symptoms and cravings caused by addiction to opioids or to other addictive substances such as alcohol. There is no scientific evidence so far that kratom is effective or safe for this purpose.

States also adopted the International Narcotics Control Board[12] ("INCB")'s recommendation to place MAPA under international control. MAPA is a substitute chemical for several precursors already under international control, such as 1-phenyl-2-propanone ("P-2-P"), alpha-phenylacetoacetonitrile ("APAAN") and alpha-phenylacetoacetamide ("APAA")[13], and is highly suitable for the illicit manufacture of amphetamine and methamphetamine[14].

10. INCB considers that international control of MAPA is required in order to limit its availability for illicit drug manufacture and subsequently reduce the quantity of amphetamine and methamphetamine manufactured illicitly from the precursor chemical.

11. Currently, MAPA is not controlled under CCO in Hong Kong. There is no registered pharmaceutical product containing or made from this precursor chemical in Hong Kong. As regards trade declarations, there is no record of import and export of this precursor chemical over the past five years.

12. Under CCO, substances included in Schedule 2 are subject to the control of a licensing scheme administered by C&ED. It is an offence for a person to have in his/her possession, manufacture, transport or distribute these substances for the unlawful production of dangerous drugs; or import or export these substances not under and in accordance with a licence. The maximum penalty is imprisonment for 15 years and a fine of $1 million.

13. Given the adversity of the use of MAPA and the advice of INCB mentioned above, the Government **proposes** including this precursor chemical in Schedule 2 to CCO so as to bring it under proper control.

CONSULTATION

14. Relevant stakeholders, including holders of licences under DDO, CCO and the Pharmacy and Poisons Ordinance (Cap. 138), the logistics trade and

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[12] INCB is an independent monitoring body established under the United Nations since 1968 for the implementation of the United Nations international drug control conventions, namely the Single Convention on Narcotic Drugs of 1961, the Convention on Psychotropic Substances of 1971 and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988. One of its functions is to assess chemicals used in the illicit manufacture of drugs, in order to determine whether they should be placed under international control.

[13] P-2-P, APAAN and APAA are precursor chemicals controlled under the Second Schedule of CCO.

[14] Amphetamine and methamphetamine are dangerous drugs controlled under the First Schedule to DDO.

relevant industry groups were consulted on the legislative proposals on amending DDO and CCO in August 2020 and February 2021. Only two letters were received, one from the Federation of Hong Kong Industries supporting the proposals and one from a law firm expressing objection to placing mitragynine and 7-hydroxymitragynine under control. DH was consulted on the objection raised and advised that DDO covers a range of substances with different pharmacological effects, and the harms and abusive potential of mitragynine and 7-hydroxymitragynine are clearly established as set out in paragraph 5 above. The proven pharmaceutical uses of them are also lacking. Moreover, a number of overseas jurisdictions have already put the two substances or *mitragyna speciosa* (kratom) under control. By regulating the two substances in Hong Kong, the Government would be able to deter their illicit use and trafficking, thereby safeguarding the health of our residents, whilst continuing to allow legitimate use (such as research) through DH's licensing scheme. Having regard to the host of relevant factors, the Government maintains the view that mitragynine and 7-hydroxymitragynine should be controlled under DDO.

15. The Government has also consulted ACAN, which supports the proposed control.

WAY FORWARD

16. Pursuant to section 50(1) of DDO, the Chief Executive may by order published in the Gazette amend the First Schedule to DDO. Section 18A(1) of CCO provides that the Secretary for Security may by order amend Schedule 2 to CCO.

17. The Government plans to table the relevant amendment orders in the Legislative Council for negative vetting within the 2020-21 legislative session.

ADVICE SOUGHT

18. Members are invited to comment on the Government's proposal in paragraph 1 above.

Narcotics Division
Security Bureau
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