Annex E: So-called ‘New Psychoactive Substances’

E1 The term ‘New Psychoactive Substances’ (NPSs) is meant to cover the kinds of substances that people have, in recent years, begun to use for intoxicating purposes. In general, when an NPS first became available, it would not have been a controlled substance under the Misuse of Drugs Act 1971. Some NPSs may still not be controlled under that Act: if so, they will be covered by the Psychoactive Substances Act, which came into force on 26 May 2016. The definition of NPSs therefore includes substances which some people used to describe as ‘legal highs’ (by which is meant substances which were legally available at the time of the death, whether or not they have since become controlled under the Misuse of Drugs Act or become subject to the Psychoactive Substances Act).

E2 Tables NPS1 to NPS3 show the numbers of deaths involving NPSs. The main points from those figures are set out in paragraph E8 onwards, but first we must say something about the kinds of statistics that are available and which drugs are counted as NPSs. The tables distinguish between deaths for which NPSs:

a) were implicated in, or potentially contributed to the death; and
b) were present but not considered to have contributed to the death.

In each case, the figures are sub-divided into:

(i) deaths which fall within the definition of drug misuse deaths that is used to produce the statistics that are given in the main body of this report (whether because the NPS was controlled at the time, or because the person had also used a controlled substance, like heroin or methadone); and
(ii) deaths not counted in the statistics in the main body of this report (for example cases where the deceased person appears to have used only an NPS that was not controlled at that time).

In addition, the figures under (a) are further sub-divided, in order to show the extent to which deaths appear to have been due to the use of one (or more) NPSs alone or due to the use of combination of them and other types of substance.

E3 Deaths involving a particular substance may be counted in different ways at different times, because the classification of that substance may have changed. For example, mephedrone is an NPS. It was a ‘legal high’ until 15 April 2010, because it was not a controlled substance until it became a Class B drug with effect from 00.01 hours on 16 April 2010. Therefore, a death which was due solely to mephedrone, with no other substance found to be present in the body, would be counted as follows:

- if it occurred up to 15 April 2010, it would not be included in this publication's statistics of drug misuse deaths, because the death did not involve any substance that was controlled at the time of the death. However, it would be counted in the figures for deaths involving NPSs (for example, in the first line of part (a) (ii) of Table NPS2).
- if it occurred after 15 April 2010, it would be included in this publication's statistics of drug misuse deaths, because the death involved a substance that was controlled at the time of death. It would also be counted in the figures for deaths involving NPSs (for example, in the first line of part (a) (i) of Table NPS2).

Note: National Records of Scotland (NRS) uses the date of death to determine how to count a drug because the information that NRS has does not include when the person used the drug.

E4. The next three paragraphs list the NPSs which are counted for the purpose of statistics of deaths registered in Scotland up to the end of 2020, distinguishing between:

- NPSs which were already controlled substances at the start of 2009 (as that was the first year in which deaths involving NPSs were registered in Scotland);
- NPSs which became controlled substances between the start of 2009 and the end of 2020 (that is, ones whose classification changed during the period covered by these figures for deaths involving NPSs); and
- NPSs which were not controlled substances at the end of 2020 (some of which may have since become controlled substances).

Please note two points.

- First, these are not comprehensive lists of NPSs: they cover only the NPSs which were involved in deaths which were registered in Scotland by the end of 2020. (They do not include a few other NPSs whose names are in the look-up table that NRS uses to identify the types of substance that are involved in drug misuse deaths.)
- Second, these lists may contain an occasional error. Sometimes, a Home Office circular about substances which will become controlled from a particular date describes them in chemical terms (e.g. "... replacement of the indole ring with indane, indene, indazole, pyrrole, pyrazole ...") rather than giving specific substance names. In such cases, it is unfortunately very easy for someone who does not know about chemical structures to fail to realise that a particular substance has become controlled. NRS seeks expert advice on these matters, but unfortunately that does not guarantee absolute accuracy. For example, in the "… in 2018" edition, paragraph E7 wrongly described AB-FUBINACA and 5F-MDMB-PINACA as not having become controlled by the end of 2018. Fortunately, the effect of such errors on the figures is likely to be very slight, for two reasons: first, such substances are involved in few deaths; second, those deaths may well still be counted correctly as drug misuse, if they also involved other substances which were controlled (as is often the case: the vast majority of drug-deaths are of people who took more than one substance).

E5 The following NPSs were already controlled substances at the start of 2009:

- acetyl fentanyl
- PMA / paramethoxyamphetamine
- PMMA / paramethoxymethamphetamine

A death due solely to one of these drugs would be counted in this publication's statistics of drug misuse deaths. It would also be counted in the figures for deaths involving NPSs.

E6 The following NPSs became controlled substances between the start of 2009 and the end of 2020 (note: 'TCDO' means Temporary Class Drug Order).

Substance	Controlled with effect from:
BZP / Benzylpiperazine	23 December 2009
CPP / Chlorophenylpiperazine	23 December 2009
TFMPP / Trifluoromethylphenlpiperazine	23 December 2009
Chloromethcathinone	16 April 2010
MDPV / Methylenedioxypyrovalerone	16 April 2010
Mephedrone / 4-Methylmethcathinone	16 April 2010
4-MEC / Methylethcathinone	16 April 2010
Methylone	16 April 2010

PVP	16 April 2010
Naphyrone	23 July 2010
Phenazepam	13 June 2012
3-Methoxyphencyclidine	12 February 2013
APB / 2-aminopropyl-benzofuran/ 5 APB / 6 APB	10 June 2013 (TCDO); 10 June 2014 (Class B drug)
API / 5-API / 5-IT / 5-(2-aminopropyl)indole - APB	10 June 2013 (TCDO); 10 June 2014 (Class B drug)
AMT / Alphamethyltryptamine	7 January 2015
5-MEO-DALT	7 January 2015
4-4'DMAR	11 March 2015
Ethylphenidate	10 April 2015 (TCDO); 31 May 2017 (Class B drug)
MPA / Methylthienylpropamine / Methiopropamine	27 November 2015 (TCDO) 27 November 2017 (Class B)
AB-FUBINACA	14 December 2016
AKB48	14 December 2016
MDMB-CHMICA	14 December 2016
4F-MDMB-BINACA	14 December 2016
5F-MDMB-PICA	14 December 2016
5F-MDMB-PINACA	14 December 2016
5F-PB-22	14 December 2016
Adinazolam	31 May 2017
Clonazolam	31 May 2017
Diclazepam	31 May 2017
Etizolam	31 May 2017
Flubromazepam	31 May 2017
Flubromazolam	31 May 2017
Pyrazolam	31 May 2017
4F-EPH / 4-Fluoroethylphenidate	31 May 2017
8 AMINOCLONAZOLAM	31 May 2017

A death due solely to one of these drugs would not be counted in this publication's statistics of drug misuse deaths if it occurred before the relevant date, because it would not have involved a drug that was controlled at the time. However, it would be counted in the figures for deaths involving NPSs.

A death due solely to one of these drugs would be counted in this publication's statistics of drug misuse deaths if the person died on or after the specified date. It would also be counted in the figures for deaths involving NPSs.

E7 The following are among the NPSs that had not become controlled substances by the end of 2020:

- Camfetamine
- Diphenidine
- Flualprazolam (but see "NB" below)
- Kratom
- Mexedrone
- Mitragynine
- MXP

A death involving only these substances would not be counted in this publication's statistics of drug misuse deaths because it would not have involved a drug that was controlled at the time. However, it would be counted in the figures for deaths involving NPSs.

E8 Table NPS1 provides the numbers of deaths involving NPSs which were registered in Scotland in 2020. The figures are broken down as described in paragraph E2, and also by the type(s) of NPS that were involved, distinguishing between cases where:

- benzodiazepine-type NPSs were present, with no other types of NPS present;
- other types of NPS were present, with no benzodiazepine-type NPS present; and
- both benzodiazepine-type NPSs and other types of NPS were present.

The figures in Table NPS1 may be understood better by looking also at Table NPS3, which lists all the substances that were reported to NRS for every death, registered in Scotland in 2021, which involved NPSs. From Table NPS3, one can find out which NPSs were found in the body in each case, whether the person had taken more than one NPS, and whether other substances (such as cocaine, heroin, methadone, morphine and/or other 'traditional' drugs) were also present.

E9. The top half of part (i) of Table NPS1 shows how many deaths took place where one or more NPS was implicated or potentially contributed to a death. It details the type of NPS and whether the deaths were included in the drug misuse statistics.

E10. The lower half of part (i) of Table NPS1 provides a breakdown of the NPS deaths by the deceased's person's age.

E11. Part (ii) of Table NPS1 shows the number of deaths where NPSs were present but not considered to have contributed to the death. In Table NPS3, part (ii) lists the substances which were reported for such deaths: it shows that 'traditional' drugs (such as cocaine, heroin and methadone) were usually implicated in these deaths.

E12. Table NPS2 provides a summary of the numbers of deaths which have involved NPSs in recent years. As far as NRS knows, the first Scottish deaths involving NPSs were registered in 2009. Of course, it is possible that NPSs were involved in some deaths in Scotland in earlier years, but their presence was not identified (for example, perhaps because other drugs were found, and it appeared to the investigators that those other drugs had caused the deaths) - but all the data can tell us is that none of the deaths that were registered in Scotland in 2008 or earlier years were reported to involve NPSs.

E13. The number of deaths involving NPSs have increased rapidly over the last few years.

E14. Table NPS2 also shows that deaths for which NPSs were the only substances implicated in, or potentially contributing to, the death, generally represented only a small proportion of deaths which involved NPSs.