

## 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:
- were implicated in, or potentially contributed to the death; and
  - were present but not considered to have contributed to the death.

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

- deaths which fall within the definition of 'drug-related 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
- 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-related 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-related 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-related 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-related", 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-related 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 / Trifluoromethylphenylpiperazine	23 December 2009
Chloromethcathinone	16 April 2010
MDPV / Methylenedioxypropylvalerone	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-related 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-related 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-related 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.

NB: on 8 September 2020, it was announced that flualprazolam, flunitrazolam and

norfludiazepam will become controlled as Class C drugs under the Misuse of Drugs Act 1971. However, that does not affect how deaths involving flualprazolam are counted for the purpose of the statistics in this (“... in 2020”) edition of this publication, because it had not become controlled by the end of 2020 (at the time of writing, in June 2021, the proposal had yet to be approved by the UK Parliament).

- 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 2020, 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 that there were 872 deaths in 2020 for which one or more NPSs were implicated in, or potentially contributed to, the cause of death. In 868 cases, the only NPSs present were benzodiazepines (usually etizolam, but sometimes another, such as diclazepam, flualprazolam, flubromazolam or phenazepam); there were four deaths for which both benzodiazepine NPSs and other types of NPS were present; and there were no cases where only another type of NPS was present. Almost all of these deaths (864 out of 872) fall within the definition of ‘drug-related deaths’ that is used to produce the statistics given in the main body of this report – that is, 864 out of 872 are included in the 1,339 drug-related deaths that were registered in 2020. In only a small proportion of cases (19 out of 872) were NPSs the only substances that were implicated in the cause of death. That there were relatively few deaths for which NPSs were the only substances that were implicated in their causes can also be seen from part (i) of Table NPS3: its lists of the substances which were reported for each death show that, in most cases, ‘traditional’ drugs (such as cocaine, heroin, methadone and morphine) were also implicated in the causes of these deaths.
- E10. The lower half of part (i) of Table NPS1 provides a breakdown of the 872 deaths (in which one or more NPSs were implicated in, or potentially contributed to, the cause of death) by the deceased’s person’s age (for example, there were 195 aged 25-34, 288 in the 35-44 age-group, and 265 who were 45-54) and sex (646 were men).
- E11. Part (ii) of Table NPS1 shows that there were 35 deaths in 2020 for which NPSs were present but were not considered to have contributed to the death. In all but one case, the only NPSs present were benzodiazepines (one death involved another type of NPS and no benzodiazepine NPSs); and all but one of the deaths were counted in the statistics in the main body of this report – that is, 34 out of the 35 are included in the 1,339 drug-related deaths that were registered in 2020. The table shows that most of these deaths were of people who were aged 35-44 (eleven) or 45-54 (ten), and most were men (30). 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 at first increased rapidly, from 4 in 2009 (a year which is not shown in this edition's Table NPS2, because it starts with 2010) to 113 in 2013, was almost unchanged in 2014 and 2015, then more than trebled to 345 in 2016, rose slightly to 363 in 2017, increased markedly to 588 in 2018 and 805 in 2019, and reached 907 in 2020. The sub-totals at the foot of Table NPS2 show that this report's statistics of drug-related deaths for each year include almost all the deaths which involved NPSs (for example, 8 out of 11 such deaths in 2010, 108 out of 112 in 2015, 585 out of 588 in 2018, and 898 out of 907 in 2020).
- 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. Examples of the relevant numbers are 5 out of 47 in 2012, 3 out of 112 in 2015, 9 out of 588 in 2018, and 19 out of 907 in 2020. There was a large proportion in only one year, 2010, when it was 7 out of 11 (for several of those deaths, mephedrone was the only substance that was implicated in the death).