PHS Health Protection Alert

Title	Description
Event	Increased availability of nitazene-type drugs (synthetic opioids) in the illicit drug and counterfeit medicines market in Scotland
Alert reference number	2023/04
Recipients of this alert	NHS Board Health Protection Teams, CMO Office (CMO and DCMO), Scottish Ambulance Service, Alcohol and Drug Partnership coordinators and chairs
Alert status	For action - wider dissemination
Action required of initial recipients	• Health Protection Team to cascade to Emergency Departments, GPs and OOHs. • Scottish Ambulance Service operations manager to cascade to staff members • Alcohol and Drug Partnerships to cascade to drug and harm reduction service managers (including commissioned services) for onward dissemination • CMO office - for information
Date of issue	23 January 2023
Source of event information	Public Health Scotland (RADAR - Scotland's Early Warning System for Drugs)
Link to more information	Visit the '**Alerts**' section of our webpage: **www.publichealthscotland.scot/radar**
Contact	**phs.drugsradar@phs.scot**
Authorised by	Dr Nick Phin, Director of Public Health Science and Medical Director
HPZone context	n/a

Situation

There is an increase in the availability of a new group of drugs called nitazenes in Scotland. Nitazenes are potent synthetic opioids.

Background

Nitazenes are a category of new synthetic opioids (NSO), also known as 2-benzyl benzimidazole opioids. This group of chemical compounds exert broadly similar effects on the body, with varying levels of potency. N-pyrrolidino etonitazene is several hundred times more potent than heroin and 20 times more potent than other synthetic opioids like fentanyl. Nitazenes have been known to be administered by many routes including intravenous, oral, sublingual, nasal and vaping.

Nitazenes detected in Scotland include; N-pyrrolidino-etonitazene (etonitazepyne or NPE), metonitazene and protonitazene. Since January 2021 there have been police detections in at least six areas of Scotland, with multiple detections reported in Lothian, Grampian and Greater Glasgow and Clyde. There has been an increase in the number of detections since September 2022. Detections have been made in both prison and community settings. In Scotland, nitazenes are often mis-sold as other drugs and have been detected in paper, powder and tablet form.

To date, most detections have fallen into one of two groups:

1. N-pyrrolidino etonitazene and metonitazene in counterfeit tablets. Tablets sold as oxycodone, but no oxycodone or other substances detected. Visually similar to genuine oxycodone. Tablets are blue in colour (sometimes yellow). Tablets have the letter M stamped on one side, half score and number 30 on the other.

2. Metonitazene in paper form. This has been detected mainly in prison seizures. The vehicle is white or cream paper or blotter. When tested, samples also contained synthetic cannabinoids and benzodiazepines.

There is limited information on overdoses and deaths involving nitazenes in Scotland due to a lack of systematic testing. Elsewhere in the UK, these drugs have been detected in overdoses and deaths in both 2021 and 2022.

Assessment

A risk assessment was conducted under two dimensions – the seriousness of harm and likelihood of harm and the extent of the problem in Scotland.

As substantially lower doses are required to achieve the same effect, there is a greater risk of accidental overdose when used alone or alongside other substances. This could pose an immediate risk to life. Factors of consideration which increase the seriousness of harms associated with the introduction of nitazenes include patterns of substance use involving more than one substance taken at close intervals (polysubstance use). The risk of harm may be increased by the presence of residual substances interacting with nitazene compounds.

The majority of seizures where nitazenes have been identified in Scotland have been in tablets or powders labelled as other substances (oxycodone), therefore people may be unaware that they are consuming nitazenes.

Evidence of availability is mainly from seizures of drugs which have been sent for toxicological testing, most of these originate from Police Scotland and Scottish Prison Service seizures. Detections have also been made by WEDINOS (Welsh drug testing service) in substances sent from Scotland.

Evidence of harm associated with consumption is limited due to a lack of systematic testing in hospitals and at post-mortem. To date, nitazenes have been detected in one post-mortem toxicology sample from Scotland.

In summary, there was conclusive evidence of the presence of nitazenes in the drug supply market and its subsequent consumption in Scotland. Due to their unexpected presence in the drug supply and high potency, nitazenes pose a substantial risk of overdose, drug-related hospitalisation and drug-related death.

Clonitazene and etonitazene are Class A drugs controlled by the Misuse of Drugs Act (MDA) 1971. The supply and importation of other nitazenes is controlled by the Psychoactive Substances Act 2016. It's likely that the other known nitazenes will be added to the MDA in the coming years and new compounds may emerge as the market adapts to legislative changes.

The signs and the response actions for nitazenes are the same as for any other overdose involving opioids. Naloxone effectively reverses opioid-type drug overdoses, but due to the high potency of nitazenes multiple doses and multiple kits may be required before the overdose is reversed.

Naloxone will start to wear off after 20–30 minutes. The duration of action of naloxone is shorter than that of opioid drugs, which means there is a risk of repeat overdose.

Recommendations

Actions for drug and alcohol staff

When asking patients about substance use, also enquire about any potential use of oxycodone or other pain-relief medicines. Oxycodone may be referred to by brand names such as OxyContin and Percocet, or street names such as 'oxy' and '30s'.

Use the opportunity to raise awareness on the risks of taking counterfeit medication.

Discuss harm reduction approaches including the risk of mixing drugs and the importance of drug checking.

Service staff can help people access the drug testing service **WEDINOS**. Staff should not handle any substances but can facilitate service access by providing printed sample submission forms, stamped addressed envelopes and by sharing online results.

Share reminders of the signs of an overdose and the importance of getting help in an emergency.

Provide people with naloxone and offer regular refresher training for those previously trained.

Actions for emergency responders

All staff working in emergency services and healthcare should be vigilant for the presentation of patients with opioid toxicity. A progression of signs and symptoms includes drowsiness with eventual pin-point pupils, loss of consciousness, airway compromise and respiratory arrest, which can be rapidly fatal if untreated.

Build links with your local drug services and liaison team and encourage patients and family members to access support and take-home naloxone wherever the opportunity presents.

All organisations that provide emergency care for opioid overdose should ensure staff are able to:

- Treat suspected cases as for any opioid overdose, using naloxone and appropriate supportive care (including airway and breathing support).
- Recognise that the duration of effect of naloxone is shorter than that of opioid drugs and appropriate monitoring and further doses of naloxone may be required.
- In the community this could include injectable or intranasal naloxone. Doses should be administered one at a time, waiting 2–3 minutes between each dose while watching for a response.

Actions for staff in Emergency Departments

Where hospital-based toxicology services are available, physicians are encouraged to submit specimens of unusual opioid toxidromes to ascertain the presence of nitazene compounds.

Treatment may involve the intravenous naloxone titration regimen recommended by the National Poisons Information Service (see below).

For adults and children aged 12 years or over, in acute hospitals the standard naloxone dosing regimen where potent opioid overdose is suspected, subject to clinical assessment of the individual case, is:

- Give an initial dose of 400 micrograms (0.4 mg) intravenously (IV).

- If no response after 60 seconds, give a further 800 micrograms (0.8 mg).
- If still no response after another 60 seconds, give another 800 micrograms (0.8 mg).
- If still no response, give a further 2 mg dose. Large doses (more than 4 mg) may be required in patients exposed to highly potent opioids and those who are severely poisoned.

Aim for reversal of respiratory depression and maintenance of airway protective reflexes, not full reversal of unconsciousness.

Failure of a definite opioid overdose to respond to large doses of naloxone suggests that another central nervous system (CNS) depressant drug or brain damage is present.

Once an adequate response has occurred, monitor blood gases, oxygen saturation and respiratory rate.

Intramuscular naloxone is an alternative in the event that IV access is not possible or is delayed.

Observe the patient carefully for recurrence of CNS and respiratory depression. The duration of action of naloxone is shorter than that of all opioid analgesics and repeated doses of naloxone may be required.

Useful links

- **Public Health Scotland RADAR alert page**.
- **SDF webpage on take-home naloxone training**.
- National Poisons Information Service 24-hour telephone service on 0344 892 0111 or online database **TOXBASE**.