

# Rapid Action Drug Alerts and Response (RADAR) Alerts

## Bromazolam alert

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## Public health alert: New benzodiazepines – Bromazolam


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<b>Alert area</b>	Scotland
<b>Action required by</b>	people working and volunteering in drug and alcohol services, emergency services, healthcare and medical settings, and high-risk settings such as prisons and hostels.

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Action required	provide harm reduction interventions for benzodiazepines and polydrug use – see sections marked for specific actions.
Alert number	2023/13
Version number	1.1
Release date	5 July 2023
Updated	13 October 2023
Valid until	31 March 2024

## Printable summary of this alert

 RADAR Alert 2023/13, New benzodiazepines – bromazolam PDF | 162.0KB

## Update

This alert was updated on 13 October 2023 to include recent detection data and new information on effects.

## Summary

Between 2016 and 2022, etizolam was the primary drug detected in street benzodiazepines (benzos) in Scotland. Data shows the market is significantly changing, etizolam detections are decreasing and detections of new benzodiazepines are increasing.

Bromazolam is now the most common drug detected in ‘street benzos’.

Bromazolam has been seized in both community and custodial settings and implicated in hospitalisations and deaths in different areas of the country.

Reports to RADAR indicate that bromazolam produces strong sedative and sleep-inducing effects. As a result, there is a substantial risk of overdose.

The harm associated with bromazolam and other new benzos should be considered in the context of polysubstance use (mixing drugs), which is a common feature of drug use in Scotland.

Services should promote and discuss realistic harm reduction and support measures. Overdose signs and response actions for bromazolam are the same as for any other overdose involving depressants.

New drugs may not always be picked up in clinical testing but that does not mean that they are not present. Consider the person’s presentation and clinical history to determine appropriate interventions. Guidance on psychological and prescribing interventions to address benzodiazepine harms is available from the Scottish Drug Deaths Taskforce.

## Benzodiazepines

Benzodiazepines are a group of depressant (downer) drugs. They are also known as sedatives and hypnotics.

There are many drugs in this group and some, such as diazepam, are prescribed as medicines in the UK.

When taken in high doses (or mixed with other drugs) they can depress the central nervous system and cause respiratory depression, where breathing becomes dangerously slow or stops.

Mixing benzodiazepines with other depressants, such as alcohol, gabapentinoids or opioids, increases the risk of overdose.

## Street benzos

'Street benzos' is a term used to describe benzodiazepines from a non-pharmaceutical source. Unlike medicines, they are manufactured without quality control.

They are generally pressed into pills and sold loose in bags. Some are sold to look like genuine medicines in branded counterfeit packaging.

'Street benzos' are usually mis-sold as diazepam and referred to using generic, interchangeable names like Valium, vallies, bars and blues.

They often contain new psychoactive substances (NPSs).

These are drugs that:

- have been newly developed, or
- were developed a number of years ago but have recently resurfaced

Different benzo-type NPSs have been detected in Scotland in 2023, including:

- etizolam
- gidazepam
- flubromazepam
- clonazolam
- flubromazolam

This alert focuses on bromazolam as it's currently the most common drug detected in street benzodiazepines.

The information applies to anyone taking benzos not prescribed to them.

## Bromazolam

Bromazolam (brom or brum) is a novel benzodiazepine, similar in structure to alprazolam (Xanax).

The first detection of bromazolam in European drug markets was in 2016. The first detection in Scotland was in 2021.

Reports to RADAR describe bromazolam as having severe sleep inducing and sedative effects, more so than known effects of etizolam. Several reports describe reduced consciousness, memory loss and blackouts, where individuals have difficulty remembering events that occurred while under the influence of the drug (and for several days afterwards).

Often effects are described as fluctuating – the person can quickly change from being sedated, to alert, to sedated again.

### ⊕ Effects

- agitation
- confusion
- drowsiness
- euphoria
- memory loss and blackouts
- hallucinations
- vomiting
- reduced anxiety
- reduced breathing
- reduced coordination
- reduced heart rate

- reduced response
- slurred speech

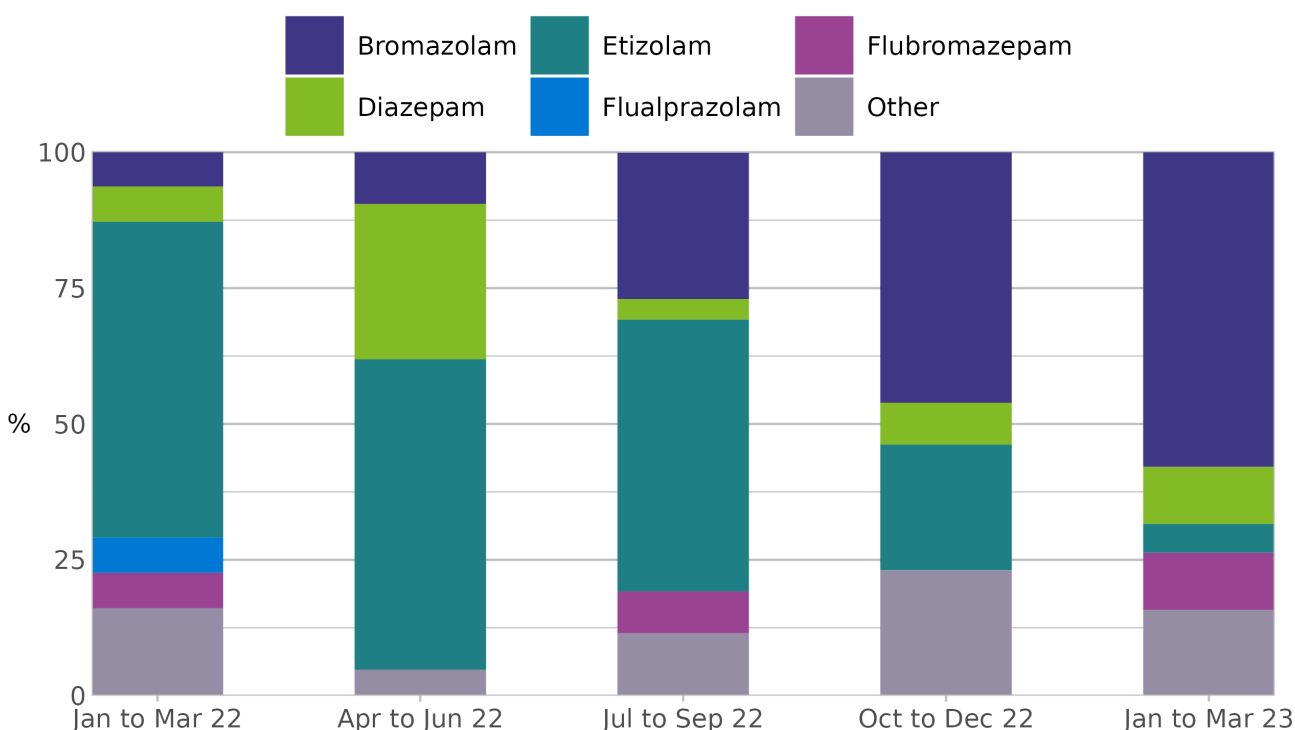
## Detections

This alert applies to all of Scotland. There have been detections of bromazolam in most regions. The drug testing service, **WEDINOS**, has detected bromazolam in samples sent from 11 NHS Boards.

Detections have increased rapidly in the last year. It was present in:

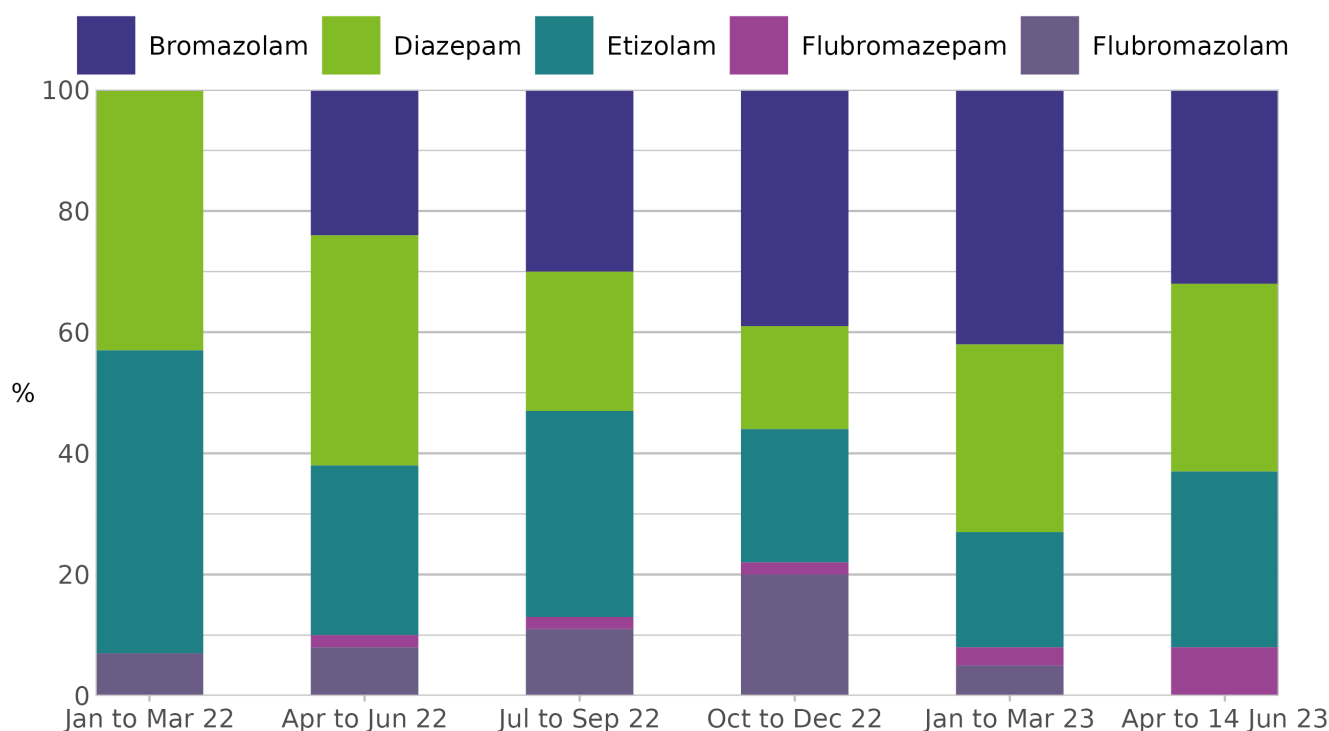
- 37% of samples in the ASSIST emergency department study (February to May 2023)
- 80% of prison benzodiazepine seizures (April to July 2023)
- 23% of post-mortem toxicology samples testing positive for a controlled drug (April to May 2023).

**Figure 1: Common benzos detected by Scottish Prison Service (SPS) drug analysis project**



Source: SPS and LRCFS University of Dundee

Figure 2: Five most common benzos detected by WEDINOS in samples from Scotland



Source: WEDINOS - Welsh Emerging Drugs & Identification of Novel Substances

## Appearance

Between 1 January and 14 June 2023, WEDINOS detected bromazolam in 49 samples sent from Scotland. Bromazolam was the 'purchase intent' for only one of the 49 samples.

- 72% were blue or white circular pills, often half score on one side, generally purchased as diazepam.
- 24% were white, green or teal bars, often stamped with 'XANAX', purchased as alprazolam or Xanax.
- 4% were blue oval pills, purchased as 'up-johns'.

In prisons, bromazolam has also been found in paper and powder form, in a variety of colours – tan, brown, yellow, white, grey and pink. Due to its potency, it is impossible to accurately dose bromazolam powder. In pure powder form, 1 gram is 1,000 doses (TripSit). A few 'grains' of powder can be enough to cause overdose.

Bromazolam in white circular tablet from Glasgow, mis-sold as diazepam (photo credit: WEDINOS, W032610)



Bromazolam in blue circular tablet from Aberdeen, mis-sold as diazepam (photo credit: WEDINOS, W032864)



Bromazolam powder from West Scotland (photo credit: Police Scotland)



## Recognising and responding to a benzodiazepine overdose

### Depressant drug overdose signs

- unconsciousness (won't wake with a shout or a shake)
- unable to speak or respond
- shallow (or slowed) breathing
- snoring or rasping breaths
- nausea and vomiting
- seizures
- blue lips
- pale skin
- pin-point pupils (sign of opioid use)

People may be taking a combination of drugs with different effects and the signs may not be as clear cut as the above. Some people may display all overdose signs, others will have one or two.

### In an emergency

- Check if the person is conscious by shaking them and loudly calling their name or asking if they're okay.
- If the person does not respond, check they are breathing.
- If there's no response, stay calm and call 999.



- Ask for an ambulance. Give as much information as you can and be honest about what was taken – you won't get in trouble for getting help.
- The call handler will stay on the line and talk you through what to do. If you are by yourself, put them on speakerphone to leave your hands free.
- Speak to the person, reassure them and talk them through what you are doing. They may be able to hear you even if they can't respond.
- Administer naloxone if you have it (see naloxone guidance below).
- For people who are unresponsive and breathing, put them in the recovery position (on their side with their head tilted back) and monitor breathing.
- For people who are unresponsive and not breathing, start chest compressions. If you have someone there, ask them to get a defibrillator.
- Stay with the person until help arrives.

Learn more about drug overdose and emergency first aid:

- Unresponsive and breathing patient (British Red Cross)
- Unresponsive and not breathing patient (British Red Cross)
- Drugs: what you need to know (NHS inform)
- Stop The Deaths (Scottish Drugs Forum)
- Overdose (Crew)

## Naloxone

Naloxone is an effective, life-saving medicine that can temporarily reverse the effects of an opioid overdose.

Although benzodiazepines are not opioids, naloxone should always be administered if the person is overdosing and is unresponsive. Many overdoses involve both benzos and opioids and reversing the effects of one drug may be enough to bring the person round. Even if it doesn't help, it will do no harm.

In Scotland, naloxone is available at some pharmacies and drug services. It can also be ordered online for home delivery from Scottish Families Affected by Alcohol and Drugs.

### How to administer naloxone

Naloxone is very easy to administer. You can learn how to administer naloxone in a free e-learning course by the Scottish Drugs Forum (SDF).

For more information and tutorial videos, visit [naloxone.org.uk](http://naloxone.org.uk):

- How to administer intranasal naloxone (Nyxoid)
- How to administer intramuscular naloxone (Prenoxad)

Doses should be administered one at a time, waiting 2–3 minutes between each dose while watching for a response.

Administration should continue until:

- the person comes round
- emergency services arrive and take over
- you have no naloxone left.

If multiple kits have been administered but they are having no effect, it may be that this is a different type of medical emergency. This is one reason an ambulance is called immediately, so that professional assistance can be offered as soon as possible.

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.

Stay with the person and monitor them. When they wake up provide reassurance and explain who you are and what has happened.

If they go back into overdose, administer further doses of naloxone as required.

# Information for people who take drugs and community members

The unregulated drug supply is increasingly toxic and unpredictable.

Getting support and treatment reduces the risk of experiencing harm or dying from an overdose.

Speak to your local drug service about support for benzo use. [Click here to find a drug service in your area.](#)

If you are dependent on benzos and want to stop, it is important to slowly and steadily reduce the quantity over time.

Sudden withdrawal can cause seizures, which can be life threatening. Your GP or local drug service can help with this. For more information on benzodiazepine withdrawal, visit [The Ashton Manual](#).

## Follow harm reduction practices

### ⊕ Be aware of fakes

- Any medicine obtained without a prescription should be treated with caution.
- Even if a tablet looks authentic, it may be fake and it can be difficult to distinguish between genuine and counterfeit medication.
- The contents may be lower quality, be contaminated with other substances or have unpredictable potency levels. The contents can vary even within the same batch.
- There are some potential signs that may indicate that a pill is fake, including differences in colour, size and shape compared to the real medication. Fake tablets may be of poor quality or crumble easily.
- The packaging may be made from lower-quality materials, have spelling or grammatical errors, or lack information such as dosage instructions, expiry dates, serial numbers and tamper-proof seals.
- Pills purchased from illegitimate sources or online marketplaces are likely to be counterfeit. To find out more, visit: [Dangers of buying medicines online – NHS](#).

### ⊕ Keep track

- Benzos can cause memory loss, making it difficult to keep track of time. Make a note of doses – use paper, a journal or an app.
- Set alarms and reminders for important tasks and appointments.
- Avoid buying in bulk as this increases the chances of using more.
- Split a large quantity of pills into smaller batches to keep track of dosing.
- Avoid cooking or smoking if you feel really tired.
- Keep all drugs and medicines out of sight and out of reach of children and animals. Where possible, keep them locked away in secure packaging.

### ⊕ Test before use

- Drug testing is the only way to confirm drug contents. To get a sample tested, use the free, anonymous postal service provided by WEDINOS.
- Visit [wedinos.org](http://wedinos.org) and click sample testing.
  - Print off a sample form.
  - Follow the instructions to generate a reference code and make a note of the code.
  - Fill in the form completely or the sample won't be accepted.
  - Put the form and drug sample (double wrapped in something leakproof) into an envelope with a stamp on it and post it to WEDINOS.
  - Results will be posted online a few days later.

### ⊕ Dose low

- Take a test dose – a small amount or part of a pill.
- The drug purchased may not always be the drug that it's expected to be. It may contain adulterants or cutting agents, be mis-sold or contain a different amount than anticipated.
- If someone who takes benzos regularly has stopped or cut down use, their tolerance will have reduced. This increases the risk of overdose as they will not need to take as much to get the same effect.

### ⊕ Go slow

- Leave as long as you can between doses. The effects of one dose of bromazolam can last 5–8 hours (TripSit).
- Some drugs have a very long half-life (over 24 hours), which means they stay in the body long after the initial effects have worn off and can increase risk when other drugs are taken.
- Redosing too quickly can cause drugs to build up in the body.
- Avoid injecting. This route of administration poses the highest risk. Injecting crushed pills can block veins causing serious infection and other complications.

### ⊕ Stick to one drug

- Avoid mixing drugs (including alcohol and medicines).
- Mixing drugs can cause unexpected and unpredictable results. This is a major risk factor in drug-related deaths.
- If you do mix drugs, research potential interactions between substances, ensure you are somewhere safe and take much less of both than you would if you were only taking one.
- Drugs such as opioids, gabapentinoids and alcohol have similar effects to benzodiazepines. They slow down heart rate and breathing. Combining them significantly increases the risk of overdose.

### ⊕ Look after yourself and others

- Make sure that there are people around who can respond in the event of an emergency.
- Tell someone what you have taken, how much and when.
- Benzos can decrease your appetite. Try to eat well and stay hydrated by drinking water regularly.
- Sleep on your side. This will help to keep your airway clear.

### ⊕ Carry naloxone

- Naloxone is an effective, life-saving medicine that can temporarily reverse the effects of an opioid overdose. Although benzodiazepines are not opioids, naloxone should always be administered if the person is overdosing and is unresponsive – many overdoses involve both benzos and opioids and reversing the effects of one drug may be enough to bring the person round.
- Pick up naloxone from a drug service or order online from Scottish Families Affected by Alcohol and Drugs.

## Actions for high-risk settings

High-risk settings are places where people may take more drugs than average, often at the same time and from shared batches. Places at higher risk include prisons, hostels, supported accommodation, nightlife venues, festivals, care homes and educational settings.

People living and working in these settings should:

- Ensure their setting is prepared and ready to respond to overdose situations.

- Encourage people to report overdose signs immediately. In an emergency, stay calm and call 999 straight away.
- Recognise that levels of consciousness may fluctuate for several hours (sometimes days) while under the influence of benzodiazepines. Even if the person appears alert, this may be temporary. Stay with the person and monitor closely for the signs of an overdose.
- Carry and promote naloxone. Ensure the setting has multiple naloxone kits available and trained people are able to respond. Check that kits have not expired and that they are easy to access in the event of an emergency.
- Provide regular refresher training on drug-related emergencies, including information on risk factors, identifying an overdose, basic life support and naloxone.
- If applicable, remind staff to use appropriate personal protective equipment (PPE) and follow procedures when handling substances.

## Actions for drug and alcohol service staff

- Services, and Alcohol and Drug Partnerships should share this alert with local partners who are likely to be in contact with people who take drugs.
- When asking patients about substance use, explain that the contents of street benzos are changing and new substances like bromazolam are becoming more common.
- Use the opportunity to raise awareness on the risks of new drugs and counterfeit medicines. Discuss treatment options and harm reduction approaches, including the risk of mixing drugs and the importance of drug checking.
- Benzodiazepines can cause extreme memory impairment. Discuss ways to keep track of appointments such as setting and sending reminders. Make a note of key points at appointments and recap these each time you meet.
- 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.
- Provide training on overdose and benzodiazepines. SDF offers a free e-learning course called What's happening on the streets with benzos?
- Read the benzo harm reduction and prescribing guidance published by the Medication Assisted Treatment (MAT) programme. This guidance is for staff who support people accessing treatment for benzodiazepine use. It includes information on the prescribing and the safe and effective delivery of appropriate psychosocial interventions.

## Actions for emergency service, clinical and healthcare staff

All staff working in emergency services and health care should be vigilant for the presentation of patients with benzodiazepine toxicity.

They should look out for:

- decreased blood pressure
- decreased consciousness
- decreased mental activity
- decreased pulse
- decreased respiration
- decreased temperature

The most common clinical features of bromazolam toxicity in the ASSIST emergency department toxicology study were reduced consciousness, airway compromise and agitation.

Be aware that testing used by clinical services is varied and as substances change these may not always be picked up by existing urine and saliva test kits. Non-detection of benzodiazepines does not mean that newer benzodiazepines are not present, and a person's clinical history is also important to determine appropriate prescribing and psychosocial interventions.

Build links with your local drug services and liaison team and in all your contacts with patients, encourage them to access support and take-home naloxone.

For further advice, medical professionals can use the National Poisons Information Service 24-hour telephone service on 0344 892 0111, or its online database, TOXBASE.

Twitter

## Legal status

Instagram

LinkedIn

In the UK, many benzodiazepines (including bromazolam) are classified as Class C drugs under the Misuse of Drugs Act (1971).

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The decrease in etizolam may be due to international control. In 2021, etizolam and alprazolam were controlled under the United Nations Convention on Psychotropic Substances (1971), increasing regulations on their production and distribution. The increase in bromazolam and other benzos may be due to their availability and its potential to be used as a substitute.

If bromazolam is internationally controlled, it is likely we will see further changes to the benzodiazepine market and more novel substances will emerge.

## More information

For more information:

- World Health Organization: Critical review report: Bromazolam
- Crew: What is bromazolam? Benzodiazepine information
- Scottish Government: Benzodiazepine use – current trends: evidence review

For more information on overdose, visit [Stop the Deaths](#).

For help and support or information on drugs, visit [NHS inform](#).

To order naloxone, visit [Scottish Families Affected by Alcohol & Drugs: Take-Home Naloxone](#).

Benzos giving unexpected effects? Make a report to RADAR. Use our reporting form or email [phs.drugsradar@phs.scot](mailto:phs.drugsradar@phs.scot)

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Last updated: 08 July 2024

## Version history

09 May 2024 - Version Xylazine alert

05 July 2023 - Version Bromazolam alert

29 March 2023 - Version Nitazenes alert 2023

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