

NITRITES

Other common names Amyl nitrite, butyl nitrite, poppers, snappers

Drug category Vasodilators (see also p.56)

Habit-forming potential

Nitrites do not cause physical dependence; major withdrawal symptoms have never been reported. However, users may become psychologically dependent on the stimulant effect of these drugs.

How taken

By inhalation, usually from small bottles with screw or plug tops or from small glass ampules that are broken.

Legitimate uses

Amyl nitrite was originally introduced as a treatment for angina but has now largely been replaced by safer, longer-acting drugs. It is still available as an antidote for cyanide poisoning. Butyl and isobutyl nitrites are not used medically.

Short-term effects

Nitrites increase the flow of blood by relaxing blood vessel walls. They give the user a rapid high, felt as a strong rush of energy. Less pleasant effects include an increase in heart rate, intense flushing, dizziness, fainting, pounding headache, nausea, and coughing. High doses may cause fainting, and regular use or overdosage by swallowing nitrites may produce a blue discoloration of the skin due to alteration of haemoglobin in the red blood cells.

Long-term effects and risks

Nitrites are very quick-acting drugs. Their effects start within 30 seconds of inhalation and last for about 5 minutes. Regular users may become tolerant to these drugs, thus requiring higher doses to achieve the desired effects. Lasting physical damage, including cardiac problems, can result from chronic use of these drugs, and deaths have occurred.

The risk of toxic effects is increased in those with low blood pressure. Nitrites may also precipitate the onset of glaucoma in susceptible people, by increasing pressure inside the eye.

Signs of abuse

Nitrites have a pungent, fruity odour. They evaporate quickly; the contents of a small bottle left uncapped in a room usually disappear within 2 hours. Unless someone is actually taking the drug or is suffering from an overdose, the only sign of abuse may be a bluish skin discoloration, although this is rare. Overdose is usually through swallowing rather than inhaling, and can result in collapse, seizures, and coma.

Interactions

The blood-pressure-lowering effect of these drugs is greatly increased by sildenafil, tadalafil, and vardenafil (drugs for erectile dysfunction) and their concomitant use should be avoided. In susceptible individuals, the effect may be to precipitate a stroke or heart attack. Alcohol, beta blockers, calcium channel blockers, and tricyclic antidepressants also increase the blood-pressure-lowering effects of nitrites, thus increasing the risk of dizziness and fainting.

OPIOIDS (HEROIN)

Other common names Horse, junk, smack, scag, H, diamorphine, morphine, opium

Drug category Central nervous system depressant

Habit-forming potential

Opioid analgesics include not only those drugs derived from the opium poppy (opium and morphine) but also synthetic drugs whose medical actions are similar to those of morphine (pethidine and methadone). Frequent use of these drugs leads to tolerance, and all have a potential for dependence. Among them, heroin is the most potent, widely abused, and dangerous. It is also associated with criminal behaviour.

After only a few weeks of use, withdrawal symptoms may occur when the drug is stopped; fear of such withdrawal effects may be a strong inducement to go on using the drug. In heavy users, the drug habit is often coupled with a lifestyle that revolves around its use.

How taken

A white or speckled brown powder, heroin is smoked, sniffed, or injected, either intravenously or subcutaneously ("popping"). Other opioids may be taken by mouth.

Legitimate uses

Heroin is widely used both in Britain and Belgium for the treatment of acute severe pain, such as the pain following a heart attack or acute heart failure. It is not used medically in other countries. Heroin and morphine are powerful cough suppressants. Other opioids, such as morphine and methadone, are used as analgesics. Most opioids are listed under Class A and Schedule II of the Misuse of Drugs legislation. Mild opioids such as codeine are also sometimes included in cough suppressant and antidiarrhoeal medications and are listed under Schedule V.

Short-term effects

Strong opioids induce a feeling of contentment and well-being. Pain is dulled and the activity of the nervous system is depressed; breathing and heart rate are slowed and the cough reflex is inhibited. First-time users often feel nauseated and vomit. With higher doses, there is increasing drowsiness, sometimes leading to coma and, in rare cases, death from respiratory arrest.

Long-term effects and risks

The long-term regular use of opioids leads to constipation, reduced sexual drive, disruption of menstrual periods, and poor eating habits. Poor nutrition and personal neglect may lead to general ill health.

Street drugs are often mixed (cut) with other substances, such as caffeine, quinine, talcum powder, and flour, that can damage blood vessels, affect the lungs, or lead to the formation of blood clots. There is also a risk of abscesses at the injection site. Dangerous infections, such as hepatitis, syphilis, and human immunodeficiency virus (HIV), may be transmitted via unclean or shared needles.

After several weeks of regular use, sudden withdrawal of opioids produces a flu-like withdrawal syndrome beginning 6–24 hours after the last dose. Symptoms may include runny nose and eyes, hot and cold sweats and goose flesh (hence "cold turkey"), sleeplessness, aches, tremor, anxiety, nausea, vomiting, diarrhoea, muscle spasms, and abdominal cramps. These effects are at their worst 48–72 hours after withdrawal and fade after 7–10 days.

Signs of abuse

An opioid abuser may exhibit such signs as apathy, neglect of personal appearance and hygiene, loss of appetite and weight, loss of interest in former hobbies and social activities, personality changes, and furtive behaviour. Users resort to crime to continue financing their habit. Signs of intoxication include pinpoint pupils and a drowsy or drunken appearance.

Interactions

Opioids dangerously increase the risk of sedation with any drug that has a sedative effect on the central nervous system, including benzodiazepines and alcohol.