

Training in the use of naloxone: Management and reversal of opioid overdose

Key messages

- As much as two-thirds of witnessed overdose deaths might be prevented if basic life support and the drug naloxone was given at the time of the overdose.
- The training of drug users constitutes an essential resource in the management of opioid overdoses.¹
- There is identified and underused potential for peer education and intervention where significant others are trained in overdose recognition and management.
- Friends, family members and carers are often the ones to encounter someone overdosing on opioids and should be offered overdose training.
- Obstacles to naloxone training and distribution have been identified at individual (transportability, stigma) and at a systems level (police involvement, prescription laws).¹

Naloxone: Questions and Answers

Q: What is naloxone?

A: Naloxone is an antidote drug that temporarily reverses the effects of heroin and other opioid drugs. Opioids can kill by stopping a person breathing; Naloxone when administered correctly will quickly reverse the overdose effects and the person will start breathing and regain consciousness. Naloxone can save lives.

Naloxone is regularly carried by ambulance crews for use in the event of a suspected overdose. It is available as a prescription only medicine in a range of formats, including ampoules, pre-filled syringes, and 'minijet' preparations.

It is permissible to prescribe take-home naloxone to named patients and is established practice in some parts of the country and is fully endorsed in the UK Clinical Guidelines (Drug Misuse and Dependence: UK Guidelines on Clinical Management).²

Q: What does overdose and naloxone training involve?

A: Training typically covers the reduction of overdose risk; recognising the signs of overdose, correct emergency response - the importance of calling an ambulance; basic life support; the recovery position and administration of naloxone.

Administering naloxone is not intended to replace calling an ambulance, rather it is to help keep someone alive whilst waiting for the ambulance to arrive.

Q: What else is naloxone used for?

A: Naloxone does not have any other use apart from reversing the effects of heroin and other opioids when taken in overdose, either accidentally or deliberately. Opioids can kill by depressing respiration (people stop breathing) and naloxone blocks this effect, therefore it is used in situations where someone may have taken too large an amount of an opioid than their body can tolerate. For example, an accidental overdose of an opioid; in newborn babies where the mother has received an opioid pain killer during labour; or in people who have been given an opioid during an operation or with their anaesthesia.

Q: Is it harmful?

A: Naloxone is a very safe drug and there are no reports of it causing overdose in humans. The main risk of giving naloxone to someone who is dependent to heroin or other opioids is that it will cause them to suddenly go into withdrawal, which would be distressing, but not

fatal. Reports of a drop or a rise in blood pressure, and effect on the heart are seen very rarely, and only in people with cardiovascular disease.

Q: How much of it is needed for it to cause harm?

A: Naloxone would have to be used in enormous quantities in order to be harmful. For example, the lethal dose of naloxone is estimated to be 260mg per kg of body weight, so for a 70kg adult that would be 18.2g – the dose used in clinical practice is 0.1 to 0.2mg. Naloxone is inactive if swallowed – only active if injected or taken intra-nasally. In reality it is less harmful than many over the counter medicines if taken accidentally.

Q: How could it be misused?

A: Naloxone does not cause dependency and has no euphoria-inducing side effects. It works by blocking any effects from heroin or other opioids, does not cause drug dependence, and as a consequence there is a minimal risk of it being misused.

Q: How is it administered?

A: It is given by injection – either intravenously or intramuscularly.

Q: What is the story so far with naloxone – do drug users have access to it now?

A: It is already being prescribed directly to drug users who are in receiving treatment from a drug treatment service, and to those coming out of the prison. This is not yet standard practice, but is increasingly becoming so. The law was changed in June 2005 so that it became legal for naloxone injection to be administered by anyone, to anyone, for the purpose of saving life.

Supplementary: the law also now allows other injections which are considered life savers to be administered such as adrenaline injection (used for example for treating people who have a severe and life threatening allergic reaction to nuts or to bee stings), and glucagon injection (used for diabetics when their blood sugar goes dangerously low and they become unconscious). Both adrenaline and glucagon are available in a form that makes it easy for a parent or partner or teacher to administer in an emergency.

Q: What safeguards are there in place to stop other people (especially children) getting hold of it?

A: The risks of harm are minimal as the drug is very safe. But all medicines (whether illicit, prescribed or bought over the counter) should be stored out of reach and out of sight of children. Naloxone is inactive if swallowed – only active if injected or taken intra-nasal. In reality it is less harmful than many over the counter medicines if taken accidentally.

Q: Have drug related deaths gone down?

A: The number of drug related deaths have fluctuated over the years, and remain too high. Drug related deaths in England and Wales have risen from 1432 (in 2002) to 1604 (in 2007)³ *highlighting the urgency to increase access to overdose training and naloxone supply to injecting opioid users, their families and carers.*

For further information : www.take-homenaloxone.com

¹Romina Lopez Gaston, David Best, Victoria Manning and Ed Day (2009) Can we prevent drug related deaths by training opioid users to recognise and manage overdoses? Harm Reduction Journal

² Department of Health and the devolved administrations (2007). *Drug Misuse and Dependence: UK guidelines on clinical management*. London: Department of Health (England), the Scottish Government, Welsh Assembly Government and Northern Ireland Executive

³ Office of National Statistics (2008) *Report on drug-related deaths 2003-2007*