

Information for opioid users, families and friends

Opioids and their effects

Opioids are drugs derived directly from the poppy plant, such as morphine, codeine and opium; the term also relates to synthetic or semisynthetic drugs that work in a similar manner, such as oxycodone, methadone, hydromorphone and heroin. Opioid drugs can be taken orally, snorted, injected, smoked or absorbed through the skin via a patch.

Certain opioids are used in surgical anaesthetic procedures and are also prescribed for acute (severe) pain in individuals with malignant and non-malignant cancer, post-surgery, severe injury and a variety of medical conditions that cause ongoing debilitating (chronic) pain.

Other opioids such as heroin may be used because of the pleasant feelings that result (“the high”). Heroin is also known as diacetylmorphine, morphine diacetate and diamorphine. Common street names for it are dope, gear, smack, hammer, horse – and many others. Heroin is an opioid analgesic that was originally synthesised in 1874 in London by a physics and chemistry researcher who was searching for an alternative to morphine.

When heroin enters the brain, the user experiences a surge of pleasurable sensation known as a “rush”. When heroin crosses the blood-brain barrier, it is converted to morphine and quickly binds to opioid receptors, producing a euphoric feeling (the afore-mentioned “high”). Opioids also stimulate the release of dopamine in the brain, thus causing feelings of euphoria (pain relief).

There are also specific opioids prescribed to treat individuals who are dependent on (addicted to) heroin and/or have developed dependency to prescription opioids due to being prescribed the drugs over a period of time for medical reasons. Treatment for opioid dependency is known as pharmacotherapy, Opioid Replacement Therapy (ORT) or Opioid Substitution Therapy (OST) and the drugs used are methadone, buprenorphine (Subutex®) and the buprenorphine/naloxone combination (Suboxone®).

Opioids bind with receptors in the brain, spinal cord and other parts of the body. When they bind to certain receptors, opioids have an impact on the central nervous system (CNS) and the respiratory centre in the brain, causing breathing and heart rate to slow down. When breathing and heart rate slows to a certain point, overdose occurs. This can result in death and/or injury such as Acquired Brain Injury.

Opioid drugs can cause side effects such as sleepiness, constipation, dry mouth, nausea and dependence. Physical dependence (addiction) to opioids is not, as some may claim, immediate and does not develop from taking the drugs once or over a short period of time (as they are prescribed). However, dependence is inevitable if opioids are consumed on a daily basis over time (six to eight weeks).

Opioid overdose

Overdose often happens accidentally. It occurs when a toxic amount of a drug, or combination of drugs, overwhelms the body. People can overdose on many substances, including alcohol, benzodiazepines, opioids, stimulant drugs or a mixture of drugs.

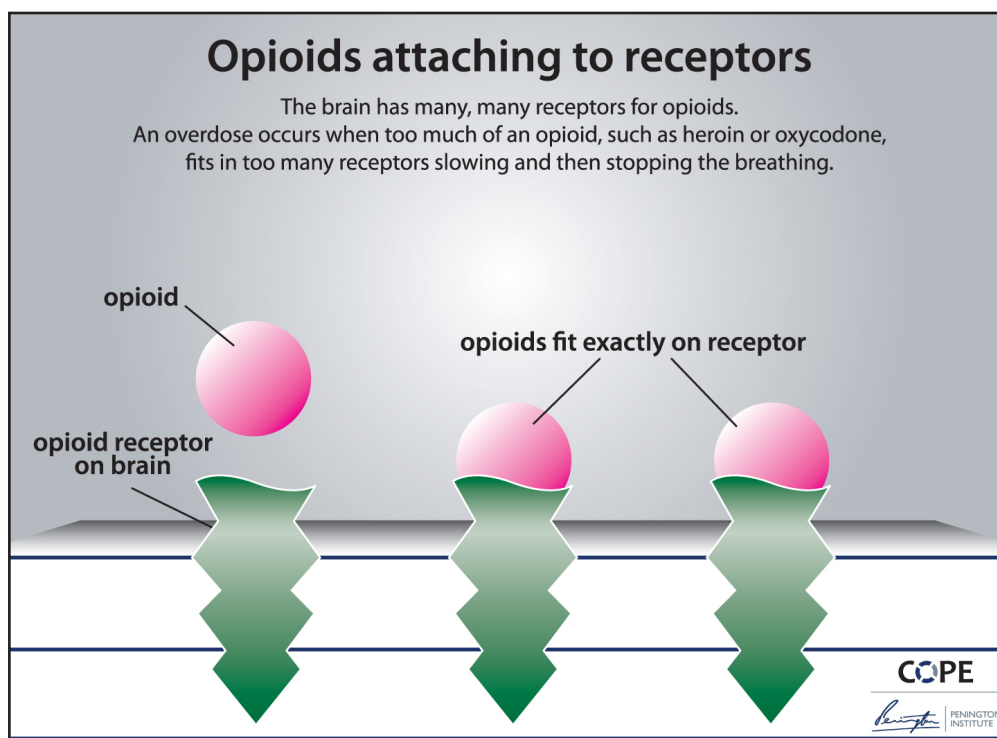
Opioid overdoses are rarely instantaneous. Most commonly, people will stop breathing slowly, minutes to hours after taking the drug/s. So, in most cases, there is time to intervene between the start of an overdose and the point at which a person would die. Even if a person were to

overdose immediately, an appropriate response could reverse the overdose and keep the person breathing and alive.

The brain has many receptors for opioids.

The diagram below demonstrates how opioid overdoses occur when the level of opioids used sedates a person to the point that they are unresponsive to stimulation and their breathing rate drops or stops.

This occurs because opioids have an impact on the respiratory centre in the brain, causing breathing to slow down.



Source: Adapted diagram from *Guide To Developing and Managing Overdose Prevention and Take-Home Naloxone Projects* <http://harmreduction.org/our-work/overdose-prevention/>

If someone cannot breathe or is not breathing sufficiently, oxygen levels in the blood decrease, causing a process called cyanosis. In fair skinned people this is represented with blue tinged lips and fingers. In a darker skinned person, lips and fingers become ashen or grey. Oxygen starvation will eventually stop vital organs such

as the heart and then the brain, and can lead to unconsciousness, coma and, potentially, death. After three to five minutes without oxygen, brain damage starts to occur. In the case of opioid overdose, survival wholly depends on maintaining the ability to breathe and sustaining oxygen levels.

Overdoses can also occur when a person misunderstands the directions for use, accidentally takes an extra dose or deliberately misuses a prescription opioid or an illicit drug such as heroin. Also at risk is the person who takes opioid medications prescribed for someone else, as is the individual who combines opioids – prescribed or illicit – with alcohol, certain other medications and even some over-the-counter products that depress breathing, heart rate and other functions of the central nervous system.

Overdose risk is increased when someone:

- » *first starts using opioids;*
- » *resumes using opioids after a period of time not using. This can occur in a variety of situations, such as when people are released from incarceration or have recently completed a drug withdrawal episode;*
- » *switches from one opioid drug to another, for example when being stabilised onto methadone or transferred from a short-acting opioid to a sustained release opioid;*
- » *uses more opioids than usual or exceeds a prescribed dose; and/or*
- » *uses a combination of drugs at the same time (polydrug use), for example mixing heroin, prescription opioids, benzodiazepines and alcohol. Polydrug use is particularly dangerous as it increases the risk of overdose significantly.*

How does a person avoid an opioid overdose?

- » Only take medicine if it has been prescribed to you by your doctor.
- » Try to never inject opioids while alone (but if you are doing so alone, let someone you trust know what you're doing).

- » Do not take more medicine or take it more often than instructed.
- » Never mix pain-relief medicines with alcohol, sleeping pills or any illicit substance.
- » Store your opioids and other medicines in a safe place where children or pets cannot reach it.
- » Learn the signs of overdose and how to use naloxone.
- » Teach your family and friends how to respond to an overdose.
- » Dispose of unused medication properly.
- » Call a doctor if your pain gets worse, rather than take more medicine.

Signs of opioid overdose

Recognising Overdose

- » *No response to stimuli (sternum rub).*
- » *Body is limp – floppy arms and legs.*
- » *Deep snoring, gurgling or choking sound.*
- » *Very infrequent (less than 8 breaths per minute), irregular or no breathing.*
- » *Pale, clammy skin.*
- » *Blue or grey tinged skin (usually lips and fingertips show first).*

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Too often we hear of family members or friends who have lost a loved one, even when they have known that the person is intoxicated due to opioid use but think the best response is to allow

them to sleep off the effects. Heavy snoring and gurgling noises are a signs of overdose.

If you're having a hard time telling the difference, it is best to treat the situation like an overdose – it could save someone's life.

Using naloxone to reverse opioid overdose

Naloxone (also known by the brand name Narcan®) is a type of medication called an "opioid antagonist". Naloxone is a life-saving medicine that temporarily reverses the life-threatening depression of both the central nervous and the respiratory systems that occurs in overdose as it has a stronger affinity to the opioid receptors. It knocks the opioids off the receptors for a short time (around 30 to 90 minutes)

In Australia, naloxone is supplied as an Intramuscular (IM) injection under the Pharmaceutical Benefits Scheme (PBS), or as over the counter medication.

Any doctor (or certain nurse practitioners) can prescribe naloxone to a person at risk of an opioid overdose. It is also available over the counter at pharmacies without a prescription. Some people prefer to visit an agency that incorporates COPE initiatives and provides training in recognising the signs of overdose and administering naloxone and rescue breathing.

Safety advice

If you suspect an opioid overdose is occurring, it is safe to give naloxone. If the person is not breathing, it will not hurt to administer naloxone. If there is an opioid involved, they will likely start breathing again, though they may still be sedated from other drugs ingested. Many overdoses happen due to mixing opioids with other drugs, which is a common practice. In the worst case scenario, naloxone will simply have no effect; in the best case scenario, it will save a life.

Naloxone only reverses the effects of opioids such as heroin, methadone, morphine, opium, codeine or hydrocodone (MS Contin®, Kapanol® Endone®, OxyNorm®, OxyContin®).

It does not counter the effects of other types of drugs, such as benzodiazepines (drugs including diazepam, midazolam or alprazolam), antihistamines, alcohol or other sedatives or stimulants such as cocaine and amphetamines.

Naloxone temporarily reverses an opioid overdose. Once administered, naloxone acts in two to five minutes. If the overdosing person does not wake up in five minutes, a second dose should be given (400mcg or 0.4mg in each dose). It is highly recommended that you call triple zero (000) for an ambulance and apply rescue breathing (if required) while you wait for the naloxone to take effect so the person still gets oxygen to their brain and is not at risk of brain injury.

Naloxone has no abuse liability or potential for misuse and no adverse effects. *If naloxone were to be consumed by an individual or child with no opioids in their system it would do nothing. However, like all medicines, it is a good idea to keep naloxone stored safely out of the reach of children and pets.*

There are very few side effects and/or risks associated with naloxone. A very small number of people have hypersensitivity to naloxone. If an individual shows any signs of an allergic reaction, such as hives, difficulty breathing or swelling of the face, lips, tongue or throat, seek medical assistance immediately.

People who have used opioids may go into withdrawal and, although withdrawal will make the person feel sick and uncomfortable, it is much better than dying. Signs of withdrawal after administration of naloxone may include:

- » feeling nervous, restless or irritable;
- » body aches;
- » dizziness or weakness;
- » diarrhoea, stomach pain or mild nausea;
- » fever, chills or goose-bumps; or
- » sneezing or runny nose in the absence of a cold.

If an individual experiences withdrawal symptoms due to the administration of naloxone, it is important to remind them not to use any more opioids to counter withdrawal as naloxone usually wears off in 30-90 minutes and the person can stop breathing again unless more naloxone is available. This is especially the case if they have taken other depressant drugs as well as the opioids (such as alcohol or benzodiazepines). For this reason, it is important to always call triple zero (000) so the person can be reviewed and/or taken for medical care.

Legal considerations

Prescribing and dispensing naloxone is fully consistent with Victorian and Commonwealth law. It is legal for a person to carry naloxone. Naloxone is not a controlled substance, nor a drug with any abuse potential. It is a Schedule 4 prescription medication that can be prescribed by a doctor to a person at risk of overdose. Naloxone is also available over the counter at pharmacies without a prescription as a Schedule 3 medication.

It is legal for a non-medical person to administer naloxone to someone else to treat a potentially fatal overdose.

Reducing harms associated with opioid use

If you are concerned about your own use of opioids, don't wait – talk with the GP who prescribed the medications for you if relevant or contact **DIRECTLINE 1800 888 236** to explore treatment options available for you. If you are concerned about a family member or friend, you could urge them to do the same. Alternatively, if you are a concerned family member, friend or loved one, you could seek advice around treatment options and communicating your concerns to your loved ones.

Effective treatment of opioid dependency can reduce the risk of overdose and help a person who is dependent on opioids (prescribed or illicit) to attain a healthier life. Pharmacotherapies such as methadone or Suboxone® have been proven to be effective in treating opioid addiction. However, not all GPs prescribe opioid pharmacotherapies; to obtain a referral to a prescribing GP in your locality, contact **DIRECTLINE 1800 888 236**.

Individuals who have experienced a non-fatal opioid overdose have endured a life-changing and traumatic event. They have had to deal with the emotional consequences of overdosing, which can involve embarrassment, guilt, anger and gratitude – all accompanied by the discomfort of opioid withdrawal. Most need the support of family and friends delivered in a non-judgmental and empathetic manner to take the next steps in reducing and/or ceasing their opioid use.

While many factors can contribute to opioid overdose, it is almost always an accident. Moreover, the underlying problem that led to opioid use – most often pain or dependence on opioids – still exists and continues to require attention. Furthermore, the individual who has experienced an overdose is not the only one who has endured a traumatic event. Family members

often feel judged, helpless or inadequate because they could not prevent the overdose. They are likely to be fearful that another overdose will occur and struggle to understand why their loved one uses drugs. It is important for families to work together to help their loved one obtain the help that he or she needs.

Learning how to recognise and respond to overdose, including the administration of naloxone, is a fundamental and effective harm reduction strategy that empowers drug users and their families and loved ones to save lives!

Support networks

It is not a sign of weakness for a person or a family to admit that they or a loved one is having difficulty ceasing or reducing their drug use and/or dealing with the trauma of overdose without assistance. It takes real courage to reach out to others for support and to connect with members of the community who can provide assistance. It is now considered best practice for alcohol and drug treatment providers to include families, friends and loved ones in treatment planning, which can provide structured, therapeutic support and feedback to family members.

If the opioid user's underlying problem is pain, referral to a pain specialist may be in order. If it is dependency, the person can be referred to **DIRECTLINE 1800 888 236** to explore treatment options and to find the closest intake and assessment hub for referral into Victoria's drug treatment system. Choosing the right treatment option can be a dynamic and empowering process: it is important that the individual requiring drug treatment is able to actively participate in their treatment planning process.

Talking to your loved one about naloxone

Often people are unsure how to start talking about overdose. If you and your friends or family have not talked about how to prevent an overdose before, you may feel a bit uncomfortable about this conversation. It is best to stick to the facts and avoid judgement about someone's choice to use drugs. Some relevant facts about naloxone are:

- » naloxone saves lives;
- » it works almost straight away and is easy to inject;
- » administering naloxone is safe;
- » naloxone only works on opioid-type drugs (see list above);
- » with training, you will know the difference between someone who is overdosing and someone who is just very intoxicated (deep nod); and
- » there are other life-saving actions that can be used such as calling an ambulance and giving rescue breathing.

What can I do if they don't want naloxone?

Don't despair. There may be another time you can talk about overdose and naloxone. If your friend/partner/child/client does not agree to get naloxone, you can still have training in overdose response. Overdose responses include calling an ambulance and giving rescue breathing. They can help you keep a person breathing while you wait for the paramedics to arrive. Depending on supply, it may also be possible to obtain naloxone yourself, over the counter at a pharmacy, meaning your loved one will not have to have it prescribed or necessarily be part of the process.

The following list of contacts may be useful:

DirectLine – 1800 888 236 – DirectLine provides 24-hour, seven-days-a-week counselling, information and referral. At DirectLine, you can talk to professional counsellors who are experienced in alcohol- and drug-related matters. DirectLine is free, anonymous and confidential.

Drug Info – 1300 85 85 84 – A 24-hour telephone information service targeted at students, parents, friends, relatives and other people interested in obtaining relevant, up-to-date information about alcohol and other drugs. This information covers both the short- and long-term effects of various drugs, statistical data on use trends and information on the social health issues associated with drug use.

Family Drug Help & Helpline – 1300 660 068 – Family Drug Help is a Victorian service for people concerned about a relative or friend using alcohol or other drugs. The service operates 24 hours, seven-days-a-week, and is staffed by volunteers with experience of alcohol and other drug issues within their family. The Helpline is staffed by volunteers from 9am to 5pm Monday to Saturday and by professional counsellors at all other times.

Bridgehaven Women’s Rehabilitation Program – (03) 9480 6488 or call Directline. Bridgehaven offers a 16-week drug rehabilitation program for women who are wanting to address their alcohol and other drugs issues. The program involves a four-month residential stay and a four-to-six month aftercare program. Its family service supports mothers and their children to remain together while the mother engages in alcohol and other drugs treatment. In-house childcare is provided by trained early years professionals who deliver educational activities for children residing at Bridgehaven.

Family residential rehabilitation services

– **1800888236** – The Family Residential Rehabilitation Program, provided by Odyssey House, is directed at drug-addicted parents and is unique in alcohol and drug rehabilitation in that it features qualified pre-school teachers and a fully operational child care/pre-school centre.

Parent support programs – Parent support programs are short-term therapeutic group programs for families of drug users that are facilitated by drug and alcohol professionals. These programs provide:

- » strategies to promote continuing communication between parents and their adolescent children for negotiating and setting guidelines on behaviour;
- » advice to increase the repertoire of communication and negotiation strategies available within the family;
- » assistance to deal with the anxiety surrounding the misuse of drugs; and
- » assistance to develop supportive relationships, which are held as a key factor in the remission of substance misuse problems.

For information and contact details of all drug treatment services, call the 24-hour telephone service **DirectLine** on **1800 888 236**.

Support is also available via 12-step self-help groups such as **Narcotics Anonymous (NA) (03) 9525 2833** (for drug users) and **Al-Anon (03) 9620 2166** (for family members).

Community Overdose Prevention and Education

The Community Overdose Prevention and Education (COPE) Program is a community-based opioid overdose prevention initiative developed with funding from the Victorian Government. It educates individuals in the community who are potential overdose witnesses around how to prevent, recognise and respond to an opioid overdose, including the administration of naloxone via intramuscular injection. These individuals may be opioid users or a family member, friend or loved one of someone who uses opioids.

Take-home naloxone programs have been established throughout the United States and in many other countries, including the United Kingdom and, more recently, Australia. As a result of having lay people administer naloxone in the community, hundreds of lives have been saved each year. Experience both internationally and in Australia indicates that overdose prevention activities incorporating naloxone are readily embraced both by people who use opioids and by the broader community and that they do reduce overdose-related death and/or injury.

COPE is modelled on existing overdose prevention programs that have seen lay people successfully administer naloxone to individuals overdosing in the community. The over-arching goal of COPE is to strive for the widespread use of naloxone as a first aid response to overdose in order to reduce opioid-related deaths and/or injury.

Opioid use in Australia

Data recently released by the National Coronial Information System supports the need for Community Overdose Prevention and Education (COPE). Over a five year period (2007-2011), at least 4,102 died from an opioid overdose, 71.2% of which were unintentional. Heroin, methadone and oxycodone were the three largest causes of opioid overdose, although three quarters of overdose fatalities involved poly drug use.