



# Frontline Workers Overdose Awareness and Naloxone Administration Pre Training Reading Material





## **Purpose of the pre training reading material:**

To provide frontline workers with foundation knowledge of Overdose and Naloxone in preparation for attending the face to face training.

## **The pre training reading material:**

1. Provides information on Overdose in Ireland
2. Provides a background to the naloxone Project in Ireland
3. Provides an awareness of the role of the HSE and Naloxone as part of the government's strategy: Reducing Harm, Supporting Recovery "A health-led response to drug and alcohol use in Ireland 2017-2025"
4. Provides an understanding of overdose and the observable signs
5. Provides an understanding of what naloxone is and how it works

## **Purpose of the face to face training:**

To provide frontline workers with the skills to;

- Recognise, intervene and respond to an opioid overdose including administration of naloxone.
- Use the training flashcards to provide training to people who use drugs

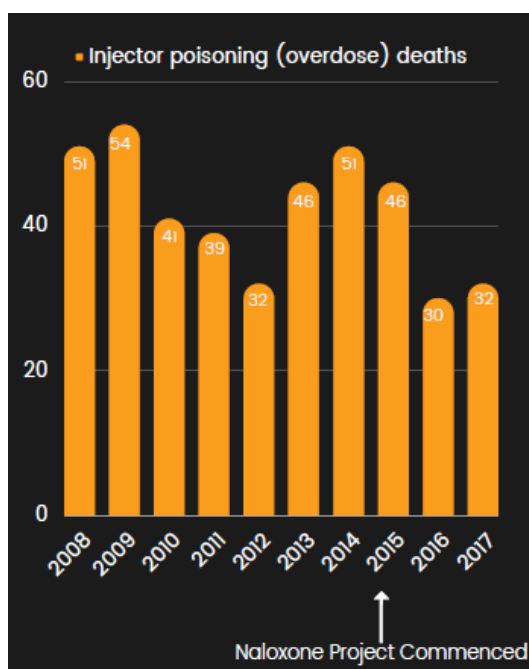
## **The face to face training will include:**

1. Overdose risk factors
2. What an opioid overdose is
3. How to identify an opioid overdose
4. ABC response to an overdose
5. Calling an Ambulance
6. What naloxone is
7. How to use naloxone
8. Advise on procedures to obtain resupplies of used, lost or expired naloxone
9. What to do if someone gets a needle stick injury
10. How to use the training flashcards
11. Data to be submitted to the HSE National Social Inclusion Office

## 1. Information on Overdose in Ireland

### Overdose deaths data in Ireland 2008-2017

Note: Most recent data available on drug-related deaths is 2017



38% decline overall in opioid injector deaths since 2008

Injector deaths have fluctuated

- ↓ Declining 69% between 2009–2012
- ↑ Rising by 42% between 2012–2015
- ↓ Declining 42% since 2015

The majority of these deaths are preventable, if they are reached early by the use of naloxone.

## 2. Background to the Naloxone Project in Ireland

Naloxone is a semi-synthetic competitive opioid antagonist medication recommended by the World Health Organisation (WHO) for the treatment of Opioid overdose. It acts by reversing, within minutes, the effects of opioid overdose. Its efficacy has been proven internationally.

In 2014 the WHO released guidelines recommending that ‘People likely to witness an opioid overdose should have access to naloxone and be instructed in its administration to enable them to use it for the emergency management of suspected opioid overdose’.

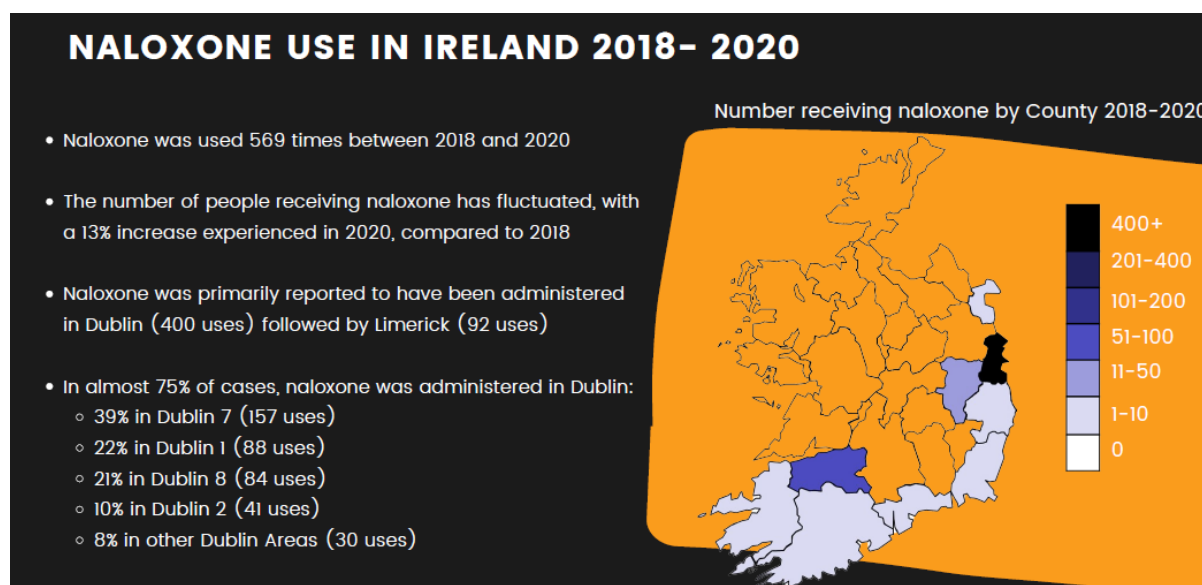
The Naloxone Demonstration Project was established by the Health Service Executive (HSE) in 2015 to test the feasibility of making naloxone available for use by opioid users in order to prevent death from overdose. Under action 40 of the National Drugs Strategy (2009-2016) which aimed to tackle the harm caused by misuse of drugs.

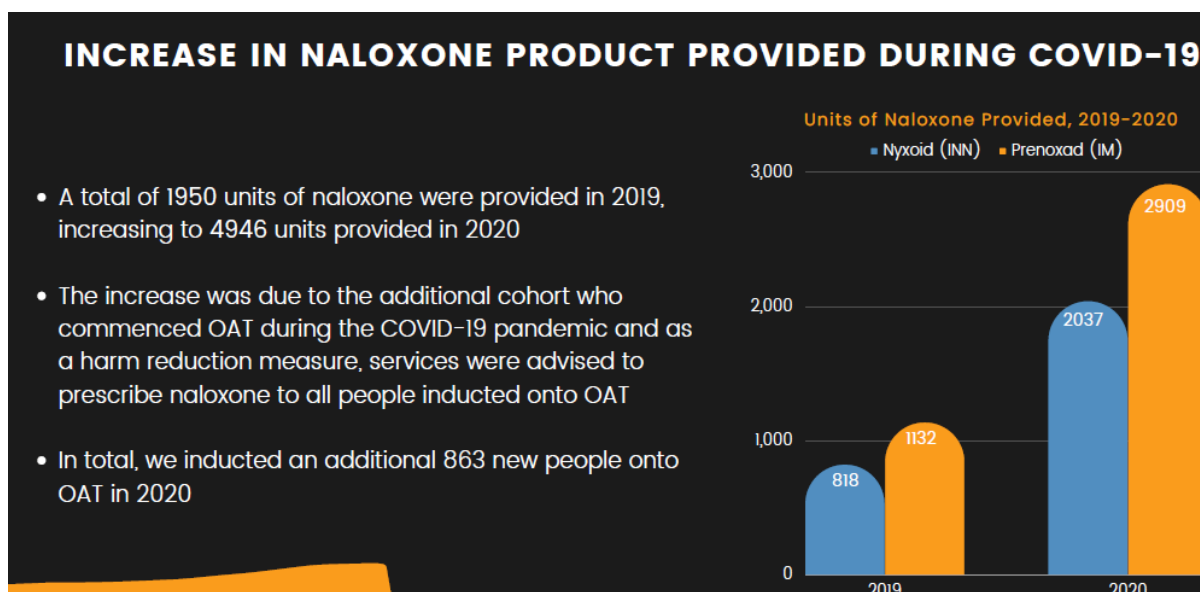
The results of the evaluation of the project are detailed in the below report:

[Clarke, A, and Eustace, A. \(2016\) External Evaluation of the Naloxone Demonstration Project: Health Service Executive](#)

### Details of Naloxone use in Ireland 2018-2020:

Between 2018 and 2020 it was reported that naloxone was administered to 569 people. Of these, 98% survived the overdose with nine deaths (2%).





DRUG INSIGHTS REPORT 2 from the Health Service Executive National Social Inclusion Office on the Naloxone Programme in Ireland:  
[Naloxone Administration by Addiction and Homeless Service Providers in Ireland: 2018-2020](#)

### 3. The role of the HSE

The HSE is the lead agency in [Reducing Harm, Supporting Recovery “A health-led response to drug and alcohol use in Ireland 2017-2025](#), objective 2.2.30 part b) as detailed below;

No.	Strategic Action	Delivered by:	Lead Agency	Partners
2.2.30	Continue to target a reduction in drug-related deaths and non-fatal overdoses.	a) Finalising HSE-led Overdose Prevention Strategy with a particular focus on implementing preventative measures to target high-risk cohorts of the drug-using population and known overdose risk periods;	HSE	DOH
		b) Expanding the availability of Naloxone to people who use drugs, their peers, and family members;	HSE	C&V sectors, UISCE, NFSN, DATFs

To fulfil this objective the HSE National Social Inclusion Office coordinates the training, distribution and supply of both naloxone products to services and funded agencies.

## 4. Overdose and the Observable signs

### What is an opioid overdose?

Opioids are a class of drugs used for pain relief. They can also lead to feelings of relaxation, happiness, and euphoria, and are highly addictive. Opioids are available both as a prescription (e.g. methadone, fentanyl) and as an illegal drug (e.g. heroin). Opioids are classed as a sedative type of drug that depress/sedate the Central Nervous System (CNS) and act as a respiratory depressant

Opioid use can lead to death due to the effects of opioids on the part of the brain which regulates breathing.

The time between a person using the drug(s) and slipping into an overdose varies from a few minutes to several hours, this is dependent on what drugs they have taken and how much they have used.

Death can occur within minutes of opioid ingestion. But often, prior to death there is a longer period of unresponsiveness lasting up to several hours. This period is sometimes associated with loud snoring, leading to the term “unrousable snorers” or known as the death rattle.

**In cases of fatal overdose, the persons breathing slows to the point where oxygen levels in the blood fall below the level needed to transfer oxygen to the vital organs and the brain.**

- Typically, the individual becomes unresponsive, blood pressure progressively decreases and the heart rate slows, ultimately leading to cardiac arrest.
- Death can occur within minutes of opioid ingestion. But often, prior to death there is a longer period of unresponsiveness lasting up to several hours.
- This period is sometimes associated with loud snoring, leading to the term “unrousable snorers”.

<p>Opioids are sedatives that depress/sedate our Central Nervous System (CNS)</p> <p>Opioids are used for the treatment of pain.</p>	<p>Non-medical use, prolonged use and non-prescribed use can lead to opioid dependence.</p>	<p>Opioid overuse can lead to death as it causes difficulties with breathing.</p>
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### Risk factors for overdose:

Take a few minutes to note below what you think the risk factors for overdose are.

Note: These are your own notes, we will discuss the risk factors during the training.

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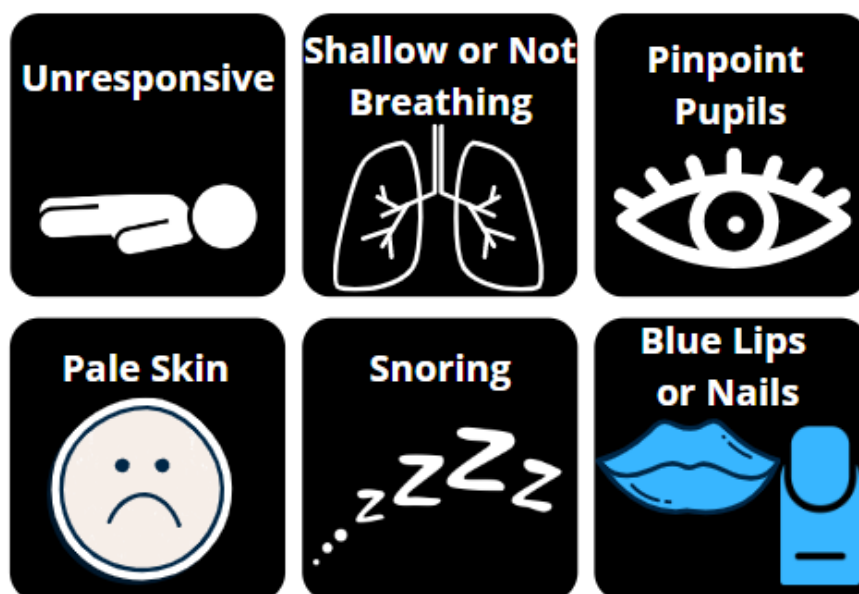
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**Most overdoses are witnessed by other people who use drugs. However they are also often witnessed by friends, staff and other members of the public. For this reason it is essential to recognise the signs and symptoms of an overdose.**

### Observable signs of an opioid overdose

Opioids affect how your brain controls your breathing. If more opioids are taken than a body can handle, it will start to show signs and symptoms of an overdose, such as:

- Unresponsive to noise or touch – ‘unroutable’
- Pale Skin
- Blue lips fingernails ‘bluish’ tinge (Or a grey tinge to lips and nails in those with black skin)
- Shallow breathing or not breathing at all
- Snoring
- Pinpoint pupils (not with everyone)
- Loss of consciousness



### The Myths:

Take a few minutes to note below any myths you have heard of that have been used to try and reverse an overdose.

Note: These are your own notes, we will discuss the myths during the training.

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The time between a person actually using the drug(s) and slipping into an overdose varies from a few minutes to several hours, this is dependent on what drugs have been taken and how much has been used.



Death following opioid overdose can be preventable if the person receives basic life support and the timely administration of the drug naloxone.

**You may be the difference between a person living and dying from an overdose.**

## 5. Naloxone and how it works

### What is Naloxone?

Naloxone (pronounced na-LOX-own) is a prescription medication that will temporarily reverse the effects of an opioid overdose if administered in time.

- Examples of opioids include heroin, morphine, codeine, methadone and fentanyl.
- Naloxone is not a cure but can help along with CPR to keep a person alive until an ambulance arrives.
- Naloxone is short acting and the effects of naloxone can last from 20 to 90 minutes depending on what opioids the individual has used.
- Naloxone only temporarily reverses the effects of overdose and therefore there is a risk

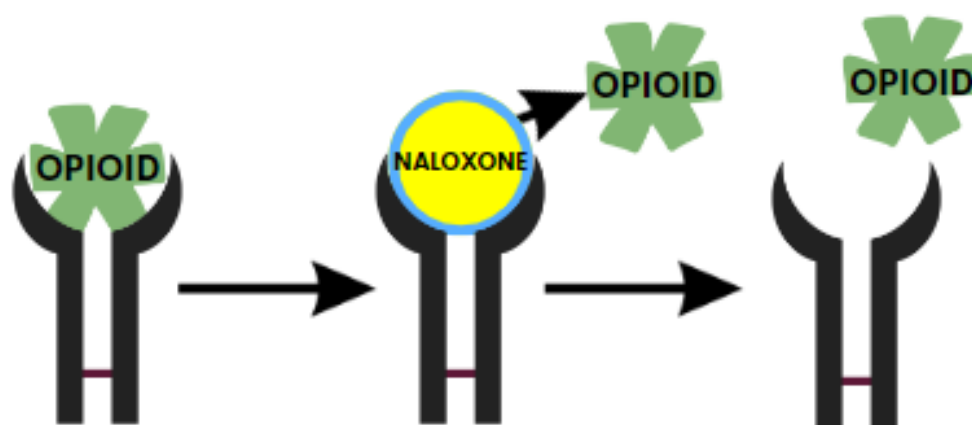


that the person can return back into an overdose after 20 minutes especially if the duration of the opioid is long acting for example Methadone

- Naloxone has virtually no effect in people who have not taken opioids
- Naloxone itself has no psychoactive properties and “no intoxicating effects or misuse benefits

### How does Naloxone work?

Naloxone works by displacing opioid molecules from their receptors in the brain, see below diagram:



- The Opioid fit into the brains receptors.
- The brains signals are blocked.
- Breathing slows and stops.
- The person becomes unconscious.
- Naloxone replaces the opioid in the receptor.
- Brain signals resumes and breathing resumes.
- The person wakes up from the overdose.
- Naloxone is only temporary so remaining opioids can return to the receptors.

## There are two types of Naloxone available in Ireland: Intramuscular Naloxone and Intranasal Naloxone

**Intramuscular Naloxone (brand name Prenoxad™)** a pre-filled syringe and needle which once assembled is injected into the middle third outer thigh. It comes in a yellow box, wrapped in a clear wrapper and contains;

- A pre-filled syringe containing 2mg/ml of a clear, colourless solution.
- Two individually packaged needles with blue fittings in protective sheaths.
- An extra needle is in the box in case the other needle gets damaged during administration.
- A patient information leaflet, which has pictogram for administration of the device.
- **Each pack is for SINGLE INDIVIDUAL USE only**
- **5 doses of 0.4mg per dose**



**Intranasal Naloxone (brand name Nyxoid™)** is a needle-free device that requires no assembly. A box of Intranasal Naloxone contains;

- Two nasal sprays.
- Each nasal spray is sealed individually in a blister pack.
- A Package Leaflet with information about the product and stepwise instructions for use.
- **Each nasal spray is for SINGLE INDIVIDUAL USE only**
- **1.8mg per dose**
- If both doses are required they are sprayed into alternate nostrils.



The below **Opioid Overdose and Naloxone** training flash cards will be provided to you and used during the face to face training session.

**Opioid Overdose and Naloxone Training Flashcards**

**01 Risk Factors: Mixing Drugs (Polydrug Use)**  
 Risk of overdose increases when mixing any of the below:  
 Heroin, methadone, morphine, Synthetic opioids (fentanyl), Prescription medications, Alcohol, Benzo's, Pregabalin, gabapentin or any other medications that may make you drowsy

**02 Risk Factors: Reduced Tolerance to Opioids**  
 Tolerance to Opioids may be reduced:  
 After a break in drug use  
 On hospital discharge  
 On release from prison  
 When starting or leaving drug treatment

**03 Risk Factors: Additional Risk Factors**  
 Increased Risk of Overdose factors include:  
 Previous experience of overdose, Long history of drug use, Not using an agreed substitute (eg. Methadone), People who are over 35, Mental Health conditions, Gender (Male)

**04 Risk Factors: Life Events**  
 High Risk Times factors include:  
 More drugs may be used when there is:  
 Loss of contact with children  
 Loss of a loved one  
 Increased available cash  
 Loss or change of accommodation

**05 Observable Signs of Overdose**  
 Check it's safe for you to approach  
 Signs: Unresponsive, Shallow or No Breathing, Pinpoint Pupils, Pale Skin, Snoring, Blue Lips or Nails  
 If you see these signs shout for help

**06 Action: ABC + Naloxone (IF BREATHING)**  
 Stay with them until the ambulance arrives

**07 Action: ABC + Naloxone (IF NOT BREATHING)**  
 Stay with them until the ambulance arrives

**08 Administer Naloxone: Prenoxad™ (injectable)**  
 Nyxoid™ (nose spray)

**10 Administer Prenoxad™**  
 1. Remove the outer wrapper by pulling the top only and then hold the base in place.  
 2. Push the outer tip back the cartridge to ensure the needle goes into the base.  
 3. Push the needle into the muscle (upper arm or thigh) and hold the cartridge for 10 seconds.  
 4. Push the needle back into the cartridge and hold the cartridge for 10 seconds.

**11 Administer Nyxoid™**  
 1. Peel off the back of the blister pack the correct amount of the dosage you need.  
 2. Push the pack on back, against the back of the nose and press the head of the stick.  
 3. Push the nose spray with your thumb on the bottom of the dosage pack and hold the pack for 10 seconds.  
 4. Push the nose spray into the nostril and hold the pack for 10 seconds.

**12 Are you ready to save someones life?**  
 Is the area safe for you?  
 Observable signs of overdose  
 Call for help and call 999 or 112  
 Check for breathing  
 Recovery Position/CPR  
 Administer Naloxone  
 Make the area safe for others  
 Expiry dates and replacement stock  
 Visit Drugs.ie for Naloxone resources

These have been designed to assist you to deliver Overdose Awareness and Naloxone Administration training to people who use drugs, peers and family members.



## Contact details for any questions

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## Further Information

Naloxone Information and Training resources including FAQ can be accessed through the below link <http://www.drugs.ie/resources/naloxone/>

Further information on Prenoxad™ can be accessed through the below link <http://www.prenoxadinjection.com/>

Further information on Nyxoid™ can be accessed through the below link <https://www.nyxoid.com/ie>