



# **DRUG RELATED DEATHS AND PREGABALIN**

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INSPIRE CGL

# INTRODUCTION

1. Overview on drug related deaths
2. Pregabalin and Gabapentin abuse potential
3. Benzos



# ACMD

## Advisory Council on the Misuse of Drugs

### Reducing Opioid-Related Deaths in the UK

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# POTENTIAL FACTORS

## **Increase in availability and purity of heroin**

### **Ageing heroin users**

Older heroin users also seem to be more susceptible to overdose because of long-term smoking and other risk factors.

**Socioeconomic deprivation:** The areas that experience the highest rates of DRDs are among those that have experienced the greatest reductions in funding for local authority services and welfare benefits for working age adults (Beatty & Fothergill, 2016; Hastings et al., 2015)

### **Lack of access to mainstream mental and physical health services for this ageing cohort**

### **Drug treatment and commissioning practices**

# DRUG RELATED DEATHS FACTS

2,677 opioid-related deaths were registered in the UK in 2015.

Being on a OST protects heroin users from overdose.

Most common factors involved – opioids, alcohol, gabapentin and pregablin.

# CGL- ANY OPIATE DEATHS IN TREATMENT *(STRUCTURED TREATMENT REPORT)*

Service	All deaths in 12 months	All in treatment	%
Blackburn with Darwen	13	705	1.84%
Wirral IRS	31	1693	1.83%
Stockton recovery service	18	1026	1.75%
Manchester recovery service	35	2031	1.72%
Knowsley	9	554	1.62%
Hull renew CJ	8	517	1.55%
Gateshead Evolve	15	998	1.50%
Birmingham ROR area 5	11	819	1.34%
North Lancs	10	895	1.12%

East Lancs	14	1271	1.10%
Birmingham ROR area 2	17	1556	1.09%
Nottinghamshire new directions	22	2041	1.08%
Walsall	11	1030	1.07%
Warrington	4	526	0.76%
Dudley	6	893	0.67%
Birmingham area 3	6	930	0.65%
Birmingham area 1	4	695	0.58%
Birmingham area 4	3	770	0.39%

# NALOXONE



Since launching the strategy in October 2015, CGL have given out approaching **27,000 take home naloxone kits**. Within that total **1449 kits** have been used in **overdose situations**. Across the 3 services we have issued 2,225 naloxone kits since 1st April 2016 to date, whilst from those issued, our clients have administered Naloxone on 123 occasions.

	Naloxone Offered	Naloxone Kits Issued	Kits Used
Blackburn with Darwen	573	551	37
East Lancashire	966	962	46
North Lancashire	724	712	40
<b>Total</b>	<b>2263</b>	<b>2225</b>	<b>123</b>



There were  
**2,383**  
drug misuse deaths  
in England in 2016...



**73%**  
of drug misuse  
deaths occur  
in men



...an **INCREASE** of



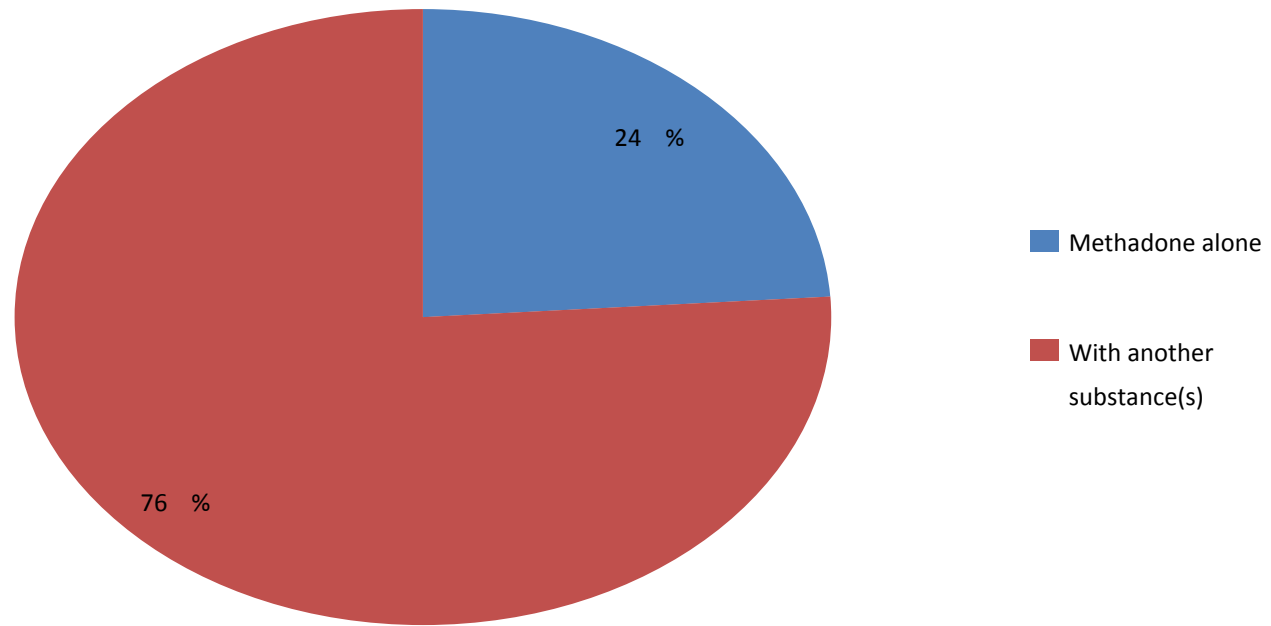
**3.6%**

on the year before and  
the highest figures  
on record

Drug misuse  
is the **third most  
common cause** of  
death for those aged

**15 to 49**  
in England







# PREGABALIN

Neuropathic pain

Generalised anxiety

Epilepsy

postherpetic neuralgia,

diabetic peripheral neuropathy and fibromyalgia,

# Dose

The dose range is 150 to 600 mg per day given in either two or three divided doses.



- **Neuropathic pain:** initially 150 mg daily in 2–3 divided doses, increased if necessary after 3–7 days to 300 mg daily in 2–3 divided doses, increased further if necessary after 7 days to **maximum 600 mg daily in 2–3 divided doses**
- **Epilepsy:** initially 25 mg twice daily, increased at 7-day intervals in steps of 50 mg daily to 300 mg daily in 2–3 divided doses, increased further if necessary after 7 days to **maximum 600 mg daily in 2–3 divided doses**
- **Generalised anxiety disorder:** initially 150 mg daily in 2–3 divided doses, increased if necessary at 7-day intervals in steps of 150 mg daily; **maximum 600 mg daily in 2–3 divided doses**
- **Note:** pregabalin doses in BNF may differ from those in product literature

# FACTS ON PREGAB/GABAPENTIN

In April 2010 – listed a new recreational psychoactive substance

In the UK, pregabalin and gabapentin prescribing has increased, respectively, by 350% and 150 % in just 5 years.

Pregabalin – off patent



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## Drugs

# Pregabalin, known as 'new valium', to be made class C drug after deaths

Prescription drug is handed out too readily and used recreationally, say doctors, with 111 deaths linked to it last year



Sarah Marsh

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Thu 21 Sep 2017 17:06 BST



7,450

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# WHAT ARE THE ISSUES?

Abuse

Dependence

Withdrawals

Overdose

Risks of Diversion

Cautions with OST

**Annex 1. Breakdown of deaths associated with pregabalin and gabapentin (2009-2013) – National Programme for Substance Abuse Deaths (2015) Pregabalin at post mortem** (braketed no. = those who were not known to be prescribed the substance) **Pregabalin implicated** (braketed no. = those who were not known to be prescribed the substance)

Year of death		Year of death					Year of death		Year of death	
2009	2010	2011	2012	2013	2009	2010	2011	2012	2013	
5	6	13	17	39	3	3	8	13	19	
(3)	(4)	(4)	(9)	(29)	(1)	(2)	(2)	(7)	(14)	

**Gabapentin at post mortem** (braketed no. = those who were not known to be prescribed the substance) **Gabapentin implicated** (braketed no. = those who were not known to be prescribed the substance)

Year of death		Year of death					Year of death		Year of death	
2009	2010	2011	2012	2013	2009	2010	2011	2012	2013	
10	13	18	57	30	4	7	5	25	17	
(3)	(3)	(11)	(49)	(16)	(2)	(3)	(3)	(19)	(9)	



# ACMD FINDINGS

Both are **increasingly** being reported as possessing a potential for misuse.

When used in **combination** with other depressants, they can cause drowsiness, sedation, respiratory failure and death.

**Rapid absorption** and **faster onset of action** and higher potency

Pregabalin causes a **'high' or elevated mood** in users; the side effects may include chest pain, wheezing, vision changes and less commonly, hallucinations.

Gabapentin can produce feelings of relaxation, calmness and euphoria.

Some users have reported that the 'high' from snorted gabapentin can be similar to taking a stimulant.

# IN OPIOID POPULATION

High risk population.

High risk of criminal behavior stimulated by the wish to obtain gabapentin or pregabalin.

Proportionate risk benefit assessment prior to the prescribing potential for illegal diversion and medicinal misuse.

# Dosage in abuse

- According to pregabalin misusers, different dosages are associated with a vast range of effects (one online report):
  - **200mg**: dizziness...
  - **600mg**: stumbling, disorientation, increased physic and psychological awareness, difficulty to drive, slurred and broken speech, hearing and visual alterations/hallucinations, double and blurred vision, uninhibited behaviours, talkativeness, increased body energy, increased sexual performances.
  - **900mg**: strong feelings of drunkenness, difficulty to walk, alteration of colours perception, little euphoria.
  - **1200mg**: drowsiness, euphoria, entactogenic feelings, (feelings of empathy)
  - **>1500mg (to 5 g)**: uncontrollable drowsiness, frequent hallucinations, great euphoria, frequent dissociative events ... behavioural inhibition, anxiety, and necessity to move..."



# PROFESSIONALS IT AFFECTS THE MOST

- general practice
- pain medicine (acute and chronic)
- substance misuse treatment and recovery
- neurology and neurosurgery
- rheumatology
- orthopaedics

# PHE-NHS

Professionals should be aware not only of the potential benefits of these drugs to patients, but also that the drugs **can lead to dependence** and may be misused or diverted.

Practitioners should prescribe pregabalin and gabapentin appropriately to minimise the risks of misuse and dependence, and **should be able to identify and manage** problems of misuse if they arise.

Prescribers must make a **careful assessment** to balance the potential benefits against the risks especially suspected propensity to misuse, divert or become dependent on these drugs.

Patients should be aware of the likely **efficacy** of the drugs for management of their symptoms and also about the risk of harms, including dependence.

## **SAFE PRESCRIBING DECISION**

# PHE-NHS CONTD

If more than one **central nervous system depressant** is taken (eg, alcohol even in small amounts, antidepressants, anti-emetics, anti-epileptics, antihistamines, antipsychotics, anxiolytics, barbiturates, hypnotics, opioid analgesics, skeletal muscle relaxants), the central nervous system depressant effects may be additive (of drowsiness, sedation, respiratory depression and, at the extreme, death).

There are reports of **respiratory failure and coma** in patients taking pregabalin and other central nervous system-depressant medicinal products.

**Cumulative** central nervous system depression, ranging from drowsiness to stupor, is particularly dangerous in situations where alertness is needed.

# INTERACTIONS

Morphine/OPIOIDS can increase the bioavailability of gabapentin.

pregabalin appears to be additive in the impairment of cognitive and gross motor function caused by oxycodone.

# HOW TO TACKLE MISUSE/DEPENDENCE

The patient **should be reviewed** and the concerns of the prescriber should be discussed sensitively and documented clearly.

**Agreement on maximum daily use** -when it is felt the medication is still needed for the management of the original indication.

Review prescribing pattern

**Careful reassessment** of the patient may lead to an appropriate decision to offer a planned withdrawal of the medication (medication does not appear any longer to be required for the main clinical indication).

**Seek specialist advice**



# TAPERING SCHEMES

A more gradual dose taper allows observation of emergent symptoms that may have been controlled by the drug.

Pregabalin: reduce the daily dose at a maximum of 50-100mg/week.

Gabapentin: reduce the daily dose at a maximum rate of 300mg every four days.

# BENZODIAZEPINES

Benzodiazepines can be addictive and induce dependence even at low doses

23% becoming addicted within 3 months of use

Benzodiazepine addiction is considered a public health problem.

survey conducted in 2014–2015 in [Bradford](#) a mean of 0.69% of registered patients had been prescribed benzodiazepines for more than a year.

Dependence features-

Rapid discontinuation can cause seizures, Psychosis, DT

Risk of diversion

Risks when other substances involved i.e respiratory depression



# HOW TO TACKLE BENZO PROBLEM

Review all people on benzos for maintainance

Change from short acting to long acting

Set slow reduction plans

Reduce harm by changing dispensing regimes

Specialist advice from substance misuse services



**THANK YOU**

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