

27 April 2017

**For Directors of Public Health to cascade to:**

Commissioners and providers of drug treatment and prevention services  
Other relevant services that have, or may have, contact with drug users including: sexual health services; youth services; hostels; relevant information networks; and service users groups

**For NHS England local area teams to cascade to:**

General Practitioners  
Accident & Emergency  
Ambulance Service NHS Trusts  
Community Pharmacists  
Dispensing General Practitioners  
Providers of drug treatment in prisons

**For action**

General Practitioners  
Accident & Emergency  
Ambulance Service NHS Trusts  
Community Pharmacists  
Dispensing General Practitioners  
Drug treatment and other relevant services in contact with drug users

**For information**

NHS Foundation Trusts (England) – Medical Director  
Consultants in Communicable Diseases  
NHS Trusts (England) – Medical Director  
Regional Directors of Public Health  
Director of Public Health  
Territorial CMOs in Ireland, Scotland & Wales  
Clinical Commissioning Groups

Dear Colleague

**EVIDENCE OF HARM FROM FENTANYL-CONTAMINATED HEROIN**

This alert advises of the availability of, and harms from, heroin that has been mixed with fentanyl or carfentanyl, both unusually potent synthetic opioids.

There is significant evidence from a small number of post-mortem results of recent drug user deaths and from police seizures that some heroin may contain fentanyl or carfentanyl added by dealers. These are highly potent synthetic opioids and very small amounts can cause severe or even fatal toxicity.

Those of you in contact with heroin users should be alert to the increased possibility of overdose arising from heroin cut with these synthetic opioids, be able to recognise possible symptoms of overdose and respond appropriately.

### ***Fentanyl***

The fentanyls are a group of synthetic opioids; some have legitimate uses while others are illicit drugs. Fentanyl is about 100 times more potent than morphine and is a licensed medicine used to treat severe and terminal pain. Carfentanyl is 4,000 - 10,000 times more potent than morphine and principally used as an animal tranquilliser.

### ***Actions advised***

Those in contact with heroin users should advise them to:

- be extra cautious about the sources from which they get their drugs, and about the drugs they take, maybe starting with just a quarter hit of a new supply
- seek treatment for drug dependence if not already in treatment

Those with heroin users when and after they use drugs (including other heroin users) should:

- watch carefully for the signs of an overdose, e.g. loss of consciousness, shallow or absent breathing, 'snoring', and/or blue lips or fingertips
- Be prepared to call immediately for an ambulance if someone overdoses and administer naloxone if available and competent to do so.

Drug treatment services should:

- warn their services users, and where possible others not in contact with services, about the risks of heroin cut with fentanyls
- supply naloxone so that it is available for all those at risk
- ensure they provide rapid access to treatment, including substitute opioids, for heroin users

Local authority and health commissioners should:

- take steps to ensure that this information is made available to heroin users who are not in contact with drug treatment services
- make efforts to ensure that other relevant services – homelessness hostels, for example – are also aware of the current risk

Emergency departments and paramedics should:

- be alert to the symptoms of opioid overdose in known and suspect heroin users
- be aware of the risk of severe toxicity resulting from adulteration of heroin with potent synthetic opioids
- treat suspected cases as for any opioid overdose, using appropriate supportive care and the intravenous naloxone titration regimen recommended by the National Poisons

Information Service (NPIS, for details [TOXBASE](#)). This provides the appropriate doses needed in severe toxicity, while minimising the risk that excessive naloxone doses might precipitate acute opioid withdrawal

- recognise that the duration of action of naloxone is shorter than that of many opioids and that appropriate monitoring and further doses of naloxone may be required
- use intramuscular naloxone as an alternative in the event that IV access is not possible or is delayed.

The standard Naloxone dosing regime where fentanyl / carfentanyl overdose is suspected (for adults and children > 12 years) for use in acute hospitals, subject to clinical assessment of the individual case, is:

- Give an initial dose of 400 micrograms (0.4 mg) intravenously
- If there is no response after 60 seconds, give a further 800 micrograms (0.8 mg).
- If there is still no response after another 60 seconds, give another 800 micrograms (0.8 mg).
- If still no response give a further 2 mg dose. Large doses (4 mg) may be required in a seriously poisoned patient.
- Aim for reversal of respiratory depression, not full reversal of consciousness.

Any health professional encountering an unusual or unexpected adverse reaction to the use of heroin (or any other drug) should report the reaction to RIDR: <https://report-illicit-drug-reaction.phe.gov.uk>

Up to date information for people considering using drugs, including advice on reducing risk, is available from [www.talktofrank.com](http://www.talktofrank.com) or from the FRANK helpline on 0800 77 66 00.

For further advice, medical professionals can use the [National Poisons Information Service](#) 24-hour telephone service on 0344 892 0111 or its online database, [TOXBASE](#).

To report any additional intelligence about the use of and harm from fentanyl please email [drug.alerts@phe.gov.uk](mailto:drug.alerts@phe.gov.uk) or call Robert Wolstenholme (020 3682 0537) or Steve Taylor (020 3682 0540) at Public Health England. This will enable suitable information to be shared with relevant agencies, and help in assessment of the need for any further action.



Professor Paul Cosford CB  
Director for Health Protection & Medical Director