

Purpose

This alert is based on one recently issued by EMV⁽¹⁾ and is considered appropriate to highlight the same safety message to CFA operational personnel of the existence of two illicit drugs within Australia.

Background

Fentanyl and carfentanil are highly toxic illicit drugs known as synthetic opioids. Fentanyl is prescribed in Australia and other countries as an analgesic, often during surgery and post-operative care. Carfentanil is used in the veterinary industry for the immobilisation of large animals. The lethal potency of fentanyl is generally believed to be **10 times that of heroin**, and the lethal potency of carfentanil is believed to be **100 times that of fentanyl**. Therefore, both substances pose potential threats to first responders.

They are often used in combination with heroin samples to boost the physiological effects and have both become available in the Australian illicit drug market. Overseas, the number of fentanyl related deaths in the drug user population has greatly increased over the past few years.

It is not yet known if fentanyl or carfentanil have been identified or reported as being used on the street in Victoria, however this remains a real possibility in the future. A SAMFS Hazardous Materials Circular⁽²⁾ indicates that a large amount of carfentanil was intercepted by Border Force officers in Queensland in February 2017 and in Sydney late 2016. In early 2016, at least four deaths in South Australia were linked to the use of fentanyl type drugs. They are believed to be manufactured in China and it is reported that carfentanil has generally shown up in the overseas heroin market.

Risks

Illicit forms of these highly toxic drugs include powder, tablets, liquids, thin pieces of cardboard or paper and self-made nasal sprays. Given the high potency of fentanyl and carfentanil, they can have extreme consequences to those exposed. Exposure to these drugs can be through skin contact absorption, inhalation or by ingestion. **First responders should be aware that when attending a scene in which an overdose is reported, that appropriate standard precautions should be employed.**

Symptoms of exposure can include:

- Slow breathing (respiratory distress)
- Blue lips and nails
- Reduced level or loss of consciousness
- Clammy and cold skin
- Constricted (small) pupils
- Nausea and vomiting
- Drowsiness/fatigue



Comparing the size of lethal doses of heroin, fentanyl and carfentanil.
The vials here contain an artificial sweetener for illustration (New Hampshire State Police Forensic Laboratory).

Figure 1

Figure 1 above relates to carfentanil and lethal doses in comparison to heroin. Just a few small grains could be sufficient to affect an individual who would potentially require treatment and transport to an emergency department. Exposure to this small amount may result in respiratory depression to the effect of causing cardiac arrest.

Actions

- Be aware of the safety implications this drug may pose when responding and avoid all contact including inhalation.
- If exposed to these drugs - **seek IMMEDIATE medical attention**
 - move to fresh air and flush affected area with water
 - monitor respiration
- In the event that carfentanil is identified (by secondary bystander), then additional PPE use is required, chemical splash suit and self-contained breathing apparatus followed by wet decontamination.
- For an EMR event – overdose/personal use, standard precautions apply including nitrile gloves, P2 respirator and safety glasses.
- For a Hazmat event – supporting police at clandestine lab or seizure, chemical splash suit and self-contained breathing apparatus to be worn.
- Mandatory notification to RDO of suspected presence of carfentanil.

Only properly trained professionals should handle any substance suspected to contain fentanyl or a fentanyl related substance.

At the present time, there is no screening device/test that can safely detect fentanyl and carfentanil.

Ref:

- (1) EMV Safety Fact Sheet - Fentanyl and Carfentanil accessed through EMCOP Library.
- (2) SOUTH AUSTRALIAN METROPOLITAN FIRE SERVICE HAZARDOUS MATERIALS CIRCULAR 189 Fentanyl and Carfentanil – Synthetic Opiates Written by K. Mitchell, Scientific Officer Produced March 2017.