



**LAC DPH Health Advisory:
Increased Risk of Fentanyl-Related
Overdoses**

August 29, 2016



*This message is intended for emergency departments, first responders, behavioral health providers, and other health care facilities and professionals caring for patients at risk for substance misuse and abuse.
Please distribute as appropriate.*

Key Messages

- **There is a heightened risk of fentanyl-related overdoses due to illegally manufactured fentanyl and its analogs increasingly added to counterfeit pills and illicit drugs.**
- **Suspected fentanyl-related overdoses should be reported to the Los Angeles County Department of Public Health (LAC DPH).**

Situation

Fentanyl and fentanyl-related compounds, including highly lethal fentanyl analogues such as carfentanil, are increasingly being illegally manufactured and found in communities across the nation.

On August 25, 2016, the Centers for Disease Control and Prevention (CDC) released a Health Alert Network (HAN) [update](#) describing recent increases in the seizure and availability of counterfeit pills (e.g., labeled as Oxycodone, Xanax, and Norco) containing varying amounts of fentanyl and fentanyl-related compounds. In addition, the CDC reports increasing incidents of these toxic compounds being mixed with or sold as heroin and other illicit drugs.

Actions Requested of Providers

- ✓ Actively communicate the increased risk of fentanyl-related overdoses given the broader distribution of counterfeit pills and illicit drugs containing fentanyl and fentanyl-related compounds.
- ✓ Maintain a high index of suspicion for fentanyl and fentanyl-related toxicity when treating an unknown overdose, particularly in patients presenting with symptoms consistent with opioid overdose. Patients exposed to fentanyl and fentanyl-related compounds may be unaware of their exposure.
- ✓ Understand and actively inform other health professionals and first responders that treatment of fentanyl and fentanyl-related overdoses will likely require multiple and higher doses of naloxone per overdose than is typical for opioid overdoses due to the higher potency of these compounds.
- ✓ Report all suspected and confirmed fentanyl and fentanyl-related overdoses to LAC DPH (see below for contact information).

Background

Fentanyl is a synthetic opioid analgesic with a potency 50 to 100 times that of morphine. Fentanyl is indicated for moderate to severe pain and as an adjunct for anesthesia. When improperly used it carries a high risk of overdose.

Carfentanil is an extraordinarily potent, synthetic opioid that is a chemical analog of fentanyl. It is used as a general anesthetic in large animals, and is not approved for human use. Importantly, carfentanil is 100 times more potent than fentanyl and even small amounts of it can result in fatal overdose.

Both fentanyl and carfentanil are increasingly being sold illicitly for their heroin-like effects and may be mixed with heroin, cocaine, or other illicit drugs with or without the user's knowledge. These compounds are also increasingly manufactured illegally and sold in powder or counterfeit pill formulations, at times labeled as other substances, such as benzodiazepines and opioid pain pills.

Clinical Presentation

Both fentanyl and carfentanil toxicity present in a similar way to other opioid overdoses, though the onset tends to be more severe and the episode more prolonged. Signs and symptoms of fentanyl-related overdoses include:

- Altered mental status
- Loss of consciousness
- Pinpoint pupils
- Respiratory depression
- Slowed or erratic heart rate
- Nausea / vomiting
- Muscle spasms
- Cold, clammy skin
- Skin color changes
- Seizures
- Death

Diagnosis and Laboratory Testing

The diagnosis of fentanyl and carfentanil cases is primarily based on a clinical history and presentation that is consistent with an opioid overdose that is more severe and less responsive to typical therapies such as naloxone.

Special confirmatory tests are available for fentanyl and carfentanil, but standard urine and drug toxicology screens are unable to reliably detect these compounds, particularly when they are illicitly manufactured and when synthetic analogues are involved.

Treatment

Naloxone (Narcan) is an opioid receptor antagonist that is the gold standard treatment for reversing opioid overdoses, including when the offending agent is fentanyl or carfentanil. Given the potency of these two compounds, health care providers should prepare for the likelihood that individuals experiencing fentanyl or carfentanil toxicity may require multiple and higher doses of naloxone.

Prevention

Patients should be advised to only take prescription medications as prescribed and dispensed by a licensed pharmacist. Carfentanil is highly toxic and is not approved for human use. Patients at risk of substance misuse and abuse should be advised that using illicit substances such as heroin and cocaine increases the risk of exposure to fentanyl and carfentanil, as well as fatal and non-fatal overdoses.

Reporting

To report suspect cases in Los Angeles County:

Contact LAC DPH Substance Abuse Prevention and Control: 626-299-3504

To report suspect cases in Long Beach:

Contact the City of Long Beach Health Department: 562-570-4302

To report suspect cases in Pasadena:

Contact the City of Pasadena Public Health Department: 626-744-6089

Additional Resources

- Influx of Fentanyl-laced Counterfeit Pills and Toxic Fentanyl-related Compounds Further Increases Risk of Fentanyl-related Overdose and Fatalities, CDC HAN <http://emergency.cdc.gov/han/han00395.asp>
- California Poison Control <http://www.calpoison.org/>

This Health Advisory was sent by Gary Tsai, MD, Medical Director and Science Officer, Substance Abuse Prevention and Control, Los Angeles County Department of Public Health.

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