

Responding to a Fentanyl Overdose: What California First Responders Need to Know

California has seen an increasing number of fentanyl/fentanyl analog-related overdoses. Preliminary 2018 data report 743 fentanyl-related overdose deaths (an increase of 72% from 2017).¹ With fentanyl in our drug supply, first responders (e.g., emergency medical services and law enforcement) are likely to encounter it on the job and may have safety concerns. To address these concerns, the American College of Medical Toxicology (ACMT) and the American Academy of Clinical Toxicology (AACT) released a position statement for first responders.²



The risk of clinically significant exposure to emergency responders is extremely low.

According to the ACMT and AACT Position Statement:

- Incidental skin absorption is unlikely to cause clinical signs of toxicity.
- Nitrile gloves provide sufficient protection for routine handling.
- Simple washing with soap and water is adequate to remove fentanyl from contaminated skin. *Hand sanitizers and cleaning agents may increase fentanyl absorption and should not be used.*
- If drug particles are suspended in the air, a fit-tested N95 respirator provides reasonable protection.



Assisted ventilation and naloxone administration is the standard first aid response to opioid overdose.

Signs, Symptoms, and Management of a Suspected Fentanyl Overdose:

- Fentanyl produces characteristic opioid overdose signs and symptoms including decreased level of consciousness, slowed breathing, lack of response to stimulation, and constricted pupils.
- Peak respiratory depression can occur in 5 minutes or less. A rapid response is imperative.³
- Naloxone administration and assisted ventilation are the most critical interventions.
- California Poison Control System can assist in the management of a suspected fentanyl overdose. They can be reached at 1-800-222-1222.

Aftercare for Overdose Victims:

First responders can be critical liaisons linking those suffering from opioid use disorder with treatment and follow-up care. When possible, people who have experienced overdose should be linked to care based on their individual circumstances:

- Harm reduction and syringe services programs provide a variety of health and social services for people who use drugs and often serve as trusted entry points to other parts of the health system. Click here to [find a harm reduction provider near you](https://tinyurl.com/y5jkmgul) (<https://tinyurl.com/y5jkmgul>).
- Medications used to treat opioid use disorder reduce the risk of overdose. Click here to find [local substance use disorder treatment in your community](https://choosemat.org) (<https://choosemat.org>).

If You Need Naloxone in Your Agency/Community:

A [list of naloxone access options in California](https://tinyurl.com/yyt2busc) (<https://tinyurl.com/yyt2busc>) is available from the California Health Care Foundation. Community members can also [access naloxone through local harm reduction services](https://tinyurl.com/y5jkmgul) (<https://tinyurl.com/y5jkmgul>).

Frequently Asked Questions



I have heard news reports about first responders developing toxicity from just entering the room where someone has overdosed. Should I be concerned?

Mass media reports of fentanyl toxicity by first responders through passive contact in their job duties are more myth than fact. In order to create clinically significant toxicity, an adequate dose of fentanyl must be absorbed into the blood stream and enter the central nervous system. Simply being in a room where fentanyl is present will not result in toxicity or overdose.



If I see white powder on the scene next to an overdose victim, do I need to wear a mask?

An undisturbed white powder is unlikely to be an inhalation risk to first responders. Even in industrial settings at the highest airborne concentration, it would take 200 minutes of exposure to achieve a dose of 100mcg of fentanyl.² However, if drug particles are suspended in the air, a fit-tested N95 respirator is suggested.



Can I experience opioid toxicity if I get fentanyl on my skin?

It would be highly unlikely to experience opioid toxicity from incidental dermal exposure. Absorption of fentanyl from transdermal patches designed to deliver the drug systemically requires hours to produce a therapeutic serum level. To prevent the possibility of absorption, immediate cleansing with soap and water should follow any inadvertent contact.



Will assisted ventilation with a bag-valve-mask or barrier mask put me at risk for inhaling fentanyl from an overdose victim?

Fentanyl and other opioids are not exhaled or excreted through sweat or the skin; therefore, first responders are not at risk of toxicity when providing assisted ventilation.



Do I need to administer more doses of naloxone to reverse a fentanyl overdose?

Fentanyl overdoses are responsive to naloxone like other opioids. Standard naloxone dosing should be implemented with repeated administration every 2-3 minutes until respiratory function is restored. Early and concurrent introduction of ventilatory support should always be a priority.⁴



I see the same patients for an opioid overdose multiple times. What can I do as a first responder to stop this cycle?

Individuals who have experienced an overdose are at the highest risk of experiencing a subsequent overdose. Linking patients to local harm reduction and substance use disorder treatment programs that provide medications for opioid use disorder are the most critical interventions to prevent future overdoses. First responders should also ensure that survivors of an overdose have naloxone on hand for themselves and others.

¹ <https://cdph.ca.gov/OpioidDashboard>

² Moss MJ et al. ACMT and AACT position statement: preventing occupational fentanyl and fentanyl analog exposure to emergency responders. *Clinical Toxicology* 2018;56:297-300.

³ Harper MH et al. The Magnitude and Duration of Respiratory Depression produced by Fentanyl and Fentanyl plus Droperidol in Man. *JPET* 1976;199:464-468.

⁴ Lynch MJ, Suyama J, Guyette F. Scene Safety and Force Protection in the era of ultra-potent Opioids. *Prehospital Emergency Care* 2018;22:157-162.