



Frequently asked questions about naloxone: Myths Part 2

Do unregulated fentanyl mean that standard naloxone kits are insufficient?

Some overdoses have been reported to require multiple doses or repeated administration of naloxone (Beardsley & Zhang, 2018). In one study, the response rate to naloxone for heroin overdoses was 80%, but only 57% for overdoses involving fentanyl. However, in another study, naloxone response rates were 90-95%, even as the unregulated opioid supply changed from 3% to 68% fentanyl during the study period (Bell et al., 2019). An individual response to naloxone depends on the opioid involved, the dose, other substances used, and the individual's tolerance. Although some overdoses may require more naloxone than is included in a standard kit, many victims will still respond to 1 or 2 doses.

Are there “naloxone-resistant” fentanyl?

There's no pharmacological evidence that fentanyl, or its analogs are pseudo-irreversible or non-competitive agonists at opioid receptors. The apparent failure for naloxone to reverse an overdose is more likely to be caused by other factors such including errors in administration, higher potency fentanyl, high opioid doses, or contamination of a fentanyl with another CNS depressant like benzodiazepines (Brend, 2019). Remember to always administer naloxone if you suspect an opioid overdose. Even if there is no apparent response, getting naloxone doses into a patient provides a head-start to additional doses and interventions provided by emergency personnel.

Can you suffer a fentanyl overdose via accidental exposure?

Individuals may be concerned about exposure to fentanyl when helping overdose victims. However, suffering opioid toxicity from accidental exposure to fentanyl is highly unlikely. A joint task force of the American College of Medical Toxicology and the American College of Clinical Toxicology concluded that fentanyl pills and powder did not pose any risk to cause overdose (Moss et al., 2018). Absorption of fentanyl through the skin is very slow and would require pharmaceutical-grade patches or dissolved fentanyl to be absorbed over a large surface area (Moss et al., 2018). Absorption through mucous membranes (eyes, mouth) may be greater (Leen and Juurlink 2019). Pulmonary absorption or heated or aerosolized fentanyl is possible but can be prevented through standard respiratory protection (Moss et al., 2018).