

FENTANYL SAFETY: A GUIDE FOR SAN FRANCISCO'S FIRST RESPONDERS

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Nationally, concern over transdermal and airborne exposure to Illicitly Manufactured Fentanyls (IMF) for first responders has resulted in the development of special safety protocols for working with scenes where IMF is present or persons who have ingested IMF.

Opioid toxicity (i.e. “overdose” or respiratory depression) from transdermal and airborne exposure to IMF is a near scientific impossibility. The incidents where responders were treated for exposure have largely been attributed to extreme precautionary measures, or responders experiencing what appear to be symptoms of anxiety such as dizziness, rapid heartbeat, sweating and nervousness (which are not symptoms of fentanyl exposure). There have even been cases where naloxone was administered to first responders who were not exhibiting the signs of opioid toxicity, and when they then felt better, it was attributed to the naloxone, a misinterpretation of the event. To date, none of the reports of first responders experiencing effects of transdermal exposure to fentanyl or airborne IMF have been verified or confirmed by positive toxicology.

People who use drugs and those who provide direct services to them come into contact with fentanyl constantly—handling it, testing it, reversing overdoses from fentanyl, and having contact with persons who have used it—without incident. Fentanyl has been used by the medical system for treatment of pain and anesthesia since 1968. There are some formulations of fentanyl that are specifically designed for transdermal absorption (patches) and there is technology involved in changing the drug to be absorbed this way, and even handling transdermal patches does not cause overdose. The IMF fentanyl in the drug supply is not the same as the transdermal patch formulation. IMF must have direct contact with mucous membranes or the bloodstream via snorting, smoking or injection. IMF is handled with bare skin throughout much of its travels to the end user, and by the end users themselves, causing no adverse reaction until the drug is ingested via the above-mentioned routes.

Below we will review the existing data and make recommendations for universal precautions and scene safety for all first responders working with people who may have used IMF.

The position of the American College of Medical Toxicology (ACMT) and American Academy of Clinical Toxicology (AACT), is as follows:¹

Fentanyl and its analogs are potent opioid receptor agonists, but the risk of clinically significant exposure to emergency responders is extremely low. To date, we have not seen reports of emergency responders developing signs or symptoms consistent with opioid toxicity from incidental contact with opioids. Incidental dermal absorption is unlikely to cause opioid toxicity. For routine handling of drug, nitrile gloves provide sufficient dermal protection. In exceptional circumstances where there are drug particles or droplets suspended in the air, an N95 respirator provides sufficient protection. Workers who may encounter fentanyl or fentanyl analogs should be trained to recognize the signs and symptoms of opioid intoxication, have naloxone readily available, and be trained to administer naloxone and provide active medical assistance. In the unlikely event of poisoning, naloxone should be administered to those with objective signs of hypoventilation or a depressed level of consciousness, and not for vague concerns such as dizziness or anxiety. In the absence

¹ ACMT and AACT Position Statement: Preventing Occupational Fentanyl and Fentanyl Analog Exposure to Emergency Responders https://www.acmt.net/Library/Fentanyl_Position/Fentanyl_PPE_Emergency_Responders_.pdf

of prolonged hypoxia, no persistent effects are expected following fentanyl or fentanyl analog exposures. Those with small subclinical exposures and those who awaken normally following naloxone administration will not experience long-term effects. While individual practitioners may differ, these are the positions of American College of Medical Toxicology and American Academy of Clinical Toxicology at the time written, after a review of the issue and scientific literature.

WHAT YOU NEED TO KNOW²

- Fentanyl can be present in a variety of forms (e.g., powders, tablets, capsules, solutions, and rocks) and can be present in multiple different types of drugs (black tar heroin, methamphetamine, rock or powder cocaine, etc.).
- Incidental skin contact may occur during daily activities but is not expected to lead to harmful effects. Use universal precautions, including making sure contaminated skin is promptly washed off with water.
- Personal Protective Equipment (PPE) (i.e. nitrile gloves) is effective in protecting you from skin exposure.
- Significant quantities of airborne fentanyl particulates pose a slightly greater risk of exposure, so follow your department guidelines if the scene involves large amounts of suspected fentanyl (e.g., distribution/storage facility, pill milling operation, clandestine lab, gross contamination, spill or release).
- Do not ingest any suspected fentanyl that you encounter at a scene via mucous membranes or the bloodstream directly (i.e. inhaling/snorting, smoking or injecting).
- Do not touch your eyes, mouth, nose or any skin after touching any potentially contaminated surface.
- Wash skin thoroughly with cool water, and soap if available.
- Wash your hands thoroughly after the incident and before eating, drinking, smoking, or using the restroom.

Signs of fentanyl-related opioid toxicity (i.e. “overdose”) and proper response protocol:

- Slow breathing or no breathing, drowsiness or unresponsiveness, and constricted or pinpoint pupils are the specific signs consistent with fentanyl intoxication.
- Naloxone is an effective medication that rapidly reverses the effects of fentanyl.
- If someone is exhibiting the above symptoms, administer naloxone according to your department protocols.
- If naloxone is not available, rescue breathing can be a lifesaving measure until EMS arrives. Use standard basic life support safety precautions (e.g., pocket mask, gloves) to address the exposure risk.
- If needed, initiate CPR until EMS arrives.
- Other symptoms such as dizziness, tachycardia (rapid heartbeat), rapid breathing, sweating and anxious feelings are not symptoms of opioid toxicity and the affected responder may be experiencing a response to the fear of exposure. If a responder experiences these symptoms they should also be evaluated by EMS or a mental health professional.

² Adapted from the White House Fentanyl Safety Recommendations for First Responders:

<https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Final%20STANDARD%20size%20of%20Fentanyl%20Safety%20Recommendations%20for%20First%20Respond....pdf>