Precautions for Unknown Opioids

First Responders

Indiana Department of Health

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Introduction

The following recommendations are intended for emergency medical service (EMS), fire and rescue, and law enforcement staff who may be exposed to opioids in the course of their daily activities, such as responding to opioid overdoses or other activities where small volumes of opioids may be present. Opioids may consist of multiple substances in varying amounts such as heroin, morphine, fentanyl, carfentanil or other fentanyl analogs. These substances are available in several forms, including powders, pills, liquids and nasal sprays.

General Precautions

- Avoid handling any substances or paraphernalia if possible.
- Assume all unknown powdered drugs may contain fentanyl and/or its analogs.
- Minimize exposure opportunities by covering bare skin.
- Notify everyone in proximity as to the possibility for the presence of a dangerous drug.
- Do not taste, touch or sniff suspected drugs of any kind.
- If alone, notify someone to ensure your safety is monitored.
- Ensure naloxone is immediately available for use.
- Perform risk assessments on every scene to determine exposure risks.

Opioid Exposure Risk Assessment			
Opioids potentially or confirmed present on the scene or with the patient	No visible product or product contained within syringe or other package	Minimal risk — PPE Level 1	Standard duty uniform and nitrile gloves (NFPA 1999)
	Small volume [grams] of material visible and not contained within a package	Moderate risk — PPE Level 2	Standard duty uniform; nitrile gloves (NFPA 1999); P100 filtering facepiece respirator; safety glasses
	Large volume [kilograms] of material	Moderate risk — PPE Level 4	Standard duty uniform with long sleeves or sleeve covers; nitrile gloves (NFPA 1999); P100 filtering facepiece respirator; non-vented or indirect vented goggles
	Milling lab with particulates present	High risk — PPE level 5	NFPA 1999 multi-use ensemble or NPFA 1994 Class 4 or 4R ensemble; full face air-purifying respirator (APR) with P100 filters
	Production lab with bulk chemicals present	High risk — PPE level 6	NFPA 1994 Class 3 or 3R ensemble or higher; full face CBRN APR or higher

*PPE Level 3 is not included as it pertains to fire risk only.

Signs and Symptoms of Exposure

Signs and symptoms of exposure may occur extremely rapidly or may be delayed. In general, watch for the following:

- Disorientation, drowsiness or profound exhaustion
- Unconsciousness or decreased responsiveness
- Clammy skin
- Coughing, respiratory distress or arrest
- Constricted or pinpoint pupils
- Dizziness

Medical Countermeasures and Exposure Treatment

If exposure is suspected, immediately move to a safe area to decontaminate and seek immediate medical attention. Naloxone is an antidote for opioid overdose. Immediately administering naloxone can reverse an overdose, although multiple doses of naloxone may be required. Naloxone may need to be re-administered after a period of time. Prepare to provide respiratory assistance if needed. EMS should immediately transport all exposed individuals for further monitoring and treatment.

Exposure Routes	Exposure Decontamination
Potential exposure routes of greatest concern include inhalation, mucous membrane contact, ingestion and percutaneous exposure. Skin contact is also a potential exposure route but is not likely to lead to overdose unless large volumes of highly concentrated powder are encountered over an extended period of time. Brief skin contact with fentanyl or its analogs is not expected to lead to toxic effects if any visible contamination is promptly removed. Fentanyl and analogs are water soluble, so expedient decontamination (rinsing) of any contacted areas with water is advisable.	All areas of direct skin contact with any residue suspected of containing synthetic opioids should be immediately washed with copious amounts of water. As soon as feasible, skin surfaces should be additionally washed with soap and water. Use of alcohol-based hand disinfectants or hypochlorite bleach solutions must be avoided as they may enhance skin absorption of fentanyl analogs. Contaminated PPE should be removed using techniques that prevent aerosolizing powdered contaminants while avoiding unprotected contact with the outer layers of the PPE.

Additional Information

All PPE and standards should follow all applicable OSHA regulation, NFPA standards and employer protocols. Operations involving gross contamination, large-scale accidental spills or release, crime scene and evidence collection, laboratory, K-9 and HAZMAT require additional precautions not contained in this guidance, including the utilization of Level A PPE.

For additional information on this topic, visit:

CDC.gov/NIOSH/Topics/Fentanyl/Risk.html

OJP.gov/pdffiles1/NIJ/NLECTC/251226.pdf

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