

	<p><b>Division of Fire Standards and Training &amp; Emergency Medical Services</b></p> <p><b>Opioid and Unknown Substance Precautions and Personal Protective Equipment Recommendations for First Responders</b></p> <p><b>August 2017</b></p>	
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Fentanyl, carfentanil, and synthetic opioids have recently been encountered by first responders. This document represents collaboration between local, state, and national partners to provide guidance and promote safety based on what we know today. Several sources were consulted, including NIOSH, the DEA, the American College of Medical Toxicology, and the American Academy of Clinical Toxicology.

There is a significant potential threat to first responders who may come in contact with fentanyl and its analogues (e.g. carfentanil). These guidelines should be followed when potential contact exists. However, as the situation is changing these should be considered interim and current as of publication.

**ABOUT FENTANYL, CARFENTANIL, and SYNTHETIC OPIOID ANALOGUES**

Fentanyl is a powerful synthetic opioid drug similar to morphine and heroin but 50 – 100 times more potent. Carfentanil, another powerful synthetic opioid, is considered 100 times more potent than fentanyl and 5,000 to 10,000 times more potent than morphine.

Fentanyl is prescribed as a painkiller or used as an anesthetic under a medical practitioner’s supervision. Fentanyl has become the common name used to describe synthetic opioid drugs that are used by individuals. Although fentanyl has become a common illicitly used drug, it is important to understand that other opioids may be present and that **their potency can vary drastically.**

For consistency, the remainder of this document will reference synthetic opioids which include carfentanil, furanylfentanyl, and other fentanyl analogues.

**Synthetic opioid drugs are extremely dangerous, even in very small doses.** Emergency responders, including canines used to detect drugs, may develop signs and symptoms of an opioid overdose if exposed to synthetic opioids.

**GENERAL PRECAUTIONS**

- First responders who may encounter synthetic opioids should receive training to recognize the signs and symptoms of opioid exposure.
- Opioid exposure cannot occur without drug contact and absorption into the blood stream.
- Situational assessment is a **primary tool** keeping responders safe.

**Street-level Situational Assessment / Cues**

With an increased prevalence of synthetic opioid-related emergency events, responders are reminded to be vigilant and conduct a street-level assessment while responding / arriving on a scene.

**An assessment is vital to determine risk and level of personal protective equipment (PPE) to use.**

Consider the following:

- Reason for and type of call or service, including environment of the call, a home, vehicle, etc.

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- Behaviors of persons on scene, including the signs and symptoms as listed below
- Drugs or drug paraphernalia present (e.g. pills, residue or powders, folded pieces of paper)
- Quantity of the substance and ability for it to be safely contained and sealed

### **Operational Risks**

**Normal Operational Risk** is considered when a situational assessment reveals no or limited cues for drug effects or activity.

**Elevated Operational Risk** is considered when a situational assessment or cues reveal the reasonable potential or confirmation of small amounts (e.g. personal use) of a drug or activity indicating use of a drug(s), such as presence of pills, residue or powders, or behaviors indicating an opioid overdose as listed below.

Situations involving large amounts of drugs or gross contamination should be referred to local responders who have training handling these substances.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE) RECOMMENDATIONS**<sup>1</sup>

Synthetic opioids may be absorbed through the skin and airborne powder may be inhaled, therefore, first responders should not handle these substances bare-handed and should cover bare skin when appropriate. Personnel should continue to use universal precautions in all circumstances, especially on overdose calls, even if direct patient care is not being provided. PPE guidance has been determined based on review of reasonably anticipated operational procedures, and should only be considered a minimum.

Respiratory protection should be worn in accordance with the respirator selection, medical clearance, fit-testing, and other requirements of the Occupational Safety and Health Administration (OSHA) Respiratory Protection standard.

**NORMAL OPERATIONAL RISK PPE** – Equipment used today by first responders is adequate for overdose responses.

- Standard nitrile gloves (non-powdered) are all that is essential.
- When practical, Law Enforcement Officers conducting a search or pat-down based on a traffic stop or call for service should apply at least nitrile gloves, even if leather gloves are worn.
- Universal precautions and PPE should be used if there is blood or other bodily fluids —gloves, splash or face shield/standard mask.

<sup>1</sup> <https://www.ctfc.gov/niosh/topics/fentanyl/risk.html>

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**ELEVATED OPERATIONAL RISK PPE** – Recommended PPE kit guideline for responders who are working at calls where synthetic opioids **may be present AND an elevated risk of exposure is determined** .

- N-95 mask (minimum) or P100 mask – responder must be fit tested
  - Used in the unusual circumstance of significant airborne suspension of a powder
- Nitrile gloves (non-powered) – 2 sets (i.e. double glove) light color interior, dark color exterior
- Safety glasses with sides or goggles (NIOSH approved)
- Use a buddy system, and designate a responder to monitor for safety away from risk of exposure
- 2 doses of naloxone for administration, if needed
- Consider:
  - Water-resistant type sleeves to cover exposed skin
  - In cases where an enclosed space is heavily contaminated with a potential highly potent opioid, water-resistant coveralls should be worn.<sup>2</sup>

**ACTIVE HANDLING and PROCESSING.** For active handling and processing synthetic opioids, see NIOSH. This is NOT for average response or average overdose calls. Consider contacting DEA clandestine lab team for guidance or assistance at 603-213-0925.

**PERSONNEL EXPOSURES**

Symptoms of an opioid overdose or exposure MAY include any of the following:

Altered Level of Consciousness:	Breathing:	Altered Vital Signs:	Airway:
<ul style="list-style-type: none"> <li>• Excessive drowsiness</li> <li>• Difficulty thinking, speaking or walking</li> <li>• Confusion</li> <li>• Pinpoint pupils</li> <li>• Not responsive to pain or someone’s voice</li> <li>• Coma</li> <li>• Seizures</li> </ul>	<ul style="list-style-type: none"> <li>• Trouble breathing – may sound like snoring</li> <li>• Slow shallow breathing</li> <li>• Blue lips &amp; fingernails</li> <li>• Respiratory arrest</li> </ul>	<ul style="list-style-type: none"> <li>• Slowed heart rate</li> <li>• Low blood pressure</li> <li>• Dizziness</li> <li>• Cold, clammy skin</li> </ul>	<ul style="list-style-type: none"> <li>• Choking</li> <li>• Vomiting</li> </ul>

If you experience any of these symptoms call for help from on scene personnel or call for another responder, move to fresh air, wash exposed skin with soap and water, do not use alcohol-based hand washes such as hand sanitizer, and consider self-administering naloxone. Ensure other first responders are alerted to any exposure. Call for EMS assistance.

Note that patients who have been revived using naloxone may show signs of opioid withdrawal (i.e., agitation, nausea, vomiting, trembling, and headache). Some may experience more severe symptoms such as seizures or an irregular heart rhythm. Patients may become extremely agitated or violent so proper measures should be taken to maintain responder safety. After the overdose has been reversed, responders should be prepared for symptoms of other drugs such as methamphetamine or cocaine, which may have been taken with the synthetic opioid.

Consider calling Poison Control at 800-222-1222.

<sup>2</sup> [http://www.acmt.net/\\_Library/Fentanyl\\_Position/Fentanyl\\_PPE\\_Emergency\\_Responders\\_.pdf](http://www.acmt.net/_Library/Fentanyl_Position/Fentanyl_PPE_Emergency_Responders_.pdf)

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## MANAGEMENT AND TRANSPORT OF SUSPECTED OR CONFIRMED SYNTHETIC OPIOIDS (FENTANYL, CARFENTANIL, OR ITS ANALOGUES) TO FORENSIC LABORATORIES<sup>3</sup>

Forensic drug samples may originate from either the:

- Crime scene and collected directly as evidence is collected or
- Station where evidence is taken for in processing and inventory

**Recommended sample packaging and transport process of agent or drug samples is based upon the Centers for Disease Control and Prevention Guidelines for Packaging and Transporting Infectious Substances: Category A Infectious Substance.** (<https://www.cdc.gov/smallpox/lab-personnel/specimen-collection/pack-transport.html>)

- Officers preparing the suspected drug samples for transport should use appropriate PPE for elevated risk situations, to reduce the likelihood of contamination of the transport receptacles.
- Double or triple pack all specimens in:
  - Leak-proof primary receptacle or transparent plastic bag. Multiple samples should be individually wrapped or separated
  - The primary bag containing the sample should be clearly marked with:
    - Indication that the sample contained in the bag is either confirmed or suspected fentanyl
    - Other required notation consistent with evidence collection reporting and chain-of-custody
  - Once the sample is placed in the bag, the officer should remove the outer pair of gloves and dispose of them appropriately.
  - The primary bag should now be placed into the secondary leak proof receptacle or transparent bag.
  - If the specimen is a liquid, place absorbent material between the primary and secondary receptacle.
  - Appropriate documentation and chain of custody forms should be attached to the secondary bag or placed into the rigid container. The attached documentation should not be attached in a manner that obscures the notation on the primary bag.
  - Appropriate labeling as with the primary bag should be noted on the outside of the rigid container if one is used.
  - Place sample in the trunk. It should not be transported inside the vehicle, if possible.

Any questions about packaging in NH should be directed to the NH State Police Forensic Lab at 223-3854.

<sup>3</sup> <https://www.ctfc.gov/niosh/topics/fentanyl/risk.html>

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Synthetic opioids are extremely dangerous, even in very small doses. Emergency responders, including canines used to detect drugs, may develop signs and symptoms of an opioid overdose if exposed to synthetic opioids. First responders finding situations with large quantities of drugs, large quantities of drug paraphernalia, or indications of drug handling or processing should follow local guidelines.



Assess risk before entering



Normal Operations: Wear nitrile gloves



Elevated Risk: Wear appropriate PPE

First responders attempting to revive someone suspected of an opioid overdose should use the following recommendations:



## 1. STAY SAFE & ASSESS RISK

Perform a street-level risk assessment before entering a scene. Increased risk includes substances or items that look suspicious, such as vials, exposed needles, or powders.



## 2. NORMAL OPERATIONAL RISK

For Normal Operational Risk, which are scenes with no or limited clues of drug activity, wear nitrile gloves.



## 3. ELEVATED OPERATIONAL RISK

Elevated Operational Risk includes scenes where there is a reasonable potential or confirmation of small amounts of drugs, drug paraphernalia, or drug activity. For these situations, increase PPE to include respiratory and skin protection.

## ADMINISTER NALOXONE (Narcan)

Provide rescue breathing or CPR and administer naloxone as directed by your medical protocols. Be prepared to administer more than one dose of naloxone. Ensure responder safety. Be prepared to leave the contaminated scene and call law enforcement.

# WARNING

FIRST RESPONDERS

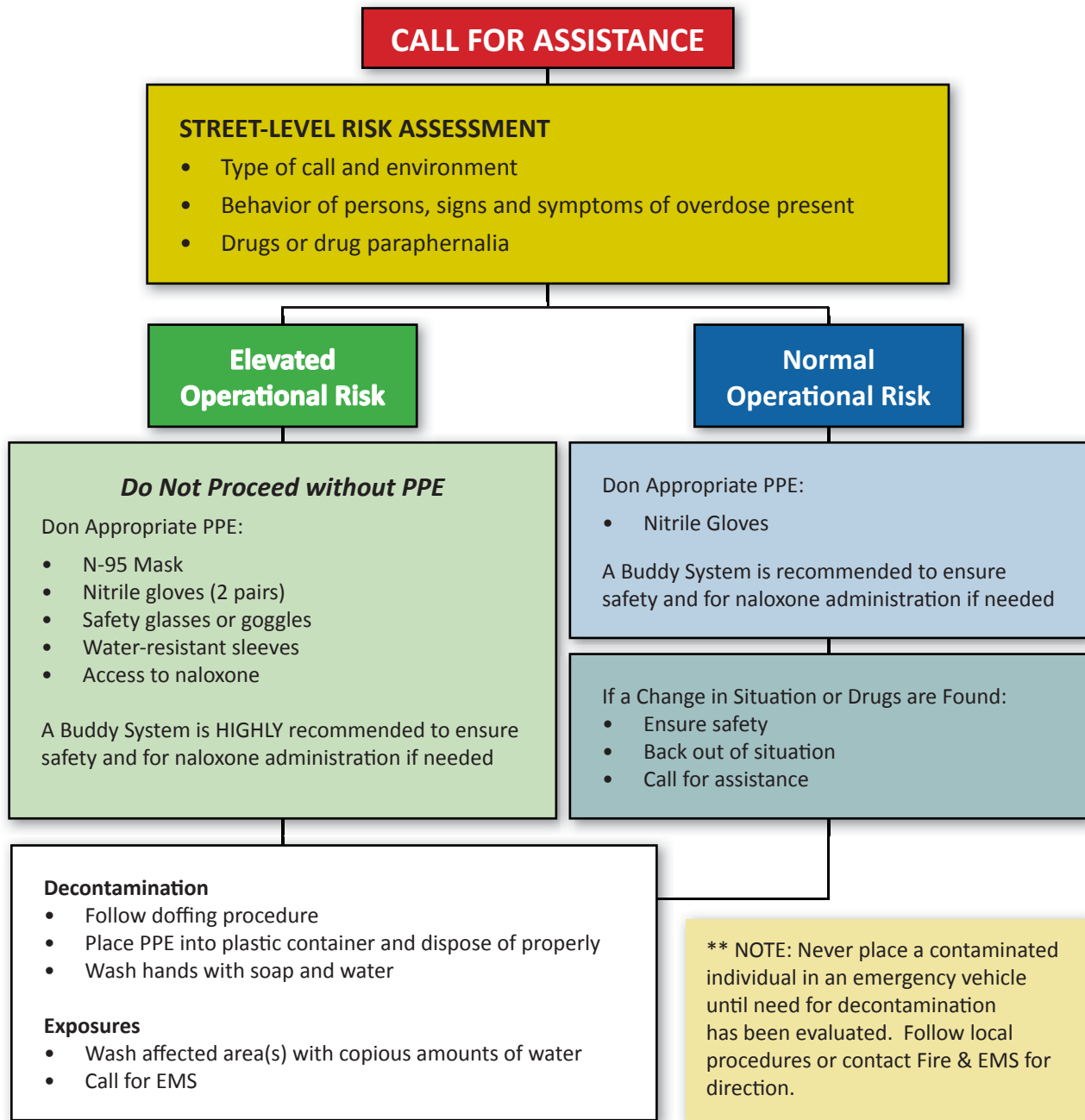
FIRST RESPONDERS

# FENTANYL, CARFENTANIL, AND SYNTHETIC OPIOIDS

FIRST RESPONDERS

FIRST RESPONDERS

## Opioid Response Guidelines for Initial On-Scene Responders



## NH STATEWIDE ADDICTION CRISIS LINE

If you or someone you know is experiencing a substance use or an addiction-related crisis

1.844.711.HELP (4357)



New Hampshire Department of Health and Human Services  
in cooperation with NH Department of Safety,  
Division of Fire Standards and Training and Emergency Medical Services

[www.dhhs.nh.gov](http://www.dhhs.nh.gov)



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# WARNING