Opioid Operational Command Center (OOCC)

Dear Colleagues,

This email is for your situational awareness regarding guidance for law enforcement, emergency medical services (EMS) personnel, and firefighters on personal protective equipment and precautions when coming into contact with unknown substances at the request of local jurisdictions. This guidance was created in collaboration with Opioid Operational Command Center representatives from the Department of Health and Mental Hygiene, Maryland Institute for Emergency Medical Services Systems, and the Maryland State Police.

There have been rare case reports of personnel across the United States being sickened from exposures to fentanyl and carfentanil and there have not been any law enforcement or EMS deaths associated with carfentanil contact. However, it's imperative that our first responders are prepared to handle these situations.

Thank you for your continued support and partnership as we work to ensure a safer future for all Marylanders.

Regards -- Opioid Operational Command Center

Personal Protective Equipment Recommendations and Unknown Substance Precautions for First Responders

ABOUT CARFENTANIL

Carfentanil, while in the same drug family as fentanyl, is a dangerous analogue and much more potent then heroin or fentanyl. Carfentanil is 10,000 times more potent than morphine, 5,000 times more potent than heroin, and 100 times more potent than fentanyl. Although the lethal dose is not specifically known, it is estimated that as little as 200 micrograms of carfentanil might be lethal.

This drug is extremely dangerous, even in very small doses, and can pose a risk to responders. Emergency responders could develop toxicity if exposed to potent opioids, such as fentanyl and its analogues, especially carfentanil.

Carfentanil overdoses present with signs and symptoms likely to be seen with other opioids, primarily central nervous system (CNS) depression, respiratory depression, and constricted pupils. Naloxone is an opioid antagonist and should reverse the effects of carfentanil overdoses, but it has been suggested that large doses might be required.

PERSONAL PROTECTIVE EQUIPMENT RECOMMENDATIONS [1]

Both fentanyl and carfentanil can be absorbed through the skin and the airborne powder can be inhaled, therefore, first responders should not handle these substances bare-handed. Personnel should continue to use universal precautions in all circumstances, especially on overdose calls, even if direct patient care is not being provided.

Personal Protective Equipment (PPE) used today by first responders is adequate for overdose responses.

- Standard gloves are all that is essential.
- Law enforcement officers conducting a pat-down should apply nitrile gloves over their leather gloves to reduce the risk of any agent binding to their leather gloves.
- If there is blood or other bodily fluids, use universal precautions—gloves, splash or face shield/standard mask.
- For active handling and processing fentanyl, which includes any time there has been aerosolization of the powder, such as a flash bang on raid, there is respiratory protection guidance from the National Institute for Occupational Safety and Health (NIOSH) as listed below. This is NOT for average response or overdose calls.

RESPIRATORY PROTECTION APPLIES ONLY IF HANDLING AND PROCESSING HIGH RISK AGENT [2]

While **handling and processing fentanyl** and its analogues, first responders, such as first responders should wear either a National Institute for Occupational Safety and Health-approved:

- Half-mask filtering facepiece respirator rated P100,
- Elastomeric half-mask air-purifying respirator with multi-purpose P100 cartridges,
- Elastomeric full facepiece air-purifying respirator with multi-purpose P100 cartridges, OR
- A powered air-purifying respirator (PAPR) with high-efficiency particulate air (HEPA) filters.

Both the filtering facepiece respirator and the half-mask elastomeric air-purifying respirator should be worn with appropriate eye and face protection. The multi-vapor P100 cartridges are designated by the olive and magenta colors on the cartridge. Additionally, chemical, biological, radiological, and nuclear (CBRN) canisters—designated by its olive green color—provide P100 protection.

[1, 2] Content directly quoted from NIOSH: Fentanyl: Preventing Occupational Exposure to Emergency Responders. Available via: https://www.cdc.gov/niosh/topics/fentanyl/risk.html

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. No facial hair is permitted when using any of these recommended respirators (except for the use of a loose-fitting hood with the PAPR).

MANAGEMENT AND TRANSPORT OF SUSPECTED OR CONFIRMED DRUG (FENTANYL OR ITS ANALOGUES) TO FORENSIC LABORATORIES

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. [3]

- Officers preparing the suspected drug samples for transport should use appropriate PPE, such as double-gloving 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.
    - The drug sample may then be placed into a rigid outer packaging (according to local law enforcement operating procedures) to prevent rupture of the primary and secondary bag during transit especially if it is a large sample.
    - If 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 and should not be transported in the provider compartment, if possible.

[3] CDC Packaging and Transporting Infectious Substances: Category A Infectious Substance. Available from: https://www.cdc.gov/smallpox/lab-personnel/specimen-collection/pack-transport.html