



Ontario Emergency Medical Services Section 21 Sub Committee

Emergency Medical Services Guidance Note # 11

Synthetic Opioids

PREAMBLE

Paramedics often work in uncontrolled environments and may encounter pharmaceutical or illicit synthetic opioids. The probability of contamination and potential exposure is minimized with proper controls, including policies, preventive measures and training.

BACKGROUND

Synthetic opioids like fentanyl, carfentanil (and many other derivatives) have potency levels significantly higher than morphine. Most synthetic opioids are not intended for human use. Synthetic opioids may be present in different forms including but not limited to:

- **Tablets:** Found in many shapes and colours; often coloured and stamped with a number or letters to replicate other familiar tablets that are pharmaceuticals or other illicit substances.
- **Powder:** Illicit powder (such as fentanyl) may appear off-white or light yellow. The powder is easily mixed with or substituted with other psychoactive substances like cocaine, heroin and methamphetamine.
- **Liquid:** Illicit opioid powder may be mixed in a liquid (for drawing up into a syringe by a user). Other liquids (e.g. drops into the eye) have also been identified as a method of misuse.
- **Patch:** Commonly prescribed for pain management in a slow release dosage. Users of illicit opioids may also find uses for patches, such as removing the gel like material containing active ingredients.
- **Blotter:** Small pieces of paper impregnated with opioids have also been encountered for street level users through oral absorption.

Some of the illicit opioids are manufactured in clandestine drug laboratories or shipped into Canada. In these situations, a user has very little control over the amount (or potency) of the opioid.

Exposure: Occurs when the drug enters a person through exposure routes described below:

- Absorption through the eyes or mucous membranes.
- Inhalation (e.g. dusts, aerosols).
- Ingestion (e.g. touching mouth with contaminated hands).
- Skin contact (limited).



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Evidence indicates toxicity cannot occur from simply being in proximity to the drug. The risk of toxicity is dependent on the exposure pathway and for exposure to occur, the suspected opioid must enter the brain/blood via the exposure routes described.

The risk of exposure to workers through secondary contact is dependent on the form of the drug (e.g. aerosols), if a scene assessment was conducted and if appropriate PPE or equipment was used. It is important to realize that the greatest risk from synthetic opioids is to people who purposely consume the drug. While drugs such as fentanyl can be absorbed through the skin, absorption through the skin from secondary contact is highly dependent on a number of factors such as:

- quantity of the product,
- length of time in contact with the skin,
- condition of the skin and whether moisture is present.

The risk of exposure through secondary contact and skin absorption is considered low.

Contamination: Occurs when a patient/bystander or first responder, has come into direct contact with a suspected opioid. Contamination with suspected opioids does not always mean exposure has occurred (clothing vs. skin).

Decontamination should occur prior to treatment by paramedics.

HEALTH AND SAFETY PRECAUTIONS AND CONTROL MEASURES

The EMS Section 21 sub-committee supports the position statement called *Preventing Occupational Fentanyl and Fentanyl Analog Exposure to Emergency Responders* prepared by the American College of Medical Toxicology (ACMT) and the American Academy of Clinical Toxicology (AACT). The position paper can be accessed at the internet link provided in the resources section of this guidance note. A number of reputable agencies with expertise in the field have also publically endorsed the ACMT & AACT position statement.

- **Policies:** Employers should develop specific policies regarding the control of worker exposure to opioids. Policies may be separate, or they may be part of existing or related policies. These policies should be developed in consultation with the health and safety representative or joint health and safety committee at the workplace.
- **Risk assessment:** The purpose of a risk assessment is to identify hazards to paramedics. A risk assessment related to the presence of opioids and potential exposure, including community-based information about potential exposure, should be conducted, with policies and procedures reviewed regularly.
- **Procedures:** Specific procedures related to prevention and control of opioid exposure may include the following items:
 - **Scene assessment:** Procedures to guide workers on proper scene assessment for the presence of opioids or other drugs should be in place. This may also take



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into consideration the task/point of care risk assessment. It is important for staff to be aware that all scene assessments must consider other potential hazards such as drug use paraphernalia, used needles or other hazards.

- Patient decontamination: Decontamination of patients should occur prior to treatment by EMS workers. It is important that workers minimize actions that may result in aerosolizing powdered opioids that may be present on patient's clothing, equipment etc. All contaminated clothing should be removed, and the person should go through decontamination with a water flush. Wash skin thoroughly with cool water and soap. Do not use hand sanitizers as they may enhance absorption (see hand hygiene below). Patients should not be ***transported or placed in the ambulance until decontamination is completed.*** EMS workers should communicate with the receiving hospital and report "that the patient has been decontaminated prior to transport". Procedures should be developed to address instances where there is any evidence of quantities of powdery substances on a patient and/or presence of possible drug-making equipment (clandestine lab). This is true for any type of illicit drug and not just suspected opioids.
- Worker decontamination: Procedures should be developed and implemented to address how to deal with workers who become contaminated.
- Worker exposure: Procedures are required to respond to workers that may be exposed. This may include appropriate response (such as sending a secondary unit) if a worker is exposed at the scene.
- Personal protective equipment (PPE): PPE must be available for potential exposure scenarios. In most cases, exposure can be prevented by using appropriate PPE. The following PPE may be required:
 - Nitrile gloves, if hand contamination is possible.
 - A fit-tested N95 respirator should be worn, as a minimum if there is potential for exposure to aerosolized or powdered drug product. (The US Centers for Disease Control (CDC) can be use as a reference for examples of additional PPE currently being recommended for EMS and law enforcement workers).
 - Eye and face protection if there is potential exposure to mucous membranes.
 - Gown or coveralls to protect clothing if there is potential for contamination of clothing.
- Hand-hygiene: Hand-cleaning is important following tasks where hands may become contaminated and after removal of PPE.
 - Caution is required regarding the use of alcohol-based hand rub (ABHR). ABHR is not recommended for hand cleaning when the presence of synthetic opioids on hands is suspected or probable as it may encourage absorption.



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- After call procedures: Following service, procedures are required for appropriate cleaning and decontamination of vehicle, equipment and uniforms.

- **Education and instruction**: All staff that have the potential risk of exposure or may be involved in decontamination efforts must be acquainted with the hazard in the work. The employer must provide information and instruction to protect the health or safety of workers.

SOME RELEVANT OCCUPATIONAL HEALTH AND SAFETY ACT REQUIREMENTS

The Occupational Health and Safety Act (OHSA) requires that employers:

- Ensure that the equipment, materials and protective devices provided by the employer are maintained in good condition – OHSA clause 25 (1)(b).
- Acquaint a worker or person in authority over a worker with any hazard in the work – OHSA clause 25 (2)(d)
- Provide information, instruction and supervision to a worker to protect the health or safety of the worker – OHSA clause 25(2)(a)
- Take every precaution reasonable in the circumstances for the protection of a worker – OHSA clause 25(2)(h).
- Notice of occupational illness – if an employer is advised by or on behalf of a worker that the worker has an occupational illness or that a claim has been filed with the Workplace Safety and Insurance Board, the employer shall give notice in writing within four days of being so advised, to a Director, to the committee, health and safety representative and to the trade union, if any, containing such information and particulars as are prescribed – OHSA clause 52(2).

Supervisors are required under the OHSA to:

- Ensure that a worker uses or wears the equipment, protective devices or clothing that the worker's employer requires to be used or worn – OHSA Clause 27(1) (b).
- Advise a worker of the existence of any potential or actual danger to the health and safety of the worker of which the supervisor is aware – OHSA clause 27(2)(a).
- Take every precaution reasonable in the circumstances for the protection of a worker – OHSA clause 27(2)(c).

Workers are required under the OHSA to:

- Work in compliance with the provisions of the Act and the regulations – OHSA clause 28(1)(a).
- Use or wear the equipment, protective devices or clothing that the worker's employer



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requires – OHSa clause 28(1)(b).

- Report to an employer or supervisor the absence of, or defect in any equipment or protective devices of which the worker is aware and which may endanger the health or safety of a worker – OHSa clause 28(1)(c).
- Report to a supervisor or employer any contraventions of the Act or regulations or the existence of any hazard of which he or she is aware – OHSa clause 28(1)(d).

References and Resources:

American College of Medical Toxicology and American Academy of Clinical Toxicology. [*ACMT and AACT Position Statement: Preventing Occupational Fentanyl and Fentanyl Analog Exposure to Emergency Responders*](#). (September 2017) (Retrieved March 2018).

Centers for Disease Control and Prevention. [*CDC Guidelines - Fentanyl: Workers at Risk: NIOSH Workplace Safety & Health Tips*](#). (August 2017). (Retrieved March 2018).

Ontario Poison Centre. [*Street Opioid Resuscitation Recommendations*](#). (January 2017. Retrieved March 2018).

Ontario poison Centre: [*Opioid Overdose Management*](#) (includes facts and myths about opioids) (Retrieved March 2018).

Royal Canadian Mounted Police (RCMP) Drug Fact Sheets [*Drugs and New Trends – Awareness- Depressants*](#) (Retrieved March 2018)

United States Interagency Board. [*Recommendations on Selection and Use of Personal Protective Equipment and Decontamination Products for First Responders Against Exposure Hazards to Synthetic Opioids, Including Fentanyl and Fentanyl Analogues*](#). (August 2017). (Retrieved March 2018).

Saskatchewan Association for Safe Workplaces in Health - www.saswh.ca

This document should be shared with the workplace Joint Health and Safety Committee or Health and Safety Representative, incorporated into the workplace occupational health and safety policy and program where appropriate, and posted on the Public Services Health & Safety Association website and the websites of other interested stakeholders.

This Guidance Note has been prepared to assist the workplace parties in understanding some of



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their obligations under the Occupational Health and Safety Act (OHSA) and the regulations. It is not intended to replace the OHSA or the regulations and reference should always be made to the official version of the legislation.

It is the responsibility of the workplace parties to ensure compliance with the legislation. This Guidance note does not constitute legal advice. If you require assistance with respect to the interpretation of the legislation and its potential application in specific circumstances, please contact your legal counsel.

While this Guidance Note will also be available to Ministry of Labour inspectors, they will apply and enforce the OHSA and its regulations based on the facts as they may find them in the workplace. This Guidance Note does not affect their enforcement discretion in any way.