

PURPOSE: The City of Surrey is committed to providing a safe and healthy workplace. This plan provides City of Surrey staff with key information regarding the hazards related to fentanyl compound or its analogues and precautions required to minimize potential exposure, including coming into contact with persons who have used these drugs or have them in their possession.

KEY OBJECTIVE: To raise the general awareness and understanding of the hazards and risks of contact with the Fentanyl substance; Opioid overdose including its signs and symptoms; and the appropriate first-aid responses.

PREVENTION PLAN:

1. Opioid Overdose
2. Hazard
3. Route, Symptoms, Risk of Exposure & Precautions
4. Personal Protective Equipment
5. First-Aid
6. First Aiders Responding to an Opioid Overdose –Hazards, WorkSafeBC & Response
7. Debriefing & Supporting Staff
8. Education & Awareness
9. Documentation & Reporting
10. Communication
11. Review & Evaluation
12. References

1. OPIOID OVERDOSE

What do you do when you find an unconscious patient with a suspected or confirmed opioid overdose?

Call 911 first.

- a) Scene safety assessment:
 - ✓ Ensure no general hazards
 - ✓ Look for needles or sharps and make the scene safe before moving in to patient
 - ✓ Look for signs of the drug compound and ensure there is nothing present. Avoid contact with any drug compounds.
- b) Look for:
 - ✓ Signs of injection drug use (e.g. track marks)
 - ✓ Signs of inhalation in oral and nasal mucosa
 - ✓ Evidence of intoxication during assessment

- c) Assess for the following:
- ✓ Level of consciousness - the person can't stay awake, walk or talk, unresponsiveness
 - ✓ Little or no response to a sternal rub
 - ✓ Pinpoint pupils or eyes rolled back
 - ✓ Body is limp
 - ✓ Slow or absent pulses
 - ✓ Slow or absent breathing (< 8 breaths per minute), snoring or gurgling
 - ✓ Low oxygen saturation (< 92% oxygen saturation on room air)
 - ✓ Skin looks pale or blue, especially nail beds and lips, feels cold
 - ✓ Vomiting

2. HAZARD

FENTANYL

A man-made pain medication often prescribed after surgery or used for advanced cancer patients. It is a powerful synthetic opioid analgesic. It is colourless, odorless and can resemble white salt. Exposure can quickly result in respiratory depression.

Fentanyl is a skin permeable substance with an estimated lethal dose at 2mg. Unlike many illicit drugs, the fentanyl being found on the streets today is extremely lethal and is readily absorbed through the skin, by inhalation or ingestion.



Depressants (or downers) tend to slow the body down (including breathing) and can make people sleepier.

Opioids are a special class of depressant. They may be prescribed or used illegally to reduce pain, manage opioid dependence or produce a state of euphoria/relaxation. Common opioids include heroin, fentanyl, morphine, methadone, codeine and oxycodone.

RCMP and municipal police forces in BC have found illicitly manufactured fentanyl being sold in:

- Pill form sold as fake oxys and other club drugs
- Powder form as heroin or fentanyl
- Powder form mixed into other drugs (e.g. cocaine, crystal meth, etc.)

Pills or powders containing illicitly-manufactured fentanyl are especially dangerous because there is no quality control or regulated manufacturing process. These drugs may contain toxic contaminants or have different levels of fentanyl in each batch. Even pills produced in the same batch may have little to lethal levels of fentanyl.

3. ROUTE, SYMPTOMS, RISK OF EXPOSURE & PRECAUTIONS

ROUTES OF EXPOSURE

Fentanyl can be absorbed into the body via:

- inhalation,
- ingestion, or
- skin contact.

It is not known whether fentanyl can be absorbed systemically through the eye.

Fentanyl can be administered intravenously (IV), intramuscularly (IM), or as a skin patch (transdermally).

Symptoms of exposure:

- Feelings of euphoria and relaxation, false sense of well-being
- Reduced level of consciousness
- Confusion
- Sedation, Drowsiness
- Pinpoint pupils
- Dizziness/light-headedness
- Nausea and vomiting
- Nervous System depression
- Respiratory distress, respiratory depression or arrest

RISK OF EXPOSURE

Depending on their role, staff may come into contact with persons who have used these drugs, have them in their possession, or may have used them in a City of Surrey facility, public place or private property. While the risk is low, City of Surrey employees are at risk of potential exposure while administering first aid to overdose victims in an environment where there is an unknown powder.

Exposure via inhalation of powder or skin absorption may lead to overdose. While it can be absorbed through unbroken skin, it does take some time. Absorption by skin is less likely to lead to overdose than exposure through inhalation. Inhalation or incidental ingestion is the greatest threat to employees. Inhalation exposure can quickly result in respiratory depression.

Fentanyl and its analogs such as carfentanil do not have established occupational exposure limits (OELs). Pharmaceutical manufacturers have developed internal OELs based on their own risk assessments. Time-weighted averages that have been used as OELs in the pharmaceutical industry are reported as 0.0001 mg/m³ for fentanyl, 0.000032 mg/m³ for sufentanil, and 0.001 mg/m³ for alfentanil (Van Nimmen et al.).

Highly toxic substances distributed on the street for consumption by drug users is typically cut to a lower purity level and if so, does not represent the same level of risk as pure substances.

Notwithstanding, any product which may contain highly toxic substances at any concentration should be handled with caution and appropriate precautions should be taken to avoid accidental exposure and contamination.

NOTE: To date, there have been no reported incidents of accidental exposure to fentanyl by City of Surrey staff, including RCMP employees. We are aware of an incident involving provincial staff (i.e. Sheriff) conducting a Court House transfer. The incident involved a search and seizure resulting in a possible exposure to an opiate that required medical treatment (opiate antidote).

LEVEL OF RISK / PRECAUTIONS

Level of risk will be determined by the responding employee through their scene assessment of the environment. The employee will utilize the appropriate personal protective equipment (PPE) and/or complete the actions noted below. If in doubt, employees should speak with their Manager and/or Health & Safety Specialist.

Very Low Risk:

Performing regular tasks; touching shared door handles; pressing elevator buttons; exchanging papers.

PPE/Precautions: No PPE required unless previously required to control other hazards.

Potential Risk:

Taking blood samples; providing first aid; cleaning shared surfaces in areas, with or without known drug use with no visible powders; collecting sharps containers.

PPE/Precautions: Put on gloves for these situations. Use pocket masks for CPR. Wash hands regularly. Wear appropriate PPE for cleaning and disposing known powders as required.

If available, nitrile gloves of darker colour or black should be used as the presence of light coloured powder will be easily visible. Light coloured powder contamination will be harder to identify on light coloured gloves.

Wear long sleeved shirt to prevent accidental exposure from highly toxic substances, in powder form. A waterproof dark coloured jacket will provide an additional level of safety. Any contaminate will be easily identifiable and can be removed by running water over the garment.

Do not taste, feel, or sniff suspected drugs.

NOTE: Only First-Aid Certified employees who understand the importance of following universal precautions should be responding to medical incidents in the workplace until Emergency Health Services (EHS) arrive.

PPE/Precautions: Only trained Responders are allowed to deal with these situations. They will contact the RCMP as per their protocols.

High Risk:

Visible unknown powder substance is found in an area associated with an overdose, a medical emergency and/or has signs of recent drug use such as drug paraphernalia. There is a higher risk to staff when exposure to environments where illicit drugs are being produced, transported and stored.

RCMP, Surrey Fire Service & EHS should be contacted to address these types of situations.

NOTE: First responders may also encounter violent behavior from the user when naloxone is used to reverse respiratory depression as it may put the user into withdrawal.

The January 13, 2017 guidance document reflected below from the Provincial Health Officer confirms the “extremely low” risk related to exposure and provides recommendations on the appropriate level of PPE required for guarding against secondary exposures.



January 13, 2017

To: BC Chief Medical Health Officers
Dr. Peter Rothfels, Director, Clinical Services & Chief Medical Officer, WorkSafe BC

Guidance statement regarding Personal Protective Equipment for Emergency Medical Services and Health Care Workers dealing with overdose victims

The purpose of this guidance document is to recognize the differing practices used by local law enforcement officials carrying out drug seizures and executing search warrants. This has created concern within British Columbia's health care community. This guidance statement is to recommend the appropriate level of Personal Protective Equipment (PPE) required for guarding against secondary exposures to potentially harmful, illicit drugs in the health care setting

The risk of unintended fentanyl and fentanyl analogue exposures to Health Care Workers (HCWs) and Emergency Medical Services (EMS) staff treating overdose victims is extremely low. Unlike law enforcement, EMS and hospital medical staff are not exposed to environments where illicit drugs are being produced, transported or stored. In British Columbia, the epicenter of the Canadian opioid overdose epidemic, there have been no reported cases of secondary exposures of fentanyl to EMS, HCWs or private citizens administering naloxone, despite thousands of overdose reversals in the field and in health care facilities.

No additional Personal Protective Equipment is required when attending patients with drug exposures unless there is a risk of respiratory and/or bodily fluid exposure. The protective equipment used by law enforcement first responders and hazardous materials teams reflect contexts and risks beyond those found in the health care setting. While PPE, routine practices and additional precautions should continue to be used when there is a risk of respiratory and/or bodily fluid exposure, the additional practices and/or elevated levels of PPE used in other professions are not required at this time.

Further guidance on overdose management can be found on the following website:
http://towardtheheart.com/assets/naloxone/administering-naloxone-dst-final-december-2016_229.pdf

Further guidance for Fentanyl Safety for First Responders can be found at
<https://www.fentanylsafety.com/job-specific/>

Sincerely,

P.R.W. Kendall
OBC, MBBS, MHSc, FRCPC
Provincial Health Officer

Health Authority On-Call Numbers:

Fraser Health Authority – 604-527-4806
Interior Health Authority – 1-866-457-5648
Northern Health Authority – 250-565-2000
Vancouver Coastal Health – 604-527-4893
Vancouver Island Health Authority - 1-800-204-6166

Ministry of Health

Office of the
Provincial Health Officer

4th Floor, 1515 Blanshard Street
PO Box 9648 STN PROV GOVT
Victoria BC V8W 9P4
Tel: (250) 952-1330

4. PERSONAL PROTECTIVE EQUIPMENT (PPE)

When there is a potential risk of exposure with no visible powder:

- Always wear nitrile gloves
- Use a pocket mask equipped with a one-way valve when performing CPR
- Wear CSA approved safety glasses

When providing first-aid services, universal precautions must be followed, ALL blood and body fluids treated as infectious. The appropriate PPE must be used.

If available, nitrile gloves of darker colour or black should be used as the presence of light coloured powder will be easily visible. Light coloured powder contamination will be harder to identify on light coloured gloves.

If visible unknown powder is found, call RCMP/Surrey Fire Services.

It is recommended to wear a long sleeved shirt to prevent accidental exposure from highly toxic substances, in powder form. A waterproof dark coloured jacket will provide an additional level of safety. Any contaminate will be easily identifiable and can be removed by running water over the garment.

Do not taste, feel, or sniff suspected drugs.

- Wear long sleeves to prevent a powder from inadvertently contacting your skin.
- Wear fit tested respirators (N95) when dealing with powdered substances
- Double-bag any possibly contaminated gloves, clothing, etc.

NOTE: First Responder PPE must be decontaminated and cleaned as per manufacturer's instructions. Rinsing with large volumes of water, detergent and hanging to dry is generally sufficient.

5. FIRST AID

ROUTE OF EXPOSURE	FIRST AID PROCEDURE
Eyes	Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT attempt to remove the lens until you have completed to flush the eyes.
Skin	Immediately wash skin with plenty of water. Remove and isolate contaminated clothing and shoes. Wash clothing separately before reuse.
Inhalation	If gas/fume/vapor/dust/mist from fentanyl is inhaled, remove yourself from contaminated environment, immediately seek fresh air. If fellow employee inhales the substance, move them immediately to fresh air. If unconscious, place the person in the recovery position to ensure the airway is open. Evaluation of breathing is required until transfer to EMS. Start CPR and AED protocol if needed. Do not use mouth-to-mouth method; Use a pocket mask equipped with a one-way valve. Apply oxygen if available.
Ingestion	Immediately call a POISON CENTER or physician. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep the head low so that stomach content doesn't get into the lungs. If fellow employee ingested substance, and is unconscious, place the person in the recovery position to ensure the airway is open. Evaluation breathing is required until transfer to EMS. Start CPR and AED protocol if needed. Do not use mouth-to-mouth method; Use a pocket mask equipped with a one-way valve. Apply oxygen if available. Follow same vomiting protocol as described in previous paragraph.

NOTE:

- If you get any unknown powder on yourself, immediately let someone know and follow the first aid procedures in the table above. If you feel any noticeable symptoms identified above, contact Emergency Health Services (EHS) immediately. Exposure to fentanyl can be safely reversed by the administration of Naloxone (Narcan™), which EHS crews carry. The effects of Naloxone wear off within 30–90 minutes so it is important to seek medical help as soon as possible.
- Surrey Fire Services should arrive in less than 8 minutes.
- Be sure to clean your work surface and equipment. After removing gloves, wash hands and other exposed skin thoroughly.
- Double-bag any possibly contaminated gloves, clothing, etc.
- Offer confidential counselling- FSEAP to staff – 1-800-667-0993.

6. FIRST AIDERS RESPONDING TO AN OPIOID OVERDOSE –HAZARDS,WORKSAFEBC & RESPONSE

Occupational First Aid level 1 or Standard First Aid certificate is strongly recommended for staff in our facilities. Universal precautions must be followed, ALL blood and body fluids treated as infectious. The appropriate PPE must be used. Employees who have not received first-aid education and training will not be required or pressured to provide assistance if they are not comfortable providing first aid to a patron. Staff should respond to first-aid opioid overdose incidents in pairs.

IDENTIFIED HAZARDS

- Assault by clients who have an aggressive opiate withdrawal from the naloxone administration
- Exposure to opioid dusts, infectious body fluids or sharp drug paraphernalia
- Liability lawsuits from clients receiving naloxone from City employees
- Extraordinary stress, reduced resiliency for non-professional first responders
- Employee performing work outside of job description

WORKSAFEBC

Administering First-Aid must be within the employee's worksite. Employees have maximum insurance and liability protection within the worksite. When employees voluntarily leave the worksite and administer First-Aid in a public space they are at risk of voiding their WorkSafeBC injury coverage if they become injured. WSBC has specific policy to accept claims. If WSBC does not believe an injury "arose out of the course of employment" they will not accept a claim. There is an increased probability WSBC will deny an injury claim for an employee who left the worksite to voluntarily administer first-aid and first responder duties are not part of their job description. Employees are strongly recommended to only administer first-aid only within the worksite for their maximum insurance and liability protection.

If employees witness a medical incident in a public area they should call 911 for ambulance and/or Surrey Fire Services response.

If a worker chooses to respond to a first-aid incident beyond their worksite and administer first aid they need to accept that the burden of risk for physical injury or personal liability rests with them personally and not the City. The Good Samaritan Act provides limited personal liability and physical injury compensation. If you have Sick Leave benefits from the City, your benefits may be used to cover wage loss implications of a personal injury.

FIRST AIDERS RESPONDING TO AN OPIOID OVERDOSE IN THE WORKPLACE– FOLLOW THE “SAVE” ACRONYM.

First-Aid trained employees are encouraged to do rescue breathing and **call 911**.

STIMULATE

If you suspect someone is having an opioid overdose, start by stimulating them to confirm that they



are unresponsive. Shout at them – use their name if you know it. Next do a sternal rub (make a fist and rub your knuckles along the person's breast bone). You should always tell someone what you are going to do before you touch them. If the person does not respond to sound or pain, then it is a medical emergency. Call 911. If you are alone, you can put the phone on speaker.

AIRWAY

Next, check the person's mouth for any obstructions. Items like gum, dentures, or a syringe cap could be preventing the person from breathing properly.



Remove any obstructions. Once you've confirmed the mouth is clear, tilt the person's head back – this opens their airway.

VENTILATE

The next step is to breathe for the person. Opioid overdoses slow breathing decreasing oxygen to the brain. By doing rescue breathing throughout the overdose response, you help keep oxygen going to the person's brain.

Use a pocket mask equipped with a one-way valve. To give breaths, keep the person's head tilted back, pinch their nose, and give them 2 breaths. You should be able to see their chest rise with each breath. Continue to give 1 breath every 5 seconds until the person is breathing on their own or first responders arrive.

Breaths are crucial to the overdose response. They keep the brain alive.

If you witness someone overdose, it is likely that their heart is still beating, and only rescue breathing is necessary. If you come across someone who has overdosed and you do not know how long they have been unconscious and not breathing you should give chest compressions in addition to giving breaths.

EVALUATE

Sometimes giving some breaths is enough for the person to regain consciousness. If they are still unresponsive, Stimulate to confirm they are not responsive, and call 911. Check their airway, and provide breaths, 1 every 5 seconds, until first responders arrive.

The Recovery Position

If you have to leave an unconscious/unresponsive person at any point, put them in the recovery position. This helps to keep the airway clear from their tongue or vomit allowing them to breathe properly. During an opioid overdose, slowed breathing can cause the lungs to fill up with excess fluid. If you are not actively working on an individual (giving breaths) put them in the recovery position.



To put someone in the recovery position, hold the leg and arm on the side of their body closest to you and roll them away from you. In the picture above it is the right leg and the right arm that get bent.

REQUESTS BY THE PUBLIC TO ATTEND OFF-SITE OVERDOSES

Employees may NOT leave the worksite. The City does not require or request that employees leave the worksite to respond to overdoses.

Voluntary departure from the worksite to attend an off-site overdose may void WorkSafeBC coverage for an injury and City protection for personal liability lawsuits.

Call 911 and let ambulance or Surrey Fire Services respond.

7. DEBRIEFING & SUPPORTING STAFF

The City of Surrey recognizes that responding to an overdose can be a stressful experience.

Following each overdose response the worksite supervisor will check the wellbeing of employees, especially the individuals who were directly involved.

Worksite supervisors may request assistance from senior managers, Workplace Health Specialist, and/or FSEAP (supervisors must request “Critical Incident Stress Debrief” from intake call centre).

Worksite management are expected to make sure employees feel supported. The following simple interventions allow employees to better manage stress and resiliency following overdose incidents:

- Create a supportive work environment
- Provide encouragement and positive feedback
- Prioritize staff complaint follow up
- Encourage feelings of connectedness and belonging through staff social events
- Promote self-care as a regular and worthwhile practice

Encourage struggling employees to seek counselling if their resiliency is weakened from responding to overdose incidents or other personal challenges through the City’s EFAP provider, FSEAP at 1.800.667.0993

8. EDUCATION & AWARENESS

Workers at risk of Fentanyl exposure will be educated about the following topics:

- What is Fentanyl?
- Symptoms of Exposure
- Risks for workers
- First-Aid

There are three levels of education & awareness:

- I. General awareness
- II. Non-first responders potentially exposed
- III. First responders

Note: Violence Prevention Awareness Training is also recommended for potentially exposed staff.

I. GENERAL AWARENESS

For staff that may not be exposed but would like general Fentanyl Awareness information, they have two options on the OHS Intranet to gain information:

- Safety Link on OHS - <https://www.fentanylsafety.com/about-fentanyl/>
- Safety Bulletin – [Preventing Exposure to Fentanyl or Fentanyl Analogues for Non-First Responders](#)

II. NON-FIRST RESPONDERS POTENTIALLY EXPOSED STAFF

For staff that have potential exposure and feel they need further information, the Manager/Supervisor may arrange to have OHS staff provide a crew talk awareness session (not mandatory).

During the session participants will be able to:

- Identify an opioid (specifically fentanyl) overdose
- Implement correct procedures to respond to an overdose
- Follow proper first aid procedures during overdose response
- Access and review relevant resources available to staff: PPE, EFAP, First Aid
- Inform others with sound general information about opioids and overdose response

- CRS Staff
- Library Staff
- Park Ops Field Staff
- Engineering Ops Field Staff
- By-Law Enforcement
- First-Aid attendants

III. FIRST RESPONDERS – SURREY FIRE SERVICES

- All City of Surrey First Responders must receive Surrey Fire Services **Responder Fentanyl Awareness Training**
- All Surrey First Responders must receive the **Administration of Naloxone by Fire First Responders and Emergency Medical Responders in Suspected or Confirmed Opiate Overdose.**

9. DOCUMENTATION & REPORTING

- All non-first responder's education and training should be documented.
- All First Responder training must be documented.
- Safety Bulletin -Preventing Exposure to Fentanyl or Fentanyl Analogues for Non-First Responders.
- 2017 Fentanyl Awareness OHS plan document – First-Aid Procedure if exposed to Fentanyl.
- All potential incidents of exposure must be documented by using the City of Surrey Incident report and submitting to Occupational Health & Safety.

10.COMMUNICATION

- After the SMAT/Citywide Joint Occupational Health & Safety committee supports the plan, OHS will communicate to all managers who have workers that may be potentially exposed. Managers can invite OHS to discuss at their safety meetings.
- Caroline Tallarico, Human Resources Communications Manager will post the bulletin, plan/SWP on our OHS intranet & City Net.
- The bulletin and first-aid procedures will be issued with the 2017 City-Wide JOHS Committee minutes.
- Once the pilot Fentanyl Awareness session has been held, OHS will work with departments to determine what level of education and training is required.
- OHS will promote Fentanyl Awareness.

11.REVIEW & EVALUATION

- OHS will post the plan and distribute to all work areas.
- OHS can coordinate additional education and training (i.e., crew talks) if needed with potentially exposed user groups by May – July, 2017.
- OHS will conduct site visits from Aug –Oct, 2017 to informally Audit Awareness.
- The plan will be reviewed on a quarterly basis until SMAT and the City-Wide Joint Occupational Health & Safety Committee are satisfied that risks have been mitigated and the plan only needs to be reviewed on an annual basis or if new information warrants further investigation.
- Review reported Incident(s) and recommended corrective action(s).

12. REFERENCES

- Royal Canadian Mounted Police - Fentanyl: Canadian Situation, Risks and Hazards - 2015-10-06
- Royal Canadian Mounted Police - FRONTLINE MEMBER'S POCKET GUIDE TO HANDLING OF HIGHLY TOXIC SUBSTANCES E.G. FENTANYL - Prepared by: Sgt Luc CHICOINE, National Drug Program
- Office of the Provincial Health Officer –British Columbia
- Surrey Fire Services Responder Fentanyl Awareness
- BC Centre for Disease Control
- OHRDP- Harm Reduction Resources
- Center of Disease Control and Prevention –National Institute for Occupational Safety and Health (NIOSH)
- <http://towardtheheart.com/>

- <http://www.fraserhealth.ca/health-info/health-topics/harm-reduction/overdose-prevention-and-response/>
- Vancouver Coastal Health - Overdose Prevention Site Manual – January 2017

Prepared by: Sam Chauhan, Manager, Occupational Health & Safety

Date: April 4, 2017

Reviewed and Supported by: City-Wide Joint Occupational Health & Safety Committee

Date: April 12, 2017

Updated: May 29, 2017