

CORONAVIRUS OUTBREAK WEEKLY CHECK-IN

Corey Ranger RN BN

March 31, 2020

Homelessness Services Association of BC



ACKNOWLEDGING FIRST NATIONS

For thousands of years the sə́lilwətaʔ təməx^w (Tsleil-Waututh), Skwxwú7mesh-ulh Temíxw (Squamish), W̱SÁNEĆ, and the Songhees Nation of the Lək̓ʷəŋən (Lekwungen) Peoples have walked gently on the unceded territories where we now live, work, and play. We are committed to building relationships with the first peoples here, one based in honour and respect, and we thank them for their hospitality.





SCENARIOS



RESPECT THAT WE ALL HAVE SOME FEARS RIGHT NOW
RESPECT THAT ANY QUESTION IS OK



GOALS FOR TODAY



RECAP: COVID 101, SHELTER/DROP-IN PRECAUTIONS,



PUBLIC HEALTH UPDATES



OVERDOSE, SCS/OPS, OUTREACH



DRUG USE IN A PANDEMIC



In the media.

Province	Cases	Deaths
Alberta	621	2
British Columbia	884	17
Manitoba	64	1
New Brunswick	51	0
Newfoundland	120	0
Nova Scotia	110	0
Northwest Territories	1	0
Nunavut	0	0
Ontario	1,355	21
Prince Edward Island	11	0
Quebec	2,498	22
Saskatchewan	134	0
Yukon	4	0

With data from CBC News

Coronavirus by the numbers

- 720,055+ cases, 33,965+ deaths globally
- 638,585+ cases confirmed outside mainland China
- 141,135+ in the United States
- 203 countries and territories have reported cases
- 10,775+ deaths in Italy, 6,800+ in Spain
- 20.68% of patients have reportedly recovered

Updated March 29, 10:00 p.m. ET

REUTERS

BNO Newsroom @BNODesk

Coronavirus timeline:

- January 19: 100 cases
- January 24: 1,000 cases
- February 12: 50,000 cases
- March 6: 100,000 cases
- March 18: 200,000 cases
- March 21: 300,000 cases
- March 24: 400,000 cases
- March 26: 500,000 cases
- March 28: 600,000 cases
- March 29: 700,000 cases

11:18 · 2020-03-29 · TweetDeck



BC Gov News

Mental Health and Addictions

New clinical guidance to reduce risk for people during dual health emergencies

Share    News Release

Victoria

Thursday, March 26, 2020 5:41 PM

RISK MITIGATION

IN THE CONTEXT OF DUAL
PUBLIC HEALTH EMERGENCIES


INTERIM CLINICAL GUIDANCE



Advocacy.








RECAP: COVID 101



Coronavirus FAQ for Shelter & Drop-In Settings

A resource for people working in high-risk community settings.


<p>Wash your hands early and often, for at least 20 seconds</p>	<p>Report suspected COVID-19 infections to local Public Health Authorities</p>
 <p>COVID-19 is spread by droplets; it can come from a cough or sneeze, someone's hand, or even an unclean surface.</p>	 <p>Disinfect common areas more frequently. Use alcohol solutions with >70% alcohol, or diluted household bleach.</p>
 <p>The 3 hallmark symptoms of COVID-19 are: 1. Fever ($\geq 38^{\circ}\text{C}$) 2. Cough (Usually Dry) 3. Shortness of Breath</p>	 <p>Wear a facemask to cover your coughs and sneezes. Ask symptomatic clients to wear a mask, and do frequent hand washing.</p>
 <p>Social distancing means 6 feet or 2 metres. Have clients sleeping head-to-toe.</p>	 <p>Let your manager know if you are at higher risk for health complications related to COVID-19.</p>
 <p>Soap and water is the most effective hand cleanser. If unavailable, hand sanitizer with >60% Alcohol</p>	 <p>Designate someone to monitor clients for symptoms. Reassure clients that you are taking precautions to keep them safe.</p>

Always follow the instructions of your local public health authority. When in doubt, seek clarification.

Self-screen for COVID-19 at <https://covid19.thrive.health/> or call 1-888-COVID19

<http://www.bccdc.ca/health-info/diseases-conditions/covid-19>
<https://www.bchousing.org/COVID-19>



<div>  <h2>Frequently Asked Questions</h2>  </div> <p>A resource for people working in high-risk community settings.</p>	
Questions	Answers
<p>What is the personal protective equipment overdose response during the COVID-19 outbreak?</p> 	<p>Your naloxone kits contain one-way pocket valve masks which will provide protection.</p> <p>The use of BVM increases the risk of transmission; it does not prevent it. Therefore currently we do not recommend using BVM during an OD response.</p>
<p>What is the proper technique for disinfecting surfaces?</p>	 <p>Clean the surface with soap and water first, then apply approved disinfectant. Let sit for 10 minutes before wiping.</p> <p>A simple 'spray & wipe' won't work!</p>
<p>What should I do if we don't have enough supplies?</p> 	<p>Contact your local BC Housing representative for help with:</p> <ul style="list-style-type: none"> - Soap - Alcohol based hand sanitizer - Tissues - Disinfecting wipes - Trash baskets - Gloves - Disposable masks - Paper plates/cutlery
 <p>Should I wear a mask all the time? Should I wear two masks?</p>	 <p>Masks are in short supply and should be used during periods of higher risk - wearing two masks can actually increase risk.</p>
<p>¹Call emergency services, administer naloxone and use the 1 way valve masks when providing breaths. Wear gloves, and eye protection.</p> <p>Self-screen for COVID-19 at https://covid19.thrive.health/ or call 1-888-COVID19</p> <p>http://www.bccdc.ca/health-info/diseases-conditions/covid-19</p> <p>https://www.bchousing.org/COVID-19</p>	

RECAP: COVID 101



HOW DO I KNOW IF I'M SICK?

COVID-19 compared to other common conditions

SYMPTOM	COVID-19	COMMON COLD	FLU	ALLERGIES
Fever	Common	Rare	Common	Sometimes
Dry cough	Common	Mild	Common	Sometimes
Shortness of breath	Common	No	No	Common
Headaches	Sometimes	Rare	Common	Sometimes
Aches and pains	Sometimes	Common	Common	No
Sore throat	Sometimes	Common	Common	No
Fatigue	Sometimes	Sometimes	Common	Sometimes
Diarrhea	Rare	No	Sometimes*	No
Runny nose	Rare	Common	Sometimes	Common
Sneezing	No	Common	No	Common

*Sometimes for children

Sources: CDC, WHO, American College of Allergy, Asthma and Immunology

BUSINESS INSIDER



WHAT IF I'M SICK

IF YOU HAVE SYMPTOMS SUCH AS FEVER, COUGH OR DIFFICULTY BREATHING AND HAVE TRAVELLED OUTSIDE OF CANADA OR HAVE BEEN EXPOSED TO SOMEONE WHO HAS COVID-19, AVOID CONTACT WITH OTHERS. **SEE A HEALTH CARE PROVIDER AS SOON AS POSSIBLE.**

CONTACT THE CLINIC YOU ARE GOING TO FIRST SO THEY CAN MAKE ARRANGEMENTS. **AVOID EMERGENCY DEPARTMENTS IF POSSIBLE.**

WEAR A MASK. **GET TESTED.** CONTACT PRECAUTIONS ARE INCREDIBLY IMPORTANT TO PREVENT FURTHER SPREAD.



FACT CHECK: COVID-19 is NOT airborne

The virus that causes COVID-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or speaks. **These droplets are too heavy to hang in the air. They quickly fall on floors or surfaces.**

You can be infected by breathing in the virus if you are within 1 metre of a person who has COVID-19, or by touching a contaminated surface and then touching your eyes, nose or mouth before washing your hands.

To protect yourself, keep at least 1 metre distance from others and disinfect surfaces that are touched frequently. Regularly clean your hands thoroughly and avoid touching your eyes, mouth, and nose.



This message spreading on social media is incorrect. Help stop misinformation. Verify the facts before sharing.



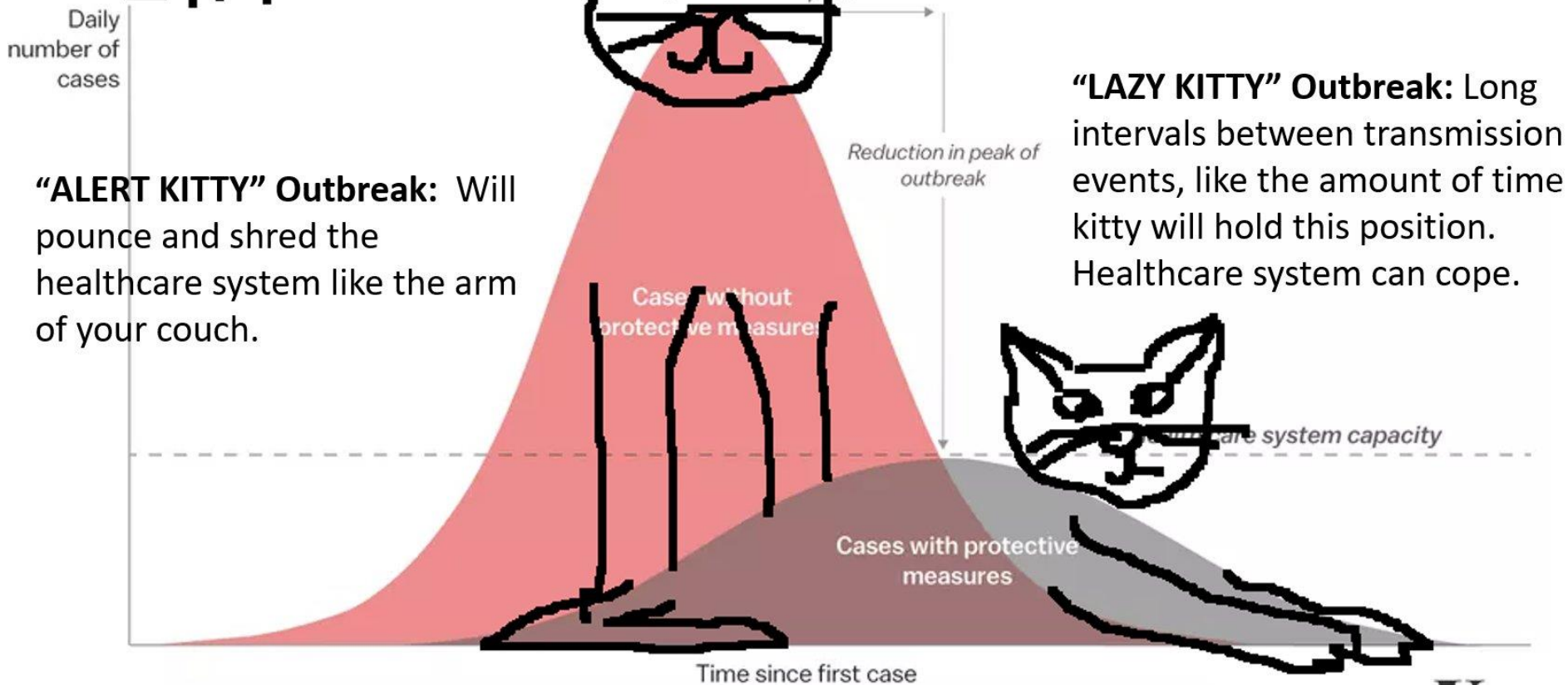
March 28 2020

#Coronavirus #COVID19

World Health
Organization
- March 28, 2020



Flattening the curve CAT



Source: CDC

Vox



AIRWAYS + OVERDOSE RESPONSE

UPDATE*

AGMPs Requiring Respiratory Protection for 2019-nCoV Patients Under Investigation

Autopsies involving respiratory tissues
CPR with Bag valve mask ventilation
Bronchoscopy and bronchoalveolar lavage
Continuous positive airway pressure (CPAP) or bilevel positive airway pressure (BiPAP)
Intubation and extubation procedures
Nasopharyngeal aspirates, washes, and scoping*
Nebulized therapy
Open airway suctioning
Sputum Induction

* Nasopharyngeal (NP) and throat swabs can be performed using contact and droplet precautions with procedural mask and eye protection, and do not require the use of an N95 respirator. See [here](#) for more details.

Masks and personal protective equipment

- Patients under investigation should be managed with contact and droplet precautions
- Nasopharyngeal (NP) swabs and throat swabs can be performed using contact and droplet precautions, and HCW must wear gown, gloves, surgical/procedural mask and eye protection (face shield or goggles) and do not require the use of an N95 respirator.
- Airborne precautions including N95 respirators with gown, gloves, surgical/procedural mask and eye protection (face shield or goggles) should be used during aerosol-generating medical procedures
- Download the [Respiratory protection guidance](#) (PDF).



Overdose in the context of COVID-19

Information for Service Providers in Non-Clinical Settings



OPIOID OVERDOSES NEEDING DROPLET PRECAUTIONS

Direction for responding to overdoses will be as dynamic as our current situation. The information provided **WILL change day-to-day and please check back regularly for the most up to date recommendations.**

IMMEDIATE RECOMMENDATIONS

- In the event of an overdose, **CALL 9-1-1 AND ADMINISTER NALOXONE**
- BC Emergency Health Services (BCEHS) will have access to appropriate personal protective equipment (PPE) needed for responding to opioid ODs during this time
- Anyone not responding to overdose should leave the room or immediate area.
- It is unclear at this time the degree to which the face shield will protect you from COVID-19 while providing rescue breaths. If you choose to provide rescue breaths, always use the face shield.
- If leaving your site to respond to an OD, clear the area as much as possible
- Those essential to response should don appropriate PPE equipment (gown, face mask, eye protection, gloves); and those unable to leave immediate area (2 meters or 6.5 feet) should also don PPE (keeping this practice until we know more)
- New or appropriately cleaned PPE is required with each OD event

AEROSOL GENERATING MEDICAL PROCEDURES (AGMP)

Viruses can be passed from one person to the next a few different ways (e.g. contact, droplet and airborne). In the context of COVID-19, physical distancing and other public health recommendations are being made based on **contact and droplet precautions**.

Some activities such as **BVM OR the use of non-rebreather masks (NRB) OR other high flow oxygen (> 6-10 L/min)** procedures are considered aerosol generating medical procedures (AGMP). This is very important to know when responding to opioid overdoses because AGMPs can introduce aerosols of various sizes, including droplet nuclei into the air, changing COVID-19 infection control precautions from contact and droplet (surgical mask with face shield) to airborne (fit-tested N95 respirator with goggles).

When viral infections become airborne there is additional risk of infection to everyone in the immediate vicinity because it allows for smaller virus particles to be suspended in the air for a greater length of time, which means that others may be at risk for infection by entering into this space without the right protective equipment.

The risk from use of BVM or high flow oxygen due to AGMP can be reduced by using a bacterial and viral BVM filter or a HEPA filter. Until we know more, airborne PPE precautions are still required with the use of a filter.

If you are providing supplemental oxygen use the minimum oxygen flow to achieve 90% SpO₂ and < 6-10 L/min

We recognize our current situation is uncertain and the colliding of our two provincial public health emergencies is causing grave concern for many people living and working during this time. We are working our hardest to provide as much information as we can, and as we receive it.

For more information visit: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/vulnerable-populations/people-who-use-substances>

Last updated: 2020-09-23

Overdose in the context of COVID-19

Information for Service Providers in Non-Clinical Settings



BVM INCREASES POSSIBILITY OF COVID-19 TRANSMISSION

We recognize that people who use drugs are doing incredible work to keep communities safe and reduce possible transmission while continuing to respond to the overdose crisis. Staff (including experiential workers) at some sites have been trained to provide breaths using Bag-Valve-Mask (BVM) ventilation.

We do not recommend using a BVM or non-rebreather mask or high flow oxygen when responding to an opioid overdose this time. If BVM use is necessary, appropriate personal protective equipment (PPE) should be used by everyone involved in OD response, and everyone who remains within the vicinity of the overdose event. Appropriate airborne precautions include fluid-resistant gown, gloves, a fit tested N95 respirator and eye protection (N95 with goggles or face shield).

Because it is unlikely that everyone on scene will be fitted for airborne precautions (N95) during the time of an unexpected overdose event, it is strongly encouraged that only responders remain on site if proceeding with BVM intervention, and only after donning the appropriate PPEs.

RESCUE BREATHS AND VENTILATION

We remain uncertain whether face masks for rescue breaths provide protection at this time. BCCDC's THN kit face shield masks are large/oversized and impermeable and cover enough space to prevent responder exposure to respiratory fluids. Face shields are protective against the passage of fluids from the one receiving care to the responder, but it remains unclear whether aerosolized virus particles can permeate the filter increasing possibility of transmission to responder.

Additionally, it is also unclear whether it is possible for viruses to be transmitted from the responder through the face shield, which is an important consideration when some responders may be asymptomatic or only have mild symptoms.

At this time we cannot determine if rescue breaths or oral and nasopharyngeal airways produce aerosols.

CHECK BACK SOON FOR MORE INFORMATION

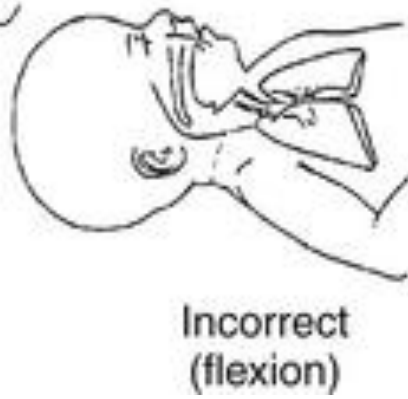
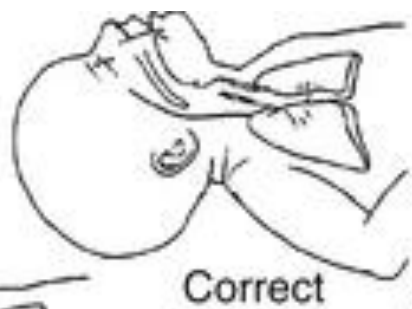
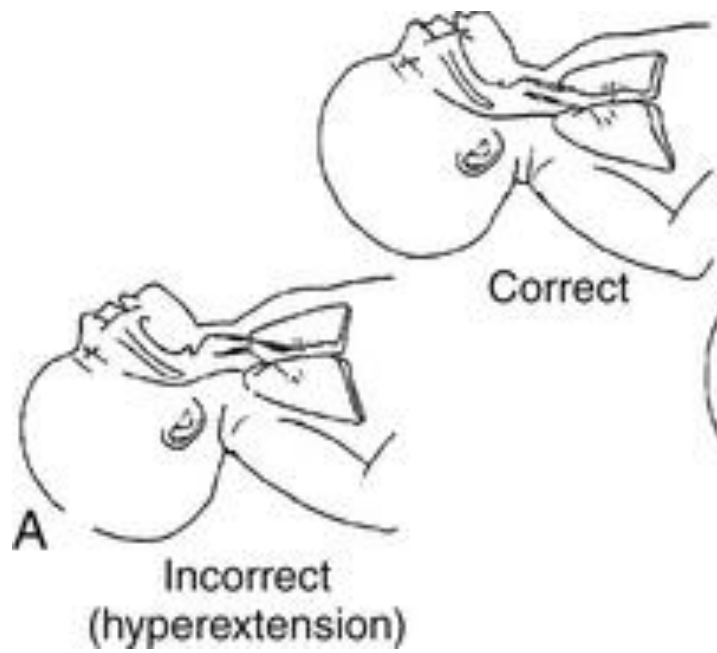
OTHER RECOMMENDATIONS

- Cleaning OPS/SCS, routine: continue to use usual cleaning products with increasing frequency and attention to high-touch areas such as doorknobs and handrails, chairs, etc.
- Clear out all non-essential items (e.g. papers, books, food, etc.) from consumption areas
- Do not reuse equipment that is meant for one-time-use only (e.g. face shields, airways, etc.)
- Cleaning OPS/SCS after OD event: thorough clean of surfaces, replace equipment, and return to business as usual

For more information visit: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/vulnerable-populations/people-who-use-substances>

Last updated: 2020-09-23







Safe Outreach During The Coronavirus Outbreak

Follow these tips to help keep our community, clients, and ourselves safe during a time of uncertainty.

Personal Safety Tips



Wash your hands often, for at least 20 seconds.

Use **soap and water**, or hand sanitizer with 60% alcohol or more.



Stay home if you have a fever, cough, and/or shortness of breath. Call your supervisor/manager.

Stop touching your face.



Avoid **close contact** with people who are sick.

Remember to stay **6 feet or 2 arm lengths** away!

Try and **avoid hugs**. Talk to people about why social distancing helps.



Change your clothes and shoes when you get to work.

Wash your clothes and shower as **soon as you get home**.

If you don't have a washer, put the **clothes in a garbage bag**, to wash all together later.

How to Keep Everyone Else Safe



For overdose response, administer **naloxone** and call **911**.

If you give respirations during an overdose response, use the **THN face shield and eye protection**.



Masks are for **high risk** situations, and clients who have **symptoms**.

Wearing a mask all day, or wearing two masks will **increase your risk**.



Stay at home while you are sick.

Call **1-888-COVID19** and arrange a test.

Return to work if the **test is negative**, or **after 14 days** if you did not get tested, but **no longer have symptoms**.



Store supplies **away from public access**.

Do not accept **unsealed or shared** food donations.

Do not accept anything you **can't disinfect**.



Self assessment at:
covid19.thrive.health/

Let your supervisor or manager know if you have a health condition, or are taking any medications that might put you at greater risk for COVID-19. You might need work a different role, or take extra precautions.



Safe Outreach During The Coronavirus Outbreak

Follow these tips to help keep our community, clients, and ourselves safe during a time of uncertainty.

Screening for COVID19



The top 3 symptoms of COVID 19 are **Fever, Shortness of Breath, and Cough**.

Fever is $\geq 38^{\circ}\text{C}$.



Call **1-888-COVID19** or your local public health authority, if you suspect COVID.

Get the person to wear a mask, and wash their hands.



Is it dope sick or COVID? Ask people if this is a new cough? Is it getting worse? Do you have a fever?



Don't forget people are at risk for things **other than COVID**.

Assess for **increased overdose risk, mental health crisis, withdrawal, and other types of infection**.



Self assessment at:
covid19.thrive.health/

New revisions to Health Canada rules, make it easier to get for doctors and pharmacists to provide carries. Ask your doctor to prescribe carries and as for as many carries as possible.

Recent adoption of Safe Supply guidelines means we are one step closer to a provincial safe supply of drugs in a dual health crisis.

Communication about COVID19



Talk to clients about **handwashing, social distancing, and covering your cough or sneeze**.

If you give respirations during an overdose response, use the **THN face shield and eye protection**.



Teach **proper handwashing** techniques, and where to access clean water/soap.

Provide handwashing kits when there is no public access.



Encourage people to stock up on **naloxone and harm reduction supplies**.

Make sure they are keeping an eye out for each other.



Teach about changes to **drug tolerance** during periods where drugs aren't available.

Teach about changes to **drug tolerance** during periods of illness.

Talk about risk.



HOW TO ACCESS SAFER DRUGS NOW

WHO IS ELIGIBLE?



- AT RISK OF COVID INFECTION OR HAVE A SUSPECTED CASE
- ACTIVE SUBSTANCE USE OF OPIOIDS, STIMULANTS, ALCOHOL, BENZOS OR TOBACCO.
- HIGH RISK OF WITHDRAWAL OR OD

WHO CAN PRESCRIBE?



- WORK WITH YOUR EXISTING DOCTOR OR NURSE PRAC.
- DON'T HAVE ONE? CONTACT HEALTHLINK (811) AND ASK TO BE CONNECTED TO A RAPID ACCESS CLINIC OR OUTREACH

WHAT ARE SOME OPTIONS?



- OPIOIDS: HYDROMORPH, M-ESLON, OR OAT
- STIMULANTS: DEXEDRINE, METHYLPHENIDATE
- BENZOS: DIAZEPAM, CLONAZEPAM
- ALCOHOL / TOBACCO: OPTIONS BASED ON AVAILABILITY
- *DOSAGE DEPENDS ON USE / ALTERNATIVE DRUGS MAY BE OFFERED*

HOW WILL IT WORK?



- YOU WILL LIKELY RECEIVE A SCRIPT FOR 23 DAYS
- SCRIPT SHOULD NOT END ON WEEKEND OR MONDAY
- PRESCRIBER CAN HELP FIND A DELIVERY OPTION

REPORT ANY ISSUES



- IF YOU HAVE ANY ISSUES, TEXT OR CALL BC YUKON ASSOCIATION OF DRUG WAR SURVIVORS (778-801-5920)

THESE STEPS WERE CREATED FROM THE BCCSU GUIDELINES:
"RISK MITIGATION: IN THE CONTEXT OF DUAL PUBLIC HEALTH EMERGENCIES"

A RESOURCE BY: BC / YUKON ASSOCIATION OF DRUG WAR SURVIVORS

V 2.1

HOW TO ACCESS SAFER DRUGS NOW

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V 2.0

Safe
Supply
- BCCDC March
21, 2020



QUESTIONS



COVID-19 SYMPTOMS:

- › FEVER
- › COUGH
- › SHORTNESS OF BREATH

TIPS & TRICKS



info@westsideharmreduction.com



Hand-washing technique with soap and water



Wet hands with water



Apply enough soap to cover all hand surfaces



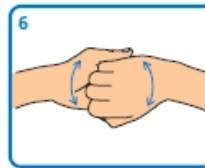
Rub hands palm to palm



Rub back of each hand with palm of other hand with fingers interlaced



Rub palm to palm with fingers interlaced



Rub with back of fingers to opposing palms with fingers interlocked



Rub each thumb clasped in opposite hand using a rotational movement



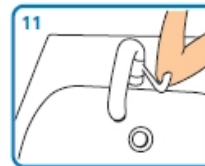
Rub tips of fingers in opposite palm in a circular motion



Rub each wrist with opposite hand



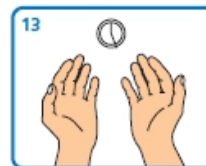
Rinse hands with water




Use elbow to turn off tap



Dry thoroughly with a single-use towel



Hand washing should take 15-30 seconds

A decorative background featuring several thin, curved lines in shades of grey and teal. A large teal rectangle is positioned on the left side, containing the text 'ADDITIONAL RESOURCES'.

ADDITIONAL RESOURCES

- BC / Yukon Association of Drug War Survivors: [How to Access Safer Drugs Now](#)
- BCCDC: [Risk Mitigation in the Context of Dual Public Health Emergencies](#)
- Ministry of Health: [Infection Prevention and Control for Novel Coronavirus](#)
- BCCDC: [Overdose in the Context of COVID-19 Outbreak \(UPDATED\)](#)
- Westside Harm Reduction: [Safe Outreach During the Coronavirus Outbreak](#)

Select References

- BC Centre for Disease Control. (2020). "COVID-19 For People Who Use Drugs"
- BC Centre for Disease Control. (2020). "COVID-19". Retrieved from: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19>
- BC Centre for Disease Control. (2020). "Frequently Asked Questions about 2019 Novel Coronavirus (COVID-19)". Retrieved from: www.bccdc.ca/Health-Info-Site/Documents/Coronavirus-FAQ-English.pdf
- BC Housing. (2020). "COVID-19 Update". Retrieved from: <https://www.bchousing.org/COVID-19>
- BC Centre on Substance Use. (2020). "B.C. Releases Plan to Provide Safe Supply of Drugs During COVID-19 Pandemic". Retrieved from: <https://www.bccsu.ca/blog/news/b-c-releases-plan-to-provide-safe-supply-of-drugs-during-covid-19-pandemic/>
- Canadian Drug Policy Coalition. (2020). "COVID-19 Harm Reduction Resources". Retrieved from: <https://drugpolicy.ca/covid-19-harm-reduction-resources/>
- Canadian HIV/AIDS Legal Network. (March 15, 2020). "COVID-19, Human Rights, and the Legal Network". Retrieved from: <http://www.aidslaw.ca/site/covid-19-human-rights-and-the-legal-network/?lang=en>
- Catie (2020) "CATIE Update On COVID-19". Retrieved from: <https://mailchi.mp/catie/covid-19-mar-16?e=f025ae92a4>
- Smith, Jennifer. (March 18, 2020). *VicNews*. Retrieved from: <https://www.vicnews.com/news/covid-19-skip-doc-see-pharmacist-for-renewals/>
- Vancouver Coastal Health. (2007). "Pandemic Response Planning Checklist for Homeless & Housing Service Providers". Retrieved from: <https://sneezesdiseases.com/assets/uploads/1584050040ueDrQ4uF2STpj0uScxV9XTftm9T8.pdf>
- Vancouver Coastal Health. (2006). "Cover Your Cough". Retrieved from: <http://www.vch.ca/Documents/Cover-your-cough-poster.pdf>
- World Health Organization. (2010). "Guide to Local Production: WHO-recommended Handrub Formulations". Retrieved from: https://www.who.int/gpsc/5may/Guide_to_Local_Production.pdf

