Exposure Control Awareness and Research: COVID-19

Health, Safety & Wellness
Training Purpose

This training is designed to:

• Raise safety awareness about COVID-19.

• Provide the latest safety guidance.

• Provide instructions on how to correctly wear personal protective equipment—PPE.
COVID-19

• Coronavirus disease 2019, or COVID-19, is a respiratory illness spreading from person-to-person.

• COVID-19 is considered a global pandemic with community spread.

• Most cases are mild and do not require hospitalization.

  - Symptoms may include:
    a) Chills
    b) Conjunctivitis (pink eye)
    c) Cough
    d) Diarrhea
    e) Fatigue
    f) Fever
    g) Muscle or body aches,
    h) Sore throat
    i) Shortness of breath
    j) Difficulty breathing
    k) Runny nose
Overview

If you are feeling sick,

**DO NOT come to Campus**

Self-monitor symptoms. If symptoms develop, and you’re not sure if you should be tested for COVID-19:

Exposure

The spread of COVID-19 requires three things:

1. Source of infectious material
2. Means of transmission/exposure
3. Susceptible host
Exposure

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1. Source of infectious material
2. Means of transmission/exposure
3. Susceptible host

First, you need the infectious material. Materials like coronaviruses (COVID-19) can survive on hard surfaces for approximately 24 - 48 hours.
Exposure

The spread of COVID-19 requires three things:

1. **Source of infectious material**

2. **Means of transmission/exposure**

3. **Susceptible host**

Second, you need a way to pass/transmit the virus. COVID-19 is thought to be spread by **contact** and **droplets**. (More on this in future slides.)
Exposure

The spread of COVID-19 requires three things:

1. Source of infectious material
2. Means of transmission/exposure
3. Susceptible host

Lastly, the virus needs a susceptible host. Not everyone develops a disease or infection when exposed. Some people may be immune, whereas some are more likely to get sick when exposed.
COVID-19 can spread from person to person through small droplets from the nose/mouth which are spread when a person with COVID-19 coughs or exhales.
Exposure

These **droplets then land on objects** and surfaces around the person. Other people then catch COVID-19 by touching these objects or surfaces, then **touching their eyes, nose, or mouth.**

- Touching face with gloves used for work tasks.
- Touching cell phone and face with gloves used for work tasks.
- Touching contaminated surfaces (fomites).
Exposure

People can catch COVID-19 if they breathe in droplets from a person with COVID-19 who coughs out or exhales droplets. This is why it is important to stay more than 2 meters (6 feet) away from a person who is sick. Unless you give them a mask to wear.

Main routes of COVID-19 infection*

Exposure Control

Standard Precautions

• If you have health related questions, speak with a well informed and educated person, like a medical professional.
• Take a moment to clean and disinfect items and areas like your cell phone, desk, tools, keys, flashlights, etc.

In the event of a known or suspected exposure:

• All areas, equipment, and clothing must be decontaminated with a Health Canada approved disinfectant (see future slides).
• Discard material soiled with blood and body fluids in a sealed plastic bag.
• Wash contaminated clothing separately in hot soapy water and dry in a hot dryer.
Reducing community spread of COVID-19

As **asymptomatic** individuals can spread the disease, when applying precautionary measures everyone should be considered to potentially be infected.

Take steps to protect yourself and others:

- COVID-19 is spread person-to-person or by touching contaminated surfaces.
- No vaccine is currently available.
- **Asymptomatic** individuals can spread the disease.
- Avoid being exposed by practicing social distancing.
Health and Safety Precautions

Maintain physical (social) distancing

- Maintain minimum 6 feet or 2 m away from others.
- Orient desks and workstations/lab benches to the 2 m standard.
- Use communication tools such as phone, email, web meetings as much as possible (including within the same building or floor).
- Group meetings and in-person meetings should be eliminated in favour of remote access meeting via video or phone.
- Stagger work hours/lunch breaks.
- Avoid shaking hands.

[Health Canada Social Distancing]
Health and Safety Precautions

Use the recommended hand hygiene practices.

- Wash your hands frequently using proper handwashing technique for at least 15-20 seconds.
- Avoid touching your face.

Visit www.germSMART.ca to view a video demonstrating proper technique for handwashing with soap and water.
Health and Safety Precautions

Hand Sanitizer

- Use hand sanitizer (with >60% ethanol/>70% isopropanol) when handwashing isn’t possible.
- Is not a replacement for hand washing.
- It kills germs but does not remove them.

Alcohol based hand sanitizer may be available at UR Stores.

Visit www.germsmart.ca to view a video demonstrating proper technique using sanitizer.
Practice Respiratory Etiquette

▪ Cough/sneeze into your elbow or
▪ Cover nose/mouth with a tissue.
▪ Use disposable tissues and discard after use.
▪ Use good hand hygiene after having contact with respiratory secretions or using a tissue.
Health and Safety Precautions

Evaluate workspaces for frequently touched items and clean frequently.

- Work teams must clean surfaces, laptops, etc. with regular disinfectants or soap and water.
- Custodial Services disinfects frequently touched surfaces in common areas, such as door handles, railings and elevator buttons.

Minimize sharing of items as much as possible. Clean items/workstations between usages by different staff.

- E.g. laptops, phones, workstations, pens.
Health and Safety Precautions

Social Distancing in Elevators

- Help stop the spread of COVID-19.
- **If possible, ride the elevator alone.**
- Must maintain social distancing.
- Take the stairs when possible and available.
Surface Disinfection

Cleaning and Disinfection

- **Custodial Services** continues to clean and disinfect common touch points of buildings in service.

- Commonly touched areas in **public spaces that Custodial Services is cleaning** include:
  - light switches
  - doorknobs
  - toilets
  - sinks and faucets
  - Handrails

- If custodial services have been altered due to reductions in building usage, supervisors must contact the buildings custodial team lead to reinstitute services.
Cleaning Vs. Disinfection

There is a BIG difference!

**Cleaning**: Removal of dirt, organic matter, dust, etc. from a surface or object. Cleaning works by using soap and water to physically remove dirt from surfaces. This process does not kill germs.

**Disinfection**: Kills germs on surfaces or objects by using chemicals. This process does not necessarily clean dirty surfaces.

It is very important to understand the chemical disinfectant you are using and how to use it properly. A heavily soiled surface may need to be cleaned before disinfected. A disinfectant requires sufficient contact time to properly disinfect a surface.

Note all directions found on a disinfectants label, including the required contact time. Many disinfectants must be applied generously and allowed to air dry.

**OxivirTb wipes** are available at UR Stores and have been approved by the Saskatchewan Health Authority as an effective disinfectant for COVID-19.
Disinfecting and Laboratories

- Laboratories must implement enhanced environmental cleaning/disinfecting.

- Commonly touched areas and shared equipment should be cleaned and disinfected by personnel working in that area at least twice daily, and when visibly soiled.

- Commonly touched areas in labs and work areas spaces that area personnel must clean/disinfect includes:
  - lab benches and equipment
  - touch-points in research and animal areas
  - desk and lab phones
  - personal lockers
  - shared PPE
  - touch screens/mobile devices and keyboards/mice must be cleaned between uses/users
Cloth Masks

- Cloth masks are optional items that can be made at home as a *voluntary public health measure*.

- Should not be worn by:
  - Children under 2.
  - Anyone who has trouble breathing.
  - Anyone who is unconscious, incapacitated or unable to remove the cloth masks without assistance.

- Guidance for cloth masks will be provided in later slides.
Cloth Masks

Information about cloth masks.

• **Meant to protect others** in case you are infected.

• People may choose to wear if they feel it offers additional protection.

• Cloth masks are not standardized or tested.

• Unknown effectiveness and limitations.

• Medical masks and respiratory personal protective equipment is reserved for medical and healthcare workers.
Cloth Masks

Benefits

• Using a mask may reduce frequency that a user touches their nose or mouth.

• When used by an ill person with a cough or sneeze, the mask helps contain droplets and particles carrying the virus, limiting their dispersion.
Cloth Masks

Risks

• These masks have not been tested for effectiveness.

• They may not block virus carrying particles that can be transmitted by coughing, sneezing, or contact.

• These masks are not designed for proper fit or form.

• Wearing a mask may create a false sense of security.

• If the user adjusts, touches or removes the mask often, it decreases effectiveness by increasing the number of contacts to the face.
Cloth Masks

For those who elect to use a cloth mask, here are instructions for making cloth masks coverings.

**Should:**

- Fit snugly but comfortably against face.
- Be secured with ties or ear loops.
- Preferably include multiple layers of fabric (2+).
- Allow for breathing without restriction.
- Be able to be laundered and machine dried on high.
Cleaning instructions for cloth masks

• Do not touch eyes, nose, or mouth when removing cloth masks.

• Masks should be changed when saturated from condensation, are wet, or after an event that may cause contamination.

• Cloth masks should be routinely washed in a washing machine.

• Wash hands with soap and water or apply hand sanitizer before and after removing cloth masks.
Important Notes

Cloth masks are a *voluntary public health measure*. Cloth masks are meant to protect others in case you are infected. Cloth masks have not been tested for effectiveness. Cloth masks should be routinely washed in a washing machine and dried on hot. Wash hands before and after donning and doffing masks.
PPE Refresher: Doffing Gloves

As a refresher – remember to use the proper glove removal technique to prevent cross contamination

- Grasp the outside edge near your wrist.
- Peel away from your hand turning the glove inside-out.
- Hold in opposite gloved hand.
- Slide ungloved finger under the wrist of the remaining glove.
- Peel off from inside, creating a bag for both gloves.
- Discard gloves in garbage.
PPE Refresher: removing PPE

Removing PPE Order:

Gloves → then → Glasses → then → Wash

Remember:
Always use proper glove procedures to avoid cross contamination.
Always take off gloves before leaving work areas and after completing tasks.
Working Alone/In the Field

**Working Alone** refers to any time a worker is alone on a worksite or is working in circumstances where assistance is not readily available to the worker in the event of injury, ill health, or emergency. **Working afterhours** refers to any work done outside of normal business hours.

During this unprecedented time there are no normal business hours and working alone cannot be avoided. For this reason, work groups must develop strategies to mitigate the risks of working alone/afterhours.

Worker: researcher, staff, working student
Working Alone/In the Field

Helpful tips for working alone/in the field:

- **Job Safety Analysis** – determine allowable/prohibited activities, task hazards and mitigation strategies. A risk assessment helps determine the hazards and how to mitigate them.
- **Develop a communication plan** – provide contact numbers, alternate contacts, and check-in intervals for those working in the field/alone.
- **Work Scheduling** – determine work locations, durations, supervision and alternate supervision.
- **Procedures for the safe stoppage of work** should symptoms or unsafe conditions arise.
Risk Assessment

A risk assessment helps identify the hazards of an activity, who they may harm, and how to mitigate them.

There are 5 main steps to completing a risk assessment:

1. Identify potential hazards
2. Assess the risk associated with each hazard
3. Select appropriate controls
4. Implement the selected controls
5. Assess the effectiveness of the selected controls
Risk Assessment

For example – identifying workplace/task hazards such as exposure, hazardous materials, equipment, slips/trips/falls. A risk matrix can be used as a visual tool to help determine the severity of the hazard and likelihood that it can harm someone.

It should also be determined who hazard may harm – workers, members of the public, family, etc.
Risk Assessment

Mitigate the hazard
There are many different controls that can be used to mitigate the hazards of a task. Find those that are most effective in lessening the risk. The most effective way of mitigating risk is eliminating the risk or source of risk whenever possible.

Hierarchy of Controls

- **Elimination**: Physically remove the hazard
- **Substitution**: Replace the hazard
- **Engineering Controls**: Isolate people from the hazard
- **Administrative Controls**: Change the way people work
- **PPE**: Protect the worker with Personal Protective Equipment
Risk Assessment

Mitigate the hazard

Elimination – remove the hazard entirely

Substitution – substitute for something less hazardous

Engineering controls – includes designs or modifications to equipment, ventilation systems, and any process that reduces the source of exposure

Administrative controls – controls that alter the way the work is done, implementing policies and procedures. For example developing a Standard Operating Procedure.

Personal Protective Equipment – worn by individuals to reduce exposure, such as lab coats, safety glasses, gloves or respiratory equipment.

While COVID-19 is a novel hazard, there remain many different hazards within a workspace, all of which should be re-evaluated for the current circumstances.
Hazardous Materials and Equipment

As the circumstances surrounding access to facilities, supplies and supports are fluid it is imperative to coordinate and plan for the following:

• Maintenance/availability of emergency equipment (eyewash flushing, first aid kits, spill kits).
• Ensure appropriate personal protective equipment (PPE) is available prior to starting any work/experiment. If adequate PPE is not available, do not conduct any experiments.
• Ensure all hazardous materials and waste are cleaned and stored before leaving the lab, avoid all temporary storage or conditions that may require intervention.
• Do not leave hazardous equipment or conditions that may require intervention.
• Prepare a contingency plan in case access is severely restricted or laboratories/work areas are shut down for a prolonged period of time.
• Ensure all personnel and back-ups have received documented training.
Self-Monitoring

• Self-monitor personal health for COVID-19 symptoms.

• If you are sick, please stay home.

• Supervisors are encouraged to review symptoms regularly.

• Develop plans for safe stoppage of work should symptoms arise at work. Notify your supervisor if you develop unexplained new or worsening symptoms.

• Keep up to date with known symptoms – which may include:

  • Fever (>38.0°C)
  • Fatigue (tired)
  • Headache
  • Aches and pains
  • Chills
  • Sore throat
  • Shortness of breath/Difficulty breathing
  • Runny Nose
  • Loss of sense of taste or smell
Self-Isolation

The Government of Saskatchewan has mandated three groups of people must self-isolate:

Anyone returning from international travel (must isolate for 14 days)
Anyone diagnosed with COVID-19 (follow advice of health care provider)
Close contacts of confirmed COVID-19 cases

If a worker has come in contact with someone who tested positive for COVID-19 and the worker DOES develop symptoms, they are required to self-isolate until:

- It has been at least 14 days since symptoms started
- It has been at least 72 hours since the individual had a fever
- All other symptoms have improved

For more information on when to self-isolate see the Government of Saskatchewan Resources:

Saskatchewan Mandatory Self-Isolation Guide
Saskatchewan Self-Isolation Page
Exposure and Suspected Exposure

Notify your supervisor If you:

Have been exposed to a confirmed positive case;

Suspect exposure to a confirmed positive case; or

develop new unexplained new or worsening symptoms.

The plan for post-exposure investigation and follow-up will ensure that:

• Measures taken to minimize the risk of your infection;
• Exposure is investigated and documented;
• You receive timely medical evaluation or medical intervention if required.

For more information or useful links visit the University of Regina COVID-19 Page

If you have any questions about this module forward them to Health, Safety & Wellness (Health.Safety@uregina.ca)