

## **Guidelines for working with human samples during COVID19 period**

**The work needs to be conducted in a BSL-2 laboratory. A poster on the door should be placed to identify that BSL-2 human samples are in use (contact the BSO Marie-Christine Gagnon to get a poster). People working in the laboratory have to be informed of the work in progress and the material used in the laboratory.**

### **After taking the human sample:**

Spray original tubes with 70% ethanol and place them in a biohazard bag. Spray this bag with 70% ethanol and place it in a second biohazard bag. If COVID-19 contamination is confirmed for a sample, identify the sample with "COVID-19 tissue samples".

### **Personnel protective equipment to be used:**

1. Gloves
2. Lab coat with additional sleeve covers OR disposable gown/apron
3. Surgical mask with face shield.

### **Procedure for transportation of human tissues, blood, body fluids from storage freezer to laboratory room, and between different places in the lab:**

Use a double leak proof container labeled with a biohazard sign and "human tissue samples, possibility of COVID-19 contamination". If COVID-19 contamination is confirmed for a sample, identify the container with "COVID-19 tissue samples". Spray the box and the samples with 70% ethanol before working with the samples.

### **Storage in fridge or freezer:**

Store the samples in a dedicated fridge or freezer or in an assigned space or box in the fridge or freezer, labeled with "human tissue samples, possibility of COVID-19 contamination" or "COVID-19 tissue samples" if contamination is confirmed. The fridge or freezer should be locked or in a locked room. Label the fridge or freezer with a Biohazard sign and "human tissue samples, possibility of COVID-19 contamination" or "COVID-19 tissue samples" if contamination is confirmed.

### **Precautions that have to be taken to control infectious droplets and aerosols:**

The work has to be done in Biosafety Cabinet Class II (BSC).  
Centrifugation has to be done in a centrifuge using buckets with aerosol proof lids.

### **Procedure for disposal of biohazardous materials (liquid and solid):**

Place solid waste into biohazard bag that will be sealed.

If working in a BSC, remove the bag from BSC only after disinfection and dispose it as Biohazardous waste as described in DHRC Biological Safety Manual.

Liquid waste has to be treated with 1% bleach (1 part of 6% Bleach for each 5 parts of liquid). After 30min of contact time, liquid can be disposed of in drain while flushing with lots of water.

Dispose microscopy glass slides into a jar with 1% bleach with a lid and later transferred them into a rigid sharp container for contaminated sharps. This container is disposed as Biohazardous waste as described in DHRC Biological Safety Manual.

Collect all potentially contaminated materials such as napkins and disposable personal protective equipment in red biohazard bags and disposed as Biohazardous waste as described in DHRC Biological Safety Manual.

#### **Procedure for disinfection and its recording:**

Use 70% ethanol or 1% bleach solution for proper disinfection of working area and contaminated or potentially contaminated equipment. Record all disinfection activities in a BSL-2 logbook.

#### **Protocol for accidental exposure (eg., needlestick injury, splash to skin or mucous membranes):**

Exposure from splash to eye, skin and/or mucous membrane - rinse for a minimum of 15 min with water, call security (ext 2444) and mention code blue, then present yourself (within 2hrs of the incident) to the Post-Exposure Prophylaxis clinic (PEP clinic, (514) 890-8000) located at Emergency CHUM (Centre hospitalier de l'Université de Montréal), 1051 rue Sanguinet, Montreal, QC, H2X 0C1 (Metro Champs-de-Mars). It is advised to call ahead, as often they can assess risk over the phone and advise whether to come in person or not.

Exposure from aerosol inhalation - call security (ext 2444) and mention code blue, then present yourself (within 2hrs of the incident) to the Post-Exposure Prophylaxis clinic (PEP clinic, (514)890-8000) located at Emergency CHUM, 1051 rue Sanguinet, Montreal, QC, H2X 0C1 (Metro Champs-de-Mars). It is advised to call ahead, as often they can assess risk over the phone and advise whether to come in person or not.

Needle stick and/or sharps exposure - wash contaminated wound with water, call security (ext 2444) and mention code blue, then present yourself (within 2hrs of the incident) to the Post-Exposure Prophylaxis clinic (PEP clinic, (514) 890-8000) located at Emergency CHUM, 1051 rue Sanguinet, Montreal, QC, H2X 0C1 (Metro Champs-de-Mars). It is advised to call ahead, as often they can assess risk over the phone and advise whether to come in person or not.

All incidents must be reported to your lab manager and/or principal investigator, biosafety coordinator and DHRC administration by filling in an incident report form available on the intranet and Y-drive "3\_accident report form\_2018.pdf".

#### **Emergency response in case of spill:**

If required inform co-workers, lab manager, biosafety officer and security (2444).

Wear gloves and protective clothing, including disposable gown, mask and face shield.

Bring Spill Kit to the site of the spill.

Cover the spill with cloth or paper towels to contain it.

Pour an appropriate disinfectant (1% bleach solution) over the paper towels and the immediately surrounding area.

Apply disinfectant concentrically beginning at the outer margin of the spill area, working toward the center.

After the appropriate contact time (e.g. 30 minutes), clear away the materials and dispose of in biohazardous waste. If there is broken glass or other sharps involved, use a dustpan or a piece of stiff cardboard to collect the material and deposit into a puncture resistant container for disposal.

Glass fragments should be handled with forceps. Dustpans should be autoclaved or placed in 1% bleach solution.

Clean and disinfect the area of the spillage – if necessary repeat the steps above.

After successful disinfection, inform the competent authority that the site has now been decontaminated.