BKV: LABORATORY SAFETY CHECKLIST/INSTRUCTIONS IN CORONA TIMES

During “distance mode” and in a possible scenario of a “lock-down” of Linköping University

Department of Biomedical and Clinical Sciences (BKV)

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IMPORTANT CONTACTS

IN CASE OF
ACCUTE MEDICAL EMERGENCY/FIRE/EMERGENCY

CALL 112!

Defibrilators:
010-1031100 (buildings with conduit access)
013-282010 (buildings without conduit access)

VÄKTARE
Campus Security: 013- 28 5888
(Campus US security : 0702 439570)

Problems with facilities, drainage, electricity etc. 010-103 60 00

Access to the premises:
During “distance mode” all lab personnel have access to the facilities. If you lack access, contact Mats Söderström (mats.g.sodertsrom@liu.se, 013-286870)

In case of a lock-down:
Only “key-persons” will have access to the premises. If you need access contact Mats Söderström, or if urgent, the Campus Security.
LABORATORY SAFETY

This pamphlet summarizes laboratory safety issues that should be applied/considered at the lab premises and can be used as a checklist in case of a lock down.

The information is divided into different laboratory safety areas and each part is split into two scenarios:

1) what to think about when working in a distance mode/when you are running less experiments and
2) what to think about in a possible scenario of a lock-down of Linköping University (i.e. in order to close down the labs safely).

All actions should be planned together with your PI, in dialogue with your head of the division/department!

All action taken should be based upon risk assessments, MSDS, and local safety instructions!

If you have any questions please contact the Co-ordinator for laboratory safety BKV (veronika.brodin@liu.se), the laboratory safety group at BKV, or Hanna Wessman at the LIU central unit (hanna.wessman@liu.se)

PPE (personal protective equipment), safety equipment

1) Distance Mode

Use your risk assessment to plan your work:

- Make sure that you have enough of PPE necessary for conducting your experiments: e.g. safety gloves, face protection mask, face-mask (3M), disinfectants etc.
- Order more if necessary (make sure that someone can receive the order upon delivery)
- Do NOT give away disinfectants on your own initiative! (such issues should be carried as a collective action at BVK).

2) Lock down

- In case of a lock-down only the project identified as “necessary” by the head of the division will be carried out. Turn-off all other equipment, follow the safety procedures/instructions for the equipment!
- Only personnel identified as “key”-persons will have access to the premises. Make sure that persons that need to check on equipment regularly are identified as “key” persons and are on the “on –call duty list (jourlista).

Equipment/apparature

1) Distance Mode

- Close down/turn off, disconnect equipment that is not needed. Follow the safety procedures/instructions for the equipment!
- In case the equipment needs to be checked regularly, make a on-call duty list (jourlista) of people who can handle the equipment correctly if necessary.

2) Lock down

- In case of a lock-down only the project identified as “necessary” by the head of the division will be carried out. Turn-off all other equipment, follow the safety procedures/instructions for the equipment!
- Only personnel identified as “key”-persons will have access to the premises. Make sure that persons that need to check on equipment regularly are identified as “key” persons and are on the “on –call duty list (jourlista).
**Cell Culture in general**

1) **Distance Mode**

Plan your cell culture work, and end all cell culture that is not necessary. Freeze down cell cultures.

- Make sure that you have enough of PPE necessary for conducting your future experiments if any: e.g. safety gloves, face protection mask, face-mask (3M), disinfectants etc.
- Turn off the empty incubators if possible (clean them accordingly first), make sure to turn off the gas properly! (CO₂ flask)

2) **Lock down**

- In case of a lock-down only the project identified as “necessary” by the head of the division will be carried out.
- Throw away/freeze down your cultures.
- Turn the off the incubators if possible (clean them accordingly first), make sure to turn off the gas properly! (CO₂ flask)
- Make sure all waterbaths, table centrifuges and other equipment is turned off.
- Pull out equipment that is turned off from electrical sockets (if possible)

**Patient samples, blood, tissue samples etc.**

1) **Distance Mode**

- Shut down your experiments, cancel blood orders, cancel patient sample deliveries etc. as much as possible.
- In case your experiments take some time to shut down, plan your work with your PI, check your stock of materials necessary for conducting the experiments. Follow the rules for working during distance mode, and the regulations for working alone.

2) **Lock down**

In case of a lock-down only the project identified as “necessary” by the head of the division will be carried out.

- Shut down all your experiments.
- Turn off equipment and clean the work space of waste. Take care of chemicals and store the properly. (see chemicals, waste, equipment sections)

**Cell Culture: valuable cell lines, primary cell cultures etc**

1) **Distance Mode**

Some cell lines, patient samples etc. that are difficult to obtain again must of course be cultured continuously.

- Make sure that your experiments are on the list of “special experiments ” at BKV that need to be carried out (contact head of division).
- Make sure that you have enough of PPE, disinfectants, cell culture media etc necessary for conducting your experiments.
- Make sure that you have enough CO₂ for your incubator. (orders are carried out as usual, but calculate that the estimated delivery time can be prolonged!)
- Set up a on-call duty list (jourlista) to make sure that someone takes care of the cells in case you get sick.

2) **Lock down (follow distance mode above)**

- Only personnel identified as “key”-persons will have access to the premises.
- Limit the experiments/ cell culture even more if possible.
- Make an inventory of your materials/stock. In case of a lockdown, PPE and disinfectants and other materials will be collected as a central stock at BKV and re-distributed.
Low temperature freezers

1) Distance Mode
- If you store samples/materials in a low temperature freezer you may have to secure your samples in case of a freezer alarm/mechanical failure.
- Plan ahead so that you know what to do with your samples (back-up) in case of mechanical failure of the freezer.

2) Lock down (follow distance mode above)
- Only personnel identified as “key”-persons will have access to the premises.

If you find yourself to be locked out from the premises and you need to reach your freezer in order to secure your samples, call the security guards (013-285888 and state that it concerns Campus US).

Routine for space in back-up freezers:
In case of mechanical failure there is some space in the -80°C, and the back-up 150°C freezers at BKV.
Contact Karin Söderman (karin.soderman@liu.se, 013-282920) in order to receive the instruction about room number and freezer ID, and to give her information about your samples etc.

Do NOT move samples to the freezers without contacting Karin Söderman! All unmarked samples/unknown samples will be thrown away! If space is needed!
Upon moving your samples: call “Driftcentralen”, 010-103 76 89 to inform them that you will work in the spare freezer (in case the alarm is generated due to the lids being open)

Sharps, needles etc.

1) Distance Mode
- Upon ending your experiments, make sure you take care of all sharps and lock them away according to regulations.
- Sharp Waste: If your sharp–waste containers are full, please close the lids properly, label the containers with the correct label, your name, your contact information, and dispose of the waste following the local instructions at your work place. (ask your local waste-representative, or the laboratory safety group, or check the information in the laboratory safety handbook.

2) Lock down
Follow the procedures for distance mode above
Flammable substances (brandfarlig vara)

1) Distance Mode

- Make sure that you put away your flammable chemicals/substances in the proper cabinets approved for storage of flammables (according to MSDS, and your risk assessment).
- Remove all the flasks with flammable chemicals from the fume hoods!
- Take care! A fridge is not a proper place to store bigger number of samples that are dissolved in solvents/flammable substances due to the risk of fume evaporation/assembly. Please move to cold rooms for longer storage where the ventilation is better.

2) Lock down

- Follow distance mode instructions above

Self reactive substances!

1) Distance Mode

- Make sure that you store your self-reactive chemicals/substances in the proper cabinets approved for storage (according to MSDS, and your risk assessment).
- Follow the regulation about co-storage (avoid co-storage of certain chemicals (see laboratory safety handbook).
- Make sure that you have taken care of those chemicals that need some extra care (watering, rotation etc.) An example of a chemical that needs extra care is Picric acid, Dioxane.
- Remove all the flasks from the fume hoods!
- Get rid of the very hazardous -chemical waste in a proper manner! Do not move from the shelf/cabinet! Instead follow waste procedures and contact Karin Söderman, Maria Tärnberg, Mats Söderström). Access link to Laboratory safety group by QR code:

2) Lock down

- Follow the “distance mode” instruction above
- Construct a on call duty list (jourlista) to make sure that someone takes care of the chemicals that need extra actions. Inform your PI/ head of division
**Fume hoods**

1) **Distance Mode**
- The fume hoods should not be used for storage of chemicals!
- Remove all the flasks with chemicals/substances and solutions from the fume hoods!
- Close the fronts of the fume hoods properly

2) **Lock down**
- Follow "distance mode instructions" above

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**Waste**

1) **Distance Mode**
- Make sure that you take care of the laboratory waste.
- Close the boxes/lids properly, label and state your contact information. Dispose of the waste according to the waste handling procedures at your workplace.
- **Hazardous waste** (chemical) is disposed of in a special way!
- Follow the waste procedures for chemical/biological/GMM/radioactive waste!
- **IMPORTANT!** If you want to get rid of self-reactive/explosive substances, do not move the substance! Follow the instructions for hazardous chemical waste and contact Maria Tärnberg, Karin Söderman or Mats Söderström for help with the disposal.

2) **Lock down**
- Follow the "distance mode instruction" above

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**Gas**

1) **Distance Mode**
- Close the outlets on the gas flasks connected to equipment that is turned off
- Make sure that the gas flasks are attached to the walls/locked in place
- Remove all small gas flask (gasol) and store them in the proper cabinets

2) **Lock down**
- Follow the procedure above
LAST TO CHECK IN CASE OF LOCK DOWN OF YOUR LABORATORY:

At your premises, have you:
- Stored chemicals properly in chemical cabinets according to pictograms/MSDS/risk assessments?
- Closed the chemical cabinets?
- Locked all the cabinets that have to be locked according to law? (sharps, poisons, carcinogenic substances, narcotic substances etc)
- Removed chemicals from the fume hoods?
- Closes the fume hoods properly?
- Switched off electrical devices?/broken all the connections to the extension cords?
- Have you emptied the waste/removed the chemical-/ biological-/ radioactive waste according to regulations and the local waste procedure?
- Closed the doors to the all the labs/rooms on the floor? (in the event of fire)

If you need to access sensitive equipment have you:
- Made sure that you are on the list of “key-persons “ at BKV?
- Constructed a on-call duty list (jourlista) for equipment that needs extra care?
- Informed your PI/ head of your division about your visiting schedule? (remember to follow the instruction for working alone)

GOOD LUCK!