

1. Basic laboratory safety

1.1. General lab routines

- Always wear proper personal protection equipment (PPE) while working in the lab.
- Never wear your lab coat and gloves in the kitchen area, lunch room or office.
- Do not chew gum, drink, or eat while being in the lab.
- Label all your bottles etc. containing solutions with your name, chemical composition, concentration, date and hazard pictogram (if applicable).
- Make a routine to always mark the containers with the date on which it was first opened.
- Every time you introduce a new procedure or start using a new chemical that entails potential risk, make a risk assessment.
- You must always be sure that you know how to handle an instrument, a chemical etc. correctly before you start using it. If unsure, always ask someone who knows.
- Before you start using a shared instrument, consult the person in charge.
- Always leave the instrument or working bench, autoclave room, etc. in good order.
- If you are transporting samples between rooms/floors, always remove the glove on the hand that you use for door openings etc.
- Make sure you always follow the proper procedures for disposing of lab waste.
- Make sure you know where your lab's safety equipment, including first aid kit, fire extinguishers, eye wash stations, and safety showers, are located and how to properly use them.
- Make sure you know what to do if an accident happens.
- Make sure you know where to find emergency phone numbers in case of an emergency.
- Report all injuries, accidents, and broken equipment right away to your PI and other people working in the lab, even if the incident seems small or unimportant.

1.2. PPE: gloves, lab coats, goggles etc.

Lab coats should be worn in the lab to protect you and your clothing from contamination. It should be washed as often as required and the laundry is collected in a textile bag in each corridor (the coat should not be washed at home). Lab coats should not be worn outside the laboratory.

Protective gloves should be used when handling any toxic or hazardous agent (e.g. chemicals, biological samples). What kind of glove you need depends on the properties of the chemicals or samples. In the Chemical safety data sheet, section 8 (*Exposure controls/personal protection*) you find an indication of which glove is recommended by the supplier. See the link [Chemical Resistance Guide](#) that may help to choose the right glove.

Protective goggles should always be used when handling corrosive substances, such as acids, bases and other substances that may damage the eyes. Contact lenses should not be used in labs as these can burn on the eyes and lead to blindness in the event of corrosive substances splashed in the eye.

Lab footwear should consist of normal closed shoes to protect all areas of the foot from possible puncture from sharp objects and/or broken glass and from contamination from corrosive reagents and/or infectious materials.

1.3. Eye showers, emergency showers

Most labs have an eye shower connected to the sink. If not, there should be portable eye wash bottles in these labs instead. Make sure never to leave items in the sink that may interfere with an emergency eye washing situation.

Each corridor has two emergency showers. Make sure that the immediate area around and under the showers are free from obstructing objects.

How to use emergency eye showers:

- Immediately flush eyes for at least 15 minutes with lukewarm water.
- Keep the eyes open and rotate the eyeballs in all directions to remove contamination from around the eyes. An injured person may need help holding the eyelids open.
- Seek medical attention immediately. Bring a portable eye wash bottle, and flush eyes continuously during the transport to the hospital.
- Have someone bring the Chemical safety data sheet to the doctor.

How to use emergency showers:

- Immediately flush the affected area with copious quantities of water for at least 15 minutes. Protect the eyes from inadvertent contamination.
- Remove contaminated clothing, jewelry, and shoes. Don't let modesty slow you down. Every second counts. Use a clean lab coat to provide the victim with privacy and warmth.
- Seek medical attention immediately.
- Have someone bring the Chemical safety data sheet to the doctor.

2. Risk identification, risk management and protection measures

One has to evaluate whether there is any risk to work with any given

- chemical,
- microorganism,
- biological sample,
- method and apparatus,

and if protective measures and handling instructions are required. There must also be an emergency routine in case of spills or in case of an accident. Responsible for carrying out risk assessments is the closest manager, but the risk assessment is preferably performed by the person who is to perform the method.

A valid risk assessment shall specify the identity of the people making the assessment and also be approved and signed by the responsible person (the manager). The risk assessment should be kept in the premises it refers to and be updated when/if new circumstances arise. It is important that all parties in the workplace are informed and understand the risks involved.

If there are pregnant employees at the workplace it is important to conduct specific risk assessments that take this into account.

The risk assessment for laboratory work should include:

- Method description
- Premises
- Substances/products
- Classification
- Risky moments and situations
- Exposure (how to handle and dispose)
- Personal protection
- Preventions
- Actions in case of accident or spill

- Estimated total risk
- Name of the risk assessor
- Signature (manager)

At Karolinska Institutet staff portal (<https://staff.ki.se>) you can find risk assessment templates that preferably may be used: KLARA (for chemicals), BARA (for biological agents and toxins) and HUMRA (for blood and human samples).

3. Chemical safety

3.1. Classification, labeling and safety data sheet

Chemicals are provided with safety data sheets (SDS) and also labelled with hazard pictograms, signal words, hazard and precautionary statements or symbols, indication of danger risk and safety phrases, in order to identify any chemical hazard. All chemicals must be registered in KLARA chemical register.

If you make any chemical solutions, all containers/bottles must be labeled with your name, content, concentration and hazard symbol (if applicable). Please note that even bottles containing just water should be labeled, so that they are not mistaken for hazardous content.

3.2. Storage

Storage conditions should be based on the properties of the chemical products (safety data sheet, section 7 - handling and storage).

General storage conditions

- All areas in which chemicals are stored shall be clearly marked so that it is clear that the space is intended for chemical products.
- Chemical products should be stored in ventilated cabinets or storages.
- Chemical products shall not be stored so that there is a risk that they accidentally end up in the sewage (in a fume hood without embankment, on shelves above the sink).
- Acids shall be stored in acid-resistant and ventilated cabinet.
- Acids may not be stored together with bases or organic substances.
- Acids and bases should be stored below waist height.
- Oxidizing materials should not be stored with chemicals that can be oxidized.
- Peroxide-forming chemicals should be stored in a dark and cool place. A special handling routine is required (see <https://staff.ki.se/peroxide-forming-chemicals>)
- Chemical products that are very toxic/lethal shall be kept in locked cabinets.
- Gas cylinders should be stored well anchored with a chain or equal.
- Flammable liquids, flammable gases and volatile products must be stored in ventilated fireproof cabinets (yellow cabinets). At CMM L8, most labs have a fireproof cabinet. Additional cabinets can be found in the chemical rooms, and these are shared by the groups in the corridor.
- In each corridor, up to a total of 1 liter of flammable gas may be stored in the same cabinets as flammable liquids. Volumes over 1 liter must be stored in a separate fireproof cabinet for flammable gases.
- Flammable products should not be stored with inflammable substances/materials.
- It is not allowed to store flammable goods in ordinary fridges and freezers, only specific "non-sparking" lab freezers and fridges may be used. These refrigerators and freezers should be labelled to indicate that they contain flammable goods.
- Combustible material (cardboard boxes etc.) must not be stored on top of fridges and freezers.

3.3. Handling flammable goods

Flammable and explosive goods is a collective term for flammable liquids, flammable gases and other fire reactive goods. Handling of these is associated with particular risks. Therefore

- Spray bottles are not allowed to use for flammable liquids, such as ethanol. Instead you should use a tip bottle.
- During working hours, only the amounts of flammable liquids used should be taken out from the fireproof cabinets. At the end of the day you must put the bottles and containers back into the cabinet.
- Please keep in mind that *flammable liquid waste* also must be stored in fireproof cabinets.
- Burners may not be used at all within the L8 building.

3.4. Spills of hazardous chemicals

In case of spillage of hazardous chemicals, it is important to take immediate action:

1. Lock the area
2. Read risk assessment and/or safety data sheet for the current chemical/method
3. Contact a specialist for advice (see Emergency procedure document below)
4. Decontaminate yourself if it is possible. Never let the cleaning staff clean up! They do not have the expertise required.

All incidents must be reported to your employer.

Karolinska Institutet has an agreement with Stena Environment for counseling, treatment and decontamination of chemical spills. See document "*Emergency procedure for larger spills of hazardous chemicals*" at <https://staff.ki.se>

4. Bio safety

4.1. General

Laboratory biosafety means the protection of people and environment from exposure to contagious biological material generated in the laboratory. Issues regarding laboratory biosafety can be directed to the contact person for laboratory biosafety at your department:

MedS: Afsar Rahbar (Afsar.Rahbar@ki.se)

CNS: vacant

MMK: Cecilia Österholm Corbascio (Cecilia.Osterholm.Corbascio@ki.se)

FyFa: Stefano Gastaldello (Stefano.Gastaldello@ki.se)

KBH: Cecilia Dominguez (Cecilia.Dominguez@ki.se)

or to the biosafety coordinator at KI (Jenny Karlsson - Jenny.S.Karlsson@ki.se).

A microorganism is defined as "every microbiological unit, cellular or non-cellular, which is able to reproduce, or transfer genetic material". They include, but are not limited to, bacteria, viruses, protozoa and cell cultures of higher organisms. Note that cell cultures from higher organisms in this context are considered microorganisms, but that tissue/multicellular organisms are not covered by the regulations.

Biological agents are divided into four groups in accordance with increasing hazardousness, where a microorganism is classified as a low risk if it is unlikely to cause severe infection in humans, and the possible resulting infections will be mild. Examples of microorganisms that do not normally cause infectious diseases are cell cultures, as well as laboratory-adapted *Escherichia coli* strains (i.e., not pathogenic). A list of the classification of specific microorganisms can be found in the Provision "Smittrisker, AFS 2018:4" at *Arbetsmiljöverket* (Swedish Work Environment Authorities) www.av.se

Genetically modified microorganisms (GMM) are defined as "a microorganism, in which the genetic material has been altered in a manner that would not occur naturally through mating or natural recombination".

4.2. Permissions to work with GMM

In the L8-building we have a general permission to work with GMM at risk level F (negligible risk). This means that all groups in the building are allowed to work with this, provided that they belong to departments MedS, CNS, FyFa, KBH or MMK, and that the work will take place in a lab that has been registered for GMM level F. Contact Afsar Rahbar (Afsar.Rahbar@ki.se) if you are unsure.

Groups that wish to work with GMM risk level L (low risk) need to apply for permission at the Swedish Work Environment Authorities before they start. Labs that work with GMM risk level L must have written cleaning instructions for the cleaning staff. A template instruction is available at CMM website (Documents).

4.3. Working with GMMs with negligible risk

In the bacteria lab core facility at CMM L8:02 room 063, you are only allowed to work with genetically modified microorganisms with negligible risk, i.e. laboratory-adapted strains of *E. coli* (no other bacteria strain is allowed). While *E. coli* is a human pathogen, lab strains like for example TOP10, DH5a or K12 have been modified and are not as virulent as wild type *E. coli*. However, all bacteria should be treated as if they are a hazard. Many of the cultures that we work with contain antibiotic-resistant plasmids and it is the user's responsibility to make a risk assessment of every plasmid/bacterial strain combination and make sure that these genetically modified bacteria are not released into the environment.

Disinfect work areas before and after work with 70% ethanol. Disinfect all shake flasks and other glass ware that has been in contact with live bacteria with Virkon. Floors in the labs are cleaned as usual by the cleaning staff.

New users should contact Susanne Gräslund (susanne.graslund@ki.se) to get an introduction to the bacteria lab facility, read the general lab rules and hand in a signed copy.

4.4. Cell culture and blood handling

The main rule for blood handling is to handle all blood and blood contaminated material as if it was infectious. Permission is not required in order to handle blood, provided that no microorganisms are to be grown/cultured in the sample. However, work may only be conducted by those who have been trained in the risks of infection, how to avoid infection, routes of transmission, protective measures and measures in the event of undesirable events, as well as specific hygiene.

There must be written instructions on how to handle blood in each respective work place. The written instructions shall be based on a risk assessment.

It is primarily Hepatitis B and C as well as HIV that can be transmitted through human blood handling. Note that blood infection is not only transmitted through blood handling, but also through material that has been contaminated by blood, such as tissue, exudate, spinal fluid, urine, pipette tips etc.

The laboratory must be at least a biosafety level 2 (BSL2) laboratory according to risk assessment and marked with the warning sign for biological hazard and indicate the biosafety level. Blood handling may only take place in laboratories that have access to skin disinfection, as well as hand washing facilities. The laboratory space in which work with blood takes place must be clearly marked, delimited from other activities and easily cleaned.

There may also be risks involved in the handling of cell cultures. Handling of cell cultures from animals, generally, involves less of a risk than handling human cell cultures. Human cell cultures and tumors may contain, for example, Hepatitis B and HIV. Primary cultures entail a higher risk, comparable to handling of blood.

For further details, please see “*KI Rules for the handling of blood and other human sample materials*” at <https://staff.ki.se>

4.5. Spills

In the event of a spill of biological material, it is important to quickly take measures, in order that no harm comes to staff or persons in the surroundings:

1. Seal off the area. This should be done to avoid exposure to aerosols.
2. Read the risk assessment.
3. Contact any specialists for advice, such as the occupational health service (Previa: 0771-23 00 00), infection clinic or the KI biosafety coordinator (Jenny Karlsson 08-524 866 02).
4. Decontaminate, if possible. Never let the cleaning staff decontaminate! They do not have the expertise required.

The risk assessment regulates how to decontaminate. It takes approximately 5-10 minutes for all the aerosols to settle. Most often, the area should be covered with paper towels or equivalent material, after which a disinfectant chemical shall be poured onto the paper towels. It is important that the chemical has a sufficient contact time, i.e. 5-10 minutes. Thereafter, the material shall be handled as contagious. The surface should be disinfected again, and then washed with a non-oxidizing chemical, such as ethanol or detergent.

Note that the disinfected chemical shall be proven effective against the biological material in question.

In the event of a spill on a microbiological safety cabinet, item 1 can normally be skipped. In the event of a contamination of a centrifuge or incubator, the lid/incubator door shall instead be closed, in order for any aerosols to settle before it is cleaned in accordance with items 2-4 above.

Blood has a buffering ability, and therefore, ethanol is not sufficient in the event of a spill, and Virkon, hypochlorite or equivalent shall be used.

All incidents must be reported to your employer.

4.6. Ventilated work areas

The risk assessment for the experiment shall state whether ventilated work areas need to be used, and if so, which type. It is important to differ between microbiological safety cabinets (also known as biological safety cabinets) and ventilated work areas adapted to handling chemicals. A microbiological safety cabinet is adapted for working with microorganisms. Among other things, it has an HEPA filter, in order to purify the outgoing air.

4.7. Transportation of microorganisms

If you need to transport live bacteria in the corridors, like agar plates with colonies or small inoculation cultures, make sure that they are well sealed with parafilm or tight caps. Put them in a basket or other carrying device so that you don't risk dropping them. Do not wear a glove on the hand you use to open the doors.

5. Liquid nitrogen

5.1. General

Liquid nitrogen is a colorless, odorless and a tasteless liquid with a boiling point of -196 °C. The gas is non-toxic and does not burn, but there is a risk of the oxygen in the air being displaced which can cause oxygen deficiency. This is especially the case in smaller enclosed spaces such as lifts and rooms where liquid nitrogen is stored or used. Because of its extremely low temperature, liquid nitrogen can cause cryogenic burns/frostbite when coming into contact with unprotected body parts or skin. Moist skin

can instantaneously freeze and adhere to metal objects that have been cooled with liquid nitrogen, which can lead to tearing and other skin injury. Therefore liquid nitrogen may only be handled and used by people with a sufficient understanding of the risks involved.

For work with liquid nitrogen follow the KI *“Rules for handling liquid nitrogen”* at <https://staff.ki.se>. It is obligatory to make a risk assessment and issue written handling and protection instructions before handling liquid nitrogen.

Warning signs marked “Liquid Nitrogen” and “Compressed gas” danger pictograms have to be posted in rooms where liquid nitrogen is stored/handled.

5.2. Liquid nitrogen tanks storage

Tubes, tanks and other containers must never be sealed due to the risk of explosion caused by the accumulation of gas. Larger containers such as transport flasks and cryogenic dewars without safety vents must never be hermitically sealed. If a container cannot be opened and the gas has no means of escape, the emergency services must immediately be contacted (call 112).

5.3. Liquid nitrogen handling

Never work alone with liquid nitrogen. When handling liquid nitrogen, users must wear full face visors as well as cryo gloves, protective shoes and clothing. Never allow any unprotected part of your body to touch objects cooled by liquid nitrogen. Use tongs, preferably with insulated handles, to withdraw objects immersed in the liquid, and handle the object carefully. The gloves should fit loosely, so that they can be thrown off quickly if liquid should splash into them. Cryogenic gloves are designed to be used in the vapor phase only and should not be immersed into liquid nitrogen under any circumstances. Use only containers designed for low-temperature liquids.

Cryogenic containers are specifically designed and made of materials that can withstand the rapid changes and extreme temperature differences encountered in working with liquid nitrogen. Even these special containers should be filled slowly to minimize the internal stresses that occur when any material is cooled. Do not ever cover or plug the entrance opening of any liquid nitrogen dewar. Do not use any stopper or other device that would interfere with venting of gas.

5.4. Transportation of liquid nitrogen

If the risk assessment declares it to be safe, small volumes (≤ 10 liters) may be carried by employees direct to the room in which the container is to be stored. Such containers must be of such a size and design that the risk of spillage/accident likely to cause explosion, cryonic burns/frostbite or asphyxiation is avoided.

Liquid nitrogen in volumes greater than 10 liters must be transported using a suitable trolley, cart or wheeled tank and in such a way that the container cannot tip over.

You may never accompany containers with liquid nitrogen when they are transported by lift, and the lift must be signed or locked/cordoned off so that no one enters it by mistake at another level of the building. Containers lacking a check valve may never be hermetically sealed (explosion hazard).

5.5. First aid measures

High concentrations of nitrogen gas can cause asphyxiation, which can occur without warning. The symptoms can also include unconsciousness. If someone thus exposed develops respiratory difficulties, he or she must be immediately moved a safe distance away from the source of the gaseous nitrogen (this might require his/her colleagues to don face masks), and kept warm and still. If breathing stops administer artificial respiration and call a medical doctor.

In the event of splashes in the eye, immediately rinse the eye thoroughly with water for at least five minutes. Remove any contact lenses. A doctor must always be contacted.

Cryogenic injuries should be thawed out with lukewarm water until sensation and normal color return to the skin. Injuries must not be rubbed or handled in any other way as it could aggravate the injury. A doctor must be called if the injury is more severe or extensive. The thawing process must not be interrupted during transport to the hospital.

6. Radiation protection

All personnel working with ionizing radiation shall in accordance with regulations set by the Swedish Radiation Safety Authority (SSM) participate in a radiation safety education held by the employer, in this case VO Hospital Physics Karolinska University Hospital. The training shall be repeated at least every 5 years.

The courses go through the legislation governing radiation safety in healthcare, the rights and responsibilities you have as an employee as well as the dose limits that apply to public and staff.

For more information about the course, contact Disa Åstrand, phone: 08-517 706 15, e-mail: disa.astrand@sll.se.

Questions regarding radiation protection can be answered by Radiation Safety Coordinator: Lena Engelin, phone: 08-517 738 36, e-mail: lana.engelin@sll.se

7. Fire safety

7.1. General

A fire cell is a part of a building, such as rooms or floors that are technically constructed so that a possible fire is prevented from spreading to another part of the building during a given time. In CMM L8-building each corridor is a fire cell. The corridor doors resist fire for at least 30 minutes.

In case the fire alarm goes off or the fire brigade is called, they will arrive within ten minutes.

7.2. Fire safety training

KI's operations at hospitals (e.g. in CMM L8) comply with the fire safety rules, self-monitoring routines and training requirements in place at the hospital in question. However, every operation still comes under the relevant department's fire safety organization so that KI can also monitor that it works systematically with fire safety at these workplaces.

It is important that you feel safe at your workplace. Knowing what to do in the event of a fire alarm and how to deal with a fire at your workplace is an important part of this, as is knowing how to prevent fires within the context of your work. Employees at the Karolinska University Hospital area (including at CMM L8) must attend the fire and safety courses arranged by the hospital. The training includes both theoretical and practical (putting out fire) content.

The courses can be booked through *Inuti* (Karolinska University Hospital intranet). If you cannot access *Inuti*, please contact the fire safety officers at the hospital, Safety center, phone: 08-585 888 88.

Each department at KI has a fire safety responsible person. They can guide you if you need further information.

MedS: Angela Silveira (Angela.Silveira@ki.se)

CNS: Elin Johansson (Elin.Johansson.1@ki.se)

MMK: Elisabeth Norén-Krog (Elisabeth.Noren-Krog@ki.se)

FyFa: Sabina Eriksson (Sabina.Eriksson@ki.se)

KBH: Christine Carlsson-Skwirut (Christine.Carlsson-Skwirut@ki.se)

7.3. Evacuation stations

In the middle of each corridor you will find an evacuation station. Please take your time to examine the Fire Warden Instruction card, vests and evacuation plan. In the event of an evacuation situation, the first person to reach the station take on the role as Fire Warden, puts on the vest and follows the instructions on the card. The Fire Warden is responsible for going through the premises and instructing colleagues to evacuate to the assembly point. However, it is important to emphasize that everyone has a personal responsibility for following the Fire Warden's instructions. You can find more details at <https://ki.se/en/staff/fire-safety>

7.4. Escape Routes

In case of an evacuation situation, it is utterly important that the escape routes are free from obstacles that may block the evacuation. Never place items near the emergency exits, and make sure the corridors are free from cardboard boxes etc.

Fire extinguishers may not be blocked.

7.5. Self-monitoring of fire safety installations

According to Karolinska University Hospital rules, self-monitoring should be carried out once a month. Within the KI organization, these are carried out by the Fire Safety Controllers (by delegation at each department).

8. Waste management

8.1. General

Since CMM L8 is located on the Karolinska University Hospital ground we are to follow their rules regarding waste management. At some points the waste management rules differ from KI Campus site.

The cleaning staff may only take care of combustible waste bags. All other waste must be handled by the research groups.

Each corridor at L8 has a room for storing their special waste. Laboratory waste is picked up once a week from these rooms by the janitors at Karolinska University Hospital service center. Additional pick-up can be ordered at phone 08-585 81 000.

Please note that they will only pick up boxes that are correctly sealed and labeled.

Each group should have at least one person who has taken the Karolinska University Hospital course for sending hazardous waste. Contact ewa.frank@sll.se for information regarding the course.

8.2. Laboratory waste

All necessary packaging items for laboratory waste can be ordered from Medicarrier. Each group is responsible for their own laboratory waste management.

8.2.1. Chemical waste

All substances that have a hazard symbol on the original packaging will eventually end up as hazardous waste.

To pack your waste correctly, there are two options:

- a) Certain liquids may be packed in UN-approved 5 L plastic containers.
- b) Liquids and solid waste may be packed in an UN-approved corrugated cardboard box. Place a strong plastic bag in the box and fill with as much absorbent (vermiculite) needed, before placing your waste (bottles must have tightly screwed corks, standing in an upright position) in the bag. Seal the bag tightly, and close the box according to the instructions on the box.

Label your waste with a chemical waste label (“Kem avfall”), warning label (please note that these labels are not the same as the CLP hazard pictograms) and the UN-number of the packed chemical. In the safety data sheets of the chemicals (sections 13 and 14) you can find waste handling information and correct UN-number to label your waste. All marking should be on the same side of the package.

The labelling is the same whether you pack your waste in containers or boxes.

8.2.2. Sharps/infectious waste

Sharps waste includes all sharp objects such as needles, syringes with fixed needles, scalpels, lancets, suture needles and microscope slides. This applies even if the material is not suspected to be infectious.

Place the waste in small yellow boxes (approx. 1-2L) intended for sharp waste. The box must be labeled with a “*Stickande/skärande/smittförande avfall*”-sticker. Fill the box with sharp objects up to a maximum of 2/3. Close the box properly, and fill in all required information on the label.

Sharps/infectious waste may be stored in room temperature.

8.2.3. Infectious waste

Infectious waste includes human blood and blood products, microorganisms, cell cultures and material that has been in contact with these, such as gloves, pipette tips, petri dishes, napkins and similar.

Infectious waste should be collected in yellow boxes (30L or 60L). The box must be labeled with a “*Smittförande avfall*”-sticker. If the waste is liquid, an absorbent pad must be placed in the bottom of the box. Fill the box with infectious waste up to a maximum of 10kg. Close the box properly, and fill in all required information on the label.

A sealed box may be stored at maximum +8°C for 1-7 days before pick-up.

8.2.4. Pharmaceuticals, including cytostatic waste

This fragment includes cytostatics, antibiotics, and other pharmaceuticals with toxic effects. Materials that have been contaminated with these, e.g. paper tissue or gloves, should also be collected here.

Pharmaceuticals and cytostatic waste should be collected in yellow boxes (30L or 60L). The box must be labeled with two stickers: “*Cytostatika och läkemedelsförorenat avfall*” and the hazard symbol “*Environmentally toxic*” (“the dead fish”). If the waste is liquid, an absorbent pad must be placed in the bottom of the box. Fill the box with waste up to a maximum of 10kg. Close the box properly, and fill in all required information on the label.

8.2.5. Biological waste

Biological waste, such as tissues, organs, histological incisions etc. should be collected in black boxes (30L or 60L). The box must be labeled with a “*Biologiskt avfall*”-sticker. If the biological waste is infectious, an additional sticker, “*Smittförande avfall*”, is also needed. Fill the box with biological waste up to a maximum of 10kg. Close the box properly, and fill in all required information on the label.

Biological waste must be stored in a cold room, maximum +8°C.

8.3. Recycling

Each person is responsible for recycling their own waste. Each group or corridor decide how to practically arrange their recycling routines. Recycled waste can either be brought by the groups to the Environment Station in the culvert, or you can order pick-up by the Karolinska University Hospital service center, phone 08-585 81 00.

The following fragments are to be recycled:

Colored glass, Non-colored glass, Laboratory glass and porcelain, Paper, Corrugated cardboard, Metal, Plastics, Toner cassettes, Batteries, Electronics, Light bulbs, Fluorescent lamps, Confidential waste. Instructions for what is included in each fragment may be found at CMM website (see "Documents") or at www.karolinska.se.

9. Personal protection

9.1. Vaccinations

For your own protection, please make sure that you have the vaccinations needed for your laboratory work. Your supervisor can guide you regarding this. As an employee or a scholarship-funded doctoral/post-doctoral student at KI you may order Hepatitis B vaccination at KI occupational health Previa. Other necessary vaccinations must be ordered by your supervisor/manager.

9.2. Defibrillator

By the CMM L8 main entrance there is a defibrillator. This may be used in case of an emergency. Please make sure that you have updated knowledge of CPR. Your department at KI can help you with this.

9.3. Incidents

Contact your safety officer or your manager in case you experience any work related incidents, accidents or near accidents. It is mandatory to report incidents to your employer (Karolinska Institutet) through the electronic incident system at staff.ki.se.

If the incident is related to any premises in L8-building, please send a copy of your report to helpdesk@cmm.se.

2019-06-27. This document has been issued by a working group consisting of:

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Comments may be sent to the CMM Work Environment Group through helpdesk@cmm.se

The information that this document is based on can be found at <https://staff.ki.se>, www.karolinska.se and Karolinska/Inuti.