


**1. a)** Does your country use a four-part BioSafety Level rating system for laboratories? If so, what rating is the most dangerous?

- Yes. Level 4 is the most dangerous. (True for most countries in Asia, the European Union, and North/South America; the WHO also uses this system)
- Yes. Level 1 is the most dangerous. (True for some countries, especially those that were formerly part of the Soviet Union)
- No, our country uses a different system (please describe the system

here): 

**b)** What is the BioSafety Level of your lab? (Use the WHO numbering system, in which Level 4 is the most dangerous.)

- Level 1 (low risk, ~= WHO BSL 1)
- Level 2 (moderate risk, ~= WHO BSL 2)
- Level 3 (high risk, ~= WHO BSL 3)
- Level 4 (extreme risk, ~= WHO BSL 4)

- Other (please describe): 

2 laboratories


BioSafety level 1 (for our ML-I laboratory)

Most work at the ML-I lab involves recombinant expression of proteins in E. coli or yeast expression systems, and the application of bacteriophages for phage display.

BioSafety level 2 (for our ML-II laboratory)

Work in the ML-II lab (cell lab) typically involves the use of immortalized cell lines, but it can also involve tissues or primary cells from animals or humans.

- Choose this option if you have several different lab areas with different BioSafety Levels.

Please describe what procedures you do in each area: 

**2. a)** What type of work environments do you use to handle biological materials? Please check all that apply.

- Open bench top
- Laminar flow hood / biosafety cabinet with open front

- Glove box (biosafety cabinet with closed front)
- Other (describe):

**b)** If you handle different materials in different places, please describe what materials you handle where.

Yes,

Working with bacteria, yeast and phages is done on open benches in the ML-I lab.

Working with cells (human and animal) is done in the ML-II lab, cell culturing is done in the laminar flow hood/ biosafety cabinet in the cell lab (ML-II laboratory).

**3. a)** What personal protective equipment do you use in the lab? Please check all that apply.

- Appropriate clothes (long pants/skirts, shoes that cover your toes, etc.)
- Lab coats
- Gloves
- Safety glasses / goggles
- Full face shields
- Surgical masks
- Respirators (what kind?)
- Other (describe):

**b)** If you use different protective equipment for different procedures, please describe what equipment you use in what situations.

Lab coats and safety glasses: always and everywhere in the laboratory (ML-I and ML-II).

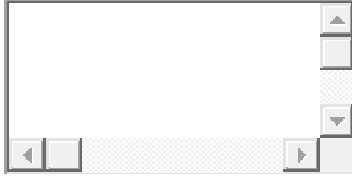
Gloves: Gloves (mostly latex) are used when handling chemicals and for working DNase free.

In the cell lab (ML-II) they are also used for working with biological materials in the biosafety cabinets.

Gloves (nitrile) are used for handling chemicals that pass through latex or for persons allergic to latex.

Cryo-gloves and heat-resistant gloves are used for handling cold and hot materials.

**4.** How do you dispose of biological waste? (For example: liquid cell cultures, agar plates, used pipette tips.)



All solid biological waste (ML-I and ML-II) is collected in red biohazard bags and are transferred in the leak-free blue hospital containers. After closing, labeling and disinfecting the exterior of the container with 70% ethanol it can be disposed of as special waste.

Solid waste contaminated with phages can also be collected in the blue hospital containers.

Liquid biological waste has to be autoclaved (20 min. at 121 degree Celsius) and can be discarded afterwards in the sewer.

Liquid waste contaminated with phages has to be disinfected in a bottle with concentrated chlorine at least overnight.

Glass and instruments which have been in contact with the biological agents must also be autoclaved and can be cleaned in the dishwasher, subsequently.

Glass and instruments which have been in contact with phages must be disinfected overnight with a chlorine solution, and then washed with water, cleaned in the dishwasher and autoclaved.

Chemical waste has to be collected in the chemical trashcans in the lab, transferred in the wisseldrum near the autoclave and disposed of when it is full.