

Basic biosafety rules in the laboratory

To ensure minimum biosafety conditions in the laboratory, the following instructions and/or measures must be strictly adhered to:

- Laboratory personnel must be **informed and trained on the risks and preventive and protective measures** before the start of the work¹.
- Laboratory personnel must comply with and enforce safety regulations.
- Access to the laboratory is restricted to authorized personnel only.
- Doors and windows must remain closed to maintain proper containment.
- Biosafety level 2 and 3 laboratories must have a [biohazard sign](#) at the access door. This signal must also be present on all equipment that may be contaminated.



- Personal items (e.g. backpacks, wallets, mobile phones, tablets, laptops, MP3 players, etc.) should be kept away from areas where biological agents are handled or stored.
- Staff must behave in a correct, responsible, and reasonable way. **Closed footwear** and clothing that does not allow the skin to be exposed should be worn.

– Notebooks should not be placed in the work area, as paper is difficult to decontaminate.

– It is highly recommended not to wear contact lenses in the laboratory, as they cannot be removed quickly in the event of accidental liquid projection.

– People with long hair must tie it before entering the lab.

– Eating, drinking, smoking, chewing gum and applying cosmetics in the laboratory is strictly prohibited, as well as storing food or drinks and wearing jewelry on the wrist or fingers that hinder personal hygiene.

– **Mouth pipetting is forbidden.** Mechanical pipetting must be performed.

– **Wash your hands** with soap and water before and after each manipulation, even if gloves have been used and especially, when hands are soiled with potentially contaminated materials. Afterwards, dry them with disposable paper.

– The lab must remain **clean and tidy** as disorder equals risk. All objects without utility (e.g. packaging, boxes, etc.) must be kept outside.

– Always minimize the risk of self-inoculation and aerosol generation..

– **Protective clothing is mandatory** and must be adjustable, comfortable, always buttoned and available at all times. Clothing used in BSL2 (or higher) must never be worn outside of these areas.



¹ Guidelines and working procedures relating to substances, organisms and activities should be read and implemented before work begins.

- **Safety glasses are mandatory** whenever there is a risk of mucous membrane contact. They must be close-fitting protective goggles or face shields if there is a risk of exposure to bioaerosols or splashes, respectively.



- Gloves must always be worn when handling samples or cultures containing potential pathogens. Gloves should never be worn outside the laboratory, or for picking up your phone, notebooks, touching parts of your body, opening doors, etc.

- While gloves may not prevent punctures or cuts, they have a protective effect (latex gloves reduce the volume of transferred fluid by approximately 50%).

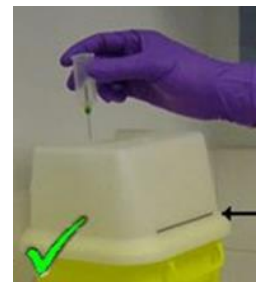
- Whenever possible, the glass material should be replaced with plastic.

- Wounds and cuts must be properly bandaged before putting on gloves.

- The use of hypodermic needles and syringes should be avoided whenever possible.

- Avoid sheathing, forcing, or separating the needles from the syringe.

- Needles, scalpels, and Pasteur pipettes must be discarded in puncture-resistant containers. Never fill it more than 3/4 full.



- Handling of cell cultures and samples of human origin, infectious agents, etc., must always be done in a biological safety cabinet.

- All work surfaces should **be cleaned and disinfected with an appropriate** and effective product (e.g. Virkon) at least once a day and whenever a spill occurs.



- Storage of samples, cultures and media, must be clearly identified, with the user's name or initials and the date. Failure to comply with these requirements may result in disposal of such samples.



- Transport of samples must be carried out in a manner that, in the event of a fall, splashes or bioaerosols are avoided. Use airtight boxes or transportable, rigid and shock-resistant coolers and, inside, include absorbent materials for an easy disinfection. They must be labeled and should not be used for other purposes. Samples must not be transported by hand.

- All biohazardous waste generated must be treated according to the established waste management plan.



- Persons who are or intend to become pregnant must inform their occupational health doctor in advance (tel. 4272) of Health Care Service (SAS), to ensure that the necessary preventive measures are taken.

- In the event of any incident or accident, the supervisor must be immediately

informed and they must be recorded by the [accident or incident report](#).

For any questions or clarifications, please contact us by using this [e-form](#).