

Containment level 2 - Laboratory Facilities

Design Features and Technical Characteristics
<ul style="list-style-type: none">• The laboratory is not compulsorily physically separated from other activity areas in the same building.
<ul style="list-style-type: none">• The access doors into the laboratory are lockable when the corridor or the area does not have restricted access.
<ul style="list-style-type: none">• The access doors into the laboratory are provided with an automatic closing system when they directly give access to a public area.
<ul style="list-style-type: none">• Furniture designed to facilitate room cleaning as well as a control program for rodents and insects are recommended.
<ul style="list-style-type: none">• The laboratory has a sink for handwashing and decontamination.
<ul style="list-style-type: none">• The personnel have access to a change room for protective clothing. Protective and street clothing cannot be in contact.
<ul style="list-style-type: none">• Bench tops are easy to clean, impervious to water and resistant to acids, alkalis, organic solvents, and disinfectants and chemicals normally used in the laboratory for decontamination.
<ul style="list-style-type: none">• Dedicated equipment is assigned to the laboratory.
Safety equipment
<ul style="list-style-type: none">• All manipulations likely to produce infectious aerosols or involving potential risks are conducted within a type II biological safety cabinet (norm: EN 12469).
<ul style="list-style-type: none">• The laboratory has at least one type II biological safety cabinet if open manipulations are performed. It is installed in order to avoid disturbing airflows equilibrium inside the work area. It is located away from doors, from windows, from room supply and exhaust air louvers, and from heavily travelled laboratory areas. It is controlled and certified when placed, after each moving and at least once a year.
<ul style="list-style-type: none">• An autoclave is located in the same building.
<ul style="list-style-type: none">• Biological material is centrifuged in centrifuges located in the contained area. It is placed in leak-proof tubes in rotors or cups with a hermetic closing system ("safety cups") to contain aerosols in case of breaking or cracks of tubes.
Work practices*
<ul style="list-style-type: none">• The room access door is labelled with the following information:<ul style="list-style-type: none">○ Biohazard symbol,○ Containment level,

<ul style="list-style-type: none">○ Coordinates of the responsible person for the area.
<ul style="list-style-type: none">• Protective laboratory clothing is worn. Protective clothing is dedicated to the contained area and is not worn outside. It is decontaminated preferably in the contained area prior to laundering or elimination.
<ul style="list-style-type: none">• Gloves are available for the personnel and worn when necessary.
<ul style="list-style-type: none">• Outside manipulations, viable pathogens and/or genetically modified (micro)-organisms are contained within closed systems (tubes, flasks, etc.).
<ul style="list-style-type: none">• The creation of splashes and the formation of aerosols are minimized. Their spreading is controlled by the use of appropriate equipment and practices.
<ul style="list-style-type: none">• Mechanical pipetting devices are used. Mouth pipetting is prohibited.
<ul style="list-style-type: none">• Eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption are not permitted in the laboratory.
<ul style="list-style-type: none">• All the manipulated and stored pathogens and/or genetically modified (micro)-organisms are recorded in a register.
<ul style="list-style-type: none">• Control measures and control equipment as well as protective equipment are adequately and regularly tested.
<ul style="list-style-type: none">• The workers wash their hands when they leave the contained area, before beginning another activity and each time it is proved necessary.
<ul style="list-style-type: none">• Work surfaces are decontaminated with an appropriate disinfectant after work is finished and after any spill of biological material.
<ul style="list-style-type: none">• Directions for use of disinfectants are available for the personnel. Depending on the purpose, instructions precise the kind of disinfectant to use, its concentration, and contact time.
<ul style="list-style-type: none">• Instruction of the personnel on biosafety aspects is organized as well as a follow up and regular updates. The personnel are specifically trained to work in a containment level 2 area.
<ul style="list-style-type: none">• A biosafety manual is prepared and adopted. Personnel are advised of special risks they are exposed to and are required to read instructions on work practice. Behaviour in case of accident is clearly posted in the laboratory.
<ul style="list-style-type: none">• The biosafety signage is posted on incubators, refrigerators, freezers, and liquid nitrogenous cryopreservators containing biological material with a class of risk 2 (or

higher).

- An efficient control program for rodents and insects is in effect.
- Animal spreading in the laboratory is forbidden.

Waste management

- Management of wastes and/or residual biological material satisfies the following conditions:
 - Contaminated wastes and/or residual biological material and contaminated disposal are inactivated by an appropriate and validated method before disposal, e.g. by autoclaving or incineration. Incineration is performed in an agreed installation. Bags and containers used for infectious waste collect are resistant, sealable, labelled with the biosafety symbol and closed before leaving contained area.
 - Before washing, reuse and/or destruction, contaminated material (glassware, slides, etc.) is inactivated by an appropriate and validated means.

*Use of a horizontal airflow cabinet is prohibited for the manipulation of pathogens and/or genetically modified (micro)-organisms.