

# **BIOSAFETY-EUROPE**

List of training needs



We suggest that the scheme below addresses the training needs of all persons concerned with biosafety. Appropriate training should be delivered to those who need it in appropriate national languages or English. However, it needs to be tailored to different countries as it can be difficult to provide EU-wide training because of lack of harmonisation.

The senior management is responsible for making suitable training available in accordance with any EU or national standards which prevail. They must also ensure that training is documented. In addition to initial training, annual refresher courses and updates should also be available. There are certain safety-critical roles for which training is extremely important e.g. persons who will work in BSL 3 and 4 (see table):

To ensure that staff members with sufficient training and experience are always available, a minimum period of work in the safety laboratories must be required and documented. The aim should be to have permanent jobs so as to ensure continuity.

Training arrangements should be examined whenever departments or organizations are audited.

**Table 1: List of training needs.**

Target audience	Training topics	Training format (1)	Remarks
Scientists and technical staff working in basic laboratories at Biosafety Levels (BSL) 1 and 2 with some BSL3 information for diagnostic lab work.	Good microbiological technique (GMT) Information on the specific agents handled in their workplace	Lecture with examination	Module 1 (the core module)(2): Duration: one week.
Senior scientific and technical laboratory staff, and engineering, architectural and administrative staff concerned with construction, maintenance and servicing of the buildings.	The safe laboratory environment. (Discussion documents to be provided are relevant national biosafety guidelines and laboratory planning and construction plans.)	Lecture	Module 2 (2): Duration: two days In two parts, one concerned with planning for safety and the other with organization for safety.
Groups of laboratory support staff who do not normally have any laboratory training: Group 1. Domestic staff who: clean the premises; dispose of contaminated and other laboratory waste; wash and prepare glassware and other equipment; prepare and sterilize culture media and reagents. Group 2. Engineering and maintenance staff, including field service engineers, who service laboratory facilities or repair equipment. Group 3. Staff who: receive and sort pathological material brought to the laboratory; open mail; handle request forms and laboratory records; pack infectious materials for mailing or shipping; drive vehicles that carry infectious materials.	Good Laboratory Practices (GLP) for support staff	Lecture	Module 3 (2): Duration: one day

Target audience	Training topics	Training format (1)	Remarks
Biosafety Professionals (e.g. Biosafety officers) but other members of the safety committee should be encouraged to attend.	GLP for safety staff	Workshop, Lecture with examination	Module 4 (2), CWA (3) Duration: one week
Senior Management	- Basic understanding of range of projects and related risks, raising awareness of actions required for effective implementation of Biosafety and Biosecurity measures - Risk communication, - Personnel security checks	Seminar, Workshop	Duration: ½ to one day
Specialized scientific, technical and safety staff who will handle microorganisms in Risk Groups 3 and 4.	GLP for specialist staff who handle microorganisms in Risk Groups 3 and 4 Training should include: - experience of a virtual BSL3/BSL4 laboratory before the start of an activity, - stress management in the BSL4 area and - instruction on how to rescue persons.	Workshop	Module 5 (2): Duration: three days It is essential that safety personnel are trained up to the level of Module 4 before following this module. Staff who have not received the proper training should not be given responsibility for microorganisms in Risk Groups 3 and 4
Trainers	Applying presentation techniques, skills in communication, and learning styles to develop and evaluate biosafety courses.	Workshop	Duration: two days
Competent authority	Enforcement of biological agent regulation	Lecture, Workshop	Duration: one days

<sup>(1)</sup> Training has to meet the needs of all persons concerned with biosafety and should include problem-based learning. Workshops are a good means for analysing and discussing the outcome of questionnaires.

<sup>(2)</sup> WHO syllabus

<sup>(3)</sup> CWA Biosafety Professional