

LABORATORY PERSONAL PROTECTIVE EQUIPMENT (PPE)

Responsibilities:

PPE must be made available to laboratory workers to reduce exposures to hazardous biological, chemical and radioactive substances in the lab. Proper PPE includes items such as gloves, eye protection, lab coats, face shields, aprons, etc.

PPE must be readily available and provided at no cost to the employee. It is the responsibility of the laboratory Principal Investigator to provide PPE to his/her employees.

Requirements:

Biological Laboratories

An area regulated by CDC/NIH biohazard requirements for Biosafety Level 1 and 2 (BSL1: work involving well-characterized agents not known to consistently cause disease in healthy adult humans, and of minimal potential hazard to laboratory personnel and the environment; BSL2: work involving agents of moderate potential hazard to personnel and the environment). Predominant area-based hazards are eye and skin exposure to biological agents and chemicals.

Minimum PPE requirements to work in a biological lab include: lab coat, long pants, fully enclosed shoe, safety glasses and gloves.

Chemical Laboratories

An area regulated by OSHA 29CFR1910.1450 Laboratory Standard. The area is characterized by frequent use of open containers of chemicals in operations such as synthesis, reactions, distillations, separations, purifications, and analysis via glassware, instrumentation, baths, ovens, furnaces, etc. The use of chemicals poses high exposure and risk based on the hazard, quantities, and types of operations. Predominant area-based hazards are eye and skin exposure to chemicals.

Minimum PPE requirements to work in a chemical lab include: lab coat, long pants, fully enclosed shoe, safety glasses and gloves.

General or Multi-purpose Laboratories

Combination of biological and chemical laboratories as listed above and might also include laser, radioactive material or x-ray hazards.

Minimum PPE requirements to work in a general or multi-purpose lab include: lab coat, long pants, fully enclosed shoe, safety glasses and gloves.

Training for Personal Protective Equipment:

Laboratory personnel must be trained in the selection, proper use, limitations, care, and maintenance of PPE. The annual laboratory safety plan review meets these training requirements but it is strongly recommended that further training be done. Further training could include group meeting sessions or one-on-one training. Examples of topics to be covered during the training include:

- When PPE must be worn
- What PPE is necessary to carry out a procedure or experiment
- How to properly put on, take off, adjust, and wear PPE
- The proper cleaning, care, maintenance, useful life, limitations, and disposal of the PPE

It is the responsibility of the Principal Investigator to ensure laboratory staff have received the appropriate training on the selection and use of proper PPE, that proper PPE is available and in good condition, and laboratory personnel use proper PPE when working in laboratories under their supervision.

PPE should not be worn outside the lab—employees should be trained to remove all PPE when they leave the lab to enter public areas.

If you have further questions regarding PPE please review the UNC [Laboratory Safety Manual](#) (Chapter 5), [Biosafety Manual](#) and/or the [Bloodborne Pathogen Exposure Control Plan](#).

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