

## Reminders

### Storage, Use, & Maintenance of PPE:

Always store in a clean, dry place away from chemical contact. Clean before and after use if soiled or dirty. Inspect for cleanliness, structural or optical defects before each use. Replace if defects are found. Lab coats should not be taken home for personal laundering. Please visit the EH&S website's PPE page for further information on laundering.



Personal Protective Equipment (PPE) represents the *last line of defense* against potential exposure. PPE should never be used as a substitute for proper engineering controls and prudent work

practices, but only as an additional measure of protection once all other reasonable precautions have been taken.

## A note on Latex allergies



**A**pproximately 8% of health care workers have been sensitized to latex rubber proteins or the chemicals used in manufacturing the gloves. EH&S can provide information on substitutes for latex gloves that provide the same level of barrier protection as latex without putting the wearer at risk for sensitization. Always use non-powdered gloves regardless of the glove material used. Latex proteins adsorbed onto airborne powder increase the risk of sensitization and can exacerbate pre-existing allergic symptoms.



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## Personal Protective Equipment

### Environmental Health & Safety



### VISION STATEMENT

*We provide expert guidance and timely service to the University Community through our commitment to health and safety.*

*Employing best practices and collaboration, and by building long term relationships, we promote a productive and safety conscious work environment.*

<http://www.ehs.columbia.edu>

Environmental Health & Safety  
Campus Contact Numbers:

Columbia University Medical Center  
212-305-6780  
Morningside Campus  
212-854-8749

## Introduction

The appropriate use of Personal protective Equipment (PPE) is critical in reducing exposure to laboratory hazards.

(PPE) is provided at no cost to affected personnel and used whenever the potential for exposure to chemical, biological, & physical hazards exists. In most instances, the baseline personal protective equipment in a Columbia University Laboratory consists of a lab coat, gloves, and eye protection.

### Responsibilities of Principal Investigator:

- ◆ Performing "Hazard Assessment" of the laboratory to identify, control and ultimately prevent occupational exposures.
- ◆ Identify and provide appropriate PPE for employees.
- ◆ Train employees on the use and care of PPE.
- ◆ Maintain PPE, including replacing when worn or damaged .
- ◆ We encourage PI's and/or the PPE responsible party to periodically reviewing, updating and evaluating the effectiveness of the lab's PPE program.

### Responsibilities of the employee:

- Properly wear PPE.
- Attend training sessions on PPE.
- Care for, clean and maintain PPE
- Inform a supervisor of the need to repair or replace PPE.

## Required PPE for the laboratory

### Laboratory Coats



A lab coat is required to be worn by all personnel in a research laboratory whenever there is the potential for exposure to hazardous materials.

Laboratory coats are not to be worn outside of the laboratory if they have been used while working with any radioactivity, chemical, or pathogen.



### Hand Protection

Gloves are required to be worn by all personnel in a research laboratory whenever there is the potential for the hands to be exposed to physical hazards or hazardous materials.

**There is no glove material that will protect against all chemicals.** Please review the manufacturer's guide for guidance on choosing the appropriate glove.



### Eye Protection

There are numerous eye/face protection options and the specific type of protection must reflect the particular hazards and procedures in the laboratory.

Safety glasses provide minimal protection against chemical hazards. When working with large amounts of hazardous materials, or there is a splash risk, safety goggles with a face shield is recommended.

**Eye glasses and contact lens do not offer the appropriate level of protection.**

<http://www.ehs.columbia.edu/ppe.html>

## Required PPE for the laboratory



### Respiratory Protection

Respirators protect against gases, vapors, and particulates. They are distinct from (surgical) masks, which provide no protection from gases, vapors and are minimally effective against small particulates.

Fume hoods and other engineering controls should largely eliminate the need for respirators. For information on the University's Respiratory Protection Program and risk assessments please call EH&S or visit:

[www.ehs.columbia.edu/rpp.html](http://www.ehs.columbia.edu/rpp.html)



### Other clothing considerations

In general, research laboratory work processes do not require specialized protective footwear. However, there may be instances where laboratory personnel are required to wear disposable shoe covers, such as when working with blood or other potentially infectious materials

Shorts and sandals or open-toed shoes must never be worn in the laboratory.

**Avoid loose, dangling jewelry that may get caught in equipment or dip into chemicals; the same considerations apply to unrestrained hair.**

**SAFETY  
FIRST**

**THE SAFE WAY IS  
THE BEST WAY**