

Personal Protective Equipment: Body

Reusable fabric coats must be **professionally laundered** since they cannot be easily decontaminated within the lab/shop. DO NOT wash lab/shop coats at your home, public laundromats, or residential laundering services. If you cannot arrange professional laundering services, use disposable options.

DISPOSE OF CONTAMINATED PERSONAL PROTECTIVE EQUIPMENT AS HAZARDOUS WASTE.

<p>Standard lab coat</p>	<p>Required for work with hazards that pose a health hazard: corrosives, radioactive materials, biohazards, laboratory animals, and toxics. Snap closures, pockets, and cuffs at the wrists are preferred features.</p>
<p>Flame-resistant lab coat</p>	<p>Provides additional protection against flames. Required for work with ignitable reactive chemicals, flammable solids, flammable liquid chemicals > 1 gal (4L), and any flammable chemical processes near ignition sources. Some flame-resistant fabrics do not provide substantial chemical splash protection. Add a chemical resistant layer under the flame resistant lab coat if splashes are likely.</p>
<p>Barrier lab coat</p>	<p>Provides additional protection against liquid spills and features cuffs at the wrist to prevent contact under the sleeve. Required for BSL2 biohazards if aerosols can be generated. Required for handling > 1 gal (4L) of hazardous liquids and for biohazard or hazardous chemical processes likely to produce splashes.</p>
<p>Disposable lab coat</p>	<p>Disposable options are available for standard and barrier lab coats, but not for flame-resistant lab coats. Follow manufacturer instructions about duration of use. Polyethylene is protective for work with concentrated or large volumes of acid. Polypropylene SMS is sufficient for nuisance materials or processes only capable of causing a small splash (such as work with < 1 L of fluid in a chemical fume hood or biological safety cabinet). See back for addition guidance.</p>
<p>Aprons or sleeves</p>	<p>Provides additional barrier protection for work with biohazards, toxic chemicals, and corrosive where splashes are foreseeable.</p>
<p>Specialized protection for field work or workshops</p>	<p>Specialized body protection is required for hazardous workshop or field work tasks including: potential impacts from tools, machinery and materials; high-voltage electrical work; welding; work with toxins outside of ventilation controls; immersion into potentially hazardous water; work in extreme temperatures; work in kitchens; extensive work in the sun; work in dark environments; work in high-traffic environments; and work with hot/cold equipment. Ask your supervisor for help selecting body protection for specialized work.</p>

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Disposable Lab Coat Frequently Asked Questions

Contact EH&S if you need a safety consultation for your specific situation.

- **WHO NEEDS LAB COATS?** Lab coats are required for BSL2 materials as well as corrosive, toxic, reactive, or radioactive chemicals. This applies to lab, workshop, studio, and field work settings. Lab coats cannot be shared because they cannot be easily decontaminated between uses (unlike safety glasses and ear muffs that can often be decontaminated by personnel). Personnel working with multiple types of hazards may require multiple lab coats.
- **ISN'T IT CHEAPER AND MORE ECO-FRIENDLY TO LAUNDRER COATS?** Lab coat laundering costs about 50¢ to \$2 per lab coat each week with a weekly minimum throughout the whole year. Laundering is often cost effective for departments with personnel that work with hazards full time and year-round. As of 2024, 1 college and 3 academic departments launder coats. Disposable lab coats are often cost effective for labs with sporadic hazardous activities. If you, your department, and your college cannot afford adequate protective equipment, then personnel CANNOT conduct hazardous activities. If you want to minimize trash generation, you can invest effort and budget into laundering programs. **Direct budget questions to your college or department leadership.**
- **CAN WE REUSE COATS TO REDUCE WASTE AND COST?** In general, disposable lab coats should be replaced within 40 hours of use -- check manufacturer recommendations and consider the hazards of the actual workflow before following this general guidance. To project ordering needs, estimate how many personnel conduct hazardous activities and the approximate number of hours each personnel needs the coat for protection. Here are some examples:
 - A person works with hazardous materials full-time, so a new disposable coat is needed each week that the work is conducted.
 - A person works with hazardous materials part-time for 10 hours a week, so a new disposable lab coat is needed monthly.
- **WHAT DO I NEED TO TELL MY PERSONNEL ABOUT DISPOSABLE COATS?** Train personnel to check disposable personal protective equipment for damage before each use. If personnel will reuse their disposable coat, develop a storage strategy to prevent cross-contamination such as a hook, drawer, or bag for each person. Teach personnel to fold the coat so the clean inside will not touch the potentially contaminated outside. Instruct personnel to write their name and track the duration of use on the coat. Provide clear disposal guidelines for regular operations (regular trash) as well as for incidents that involve suspected hazardous contamination (hazardous waste stream).
- **ARE DISPOSABLE COATS COMFORTABLE?** Best practice is to purchase disposable lab coats with pockets, knitted cuffs, and anti-static coating for comfort. Make sure that the lab coats are the correct size for personnel.
- **HOW LONG CAN WE STORE DISPOSABLE COATS?** EH&S does not recommend purchasing lab coats for more than 1 semester at a time. Safety equipment often has expiration dates and bulk orders can consume valuable storage space. Maintaining a 3-6 month supply helps to buffer against supply chain challenges. Make sure to consider additional orders for special projects like bulk sample processing for all the field samples collected during the summer.
- **WHAT MATERIAL DO WE NEED?** You can filter by material type on most coat vendor websites. This resource notes chemical compatibility for common materials and lab chemicals: <https://www.coleparmer.com/chemical-resistance>
Reach out to EH&S if you would like a consultation or specific product recommendations.
 - Use polyethylene material disposable lab coats for work with concentrated or large volumes of acid (for example: nitric acid baths and any hydrofluoric acid work). Tyvek is polyethylene. **~\$5 to \$7.50 per coat**
 - Polypropylene SMS is appropriate for nuisance materials, BSL2 biohazards, and processes where only a small amount of splash or contact would be likely (like work with < 1 L of fluid in a chemical fume hood or biological safety cabinet). **~\$4 - \$5 per coat**
 - If you cannot set up laundering for flame-resistant lab coats, contact EH&S for help selecting an adequate disposable option that is flame-resistant.