

Research and teaching activities often require personal protective equipment (PPE) to ensure maximum safety of personnel. A lab coat is an essential component of PPE for many types of laboratory work. This fact sheet will assist the researcher in selecting the appropriate lab coat type for the hazard encountered.

Tips on Wearing Lab Coats

- Always ensure **lab coat fits properly**.
- Wear appropriate clothing under your lab coat, including long pants and closed-toe/heel shoes. Roll up long sleeves to prevent contamination if necessary. Wear personal clothing that is made of natural rather than synthetic fibers (e.g., cotton jeans vs. Lycra leggings) if working with flammable liquids or open flames.
- Fully button/snap the lab coat and wear in conjunction with other PPE, such as eye protection and gloves, when deemed necessary per your risk assessment.
- Lab coats provide moderate protection against chemical exposure, but may degrade over time. **Replace if heavily soiled/contaminated or visibly degraded.**
- Immediately remove and dispose of as hazardous waste if grossly contaminated.

Lab Coat Selection Guide

Flame Resistant, Nomex®

Nomex® is a meta-aramid synthetic fiber that provides the highest level fire protection for a lab coat. The material is intrinsically flame resistant. Its protection will not diminish over repeated washes. Appropriate for protecting against:

- Open flames
- Electrical arc flash hazard
- Extreme fire hazard (e.g., large volumes of flammable materials)
- Organometallic compounds, metal hydrides, alkali metals, or other materials that ignite on contact with air (pyrophoric) or moisture

Flame Resistant, Treated Cotton

Cotton lab coats that are treated with flame resistant material provide a good balance of protection from chemicals, and low-to-medium fire risk procedures.

- Not appropriate for use with pyrophoric materials. Must use Nomex® (see above)
- Appropriate for limited work with well-controlled open flames (e.g., bunsen burner)
- Appropriate for work with solvents and other flammable liquids
- The flame retardant properties of the coat may decrease after frequent laundering; replace according to manufacturer recommendations

Standard Cotton

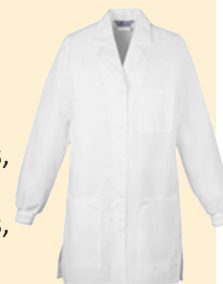
Coats made from 100% cotton are not as fire resistant as Nomex® or treated cotton, however, unlike synthetic blend coats, the cotton coat will not melt and adhere to the wearer.

- Appropriate for use when working with chemicals, radioactive materials, or physical hazards, but only where risk of fire is low
- Flammable liquids - only appropriate for use with minor volumes of flammable materials under low risk conditions (e.g., undergraduate teaching labs)

Fluid Resistant

Barrier coats are made from 100% polyester and prevent fluid penetration.

- Appropriate for use when working with biological materials, bodily fluids, blood, blood-borne pathogens, tissue, cell lines, microbial cultures, and other potentially infectious materials.
- Polyester coats will readily burn and melt, and should never be used with pyrophoric substances, flammable liquids, or around open flames (e.g., bunsen burner)



Visit the [Lab Coat Services](#) web page to learn about the laundering service. To launder lab coats by Medico, each lab coat must have an RFID chip. The RFID chip identifies the lab coat with the following information: Principal Investigator; Department; School; Building Code; Lab Room; PU/DO location ([UPC](#) or [HSC](#)); and Medico account number.

RFID-Tag

Without the RFID chip to identify the owner, soiled lab coats may not return from the laundering facility. Each lab coat will need a completed [Medico Repair Tag](#) (see illustration below).

The [RFID-Tag Lab Coat Guide Sheet](#) details steps to have lab coats RFID-tagged by Medico.

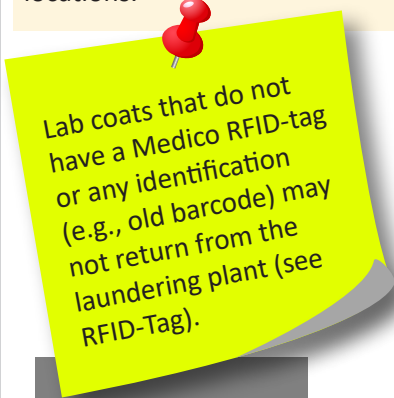
Additionally, research groups relocating to another building will need to have their RFID-tagged lab coats re-programmed to ensure that the lab coats return to that building or a convenient PU/DO location ([UPC](#) or [HSC](#)) nearby.

Questions?

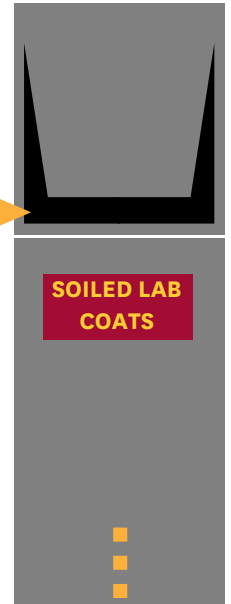
Contact EH&S at 323.442.2200 or EHS@usc.edu

Step 1

Drop soiled, RFID-tagged lab coat in soiled lab coat locker at one of the [UPC](#) or [HSC](#) Pick Up locations.



Keep at least one lab coat available for use at all times.



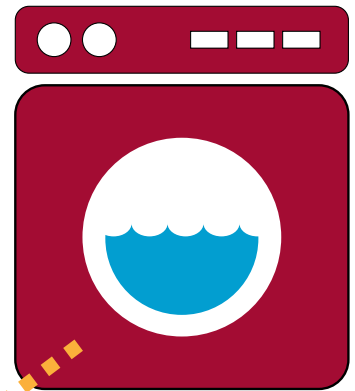
NOTE: If coats remain in locker for over a week, contact Medico at 800-464-6334 X-540 or service@medicolinen.com



Step 3

Lab coats are returned to Drop Off locations weekly

NOTE: If coats do not return, contact Medico at 800-464-6334 X-540 or service@medicolinen.com



Step 2

Soiled lab coats are picked up weekly and washed at laundering facility.



| REPAIR TAG | | XXXXXX |
|---|------------------------------------|---------------------------------|
| <small>• Print tag on adhesive label and apply to garment. • Use one repair tag per garment.</small> | | |
| <small>Select all that apply:</small> | | |
| <input type="checkbox"/> Install Medico RFID chip. Complete RFID information section below. | | |
| <input type="checkbox"/> Re-program existing Medico RFID chip (e.g., for lab relocation to another building). Enter new RFID information below. | | |
| <small>Check lab coat type and size</small> | | |
| <input type="checkbox"/> Repair lab coat | | |
| <input type="checkbox"/> Button | <input type="checkbox"/> Pocket | <input type="checkbox"/> Collar |
| <input type="checkbox"/> Snap | <input type="checkbox"/> Belt loop | <input type="checkbox"/> Sleeve |
| <input type="checkbox"/> Torn | <input type="checkbox"/> Cuff | <input type="checkbox"/> Logo |
| <input type="checkbox"/> Extra Small (XS) | | |
| <input type="checkbox"/> Small (S) | | |
| <input type="checkbox"/> Medium (M) | | |
| <input type="checkbox"/> Large (L) | | |
| <input type="checkbox"/> Extra Large (XL) | | |
| <input type="checkbox"/> Other | | |
| <small>RFID Information</small> | | |
| PI Name | Date | |
| Lab Location (e.g., SGM 112) | Pick Up/Drop Off | |
| Department | School | |
| Medico Account No. | | |
| <small>Contact Information</small> | | |
| Name | Phone | |
| <small>Questions? Contact Medico at 800-464-6334 X-540 or service@medicolinen.com EH&S at 323-442-2200 or EHS@usc.edu</small> | | |

| REPAIR TAG | | XXXXXX |
|---|------------------------------------|---------------------------------|
| <small>• Print tag on adhesive label and apply to garment. • Use one repair tag per garment.</small> | | |
| <small>Select all that apply:</small> | | |
| <input type="checkbox"/> Install Medico RFID chip. Complete RFID information section below. | | |
| <input type="checkbox"/> Re-program existing Medico RFID chip (e.g., for lab relocation to another building). Enter new RFID information below. | | |
| <small>Check lab coat type and size</small> | | |
| <input type="checkbox"/> Repair lab coat | | |
| <input type="checkbox"/> Button | <input type="checkbox"/> Pocket | <input type="checkbox"/> Collar |
| <input type="checkbox"/> Snap | <input type="checkbox"/> Belt loop | <input type="checkbox"/> Sleeve |
| <input type="checkbox"/> Torn | <input type="checkbox"/> Cuff | <input type="checkbox"/> Logo |
| <input type="checkbox"/> Extra Small (XS) | | |
| <input type="checkbox"/> Small (S) | | |
| <input type="checkbox"/> Medium (M) | | |
| <input type="checkbox"/> Large (L) | | |
| <input type="checkbox"/> Extra Large (XL) | | |
| <input type="checkbox"/> Other | | |
| <small>RFID Information</small> | | |
| PI Name | Date | |
| Lab Location (e.g., SGM 112) | Pick Up/Drop Off | |
| Department | School | |
| Medico Account No. | | |
| <small>Contact Information</small> | | |
| Name | Phone | |
| <small>Questions? Contact Medico at 800-464-6334 X-540 or service@medicolinen.com EH&S at 323-442-2200 or EHS@usc.edu</small> | | |