# Rutgers, The State University of New Jersey
# Clinical and Laboratory Coat Quick Selection Guide

The purpose of this selection guide is to provide assistance in choosing the proper lab coat when performing activities in laboratories, clinics or other designated areas. Detailed information regarding the proper selection, use and care of lab coats can be referenced in the Clinical and Laboratory Coat Use Guidelines.

**Lab Coat Selection Table**

| Laboratory Hazard or Use | Hazard | Laboratory Coat Style | | | |
|---|---|---|---|---|---|
| | | **Consultation** | **Liquid Barrier** | **Flame Resistant** | **Chemical Protectant/ Flame Resistant** |
| | Consultation[1] | ✓ | ✓ | ✓ | ✓ |
| | General[2] | ✕ | ✓ | ✓ | ✓ |
| | Biological[3] | ✕ | ✓ | ✕ | ✓ |
| | Chemical[4] | ✕ | ✕ | ✕ | ✓ |
| | Flammable[4] | ✕ | ✕ | ✓ | ✓ |
| | Thermal[5] | ✕ | ✕ | ✓ | ✓ |
| | Preferred Color | Any | White | Blue w/ Black Cuffs | Blue w/ Black Cuffs and Black Collar |

1. **Consultation Coats** are available for use in public or when patient interaction does not create an increased exposure to infectious material or blood borne pathogens. This coat does not provide personal protection and additional protection (e.g. disposable barriers or other coats) must be used to adequately protect the wearer, when required.
2. **Lab Coats for General Hazard Use** are available for use in laboratories that work with powders, animals, mechanical process, low volume chemical procedures (less than 1 liter of flammable material), biological at BSL 1, radiological hazards, and does not expose the wearer to potential hazards requiring a higher level of protection. General Hazard Use lab coats protection can be increased utilizing additional protection (e.g. disposable barriers, flame resistant coverall/coats, chemical resistant apron or other coats) as needed to adequately protect the wearer. General Hazard Use lab coats must be a medium weight (7 ounce) and a 20/80 (Cotton/Poly) blend or equivalent properties.
3. **Lab Coats for Biological Hazard Use** are work barrier coats which are available for lab workers performing procedures that may expose the wear to infections material, blood borne pathogens and biological material at BSL 2 (e.g. Risk Group 2 or higher). Biological Use-2 barrier coats must meet ANSI/AAMI Classification Level 1 for Barrier Performance as specified in ANSI/AAMI PB70. ASTM F1670 (Standard Test Method for Resistance of Materials Used in Protective Clothing to Penetration by Synthetic Blood) and ASTM F1671 (Standard Test Method for Resistance of Materials Used in Protective Clothing to Penetration

by Blood-Borne Pathogens Using Phi-X174 Bacteriophage Penetration as a Test System) also detail applicable testing standards.

4. **Lab Coats for Flammable/Chemical Hazard Use** are lab coats which are available for lab workers performing procedures that expose the wearer to potential risk flame or thermal energy released from chemical reactions when any chemical procedure exceeds 1 liter of flammable material. Chemical Hazard Use lab coats must meet or be equivalent to NFPA 2112/2113. AATCC Method 42 (Water Resistance: Impact Penetration) and ASTM F903 (Standard Test Method for Resistance of Materials Used in Protective Clothing to Penetration by Liquids) also detail applicable testing standards.
5. **Lab Coats for Thermal Hazard Use** are for lab workers performing activities or processes which include but not limited to: pyrophoric material, reactive metals, molten material, high temperature process, combustion, furnaces, sparks, open flames, lasers (class 4), welding, soldering, brazing, and any chemical procedure that exceeds 1 liter of flammable material. Flammable/Thermal Hazard Use lab coats must meet or be equivalent to NFPA 2112/2113 and be selected for the specific hazard. The additional protection must also be selected (e.g. thermal reflective, chemical resistant apron) to effectively protect the wearer when a specific lab coat alone would not.

The lab coat must be chosen to protect the higher hazard in the event of multiple hazards being present while performing tasks (e.g. a biological hazard would be higher than a radiological hazard, a flammable/thermal hazards would be higher than a biological hazard)

Alterations, such as embroidery, should not be made to any lab coat without first consulting the manufacture as any changes or penetrations in the coat material may compromise or reduce the protection provided by the lab coat.