

# Personal Protective Equipment

USP 800 compliance deadline: December 1, 2019.



## Head-to-toe USP 800 protection.



# Help minimize your risk to chemical exposure.\*

**The risk is real. Are you ready for the new standard?**

There's no safe level of exposure to hazardous chemotherapy drugs, but wearing the right personal protective equipment (PPE), can help minimize the risk. We have a comprehensive selection of PPE that meet the new USP 800 recommendations, so you can protect your team with confidence.



**8 million**

U.S. healthcare workers potentially exposed to hazardous drugs annually.<sup>1</sup>

More than

**12 billion**

doses of hazardous drugs are handled by U.S. providers each year.<sup>1</sup>



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**Read the new USP 800 guidelines at [usp.org](https://www.usp.org).**

\*When used in accordance with the USP 800 guidelines going into effect December 1, 2019. Users are recommended to review Material Safety Data Sheets for chemotherapy drugs being used to determine the required level of protection.

# What does compliance look like?



# Gowns

## USP 800 Guidelines

- Gowns must be selected based on the hazardous drugs (HD) handled
- Gowns must close in the back, be long sleeved, and have closed cuffs that are elastic or knit
- Gowns must not have seams or closures that could allow HDs to pass through
- Gowns must be changed every 2–3 hours, immediately after a spill or splash, or per the manufacturer's information for permeation of the gown
- Gowns worn in HD handling areas must not be worn to other areas

## Chemotherapy gowns are tested against the following chemotherapy drugs per ASTM F739-12:

- Dacarbazine
- Carmustine (BiCNU)
- Cyclophosphamide (Cytoxan)
- Doxorubicin Hydrochloride
- 5-Fluorouracil
- Cisplatin
- Etoposide (Toposar)
- Paclitaxel (Taxol)
- Thio-Tepa
- Mitomycin C
- Vincristine Sulfate

## Chemotherapy Gowns

Recommended for: Oncology, Radiology, Lab, Pharmacy

- Protective, polyethylene-coated material tested against ASTM F1670 & 1671
- Materials and seams tested against top 11 chemotherapy drugs per ASTM F739-12
- Hook and loop neck, waist ties and knit cuffs
- Taped seams to meet USP 800 guidelines

Item No.	Description	Pkg.
NON25457M	Medium	30/cs
NON25457	Regular/Large	30/cs
NON25457XL	X-Large	30/cs
NON25457XXL	XX-Large	30/cs

USP800 Requirements	Medline Chemo Gown NON25457
Disposable	✓
Not made of cloth	✓
Have testing regarding resistance to HD permeability	✓
List the HD it is tested against	✓
Close in the back	✓
Have long sleeves	✓
Have closed cuffs (elastic or knit)	✓
Have HD testing at seams and closures that prove permeability resistance (not just gown material)	✓





# Head, Hair, Shoe and Sleeve Covers

## USP 800 Guidelines

- Head and hair covers (including beard and moustache), shoe covers and sleeve covers provide protection from contact with HD residue
- When compounding HDs, a second pair of shoe covers must be donned before entering the C-SEC and doffed when exiting the C-SEC
- Shoe covers worn in HD handling areas must not be worn to other areas
- Disposable sleeve covers protect areas of the arm that may come in contact with HDs

## Pro Series Bouffant Cap

- Medium-weight, multi-layer material
- Blue, one size fits most

Item No.	Description	Pkg.
NON30233B	24", Lightweight, Blue	500/cs
NON28533B	24", Heavyweight, Blue	500/cs



NON30233B

## Beard Covers and Surgeon Hoods

- Made of multi-layer or polypropylene material
- One size fits most

Item No.	Description	Pkg.
NONSH100C	Surgeons Hood with Multi-Layer Material, Polypropylene Crown	300/cs
NONSH200	Multi-Layer Hood	300/cs
NONSH600	Polypropylene Hood	300/cs
NONSH400	Polypropylene Beard Cover	1000/cs



NONSH100C



NONSH200



NONSH600



NONSH400

## Head, Hair, Shoe and Sleeve Covers (cont.)

### Polyethylene Shoe Cover

- Smooth bottom for situations where traction is not essential
- Made from polyethylene material designed to withstand high levels of fluids

Item No.	Description	Pkg.
CRI2010	One Size Fits Most	1000/cs



CRI2010

### Multi-Layer Shoe Covers

- Made of multi-layer material
- Heavyweight material features striped, non-skid pattern for increased traction
- Range of sizes to fit all shoe types

Item No.	Description	Pkg.
NON29858	Regular/Large	100/bx, 300/cs
NON29859	X-Large	100/bx, 200/cs



NON29858

### Knee-High Boot Covers

- Premium, breathable material tested against viral penetration per ASTM F1671 and against the top 11 chemotherapy drugs per ASTM F739-12
- Blue laminate material tested against blood and bodily fluids per ASTM F1670 and viral penetration per ASTM F1671
- Hook and loop closure
- Foam strip bottoms for increased traction

Item No.	Description	Pkg.
NON27348P	Premium Breathable, Regular/Large	50/bx, 150/cs
NON27348PXL	Premium Breathable, X-Large	50/bx, 150/cs
NON27200	Blue Laminate, Regular/Large	50/bx, 150/cs
NON27200XL	Blue Laminate, X-Large	50/bx, 150/cs



NON27348P

### Protective Sleeve Covers

- Providing the maximum amount of protection when high amount of fluids are expected or when extra protection is needed
- Elastic bands at both ends secure the covers at the wrists and upper arms
- Microporous and premium breathable laminate material tested against ASTM F1670
- Premium breathable laminate material is tested against the top 11 chemotherapy drugs per ASTM F739-12

Item No.	Description	Pkg.
NON18P2SLEEVE	20" (50.8 cm) Long, Breathable Laminate, Blue	200/cs
NON18SLEEVE1	20" (50.8 cm) Long, Microporous Breathable, White	200/cs



NON18SLEEVE1

# Eye and Face Protection

## USP 800 Guidelines

- Eye and face protection must be worn when there's a risk for spills or splashes of HD materials when working outside of a C-PEC
- A full-face piece respirator provides eye and face protection
- Face shields alone do not provide full eye and face protection—goggles must be used when eye protection is needed

## Fluid Protective Goggles

- Soft, vinyl frames with elastic strap
- Fit over prescription eyewear
- Four air vents provide additional comfort
- Compliant with ANSI Z87.1 standards for impact protection

Item No.	Description	Pkg.
NON24775	Anti-Fog, Indirect Vent, Clear Frame	36/bx
NON24776	Indirect Vent, Clear Frame	36/bx



NON24775

## Face Shields

- Lightweight, anti-fog protection from splashing or spraying
- Optically clear polyester
- Foam band not made with natural rubber latex
- Can be worn with glasses

Item No.	Description	Pkg.
NONFS100	Extra-Long	40/cs
NONFS300	Full-Length	24/bx, 4 bx/cs
NONFS400	3/4-Length	24/bx, 4 bx/cs



NONFS300

# Respiratory Protection

## USP 800 Guidelines

- Surgical masks do not provide respiratory protection from drug exposure
- A fit-tested NIOSH-certified N95 respirator protects against airborne particles for most activities
- N95 respirators offer no protection against gases and vapors and minimal protection against splashes

Cover up  
before  
Dec. 1, 2019

## N95 Respirators

- Fluid-resistance 160 mmHg
- Polyester inner and outer facings
- Not made with natural rubber latex

Item No.	Description	Pkg.
NON24507A	Small, Cone Style	20/bx, 12 bx/cs
NON24506A	Regular, Cone Style	20/bx, 12 bx/cs
RP88010	Small	50/bx, 6 bx/cs
RP88020	Regular	50/bx, 6 bx/cs



NON24506A



RP88020



# Gloves

## USP 800 Guidelines

- Gloves must be powder-free and chemo-tested to ASTM D6978
- Hands must be washed with soap and water after removing gloves
- When used for sterile compounding, the outer chemotherapy glove must be sterile
- Chemotherapy gloves must be changed every 30 minutes unless otherwise recommended (see chemo panel on back of glove boxes for breakthrough times)
- Gloves must be inspected for physical defects before use

**Contact your Medline Representative for a complete list of gloves to protect your team.**

## Heavy Duty

Oncology, Lab, ED

### VersaShield Extended Cuff Powder-Free Nitrile Exam Gloves

- 9.5" or 12" cuff help provide extra protection for your wrists and arms
- Textured fingertips for enhanced grip

Item No.	Description	Pkg.
VS311M	Medium	100/bx, 1000/cs
VS711M	Medium	50/bx, 500/cs



SPD

### CS Pro 16" Cuff Nitrile Exam Gloves

- 16" cuffs to provide extra protection between the cuff and the sleeve
- Fully textured grip enhances tactile sensitivity that performs well in both wet and dry situations

Item No.	Description	Pkg.
CS16S	Small	50/bx, 500/cs
CS16M	Medium	50/bx, 500/cs
CS16L	Large	50/bx, 500/cs
CS16XL	X-Large	50/bx, 500/cs



## Sterile

Pharmacy, Oncology, Labor & Delivery, Radiology, ED, OR

### Medline Extended Cuff Nitrile Exam Glove Pairs

- Extended-cuff, sterile, nitrile exam gloves
- Also available in singles

Item No.	Description	Pkg.
MDS198415	Medium, Pairs	50/bx, 200/cs
MDS198515	Medium, Singles	100/bx, 400/cs



## Gloves (cont.)

### Housewide

MedSurg and Specialty Departments

#### Restore Sense Powder-Free Nitrile Exam Gloves with maxOat+

- MaxOat+ colloidal oatmeal can help retain natural moisture and soothe the skin
- SmartGuard protective film barrier over the box opening helps reduce waste

Item No.	Description	Pkg.
OAT4583	X-Small	250/bx, 2500/cs
OAT4584	Small	250/bx, 2500/cs
OAT4585	Medium	250/bx, 2500/cs
OAT4586	Large	250/bx, 2500/cs
OAT4587	X-Large	230/bx, 2300/cs



#### FitGuard Prime Nitrile Exam Gloves

- Features enhanced tactile sensitivity while maintaining excellent resistance and barrier protection
- SmartGuard protective film barrier over the box opening helps reduce waste

Item No.	Description	Pkg.
FG2300	X-Small	250/bx, 2500/cs
FG2301	Small	250/bx, 2500/cs
FG2302	Medium	250/bx, 2500/cs
FG2303	Large	250/bx, 2500/cs
FG2304	X-Large	230/bx, 2300/cs



#### Generation Pink Powder-Free Nitrile Exam Gloves

- Excellent tactile sensitivity for touch perception and barrier protection
- Textured fingertips for enhanced grip

Item No.	Description	Pkg.
PINK2583	X-Small	250/bx, 2500/cs
PINK2584	Small	250/bx, 2500/cs
PINK2585	Medium	250/bx, 2500/cs
PINK2586	Large	250/bx, 2500/cs
PINK2587	X-Large	230/bx, 2300/cs



## Woodland Friends Nitrile Exam Gloves

- Colorful packaging features kid-friendly illustrations
- SmartGuard protective film barrier over the box opening helps reduce waste

Item No.	Description	Pkg.
PEDS310	X-Small	250/bx, 2500/cs
PEDS311	Small	250/bx, 2500/cs
PEDS312	Medium	250/bx, 2500/cs
PEDS313	Large	250/bx, 2500/cs
PEDS314	X-Large	230/bx, 2300/cs



## SensiCare Silk Powder-Free Nitrile Exam Gloves with SmartGuard



- Soft and comfortable feel provides outstanding tactile sensitivity
- SmartGuard protective film barrier over the box opening helps reduce waste


Item No.	Description	Pkg.
MDS2583	X-Small	250/bx, 2500/cs
MDS2584	Small	250/bx, 2500/cs
MDS2585	Medium	250/bx, 2500/cs
MDS2586	Large	250/bx, 2500/cs
MDS2587	X-Large	230/bx, 2300/cs



# When to double glove?





Your facility must conduct a risk assessment to determine whether single or double gloving is required based on your SOPs and risk of exposure. Per the guidelines, you can reference the USP 800 chapter and NIOSH.<sup>2</sup>

Activity	Formulation	Gloving Guidelines	
		USP 800	NIOSH
 <b>Receiving, unpacking, and placing in storage</b>	All types of hazardous drugs	Single. Your facility's policies must address if any additional PPE is required.	Single (Unless spills occur)
	Intact tablet or capsule (unit-dose package)	Double	Single
	Tablets or capsules	Double	Single
	Oral liquid drug or feeding tube	Double	Double
	Topical drug	Double	Double
	From a prepared syringe (Subcutaneous/intra-muscular injection from a vial)	Double	Double
	Prepared solution (Withdrawing and/or mixing intravenous or intramuscular solution from a vial or ampoule)	Double	Double
 <b>Administration</b>	Solution for irrigation (bladder, HIPEC, limb perfusion, etc.)	Double	Double
	Powder/solution for inhalation/aerosol treatment	Double	Double

 <b>Preparation (withdrawing from vial)</b>	Subcutaneous/intra-muscular injection from a vial	Your facility's SOP must describe the appropriate PPE to be worn based on its occupational safety plan and risk assessment	Double
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Our VersaShield Extended Cuff nitrile exam gloves are recommended to help reduce risk of exposure from splashing.



Activity	Formulation	Gloving Guidelines	
		USP 800	NIOSH
 <b>Cutting, crushing, or manipulating tablets or capsules; handling uncoated tablets</b>	Tablets or capsules	Your facility's SOP must describe the appropriate PPE to be worn based on its occupational safety plan and risk assessment	Double
	Oral liquid drug or feeding tube	Double	Double
 <b>Compounding</b>	Topical drug	Double	Double
	Withdrawing and/or mixing intravenous or intramuscular solution from a vial or ampoule	Double	Double
	Solution for irrigation	Double	Double
	Powder/solution for inhalation/ aerosol treatment	Double	Double
 <b>Disposal and cleaning</b>	Drugs and metabolites in bodily fluids	Double	Double
	Drug-contaminated waste	Double	Double
 <b>Cleaning</b>	Spills	Double	Double



There are some instances where a healthcare worker is required to double glove, such as when compounding or administering chemo.



Ultimately, your facility must conduct a risk assessment to determine if single or double gloving is required.



# Disposing of used PPE.

As a precaution, it's best to treat all PPE worn when handling HDs as if it has been contaminated with HDs—placing it in an appropriate waste container to be disposed of.

- PPE worn during compounding should be disposed of in the proper waste container before leaving the C-SEC
- Chemotherapy gloves and sleeve covers worn during compounding must be carefully removed and discarded immediately into an approved waste container inside the C-PEC or contained in a sealable bag for discarding outside the C-PEC

**Make sure your facility is USP 800 compliant by December 1, 2019.** For a free assessment, contact your Medline Representative or call 1-800-MEDLINE.



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Follow us    

\*Refer to section 7 of USP 800 for complete Personal Protective Equipment guidelines. Face shields alone do not provide full eye and face protection. Use in combination with goggles.

REFERENCES: 1. Centers for Disease Control: <https://www.cdc.gov/niosh/topics/hazdrug/>. Accessed July 8, 2019. 2. USP 800 guidelines: <http://www.usp.org/sites/default/files/usp/document/our-work/healthcare-quality-safety/800-know-your-exposure-to-hazardous-drugs.pdf>. Accessed July 8, 2019.

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