

ASPR TRACIE Technical Assistance Request

Request Receipt Date (by ASPR TRACIE): 9 January 2024

Response Date: 18 January 2024

Type of TA Request: Complex

Request:

The requestor asked for information and guidance on the requirements for taping personal protective equipment (PPE).

Response:

ASPR TRACIE conducted a search online for resources related to taping PPE and decontamination requirements, including those in the ASPR TRACIE [EMS Infectious Disease Playbook Version 2.0](#) and ASPR TRACIE [Hospital Patient Decontamination](#), [Pre-Hospital Patient Decontamination](#), and [Responder Safety and Health](#) Topic Collections. We also requested input from members of the ASPR TRACIE Subject Matter Expert (SME) Cadre. Section I provides comments from SMEs, and Section II includes resources related to requirements or guidance for hospital decontamination showers.

I. ASPR TRACIE Subject Matter Expert Comments

Please note: These are direct quotes or paraphrased comments from emails and other correspondence provided by an ASPR TRACIE SME Cadre member in response to this specific request. They do not necessarily express the views of ASPR or ASPR TRACIE.

SME Cadre Member 1:

- We are not aware of any existing or pending guidance on this specific topic.
- In general, the OUTER layer of gloves (which have longer cuffs) for chemical decontamination should be taped. The underglove is a shorter glove to facilitate pulling this back through the taped outer glove and suit when doffing.
- On page 79 of the Occupational Safety and Health Administration (OSHA) [Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances](#) under “sample donning instructions,” it indicates that both inner and outer gloves be taped in the process. It is important to note that this is not common field practice, can make removal of the inner gloves difficult, and there is no further discussion of this in the text nor an accompanying citation.

SME Cadre Member 2:

- We are still taping for the most part, but we leave it up to staff preference based on their comfort.
- Our checklist does not require it, but leaves it optional, especially because we only carry size XL suits and up, making cuff seal very hard for some of our female providers.

- Newer decontamination members that have gone through Hospital Emergency Response Training (HERT) in the last few years have learned that taping is not required.
- Attached to this response is the sheet they gave us in the Federal Emergency Management Agency's (FEMA's) Center for Domestic Preparedness in Anniston, Alabama.
 - In the training course in Anniston, they do not let us tape, but most local instructors still allow it.
 - During an activation we do not keep our suits anyway so the risk of the tape harming the integrity of the suit for future use is null for us today unless we start re-using suits following true chemical events.
 - Staff that do tape are not taping zippers, just cuffs (hands and feet).
 - We only reuse PPE today for exercise purposes.
- So, the bottom line is that taping is not required anymore but is certainly an option if desired by the individual.

SME Cadre Member 3:

- Unfortunately, hospital hazmat response is not a well-studied emergency preparedness item; in part because it happens so rarely.
- Our health care facilities are still taping gloves and boots to the suit with tab ending to help promote removal along "slow ball and roll" process for pulling the tape off. We use ChemTape or fresh duct tape.
- Our Kappler or Tychem suits (we have both), nitrile and butyl gloves (Silvershield as needed), and PPE ensemble is used once for real world emergency, while training suits maybe be used five times or so before disposal.
- Glove or tape failure has not been an issue, just people rushing to remove the tape and getting it stuck in the glove fingers because they removed too much at a time.

SME Cadre Member 4:

- For the frontline hospitals, for bio incidents, we do not encourage taping. Instead, we use layers (e.g., two pairs of gloves and one extended cuff) to ensure there is no skin exposed and for knee-high boots, have an apron on top.
- For chemical incidents, the PPE does include tape.

II. Select Resources

Emergency Response TIPS, LLC. (2020). [ChemTape & PPE – To Use or Not to Use](#).

This blog provides information on whether to tape PPE and includes language from the National Fire Protection Association (NFPA) standards to help support those ideas.

Occupational Safety and Health Administration. (2005). [Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances](#). U.S. Department of Labor.

The OSHA shares best practices document for hospitals to enhance employee protection and training as part of emergency planning for mass casualty incidents involving hazardous substances.