

Personal Protective Equipment (PPE) in the Event of a Radiological Contamination Risk

Preamble

- Distinguish a contaminated patient from a patient who has only been irradiated to determine the appropriate level of personal protective equipment (PPE).
 - Consider the patient contaminated if he has been in contact with powder, smoke, debris, liquid, or any other radioactive material.
 - When in doubt, consider the patient contaminated and wear PPE.
 - A patient who has only been exposed (irradiated) does not require specific PPE, as there is no risk of secondary contamination. Use standard universal precautions.
- Your hospital Radiation Safety Officer (RSO) can guide you in selecting PPE.
- PPE does not protect against gamma radiation. Minimize exposure time and maintain distance whenever you do not need to touch the patient.

PPE for Healthcare Professionals in a Hospital Setting

****** For field teams (e.g. paramedics), follow the protocols established by specialized prehospital HAZMAT response teams.

In a hospital setting :

- ☐ Droplet and airborne precautions
- ☐ Double gloves (one pair taped to the gown)
- ☐ Gown
- ☐ N95 mask
- ☐ Face shield/eye protection
- ☐ Shoe covers
- ☐ Hair covers
- ☐ Wear a dosimeter (if available)
- ☐ Ideally, tape any potential areas of contaminant entry (e.g., between gown and gloves, between shoe covers and gown, and over zippers)

If healthcare workers are at risk of exposure to contaminated fluids (e.g., during the decontamination phase), add :

- ☐ Waterproof shoe covers
- ☐ Face shield
- ☐ Waterproof gown or coveralls



RADIATION EXPOSURE ONLY



No special radiation-specific PPE is required

Use standard (universal) precautions as clinically indicated:



Gown



Gloves



Mask



Face shield
or goggles

CONTAMINATION SUSPECTED

e.g., through contact with powder, smoke, debris, or liquid



Gown



Double gloves



N95 respirator



Face shield
or goggles



Medical Hair
Covering



Wear Dosimeter
(if available)



Tape portals of entry

For personnel at risk of exposure to contaminated liquids:



Water-repellent
surgical gown or
coveralls



Waterproof
shoe covers