Personal Protective Equipment (PPE)
Overview, Donning, Doffing

What is PPE?

- Special clothing and equipment that places a barrier between an individual and a hazard
- Includes
  - Body covering
  - Respiratory protection
  - Gloves
  - Boots and more

Why is PPE Needed?

- Protects responders from potentially life-threatening hazards
  - Zoonotic diseases
  - Chemical exposures
- Prevents the spread of pathogens between animals or locations
  - Biosecurity

Risk Categories

<table>
<thead>
<tr>
<th>Table 1: Risk Categories</th>
<th>Zoonotic Risk</th>
<th>Biosecurity Risk</th>
<th>Risk Category</th>
<th>Disease Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low, vector-borne</td>
<td>Low</td>
<td>Low</td>
<td>Marburg</td>
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<tr>
<td>Low</td>
<td>Low, non-contagious</td>
<td>Low</td>
<td>Low</td>
<td>Cleaner</td>
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<tr>
<td>Low</td>
<td>Moderate, contagious</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Rinderpest</td>
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<tr>
<td>Low</td>
<td>High, highly contagious</td>
<td>High</td>
<td>High</td>
<td>Foot-and-mouth disease</td>
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<tr>
<td>Moderate</td>
<td>Low, vector-borne</td>
<td>Moderate</td>
<td>Japanese-encephalitis</td>
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</table>

Levels of PPE

Biosecurity Work Zones
DONNING PPE

- Level C

Safety

- Always use the “buddy system”
- Be aware that PPE can create additional responder hazards
  - Heat stress
  - Physical injury
    - Slips, trips, falls
  - Psychological stress
    - Impaired vision, movement, and communication

Collect Needed Supplies

- Blunt nosed scissors
- Chemical resistant tape
- Two pairs of gloves (minimum)
- Two-piece scrub suit
- Long socks
- Tyvek® or similar protective suit with boot pouches and hood
- Steel toed rubber boots
- Disposable or reusable respirator
- Goggles
- Biohazard bags
- Supplies needed to perform tasks on-site

Preparing to Don PPE

- Prepare items
  - Measure and cut supply of chemical resistant tape
  - Tabs on end for easy removal
- Inspect PPE
  - Safety features and devices provided
  - Any damage or rips before, during, and after each use

Donning Level C PPE

- Pull on chemical-resistant suit
- Step into chemical-resistant boots
- Pull on disposable boot covers
Donning Level C PPE

- Pull on inner latex or nitrile gloves
- Then outer chemical resistant gloves

Donning Level C PPE

- With a team member
- Tape-seal suit and boot junctions
  - Be sure to leave room to bend, walk, prevent ripping

Donning Level C PPE

- Put on APR
  - Fit testing required prior to wearing
- Adjust straps
- Conduct an APR user seal check
- Put on goggles
- Pull on coverall hood

Donning Level C PPE

- Zip up the suit completely
- Tape seal with chemical-resistant tape
  - Zipper
  - Face piece
- Enter to work zone

DOFFING PPE

- Begins in Hot Zone
  - Dry brush PPE exterior
  - Clean bottom of boots
- Enter Warm Zone
  - Remove all tape seals
  - Dispose properly
- Spray suit with disinfectant
Doffing Level C PPE

- Remove outer gloves
- Unzip protective suit
- Remove hood by
  - Reaching inside hood
  - Rolling it back
  - Touch only the inside surface
- Pull suit off shoulders
- Turn it inside out as moved down
- Remove outer boot covers
- Scrub inner boots with disinfectant
- Peel suit down; step out
- Remove APR and inner gloves
- Dispose of gloves and suit in containers provided
- Place APR in designated container
- Wash hands
- Shower
  - Inspect under fingernails
  - Blow your nose
- Evaluate proper fit frequently
- Do not eat, drink, smoke, apply cosmetics or lip balm or handle contact lenses while wearing
- Don and doff in proper order
- Wash hands immediately after removing PPE

Acknowledgments

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