Committee on Personal Protective Equipment for Workplace Safety and Health

Perspective from Emergency Medical Services
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Disclosures

- No financial conflict
- Grant funding
 - National Emerging Special Pathogens
 Training and Education Center (NETEC)



Emergency Medical Services



Hierarchy of controls
Standard and transmission-based precautions



EMS PPE Selection

- CDC recommended standard and transmission-based guidelines
- Risk of exposure to potentially infectious body fluids
- Work/operating environment
- Competencies to use the PPE ensemble



PPE challenges

- Thermal stress
 - Breathable
 - Liquid barrier performance
 - Viral penetration resistance
 - Tear resistance
 - Affordable
- Anti-fog eye protection
- Integrity after exposure to disinfectants



PPE challenges

- Personal protective ensemble
 - Validation of procedures to create effective interface between components PPE used in prehospital clinical care
 - eye protection/respiratory protection
 - sleeve/glove
 - pant leg/footwear
 - hood/coverall
- Human factors studies
 - To evaluate operational limits for HCP in PPE in out-ofhospital environment
 - To inform "fitness standards" for particular ensembles
 - To inform performance of clinical skills in PPE
- · PPE shelf life



PPE challenges

- Contingency and crisis standards
 - Extended use
 - Re-use
 - Disinfection and re-use

In the EMS operating environment



One size doesn't fit all

- Emergency medical services are <u>heterogeneous</u>
 - First responders
 - Urban systems short transport time
 - Rural systems long transport time
 - Critical care transport
 - Specialty teams HHID transports
 - Government and non-government based services

EMS workforce straddles healthcare and public safety
May result in an underserved constituent group



Implementation Efficacy vs. effectiveness

- Improved adherence to recommended standard and transmission-based precautions
- Maintenance of competencies
- EMS/PPE behavioral science

Education, training, exercises

National Emerging Special Pathogens Training and Education Center







