

Personal Protective Equipment (PPE) and Pandemic Influenza

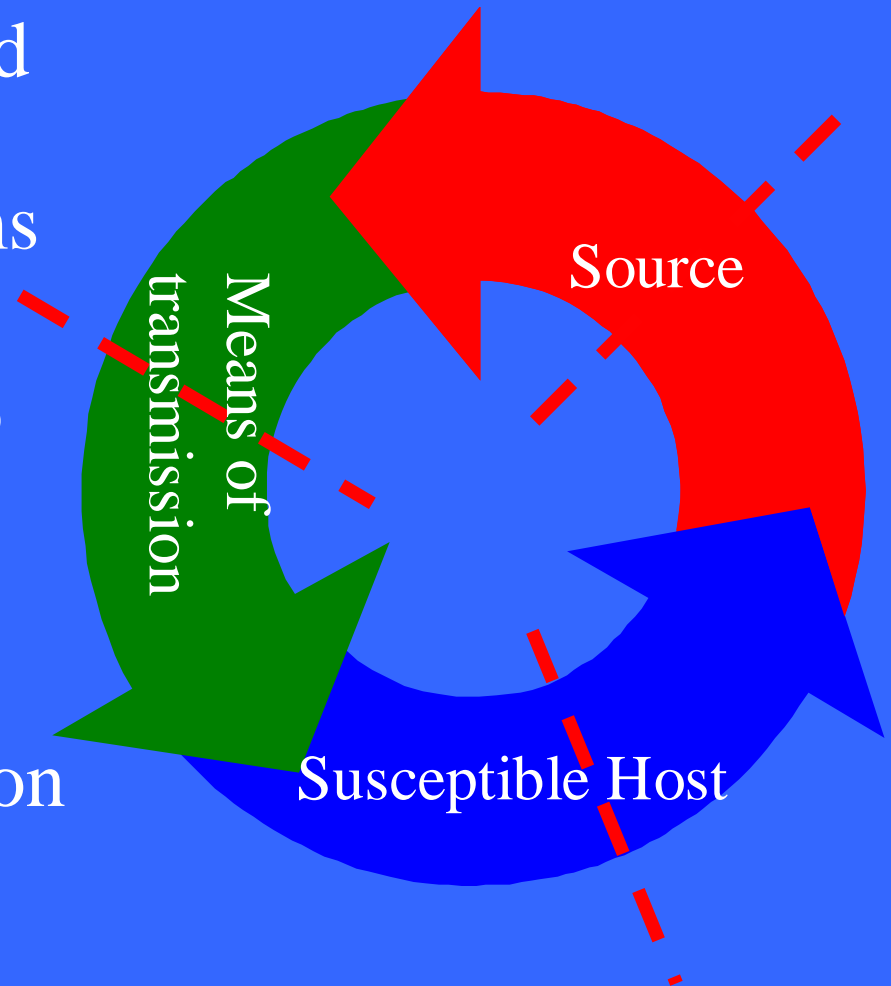
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Chain of Transmission

- A variety of infection control measures are used to decrease the risk of transmission of organisms in healthcare settings.
- These measures make up the fundamentals of isolation precautions.
- **Hand hygiene** is the cornerstone of all infection control measures and precautions.



*Body Armor: Personal Protective
Equipment*



Personal Protective Equipment (PPE)

- Any type of specialized clothing, barrier product, or breathing (respiratory) device used to protect workers from serious injuries or illnesses while doing their jobs.
- Proper use helps prevent the spread of infection
 - Protects wearers
 - Reduces chance HCWs will infect/contaminate others
 - Reduces chance of transmitting infection from one person to another



Personal Protective Equipment

- A major component of Standard Precautions
- Protects the skin and mucous membranes from exposure to infectious materials in spray or spatter
- Should be removed when leaving treatment areas

Elements of Standard Precautions

- Hand hygiene
- Gloves, masks, eye protection, and gowns
- Patient care equipment
- Environmental surfaces
- Injury prevention

Recommendations for Gloving

- Wear gloves when *anticipate* contact with blood, saliva, and mucous membranes is possible
- Remove gloves after patient care
- Wear a new pair of gloves for each patient
- *Not a substitute for hand hygiene!*



Masks, Protective Eyewear, Face Shields

- Wear a surgical mask and either eye protection with solid side shields or a face shield to protect mucous membranes of the eyes, nose, and mouth
- *Change masks between patients*
- *Clean reusable face protection between patients; if visibly soiled, clean and disinfect*

What is, or will be, the recommended PPE for caring for persons known or suspected of having avian (H5N1) influenza?

Avian Influenza (H5N1)

- Prevention of transmission
 - Respiratory hygiene/cough etiquette
 - Patient Placement
 - Personal Protective Equipment
 - WHO
 - CDC/HICPAC
 - HHS

Respiratory Hygiene/Cough Etiquette

- To prevent the transmission of all respiratory infections in healthcare settings at the first point of contact with a potentially infected person.
 - Visual alerts
 - Contain respiratory secretions
 - Cover nose/mouth when coughing/sneezing
 - Use tissues
 - Perform hand hygiene
 - Masks for coughing persons (ear loops/ties)
 - Encourage spatial separation (≥ 3 feet between coughing and non-coughing persons)
 - Droplet precautions

WHO

Minimum level of precautions

- Initial care
- Etiologic diagnosis is pending
- Patient with acute febrile respiratory illness

= *standard and droplet precautions*

CDC

- “Enhanced precautions”
 - Standard precautions
 - Contact precautions
 - Gloves/gowns for all patient contact
 - Dedicated equipment
 - Eye protection
 - Goggles./face shields when within 3 feet of patient
 - Airborne precautions
 - Airborne (negative pressure) isolation room
 - Fit-tested respirator (\geq N95) when entering room

HHS Pandemic Influenza Plan

- Masks (surgical or procedure)
 - Upon entering patient room
 - Worn once then discarded
- Gloves/gowns as per standard precautions
- PPE for special circumstances:
 - Aerosol generating procedures
 - Gloves, gowns, face/eye protection, fit-tested particulate respirator
 - Pandemic influenza with increased transmissibility
 - Airborne precautions
 - Early stages of the pandemic
 - Airborne/contact precautions

So, what should we be
stockpiling?

- Hand hygiene products/materials
 - Soap
 - Paper towels
 - Alcohol based hand rub
- Procedure/surgical masks
 - Include for respiratory hygiene
 - Pediatric sizes (25% of inventory)
- Gloves
- Gowns
- N95 respirators
- Face shields or goggles
- Tissues

How much?

(# patients x # HCW contacts in a 24 hour period) x 8 weeks



