Protecting Healthcare Workers from an Airborne Respiratory Event

Implementing a Sentinel Surveillance System for Ongoing and Continuous Monitoring of PPE Usage in the U.S. Healthcare System

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**Prevention**

- **HEALTHCARE WORKFLOW**
  - Employee Vaccination
  - PPE/PPT Programs
  - Training

**Infection Surveillance**

- Surveillance of patient to identify disease, protection of visitors
- Laboratory identification and reporting
- Medical Provider orders for Airborne Precautions
- Negative pressure room
- Signs on doorway
- Central Supply manages supply and recall of PPE
- Investigation of Exposures
- Identify disease in HCW

**NIOSH Sentinel PPE Surveillance System**

- From Metro and State Public Health:
  - Types of infectious disease seen in hospital
  - Number of patients with infectious disease
- From Infection Control through State Reporting System:
  - Types of infectious disease seen in hospital
  - Number of patients with infectious disease
- From Electronic Medical Record:
  - Time from admission to written precautions order
  - Time from admission to placement of patient in AIRR
- From Infection Control:
  - Number of exposure events reported to state
  - Type of infectious disease in hospital
- From CDC:
  - Location of national infectious disease outbreaks
  - Workplace exposures
  - Occupational illness
- From State Emergency Planning Agencies:
  - Preparation for emergent diseases
  - Local stockpiles of PPE

**Agency Input**

- To Hospitals: PPE related communications and pandemic guidance
- To Communities: PPE related communications and pandemic guidance

**Data Points**

- From Occupational Health (Prevention):
  - HCW demographics
  - Type of immunization
  - Number immunized
  - Percent compliant with immunizations
  - Number of HCWs trained
  - Method of training
  - Number of HCWs with medical clearance
- From Environmental Health & Safety:
  - Number fit tested
  - Brand of mask assigned to HCW
  - Size of mask assigned to HCW
- From Central Supply:
  - Brands of masks regularly ordered
  - Sizes of masks regularly ordered
  - Location of mask use in hospital
  - Manner of distribution in hospital
  - Number and sizes of masks in emergency stockpile
  - Mask recalls with reason and action taken
- From CDC:
  - Location of national infectious disease outbreaks
  - Workplace exposures
  - Occupational illness
- From State Emergency Planning Agencies:
  - Preparation for emergent diseases
  - Local stockpiles of PPE

**To Hospitals:**

- PPE related communications and pandemic guidance
- PPE related communications and pandemic guidance