SARS-COV-2 Infection Control in the Outpatient Setting: Rational Rationing of PPE and COVID-19 Preparation and Response

Presented by: Jason E. Farley, PhD, MPH, ANP-BC, FAAN and Lisa Maragakis, MD, MPH

Summary/Key Points:

**Infection Control in the Outpatient Setting**

- The most important infection control is recognizing symptoms of SARS-COV-2:
  - Common symptoms include fever, dry cough, and fatigue
  - Less common symptoms include loss of taste or smell, headaches, aches and pains, sore throat, diarrhea, skin rash, and discoloration of fingers and toes
  - Serious symptoms include difficulty breathing/shortness of breath, chest pain or pressure, and loss of speech or movement
- It is important that every patient is treated as if they are infected due to the possibility of asymptomatic transmission of the virus. This includes HCWs wearing personal protective equipment (masks, gloves) maintaining a distance of 6ft/2m when possible, and fever screening.
- Levels of Infection Protection and Control can be divided into administrative control, environmental control, and personal respiratory protection:
Infection Control at home and in the community:
- Ventilation (open windows)
- Isolation of patient (ideally in own bedroom)
- Cough hygiene
- Hand hygiene
- Refraining from close contacts
- Maximizing time in open-air environment (e.g. receive visitors outside, if you must)

Comparing PPE Masks:
- WHO guidelines should be followed regarding mask use. In summary, cloth masks are helpful to prevent transmission of the virus from the wearer to others and surgical or procedural masks or N95 respirators worn with some type of eye protection are helpful to prevent transmission of the virus to the wearer.

Respirator Use and Reuse:
- Respirators are disposable but can be re-used repeatedly over the course of an 8 hour shift for up to 5 days, if they are properly stored in a clean dry place, used by one person, not soiled or wet, do not contain holes, tears or damaged in any other way. If the respirator has been breached it must be disposed of and a new respirator should be used.

COVID-19 Preparation and Response

Outbreak management is a core of infection control and health care worker (HCW) protection.

Pandemic Response is composed of:
- Proper case identification
- Basic and enhanced prevention and control (IPC) practices: hygiene, distancing
- Data collection
- Communication
- Maintenance of essential health services

Key Steps in Preparedness:
- Creating a strong disease surveillance system
  - Case definitions
  - Screening and triage processes: rapid identification of symptomatic patients and subsequent isolation, collaboration between outpatient and inpatient services to manage the volume of patients presenting to the hospital
- Reinforcing IPC practices
- Coordinating with colleagues with expertise in emergency management and health ministries or other public health authorities
- Partnering with the community for education, involvement, and communication
- Performing drills and tests of the system

Incident Command Structure:
• ICS is a management system aimed at using a common organizational structure to respond to an incident.
• Health care services are encouraged to implement one as it provides better communication, clear roles and responsibilities, and organization of the response (see below for resource)

Outbreak communication and information dissemination are important in an outbreak response and should reflect transparency, respect of public concerns, and planning in advance.

HCWs on the front lines suffer a risk of psychological distress. Thus, support services should be implemented including having an on-site safety office program, IPC support, and expert mental health services for employees. In addition, HCWs should look out for each other and wellness activities should be encouraged for all (see resources below).

Online resources:
- N95 Respirator Decontamination
- WHO COVID-19 Incident Command System Resources
- WHO: Mental Health and Psychosocial considerations during the COVID-19 Outbreak Briefing note on addressing mental health and psychosocial aspects of COVID-19 outbreak (Page 10 contains recommended activities that should be implemented as part of the response to COVID-19)
- Supporting Families of Healthcare Workers Exposed to COVID-19