



IDHS GUIDANCE ON PPE AND EMS ORGANIZATION PREPARATION FOR CORONAVIRUS COVID-19 RESPONSE

March 19, 2020
Revised November 9, 2020

Recommendations for consideration for provider organizations
and their Medical Directors

THIS GUIDANCE IS INTENDED TO ADDRESS MANY OF THE QUESTIONS THAT IDHS HAS RECEIVED REGARDING PPE. IT IS BASED ON CURRENT ISDH AND CDC GUIDANCE CURRENT AS OF THE DATE OF THIS GUIDANCE. INDIVIDUALS SHOULD CONTINUE TO MONITOR FOR CHANGES IN PPE RECOMMENDATIONS.

-- DR. MICHAEL KAUFMANN, STATE EMS MEDICAL DIRECTOR
-- KRAIG KINNEY, STATE EMS DIRECTOR

EMPLOYEE SCREENING



- Although screening does not address asymptomatic individuals, it may help identify those who may have COVID.
- Screening is recommended for all employees arriving for a shift or for any visitors, if permitted, **BEFORE** entry into the facility.
- Screening is recommended as follows:
 - Taking a temperature and denying entry if temperature is over 100.0°F.
 - Ask the employee if they have been asked to self-quarantine or are recommended due to exposure with a known or strongly suspected COVID patient.
 - Questions about COVID signs & symptoms.

SOURCE CONTROL



- Used in COVID context, the CDC defines **source control** as “the use of cloth face coverings or facemasks to cover a person’s mouth and nose to prevent the release of respiratory secretions when they are talking, sneezing, or coughing.”
- **Source control** is recommended for EVERYONE since COVID can be spread by both symptomatic and asymptomatic persons.

SOURCE CONTROL



- **Source control** is important for both symptomatic and asymptomatic patients and their families BEFORE EMS interacts closer than 6 feet.
 - The patient and any other bystanders may be interviewed at 6 feet away and asked to put on their own facemasks (cloth or otherwise).
 - If the patient or bystander does not have a facemask (cloth or simple surgical style not N-95), should be provided one by EMS if supplies permit.
 - Facemasks should **not** be requested for the following:
 - Children under the age of 2
 - Difficulty breathing patients
 - Unresponsive or AMS (cannot remove their own mask if needed)
 - A facemask should be considered over a nasal cannula.

PHYSICAL DISTANCING



- EMS providers should practice physical distancing which is keeping at least 6 feet distance during interactions and transport where possible.
 - This also includes interactions between co-workers both on and off station.
- During transport, limit others to riding in the ambulance to essential personnel only (including family and responders). Additional riders should be screened as well. Those that do ride in the ambulance with a patient, should have a facial covering on—as should all responders including the driver.
- With a suspected or confirmed COVID positive patient, consider closing the door between the driver compartment and the patient compartment. Notify the receiving facility for any special arrival instructions.

Six feet between ALL persons!

PHYSICAL DISTANCING—ON STATION



- EMS providers should practice physical distancing which is keeping at least 6 feet distance during interactions including while on station. Examples include:
 - For instance, during breaks or while eating, there should remain a six-foot distance between the co-workers and consider wearing a facemask for multiple people in a single room.
 - Where possible, consider eating in separate areas to avoid a congregation that increases the risk of exposure.
 - Where possible, consider separate sleeping areas so co-workers do not have to share a common sleep area.

Six feet between ALL persons!

EMS GUIDANCE FOR COVID-19 CORONAVIRUS



- Modified scene safety and assessment
 - Do a room scan before entering and remain 6 feet away from the patient or any family members.
 - Is anyone coughing or respiratory distress?
 - Does anyone acknowledge having a fever?
 - Any previous contact with a known patient?
 - Is the location a high-risk facility (assisted living, ECF, jail)?
 - Limit number of responders that access the patient to only those that are necessary for patient care or movement.
 - Consider having the patient exit the room/location on their own if safe/feasible.
 - Any patient that receives aerosol-generating procedures should be treated with full PPE precautions (gown, goggles or faceshield, and N-95 mask).

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- If approved by local Medical Director, alternative means of screening a patient such as telemedicine are acceptable (such as utilizing a “facetime” type option).
- EMS should only take essential equipment inside when treating a possible or suspected Covid-19 patient.
- Assessments may be tailored to focus on priority symptoms and maintain distance from patient except where needed for assessment and patient care.

EMS GUIDANCE FOR COVID-19 CORONAVIRUS



Standard EMS Response

PPE to include gloves
Consider gown and face shield if any coughing or other exposure to fluids

Covid-Response to Areas with moderate or high community transmission

PPE to include gloves, gown, goggles, and facial surgical mask. N-95 if available. The key is to ensure that eyes, mouth, and nose are all protected.

Known Covid-19 response or indicators such as patient family member or other exposure and symptoms such as fever, cough and respiratory distress

PPE to include gloves, gown, goggles or face shield, and N-95 mask. Surgical mask on patient.

EMS GUIDANCE FOR COVID-19 CORONAVIRUS



Hands

- Clean, non-sterile gloves worn for each patient encounter
- Practice hand hygiene after disposal with alcohol-based hand sanitizer (>60%) or hand washing with soap & water for at least 20 seconds.



Body

- Recommended to use a clean isolation gown for each patient encounter
- Cloth gowns should be laundered between patient encounters.



Eyes

- Protection should be for front and sides with no gaps for best protection.
- Should not interfere with the facemask protection which is the priority.
- May be used for extended covered or direct patient care.
- Reusable protection should be clean and disinfected per manufacturer recommendations.
- A faceshield is not as effective due to gaps but may be used if goggles are not available.



Mouth

- N95 mask is the standard unless not available due to supply then a face mask may substitute.
- Must be worn before patient contact.
- Follow recommended cleaning and disinfecting recommendations if extended use of the masks.
- Remember to clean hands after touching or removing the N95 or facemask.

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- Precautions for Invasive Airway Interventions
 - Full recommended PPE (gloves, gown, goggles, and N95 or other respirator) should be utilized during all aerosol generating procedures.
 - Such procedures include: BVM, suctioning, CPAP, supraglottic airway, intubation, nebulized medications, NRM mask without a surgical mask.
 - Consider utilizing a BVM with a HEPA filter.
 - It is recommended to use a supraglottic airway instead of intubation for suspected or known Covid-19 patients.
 - Do not use ventilators in the prehospital setting during this emergency.
 - Maximize area ventilation during procedures such as windows open or doors (if vehicle not in motion) and use exhaust fans and HVAC system.
 - Always follow your local Medical Director guidance for medical procedure alteration during this public health emergency.

EMS GUIDANCE FOR COVID-19 CORONAVIRUS



- To prevent a shortage of masks including N95 masks. Providers should consider alternatives and plan accordingly.
- EMS providers need to focus on safety but it is also no realistic to use masks for every response due to the limited supply. Use N95 for the most likely cases or the largest risks in terms of known diagnosis or performing airway procedures..

**CONSERVE
TO
PRESERVE!!

USE WISELY!!**

EMS GUIDANCE FOR COVID-19 CORONAVIRUS



- CDC guidance is that an N95 mask remains effective for at least 8 hours. There are many factors to consider, such as removal and re-application, discarding if the respirator is physically contaminated (blood or secretions on the respirator, use for aerosol generating procedures), etc.
- Clean your hands with soap and water before and after application or adjustment of any face mask.
- **NOTE THAT A PROVIDER MAY USE A CLEANABLE FACE SHIELD OVER AN N95 RESPIRATOR TO PROTECT ITS LONGEVITY.**

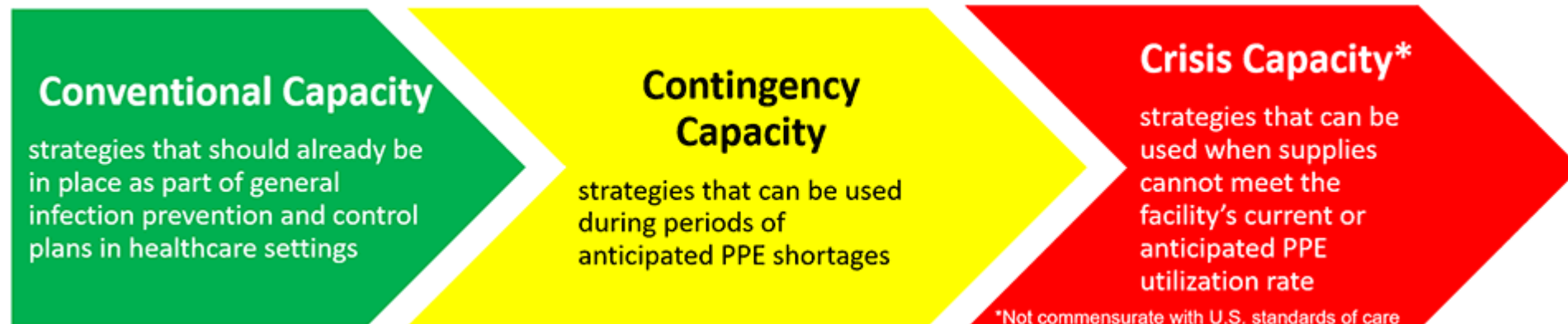
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CONSERVING PPE



- THE CDC defines conservation in terms of Conventional Capacity, Contingency Capacity, and Crisis Capacity.
 - See the CDC Summary guidance and recommendations at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/strategies-optimize-ppe-shortages.html>



** Graphic is from CDC website link

CONSERVING PPE – N95 / RESPIRATOR



- Some highlights for dealing with limited respiratory PPE and crisis capacity:
 - Consider a policy of prioritizing N95's for the patients with demonstrated risk or procedures such as aerosolization
 - N95's may have to be re-used
 - Consider rotating and allowing time between shifts
 - Must replace when grossly contaminated or visibly damaged.
 - Battelle decontamination system is available for organizations – Go to <https://www.in.gov/dhs/ems/> and then under News Updates / Archive / Coronavirus Updates look for Battelle links.
 - N95's may have to be used beyond recommended shelf life
 - Consider use of respirator products approved from other countries (recommend doing some fit testing to ensure they are functional as advertised).
- See the CDC guidance and recommendations at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html#conventional-capacity>

CONSERVING PPE – GOWNS



- Some highlights for dealing with limited gowns PPE and crisis capacity:
 - Consider a policy of prioritizing gowns for the patients with demonstrated risk or procedures such as aerosolization (eg. situations with splashes and sprays.)
 - Consider using cloth gowns and launder them between use.
 - Note that this creates more costs and you must have laundry facilities but could be an alternative.
 - Consider non-traditional gowns not for medical use such as painter suits, etc.
- See the CDC guidance and recommendations at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html#contingency-capacity>

CONSERVING PPE – EYE PROTECTION



- Some highlights for dealing with limited eye PPE and crisis capacity:
 - Consider a policy of prioritizing eye protection for the patients with demonstrated risk or procedures such as aerosolization (eg. situations with splashes and sprays.)
 - Consider using eye protection beyond manufacturer recommendation dates.
 - Consider using non-medical goggles that have side protection.
- See the CDC guidance and recommendations at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html#contingency-capacity>

CONSERVING PPE – GLOVES



- Some highlights for dealing with gloves PPE and crisis capacity:
 - Consider a policy of prioritizing non-sterile disposable medical glove protection for the patients with demonstrated risk or procedures such as aerosolization (eg. situations with splashes and sprays.)
 - Consider using gloves beyond manufacturer recommendation dates.
 - Consider using non-medical gloves.
- See the CDC guidance and recommendations at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/gloves.html#contingency-capacity>



THESE GUIDELINES ARE BEING OFFERED FOR ADDITIONAL INFORMATION FOR EMERGENCY RESPONDERS.

Please continue to monitor ISDH and CDC for additional and changing guidance:

- ISDH: <https://www.in.gov/isdh/28470.htm>
- CDC: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html>