Guidance for Healthcare Personnel at Higher Risk for Severe Illness from COVID-19 Infection

Although any exposed person may be infected with SARS-CoV-2 and develop COVID-19, data indicate that certain populations are at higher risk for serious illness requiring hospitalization and/or ICU care and may be at higher risk for death. The purpose of this document is to provide guidance for healthcare personnel (HCP) who are at higher risk for developing more serious complications from COVID-19 illness, as well as persons managing these personnel.

This guidance is not intended to exclude HCP from the workplace but is meant to ensure workers are safe as possible. In some instances, HCP may not be able to avoid certain circumstances or high-risk exposures, but at minimum must be provided with all appropriate Personal Protective Equipment (PPE).

Risk Factors

HCP meeting either of the following criteria may be at higher risk of developing severe disease complications from COVID-19 illness:

- **Adults over 60 years of age.** It is also important to recognize that there is an increase in risk of death for people in their 50s, and studies find a gradient of increasing age associated with increasing fatality rates. This is consistent with the Alameda County experience to date.

- **Persons of any age with certain underlying medical conditions** These underlying medical conditions have been categorized by CDC based on the level of scientific evidence linking them to serious complications from COVID-19. As of July 2020, a person having any of the conditions listed below should be considered at elevated risk of developing severe disease from a COVID-19 infection. Note, this list is consistently updated by CDC and should be reviewed as evidence evolves.

1. **Strongest and Most Consistent Evidence**
   - Serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies
   - Chronic kidney disease
   - Chronic Obstructive Pulmonary Disease (COPD)
   - Obesity (body mass index of 30 or higher)
   - Sickle cell disease
   - Immunocompromised state (weakened immune system) from solid organ transplant
   - Type 2 diabetes mellitus
2. **Mixed Evidence**
   - Asthma (moderate-to-severe)
     - Cerebrovascular disease (affects blood vessels and blood supply to the brain)
     - Hypertension
     - Pregnancy
     - Smoking
     - Use of corticosteroids or other immunosuppressive medications

3. **Limited Evidence**
   - Immunocompromised state (weakened immune system) from bone marrow transplant, immune deficiencies, or HIV
   - Neurologic conditions, such as dementia
   - Pulmonary fibrosis (having damaged or scarred lung tissues)
   - Cystic fibrosis
   - Liver Disease
   - Type 1 diabetes mellitus
   - Thalassemia (a type of blood disorder)
   - Inherited metabolic disorders

**Older Adults with Underlying Medical Conditions**
Older adults are considerably more likely than younger people to have underlying medical conditions, and evidence indicates that these compounding factors place patients at an even greater risk of developing severe disease. In the US, patients 65 and over with underlying medical conditions were substantially more likely than either older adults without medical conditions or younger adults with medical conditions to be admitted to the hospital, including the Intensive Care Unit (ICU).

**Guidance for Managers**
Persons managing healthcare personnel\(^1\) should:
1) implement a risk assessment to evaluate where and how employees may be exposed to patients with COVID-19,
2) empower employees to self-identify as being at high risk of developing severe disease and,

\(^1\) The definition of HCP includes not only those providing direct clinical services, but all support personnel present in the facility, including, for example, clerical staff and environmental services.
3) develop a plan to minimize high-risk exposures for all employees in general and high-risk employees in particular.

**Risk Assessment**


CDC defines close contact for healthcare exposures as follows:

a. being within approximately 6 feet (~2 meters), of a person with COVID-19 for 15 minutes or longer (such as caring for or visiting the patient or sitting within 6 feet of the patient in a healthcare waiting area or room)

b. having unprotected direct contact with infectious secretions or excretions of the patient (e.g., being coughed on, touching used tissues with a bare hand)

c. presence, for any duration of time, during the performance of an aerosol-generating procedure.

Consider the day-to-day tasks employees are asked to perform. Where do HCP have close contact with patients, or even other HCP, that may have a COVID-19 infection? Keep in mind patients and HCP with transmissible infections may be asymptomatic or display mild symptoms, so a risk assessment should include identification of any instance where patients or employees may congregate, or where HCP may have face-to-face contact with sick patients (e.g. a daily huddle among nursing assistants or performing triage in an emergency department).

**Empower employees to identify as high risk**

Clearly articulate to all employees and HCP that older age and certain underlying medical conditions (see list above) may place them at higher risk of developing severe complications from an infection with COVID-19. Explain in detail the kinds of interventions and policies that will be in place to protect high-risk workers.

Encourage HCP to speak to management and self-identify as belonging to a high-risk group. Keep in mind that HCP who acquire a COVID-19 infection at work may spread the infection to those in their household or for whom they provide care. For this reason, if HCP live with, or provide care for, an older adult or someone with a high-risk underlying medical condition, this should factor into decisions about their work assignments.

Maintaining confidentiality is a key part of this process, and employees who disclose a medical condition should be assured that appropriate steps will be taken by management to ensure confidentiality.
Steps to Protect Healthcare Personnel

This section provides guidance on how healthcare personnel and managers can ensure their healthcare facility is as safe a workplace as possible. This list is not exhaustive and each individual healthcare setting will have to maintain flexibility and creativity to meet the challenge of COVID-19.

| All HCP, regardless of risk, should practice physical and social distancing | • Avoiding gatherings and maintain a distance of at least 6 feet from others when possible.  
• When possible, conduct staff meetings and other staff interactions remotely by using conference call or video conferencing technology.  
• Wherever possible and clinically appropriate, replace in-person patient visits with telemedicine/telehealth visits.  
• Barriers such as glass or plastic windows can be an effective solution for reducing exposures among HCP to potentially infectious patients – for example, at a nursing intake station or pharmacy drop-off/pick-up window.  
• Other examples:  
  o Nursing stations should be reconfigured to allow employees to sit or stand at least 6 feet apart.  
  o Staff at a Skilled Nursing Facility should not gather in a break room or other small area where distancing may not be possible.  
  o Hospital cafeterias should establish a 6-foot physical distance between persons in line. |
| All HCP, regardless of risk, should work in a sanitary environment that is as clean and hygienic as possible to prevent transmission of the SARS-CoV-2 virus | • Ensure frequent cleaning and disinfection of high-touch surfaces in the healthcare facility, such as doorknobs, countertops, light switches, and bedrails, by specifically assigning staff to this task.  
• Provide all employees with ready access to supplies for cleaning and disinfection of their own workstations and equipment.  
• Discourage workers from using other workers’ phones, desks, offices, or other work tools and equipment, when possible. If necessary, clean and disinfect them before and after use.  
• Other examples:  
  o Provide wipes or other cleaning supplies to enable staff to clean and disinfect shared medical equipment, such as bedside computer stations, before and after use.  
  o When possible and appropriate, dedicate equipment to individual HCP, such as a headset or pager or mobile phones. |
| Reassign high-risk HCP to care and interact with patients without symptoms of respiratory illness | • Dedicate groups of non-high-risk HCP to care for patients with confirmed or suspected COVID-19.  
• Other examples:  
  o High-risk HCP at a Skilled Nursing Facility may be assigned to care for residents in the COVID-19 negative cohort.  
  o High-risk HCP at an Acute Care Hospital should avoid exposure to aerosol-generating procedures on patients with respiratory symptoms but, when possible, should train others to perform these procedures. |
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| Minimize close contact between high-risk HCP and other staff or patients by replacing face-to-face interactions with virtual communications | • Consider temporarily reassigning high-risk HCP who perform direct patient care to administrative tasks that can be performed remotely (i.e. telework) or with minimal direct interaction with others.  
• Establish “virtual rounds” with high-risk providers that allow for social distancing while ensuring their continued guidance of other colleagues.  
• Implement alternative communication systems to enable high-risk providers to check electronic medical records and receive information remotely from other physicians and nurses.  
• Wherever possible and clinically appropriate, replace in-person patient visits with telemedicine/telehealth visits.  
• Other examples:  
  o Replace in-person triage with a telephone triage system.  
  o Stagger shifts so that high-risk environmental services personnel may perform their duties at less busy times of day. |
| Establish strategies to ensure that high-risk HCP have access to Personal Protective Equipment (PPE) appropriate to exposure risk | • When access to appropriate PPE is limited, consider excluding high-risk HCP from caring for patients with confirmed or suspected COVID-19 infection.  
  o If high-risk HCP are caring for these patients, ensure they are using the appropriate PPE including a fit-tested N95 mask and a face shield.  
• Other examples:  
  o High-risk HCP may use an N95 mask at times when other workers would wear a surgical mask due to PPE supply constraints.  
  o Hospitals might confer with their ethics committees when high-risk HCP may be required to treat patients with suspected or confirmed COVID-19 without appropriate PPE. |
Resources and References

- CDC: Older Adults

- CDC: People of Any Age with Underlying Medical Conditions

- CDC: Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 (COVID-19)

- OSHA: Guidance on Preparing Workplaces for COVID-19
  https://www.osha.gov/SLTC/covid-19/

- Preliminary Estimates of the Prevalence of Selected Underlying Health Conditions Among Patients with Coronavirus Disease 2019 — United States, February 12–March 28, 2020
  https://www.cdc.gov/mmwr/volumes/69/wr/mm6913e2.htm?s_cid=mm6913e2_w

- Characteristics of Women of Reproductive Age with Laboratory-Confirmed SARS-CoV-2 Infection by Pregnancy Status — United States, January 22–June 7, 2020
  https://www.cdc.gov/mmwr/volumes/69/wr/mm6925a1.htm

- Severe Outcomes Among Patients with Coronavirus Disease 2019 (COVID-19) — United States, February 12–March 16, 2020
  https://www.cdc.gov/mmwr/volumes/69/wr/mm6912e2.htm