Interim Framework During the COVID-19 Pandemic for PPE Use by City and County of San Francisco (CCSF) and Contractor Health Care Personnel Working in a CCSF-Operated Outpatient Clinic Setting

Updated July 31, 2020

The City and County of San Francisco is sharing this Interim Framework for PPE in an effort to promote the general welfare, health and safety; employee health and safety, and effective client and patient care and services during the COVID-19 pandemic, given current PPE shortages. Anyone reviewing this Interim Framework for PPE must understand the following:

- Data, knowledge, and recommendations concerning the safe use of PPE are evolving rapidly. CCSF developed this Interim Framework based on its inventory of PPE and the client and patient care and services being provided as of July 31, 2020. This Framework is based specifically on the data, knowledge and recommendations concerning the safe use of PPE and supply chain prognosis as of July 31, 2020, and is subject to change without notice.

- Care and service providers should consult CDC guidelines for the current selection, alternatives, and safe use of PPE. This Framework may not strictly comply with all guidelines for PPE but was developed to address the COVID-19 Pandemic Emergency and the resulting PPE shortages.

Care and service providers should consult with their Health & Safety, Infection Control, and Risk Management Staff before deciding to use any of the information or processes in this Interim Framework. Any decision to use all or part of this Interim Framework rests solely with that provider. In making this Interim Framework for PPE publicly available, CCSF is not assuming or imposing on CCSF, or its officers or employees, any obligation for which it may be liable to any person who claims that this Interim Framework proximately caused injury.

Summary of Changes to Guidance from 6/11/2020

Updated Background and the Health Order and Health Directive citations.

Modified PPE Table Entries A2 and B1 to reflect July 2020 change to the CDC’s Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic which now states that Health Care Personnel working in facilities located in areas with moderate to substantial community transmission should wear eye protection during patient care encounters.

**PURPOSE:**
To create an Interim Framework for personal protective equipment (PPE) recommendations for CCSF and contractors HCP working in the sites listed above that takes into account the risk of SARS-CoV-2 transmission during different activities and the availability of PPE supplies and resources.

**BACKGROUND:**
Novel coronavirus disease, or COVID-19, is a new respiratory disease that spreads from person to person. Most
people who get the infection have mild symptoms or no symptoms at all. Some develop severe illness requiring hospitalization, especially people who are older and/or have chronic medical conditions like heart disease, lung disease, diabetes, kidney disease and weakened immune systems.

Patients seen at an outpatient clinic may or may not exhibit symptoms if they are infected with SARS-CoV-2. For this reason, it is essential for outpatient clinics to enact appropriate administrative and environmental controls as well as use of personal protective equipment (PPE) by staff to minimize transmission.

Readers should also be aware of, and familiarize themselves with the relevant portions of San Francisco Health Orders and Health Directives that relate to providing outpatient care.

**Guidance:**

This guidance provides a framework for PPE recommendations that takes into account 1) the risk of SARS-CoV-2 transmission during different activities and 2) the supply and resources for PPE which may be limited. See the table below for recommended PPE for use with asymptomatic, medically screened patients and when providing care to suspected or confirmed COVID-19 patients, when the facility is authorized to do so.

Use of PPE is only one method of protecting HCP and patients from transmission. Facilities should first and foremost optimize administrative and environmental controls to minimize disease transmission to patients, HCP and others. Some recommended administrative and environmental controls are provided below.

**Administrative and Environmental Controls to Protect HCP**

- HCP with fever or respiratory illness should not work while ill. Employees who are ill should be advised of sick leave policies that allow employee to stay home when sick. HCP who develop a respiratory infection, flu-like illness, or other symptoms of acute illness while on the job should immediately inform their supervisor and leave work, noting which persons, equipment, and locations they were in contact with. HCP should consult with their own medical providers and follow CCSF procedures for when it is safe to return to work following an illness that included symptoms of COVID-19. [https://sfdhr.org/covid-19](https://sfdhr.org/covid-19)

- Postpone or remotely conduct any non-essential appointments and explore alternatives (e.g. telemedicine) for patients who are ill.

- Control the points of entry into the facility and develop protocols so that HCP can screen all patients or clients before they enter the facility.

- Provide all patients, clients and visitors with an isolation mask and ensure the mask is worn prior to their entering the clinic.

- Ensure that tissues, hand soap, waste receptacles and alcohol-based hand sanitizer are readily available to staff, patients, clients and visitors.

- Ensure patients wear their isolation mask for the duration of the visit unless a procedure is required where the face mask must be removed.

- Keep a distance of at least 6 feet or use a physical barrier, when possible, between the HCP and the patient to reduce exposure when direct contact is not necessary. Set up waiting areas so patients can maintain 6-foot social distancing.
• Place visual alerts such as signs and posters at entrances and in strategic places providing instruction on hand hygiene, respiratory hygiene, and cough etiquette.

• For facilities that are authorized to treat suspected or confirmed COVID-19 patients or clients, designate specific rooms or areas in the facility where they will wait and receive treatment that minimizes their travel through the clinic.

• Ensure Environmental Services (EVS) staff perform frequent and routine cleaning of high touch services in the clinic and that areas where suspected or confirmed COVID-19 patients are seen receive more extensive cleaning and disinfection.

• Ensure all staff who will be working with asymptomatic patients and suspected or confirmed COVID-19 patients, are trained on the facility procedures, controls and use of PPE, including instructions for donning, doffing and any reuse or extended use of PPE, including N95 respirators. When PPE supplies are critical, special care should be taken to ensure N95 respirators are prioritized for those activities and conditions where there is greater risk to the HCP, such as during aerosol generating procedures on patients with suspected or confirmed COVID-19 or where there is care to patients with other infections for which respiratory protection is strongly indicated (e.g. TB, measles, varicella).
A. For HCP staff working with:
ASYMPTOMATIC patients or clients who have been medically screened and answered “No” to all screening questions\(^1\) prior to entering the facility.

### A.1: When all of these conditions are met:
- HCP is working behind a barrier.
- The patient/client is wearing an isolation mask but may need to remove the mask briefly during the encounter.
- **NOT performing** an aerosol generating procedure\(^3\).

Examples of activities include: Speaking with patient/client at a registration desk or nursing station, providing oral medication, counseling a client in an exam room, office or waiting area where a barrier is present.

**Preferred PPE**
- Isolation Mask. Extended use practices in place\(^4\). Discard if any discard criteria are met\(^8\).
- Gloves only if there is contact with potentially contaminated surfaces or shared items during interaction with patient/client. Discard after use.

### A.2: When all of these conditions are met:
- HCP is interacting with a patient/client without a barrier.
- Patient/client is wearing an isolation mask for the entire encounter but may need to remove the mask briefly during the encounter.
- **NOT performing** an aerosol generating procedure

Examples of activities include: Taking vital signs (e.g. blood pressure, weight, oral temperature); using a non-contact thermometer as part of a screening process, providing injections; counseling clients in an exam room, office or waiting area; conducting medical histories or physical examinations, phlebotomy, working at a registration or nursing desk without a barrier.

**Preferred PPE**
- Isolation Mask. Extended use practices in place\(^4\). Discard if any discard criteria are met\(^8\).
- **Gown**\(^5\) or Gown Alternative\(^7\) if the medical issue, treatment or contact indicates a covering is needed for patient/client care.\(^5\) Discard if any discard criteria met\(^8\).

**Alternatives when supplies or resources are critical or unavailable**
- Isolation Mask with reuse and extended use practices in place\(^4\). Discard if any discard criteria are met\(^8\).
- **Gown**\(^5\) or Gown Alternative\(^7\) if the medical issue, treatment or contact indicates a covering is needed for patient/client care with
### Eye and Face Protection as follows:

- If the patient is unmasked at any time during the interaction or if the medical treatment or procedure may generate a splash, spray, or other eye hazard: face shield or goggles.
- For all other interactions: safety glasses or surgical splash shield.

Discard if discard criteria met or clean and disinfect after use.

### Gloves

- If the treatment or medical issue indicates gloves are required for patient/client care or there is contact with potentially contaminated surfaces or shared items during the interaction.

Discard after use.

### A.3: When all of these conditions are met:

- HCP is providing direct patient/client care.
- Patient/client is wearing an isolation mask but may need to remove the mask during the encounter for a procedure or treatment.
- Performing an aerosol generating procedure (AGP)³

Examples of activities: nebulizer treatment, nasopharyngeal swab sample collection, cleaning up body fluids, CPR

<table>
<thead>
<tr>
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<tbody>
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<td>- Fit-tested N95. Discard after use.</td>
<td>- Fit-tested FDA approved KN95 or other accepted internationally certified N95 respirator⁶. Discard after use.</td>
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<td>- Gown⁵. Discard if discard criteria met⁸</td>
<td>- Gown Alternatives⁷. Discard if discard criteria met⁸</td>
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<td>- Full face shield or goggles. Discard if discard criteria met⁸ or clean and disinfect after use with each patient/client.</td>
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<td>- Minimize number of staff present for AGPs and substitute lower risk activities whenever possible.</td>
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B. For HCP staff working with:
SYMPTOMATIC patients or clients (suspected or confirmed COVID-19 Patient) or a Patient/Client who answers “Yes” on any of the Screening Questions

Important: Patients or Clients who answer “Yes” on any of the screening questions must have their visit cancelled and the provider must tell the patient or client they should obtain a diagnostic test for the COVID-19 virus. (Order of the Health Officer No. C-19-08b)

The only instance in which a provider may continue to provide care to a patient or client in this category is if the facility is authorized by a Health Directive or if the facility is a specialized medical facility (such as an urgent care center) that has expertise in working with a person who may be positive for the SARS-CoV-2 virus and can safely offer care in a way that does not put staff or other patients or clients at risk (Order of the Health Officer No. C-19-08b)

B.1: When all of these conditions are met:

- The patient or client is wearing an isolation mask for the entire encounter.
- The interaction is very brief as patients in this category will have most interactions, procedures or treatments performed in a private room
- NOT performing an aerosol generating procedure (AGP).

Examples of activities include: Navigating a patient/client to an exam room, brief conversation at a registration desk or nursing station.

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<td>o Gloves if there is patient/client contact or with potentially contaminated surfaces or shared items during interaction with patient/client. Discard after use.</td>
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B.2: When all of these conditions are met:

- HCP is providing direct patient/client care.
- Patient or client is wearing an isolation mask for the entire encounter or they may need to remove the mask during the encounter.
- Performing or NOT performing an aerosol generating procedure\(^3\) (AGP).

Note: Patients or clients in this category will have most interactions, procedures or treatments performed in a private room.

Examples of activities include: Taking vital signs (e.g. blood pressure, weight temperature, oral temperature); physical examinations or counseling; phlebotomy; providing injections; any aerosol generating procedure\(^3\) (AGP), nasopharyngeal swab sample collection.

### Preferred PPE

- Fit-tested N95. If AGP, discard after use, otherwise extended use\(^4\) practice in place and discard if any other discard criteria met\(^8\).
- Gown\(^5\), if there is direct patient contact or AGP. Discard if AGP, or if any other discard criteria met\(^8\). If there is no patient contact or AGP (e.g. patient counseling), then not required.
- Full face shield or goggles. Discard if discard criteria met\(^8\) or clean and disinfect after use with each patient or client.
- Gloves. Discard after use.

### Alternatives when supplies or resources are critical or unavailable

- Fit-tested FDA approved KN95 or other accepted internationally certified N95 respirator\(^6\) If AGP discard after use otherwise discard if any other discard criteria met\(^8\). Reuse and extended use practices in place\(^4\) for non-AGP activities.
- Gown Alternatives\(^7\). Discard if AGP or any other criteria met\(^8\); If there is no contact or AGP (e.g. patient counseling), then not required.
- Eye and Face Protection as follows:
  - Full face shield or goggles for any AGP;
  - Safety glasses or surgical splash shield for other activities. Discard if discard criteria met\(^8\) or clean and disinfect after use with each patient or client.
- Gloves. Discard after use.
- Minimize number of staff present for AGPs and substitute lower risk activities whenever possible.
EVS Only. When all of these conditions are met:

- EVS performing routine cleaning activities
- EVS staff can maintain > 6 Feet distance from patients
- Cleaning and disinfecting can wait 60 minutes\(^9\) if an aerosol generating procedure or NP Swab was performed on any patient for workup of an infection.

For additional information on EVS PPE recommendations, see the following guidance document: Interim Framework for PPE Use by City and County of San Francisco (CCSF) Environmental Services (EVS) Employees, and EVS Contractors (Custodians), Working in Facility Cleaning Areas Where Suspected or Confirmed COVID-19 Patients and Clients Are Currently Treated, Housed, or Temporarily Relocated Given Current PPE Shortages

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Footnotes

1Health Order No. C19-08b requires that patients or clients must be screened for symptoms in advance of any in-person visit, including on the calendar day of the visit, and such screening must occur before the patient or client enters the office or facility on the day of the visit in order to protect personnel and other patients or clients. The screening must ask the questions listed in Attachment 1 of the Health Order. If a client answers “yes” to any questions, the provider must cancel the visit unless authorized to do so by a Directive or if the facility is a specialized medical facility that has expertise in working with a person who may be positive for the SARS-CoV-2 virus and can safely offer care in a way that does not put staff or other patients or clients at risk. The provider may reschedule the person for an appointment after they receive a negative diagnostic test result, after they have safely recovered from a confirmed test result, or after they have successfully self-quarantined.

See also Health Order No. C19-15 (Testing Requirements for Health Facilities and Providers) and Health Directive No. 2020-20 (Ambulatory Care)

2Instructions for PPE Use and Re-Use by CCSF and Contractor Health Care Personnel in an Outpatient Clinic Setting Caring for Suspected or Confirmed...
COVID-19 Patients (May 24, 2020)

Aerosol generating procedures that may occur in an outpatient clinic setting include cardiopulmonary resuscitation, conscious intubation, nebulizer therapy, and sputum induction. Although nasopharyngeal swab-collection is not in itself an aerosol generating procedure, the procedure may induce sneezing or coughing. Aerosol generating procedures should be conducted in a private room (negative pressure preferred, if available). For sputum induction, using a PAPR instead of an N95 respirator is recommended.

PPE reuse and extended use is per your facility policy and during times of PPE scarcity. Please see “Discard Criteria for PPE” for when PPE should be discarded in settings of reuse and extended use. Adherence to proper hand hygiene is essential when donning an N95 respirator, facemask, eye protection or gowns. For additional information go to: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html

- Extended use refers to the practice of wearing the same N95 respirator, facemask, eye protection, or gown for repeated close contact encounters with several patients, without removing the protective equipment between patient encounters. Extended use may be implemented when multiple patients/clients are infected with the same respiratory pathogen.
- Reuse refers to the practice of repeated use of an N95 respirator, facemask, or eye protection by the same person over a period of time for multiple encounters with patients and removing it (‘doffing’) after each encounter. The respirator, facemask, or eye protection is stored in between encounters to be put on again (‘donned’) prior to the next encounter with a patient/client.

Gowns are disposable isolation gowns that are typically made of a spun synthetic material and are resistant to fluids. Prioritize gowns for the following activities:
- During care activities where splashes and sprays are anticipated, and during other aerosol generating procedures.
- During high-contact patient/client care activities that provide opportunities for transfer of pathogens to the hands and clothing of providers, such as: Dressing, bathing/showering, transferring, providing hygiene, changing linens, changing briefs or assisting with toileting, device care or use, wound care.

Respirators that comply with international standards may be considered during times of known shortages. See CDC Factors to Consider When Planning to Purchase Respirators from another Country and the FDA Emergency Use Authorization.

Gown Alternatives include re-usable cloth isolation gowns, cloth gown, lab coats, or shop coats and will depend on availability at each facility.
Discard Criteria for PPE in Settings of Reuse and Extended Use

<table>
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<tr>
<td>N95 or facemasks</td>
<td>• Dirty or visibly soiled&lt;br&gt;• Comes in contact with blood or bodily fluids&lt;br&gt;• Is hard to breathe through&lt;br&gt;• If the straps appear overly stretched, torn or if face-piece becomes damaged&lt;br&gt;• Worn in care area of patient with additional infectious diagnosis that is transmitted by contact (e.g. C difficile)&lt;br&gt;• If the inside of the respirator is inadvertently touched by a dirty glove or hand</td>
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<tr>
<td>Gown or gown alternative&lt;sup&gt;4&lt;/sup&gt;</td>
<td>• Dirty or visibly soiled&lt;br&gt;• Comes in contact with blood or bodily fluids&lt;br&gt;• Physically damaged, including broken ties and fasteners&lt;br&gt;• Worn in care area of patient with additional infectious diagnosis that is transmitted by contact (e.g. C difficile)&lt;br&gt;</td>
</tr>
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<td>Face shield, goggles, safety glasses, or surgical splash shield</td>
<td>• Dirty or visibly soiled&lt;br&gt;• Comes in contact with blood or bodily fluids&lt;br&gt;• Can no longer fasten securely to the provider&lt;br&gt;• Visibility obscured and reprocessing does not restore visibility&lt;br&gt;</td>
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<sup>9</sup> Wait 60 minutes unless the air exchange rate for the room is known and can reduce the waiting time.
COVID-19
Eye Protection

For Aerosol Generating Procedures (AGPs) and/or activities where there is the risk of splashes or sprays

1. Face Shield:

海尔斯科里斯黑盒所示，冲击耐久工业面罩
Face Shields also acceptable

2. Goggles:

Flexible surround forms seal against face

For general patient care activities without splash or spray risks and when AGPs not being performed

3. Safety Glasses:

Rigid, impact resistant plastic

4. Surgical Eye Shield (aka Trauma Glasses):

Lightweight flexible plastic connected to frame