



Interim Framework During the COVID-19 Pandemic for PPE Use by City and County of San Francisco (CCSF) Disaster Service Workers and Contractors Working in Settings with Significant Commingling of Individuals with Varying COVID-19 Status

May 23, 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 May 23, 2020. This Framework is based specifically on the data, knowledge and recommendations concerning the safe use of PPE and supply chain prognosis as of May 23, 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 for PPE. Any decision to use all or part of this Interim Framework for PPE 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.

Audience:

- CCSF and contracted medical and non-medical staff who are caring for individuals in:
 - Shelter-in-Place (SIP) Hotels
 - Isolation and Quarantine (I/Q) Hotels
 - Post-COVID-19 Sites
 - Shelters or Navigation Centers for persons experiencing homelessness (PEH)
 - Alternative Care Sites (ACS) with similar conditions described below in Background
- CCSF and contracted EVS/janitorial staff working in:
 - Shelter-in-Place (SIP) Hotels
 - Isolation and Quarantine (I/Q) Hotels
 - Post-COVID-19 Sites
 - Shelters or Navigation Centers for persons experiencing homelessness (PEH)
 - Alternative Care Sites (ACS) with similar conditions described below in “Background” who are cleaning areas in which persons with suspected or confirmed COVID-19 are reasonably believed to have spent time.



For the purposes of this guidance, individuals suspected to have COVID-19 are:

- Individuals in the sites listed above who have symptoms consistent with COVID-19 which include: fever ($\geq 38^{\circ}\text{C}$ or 100.4°F), cough, sore throat, new shortness of breath, or rhinorrhea (runny nose), headache, muscle aches, fatigue, new loss of smell or taste, nausea, vomiting, or diarrhea.

Purpose: To create a framework for personal protective equipment (PPE) recommendations for CCSF staff and contractors 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. This guidance and other SFDPH COVID-19 guidance can be found at: www.sfdcp.org/covid19.

Background: San Francisco's Health Order No. C19-12 requires all essential workers to wear face coverings when conducting essential services (<https://www.sfdph.org/dph/alerts/coronavirus-healthorders.asp>). Generally speaking, the Centers for Disease Control (CDC) does not recommend personal protective equipment (PPE) beyond face covering when interacting with asymptomatic individuals who are not known to have COVID-19. However, in San Francisco at this time, Shelter-in-Place (SIP) hotels, Isolation and Quarantine (I/Q) hotels, Post-COVID-19 Sites, shelters/navigation centers serving persons experiencing homelessness, and certain circumstances at Alternative Care Sites (ACS) are unique in the degree of commingling that occurs among persons with suspected or confirmed COVID-19 and those who are asymptomatic or uninfected.

Containment efforts (such as strict isolation or cohorting of confirmed cases) employed in more controlled settings such as healthcare facilities are not able to be consistently applied in these settings. Also, non-medical staff at these sites are often engaged in activities that are akin to delivering medical care.

Therefore:

- 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.
- For staff working strictly with asymptomatic clients in which there is no significant commingling with persons with suspected or confirmed COVID-19, there are less stringent PPE recommendations.
- For staff working closely with asymptomatic clients that commingle with persons with suspected or confirmed COVID-19, particularly if engaged in activities akin to providing medical care to those clients, use of additional personal protective equipment (PPE) is recommended and mirror those for healthcare personnel.



FRAMEWORK

In all circumstances, facilities should first and foremost optimize environmental controls that support social distancing of staff and clients. PPE is not a substitute for environmental controls and should be used in conjunction with environmental controls. These include using physical barriers (e.g. sneeze guards, placing table between staff and clients), social distancing in all areas so that individuals are at least six feet apart, and limiting occupancy of communal areas. Staff should also promote and provide supplies for frequent hand washing, cleaning frequently touched services before and after use, etc. For further information on environmental controls in similar settings see: [Preventing and Managing COVID-19 Transmission in Shelters and Navigation Centers](#), posted at www.sfgdcp.org/covid19 under “Persons Experiencing Homelessness.”



For staff working strictly with:

- **ASYMPTOMATIC clients in which there is no significant commingling with suspected or confirmed COVID-19 clients**

Preferred PPE

- Wear facemask at all times
- Wear gloves when contact is expected with clients or clients' belongings
- Wash hands with soap and water for 20 seconds or with an alcohol based hand sanitizer after removing or replacing gloves or after direct contact with clients or clients' belongings
- Wear gloves and gown if the patient's non-COVID-19 medical issue indicates gloves or gown are required for patient care



For staff working with:

- **ASYMPTOMATIC clients who may be co-mingling with suspected or confirmed COVID-19 clients or**
 - **Suspected or confirmed COVID-19 clients**

A: When both of these conditions are met:

- Employee is interacting with client, including direct care, within 6 feet from a client –and–
- Client is not wearing a mask or mask needs to be removed for any period of time during the encounter

-OR-

This single condition is met:

- Employee is performing or present for a high risk activity¹ with a client, including those in which splashes, sprays or aerosol generating procedures² may occur.

Preferred PPE

- Fit-tested N95 with extended use practices in place³
- Gown⁴ for HCP and other staff performing high risk activities;¹ Gown Alternatives⁶ for all others
- Face shield or goggles with reuse and extended use practices in place³ for HCP and other staff performing high risk activities;¹ Eye Protection Alternatives⁷ with reuse and extended use practices in place³ for all others
- Gloves

Alternatives when supplies or resources are critical or unavailable

- Fit-tested N95 used only for aerosol-generating procedures² with extended use practices in place³
- Facemask used for non-aerosol-generating procedures (N95 which has not been fit-tested can be used as substitutes for facemasks⁵) with extended use practices in place³
- Gown Alternatives⁶
- Eye Protection Alternatives⁷ with reuse and extended use practices in place.³ Face shield or goggles should be prioritized for high risk activities¹
- Gloves
- Minimize number of staff present during high risk activities and substitute lower risk activities whenever possible



B: When both of these conditions are met:

- Employee is interacting with client, including direct care, within 6 feet from a client –and–
- Client is masked for the entire encounter

Preferred PPE

- Fit-tested N95 with extended use practices in place³
- Gown⁴ for HCP and other staff performing high risk activities;¹ Gown Alternatives⁶ for all others
- Face shield or goggles with reuse and extended use practices in place³ for HCP and other staff performing high risk activities;¹ Eye Protection Alternatives⁷ with reuse and extended use practices in place³ for all others
- Gloves

Alternatives when supplies or resources are critical or unavailable

- Facemask or N95 which has not been fit-tested⁵ with reuse extended use practices in place³
- Goggles or Eye Protection Alternatives⁷ with reuse and extended use practices in place³
- Gown Alternatives⁶
- Gloves

C: Under all of these conditions:

- Employee interaction with client can be maintained at > 6 Feet
- Client may or may not be masked

Preferred PPE

- Facemask with extended use practices in place³
- Lab coat or alternative⁶
- Face shield, goggles with reuse and extended use practices in place³ for HCP; Eye Protection Alternatives⁷ with reuse and extended use practices in place³
- Gloves

Alternatives when supplies or resources are critical or unavailable

- Facemask with reuse and extended use practices in place³
- If client is masked, eye protection is not required. If client is unmasked, Eye Protection Alternatives⁷ with reuse and extended use practices in place³
- Lab coat or alternative⁶
- Gloves are not required if employee is not in direct contact with client, client’s belongings, or any objects in client’s immediate area



D: Under all of these conditions:

- EVS/Janitorial Staff performing routine cleaning activities
- Client may or may not be present and may or may not be masked

Preferred PPE

- Facemask for non-high risk activities; fit-tested N95 with extended use practices in place³ for any high risk activity¹
- Gown⁴
- Face shield or goggles with reuse and extended use practices in place³
- Gloves

Alternatives when supplies or resources are critical or unavailable

- Facemask or N95 respirator which has not been fit-tested⁵ and goggles or Eye Protection Alternatives⁷ with reuse and extended use practices in place³
- Gown Alternatives⁶
- Gloves

Footnotes

¹High risk activities include those in which splashes and sprays are anticipated, including aerosol-generating procedures² and patient care activities with prolonged face-to-face or close contact such as dressing, bathing/showering, transferring, providing hygiene, and changing linens, changing briefs or assisting with toileting, device care or use, or wound care and EVS activities that involve cleaning up body fluids or personal belongings.

² Aerosol generating procedures include cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer therapy, sputum induction and nasopharyngeal swab collection that may induce coughing.

³PPE reuse and extended use is per your facility policy and during times of PPE scarcity. Please see “Discard Criteria for PPE” below for when PPE should be discarded in settings of reuse and extended use. Adherence to proper hand hygiene is essential when redonning 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 and patients/clients are placed together in dedicated rooms.
- 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.

⁴An isolation gown that is made of a spun synthetic material and is resistant to fluids. These are most often disposable gowns unless cotton laundered gowns are being used.



⁵An N95 respirator for which the wearer has not been fit-tested are considered to be substitutes for facemasks.

⁶Gown Alternatives include re-usable cloth isolation gowns, coveralls, cloth gown, lab coats, or shop coats and will depend on availability at each facility.

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.

⁷Eye Protection Alternatives in descending order of preference are ANSI safety glasses and then healthcare “eye shields.”

Discard Criteria for PPE in Settings of Reuse and Extended Use

| PPE | Discard criteria |
|--|--|
| N95 or facemasks | <ul style="list-style-type: none"> • Dirty or visibly soiled • Comes in contact with blood or bodily fluids • Is hard to breathe through • If the straps appear overly stretched, torn or if face-piece becomes damaged • Worn in care area of patient with additional infectious diagnosis that is transmitted by contact (e.g. C difficile) |
| Gown or gown alternative ⁴ | <ul style="list-style-type: none"> • Dirty or visibly soiled • Comes in contact with blood or bodily fluids • Physically damaged, including broken ties and fasteners • Worn in care area of patient with additional infectious diagnosis that is transmitted by contact (e.g. C difficile) • Consider discarding after high risk activities depending on supply availability |
| Face shield, goggles, or Eye Protection Alternative ⁷ | <ul style="list-style-type: none"> • Can no longer fasten securely to the provider • Visibility obscured and reprocessing does not restore visibility |