DEPARTMENT OF HEALTH

Interim Guidance for Facemask Use in Health Care Facilities during the COVID-19 Pandemic

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Facemasks play an important role in the protection of health care workers (HCW) and staff from both known and unseen exposures to the virus that causes COVID-19. Medical grade facemasks, referred to here as surgical masks, are classified as personal protective equipment (PPE), while alternative facemasks, often handmade from cloth, serve as a form of source control but provide the wearer unknown protection during exposure to persons with COVID-19.

A description of these facemasks, and their recommended uses for personal protection and source control, is provided in this document. Shortages of medical supplies during the COVID-19 pandemic have necessitated implementation of approaches to optimize use of facemasks, respirators, gowns, and eye protection. Recommendations for optimization have been published by the Minnesota Department of Health (MDH) and the Centers for Disease Control and Prevention (CDC) to ensure safe extended use and reuse of PPE [1,2].

Universal Masking

The concept of "universal masking" involves the use of facemasks by all HCW and health care facility staff, as well as patients and visitors, to deter the unseen risk of asymptomatic virus transmission. This approach has become common in health care facilities with COVID-19, and it could play an important role in keeping the disease out of facilities without known cases. Universal masking includes use of facemasks as PPE (Table 1) and use of facemasks as "source control," which prevents respiratory secretions produced by the wearer from contaminating other persons and surfaces.

Employees participating in universal masking initiatives will wear different facemasks, depending on their potential exposure to patients with COVID-19 and their job responsibilities. Those with patient-facing responsibilities must wear surgical masks for PPE, while staff with no close or direct contact with patients might wear alternative facemasks, which are not meant for medical care and are not PPE. Selecting a facemask based on each employee's individual work location, function, and exposure risk, not just on their job category, ensures that health of all employees is prioritized. In addition to HCW providing patient care, environmental services staff might spend considerable time in patient rooms, fulfilling the essential needs of environmental cleaning and disinfection. In both of these situations, surgical masks might be warranted as PPE. Table 2 provides recommendations for surgical mask or alternative facemask selection, based on potential exposures.

Any staff member with signs or symptoms of illness should report to their supervisor and leave work. Regardless of universal masking approaches, HCW should not work while ill. Return of ill staff to work should align with posted recommendations[3].

Surgical Masks

Surgical masks, also referred to as isolation, dental, or medical procedure masks, are medical grade facemasks that are classified as PPE. If worn properly, a surgical mask provides the wearer protection from droplet contamination and helps prevent respiratory secretions produced by the wearer from contaminating other persons and surfaces (referred to as source control).

At this time, indications for using this type of facemask include:

- PPE during direct care of patients with symptoms of COVID-19 or other clinical indications requiring transmission-based precautions
- PPE for other employees working in the direct patient care environment of a person(s) with symptoms of COVID-19
- PPE for employees with patient-facing responsibilities outside of direct patient care
- Source control for HCW who continue to work during the 14-day quarantine period resulting from medium or high-risk exposure to a person with confirmed COVID-19
- Source control for HCW returning to work after confirmed or suspected COVID-19 infection (HCW may return to work after at least 7 days since symptom onset and 3 days with no fever (without fever-reducing medications) and symptom improvement; facemask to be worn until all symptoms have resolved or 14 days after illness onset, whichever is longer.)

Given the current constraints on PPE, HCW might be provided a single surgical mask with the expectation that it be used for an entire shift, entire day, or longer. HCW should not switch between surgical masks and alternative facemasks during the day (e.g., surgical mask during patient care and alternative facemask at other times of the working day), as it presents increased opportunities for contamination of hands and face.

PPE During Exposure to the Patient Care Environment, including Direct Patient Care

HCWs and staff who enter the room of an individual with known or suspected COVID-19 should adhere to Standard and Transmission-based Precautions and use a surgical mask, gown, gloves, and eye protection[4]. N95 or higher-level respirators should be prioritized during shortages for situations where respiratory protection is most important, including aerosol generating procedures and HCW providing care for patients in the ICU. Guidance for extended use of facemasks and respirators is available[2,5]. Recommendations for PPE during direct patient care are shown in Table 1, and examples of employee activities and potential exposures during which a surgical mask should be used are given in Table 2.

When collecting a nasopharyngeal swab (NP) from a possible COVID-19 patient, CDC indicates that if respirators such as N95s are not readily available, N95s should be prioritized for procedures at higher risk for producing infectious aerosols (see footnote in table), and a surgical mask can be used. Other PPE should include eye protection, gloves, and a gown[4].

Table 1. PPE for Direct Patient Care in Acute Care, Outpatient, and Long-term Care Settings

Direct Care of Patient Not Suspected to Have COVID-19	Direct Care of Patient with Suspected or Confirmed COVID-19	All Work in ICU with Confirmed/Suspected COVID-19 Patients	All Work in Procedural Areas with Confirmed/Suspected COVID-19 Patients
▪ Surgical mask	▪ Surgical mask or N95/PAPR if AGP* ▪ Gown ▪ Gloves ▪ Eye protection	▪ N95 or PAPR ▪ Gown ▪ Gloves ▪ Eye protection	▪ Surgical mask or N95 if AGP* ▪ Gown ▪ Gloves ▪ Eye protection

* Aerosol-generating procedures (AGP) include open suctioning of airways, sputum induction, cardiopulmonary resuscitation, endotracheal intubation and extubation, non-invasive ventilation (e.g., BiPAP, CPAP), bronchoscopy, manual ventilation. It is uncertain if aerosols generated from nebulization and high-flow O_2 delivery might be infectious.

Source Control for HCW

HCW who have experienced a medium or high-risk exposure to a person (e.g., patient, coworker, household contact) with confirmed COVID-19 disease are asked to stay out of work for 14 days after the date of last exposure or the date on which preventive measures were put into place[3]. If a HCW returns to work during this 14-day quarantine period, a surgical mask should be worn at all times, including during patient and coworker encounters. If feasible, HCWs should take on a non-patient care role or limit interactions with immunocompromised patients.

If possible, HCWs with a household contact or intimate partner suspected to have COVID-19 are advised to wear a surgical mask at work for 14 days after preventive measures (e.g., self-isolation of the contact) are put in place[3]. HCWs in this situation are also advised to take non-patient care roles or limit interactions with immunocompromised patients.

Surgical mask should be worn by HCW returning to work after confirmed or suspected COVID-19 disease. The mask should be worn at all times while in the facility until all symptoms are completely resolved or until 14 days after illness onset, whichever is longer.

Alternative Facemasks

Alternative facemasks are not medical equipment and should not be considered PPE, as they cannot be expected to protect the wearer[6]. Use of alternative masks is appropriate in the following situations.

- HCW who are not in a patient-facing role.
- Other staff in a health care facility that do not have a patient-facing role.
- Patients and residents moving outside their rooms and when receiving care.
- Contract non-patient care staff providing services to a health care facility.
- Medical grade PPE supply has been exhausted and all efforts to extend PPE use has been exhausted.

Patient and Resident Source Control

All Settings

To optimize PPE in all health care settings, CDC has recommended that PPE, including surgical masks, be reserved for use by HCW[2]. In situations where surgical masks are typically recommended as source control for symptomatic patients or residents (e.g., during intra-facility transport and as part of Standard Precautions during caregiving), they should be replaced with other barrier precautions, such as tissues or alternative facemasks[2].

CDC Standard Precautions apply to all symptomatic patients in inpatient, outpatient, and long-term care (LTC) settings, including:

- Cover mouth and nose when sneezing or coughing;
- Use tissues and dispose of them in a no-touch receptacle;
- Conduct hand hygiene after soiling of hands with respiratory secretions; and
- Maintain spatial separation, >3 feet if possible.

These precautions apply to care given in a patient/resident room and should be used in addition to the recommendation for non-PPE barrier precautions, such as alternative facemasks or tissues.

Care must be taken in the removal of alternative facemasks, so as not to contaminate the surrounding environment or staff. Facemasks should be removed after they become saturated from breathing or if they are grossly contaminated. After removal, HCWs should place the mask with dirty linens for laundering, and conduct hand hygiene. Alternative facemasks should be laundered at least daily, and whenever they become wet or soiled.

Hospital Settings

In hospital settings, patients with confirmed or suspected COVID-19 disease should use a barrier, such as an alternative facemask, to contain secretions during transport. If a patient cannot tolerate a facemask or one is not available, they should use tissues to cover their mouth and nose[4]. If available, use of alternative facemasks while transporting asymptomatic patients within a hospital setting is recommended to help prevent asymptomatic virus transmission.

Long-term Care Settings

Regardless of the COVID-19 transmission status of an individual LTC facility or its surrounding community, residents with respiratory symptoms in a LTC facility should be restricted to their rooms. If a resident does need to leave their room, an alternative facemask should be used if tolerated by the resident. Tissues can be used as a respiratory barrier if a facemask cannot be tolerated.

In LTC facilities with known COVID-19 cases, or in a setting of sustained community transmission, ALL residents (symptomatic and asymptomatic) should:

- Wear an alternative facemask, or use another barrier such as tissues, when leaving their rooms;
- Perform hand hygiene;
- Limit movement in the facility; and
- Perform social distancing (≥6 feet from others).

In these situations, room restriction for all residents is also recommended, except for medically necessary purposes[5].

Table 2. Facemask use for PPE and source control. Surgical masks are PPE. Alternative facemasks are not PPE. See additional detail in text. N95 respirator or PAPR is recommended in some situations (see Table 1).

PPE Uses of Facemasks	Facemask Type
Direct patient care*	
▪ **Potential exposures:** Examination, procedures, phlebotomy, medication administration, wound care, physical therapy ▪ **Potential personnel:** Physicians, nurses, PAs, CNAs, radiology technicians, phlebotomists ▪ **Care settings:** Acute care, outpatient care, long-term care	Surgical mask
Direct patient supportive care	
▪ **Potential exposures:** Bathing, dressing, toileting ▪ **Potential personnel:** Nurses, CNAs, care assistants ▪ **Care settings:** Acute care, long-term care	Surgical mask
Entry into rooms of confirmed/suspected COVID-19 patients	
▪ **Potential exposures:** Cleaning potentially contaminated items, including high-touch surfaces, bathrooms; meal delivery ▪ **Potential personnel:** Environmental services staff, dietary staff ▪ **Care settings:** Acute care, long-term care	Surgical mask
Patient-facing responsibilities without direct patient care	
▪ **Potential exposures:** Patient registration and rooming ▪ **Potential personnel:** Front desk staff ▪ **Care settings:** Acute care, outpatient care	Surgical mask
Visitation with close or direct patient contact	
▪ **Potential exposures:** End-of-life family visits, administration of last rites ▪ **Potential visitors:** Patient family members, clergy ▪ **Care settings:** Acute care, long-term care	Surgical mask
Source Control Uses of Facemasks	**Facemask Type**
HCW return to work after COVID-19 exposure or infection (see text for additional detail)	
▪ **Potential exposures:** Any coworker and patient interaction ▪ **Potential personnel:** All staff ▪ **Care settings:** Acute care, outpatient care, long-term care	Surgical mask
Health care functions without patient interaction	
▪ **Potential exposures:** Coworkers ▪ **Potential personnel:** All staff without patient-facing responsibilities (e.g., radiologists, administrators, food service workers) ▪ **Care settings:** Acute care, outpatient care, long-term care	Alternative facemask
Contract staff providing non-health care services	
▪ **Potential exposures:** Coworkers ▪ **Potential personnel:** Contract staff with no patient-facing responsibilities ▪ **Care settings:** Acute care, outpatient care, long-term care	Alternative Facemask

* Direct patient care providers should be prioritized when resources do not allow all job categories to use recommended PPE.

References

1. MDH: Strategies for Optimizing the Supply of Personal Protective Equipment (https://www.health.state.mn.us/diseases/coronavirus/hcp/optimizingppe.pdf)
2. CDC: Strategies to Optimize the Supply of PPE and Equipment (https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html)
3. MDH: COVID-19 Recommendations for Health Care Workers (https://www.health.state.mn.us/diseases/coronavirus/hcp/hcwrecs.pdf)
4. CDC: Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings (https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html)
5. CDC: Preparing for COVID-19: Long-term Care Facilities, Nursing Homes (https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/prevent-spread-in-long-term-care-facilities.html)
6. MDH: Interim Guidance on Alternative Facemasks (https://www.health.state.mn.us/diseases/coronavirus/hcp/masksalt.pdf)

Minnesota Department of Health
Infectious Disease Epidemiology, Prevent and Control Division
www.health.state.mn.us | 651-201-5414 | 1-877-676-5414