



Central Michigan District Health Department
Promoting Healthy Families, Healthy Communities



Congregate Setting COVID-19 Toolkit

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Basics of COVID-19

1. Overview of COVID-19

- a. New type of coronavirus; coronaviruses make up a large family of viruses that are common in people (“the common cold”) and many different species of animals.
- b. This new virus is named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2); the disease it causes is named coronavirus disease 2019 (COVID-19).
- c. COVID-19 causes mild to severe respiratory illness and occasional causes nausea, vomiting and diarrhea.
 - i. Symptoms that may appear **2-14 days after exposure to the virus:**
 1. Fever or chills
 2. Cough
 3. Shortness of breath or difficulty breathing
 4. Fatigue
 5. Muscle or body aches
 6. New loss of taste or smell
 7. Headache
 8. Sore throat
 9. Nausea or vomiting
 10. Diarrhea
 - ii. Older adults and people who have severe underlying medical conditions like heart or lung disease or diabetes are at higher risk for developing more serious complications from COVID-19 illness.
- d. There is no specific treatment or vaccine for COVID-19; treatment is aimed at easing the symptoms and treating complications.

2. Transmission of COVID-19

- a. Spread is primarily person-to person between close contacts (people within 6 feet of each other).
 - i. Spread is mainly by respiratory droplets that are coughed, sneezed, or breathed out by and infected person and get into the mouths or noses of those nearby.
 - ii. Less commonly spread by touching surfaces or objects with virus on them then touching the mouth, nose, eyes.
- b. Infected person is most contagious while showing symptoms but can be contagious for 1 to 3 days before symptoms start and some are contagious and never have symptoms.
- c. Because of the way COVID-19 spreads: need to practice TRANSMISSION based precautions (in addition to STANDARD precautions) when dealing with a resident with suspect or confirmed COVID-19.

3. Testing for COVID-19

- a. PCR (polymerase chain reaction) test which identifies presence of viral particles (specifically, RNA) in the infected person's respiratory tract.
 - i. Ideal sample is from nasopharynx.
 1. How to Obtain a Nasopharyngeal Swab Specimen (video and text from New England Journal of Medicine)
<https://www.nejm.org/doi/full/10.1056/NEJMvcm2010260>
 - ii. Positive result is very reliable that virus is present, although it may not be infectious virus; could be remaining non-infectious ("dead") virus after illness has improved/ended.
 - iii. Negative results could be false if inadequate sample taken, person not shedding much virus especially later in illness, other reasons.
 1. If test is negative and clinically suspect COVID-19, continue to treat as COVID-19 is present and consider retesting.
- b. Antibody testing
 - i. Tests for presence of antibodies (typically IgM and/or IgG) in blood.
 - ii. IgM usually develops 7 to 9 days after infection and IgG appears after 7 to 20 days.
 1. Antibody tests are not meant to diagnose an acute infection.
 - iii. Antibody testing may help identify people who have been infected. However:
 1. Currently, there are numerous non-FDA approved antibody tests being sold that are not accurate.
 2. It is not known what level of antibodies (called a titer) are needed to protect someone from re-infection.
 3. It is not known how long antibodies stay present after infection.
 4. Antibodies may not be measurable in all that have been infected, especially those that have had mild illness (Wu, et al, 2020).

Preparing for and Responding to COVID-19 in Your Facility

1. Keep COVID-19 from entering your facility.
 - a. SCREEN ALL staff and visitors/consultant before entering EVERY DAY. This includes:
 - i. Advise all staff and visitors/consultants coming into your facility to screen themselves for fever (measured or subjective) and respiratory symptoms and to not reporting to work/the facility if either are present (Stay Home When You are Sick Poster https://www.cdc.gov/coronavirus/2019-ncov/downloads/316129-B-StayHomeFromWork_Poster.pdf) AND
 - ii. On arrival to the facility, prior to exposure to other staff or residents:
 1. Take the temperature of anyone trying to enter (if thermometer not available, ask if individual feels feverish)
 2. Assess for any of the following signs or symptoms (see tool: "COVID-19 Screening for Visitors and Staff" form):
 - a. Fever ($\geq 100.4^{\circ}$ F)¹
 - b. Shortness of breath
 - c. New or changed cough
 - d. Sore throat
 - e. Or any of the other symptoms mentioned on page 3
 3. IF any of these are present OR if a staff/visitor becomes ill while working, they should immediately stop, put on a facemask, notify facility supervisor, and be sent home. They should be advised to seek assessment and testing for COVID-19 ASAP.
 - a. See "Returning Ill Staff" (#5) for guidelines on allowing ill staff to return or consult with your local health department or CDC for guidance.
 - b. ALL STAFF AND VISITORS/CONSULTANTS should wear a facemask (see Table 1) from the time they enter the facility until leaving the facility.
 - i. This should continue until COVID-19 is no longer prevalent in the community or until recommendations change from CDC and/or MDHHS.
 - ii. Infection with COVID-19 does not guarantee immunity, therefore it is recommended that staff and visitors/consultants who have recovered from COVID-19 still wear a mask.
 - c. Restrict Visitors and non-essential staff.

¹Fever is either measured temperature $\geq 100.4^{\circ}$ F. Respiratory symptoms consistent with COVID-19 are cough, shortness of breath, and sore throat. Medical evaluation may be recommended for lower temperatures ($< 100.0^{\circ}$ F) or other symptoms (e.g., muscle aches, nausea, vomiting, diarrhea, abdominal pain headache, runny nose, fatigue) based on assessment by public health authorities

- i. See Epidemic Order issued by MDHHS for guidance:
https://www.michigan.gov/coronavirus/0,9753,7-406-98178_98455-542860--,00.html
- ii. (a) Except as otherwise provided in this or any subsequent orders, facilities must prohibit visitors from entering their facilities. For purposes of this order, visitation includes indoor and outdoor visitation unless otherwise specified.
- iii. (b) With the exception of the categories listed in subsection 2(e)(1)-(5) of this order, facilities may only permit visitation when the facility meets all of the following criteria:
 - 1. (1) The facility has had no new COVID-19 cases originate in the facility, including those involving residents or staff (“facility-onset cases”), within the prior 14 days and is not currently conducting outbreak testing. Admission of a resident who is known to be COVID-19-positive at the time of admission does not constitute a facility-onset case;
 - 2. (2) The facility is in a county where the current Risk Level on the [MI Safe Start Map](#) is Low, A, B, C, or D with the exception of outdoor visits which are permitted in counties where the current Risk Level is E;
 - 3. The local health department has not prohibited visitation at the facility.
- iv. Reduce trips outside of property.
 - 1. Residents that must leave for medically necessary reasons should wear a facemask for the duration of their time out of their room.
- d. Screening and management of new and returning residents for COVID-19
 - i. When accepting new or returning residents, determine their COVID-19 status (if they are suspected or confirmed of having COVID-19, any potential COVID-19 exposure in the 14 days prior to coming to your facility, any symptoms of COVID-19, any fever, etc.).
 - 1. If resident coming from an area with ongoing community transmission of COVID-19, consider them at risk for COVID-19 exposure at admission.
 - 2. If the resident is felt to have been at risk for COVID-19 exposure at some time in the 14 days prior to admission, keep resident in quarantine until the total 14 days is completed.
 - a. Any staff attending to the resident in quarantine should use PPE for COVID-19 transmission-based precautions (see Table 1).
 - b. Screen twice a day (or once a shift) for fever and symptoms during quarantine.
 - c. Place in private room during quarantine period unless moving in at same time as spouse or another household member
- 2. Identify infection early
 - a. Actively screen ALL RESIDENTS AT LEAST ONCE A DAY for fever and respiratory symptoms.
 - i. Active screening for signs and symptoms of COVID-19 (see tool: “Resident COVID-19 Screening Log”):

1. Take temperature (fever considered temperature of $\geq 100.4^{\circ}\text{F}$).
 2. Assess for (and ask residents to report) any new or change in cough, sore throat, difficulty breathing, or feeling feverish.
 3. Older adults may not show typical symptoms and may not have fever.
 - a. Less common symptoms: new/worsening malaise, new dizziness, diarrhea.
- ii. If any resident is showing signs or symptoms of COVID-19, immediately have them wear a mask (if tolerated) and isolate them from others (e.g., keep in their room with door closed, move them to COVID-19 dedicated unit) to protect staff and residents while other precautions are put into place.
1. Contact resident's healthcare provider for guidance
 - a. Have plan ready to get your residents and staff evaluated and tested for COVID-19.
 2. See 3h-v for further discussion of dedicated unit and management of symptomatic resident.
- iii. NOTIFY HEALTH DEPARTMENT IF your facility has:
1. Suspected or confirmed case(s) of COVID-19 in any staff or resident OR
 2. One or more resident with a severe respiratory infection OR
 3. A cluster (3 or more residents or staff members) with symptoms of respiratory illness in your facility within 72 hours.
3. Prevent spread of COVID-19
- a. Educate staff (including direct care providers, ancillary staff, and external providers) about COVID-19 and infection prevention and control measures, with focus on:
 - i. Hand hygiene
 1. Post signs to remind staff and residents (posters available at <https://www.cdc.gov/handwashing/posters.html#posters-general-public>).
 2. Recommend and provide soap and water or 60%-70% alcohol hand sanitizer.
 3. Recommend performing hand hygiene: before and after touching a resident, before moving from work on a soiled body site to a clean body site on the same resident, after touching a resident's immediate environment, after contact with blood, body fluids or contaminated surfaces, immediately after removal of PPE, before/after eating, immediately after using the restroom, after blowing nose or covering cough, any other time of concern.
 4. Hand Hygiene Web-based course https://www.cdc.gov/infectioncontrol/training/strive.html#anchor_1561123246

ii. Droplet and contact precautions

1. Post signs on outside of resident's doors as a reminder.

- a. Details regarding transmission-based precautions and posters are available at <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>.

iii. PPE

1. Educate on selection and use of PPE, proper donning and doffing of PPE, how to preserve PPE.

- a. See Table 1 for selection of PPE.
- b. Resources to procure PPE:
- i. If you are a member of the Michigan Small Business Association, you can order PPE through them. Information is available at the following website: <https://www.sbam.org/covid-19-resources/personal-protective-equipment-ppe/>
 - ii. The Michigan Economic Development Corporation has established a Procurement Platform to connect those businesses in need of access to PPE with Michigan businesses that have capacity to meet that demand: <https://www.michiganbusiness.org/pppe/>
 - iii. If you prefer to make calls yourself, you can access a list of Michigan businesses that supply PPE here: <https://www.michamber.com/personal-protection-equipment>
- c. VIDEO: Proper donning and doffing of all PPE <https://youtu.be/of73FN086E8> and <https://www.youtube.com/watch?v=oxdaSeq4EVU&feature=youtu.be>
- d. Use of PPE When Caring for COVID-19 Patients Posters 8.5x11 https://www.cdc.gov/coronavirus/2019-ncov/downloads/A_FS_HCP_COVID19_PPE.pdf and 11x17 https://www.cdc.gov/coronavirus/2019-ncov/downloads/A_FS_HCP_COVID19_PPE_11x17.pdf
- e. Personal Protective Equipment Web-based course https://www.cdc.gov/infectioncontrol/training/strive.html#anchor_1565264877
- f. Using Personal Protective Equipment (PPE) <https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html>

iv. Cough etiquette

1. Post signs at entrances and in strategic places with reminders to cover mouth and nose with tissue or inner elbow when cough/sneeze.
 - a. Cover your Cough Poster
https://www.cdc.gov/flu/pdf/protect/cdc_cough.pdf
2. Provide tissues and no-touch receptacles (e.g., foot-pedal-operated lid or open, plastic-lined waste basket) for disposal of tissues.
- v. Importance of social distancing
https://harvard.edu/sites/default/files/content/Coronavirus_HUHS_social_distancing_A%5B3%5D.pdf)
- vi. Avoiding touching face (https://apic.org/wp-content/uploads/2019/12/Dont-touch-your-face_FINAL.pdf)
 1. Tips to stop touching face (written for people with a brain injury and related cognitive or memory impairments but excellent ideas for anyone)
https://www.krysalisconsultancy.co.uk/images/showcase/WP2/Face_touching_tips_resource_.pdf)
- vii. Educate staff on importance of staying home when sick, review sick leave policy.
- b. Gather supplies that will be needed
 - i. PPE (gloves, masks, gowns, eye protections, method to set PPE up conveniently).
 - ii. Non-medical grade face coverings for residents (cloth masks).
 - iii. Hand hygiene supplies (soap, water, 60%-70% alcohol-based hand sanitizer, adequate paper towel and no-touch trash cans).
 - iv. EPA certified cleaning supplies (<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>), bleach, supplies needed for cleaning.
 - v. Disposable dishes, silverware, other items needed for meal delivery.
- c. Develop a communication plan for communication with staff, residents, family of residents, health care providers to residents, public health, media.
- d. Inform staff if any residents test positive for COVID-19 (required by Executive Order No. 2020-191 through duration of state of emergency; must be done as soon as possible and no later than 12 hours).
- e. Enforce social distancing among residents
 - i. Limit all group activities and communal dining (required by Executive Order No. 2020-191 through duration of state of emergency).
 1. Serve meals directly to rooms.
 2. Meal service carts should not be taken into the resident's room.
 3. Wear appropriate PPE when delivering meals to suspect or confirmed COVID-19 residents (see Table 1), avoid entering room with meal, deliver meal to resident at door.

4. Use disposable tableware if possible, to eliminate need to return to room after meal.
- f. Avoid shared supplies, such as games or art supplies if possible and disinfect any supplies that are shared between use.
 - g. Modify resident care to decrease amount of contact with outside care.
 - i. Encourage healthcare providers to utilize telemedicine services.
 - h. Create a dedicated unit for suspect and confirmed COVID-19 patients.
 - i. Examples of a dedicated unit: floor, unit, or wing in the facility or a group of rooms at the end of a hall that will be dedicated to cohort residents with or suspected of COVID-19.
 - ii. Assign separate staffing teams for the COVID-19 dedicated units to the best of your ability (i.e., avoid rotating staff between COVID-19 dedicated unit and other units to reduce risk of spread of COVID-19 in facility).
 1. If staff that have recovered from COVID-19 are available, consider assigning them to the dedicated unit as they may have developed some immunity.
 - a. Immunity to COVID-19 after infection is not proven, therefore those that have recovered from COVID-19 must still use appropriate PPE and precautions.
 - iii. Work with local/regional/state leaders to designated separate facilities for COVID-19 negative and positive residents (i.e., regional Hubs) to transfer residents if formation of a dedicated units is not possible in your facility.
 - i. If possible, isolate COVID-19 suspect/diagnosed patient to a single room in the dedicated unit as soon as they are identified (airborne infection isolation room, or AIIR, is not required).
 - i. If no single room is available, residents with suspect/confirmed/probable COVID-19 can be cohorted together.
 1. ONLY cohort suspect cases with suspect cases and confirmed/probable cases with confirmed/probable cases: do not cohort suspect cases with confirmed/probable cases (WHO, 2020).
 2. Clearly sign the rooms by placing infection prevention control (IPC) signs, indicating droplet and contact precautions, at the entrance of the room (posters are available at <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>).
 - ii. Monitor ill residents (including documentation of temperature and pulse oximetry) at least 3 times daily to quickly identify residents who require transfer to a higher level of care.
 - iii. Set up PPE stations at easily accessible areas outside patient rooms.

1. Don PPE prior to contact with resident, ideally outside of room.
 2. Post “Use of PPE When Caring for COVID-19 Patients Posters” 8.5x11 https://www.cdc.gov/coronavirus/2019-ncov/downloads/A_FS_HCP_COVID19_PPE.pdf or 11x17 https://www.cdc.gov/coronavirus/2019-ncov/downloads/A_FS_HCP_COVID19_PPE_11x17.pdf at stations.
- iv. Isolate residents to their rooms except for medically necessary purposes; they should wear a mask and take other precautions if they do need to leave their room.
1. Residents awaiting transfer for higher levels of care should wear a mask (if tolerated) and be kept in their room with door closed (i.e., kept separate from others).
- v. Residents in isolation due to confirmed or probable COVID-19 should stay in isolation until meets one of the following:
1. Non-test-based strategy. Keep in isolation until:
 - a. At least 10 days have passed *since symptoms first appeared* **and**
 - b. At least 24 hours with no fever without fever- reducing medications **and**
 - c. Other symptoms of COVID-19 are improving
- j. Any resident that has been in close contact² with a confirmed or probable COVID-19 resident or staff while they were symptomatic OR during the 48 hours before their symptoms started should:
- i. Be placed in quarantine, which entails being restricted to their room and be screened twice a day (or once a shift) for fever and symptoms.
 1. If they must leave their room for medical care, they must wear a facemask at all times.
 2. Any staff attending to the resident in quarantine should use PPE appropriate for COVID-19 transmission-based precautions (see Table 1).
 - a. The exposed residents should continue to be cared for in this way until 14 days after their last exposure to the confirmed case.

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- ² Close contact is defined as being within approximately 6 feet (2 meters) of a COVID-19 (confirmed or probable) person for a cumulative of 15 minutes or more over 24 hours while symptomatic or during the 48 hrs. prior to symptom onset for a prolonged period of time; close contact can occur while caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case, OR
 - having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)

Examples of close contacts:

- Living in the same household, having face-to-face exposure (less than 6 feet) for 10 to 30 minutes, sharing the same confined space in close proximity (riding in a car, in a small room) with a symptomatic patient for 30 to 60 minutes or more, direct contact with respiratory, oral, or nasal secretions from a symptomatic patient (touching used tissues, coughed on, sneezed on, etc.)

- b. If the resident should develop symptoms, they should be placed in isolation and be prioritized for testing if they develop symptoms. Without testing, they would be considered a Probable case.
 - c. Testing of asymptomatic residents that have had a high-risk exposure to a confirmed case can be considered if it will assist with their management.
 - i. If test is positive: place them in isolation for 10 days past the date of testing. Identify close contacts from 2 days prior to testing and place in quarantine.
 - ii. If test is negative, continue with quarantine due to potential for false negative results.
 - k. Have EPA-registered, hospital grade disinfectants available to staff (see <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2> for options).
 - i. Follow cleaning guidance at <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility-H.pdf>
4. Continually assess supply of personal protective equipment (PPE) and initiate measures to optimize current supply.
- a. PPE Burn Calculator Rate Calculator <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html>
 - b. Monitor how long facility's supply of PPE (facemasks, N-95 or equivalent respirators, isolation gowns, eye protection, gloves, alcohol-based hand sanitizer) will last.
 - c. Be aware of ordering delays and limitations through your normal suppliers.
 - d. Communicate with your local health department, Regional Healthcare Coalition, and County Emergency Manager re: alternative PPE supplies (see Resource section for links to contact information).
 - e. Tips for preserving PPE (NOTE: staff at higher risk for severe illness should be high priority to receive full PPE)
 - i. Improve environmental controls such as increasing ventilation in facility by opening windows often, increasing the outside air exchange in HVAC system, utilizing portable fan devices with high-efficiency particulate air (HEPA) filtration, considering use of ventilated headboards, etc.
 - ii. Facemasks shortage recommendations (FDA approved surgical masks, non-FDA approved procedure masks):
 - 1. Wear same facemask for extended periods, through repeated patient encounters; do not touch mask, discard if soiled or damaged.
 - a. If supplies allow, facemask should be discarded at the end of day.
 - b. If supplies do not allow, the facemask can be reused by a single staff member. After use, remove carefully to avoid contact with the

outer surface, fold the facemask such that the outer (and potentially contaminated) side is folded in on itself and then store in a clean paper bag or other breathable container.

- c. Consider using a face shield that extends to the chin with no facemask or with a homemade cloth mask, particularly in lower risk situations.

iii. N95 Respirator shortage recommendations:

1. N95 masks are only indicated for use when there is a risk of airborne transmission. When there is a shortage of N95 respirators, these respirators should be reserved for use during aerosol-generating procedures (MDHHS, April 2020).
2. Use past expiration date (examine for degradations, especially at the elastic, rubber and foam components).
3. Allow for extended use of N95 respirator between several different patients, without removing between different patients. Recommended maximum period of time allowed for extended use: 8 to 12 hours. Disposable respirators are not intended to be reused after one extended use.
4. In extreme shortages, re-use of disposable respirators may be needed. Extended re-use causes worsening fit; therefore, it is suggested to limit reuse to no more than a 5-day period (Brosseau, L., Sietsema, M., 2020).
5. Based on the limited research available, ultraviolet germicidal irradiation, vaporous hydrogen peroxide, and moist heat showed the most promise as potential methods to decontaminate disposable respirators. See <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html> or guidance.
6. Also see “Use of respirators approved under standards used in other countries that are similar to NIOSH-approved respirators” at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html> for alternatives to N95 respirators.

iv. Gown shortage recommendations:

1. Extended use of isolation gowns (disposable or cloth) or coveralls can be considered by the same staff member that is interacting with more than one resident but ONLY IF the residents are known to be infected with same disease (i.e., COVID-19), not co-infected with anything else, and housed close together. Gown must be removed if it becomes visibly soiled.
2. Prioritize gown use for aerosol-generating procedures and care activities where splashes and sprays are anticipated and for high contact resident care activities such as: dressing, bathing/showering, transferring, providing hygiene, changing linens, changing briefs or assisting with toileting, device care or use, wound care.

3. If no gowns are available, alternatives can be considered such as:
disposable or reusable (washable) laboratory coats, reusable (washable) patient gowns, disposable aprons, long sleeve aprons in combination with long sleeve patient gowns or laboratory coats, open back gowns with long sleeve patient gowns or laboratory coats, sleeve covers in combination with aprons and long sleeve patient gowns or laboratory coats.
 - a. Reusable items can be laundered according to routine procedures.
- v. Eye protection shortage recommendations:
 1. Dedicate eye protection to a single staff member and prioritize use to activities where splashes and sprays are anticipated, or prolonged face-to-face contact is unavoidable. Inspect prior to each use and discard if damaged.
 2. Clean when visibly dirty and at end of shift.
 3. Follow manufacturer instruction for cleaning. If none is available (such as for single use face shield), follow these steps:
 - a. Wearing gloves, wipe inside then outside using clean cloth saturated with neutral detergent solution or cleaner wipe.
 - b. Wipe outside using a wipe or clean cloth saturated with EPA-registered hospital disinfectant solution.
 - c. Wipe the outside with clean water or alcohol to remove residue.
 - d. Fully dry (air dry or use clean absorbent towels).
 - e. Remove gloves and perform hand hygiene.

Table 1. PPE Considerations by Facility Type

Facility type	N95 Respirator	Surgical Mask	Cloth Face Covering	Eye Protection (Goggles or Face Shield)	Isolation Gown	Sterile Gloves	Gloves
Skilled Nursing Facility							
COVID-19 Transmission-based precautions (Standard, Droplet, Contact)		X		X	X		X
Daily resident care (Standard Precautions)		X		X ^a	X ^a		X ^b
Upon entering the facility		X	X				
Assisted Living Facility							
COVID-19 Transmission-based precautions (Standard, Droplet, Contact)		X		X	X		X
Daily resident care (Standard Precautions)		X		X ^a	X ^a		X ^b
Upon entering the facility			X				
Adult Foster Care							
COVID-19 Transmission-based precautions (Standard, Droplet, Contact)		X		X	X		X
Daily resident care (Standard Precautions)		X		X ^a	X ^a		X ^b
Upon entering the facility			X				
Independent Living Facility							
COVID-19 Transmission-based precautions (Standard, Droplet, Contact)		X		X	X		X
Daily resident care (Standard Precautions)		X		X ^a	X ^a		X ^b
Upon entering the facility			X				
Home for the Aged							
COVID-19 Transmission-based precautions (Standard, Droplet, Contact)		X		X	X		X
Daily resident care (Standard Precautions)		X		X ^a	X ^a		X ^b
Upon entering the facility			X				

Notes:

^a During care activities that are likely to generate splashes or sprays of blood, body fluids, secretions and excretions

^b During care activities where contact with blood, body fluids, or other potentially infectious materials may occur

Source: Michigan Department of Health and Human Services (MDHHS). (April 9, 2020). Guidance to Protect Residents of Long-Term Care Facilities (Upon Readmission or Current Stay) https://www.michigan.gov/documents/coronavirus/LTC_Guidance_to_Protect_Residents_Final_4-10_686874_7.pdf

Table 2. PPE Considerations by Care Provided

Care Type	N95 Respirator	Surgical Mask	Cloth Face Covering	Eye Protection (Goggles or Face Shield)	Isolation Gown	Sterile Gloves	Gloves
Wound care		X ^a		X ^a	X ^a	X	X
Tracheostomy care		X ^a		X ^a	X ^a		X
Feeding tube care (e.g., PEG, NG)		X ^a		X ^a	X ^a		X
Peripheral IV care		X ^a		X ^a	X ^a		X
Central venous catheter care (e.g., PICC, Dialysis port)		X ^a		X ^a	X ^a	X	X
Urinary catheter care		X ^a		X ^a	X ^a		X
Colostomy care		X ^a		X ^a	X ^a		X
Aerosol-generating procedure, may include but not limited to: Bronchoscopy Cardiopulmonary resuscitation Endotracheal intubation and extubation Manual ventilation Non-invasive ventilation (e.g., BiPAP, CPAP) Open suctioning of airways Sputum induction	X			X ^a	X ^a		X
High-flow O2 delivery	X ^c						
Nebulizer administration	X ^{c,d}	X ^{c,d}					

Notes:

^a During care activities that are likely to generate splashes or sprays of blood, body fluids, secretions and excretions

^b During care activities where contact with blood, body fluids, or other potentially infectious materials may occur

^c Based on limited available data, it is uncertain whether aerosols generated from these procedures may be infectious

^d Aerosols generated by nebulizers are derived from medication in the nebulizer. It is uncertain whether potential associations between performing this common procedure and increased risk of infection might be due to aerosols generated by the procedure or due to increased contact between those administering the nebulized medication and infected residents.

Source: Michigan Department of Health and Human Services (MDHHS). (April 9, 2020). Guidance to Protect Residents of Long-Term Care Facilities (Upon Readmission or Current Stay)

https://www.michigan.gov/documents/coronavirus/LTC_Guidance_to_Protect_Residents_Final_4-10_686874_7.pdf

5. Staff with suspected/probable/confirmed COVID-19 returning to work
 - a. If staff member is a healthcare providers (HCP):
 - i. Non-test-based strategy. Exclude from work until:
 1. At least 10 days have passed since symptoms first appeared **and**
 2. At least 24 hours have passed *since last* fever without the use of fever-reducing medications **and**
 3. Symptoms have improved
 - ii. Return to Work Practices and Work Restriction
 1. After returning to work, HCP should:
 - a. Wear a facemask at all times until all symptoms are completely resolved. A facemask instead of a cloth face covering should be used by these HCP.
 - i. A facemask for source control does not replace the need to wear an N95 or higher-level respirator (or other recommended PPE) when indicated, including when caring for patients with suspected or confirmed COVID-19.
 - ii. Of note, N95 or other respirators with an exhaust valve might not provide source control.
 - b. Be restricted from contact with severely immunocompromised patients (e.g., transplant, hematology-oncology) until 14 days after illness onset.
 - c. Self-monitor for symptoms and seek re-evaluation from occupational health if respiratory symptoms recur or worsen.
 - b. Non-healthcare provider
 - i. Non-test-based strategy. Exclude from work until:
 1. At least 10 days have passed since symptoms first appeared **and**
 2. At least 24 hours have passed *since last* fever without the use of fever-reducing medications **and**
 3. Symptoms have improved
6. Management of staff exposed to suspected/probable/confirmed COVID-19 case
 - a. Preferred: quarantine for 14 days after the last day from exposure.
 - b. Alternative: for critical infrastructure workers/healthcare providers, there is currently no requirement for 14-day quarantine, particularly in areas with

sustained community transmission if certain precautions are taken while working.

- ii. If staff is allowed to work after a high-risk exposure:
 1. Pre-Screen: Continue to screen staff member for fever and symptoms before the individual enters the facility.
 2. Regular Monitoring: staff member is to self-monitor under the supervision of their employer's occupational health program. They are to immediately report any signs of illness that develop during their shift and leave work immediately.
 3. Wear a Mask: should wear a face mask at all times while in the workplace for 14 days after last exposure.
 4. Social Distance: maintain 6 feet and practice social distancing as work duties permit in the workplace.
 5. Disinfect and Clean workspaces: clean and disinfect all areas such as offices, bathrooms, common areas, shared electronic equipment routinely.

7. Additional Staffing Resources

- a. If facing critical staffing shortages, volunteers *may* be available. Requests can be placed with:
 - i. Rapid Response Staffing via MDHHS:
https://www.michigan.gov/documents/coronavirus/RRS_Guidance_for_LTC_Facilities_Expansion_Changes_FINAL_Sept_2020_702332_7.pdf
 - ii. Your county emergency manager and ask if they can request the needed volunteers for you through the Michigan Critical Incident Management System (MI CIMS).
 - iii. The emergency preparedness coordinator (EPC) at your local health department can request the needed volunteers for you through MI Volunteer.
 - iv. Michigan Health and Hospital Association (MHA), at <https://mha.boxwoodgo.com/jobs>, has an online job board for sharing staff.

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<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>
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<https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html>
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- Michigan Department of Health and Human Services (MDHHS). (April 9, 2020). Guidance to Protect Residents of Long-Term Care Facilities (Upon Readmission or Current Stay)
https://www.michigan.gov/documents/coronavirus/LTC_Guidance_to_Protect_Residents_Final_4-10_686874_7.pdf

COVID-19 Screening for Visitors and Staff

Community	Name	Date	Shift

For the safety and wellbeing of our residents, if the answer to any of the following are yes, we ask that you not be in our community at this time. If you develop any while you are here, we ask that you inform a staff person and leave immediately. Thank you.

	YES	NO
Do you have a fever? Current body temperature as measured by community personnel: _____		
Are you feeling generally well today?		
Have you visited any other healthcare facilities within the past 14 days?		
Do you have a cough?		
Do you have shortness of breath?		
Do you have a sore throat or headache?		
Have you been exposed to anyone with COVID-19?		
To the best of your knowledge, have you come into contact with anyone who has tested positive for COVID-19 or has symptoms of COVID-19?		
Are you under investigation for COVID-19?		

Name:	Date:
Address:	
Phone:	
Temperature Recorded By:	

Resident COVID-19 Screening Log

Resident Name	Apartment/Room #

Date	Time	Temp	Cough	Difficulty Breathing / Shortness of Breath	Any other symptoms?
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
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			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

COVID-19 Line List

Please list all residents AND staff members with COVID-19 respiratory symptoms.

#	Name	DOB	Unit or Staff	Date of First S/S	Cough (Y/N)	SOB (Y/N)	Highest Temp	Other Symptoms	SARS CoV-2 Test Results / Date	Resp. Panel Result / Date	Hosp-italized (Y/N) / Date	Died (Y/N) / Date	Notes

Additional COVID-19 Related Resources

State Contacts	<ul style="list-style-type: none"> • Interactive map and contact information of local health departments https://www.michigan.gov/mdhhs/0,5885,7-339--96747--,00.html • Regional Healthcare Coalition Contact Information https://www.hcam.org/uploads/ckeditor/files/Regional%20Healthcare%20Coalition%20Contact%20Information.pdf • Local (county) Emergency Management Program https://www.michigan.gov/msp/0,4643,7-123-72297_60152_66814---,00.html • Michigan Long Term Care Ombudsman (LTCO) https://mltcop.org/contact-us
Associations	<ul style="list-style-type: none"> • Center to Advanced Palliative Care (CAPC) COVID-19 Response Resources/Toolkits https://www.capc.org/toolkits/covid-19-response-resources/
General	<ul style="list-style-type: none"> • Tips for Keeping Residents Engaged https://www.ahcancal.org/facility_operations/disaster_planning/Documents/Keeping-Residents-Engaged.pdf
Advanced Care/End of Live Planning	<ul style="list-style-type: none"> • Advance Care Planning During COVID-19: Key Information for Nursing Facility Staff https://www.optimistic-care.org/docs/pdfs/NH_Advance_Care_Planning_During_a_Crisis.pdf • Advance Care Planning and COVID-19: A Guide for Residents and Families https://www.optimistic-care.org/docs/pdfs/Advance_Care_Planning_and_COVID-19_Education_Sheet_(002).pdf • POLST (Provider Orders for Life-Sustaining Treatment) during COVID-19 https://polst.org/covid/ • Respecting Choices® COVID-19 tools and resources have conversations about treatment preferences before a medical crisis https://respectingchoices.org/covid-19-resources/
Dementia	<ul style="list-style-type: none"> • Alzheimer’s Association: COVID-19 resources https://www.alz.org/professionals/professional-providers/coronavirus-covid-19-tips-for-dementia-caregivers • Online Resource List for Resident Engagement in Memory Care http://caassistedliving.org/pdf/resources/resident-engagement-ideas-for-memory-care.pdf
Resident Care and Management	<ul style="list-style-type: none"> • Symptom Management Support for COVID-19 in the Nursing Home https://www.optimistic-care.org/docs/pdfs/COVID_symptom_treatment_in_NHs_4-5-20.pdf • MDHHS Hospital to Post-Acute Care Transfer Form for COVID-19 https://www.hcam.org/uploads/ckeditor/files/Hospital_to_Post_Acute_Care_Transform_Form_v4_031920_684373_7.pdf • COVID-19 Guidance for Healthcare Facilities for Discharge of Residents https://www.hcam.org/uploads/ckeditor/files/Guidance_for_Health_Care_Facilities_for_Discharge_of_COVID_FINAL_684358_7.pdf • What to Do When COVID-19 Gets into Your LTC Facility Don’t Wait: Assume It’s Already There https://www.ahcancal.org/facility_operations/disaster_planning/Documents/When-COVID-Gets-In.pdf • Cohorting Residents to Prevent the Spread of COVID-19 https://www.ahcancal.org/facility_operations/disaster_planning/Documents/Cohorting.pdf
Communication	<ul style="list-style-type: none"> • Vitaltalk COVID Ready Communication Playbook https://www.vitaltalk.org/guides/covid-19-communication-skills/#resourcing • The COVID-19 Risk Communication Package For Healthcare Facilities https://iris.wpro.who.int/bitstream/handle/10665.1/14482/COVID-19-022020.pdf

<p>Training, Education, and Consultation</p>	<ul style="list-style-type: none"> • How to Obtain a Nasopharyngeal Swab Specimen (video and text from New England Journal of Medicine) https://www.nejm.org/doi/full/10.1056/NEJMvcm2010260 • Temporary Nurse Aide Course (FREE 8 hour on-line training) https://educate.ahcancal.org/products/temporary-nurse-aide • Temporary Nurse Aide Skills Competency Checklist https://www.ahcancal.org/facility_operations/disaster_planning/Documents/TempNurseAide_CompencyChecklist.docx • N95 Mask Education https://ahca.healthcareacademy.com/n95mask/ • COVID-19 Introduction and Overview https://vimeo.com/400768570/0b8824ca75 • COVID-19 Responding to Signs and Symptoms https://vimeo.com/400792175/7f5188337e • COVID-19 Standard, Contact, and Droplet Precautions https://vimeo.com/400775922/7fd755b759 • COVID-19 Personal Protective Equipment (Includes CDC extended use guidelines) https://vimeo.com/400788568/0fdde84d79 • CDC Hand Hygiene Video https://youtu.be/d914EnpU4Fo
<p>Regulation</p>	<ul style="list-style-type: none"> • Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers (CMS EP Rule) https://asprtracie.hhs.gov/cmsrule
<p>PPE</p>	<ul style="list-style-type: none"> • PPE Burn Calculator Rate Calculator https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html • Respirators approved under standards used in other countries that are similar to NIOSH-approved respirators https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html • WHO, Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19) https://apps.who.int/iris/bitstream/handle/10665/331215/WHO-2019-nCov-IPCPPE_use-2020.1-eng.pdf • Joint Commission Statement on Use of Face Masks Brought From Home https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/infection-prevention-and-hai/covid19/public_statement_on_masks_from_home.pdf • N95 Mask Education https://ahca.healthcareacademy.com/n95mask/ • VIDEO: Proper donning and doffing of all PPE https://youtu.be/of73FN086E8 and https://www.youtube.com/watch?v=oxdaSeq4EVU&feature=youtu.be • Use of PPE When Caring for COVID-19 Patients Posters 8.5x11 https://www.cdc.gov/coronavirus/2019-ncov/downloads/A_FS_HCP_COVID19_PPE.pdf and 11x17 https://www.cdc.gov/coronavirus/2019-ncov/downloads/A_FS_HCP_COVID19_PPE_11x17.pdf
<p>Facilities Management</p>	<ul style="list-style-type: none"> • CDC Detailed Environmental Cleaning and Disinfection Recommendations https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html • EPA: List N: Disinfectants for Use Against SARS-CoV-2 https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2 • Guidelines for Residents' Personal Laundry During COVID-19 https://www.ahcancal.org/facility_operations/disaster_planning/Documents/Guidelines-Resident-Laundry.pdf

Appendix: Additional Resources