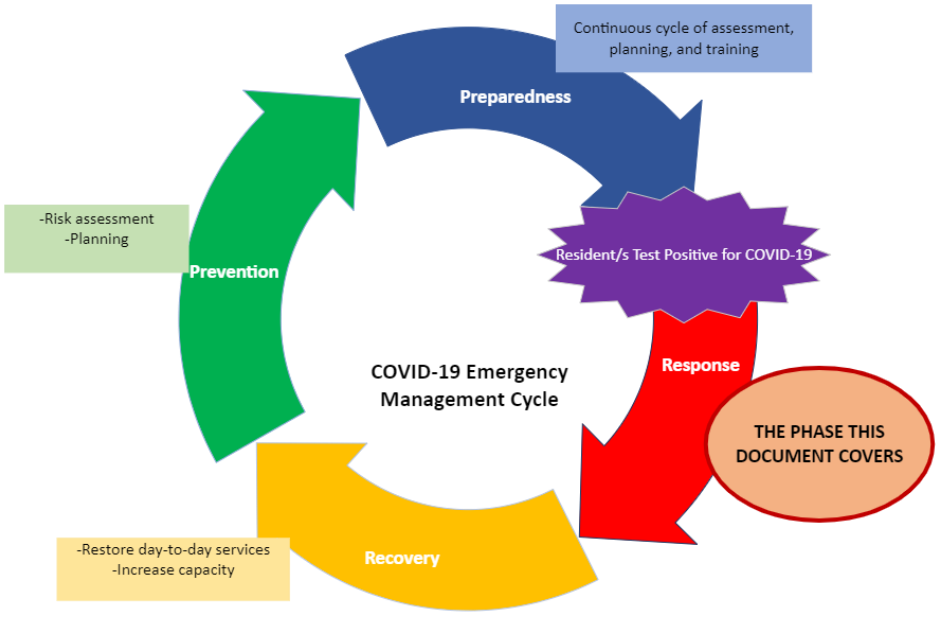
Infection Prevention Resource and Assessment Team

Long Term Care Facilities Outbreak Response Tool

This document is intended to assist long term care facilities with taking steps to address an outbreak at their facility. In the COVID-19 Emergency Management Cycle of Preparedness, Response, Recovery, and Prevention, this document addresses the "Response" phase, as indicated in the diagram below. The Response phase is initiated with the finding of a single case of COVID-19 among residents. This Response Tool is meant to assist facilities through an outbreak and can also be utilized by facility staff under the circumstances when facility leadership may be out of the office due to illness or other reasons. It enables all facility staff to work congruently to control and stop the spread of COVID-19 in the facility.



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*****While this document is organized in a step-by-step process for ease of understanding, these steps should be done as concurrently as possible. *****

Part One: Steps

Step 1: Patient Placement

SNF with a COVID Unit

Resident(s) Tests Positive!

• If a resident tests positive for COVID-19 you must immediately place that resident in transmission-based precautions.
  ▪ If the resident was positive on antigen test and symptomatic, place that resident in the COVID unit.
  ▪ If the resident was positive on antigen and asymptomatic, do not place the resident on the COVID unit unless a NAAT test confirms. Place the resident on a quarantine (PUI) unit or private room until confirmatory test is resulted.
  ▪ If the resident tests negative on antigen, but is still symptomatic, conduct a confirmatory PCR before placing in COVID unit. Refer to the below algorithm for determining patient placement.
• Asymptomatic residents with close contact with someone with SARS-CoV-2 infection should have a series of three viral tests for SARS-CoV-2 infection, spaced 48 hours apart.

https://www.cdc.gov/coronavirus/2019-ncov/downloads/hcp/Considerations-for-Interpretation-of-SARS-CoV-2-Antigen-Tests-in-Long-Term-Care-Facilities.pdf QSO-20-38-NH (Revised 9/23/22) Infection Control: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) | CDC If the number of positive residents exceeds your designated COVID bed capacity: MDHHS COVID Relief Facility Capacity Change Request

SNF without a COVID Unit

• If a resident tests positive for COVID-19 on antigen test, immediately place the resident in transmission-based precautions.
  ▪ If the resident is not symptomatic, keep the resident in transmission-based precautions (consider a quarantine unit or private room), and confirm with a NAAT test.
  ▪ If the resident is symptomatic for COVID-19 you must immediately find placement for this resident in a CRF Tier 2 or CRC facility.

• If placement cannot be found, you must contact the IPRAT team Infection Prevention Resource and Assessment Team (IPRAT) (michigan.gov) to apply for Tier I status 2022 COVID Relief Facility Application: Tier 1 - Retain Survey (research.net) immediately. You must have a COVID unit, even if it is one bed.
• Do not shelter in place. You must have permission to shelter in place from BPHASA (previously MSA) and be working with IPRAT toward obtaining a CRF Tier 1 determination. **Do not shelter in place unless you have been told this is an appropriate action.**
• To find an appropriate facility to accept a covid positive resident, use the link below to go to the Michigan Long Term care page. Then select CRC and CRF programs. You will find links to the facilities that accept residents. Long Term Care COVID-19 Plan (michigan.gov) • When making decisions regarding placement of a resident you may utilize this resource. CRC-CRF-Decision-Flow_diagram_05-04-22.pdf (michigan.gov) • If you have questions regarding the CRF and CRC program, the policy is available here. You may also contact the IPRAT team with any questions at mdhhs-iprat@michigan.gov. MSA_21-40-NF-COVID-19.pdf (michigan.gov)

Adult Foster Care or Homes for the Aged and you have a resident test positive

• Immediately place that resident in transmission-based precautions and shelter in place. • Immediately contact your local health department. • Consider contacting IPRAT for support and clarification of guidelines.
• AFC / HFA COVID-19 Emergency Response Tool • October 12, 2021 - Testing in Skilled Nursing Facilities, Homes for the Aged, and Adult Foster Care Facilities - Rescission of May 5, 2021 Order (michigan.gov) • October 4, 2022 - Amendment to Order under MCL 333.2253 Requirements for Residential Care Facilities (michigan.gov) (original EO: May 21, 2021 - Requirements for Residential Care Facilities - Rescission of March 17, 2021)

Step 2: COVID Precautions

Preparation of the isolation room or area
• Ensure that appropriate handwashing facilities and hand-hygiene supplies are available.
• Stock the sink area with suitable supplies for handwashing, and with alcohol-based hand rub, near the point of care and the room door.
• Post transmission-based precautions signage on the door indicating that the space is an isolation area. (See Appendices for printable signage.)
• Stock the PPE supply and linen outside the isolation room or area (e.g., in the change room). Setup a cart outside the door to hold PPE. A checklist may be useful to ensure that all equipment is available (see sample checklist below).
Place appropriate waste bags in a bin. If possible, use a touch-free bin. Ensure that used (i.e., dirty) bins remain inside the isolation rooms
• Place an appropriate container with a lid outside the door for equipment that requires disinfection.
• Dedicate non-critical patient-care equipment (e.g., stethoscope, thermometer, blood pressure cuff and sphygmomanometer) to the patient, if possible. Thoroughly clean and disinfect patient-care equipment that is required for use by other patients before use.
• Keep adequate equipment required for cleaning or disinfection inside the isolation room or area, and ensure scrupulous daily cleaning of the isolation room or area.
• Place a puncture-proof container for sharps disposal inside the isolation room or area.
Remove all non-essential furniture and ensure that the remaining furniture is easy to clean and does not conceal or retain dirt or moisture within or around it.
• Keep the patient's personal belongings to a minimum. Keep water pitchers and cups, tissue wipes, and all items necessary for attending to personal hygiene, within the patient's reach.
• Ensure that visitors consult the health-care worker in charge (who is also responsible for keeping a visitor record) before being allowed into the isolation areas. Keep a roster of all staff working in the isolation areas, for possible outbreak investigation and contact tracing.
• Set up a telephone or other method of communication in the isolation room or area to enable patients, family members or visitors to communicate with health-care workers. This may reduce the number of times the workers need to don PPE to enter the room or area.

Supply Checklist for Isolation Room or Area *(see Appendix 10 for printable version)*

Equipment	Stock Present
On PPE Cart:	
Eye Protection (face shield or goggles)	
Gloves	
Particulate respirators (N95 or equivalent)	
Medical (surgical or procedure) masks	
Gowns	
Available in or near the room/ area:	
Alcohol-based hand rub	
Plain soap (liquid, if possible, for washing hands in clean water)	
Clean single-use towels (e.g., paper towels)	
Sharps containers	
Appropriate detergent for environmental cleaning and disinfectant for disinfection of surfaces, instruments or equipment (Should be on the EPA List N)	
Large plastic bags	
Appropriate biohazard bags	
Linen bags	

*Adapted from World Health Organization: Infection Prevention and Control of Epidemic- and Pandemic-Prone Acute Respiratory Infections in Health Care

Step 3: Outbreak Testing

General Testing Recommendations

• Anyone with even mild symptoms of COVID-19, regardless of vaccination status, should receive a viral test as soon as possible.
• Asymptomatic patients with close contact with someone with SARS-CoV-2 infection should have a series of three viral tests for SARS-CoV-2 infection. Testing is recommended immediately (but not earlier than 24 hours after the exposure) and, if negative, again 48 hours after the first negative test and, if negative, again 48 hours after the second negative test. This will typically be at day 1 (where day of exposure is day 0), day 3, and day 5.
• Testing is recommended at admission and, if negative, again 48 hours after the first negative test and, if negative, again 48 hours after the second negative test. In general, admissions in counties where Community Transmission levels are high should be tested upon admission; admission testing at lower levels of Community Transmission is at the discretion of the facility. • They should also be advised to wear source control for the 10 days following their admission. Residents who leave the facility for 24 hours or longer should generally be managed as an admission.
• Due to challenges in interpreting the result, testing is generally not recommended for asymptomatic people who have recovered from SARS-CoV-2 infection in the prior 30 days. Testing should be considered for those who have

recovered in the prior 31-90 days; however, an antigen test instead of a nucleic acid amplification test (NAAT) is recommended. This is because some people may remain NAAT positive but not be infectious during this period.

- Per MDHHS, SNFs, AFC, and HFAs are required to follow CMS QSOs 20-38-NH, revised September 23rd, 2022, provided below.

Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2 | CDC

QSO-20-38-NH REVISED (cms.gov)

October 12. 2021 MDHHS Testing in Skilled Nursing Facilities, HFAs, and AFCs; MDHHS October 18, 2022 Amendment

Contact Tracing Testing

Perform contact tracing to identify any HCP or residents who may have had close contact with the individual with SARS-CoV-2 infection:

- All HCP and residents who have had close contacts, regardless of vaccination status, should be tested as described in the testing section above.
- HCP with higher-risk exposures should be managed as described in the below resource.
- **If testing of close contacts reveals additional HCP or residents with SARS-CoV-2 infection**, contact tracing should be continued to identify residents or HCP with close contact to the newly identified individual(s) with SARS-CoV-2 infection.
  - A facility-wide or group-level (e.g., unit, floor, or other specific area(s) of the facility) approach should be considered if all potential contacts cannot be identified or managed with contact tracing or if contact tracing fails to halt transmission.
  - If the outbreak investigation is broadened to either a facility-wide or unit-based approach, follow recommendations below for broad-based outbreak testing.
- Interim U.S. Guidance for Managing Healthcare Personnel with SARS-CoV-2 infection or Exposure to SARS-CoV-2.

Broad-Based Testing:

- A broad-based (e.g., unit, floor, or other specific area(s) of the facility) approach is preferred if all potential contacts cannot be identified or managed with contact tracing or if contact tracing fails to halt transmission.
- Perform testing for all residents and HCP identified as close contacts or on the affected unit(s) if using a broad-based approach, regardless of vaccination status.
  - Testing is recommended immediately (but not earlier than 24 hours after the exposure) and, if negative, again 48 hours after the first negative test and, if negative, again 48 hours after the second negative test. This will typically be at day 1 (where day of exposure is day 0), day 3, and day 5.
  - Due to challenges in interpreting the result, testing is generally not recommended for asymptomatic people who have recovered from SARS-CoV-2 infection in the prior 30 days. Testing should be considered for those who have recovered in the prior 31-90 days; however, an antigen test instead of a nucleic acid amplification test (NAAT) is recommended. This is because some people may remain NAAT positive but not be infectious during this period.
- In the event of ongoing transmission within a facility that is not controlled with initial interventions, strong consideration should be given to use of Empiric use of Transmission-Based Precautions for residents and work restriction of HCP with higher-risk exposures. In addition, there might be other circumstances for which the jurisdiction's public authority recommends these and additional precautions.
- If no additional cases are identified during contact tracing or the broad-based testing, no further testing is indicated. Empiric use of Transmission-Based Precautions for residents and work restriction for HCP who met criteria can be discontinued as described in Section 2 and the Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2, respectively.

• If additional cases are identified, strong consideration should be given to shifting to the broad-based approach if not already being performed and implementing quarantine for residents in affected areas of the facility. As part of the broad-based approach, testing should continue on affected unit(s) or facility-wide every 3-7 days until there are no new cases for 14 days.
• If antigen testing is used, more frequent testing (every 3 days), should be considered.
Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes | CDC

Definition of "Up to Date"

• You are **up to date** with your COVID-19 vaccines if you have completed a COVID-19 vaccine primary series and received the most recent booster dose recommended for you by CDC.
• Vaccine recommendations are different depending on your age, the vaccine you first received, and time since last dose.
Stay Up to Date with Your COVID-19 Vaccines | CDC COVID-19 Vaccine Boosters | CDC

Step 4: Notification - LHD

• Notify your LHD about your COVID-19 outbreak and coordinate with them on infection prevention practices at your facility.
• Contact IPRAT for assistance with your outbreak.
Directory | Michigan Association for Local Public Health (malph.org) Infection Prevention Resource and Assessment Team (IPRAT) (michigan.gov) mdhhs-iprat@michigan.gov 517-335-8165 (Mon - Fri 8 a.m. - 5 p.m.) 517-335-9030 (After Hours/Holidays)

Step 5: Expansion

You have a covid unit, but you need more beds?
• Utilize the rooms nearest to your existing covid unit. As your unit gets larger consider dedicating equipment vs. Clean to dirty workflow.
• Immediately apply for more beds using the CRF capacity change application. This application does require a floor plan in which you will indicate what beds you intend to use. If you are still having residents test positive during outbreak testing, consider asking for a few more beds than you immediately need.
COVID Relief Facility Capacity Change Notice Survey (research.net)

Step 6: Quarantine/Isolation Duration

Quarantine

Duration of Empiric Transmission-Based Precautions for Symptomatic Patients being Evaluated for SARS-CoV-2 infection
• The IPC recommendations described below (e.g., patient placement, recommended PPE) also apply to patients with symptoms of COVID-19 (even before results of diagnostic testing) and asymptomatic patients who have met the criteria for empiric Transmission-Based Precautions based on close contact with someone with SARS-CoV-2 infection. However, these patients should NOT be cohorted with patients with confirmed SARS-CoV-2 infection unless they are confirmed to have SARS-CoV-2 infection through testing.

- The decision to discontinue empiric Transmission-Based Precautions by excluding the diagnosis of current SARS-CoV-2 infection for a patient with symptoms of COVID-19 can be made based upon having negative results from at least one viral test.
  - If using NAAT (molecular), a single negative test is sufficient in most circumstances. If a higher level of clinical suspicion for SARS-CoV-2 infection exists, consider maintaining Transmission-Based Precautions and confirming with a second negative NAAT.
  - If using an antigen test, a negative result should be confirmed by either a negative NAAT (molecular) or second negative antigen test taken 48 hours after the first negative test.
- If a patient suspected of having SARS-CoV-2 infection is never tested, the decision to discontinue Transmission-Based Precautions can be made based on time from symptom onset as described in the Isolation section below. Ultimately, clinical judgement and suspicion of SARS-CoV-2 infection determine whether to continue or discontinue empiric Transmission-Based Precautions.

- **Duration of Empiric Transmission-Based Precautions for Asymptomatic Patients following Close Contact with Someone with SARS-CoV-2 Infection**

- In general, asymptomatic patients do not require empiric use of Transmission-Based Precautions while being evaluated for SARS-CoV-2 following close contact with someone with SARS-CoV-2 infection. These patients should still wear source control and those who have not recovered from SARS-CoV-2 infection in the prior 30 days should be tested as described in the testing section.

- Examples of when empiric Transmission-Based Precautions following close contact may be considered include:
  - Patient is unable to be tested or wear source control as recommended for the 10 days following their exposure
  - Patient is moderately to severely immunocompromised
  - Patient is residing on a unit with others who are moderately to severely immunocompromised
  - Patient is residing on a unit experiencing ongoing SARS-CoV-2 transmission that is not controlled with initial interventions

- Patients placed in empiric Transmission-Based Precautions based on close contact with someone with SARS-CoV-2 infection should be maintained in Transmission-Based Precautions for the following time periods.
  - Patients can be removed from Transmission-Based Precautions after day 7 following the exposure (count the day of exposure as day 0) if they do not develop symptoms and all viral testing as described for asymptomatic individuals following close contact is negative.
  - If viral testing is not performed, patients can be removed from Transmission-Based Precautions after day 10 following the exposure (count the day of exposure as day 0) if they do not develop symptoms.

Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes | CDC

Isolation

Duration of Transmission-Based Precautions for Patients with SARS-CoV-2 Infection

- The following are criteria to determine when Transmission-Based Precautions could be discontinued for patients with SARS-CoV-2 infection and are influenced by severity of symptoms and presence of immunocompromising conditions. Patients should self-monitor and seek re-evaluation if symptoms recur or worsen. If symptoms recur (e.g., rebound), these patients should be placed back into isolation until they again meet the healthcare criteria below to discontinue Transmission-Based Precautions for SARS-CoV-2 infection unless an alternative diagnosis is identified.

- Patients with mild to moderate illness who are *not* moderately to severely immunocompromised:
  - At least 10 days have passed *since symptoms first appeared* **and**
  - At least 24 hours have passed *since last fever* without the use of fever-reducing medications **and**
  - Symptoms (e.g., cough, shortness of breath) have improved

- Patients who were asymptomatic throughout their infection and are *not* moderately to severely immunocompromised:
  - At least 10 days have passed since the date of their first positive viral test.

- Patients with severe to critical illness and who are *not* moderately to severely immunocompromised:
  - At least 10 days and up to 20 days have passed *since symptoms first appeared* **and**

▪ At least 24 hours have passed *since last fever* without the use of fever-reducing medications **and** ▪ Symptoms (e.g., cough, shortness of breath) have improved. ▪ The test-based strategy as described for moderately to severely immunocompromised patients can be used to inform the duration of isolation.
• In general, patients should continue to wear source control until symptoms resolve or, for those who never developed symptoms, until they meet the criteria to end isolation. Then they should revert to usual facility source control policies for patients.
Infection Control: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) | CDC

Part Two: Appendices

Appendix 1: AGP Precautions

Clinical Questions about COVID-19: Questions and Answers / CDC • Refer to question "Which procedures are considered aerosol generating procedures in healthcare settings?" under Infection Control
Infection Control: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) | CDC
Air Exchange Table / CDC
Interactive Ventilation Tool | CDC

Appendix 2: Hand Hygiene

Healthcare Providers | Hand Hygiene | CDC
Hand Hygiene Audit Tool / CDC
Clean Hands Count Campaign | Hand Hygiene | CDC

Appendix 3: PPE Donning/Doffing

Donning Video / CDC & Doffing Video / CDC
Optimizing Supply of PPE and Other Equipment during Shortages / CDC
CDC PPE Burn Rate Calculator • Please refer to Version 2 or mobile app

Appendix 4: Cleaning and Disinfection

Best Practices for Environmental Cleaning in Healthcare Facilities: in Resource Limited Settings / CDC
Environmental Services / CDC
Strategies to Mitigate Cross Contamination of Non-critical Medical Devices / APIC
Non-critical is Critical Infographic / APIC

Appendix 5: Clean to dirty workflow

Environmental Cleaning Procedures / CDC
Cleaning and Disinfection Strategies for Noncritical Surfaces and Equipment / CDC
Environmental Cleaning Supplies and Equipment / CDC

Appendix 6: Treatment

MDHHS COVID-19 Outpatient Therapy Guidance for outpatient therapies for patients with mild to moderate COVID-19
MDHHS Healthcare Provider COVID-19 Outpatient Therapy Toolkit
Coronavirus - COVID-19 Therapeutics Information Page (michigan.gov)

Appendix 7: Crisis Staffing

Michigan Healthcare Coalition and Health Department Contact List
Nurse Aide Training Programs Map Strategies to Mitigate Healthcare Personnel Staffing Shortages | CDC

Appendix 8: COVID Relief Facilities: Devoted vs. Designated Staff

Numbered_Letter_L_21-85.pdf (michigan.gov) MSA_21-40-NF-COVID-19.pdf (michigan.gov) Numbered-Letter-L-22-52.pdf

Appendix 9: Signage

Droplet & Airborne Precautions

VISITORS: **Please speak with nurse prior to entering room**

Clean Hands Prior to Entering and Upon Leaving

N95 Respirator PAPR

*Fit Testing and Training Required

N95

PAPR

Gown & Gloves

Eye Protection

*Wear eye protection for potential exposure

Keep Room Door Closed

Practice Delayed Entry Time

Use Dedicated or Disposable Equipment

STOP

Aerosol-Generating Procedure (AGP) in Progress

AGP Start Time:

_____

AGP End Time:

_____

Entry Time:

(AGP End Time + Delayed Entry Time)

_____

PPE

Appendix 10: Isolation Checklist

Supply Checklist for Isolation Room or Area

Equipment	Stock Present
On PPE Cart:	
Eye Protection (face shield or goggles)	
Gloves	
Particulate respirators (N95 or equivalent)	
Medical (surgical or procedure) masks	
Gowns	
Available in or near the room/ area:	
Alcohol-based hand rub	
Plain soap (liquid, if possible, for washing hands in clean water)	
Clean single-use towels (e.g., paper towels)	
Sharps containers	
Appropriate detergent for environmental cleaning and disinfectant for disinfection of surfaces, instruments or equipment (Should be on the EPA List N)	
Large plastic bags	
Appropriate biohazard bags	
Linen bags	

*Adapted from World Health Organization: Infection Prevention and Control of Epidemic- and Pandemic-Prone Acute Respiratory Infections in Health Care