ICAP Infection Control Assessment and Promotion Program

ICAP Summary of Recommendations for COVID-19 in a Long-Term Care Facility

In general, the following items need to be prioritized upon identification of a COVID-19 case:

- ☐ Notification of Outbreak
- ☐ Contact tracing and testing
- ☐ Isolation (for suspected or confirmed COVID-19)
- ☐ Evaluation for need of a Yellow Zone
- ☐ Review PPE requirements with staff
- ☐ Review basic infection control measures with staff
- ☐ Review enhanced environmental disinfection needs
- ☐ Evaluate residents' eligibility for COVID-19 therapeutics

Definitions:

Outbreak: One case of COVID-19 among healthcare personnel (HCP) or residents requires additional investigation by the facility.

- Standardized CORHA/CSTE outbreak definition: https://corha.org/assets/documents/COVID-19-HC-Outbreak-Definition-Guidance_January-2024.pdf

Close contact: Being within 6 feet for a cumulative total of 15 minutes or more over a 24-hour period with someone with SARS-CoV-2 infection.

Source Control

- Source control (masks) should be worn by everyone in the healthcare setting who:
  - Had close contact or a higher-risk exposure to someone with COVID-19 infection, for 10 days after their exposure.
  - Reside or work in a unit experiencing COVID-19 outbreak. Universal source control should be worn until no new cases have been identified for 14 days.
  - Have otherwise had source control recommended by public health authorities.
- Broader use of source control facility wide should be based on facility risk assessment, targeted toward higher risk areas and patient populations during periods of higher levels of COVID-19 or other respiratory virus transmission.

Visitation During a COVID-19 Outbreak

Visitors should be counseled about their potential exposure to respiratory infection in the facility.

If indoor visitation occurs, visits should ideally occur in the resident's room, and visitors should not linger in other areas of the facility or engage with other residents.

New Admission / Readmission to Facility

- New admission testing is at the discretion of the facility. The facility may consider community levels of COVID-19 to inform their practice.
    - However, if the resident has reported exposure to or symptoms of COVID-19 then testing for COVID-19 should be performed.

Initial Steps Upon Identifying a COVID-19 Case:

Reporting / Notification of COVID-19 cases:

- Reporting positive test results:
    - SNF/NF: Report positive cases through NHSN.
    - Assisted Living Facilities: Report outbreak through REDCap link: https://epi-dhhs.ne.gov/redcap/surveys/?s=HFDCEHEYT844R8C8
- Inform Local Health Department (LHD) of positive COVID-19 case, depending on specific local health department expectation/direction.
- Follow your facility policy regarding internal notification of an identified positive case (for example notifying facility leadership or activating incident command etc., as applicable)
- Contact ICAP, as needed, for infection control related questions.

Contact Tracing / Testing:

- Perform contact tracing of the positive resident or staff member starting from 48 hours prior to the symptom onset or positive test date (if asymptomatic).
- Initiate outbreak testing per Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic | CDC. Facilities can use one of the two approaches depending on the circumstances as described below.
    - A contact tracing approach can be used when the facility is able to clearly identify close contact exposures (e.g., limited resident(s) exposed to a visitor or contract therapy staff)
        - Initial testing of close contacts should be performed as a series of three tests, 48 hours apart. This will typically be a day 1 (exposure is day 0), day 3, and day 5.
        - If additional COVID-19 positive cases are identified during initial testing and ongoing transmission is suspected shift to broad-based testing approach as described below.
- A broad-based (e.g., unit wide) approach to testing should be used when close contacts cannot be identified, or when additional cases are identified after the contact tracing approach.
    - Initial testing of close contacts should be performed as a series of three tests, 48 hours apart. This will typically be on day 1 (exposure is day 0), day 3, and day 5.
    - If additional COVID-19 positive cases are identified during initial testing, follow-up testing should be completed every 3-7 days (twice weekly) until there are no new cases for 14 days.
        - During broad based testing everyone in a particular location (e.g., specific unit or hallway) will be tested regardless of whether close contact or not.
- An optional approach to outbreak testing when resources are limited is to focus efforts on symptom monitoring and mask use among exposed individuals, and test those who develop symptoms.
    - In situations where the outbreak is not under control with this optional approach (e.g., large number of resident cases or ongoing transmission) facilities should switch to broad-based testing.

- Testing is generally not recommended for asymptomatic staff and residents who have recovered from SARS-CoV-2 infection in the prior **30** days.
  - Note: When testing symptomatic individuals:
    - If using PCR (NAAT) testing, a single negative test is sufficient in most circumstances.
      - If a higher level of suspicion for SARS-CoV-2 infection exists, consider maintaining isolation precautions and confirming with a second negative PCR.
    - If using an antigen test, a negative result should be confirmed by either a negative PCR test or second negative antigen test taken 48 hours after the first negative test.
      - Isolation of the resident is recommended until the second antigen test is negative. See “light red zone” in the ICAP Zones graphic below.

Work Restrictions for a Staff Member Identified to have COVID-19

- Staff diagnosed with COVID-19 need to be restricted from work until at least 7 days have passed since symptoms first appeared (or from the date of positive test if asymptomatic), AND they have resolution of fever (without fever reducing medication), AND an improvement of symptoms, AND negative viral testing. If using an antigen test, staff member should have a negative test obtained on day 5 and again 48 hours later.
- If the staff member tests positive on day 5 or7, or testing is not performed between day 5-7 then restriction will need to be extended for at least 10 days.

Isolation of Resident Identified to Have COVID-19 (Red Zone)

- Isolate the resident in a private room (can be the resident’s own room) or in a designated isolation area, if established. The resident’s door should be kept closed.
  - If limited single rooms are available, or if numerous residents are simultaneously identified to have COVID-19, residents should remain in their current location.
  - Do not move COVID -19 positive or exposed residents to another area of the building where no cases of COVID-19 have been identified.
  - Refer to all relevant regulations (e.g., CMS) that apply to changing resident rooms.
- Duration of resident isolation period:
  - Resident(s) with mild to moderate illness that have a resolution of fever (without fever reducing medication), and an improvement of symptoms should be isolated for a duration of 10 days.
  - Residents that are moderately to severely immunocompromised or who are identified to have a severe or critical infection, may require up to 20 days of isolation. A test-based strategy can be considered to discontinue isolation in moderately to severely immunocompromised individuals A test-based strategy requires documentation of two consecutive negative test at least 48 hours apart.
- For larger outbreaks, if a facility has a separate unit or a walled off area in the building with empty rooms, a COVID-unit/red zone can be established in that area to move all the COVID-19 positive residents to one area. Always evaluate airflow in the area where a red zone is being set up to avoid exposures to other units/hallways.
  - If the empty rooms are located in another unit which is not physically separated from the rest of the unit and sharing the same air space, **DO NOT** transfer the resident with COVID-19 in that unit without first checking with ICAP team. (Note: Transferring a positive or exposed resident from one unit to another unit may lead to further transmission of COVID-19 in the building).

PPE Required for care of Resident with COVID-19

- Staff entering the room of a resident with COVID-19 should adhere to standard precautions and use respirator (N95), gown, gloves, and eye protection.
- Consider facility policy requiring universal use of N95 respirators and protective eyewear for all staff during an outbreak.
- Educate/train all clinical staff in appropriate donning and doffing procedures and make donning and doffing checklists/posters available for reminders.
    - Educational resources and checklists are available at following links:
        - NETEC COVID-19 PPE: Donning and Doffing
        - This video shows the proper way to do the N95 seal check: How to Perform a User Seal Check with an N95 Respirator - YouTube

Evaluation of Eligibility for COVID-19 Therapeutics for Resident Identified to Have COVID-19

- Symptomatic COVID-19 positive residents are usually eligible to receive one of the COVID-19 treatment options that has been shown to reduce the likelihood for hospitalization and death. Facilities should reach out to residents' primary care physicians or medical director of the facility to determine eligibility and obtain orders.
- If needing assistance in developing COVID-19 therapeutic use protocols, reach out to Nebraska ASAP pharmacists for guidance.

Empiric Use of Transmission-Based Precautions

- In general, the empiric use of transmission-based precautions are not needed when providing care to residents with close contact exposures (i.e., they do not have to be in quarantine).
    - The empiric use of transmission-based precautions should be considered when an outbreak is not controlled with initial interventions (e.g., large number of resident cases or ongoing transmission):
        - Refer to Yellow Zone on Zones-and-PPE.pdf (nebraskamed.com).
        - Resident(s) movement outside the room may also need to be restricted/limited when using transmission-based precautions.
- Residents are recommended to wear masks when they are around others, if exposed to someone with COVID-19 infection or if they are on the unit where ongoing transmission of COVID-19 is suspected.

Additional Infection Prevention and Control Measures:

- Establish a process (e.g., signage, posters, handouts) to make everyone aware of recommended infection prevention and control practices in the facility when there is a respiratory illness outbreak or increased levels of respiratory virus in the community.
- Visitors with respiratory symptoms should delay non-urgent in-person visitation until they are no longer infectious.

- Establish a process to identify residents that have any symptoms, even mild, consistent with COVID-19. Symptoms can include, but are not limited to, fever or chills, cough, shortness of breath, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea.
- Limit the numbers of healthcare workers going into the rooms of the residents who are COVID-19 positive (e.g., a nurse can deliver the food in the room instead of a dietary staff member).
- If facility implements a dedicated Red Zone (i.e. a COVID unit), HCP should avoid working on both the COVID unit and other units during the same shift when possible.
    - To the extent possible, restrict access of ancillary personnel (e.g., dietary) to the unit.
    - To the extent possible, HCP dedicated to the COVID-19 care unit (e.g., nurse aides and nurses) will also be performing cleaning and disinfection of high-touch surfaces and shared equipment when in the room for resident care activities.
    - If environmental services (EVS) staff is performing cleaning in the red zone, they should also be dedicated to this unit (or if unable to dedicate, may plan daily activity in a way that they enter the red zone towards the end of their shift after they are done with rest of the facility).
- Make alcohol-based hand sanitizers widely available in the facility, including at the point of care (i.e., where resident care is taking place such as resident rooms).
- Enhance cleaning and disinfection practices in facility using a facility approved disinfectant on the EPA List N.
- ICAP environmental disinfection and cleaning videos can be used for staff training: Cleaning and Disinfection Video Series - ICAP (nebraskamed.com)
- Place a laundry bag/bin near the exit of each resident room (in isolation or quarantine) for staff members to doff PPE and discard it into the bag/bin before leaving the room.
- Avoid opening windows or using fans, as doing that may disturb the air flow in the facility and may lead to further transmission of infection in the facility.
- Utilize portable HEPA air cleaners if available.
- Conduct frequent audits for hand hygiene compliance, PPE donning and doffing practices, and environmental cleaning practices and provide real time feedback for improvement.
- Enhanced environmental cleaning and disinfection measures may need to be taken (e.g., more frequent cleaning of common areas).

Airborne Infection Isolation Room's (AIIR's)

- If an Airborne infection isolation room (negative pressure room) is available, then it is recommended that residents with COVID-19 infection should be taken care of in those rooms.
- If more residents are diagnosed with COVID-19 and less negative pressure rooms are available then preference will be given to those residents who are getting potentially aerosol generating procedures such as CPAP, BiPAP, nebulization etc.
- If negative pressure room is not available in the facility and a resident with COVID-19 is getting aerosol generating procedure, then it is preferable to keep the room door closed during that procedure, if possible. Staff should always wear the recommended PPE as mentioned in the PPE guidance. [Please note that room door should be kept closed at all times to the extent possible for any residents who are in quarantine or isolation for COVID-19].

ICAP Infection Control Assessment and Promotion Program

Refer to ICAP Zones, PPE and Testing document as quick reference. For printable version: [Zones-and-PPE.pdf (nebraskamed.com)]

Zone	Resident Masking	Staff PPE	Testing	Notes
Red Zone Isolation (Residents with a positive COVID-19 Test)	Resident isolated to room.	COVID-19 full PPE: Respirator, eye protection, isolation gown, and gloves before entering resident room. Respirator and eye protection may be used according to extended use guidance [if they are not touched]	Repeated testing is not needed to exit isolation unless test-based strategy being used to determine isolation duration.	Keep resident room door closed; communal activity and dining are restricted for the resident; therapy and bathing are preferably performed in the resident room. Designated cohort units with dedicated staff are ideal. Follow relevant regulations that apply to changing resident rooms.
Light Red Zone Isolation (Symptomatic resident with COVID-19 test pending)	Resident isolated to room.	COVID-19 full PPE: Respirator, eye protection, isolation gown, and gloves. Respirator and eye protection may be used according to extended use guidance [if they are not touched]	If using an antigen test, a negative result should be confirmed by either a negative PCR or second negative antigen test taken 48 hours after the first negative test.	Room door closed. communal activity and dining are restricted; and therapy or bathing are preferably performed in the resident room. Residents should not be moved to a COVID unit until positive status confirmed.
Tan Zone (Facility or unit in outbreak status)	Everyone should mask in communal areas of facility.	Everyone should mask in communal areas of facility. Consider universal use of N95 and protective eyewear for staff when facility is in outbreak, especially when residents unable to use source control or area is poorly ventilated.	Contact trace, if able to clearly identify exposures. Broad-based (unit wide) if unable to contact trace or additional cases are identified after contact tracing approach. When resources are limited, focus efforts on symptom monitoring and mask use among exposed individuals, and test those who develop symptoms. *Outbreak testing is not recommended for asymptomatic persons with SARS-CoV-2 infection in the prior 30 days.	**Initial Testing when using contact tracing or broad-based testing approach:** Perform a series of three tests, 48 hours apart. This will typically be day 1 (exposure day 0), day 3, day 5. **Follow-up testing if additional cases identified:** If using broad-based testing approach, test every 3 days (twice weekly) until 14 days have passed since last known positive test. If concerns exist for outbreak containment (e.g., large number of resident cases or ongoing transmission), facilities should consider using yellow zone instead of Tan Zone and implement broad-based testing approach.
Green Zone (No current outbreak)	Broader use of source control per facility policy, based on risk assessment of community level of transmission.	Broader use of source control per facility policy, based on risk assessment of community level of transmission.	No routine testing. Perform test on anyone with even mild symptoms of COVID-19.	Promote core principles of COVID-19 infection prevention: • Hand hygiene • Use of PPE per standard precautions • Respiratory hygiene/cough etiquette • Cleaning and disinfection of environmental surfaces • Instructional signage throughout facility
Gray Zone (New admission or readmission)	Masking is at facility discretion; but recommended if resident reports exposure or symptoms.	Healthcare personnel don mask based on facility policy, resident exposure, or symptoms.	Testing is at facility discretion, although recommended if resident reports exposure or symptoms.	Quarantine not required for gray zone. However, if resident reports symptoms, follow light red zone recommendations

Refer to ICAP Zones, PPE and Testing document as quick reference. For printable version: Zones-and-PPE.pdf (nebraskamed.com)

Yellow Zone transmission-based precaution measures should be implemented in the event of COVID-19 transmission within the facility that is not controlled with initial interventions (e.g., large number of resident cases or ongoing transmission).

The facility can choose to initiate all yellow zone precautions or use a phased approach, depending on their assessment of outbreak (e.g., nature of exposure, ability of residents to follow instructions, ventilation in the building, number of staff and resident cases, etc.).

Yellow Zone	Resident Masking	Staff PPE Use	Testing	Additional containment strategies may include the following
Transition to yellow zone when initial interventions fail.	Residents wear source control when outside of room.	Everyone should mask in communal areas of facility. Consider universal use of N95 and protective eyewear for staff when facility is in outbreak, especially when residents are unable to use source control or area is poorly ventilated. Respirator and eye protection may be used according to extended use guidance.	Use broad-based testing approach which consists of testing every 3 days (twice weekly) until 14 days have passed since last known positive test.	Limit group activities and communal dining. In some situations, small group activities can continue with source control and physical distancing. Visitation should occur in the resident's room. Visitors should not linger in common areas of facility or engage with other residents. Consider having small group activities outdoors and promoting outdoor visits, dependent on weather. Consider establishing dedicated cohort units (COVID unit) for residents with confirmed infection, if it is possible to do so in a safe manner. Dedicate staff to care for residents in cohort units (see Red Zone). Avoid new admissions or transfers into and out of units with infected residents or facility-wide if the outbreak is more widespread.

References:

CDC References:

- Centers for Disease Control (CDC). Infection Control Guidance: SARS-CoV-2. https://www.cdc.gov/covid/hcp/infection-control/
- Centers for Disease Control (CDC). Viral Respiratory Pathogens Toolkit for Nursing Homes. https://www.cdc.gov/long-term-care-facilities/hcp/respiratory-virus-toolkit/index.html
- Centers for Disease Control (CDC). Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2. https://www.cdc.gov/covid/hcp/infection-control/guidance-risk-assesment-hcp.html
- Centers for Disease Control (CDC). Strategies to Mitigate Healthcare Personnel Staffing Shortages. https://www.cdc.gov/covid/hcp/infection-control/mitigating-staff-shortages.html?CDC_AAref_Val=https://www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html
- Centers for Disease Control (CDC). Symptoms of COVID-10. https://www.cdc.gov/covid/signs-symptoms/?CDC_AAref_Val=https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html
- American Medical Association (AMA). Preventing and Responding to Respiratory Infections and Outbreaks in Long-Term Care. (webinar) https://www.youtube.com/live/TGwELEnHAQg

ICAP/DHHS References:

- Nebraska ICAP Environmental Cleaning and Disinfection Videos https://icap.nebraskamed.com/?s=cleaning&post_type=video

NETEC References:

- https://repository.netecweb.org/files/original/dca73031fbbc6c342e084bc2929732ef.pdf