ICAP Infection Control Assessment and Promotion Program

Actions Needed to be Taken Upon Identification of a COVID-19 Case at a Facility

Definitions:

Outbreak: a new COVID-19 infection in any healthcare personnel (HCP) or any nursing home-onset COVID-19 infection in a resident

Up to date: means a person has received all recommended COVID-19 vaccines, including any booster dose(s) when eligible.

Fully vaccinated: means a person has received their primary series of COVID-19 vaccines

Unvaccinated individual: Has not received any COVID vaccination.

Significant exposure for residents : resident has been within 6 feet of an infected person (during the period of communicability/infectivity) for a cumulative total of 15 minutes or more over a 24-hour period. (Note: The start date for period of communicability/infectivity for individuals with COVID-19 infection is generally considered to be 2 days before the symptoms onset if they were symptomatic, or 2 days before the test positive date if they were asymptomatic. The end date for period of communicability is when they meet the CDC criteria for discontinuation of isolation).

Notification:

- Inform Local Health Department (LHD) of positive COVID-19 case
- Reporting positive cases:
    - SNF/NF: Report positive cases through NHSN.
    - Assisted Living Facilities: email dhhs.epi@nebraska.gov to request COVID-19 case reporting instructions and forms **OR** report through NHSN.
- Follow your facility policy regarding internal notification of an identified positive case (for example notifying facility leadership or activating incident command etc., as applicable)
- Notify HCP, residents, and families per CMS QSO-20-29-NH (cms.gov) and requirements of the OSHA COVID-19 Healthcare Emergency Temporary Standard.
- Identify a point person (IP, DON, ADON etc.) who will subsequently get in touch with Nebraska ICAP on the *next business day during regular business hours*.
    - ICAP will assist long-term care (including skilled nursing and assisted living facilities) with implementation of infection prevention strategies and may advise on testing, isolation, staff cohorting, PPE use and other infection control related issues.

Initial Steps Upon Identifying a COVID Outbreak:

Testing

- Initiate outbreak testing per QSO-20-38-NH REVISED (cms.gov) for any staff or resident positive.

- Nebraska ICAP has noticed that when a case is identified in the building, it is often difficult for the facilities to be sure that whether that is an index case versus there may have been ongoing transmission at the facility. Limiting testing to only close contacts may increase the risk of missing cases in the building and will be a risk for widespread outbreaks. Therefore, ICAP is recommending the following testing approach at this point:

    - Outbreak testing should be done unit wide in those units where exposures have been identified (when looking at exposures for the purpose of testing, it does not need to be a prolonged/ significant exposures; exposures for shorter than 15-minute duration should also trigger outbreak testing). Both resident and staff for those units should undergo testing regardless of vaccination status.
    - In general, facility-wide testing is not necessary and if a healthcare worker who tested positive never entered resident care areas and had no contacts with resident then resident testing may not be needed. Some staff (regardless of vaccination status) may still need to have outbreak testing if they had any kind of contact with the positive staff member.
    - Facility wide testing may be needed on a case-by-case basis where there is a suspicion for a widespread exposure or additional asymptomatic cases in the building due to the nature of the outbreak. ICAP team will assist facilities with those decisions.
    - Complete outbreak testing for 7 days since last exposure on the staff and residents in the area/unit who were around the positive person.
    - Outbreak testing to be completed at least twice weekly for 7 days. If no new cases are identified, then quarantine and outbreak testing stops.
    - Note that in general, the 7-day standard will be used; however, for on-going transmission especially with more resident cases, outbreak testing may continue with a 14-day standard and quarantine extended as applicable after discussion with ICAP.
    - Residents who are up to date with all recommended COVID-19 vaccine doses and residents who have recovered from SARS-CoV-2 infection in the prior 90 days who have had close contact with someone with SARS-CoV-2 infection should wear source control and be tested as described in the testing section. In general, these residents do not need to be quarantined, restricted to their room, or cared for by HCP using the full PPE recommended for the care of a resident with SARS-CoV-2 infection unless they develop symptoms of COVID-19, are diagnosed with SARS-CoV-2 infection, or the facility is directed to do by ICAP or the local health department (for example, when previous outbreak was Delta and current outbreak is Omicron). Quarantine might also be considered if the resident is moderately to severely immunocompromised.

- If facility is using antigen tests, then they will need to follow the testing algorithm from the CDC which describes in which situations a confirmatory PCR test is needed. (In general, symptomatic individuals who test negative on antigen test need a confirmatory PCR. Similarly, asymptomatic individuals who test positive on antigen test also need a confirmatory test). The detailed guidance can be found here: [Considerations for Interpretation of Antigen Tests in Long-Term Care Facilities (cdc.gov)]

  - *Note:* When there is a discrepancy between the antigen and PCR test results, ICAP can provide further assistance on interpretation of those test results, as needed)
  - *PCR tests for confirmation can be sent to NPHL without any cost. (Contact the Local health department to obtain test kits for the specimen/test. Further information regarding NPHL can be found at http://www.nphl.org/*
- Here are additional resources explaining the procedure are available at:
  - NETEC: COVID-19 Laboratory Specimen Collection: Nasopharyngeal Swab - YouTube
  - NETEC: COVID-19 Laboratory Specimen Collection: Nasopharyngeal Swab - Flyer and Validation Checklist · NETEC Resource Library (netecweb.org)

Visitation

- In general, there is no restriction on visitation per QSO-20-39-NH REVISED (cms.gov), which was updated on *11/12/2021*. Facilities should screen all who enter for visitation exclusions. Additionally, basic infection control practices are required to keep both staff and residents safe. Visitors may need to have additional education on risks and control measures if they are deciding to visit during an outbreak
- Per Nursing Home Visitation FAQs (cms.gov), facilities should continue to consult with state and local health departments when outbreaks occur to determine when modifications to visitation policy would be appropriate.

If a Resident is identified to have COVID-19:

- Isolate the resident (either in a designated isolation area if already established or in a private room in the same unit [which can also be the resident own room] if no isolation area is yet established).
- Information to collect on positive resident:
  - Symptoms, vaccination status, previous history of COVID-19 infection, and, if a PCR has been done, where was it sent for testing.
    - If only POC testing was performed, another specimen for PCR testing may need to be collected if a confirmation is necessary based on testing algorithm.
    - For residents with mild to moderate symptoms (e.g., fever, cough, sore throat, malaise, headache, muscle pain, nausea, vomiting, diarrhea, loss of taste/smell), they may meet criteria for COVID-19 treatment.
      - Nebraska ASAP website with COVID-19 treatment resources: https://asap.nebraskamed.com/covid19-treatment/
      - Complete the Nebraska ASAP survey to begin the request process: https://redcap.nebraskamed.com/surveys/?s=ATXH748HAD4C748E
    - Facility should also start looking into staff schedule to develop a list of staff who may have recently worked with the positive resident (e.g., within the last 14 days)
- Perform contact tracing for the positive resident starting from 48 hours prior to positive test date/symptom-onset (whichever was first):
  - Review the movements of the resident diagnosed with COVID-19 and determine potential exposures to staff and other residents.

- Also consider the type of care the positive resident have been receiving (e.g., nebulizers, multiple person assist, etc.) to determine further exposure to residents and staff members.
- High-risk areas to include in the review include communal dining, group activities, resident's roommate, community outings, etc. The goal is to identify all the residents and staff who may be exposed in different areas of the building.

If a Staff Member is identified to have COVID-19:

- Make sure the positive staff member is not working and has been sent home.
  - Review pertinent CDC resources for healthcare personnel
    - Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2
    - Strategies to Mitigate Healthcare Personnel Staffing Shortages
  - Information to collect on positive staff member:
    - Symptoms, vaccination status, previous history of COVID-19 infection, and if PCR has been done where was it sent for testing.
      - If only POC testing was performed, another specimen for PCR testing may need to be collected if a confirmation is necessary based on testing algorithm.
      - State or local health department may also need additional information such as full name, date of birth etc. so that they can pursue further public health investigations
- Perform contact tracing for the positive staff member for 48 hours prior to positive date/symptom onset:
  - Review assigned duties and interview staff member (who was identified with COVID-19) to determine exposure risk for other staff and residents.
    - High-risk areas to include in review include the unit/work assignment and compliance with infection control protocols including use of PPE in nursing station/break rooms. The goal is to identify all the residents and staff who may be exposed in different areas of the building.

Exposure guidance for staff and residents:

Vaccination Status	Exposure Guidance
Up to date residents	Waived from quarantine (yellow zone) and placed in modified yellow zone
NOT Up to date residents	Traditional yellow precautions (all quarantine measures)
Up to date staff members	Follow the Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2 https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

	Conventional Strategy (recommended by ICAP): • No work restrictions with a negative test on day 1 and 5-7 **Contingency Strategy:** • No work restrictions **Crisis Strategy:** • No work restrictions • Recommend reviewing Crisis Staffing Plan with ICAP
NOT Up to date staff members	Follow the Follow the Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2 https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html **Conventional Strategy (recommended by ICAP):** • Restrict for work for 10 days; or 7 days with a negative test. **Contingency Strategy:** • No work restrictions with negative tests on day 1,2,3, and 5-7 **Crisis Strategy:** • No work restrictions (test if possible) • Recommend reviewing Crisis Staffing Plan with ICAP

Use of Personal Protective Equipment (PPE):

- Check the current inventory for all PPE.
  - Calculate PPE burn rate to plan and optimize the use of PPE for response to COVID-19.
  - Burn rate calculator is available on the CDC website at the following link: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html
- Reach out to local health department if anticipating need for additional PPE supplies in a crisis situation.
  - Supply chains are returning to normal, and facilities need to begin establish their own PPE supplies.

Cohorting Residents in LTCF and PPE Use Per Zone

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Red Zone (Isolation zone)	Dark Red	Residents with Positive COVID-19 test	COVID-19 Full PPE Respirator, Eye protection (Either Face shield or goggles), Isolation Gown, gloves Gown and gloves (with hand hygiene replaced between every resident) Respirator and Face Shield may be worn between residents if they are not touched
Yellow Zone (Quarantine zone)	Light Red (Isolation within quarantine zone):	Residents suspected of having COVID-19 but awaiting confirmation of the diagnosis [Note: Do not transfer to COVID-unit yet. Isolate in a private room within the yellow zone]	COVID-19 Full PPE
	Yellow Zone (quarantine zone)	Asymptomatic residents who may have been exposed to COVID-19. This includes residents NOT up to date or NOT within 90 days of Omicron COVID-19 infection	COVID-19 Full PPE
	Modified Yellow Zone (modified quarantine zone)	**Residents up to date or within 90 days of Omicron COVID-19 infection**	Even when quarantine [yellow zone] is waived, ICAP recommends HCW continue to wear N95 respirators and eye protection when in the resident room
Green Zone (COVID-19 free zone)		Asymptomatic residents without any exposure to COVID19	At least wear universal surgical mask for source control (although K-N95 or N-95 may also be considered based on facility risk assessment for higher level source control). Eye protection (Face shield or goggles) as part of standard precautions will always be needed. Universal eye protection may also be needed in green zone based on facility risk assessment (taking into account various factors including community transmission rates, resident and staff vaccination rates etc.)

Gray Zone (Transitional zone)	Residents NOT up to date or NOT within 90 days of Omicron COVID-19 infection without known exposure to COVID-19 who are being transferred from the hospital/outside facilities in communities with moderate to high COVID-19 transmission rates are usually kept in this zone for 7 days and if remains asymptomatic (and test negative for COVID-19) at the end of 7 day will be moved to Green zone	COVID-19 Full PPE

- Educate/train all clinical staff in appropriate donning and doffing procedures and make donning and doffing checklists/posters available for reminders.
- Educational resource and checklists are available at following links:
  - COVID-19 PPE Guidance · NETEC Resource Library (netecweb.org)
  - This video shows the proper way to do the N95 seal check: How to Perform a User Seal Check with an N95 Respirator - YouTube

Setting up Zones after Identification of a COVID-19 case in the facility:

- When a resident case is identified then proceed with setting up a red zone.
  - If a facility has a completely separate unit or a walled off area in the building with empty rooms, a COVID-unit/red zone can be established in that area. Always evaluate airflow in the area where a red zone is being set up.
  - 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.
  - If a completely separate or walled off unit with all empty beds is not available, initiate isolation in a private room within the same unit where the case is identified (sometimes it can be the resident's own room if it is a private room). Consider that private room as a red zone/red room. If the resident with COVID-19 has a roommate, quarantine the roommate by themselves and do not cohort them with anyone else.
- Yellow zone set up depends on the nature of the exposures

  - In general, it is best to **avoid** moving residents from one unit to another unit during an outbreak, as much as possible. ICAP is available to assist facilities with safe movement if a transfer from one unit to another unit is considered necessary.

Additional Infection Prevention and Control Measures:

- Continue COVID-19 symptom screening processes for everyone entering the building per CDC, OSHA, and CMS requirements.
    - HCP who report symptoms should be excluded from work and should notify occupational health services to arrange for further evaluation.
- Actively monitor all residents upon admission and at least daily for fever (temperature ≥100.0°F) and symptoms consistent with COVID-19. Ideally, include an assessment of oxygen saturation via pulse oximetry.
- Limit the numbers of healthcare workers going in the rooms of the residents who are in quarantine or isolation (e.g., a nurse can deliver the food in the room instead of a dietary staff member)
- Identify HCP who will be assigned to work only in the Red Zone (COVID unit). If possible, HCP should avoid working on both the COVID unit (red zone) and other units during the same shift.
    - 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., NAs 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).
- 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.
- Conduct frequent audits for hand hygiene compliance, PPE donning and doffing practices, and environmental cleaning practices and provide real time feedback for improvement.

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 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]

References:

CDC References:

- CDC Stay Up to Date with Your Vaccines https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html
- CDC Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes https://www.cdc.gov/coronavirus/2019-ncov/hcp/long-term-care.html
- Considerations for Interpretation of Antigen Tests in Long-Term Care Facilities (cdc.gov)
- Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic
- Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2 | CDC
- Personal Protective Equipment (PPE) Burn Rate Calculator | CDC
- Strategies to Mitigate Healthcare Personnel Staffing Shortages | CDC
- Symptoms of COVID-19 | CDC

CMS References:

- Nursing Home Visitation FAQs (cms.gov)
- QSO-20-29-NH (cms.gov)
- QSO-20-38-NH REVISED (cms.gov)
- QSO-20-39-NH REVISED (cms.gov)
- CMS Nursing Home Visitation Frequently Asked Questions (FAQs)

ICAP/DHHS References:

- Cohorting-Plan-for-LTCF-_MSA-8.26.2021.pdf (nebraskamed.com)
- Nebraska ASAP COVID-19 Treatment request order form/survey https://redcap.nebraskamed.com/surveys/?s=ATXH748HAD4C748E

OSHA References:

COVID-19 Healthcare ETS | Occupational Safety and Health Administration (osha.gov)

NETEC References:

- COVID-19 PPE Guidance · NETEC Resource Library (netecweb.org)
- NETEC: COVID-19 Laboratory Specimen Collection: Nasopharyngeal Swab - YouTube
- NETEC: COVID-19 Laboratory Specimen Collection: Nasopharyngeal Swab - Flyer and Validation Checklist · NETEC Resource Library (netecweb.org)