NETEC COVID-19 Webinar Series:
Long Term Care: Strategies to Care for Vulnerable Populations
Welcome

Shelly Schwedhelm, MSN, RN, NEA-BC
Welcome: Shelly Schwedhelm, MSN, RN, NEA-BC

A Review of Basics and Case Review: Jill Morgan, RN, BSN
Trish Tennill, RN, BSN

COVID-19 Experiences and Guidance in Nebraska Post-Acute and Long-Term Care: Muhammed Salman Ashraf, MBBS
Kate Tyner, RN, BSN, CIC

NETEC Resources: Shelly Schwedhelm, MSN, RN, NEA-BC

Questions and Answers with NETEC
Welcome

National Emerging Special Pathogens Training and Education Center

Mission Statement
To increase the capability of the United States public health and health care systems to safely and effectively manage individuals with suspected and confirmed special pathogens

For more information
Please visit us at www.netec.org
or email us at info@netec.org
NETEC Overview

Assessment
Empower hospitals to gauge their readiness using Self-Assessment
Measure facility and healthcare worker readiness using Metrics
Provide direct feedback to hospitals via On-Site Assessment

Education
Provide self-paced education through Online Trainings
Deliver didactic and hands-on simulation training via In-Person Courses
COVID-19 focused Webinars

Technical Assistance
Onsite & Remote Guidance
Compile Online Repository of tools and resources
Develop customizable Exercise Templates based on the HSEEP model
Provide Emergency On-Call Mobilization

Research Network
Online Repository Built for rapid implementation of clinical research protocols
Develop Policies, Procedures and Data Capture Tools to facilitate research
Create infrastructure for a Specimen Biorepository

Cross-Cutting, Supportive Activities
A Review of Basics and Case Review

Jill Morgan, RN, BSN
Trish Tennill, RN, BSN
Patients, residents and staff can wear masks as SOURCE CONTROL – to limit circulation of what we exhale and cough.

Staff, residents and patients should all perform hand hygiene frequently – especially after touching clients, surfaces or PPE.
Current symptoms to watch for include:

- Fever
- Cough
- Muscle Pain
- Shortness of breath, trouble breathing
- Chills
- Shaking chills (rigors)
- Headache
- Sore throat
- Loss of taste or smell
- Rash?
Goggles, safety glasses or face shield – eyeglasses do not count! If you are near people who are coughing (within arm’s length), try to protect your eyes.

Mask and respirators - prevents coughs, sneezes, and sprays from entering mucous membranes.

Gown and gloves - keep hands and clothing clean, which helps prevent germs from accidently entering the eyes, nose and mouth after doffing PPE.

Pathogens need a way into the body

Primarily, these diseases enter the body through the eyes, nose and mouth.
Hierarchy of Controls

- **Elimination**
  - Physically remove the hazard
- **Substitution**
  - Replace the hazard
- **Engineering Controls**
  - Isolate people from the hazard
- **Administrative Controls**
  - Change the way people work
- **PPE**
  - Protect the worker with PPE

Most effective to least effective:

1. Elimination
2. Substitution
3. Engineering Controls
4. Administrative Controls
5. PPE

https://www.cdc.gov/niosh/topics/hierarchy/default.html
Case Study One

Situation

Geneva is 83 and has lived at Manor Square for 3 years. She is accustomed to taking her meals in the dining room and walks the length of the interior corridors for her daily exercise, visiting with her hallway neighbors. She is generally self-sufficient, uses rails always and a walker occasionally. She only needs assistance when showering. She speaks with her family by phone once a week and her daughter Amanda visits her every Friday and takes her out to dinner.

Manor Square has not had any COVID-19 cases to date, they are unable to test residents, testing is performed at a local hospital and only on symptomatic patients.

Geneva now has had decreased appetite, poor p.o. intake and is spending more time in bed. Staff now have to assist her OOB to chair for meals. She initially complained about her walking restrictions, but now appears depressed.

Identify the Hazard

Asymptomatic spread means residents and staff are at risk of both spreading the virus and becoming ill.

Secondary hazards – social isolation, depression, failure to thrive, deconditioning.
## Case Study One

### Situation
- Geneva is 83 and has lived at Manor Square for 3 years. She is accustomed to taking her meals in the dining room and walks the length of the interior corridors for her daily exercise, visiting with her hallway neighbors. She is generally self-sufficient, uses rails always and a walker occasionally. She only needs assistance with showering. She speaks with her family by phone once a week and her daughter Amanda visits her every Friday and takes her out to dinner.
- Manor Square has not had any COVID cases to date, they are unable to test residents, testing is performed at a local hospital and only on symptomatic patients.

### Identify the hazard
- Asymptomatic spread means residents and staff are at risk of both spreading and becoming ill.

### Engineering Controls

- Air Circulation
- Barriers to prevent transmission
- Physical Distancing
- Cohorting residents in zones
**Case Study One**

**Situation**

- Geneva is 83 and has lived at Manor Square for 3 years. She is accustomed to taking her meals in the dining room and walks the length of the interior corridors for her daily exercise, visiting with her hallway neighbors. She is generally self-sufficient, uses rails always and a walker occasionally. She only needs assistance with showering. She speaks with her family by phone once a week and her daughter Amanda visits her every Friday and takes her out to dinner.
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**Identify the hazard**

- Asymptomatic spread means residents and staff are at risk of both spreading and becoming ill

**Administrative Controls**

Develop protocols that direct:

- Movement restrictions within the facility
- Monitoring staff and residents for signs and symptoms
- Visitation restrictions
- Outside medical appointments
- Resident meals
- Communication strategies
- Equipment use
- PPE donning, doffing and supply management
- Environmental cleaning strategies
### Case Study One

<table>
<thead>
<tr>
<th>Situation</th>
<th>Identify the hazard</th>
</tr>
</thead>
<tbody>
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<td>• Geneva is 83 and has lived at Manor Square for 3 years. She is accustomed to taking her meals in the dining room and walks the length of the interior corridors for her daily exercise, visiting with her hallway neighbors. She is generally self-sufficient, uses rails always and a walker occasionally. She only needs assistance with showering. She speaks with her family by phone once a week and her daughter Amanda visits her every Friday and takes her out to dinner.</td>
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</tbody>
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### Administrative Controls

**Staffing Protocols:**
- Staff assignments
- Staff training requirements
  - Workflows
  - PPE
- Role expansion for staff (within scope of practice)
Case Study One

Situation

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Identify the hazard

- Asymptomatic spread means residents and staff are at risk of both spreading and becoming ill

PPE

- CDC guidance:
  - Preferred vs acceptable
  - Universal masking
- Hand hygiene
  - Technique
  - Supplies

Training and Competency is ESSENTIAL
<table>
<thead>
<tr>
<th>Questions for Case Study One</th>
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</thead>
<tbody>
<tr>
<td>1.  What strategies can be used to minimize disruption to well residents/patients?</td>
</tr>
<tr>
<td>2.  What actions can be taken to ensure nutrition, hydration and toileting schedules remain intact?</td>
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<tr>
<td>3.  What impact do changes such as closed doors, in-room dining, decreased socialization of residents and increased demand for staff attention have?</td>
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<tr>
<td>4.  What are some best practice ideas for maintaining communication between residents/patients and families?</td>
</tr>
<tr>
<td>5.  Have you seen detrimental effects of social isolation with your residents? How have you intervened successfully?</td>
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<tr>
<td>6.  Should long term care facilities routinely test residents regardless of symptoms?</td>
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<tr>
<td>7.  Are new resident admissions tested and sequestered? For how long?</td>
</tr>
<tr>
<td>8.  What about residents who travel outside the facility for appointments?</td>
</tr>
<tr>
<td>9.  And about residents who may be admitted to an acute care setting for a non-COVID related complaint?</td>
</tr>
</tbody>
</table>
Case Study Two

Situation

John Henry is 73 and is recovering from a right BKA. He is receiving PT/OT and leaves Manor Square every T-TH-S for a 3 - 4 hour dialysis session. The facility has a transport van that takes John Henry and another resident for these occasions, and they have been moved to a semi-private room together.

While the initial goal for rehab was for John Henry to return home, he is not meeting his goals secondary to weakness and failure to thrive. Manor Square has a separate wing for rehab distinct from its skilled nursing units, necessitating a room change if John Henry does not achieve his rehab goals.

Identify the Hazard

- Asymptomatic spread
- Transmission during transport or dialysis
- Secondary hazards: Throughputs to LTC and acute care settings, failure to thrive
Case Study Two

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Identify the hazard

- Asymptomatic spread
- Transmission during transport or dialysis
- Throughputs to LTC and acute care settings
- Failure to thrive

Engineering Controls

- Increase outside air circulation
- Create barriers between workstations for staff
- Create physical barriers that allow communication, visual access between staff and residents at nursing stations
Case Study Two

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Develop Protocols to direct:
- The decontamination of transport devices and vehicles
- Distancing passengers, wearing facemasks
- Cohorting by exposure risk
Case Study Two

**Situation**
- John Henry is 73 and is recovering from a right BKA. He is receiving PT/OT and leaves Manor Square every T-TH-S for a 3-4 hour dialysis session. The facility has a transport van that takes John Henry and another resident for these occasions, and they have been moved to a semi-private room together.
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**Identify the hazard**
- Asymptomatic spread
- Transmission during transport or dialysis
- Throughputs to LTC and acute care settings
- Failure to thrive

**PPE**
- Implement PPE use when clients are anywhere outside of their own room
- Meticulous and frequent hand hygiene
- PPE available, staff trained in each ensemble
Questions from Case Two

1. What strategies can facilities use to make transport safer for residents and staff?
2. What should LTC facilities ask of dialysis centers and other referral sites?
3. What infection prevention measures should be taken in regard to the transport van,
4. The driver/assistant, the resident/patients, and the staff who send and receive resident/patients?
5. Are high, or higher risk residents managed in a separate area, or by different staff? When would that be appropriate, if ever?
6. Is symptom and vital sign monitoring done with the same frequency for all residents?
7. How are rehab therapies (PT, OT, speech) affected at your facility? What strategies have been successful in maintaining forward momentum for resident/patients?
8. What are the advantages and disadvantages of moving resident/patients together by risk level?
1. Rapid-Hire Center – targeting service industry workers who are now un- or underemployed, utilizing the temporary waiver for certification (42 CFR 483.35(d)), with the goal of permanent career change

2. Use of walking virtual tours via web-meeting platforms to allow for PH evaluations of building interventions (air handling, portable filtration, temporary walls/partitions)

3. Trending of resident vital signs to monitor for changes prior to development of clinical fever, trends identified trigger increased monitoring frequency and the addition of physical assessments

4. Administrative 24h call center – to respond to the higher-level inquiries about cases, plans, interventions and strategies, to relieve facility staff from the duty to answer those questions

5. Scheduled based on family preference for timing and frequency, video chat calls from resident/patient rooms with staff assistance, question answering
COVID-19 Experiences and Guidance in Nebraska Post-Acute and Long-Term Care

Muhammad Salman Ashraf, MBBS
Kate Tyner, RN, BSN, CIC
COVID-19 Experiences and Guidance in Nebraska Post-Acute and Long-Term Care

Nebraska Post-Acute and Long-Term Care COVID-19 Programmatic Elements

- Weekly Educational Webinars with significant time devoted to question and answer
  - Include panelists from various stakeholder organizations
  - Use DHHS inventory of facilities and contacts to distribute call information
  - Post invitation, slides, and transcript from each week
- Daily “Office Hours” staffed by infection preventionists
- CDC Tele-ICAR assessments and feedback
- On-site NETEC technical support visits
- Weekly calls hosted by DHHS Regulatory Division to provide updates on tracking, reporting, and CMS guidance
- One-to-one mentoring calls to facilities with COVID-19 cases
CDC Tele-ICAR Findings in Nebraska: Regarding PPE

Concerns
- disposable gowns being reused
- Severe shortage of PPE noted in one facility
- Healthcare workers not wearing facemasks appropriately and at all times
- Cloth facemasks in use by healthcare workers with resident contact
- Facemasks being touched while in use

Suggestions
- Assess PPE supplies and plan contingency strategies for shortages
- Prioritize use of full PPE when supplies are limited – optimize usage
- Suggest use of cloth masks for essential visitors and healthcare workers who do not have direct resident care activities.
- Observations/audits of PPE use – donning/doffing document and give feedback
Environmental Cleaning Suggestions:

- Ensure disinfectants are being used at correct dilution/mixing
- Ensure those mixing and using chemicals wear appropriate PPE
- Develop schedule for regular cleaning and disinfection of shared equipment/areas.
- Audit cleaning processes

Hand Hygiene Concern

- Insufficient access to alcohol-based hand sanitizer

Hand Hygiene Suggestions:

- Suggest auditing/monitoring use of hand hygiene practices
- Use alcohol-based hand rub preferentially over handwashing

Environmental Cleaning Concerns

- Cleaning products in use that aren’t on the EPA List N (approved agent against SARS-CoV-2)

Environmental Cleaning Suggestions:

- Ensure disinfectants are being used at correct dilution/mixing
- Ensure those mixing and using chemicals wear appropriate PPE
- Develop schedule for regular cleaning and disinfection of shared equipment/areas.
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CDC Tele-ICAR Findings in Nebraska
Transmission risks Concerns:

- Residents not being monitored at least three times daily for signs/symptoms of illness
- Screening not expanded to look for all 19 COVID-19 symptoms now identified (atypical presentations)
- Lack plan for managing admissions/readmissions of persons whose COVID-19 status is unknown

Suggestions for decreasing transmission risk:

- Dedicate an area of the facility to care for residents with confirmed COVID-19
- Assign dedicated healthcare workers to only the area of the facility where COVID-19 positive residents are housed
- Place signage at entrance to the cohort units to instruct workers on using PPE in that area
- Encourage all residents to remain in their room if there are COVID-19 cases in the community or facility
- Develop zone for observation/isolation of new admissions/persons exposed to COVID-19; implement testing at end of 14 days to be sure residents are not infected

Testing for COVID

- Discuss with ICAP regarding the need for expanded testing of resident and staff upon identification of a resident with COVID-19
NETEC Technical Consultations: The Gap

Development of Standard Operating Procedures

Execution of Standard Operating Procedures
Strengths

• General IPC
  • Restriction of entrance to only one general entrance
  • Engagement of leadership staff and enthusiasm to advance preparedness
  • Universal masking early for all staff
  • Restriction of visitors, volunteers and non-essential personnel
  • Just in time training plans for staff members in IPC – hand hygiene and PPE use

• Screening and Monitoring
  • Increased frequency of resident monitoring for temperature and s/s
  • Staff screening at entrance prior to starting shift

• PPE
  • Working with local and state resources to try and source some type of PPE*
  • Have established donning/doffing protocols

• Resident Placement
  • Preparedness plans incorporate zoning to include Red, Yellow, Green and Gray
  • Attempts to dedicate staff to each zone in place
  • Use of CDC guidance to develop discontinuation of isolation
Challenges

• General IPC
  • Inadequate supplies of hand sanitizer and disinfectant wipes
  • Lack of compliance to frequency of hand hygiene
  • Increased need for education on disinfectant use-contact times
  • Need for hands on training for all employees

• Resident Placement
  • Fans still in use and windows being opened in yellow and red zones
  • Residents not able to tolerate masking
  • Doors not able to remain shut despite protocols-fall risks and dementia

• PPE
  • Limited access to adequate supplies
  • N95s donated but very few facilities have ability to fit test
  • Lack of awareness of local and state PPE request processes
  • Staff ability to don and doff PPE in accordance with protocols is inconsistent
  • PPE not able to be stored in optimal ways
  • “PPE fatigue” decreasing compliance with leaving procedure masks in place at all times
**COVID-19 Experiences and Guidance in Nebraska Post-Acute and Long-Term Care**

### Appropriate PPE Attire

- PPE must be removed slowly and deliberately in a sequence that prevents self-contamination. A step-by-step process should be developed and used during training and patient care.

**Preferred PPE – Use**
- N95 or Higher Respirator
- Face shield or goggles
- One pair of clean, non-sterile gloves
- Isolation gown

**Acceptable Alternative PPE – Use**
- Facemask
- Face shield or goggles
- One pair of clean, non-sterile gloves
- Isolation gown

**IMPORTANT**

Masks should be medical grade and post-acute/long-term care facility staff should **not** be wearing cloth masks.

Source Control: Non-Clinical Staff
For example, visitors

Don’t forget to wash cloth masks!

COVID-19 Experiences and Guidance in Nebraska Post-Acute and Long-Term Care

What Mask?

- PPE must be removed slowly and deliberately in a sequence that prevents self-contamination. A step-by-step process should be developed and used during training and patient care.

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Acceptable Alternative PPE – Use Facemask

- Face shield or goggles
- Isolation gown
- Non-sterile gloves

Patient care PPE

- N95 or higher respirator
- Isolation gown
- Non-sterile gloves

For example, visitors

Don’t forget to wash cloth masks!
Wear cloth face coverings in public settings where other social distancing measures are difficult to maintain (e.g., grocery stores and pharmacies).

Use of simple cloth face coverings to slow the spread of the virus.

Help people who may have the virus and do not know it from transmitting it to others.

The cloth face coverings recommended are not surgical masks or N-95 respirators.
HOSPITAL TO POST-ACUTE CARE FACILITY TRANSFER COVID-19 ASSESSMENT

INSTRUCTIONS: Hospitals are encouraged to use this form to document your assessment of the COVID-19 status of all hospitalized prior to transfer to a post-acute care facility. CHECK THE BOX FOR EACH CRITERIA APPROPRIATE TO THE PATIENT’S STATUS:

Has patient been laboratory tested for COVID-19?

- YES, Patient tested for COVID-19
  - Date of test(s)
  - What was the indication for testing?
- NO

Results Pending
- Check if any results are pending

Await Results MAY NOT TRANSFER
- YES
  - Is another COVID-19 test planned/pending?
    - YES
      - Negative Test
        - Check only if all results are negative
          - NO
            - Positive Test
              - Check if any one test resulted positive
                - NO
                  - YES
                    - Exposure/travel in the past 14 days:
                      - Has the patient been to any of the restricted travel areas, traveled internationally, traveled on a cruise ship, been exposed to a person who has been lab tested positive for COVID-19, or been exposed to another person suspected to have COVID-19?
                        - NO
                          - YES
                            - Exposure/travel in the past 14 days:
                              - Has the patient been to any of the restricted travel areas, traveled internationally, traveled on a cruise ship, been exposed to a person who has been lab tested positive for COVID-19, or been exposed to another person suspected to have COVID-19?
                                - NO
                                  - YES
                                    - < 14 days
                                      - YES
                                        - Complete 14-day quarantine before transferring
                                          - MAY TRANSFER
                                            - NO
                                              - YES
                                                - Exposure/travel in the past 14 days:
                                                  - Has the patient been to any of the restricted travel areas, traveled internationally, traveled on a cruise ship, been exposed to a person who has been lab tested positive for COVID-19, or been exposed to another person suspected to have COVID-19?
                                                    - NO
                                                      - YES
                                                        - Require a rapid COVID-19 test
                                                          - MAY TRANSFER
                                                            - NO
                                                              - YES
                                                                - Exposure/travel in the past 14 days:
                                                                  - Has the patient been to any of the restricted travel areas, traveled internationally, traveled on a cruise ship, been exposed to a person who has been lab tested positive for COVID-19, or been exposed to another person suspected to have COVID-19?
                                                                    - NO
                                                                      - YES
                                                                        - Need COVID-19 test
                                                                          - MAY TRANSFER
                                                                           - NO
                                                                             - YES
                                                                               - Place patient identification label here
                                                                                   - Form updated 4/9/20

Please provide a copy of completed form to EMS/transport agency,
_ Clinical assessment (signs and symptoms) discussed with treating MD/PA/NP

Name of person completing form (print name): Date/Time
Reported to (name of facility staff): Date/Time

Leading Age Nebraska
www.leadingagene.org

Transfer Assessment Flow Chart

NEBRASKA
Good Life. Great Mission.
DEPT OF HEALTH AND HUMAN SERVICES
## Actions to be taken upon identification of a COVID-19 case at a post-acute/long-term care facility

<table>
<thead>
<tr>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Notification</td>
</tr>
<tr>
<td>• Isolation and Quarantine</td>
</tr>
<tr>
<td>• Including cohorting guidance</td>
</tr>
<tr>
<td>• Steps to take if a staff member or resident is identified to have COVID-19</td>
</tr>
<tr>
<td>• Testing</td>
</tr>
<tr>
<td>• Use of Personal Protective Equipment (PPE)</td>
</tr>
<tr>
<td>• Additional Infection Prevention and Control Measures</td>
</tr>
</tbody>
</table>

Actions needed to be taken upon identification of a COVID-19 case at a facility

**Notification:**
- Inform Local Health Department of Positive COVID-19 case
- Inform Licensure (LTC-CMS Survey team)
- Notify facility leadership and activate Incident Command System if it has not already been activated.
- Identify a point person (IP, DON, ADON etc.) who will subsequently get in touch with Nebraska ICAP team for reviewing infection control measures on an ongoing basis in coming days.
  - 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
  - The introductory call will preferably include facility leadership, local health department and ICAP team, when possible and will be arranged by the local health department.

**Isolation and quarantine:**

*If a resident is identified to have COVID-19:*

- Isolate the resident (either in a designated isolation area if already established or in the resident own room if no isolation area is yet established)

- Identify any other ill residents or staff by evaluating them for presence of any symptoms for COVID-19. Isolate and test those with COVID-19 symptoms.

- Review the exposures and movements of COVID resident with COVID-19 illness in the past 14 days in order to establish how they may have been exposed to the infection.
Nebraska ICAP COVID-19 Cohorting Guidance to LTCF

- All LTCF should implement a cohorting plan when a case of COVID-infected is suspected or identified in the facility.

- The facilities should plan to identify red, yellow and green zones where the residents can be cohorted based on their symptoms and exposure risks to COVID-19.

- Facilities are also recommended to establish a transitional zone (gray zone) for asymptomatic patients who are being transferred from other healthcare facility.

## Defining Zones for Cohorting Residents with COVID-19 in LTCF

<table>
<thead>
<tr>
<th>Zone</th>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Red Zone</strong> (Isolation zone)</td>
<td>Dark Red</td>
<td>Residents with Positive COVID-19 test</td>
</tr>
<tr>
<td></td>
<td>Light Red</td>
<td>Symptomatic residents suspected of having COVID-19</td>
</tr>
<tr>
<td><strong>Yellow Zone</strong> (Quarantine zone)</td>
<td></td>
<td>Asymptomatic residents who may have been exposed to COVID-19</td>
</tr>
<tr>
<td><strong>Green Zone</strong> (COVID-19 free zone)</td>
<td></td>
<td>Asymptomatic residents without any exposure to COVID-19</td>
</tr>
<tr>
<td><strong>Gray Zone</strong> (Transitional zone)</td>
<td></td>
<td>Residents who are being transferred from the hospital/outside facilities (but have no known exposure to COVID-19) are usually kept in this zone for 14 days and if remains asymptomatic at the end of 14 day will be moved to Green zone</td>
</tr>
</tbody>
</table>

# Red (Isolation) Zone

- All residents who have tested positive for COVID-19 (Dark Red Zone)
- All residents who are symptomatic and suspected to have COVID-19 even if the test results are not back (Light Red Zone)
- Cohort confirmed positive (dark red) and suspected positive (light red) separately within the Red Zone
- Dedicate separate healthcare personnel to work in Red Zone and preferably assign separate healthcare personnel to dark and light red zone, if possible
- Healthcare workers should wear full COVID-19 level PPE (Gloves, Gown, Mask and eye protection) when taking care of these patients

# Yellow (Quarantine) Zone

All asymptomatic residents who may have been exposed to COVID-19

Several factors have to be taken into consideration in order to determine the risk of exposures. These factors include (but are not limited to):

- Suspected mode of COVID-19 acquisition (for the positive resident)
- Movement of resident with COVID-19 infection within the facility prior to the diagnosis
- Facilities policies on universal masking and visitation
- Compliance of staff with infection control protocols
- Number of residents with suspected or confirmed COVID-19 infection in a unit

Examples of residents who may qualify for being in yellow zones:

- All asymptomatic residents of a single unit/hallway/neighborhood where a few residents are symptomatic, and one has already tested positive for COVID-19
- All asymptomatic residents of a facility where a staff member who tested positive for COVID-19 has worked while having symptoms and multiple residents in various units are now symptomatic
All residents in the yellow zone should be in isolation and healthcare workers should wear COVID-level PPE to take care of these residents.

When PPE supply is inadequate, facility may follow CDC’s extended use/limited reuse PPE protocols for taking care of all residents in yellow zone.

If gowns are in short supply, one option to conserve gowns can be to limit its use for following:
- During care activities where splashes and sprays are anticipated, which typically includes aerosol-generating procedures (such as nebulization, suction etc.)
- During high-contact patient care activities such as dressing, bathing/showering, transferring, providing hygiene, changing linens, changing briefs or assisting with toileting, device care or use, wound care.

https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html
Green (COVID-FREE) Zone

All asymptomatic residents who are not considered to be exposed will be in green zone.

Examples of residents belonging to green zone:

- All asymptomatic residents residing in a unit/hallway/neighborhood where no symptomatic residents have been identified and which is distinctly separated from those unit/hallway/neighborhood where residents have or suspected to have COVID-19.

- All asymptomatic residents in the facility where a COVID-19 case is identified in a resident who was recently admitted from the hospital and has been in quarantine since admission (with staff wearing full COVID-level PPE with all interactions).

If there are symptomatic residents suspected of having COVID-19 in many different units/hallway/neighborhood, then there may not be a green zone in that nursing home (at least at that point in time), as everyone is going to be considered exposed.
Example of a floor plan with:

- **Red Zones**
- **Green Zones**
- **Yellow zones**
Strategies for Establishing Red, Yellow & Green Zones

If nursing home has space/rooms available then it will be preferred to establish red, yellow and green zones in geographically distinct areas within the nursing homes

- For example, if a facility has an empty unit, then the symptomatic/COVID-19 positive residents will be transferred immediately to that area for isolation, which will be considered the red zone
- The unit from where the residents were moved from will now be considered a yellow zone. The rest of the facility will be considered a green zone

If space is limited, red and yellow zones can be established within the same unit/hallway/neighborhood

- For example, when a resident is diagnosed with COVID-19 infection and there is no isolation area available in the facility, the resident room will be considered the red zone and the resident will stay in his/her own room
- The rest of the unit will become the yellow zone. All other units in the facility will be considered a green zone if it is established that residents in those units have not been exposed
- If the resident in the above example have a roommate. The roommate should be transferred to a private room within the yellow zone. (Note: Do not transfer the roommate to green zone)
If COVID-19 cases are identified in more than one unit/hallway/neighborhood, then some of those can become red zone and others yellow zone.

- Example scenario: COVID-19 cases are identified in both north and south hallways and there are additional symptomatic residents residing in those hallways for whom testing is being performed.
  - Move all COVID-19 positive and symptomatic residents in one hallway (cohort confirmed positive residents at one end of that hallway and suspected positive at other end). This will be considered the red zone (including both dark red and light red zone).
  - Move all asymptomatic residents to the other hallway, which will now be considered a yellow zone.
  - If the facility has additional hallways or units that are geographically distinct from the north and south hallway (and no exposure is suspected), then those units/hallways will be considered the green zone. However, if everyone is considered exposed then there is no true green zone in the facility at that point.
Ideally, all zones (including dark and light red zones) should have dedicated staff. However, majority of the nursing homes will not have the capacity to dedicate staff for each zones. Following rules can be applied for dedicating staff to different zones including when staffing is limited.

Dedicating staff to the red zone (preferably separate for dark and light red) is recommended, whenever possible.

Nursing homes should consider avoiding assigning those staff who are working in the red or yellow zones to the green or gray zone to the extent possible.

However, if the facility is making a tough choice that in order to staff a yellow zone, they either have to pull HCW from the green zone or red zone, it will be preferred to assign the red zone staff to cover the yellow zone too.

If staff has to work in multiple zones, it will be preferred that they plan ahead and batch all the care-giving activities together in a way that they finish the work in one zone, to the extent possible, before moving on to the next zone. Follow infection prevention and control procedures very strictly to avoid transmission between zones.
Gray (Transitional) Zones

All nursing homes should consider establishing a transitional zone for new admissions, returning residents from the hospital or those who are travelling in and out of the nursing home (such as the residents who are on dialysis). Transitional zones/units are established to quarantine those residents who are at somewhat higher risk of getting exposed to COVID-19 but have no known exposure to COVID-19.

- Facilities should also consider dedicating separate staff to take care of residents in transitional (gray) zone/unit.
- Facilities may consider implementing COVID-level precautions for the residents admitted to the transition unit based on individual risk assessment.
- These units should be established even when no COVID-case is identified at the facility and may consist of dedicating a geographically distinct area/unit/rooms to returning residents.
- The residents are usually kept in this zone for 14 days and if remains asymptomatic at the end of 14 day will be moved to the Green zone.
NETEC Resources

Shelly Schwedhelm, MSN, RN, NEA-BC
NETEC will continue to build resources, develop online education, and deliver technical training to meet the needs of our partners.

Ask for help!

Send questions to info@netec.org - they will be answered by NETEC SMEs.

Submit a Technical Assistance request at NETEC.org.
Questions and Answers
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