Performing Facility-Wide Testing and Reducing Spread of SARS-CoV-2 in Nursing Homes/LTC Facilities

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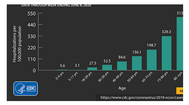
Background

Long-term care facilities (LTCF) include skilled nursing, assisted or senior living, and group homes and/or board and care facilities. As LTCFs typically serve older individuals with chronic health conditions, residents of LTCFs are at greater risk of developing severe disease from COVID-19.

The COVID 19 virus that has been expanding in the world extensive morbidity and mortality especially in the elderly population.
In the US Adults ≥ 65 y/o made up

- 35% of cases
- 45% of hospitalizations
- 53% of ICU admissions
- 80% of deaths
- The greatest risk for severe illness from COVID-19 is among those aged 85 or older.
- Based on such data and adverse outcomes COVID-19 is a serious concern for LTC facilities



Case

93 y/o F with PMH of ITP, UC, RA, Celiac disease and hypothyroidism living at a LTC was found to have a non-productive cough for 2 days, no SOB, no fevers. CXR showed diffuse interstitial disease, right pleural effusion and right sided infiltrate. Due to the findings, patient was started on Levofloxacin for suspected pneumonia.
The next morning she was desaturating and could not get SpO2 above 84% on 15L NC and was sent to the hospital.
In the hospital patient had a temperature of 103.4F, improved with acetaminophen, patient's WBC dropped from 5.4 to 1.0. Repeat CXR was similar to the day prior. Ferritin level elevated at 1364.24 and IL-6 elevated at 67523.73. Patient was admitted for sepsis due to HCAP vs COVID-19.
Patient's family wished to stop aggressive treatment and patient was placed on comfort care and passed away later that evening.
Patient's COVID test came back negative however still had high clinical suspicion due to symptoms as well as lab findings indicating elevated COVID prognostic markers.

Core Practices that should be Present in All LTC facilities

1. **Assign One or More Individuals with Training in Infection Control to Provide On-Site Management of the IPC Program.**
   - Full time roll for one person in LTC that have >100 residents or facilities that have on-site ventilator or hemodialysis
   - CDC has created an online training course to orient individuals to this role

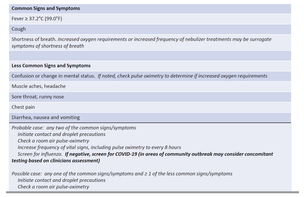
2. Report COVID-19 Cases, facility staffing, and supply information to the National Healthcare Safety Network (NHSN) LTCF COVID-19 Module

3. Educate residents, healthcare Personnel, and visitors about COVID-19

- Provide information about COVID-19 regarding signs and symptoms
- Educate residents and families on COVID-19 , actions the facility is taking to protect them and review visitor restrictions that are in place , emphasize hand hygiene and source control
- Enforce sick leave
  - Create sick leave policies that non-punitive, flexible that allow ill staff to stay home
- Screen everyone at the beginning of shift
  - Take temperature, ask/observe cough, sore throat, or shortness of breath
  - If HCP temp >100 then supervisor should be informed, note that fever may be intermittent or not present in some individuals such as elderly, immunosuppressed or if taking NSAIDS or Tylenol or other fever reducers
  - Ask about possible exposure, HCP may work at multiple facilities
- **Have Masks available for staff and HCP**
  - HCP should wear mask at all time while in facility, cloth face coverings should not be worn by HCP
- **Protocols for new Admissions that are not suspected to have been exposed or infected:**
  - Recommend to keep in separate section of facility (if possible)
  - PPE for intake and first 72 hours, keep isolated
  - Keep in separate section of facility for 14 days to monitor for signs and symptoms
- Keep staff separated from rest of facility
  - Keep staff in one section of the facility for extended periods of time if possible to reduce risk of exposure

Reduce spread

Monitor residents for signs and symptoms. Vitals at least every 12hrs

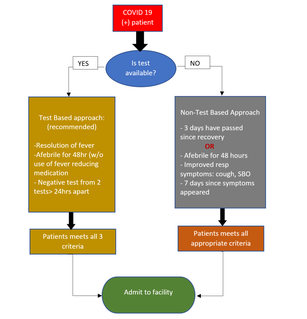


- Put alcohol-based hand sanitizer with 60-95% alcohol in every resident room, outside room and other resident care and common areas
- Perform and maintain an inventory of PPE in facility, notify NHSN when suspecting a shortage

If LTC resident becomes person under investigation (PUI)

Keep patient isolated in room
- If there is roommate place masks on both, do not remove roommate as is already exposed.
- Use respiratory precautions:
  - Masks, face shields/eye protection, gloves, gowns
- Stop nebulizer treatments, to prevent aerosolization, switch to inhalers, use spacers
- Have waste receptacles near entrances to PPE removal
- CDC recommends keeping one area of the facility a designated COVID area

DO NOT send resident to out of facility get tested if stable
Only send to hospital if patient conditions warrants hospitalization



Testing

- Viral testing of residents in nursing homes, with authorized nucleic acid or antigen detection assays, is an important addition to preventing SARS-CoV-2 from entering nursing homes
- Testing should aim for rapid turnaround times, less than 24 hours, to facilitate effective interventions if there is positive case
- Testing same resident more than once in a 24 hour period is not recommended
- Antibody test should not be used as the sole basis to diagnose an active infection
- Test residents with signs or symptoms of COVID as well as asymptomatic close contacts
  - Perform expanded viral testing of ALL residents in nursing home if there is a positive case, a single case in any HCP or nursing home is considered an outbreak
  - If viral testing is limited, CDC suggests testing residents who are close contacts of positive individual
  - Perform initial viral testing of each resident in a nursing home when reopening
  - After initial viral testing of all residents, CDC recommends repeat testing
    - Continue repeat viral testing of all previously negative residents, generally every 3-7 days. Until the testing identifies no new cases of SARS-CoV-2 infection among residents or HCP for a period of at least 14 days since the most positive result
    - If viral test capacity is limited, CDC suggests directing repeat rounds of resting to residents who leave and return to facility or have known exposure to a case

Resources

1. Preparing for COVID-19 in Nursing Homes https://www.cdc.gov/coronavirus/2019-ncov/hcp/long-term-care.html
2. Performing Facility-Wide Testing in Nursing Homes https://www.cdc.gov/coronavirus/2019-ncov/hcp/nursing-homes-facility-wide-testing.html
3. People at Increased Risk of COVID-19 https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html