LTCF COVID-19 Module:
Resident Impact and Facility Capacity Surveillance Reporting Pathway

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Discuss NHSN COVID-19 reporting options for long-term care facilities (LTCFs)

Review steps to access COVID-19 Module and the five surveillance pathways for data reporting

Apply NHSN criteria to surveillance data reporting in the Resident Impact and Facility Capacity pathway of the COVID-19 Module
Overview

National Healthcare Safety Network (NHSN) and COVID-19 Reporting
NATIONAL HEALTHCARE SAFETY NETWORK (NHSN)

- Secure, internet-based surveillance system managed by the Centers for Disease Control and Prevention (CDC)
- Open to a variety of healthcare facilities in the United States
- Tool for the collection, analyses, and summarization of data on healthcare associated infections (HAIs), adverse healthcare events, antimicrobial use and resistance, adherence to prevention practices, exposures, and outcomes
- Collaborations with local and state public health agencies, and professional groups
Optimizing Timely, Systematic Data Collection to Characterize, Inform, and Strengthen

- Surveillance Pathways Data
- COVID-19 Point-of-Care (POC) Test Reporting Tool
- COVID-19 Vaccinations

LTDCF COVID-19 Module

https://www.cdc.gov/nhsn/ltc/covid19/index.html
NHSN Long-term Care Facility Types

- Skilled Nursing Facilities (SNF) / Nursing Homes (NH)
- Assisted Living Facilities (AL) and Residential Care Facilities
- Intermediate Care Facilities for Individuals with Intellectual Disabilities
  (labeled in NHSN as *Intermediate and chronic care facilities for developmentally disabled* -LTC-DEVDIS)
LTCF COVID-19 Module: 5 Surveillance Pathways

Optimizing Timely, Standardized Data Collection to Characterize National Impact, Inform Ongoing Activities, and Direct Resources

- Resident Impact and Facility Compacity
  - Admissions
  - Newly Positive Tests
  - Test Type
  - Vaccination status
  - Re-infections
  - Deaths
  - Influenza
  - Respiratory Illness
  - Co-Infections
  - COVID-19 viral testing
  - Testing resources

- Staff and Personnel Impact
  - Newly Positive Tests
  - Test Type
  - Re-infections
  - COVID-19 Deaths
  - Influenza
  - Respiratory Illness
  - Co-Infections
  - Staffing shortages

- Supplies & Personal Protective Equipment (PPE)
  - PPE supply availability
  - Alcohol-based hand rub

- Ventilator Capacity and Supplies
  - Ventilator availability
  - Use by COVID-19 for residents
  - Supply availability

- Therapeutics
  - Residents treated
  - In-house stock

LTCF COVID-19 Pathways

February 2021
Tips for Surveillance Pathway Data Reporting

- Report in each pathway at least once per week
- Respond to **non-count** questions once per week
- Report only **NEW counts** since the last time counts were reported to NHSN
- Report new counts on the correct date for reporting week when possible

**Important!** Facilities reporting to NHSN do still need to follow state and local public health reporting requirements
One Stop Browsing for NSHN LTCF COVID-19 Module Resources

Visit NSHN LTCF COVID-19 Module web-page for reporting resources

https://www.cdc.gov/nhsn/ltc/covid19/index.html
View Data Collection Forms and Form Instructions

Surveillance Pathway Data Reporting

Options for Reporting Data to NHSN: CSV Import and Manual
NHSN Home Page > COVID-19 > Daily Entry > Calendar View Opens
Use Arrow Icons to Navigate Dates

- Calendar will default to current month
- Use Arrow icons to navigate
Options for Surveillance Pathway Data Reporting

1. Importing CSV files
2. Manual Data entry

Groups; Facility
Each Saved Pathway will be Highlighted as..... Complete or Incomplete

**Record Complete:** Pathway saved with all questions answered

**Record Incomplete:** Pathway saved with one or more unanswered questions

Click a cell to begin entering data on the day for which counts are reported.
**Import and Export Options**

Click a cell to begin entering data on the day for which counts are reported.

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Feb 01</td>
<td>02</td>
<td>03</td>
<td>04</td>
<td>05</td>
</tr>
</tbody>
</table>

**Buttons:**
- Upload CSV...
- Download CSV Template...
- Export CSV...

**Record Statuses:**
- Record Complete
- Record Incomplete

**Tags:**
- Resident
- Staff
- Therapeutics
Considerations for Importing Data to NHSN

Manually entered data will over-ride uploaded data if submission dates are the same

Uploaded data by one group can be overwritten by a second group uploading data for the same LTCF

A facility can choose to have a group report data on its behalf
Resources for Importing Data

- CSV data file templates for facility and groups
- Guidance documents with importing requirements [variable names, values, format, description]

Visit NSHN LTCF COVID-19 Module web-page

https://www.cdc.gov/nhsn/ltc/covid19/index.html
Manual Data Entry
Resident Impact and Facility Capacity Pathway

NHSN COVID-19 Module
Click a cell to begin entering data on the day for which counts are reported.

Manual Data Entry
COVID-19 Module: Five Surveillance Pathways
Click on the Resident Impact and Facility Capacity Pathway tab to Open
Resident Impact and Facility Capacity Pathway

Add COVID-19 Data

Date which counts are reported: 02/03/2021  
Facility CEN: 03300S

Facility Type: LTC/SKLNURS

Resident Impact and Facility Capacity

Staff and Patient Impact  
Supplies and Personal Protective Equipment  
Visitor Capacity and Supplies  
Therapeutics

Data Credited:

Counts should be reported on the correct calendar day (e.g., include only the new counts for the calendar day, if prior counts were not collected). If the count is zero, a "0" must enter as the response. A blank entry is equivalent to missing data. NON count questions should be answered one calendar day during the reporting period.

SARS-CoV-2 TESTING:

Since the last date of entry in the Module, has your LTCF performed SARS-CoV-2 (COVID-19) viral testing?

Yes: Indicate counts of COVID-19 viral testing that were performed:
1. PCR: Indicate the date when the last test for COVID-19 was performed on residents.
2. Other point-of-care test for COVID-19 performed on residents.
3. Nonpoint-of-care test for COVID-19 performed on staff or facility personnel?

During the past two weeks, on average how long did it take your LTCF to receive SARS-CoV-2 (COVID-19) viral test results from NGI point-of-care tests?

Testing: Does the LTCF have the ability to perform or to obtain resources for performing SARS-CoV-2 viral testing (NAAT/PCR) on staff and/or facility personnel within the next 7 days, if needed?

Testing Site: Does the LTCF have the ability to perform or to obtain resources for performing SARS-CoV-2 viral testing (NAAT/PCR) on staff and/or facility personnel within the next 7 days, if needed?

Save  
Cancel
Resident Impact and Facility Capacity Pathway

Facility Capacity: *All Beds* and *Current Census*

- **All Beds**: Total number of licensed resident beds in the facility. Includes private and/or non-private pay beds.
- **Current Census**: Total number of occupied beds on day of data entry.

*Will auto-populate after first entry*

*Required to save*
Resident Impact and Facility Capacity Pathway

Admissions: COVID-19 Admissions and Re-admissions

- Includes newly admitted/re-admitted residents since last date “Admissions” count reported to NHSN
- Excludes recovered residents
- Excludes residents preemptively isolated
Resident Impact and Facility Capacity Pathway

**Positive Tests: NEW counts only**

- **A resident(s)** newly positive for COVID-19 since last date “**Positive Tests**” count reported to NHSN
- Based on initial positive viral test result from either an antigen or NAAT [PCR] test
- Re-infected resident if more than 90 days between the initial and current positive viral test.
Resident Impact and Facility Capacity Pathway

**Test Type:** Required if *Positive Tests* count is greater than 0

For each resident included in the *Positive Tests* count, indicate the single or series of viral testing methods performed *within 2 calendar days* from the initial test.
Resident Impact and Facility Capacity Pathway

Example: *Test Type*

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td><strong>POSITIVE TESTS</strong> (previously called “Confirmed”): Number of residents newly positive for COVID-19 based on a viral test result</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TEST TYPE:** Based on the number of reported Positive Tests, indicate how many were tested using each of the following:

- 3: Positive SARS-CoV-2 antigen test only [no other testing performed]
- 2: Positive SARS-CoV-2 NAAT (PCR) [no other testing performed]
- 4: Positive SARS-CoV-2 antigen test and negative SARS-CoV-2 NAAT (PCR)
- 1: Any other combination of SARS-CoV-2 NAAT (PCR) and/or antigen test(s) with at least one positive test

**Total count for Test Type must equal Positive Tests count**
Resident Impact and Facility Capacity Pathway

*Calculated Total Confirmed: Auto-populated based on responses to Test Type*

CALCULATED TOTAL CONFIRMED *(not editable by user):*

NHSN calculated metric used to identify total confirmed cases of COVID-19 by removing probable false positive antigen results
### Resident Impact and Facility Capacity Pathway

#### Example: Calculated Total Confirmed

<table>
<thead>
<tr>
<th>POSITIVE TESTS (previously called “Confirmed”): Number of residents newly positive for COVID-19 based on a viral test result.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TEST TYPE:</strong> Based on the number of reported Positive Tests, indicate how many were tested using each of the following:</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td><strong>Positive SARS-CoV-2 antigen test only [no other testing performed]</strong></td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td><strong>Positive SARS-CoV-2 NAAT (PCR) [no other testing performed]</strong></td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td><strong>Positive SARS-CoV-2 antigen test and negative SARS-CoV-2 NAAT (PCR)</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td><strong>Any other combination of SARS-CoV-2 NAAT (PCR) and/or antigen test(s) with at least one positive test</strong></td>
</tr>
</tbody>
</table>

'Test Type' should equal the total for Positive Tests.

- Only include if the two tests were performed within 2 days of each other. Otherwise, count first test only.

\[
\text{CALCULATED TOTAL CONFIRMED} \quad (\text{not editable by user}): 10 - 4 = 6
\]
### Vaccination Status

Specify vaccination status for each resident included in the Positive Tests count. Excludes potential false positives.

- **Sub-question of Positive Tests**
- The default in the application for responses is “0”
- Replace “0” where count is greater than “0” for reporting period

**Vaccinated:** At least 14 days between the most recent COVID-19 vaccine dose received and the specimen collection date for the newly positive viral test used to detect SARS-CoV-2 (COVID-19).

![Table for Vaccination Status](image)

14 days or more before specimen collection of newly positive SARS-CoV-2 test result.
Vaccination Status

Day of vaccination is equal to Day 1
**TEST TYPE:** Based on the number of reported Positive Tests, indicate how many were tested using each of the following:

3. **Positive SARS-CoV-2 antigen test only [no other testing performed]**
2. **Positive SARS-CoV-2 NAAT (PCR) [no other testing performed]**
4. **Positive SARS-CoV-2 antigen test and negative SARS-CoV-2 NAAT (PCR)**
1. **Any other combination of SARS-CoV-2 NAAT (PCR) and/or antigen test(s) with at least one positive test**

**VACCINATION STATUS:** For positives in each test type category, indicate how many residents received COVID-19 vaccination before the positive test:

- **Positive SARS-CoV-2 antigen test only [no other testing performed]:**
  - NOVACC - Not vaccinated with COVID-19 vaccine
  - MODERNA - Only dose 1 of Moderna COVID-19 vaccine
  - MODERNA - Dose 1 and dose 2 of Moderna COVID-19 vaccine
  - PFIZERBION - Only dose 1 of Pfizer-BioNTech COVID-19 vaccine
  - PFIZERBION - Dose 1 and dose 2 of Pfizer-BioNTech COVID-19 vaccine

- **Positive SARS-CoV-2 NAAT (PCR) [no other testing performed]:**
  - NOVACC - Not vaccinated with COVID-19 vaccine
  - MODERNA - Only dose 1 of Moderna COVID-19 vaccine
  - MODERNA - Dose 1 and dose 2 of Moderna COVID-19 vaccine
  - PFIZERBION - Only dose 1 of Pfizer-BioNTech COVID-19 vaccine
  - PFIZERBION - Dose 1 and dose 2 of Pfizer-BioNTech COVID-19 vaccine

- **Any other combination of SARS-CoV-2 NAAT (PCR) and/or antigen test(s) with at least one other positive test:**
  - NOVACC - Not vaccinated with COVID-19 vaccine
  - MODERNA - Only dose 1 of Moderna COVID-19 vaccine
  - MODERNA - Dose 1 and dose 2 of Moderna COVID-19 vaccine
  - PFIZERBION - Only dose 1 of Pfizer-BioNTech COVID-19 vaccine
  - PFIZERBION - Dose 1 and dose 2 of Pfizer-BioNTech COVID-19 vaccine

Counts must match for each for Test Type category.
Resident Impact and Facility Capacity Pathway

Re-Infections: A sub-set of count for Positive Tests

- Sub-set of the reported Positive Tests count
- Number of residents who had a positive SARS-CoV-2 viral test result more than 90 days prior to current specimen collection date
Resident Impact and Facility Capacity Pathway

Example: Re-infections

- **POSITIVE TESTS** (previously called "Confirmed"): Number of residents newly positive for COVID-19 based on a viral test result.

- **RE-INFECTIONS**: Based on the number of reported Positive Tests, indicate how many met NHSN definition for re-infection.
  - **SYMPTOMATIC**: Based on the number of reported Re-Infections, indicate how many had signs and/or symptoms consistent with COVID-19.
  - **ASYMPTOMATIC**: Based on the number of reported Re-Infections, indicate how many did not have signs and/or symptoms consistent with COVID-19.

- Symptomatic vs asymptomatic is subset of re-infection count
- Enter count(s) for symptomatic and/or asymptomatic only if Re-Infection count is greater than “0”
- If the answer is “0” enter a “0” in the box
Resident Impact and Facility Capacity Pathway

*Total Deaths*: ALL causes, including COVID-19

- Includes new deaths from **any cause** since last date “Total Deaths” were reported to NHSN
- Include new deaths that occur in LTCF or elsewhere unless resident was officially discharged from LTCF [not expected to return]
- Includes new deaths from COVID-19
Resident Impact and Facility Capacity Pathway

**COVID-19 Deaths:** Sub-set of Total Deaths Count

<table>
<thead>
<tr>
<th>TOTAL DEATHS: Number of residents who have died for any reason in the facility or another location:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☑️COVID-19 DEATHS: Based on the number of reported Total Deaths, indicate the number of residents with COVID-19 who died in the facility or another location.</td>
<td></td>
</tr>
</tbody>
</table>

**COVID-19 Deaths:** Count includes new resident deaths when death is a result of COVID-19 infection and/or complication.

| TOTAL DEATHS: Number of residents who have died for any reason in the facility or another location: | 3 |
| ☑️ COVID-19 DEATHS: Based on the number of reported Total Deaths, indicate the number of residents with COVID-19 who died in the facility or another location. |
Resident Impact and Facility Capacity Pathway

NON-COVID-19 Respiratory illness: *Influenza*

New positive influenza test result
Resident Impact and Facility Capacity Pathway

New onset of respiratory illness symptoms AND either negative viral test results for influenza (flu) and/or SARS-CoV-2 OR no testing performed

Respiratory Illness: Number of Residents with acute respiratory illness symptoms, excluding COVID-19 and/or influenza (flu).

- Examples: New cough, decrease in oxygen saturation, positive chest x-ray, worsening respiratory symptoms in resident with chronic lung or heart condition
- Count a resident one-time during course of illness
- A resident may be counted in future episodes after a complete recovery
Resident Impact and Facility Capacity Pathway

Co-Infections: *Influenza and COVID-19*

- Positive viral test result for both influenza (flu) AND SARS-CoV-2 (COVID-19).
- Include if the positive viral specimens (flu and COVID-19) are collected within 7 calendar days of one another.
- A resident included in the *Influenza and COVID-19* count is also to be included in the individual counts for both *Influenza Positive Tests* and *COVID-19 Positive Tests*.
Resident Impact and Facility Capacity Pathway

Example: *Influenza and COVID-19*

<table>
<thead>
<tr>
<th>Resident Impact for Co-Infections</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> INFLUENZA and COVID-19: Number of residents with a confirmed co-infection with influenza (flu) and SARS-CoV-2 (COVID-19).</td>
</tr>
</tbody>
</table>

A resident included in the *Co-Infection* count is also to be included in the individual counts for both *Influenza* and *Positive Tests*.

<table>
<thead>
<tr>
<th>Resident Impact for Non COVID-19 (SARS-CoV-2) Respiratory Illness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10</strong> POSITIVE TESTS (previously called &quot;Confirmed&quot;): Number of residents newly positive for COVID-19 based on a viral test result.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resident Impact for New Influenza (flu)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3</strong> INFLUENZA: Number of Residents with new influenza (flu).</td>
</tr>
</tbody>
</table>
Resident Impact and Facility Capacity Pathway

SARS-CoV-2 Viral Testing: Residents and staff/facility personnel

SARS-CoV-2 TESTING

Since the last date of data entry in the Module, has your LTCF performed SARS-CoV-2 (COVID-19) viral testing?

If YES, indicate counts of COVID-19 viral testing that were performed:

- **POCRESIDENT**: Since the last date of data entry in the Module, how many COVID-19 point-of-care tests has the LTCF performed on residents?
- **POCSTAFF**: Since the last date of data entry in the Module, how many COVID-19 point-of-care tests has the LTCF performed on staff and/or facility personnel?
- **NONPOCRESIDENT**: Since the last date of data entry in the Module, how many COVID-19 NON point-of-care tests has the LTCF performed on residents?
- **NONPOCSTAFF**: Since the last date of data entry in the Module, how many COVID-19 NON point-of-care tests has the LTCF performed on staff and/or facility personnel?
Resident Impact and Facility Capacity Pathway

SARS-CoV-2 Viral Testing: Residents and staff/facility personnel

During the past two weeks, on average how long did it take your LTCF to receive SARS-CoV-2 (COVID-19) viral test results from NON point-of-care tests?

TESTINGSTAFF: Does the LTCF have the ability to perform or to obtain resources for performing SARS-CoV-2 viral testing (NAAT [PCR] or antigen) on all staff and facility personnel within the next 7 days, if needed?

TESTINGRESIDENT: Does the LTCF have the ability to perform or to obtain resources for performing SARS-CoV-2 viral testing (NAAT [PCR] or antigen) on all current residents within the next 7 days, if needed?
Questions requiring a count

- If the answer is zero (0), enter a “0” as the response. If left blank, will appear as missing data.
- Only include NEW counts since the last time counts were collected for reporting to NHSN.
- Do not include a resident/staff in the same count every day.
Take aways and reminders

Reporting Frequency for count and non-count questions

- If new counts are reported daily, a weekly total count is not needed

- If reporting more than once per week, do not include same resident/staff in more than one count for the question

- Non-count questions are to be answered once a week
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.