

Long-Term Care (LTC) Respiratory Surveillance Line List

Instructions for the Long-Term Care (LTC) Respiratory Surveillance Line List

The Respiratory Surveillance Line List provides a template for data collection and active monitoring of both residents and staff during a suspected respiratory illness cluster or outbreak at a nursing home or other LTC facility. Using this tool will provide facilities with a line listing of all individuals monitored for or meeting the case definition for the outbreak illness.

Each row represents an individual resident or staff member who may have been affected by the outbreak illness (i.e., case). The information in the columns of the worksheet capture data on the case demographics, location in the facility, clinical signs/symptoms, diagnostic testing results and outcomes. While this template was developed to help with data collection for common respiratory illness outbreaks the data fields can be modified to reflect the needs of the individual facility during other outbreaks.

Information gathered on the worksheet should be used to build a case definition, determine the duration of outbreak illness, support monitoring for and rapid identification of new cases, and assist with implementation of infection control measures by identifying units where cases are occurring.

LTC Respiratory Surveillance Line List

Instruction Sheet for Completion of the Long-Term Care (LTC) Respiratory Surveillance Line List

Section A: Case Demographics

In the space provided per column, fill in each line with name, age and sex of each person affected by the current outbreak at your facility. Please differentiate residents (R) from staff (S).

*Staff includes all healthcare personnel (e.g., nurses, physicians and other providers, therapists, food services, environmental services) whether employed, contracted, consulting or volunteer.

For residents only: Short stay (S) residents are often admitted directly from hospitals, require skilled nursing or rehabilitation care, and are expected to have a length of stay less than 100 days. Long stay (L) residents are admitted to receive residential care or nursing support and are expected to have a length of stay that is 100 days or more. Indicate the stay type for each resident in this column.

Section B: Case Location

For resident only: Indicate the building (Bldg), unit or floor where the resident is located and the room and bed number for each resident being monitored for outbreak illness. *Answers may vary by facility due to differences in the names of resident care locations.

For staff only: For each staff member listed, indicate the floor, unit or location where that staff member had been primarily working at the time of illness onset.

Section C: Signs and Symptoms (s/s)

Symptom onset date: Record the date (month/day) each person developed or reported signs/symptoms (e.g., fever, cough, shortness of breath) consistent with the outbreak illness.

Symptoms: Fill in the box (Y or N) indicating whether or not a resident or staff member experienced each of the signs/symptoms listed within this section.

Additional documented s/s (select all codes that apply): In the space provided, record the code that corresponds to any additional s/s the resident or staff member experienced. If a resident or staff member experienced a s/s that is not listed, please use the space provided by "Other" to specify the s/s.

H – headache, SB – shortness of breath, LA – loss of appetite, C – chills, ST – sore throat, O – other: Specify _____

Section D: Diagnostics

Chest x-ray: Fill in the box (Y or N) indicating whether or not a chest x-ray was performed.

Type of specimen collected: (Select all codes that apply): In the space provided, record the type of specimen collected for laboratory testing. If the type of specimen collected is not listed, please use the space provided by "Other" to specify the specimen type.

NP – nasopharyngeal swab, OP – oropharyngeal swab, S – sputum, U – urine, O – Other: Specify _____

Date of collection: Record the date (month/day) of specimen collection.

Type of test ordered (select all codes that apply): In the space provided, record the code that corresponds to whether a diagnostic laboratory test was performed for each individual. If no test was performed, indicate "zero". If the laboratory test used to identify the pathogen is not listed, please use the space provided by "Other" to specify the type of test ordered.

0 – No test performed, 1 – Culture, 2 – Polymerase Chain Reaction (PCR), also called nucleic acid amplification testing includes multiplex PCR tests for several organisms using a single specimen, 3 – Urine Antigen, 4 – Other: Specify _____

Pathogen detected (select all codes that apply): In the space provided, record the code that corresponds to the bacterial and/or viral organisms that were identified through laboratory testing. If the test performed was negative, indicate "zero". If a pathogen not listed was identified through laboratory testing, please use the space provided by "Other" to specify the organism.

0 – Negative results; Bacterial: 1 – *Streptococcus pneumoniae*, 2 – *Legionella*, 3 – *Mycoplasma*

Viral: 4 – Influenza, 5 – Respiratory syncytial virus (RSV), 6 – Human metapneumovirus (HMPV), 7 – Other: Specify _____

Section E: Outcome During Outbreak

Symptom Resolution Date: Record the date that each person recovered from the outbreak illness and was symptom free for 24 hours.

Hospitalized: Fill in the box (Y or N) indicating whether or not hospitalization was required for a resident or staff member during the outbreak period. **Note: The outbreak period is the time from the date of symptom onset for the first case to date of symptom resolution for the last case.**

Died: Fill in the box (Y or N) indicating whether or not a resident or staff member expired during the outbreak period.

Case (C) or Not a case (leave blank): Based on the clinical criteria and laboratory findings collected during the outbreak investigation, record whether or not each resident or staff member meets the case definition (C) or is not a case (leave space blank).

LTC Respiratory Surveillance Line List

Date: ____/____/____

This worksheet was created to help nursing homes and other LTC facilities detect, characterize and investigate a possible outbreak of respiratory illness.

A. Case Demographics				B. Case Location			C. Signs and Symptoms (s/s)				D. Diagnostics				E. Outcome During Outbreak ^A						
Name	Age	Sex (M/F)	Resident (R) or Staff (S)	<u>Residents Only</u> : Short stay (S) or Long stay (L)	<u>Residents Only</u> : Bldg/Floor	<u>Residents Only</u> : Room/Bed	<u>Staff Only</u> : Primary floor assignment	Symptom onset date: (mm/dd)	Fever ^B (Y/N)	Cough (Y/N)	Myalgia (body ache) (Y/N)	Additional documented s/s (select all codes that apply) H – headache, SB – shortness of breath, LA – loss of appetite, C – chills, ST – sore throat, O – other: Specify _____	Chest x-ray (Y/N)	Type of specimen collected (select all codes that apply) NP – nasopharyngeal swab, OP – oropharyngeal swab, U – urine, S – sputum, Other: Specify _____	Date of collection: (mm/dd)	Type of test ordered (Select all codes that apply) 0 – No test performed, 1 – Culture, 2 – PCR, 3 – Urine Antigen, 4 – Other: Specify _____	Pathogen Detected (Select all codes that apply) 0 – Negative results Bacterial: 1 – <i>S. pneumoniae</i> , 2 – <i>Legionella</i> , 3 – <i>Mycoplasma</i> Viral: 4 – Influenza, 5 – RSV, 6 – HMPV 7 – Other: Specify _____	Symptom resolution date: (mm/dd)	Hospitalized (Y/N)	Died (Y/N)	Case (C) or Not a case (leave blank)
1.																					
2.																					
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

If faxing to your local Public Health Department, please complete the following information:

Facility Name: _____ City, State: _____ County: _____

Contact Person: _____ Phone: _____ Email: _____

^A **Note:** Outbreak defined as date of first case to resolution of last case.

^B **Definition of Fever** (Stone N, Ashraf MS, Calder, J, et al. Surveillance Definitions in Long-Term Care Facilities: Revisiting the McGeer Criteria. Infect Control Hosp Epidemiol 2012; 33:965-977):
(1) a single oral temp > 37.8°C (100°F) or (2) repeated oral temps > 37.2°C (99°F) or rectal temps > 37.5°C (99.5°F) or (3) a single temp > 1.1°C (2°F) over baseline from any site (oral, tympanic, axillary).

Long-Term Care (LTC) Respiratory Surveillance Outbreak Summary

Instructions for the Long-Term Care (LTC) Respiratory Surveillance Outbreak Summary

The Respiratory Outbreak Summary Form was created to help nursing homes and other LTC providers summarize the findings, actions and outcomes of an outbreak investigation and response. Completing this outbreak form will provide LTC facilities and other public health partners with a record of a facility’s outbreak experience and highlight areas for outbreak prevention and response.

Instructions for each section of the form are described below. This form should be filled out by the designated infection preventionist with support from other clinicians in your facility (e.g., front-line nursing staff, physicians or other practitioners, consultant pharmacist, laboratory).

A LTC facility can use this form for internal documentation and dissemination of outbreak response activities. Facilities are encouraged to share this information with the appropriate public health authority by contacting the local health department. Should a facility decide to share this form with the local/state public health officials, please include facility contact information at the bottom of the form.

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LTC Respiratory Surveillance Outbreak Summary

Section 1: Facility Information

Health Dept. Contact Name and Phone Number: A LTC facility should have contact information (name or division, phone number) for the local and/or state health department for outbreak guidance and reporting purposes. Enter the health dept. contact information your facility used to request support during an outbreak.

Date First Notified Local Health Dept: Record the date you first contacted local or state public health during this outbreak at your facility.

Total # of residents at facility: Document the total number of residents in the facility at the time of the outbreak.

Total # of employees: Document the total number of staff working in the facility at the time of the outbreak. Staff includes all healthcare personnel (e.g., nurses, providers, consultants, therapists, food services, environmental services) whether employed, contracted or volunteer.

Summary Form Status: Information in the summary form may be completed over the course of the outbreak. Record the dates your facility started collecting information on the form and completed the outbreak summary report.

Section 2: Influenza Vaccination Status

Total # of residents vaccinated: Record the total number of residents that received the Flu Vaccine within the past year.

Total # of staff vaccinated: Record the total number of staff that received the Flu Vaccine within the past year.

Section 3: Pneumococcal Vaccination Status

Total # of residents vaccinated: Record the total number of residents that received at least one dose of the Pneumococcal Vaccine (either polysaccharide or conjugate).

Section 4: Case Definition

Provide a description of the criteria used to determine whether a resident should be considered a case in this outbreak. The description can include: signs/symptoms, presence of positive diagnostic tests, location within facility, and the timeframe during which individuals may have been involved in the outbreak (e.g., within the past 4 weeks).

Example: A Respiratory illness case includes any resident with the following symptoms: cough, shortness of breath, sputum production and fever residing on Units 2E or 2W, with onset of symptoms between Jan 15th and Feb 1st with or without a sputum specimen positive for Streptococcus pneumoniae.

Section 5: Outbreak Period Information

Outbreak start: (Date of symptom onset of first case): Record the date the first person developed signs/symptoms (e.g., fever, cough, shortness of breath) consistent with the outbreak illness.

Average length of illness: Estimate the average number of days it takes for signs/symptoms to resolve, based on clinical course among residents/staff affected by the outbreak illness.

Outbreak end: (Symptom resolution date of last case): Record the date the last person recovered from the outbreak illness and became symptom free for 24 hours.

Total # of Cases: Document the number of residents and staff (if applicable) who were identified as having the outbreak illness.

LTC Respiratory Surveillance Outbreak Summary

Section 6: Staff Information

Were any ill staff delivering resident care? Check yes or no.

- If yes, try to estimate the number of ill staff involved in resident care based on date when a staff member reported symptoms compared with the date when/if staff member was excused from work.

Did any staff seek medical attention for an acute respiratory infection at any time during the outbreak? Check yes or no.

- If yes, try to estimate the number of staff that sought medical attention based on self-report.

If available, indicate if ill staff received care at an emergency department (ED). Check yes or no and estimate number of staff.

If available, indicate if ill staff was hospitalized as a result of the outbreak illness. Check yes or no and estimate number of staff.

Section 7: Diagnostic and Laboratory Tests

Chest x-ray: Fill in the box (yes or no) indicating whether or not residents and staff had an x-ray done as a part of the diagnosis of the outbreak illness. If yes, please record the # of individuals who received chest x-ray and the # of x-rays that had abnormal findings consistent with the outbreak illness.

List all bacterial (e.g., *S. pneumoniae*, *Mycoplasma*); viral (e.g., Influenza, RSV) organisms that were identified through laboratory testing; Use the space provided by "Other" to specify if a parasite or non-infectious cause of respiratory illness was identified.

Diagnostic testing results: In the table, each row corresponds to an organism identified during the outbreak. Use the column to specify the type of testing used to identify each organism (either microbiologic culture, PCR (also known as nucleic acid amplification) or specify if a different diagnostic test was used (e.g., Legionella urinary antigen). For each test type, document the total number of residents and staff that received laboratory confirmation by that test.

Section 8: If Influenza Identified During Outbreak:

Antiviral Treatment: Fill in the box (yes or no) indicating whether or not antiviral treatment was offered. If antiviral treatment was offered, please record the total number of residents and staff that received treatment.

Antiviral Prophylaxis Offered: Fill in the box (yes or no) indicating whether or not antiviral prophylaxis was offered to any additional residents, staff or family members at risk for infection due to the outbreak. If antiviral prophylaxis was offered, please record the total number of residents and staff that received prophylaxis.

Section 9: Resident Outcome

Hospitalizations: During the outbreak, fill in the box (yes or no) indicating whether or not hospitalization was required for any residents. If yes, please record how many residents were hospitalized.

Deaths: During the outbreak, fill in the box (yes or no) indicating whether or not any residents died. If yes, please record how many residents died during the outbreak period (deaths should be recorded even if unable to determine if outbreak illness was the cause).

Section 10: Facility Outbreak Control Interventions

In this section, check if any of the infection control strategies listed were implemented at your facility in response to the outbreak. If a practice or policy change was implemented during the outbreak that is not listed (e.g., new cleaning/disinfecting products used, change to employee sick leave policy), specify in the space provided by "Other". For each strategy, record the date the change was implemented (if available).

Section 11: # of New Cases Per Day

Please fill in the chart with the number of new cases that are residents and staff per day. Once each day is complete, add the number of new cases of residents and staff and place the sum in total column for that corresponding day.

In the space provided under the chart, record the date which corresponds to Day 1 on the outbreak period (i.e., date of outbreak start).

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Facility Licensed by State: Fill in the box (yes or no) indicating whether or not the facility is licensed by the state.

Facility Certified by CMS: Fill in the box (yes or no) indicating whether or not the facility is certified by the Center for Medicare and Medicaid Services (CMS).

Facility Type: Check that box that best describes the type of care the facility provides: Nursing home, Intermediate Care Facility, Assisted living Facility or Other (specify).

of Licensed Beds: Document the total number of licensed beds at the facility.

of staff employees: Document the total number of facility employed staff working in the facility at the time of the outbreak.

of contract employees: Document the total number of contract/consulting providers working in the facility at the time of the outbreak.

LTC Respiratory Surveillance Outbreak Summary

1. Facility Information

Health Dept. Contact Name: _____ Health Dept. Contact Phone Number: _____
 Health Dept. Fax Number: _____ Date First Notified Local Health Dept.: ___/___/___
 Total # of residents at facility: _____ Total # of employees (staff and contract personnel): _____
 Summary Form Status: Date initiated: ___/___/___ Date completed: ___/___/___

2. Influenza Vaccination Status

Total # of residents vaccinated: _____ Total # of staff vaccinated: _____

3. Pneumococcal Vaccination Status

Total # of residents vaccinated: _____

4. Symptomatic Case Definition

Summarize the definition of a symptomatic case during the outbreak, including symptoms, time range and location (if appropriate) within facility:

5. Outbreak Period Information

Outbreak start: (Date of symptom onset of first case): ___/___/___ Average length of illness: _____ days Outbreak end: (Symptom resolution date of last case): ___/___/___	Total # of Cases Residents: _____ Staff: _____
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6. Staff Information

Were any ill staff delivering resident care at the beginning of the outbreak? Yes No If yes, how many: _____
 Did any ill staff seek outside medical care at the beginning or during the outbreak? Yes No If yes, how many: _____
 ED Visit: Yes No If yes, how many: _____ Hospitalization: Yes No If yes, how many: _____

7. Diagnostic and Laboratory Tests

Chest x-ray: Yes No # performed: _____ # abnormal: _____
 Which organisms were identified through laboratory testing:
Bacterial: Specify _____ **Viral:** Specify _____ **Other:** Specify _____

Total # of Laboratory Confirmed Cases	Culture	PCR	Other Diagnostic Tests: Specify _____
Organism 1 _____	Residents: _____ Staff: _____	Residents: _____ Staff: _____	Residents: _____ Staff: _____
Organism 2 _____	Residents: _____ Staff: _____	Residents: _____ Staff: _____	Residents: _____ Staff: _____
Organism 3 _____	Residents: _____ Staff: _____	Residents: _____ Staff: _____	Residents: _____ Staff: _____

8. If Influenza Identified During Outbreak:

Antiviral **treatment** offered: Yes No Antiviral **prophylaxis** offered: Yes No
 If yes, indicate total # : Residents _____ Staff _____ If yes, indicate total # : Residents _____ Staff _____

9. Resident Outcome

Hospitalizations: Yes No If yes, how many: _____ Deaths: Yes No If yes, how many: _____

10. Facility Outbreak Control Measures

- | | |
|---|--|
| <input type="checkbox"/> Educated on hand hygiene practices: Date: _____
<input type="checkbox"/> Implemented transmission-based precautions: Date: _____
<input type="checkbox"/> Dedicate staff to care for only affected residents: Date: _____
<input type="checkbox"/> Suspend activities on affected unit: Date: _____
<input type="checkbox"/> Notified family/visitors about outbreak: If yes, Date: _____
<input type="checkbox"/> Other: _____ | <input type="checkbox"/> Monitored appropriate HH and PPE use by staff: Date: _____
<input type="checkbox"/> Cohorted ill residents within unit/building: Date: _____
<input type="checkbox"/> Placed ill staff on furlough: Date: _____
<input type="checkbox"/> Restricted new admissions to affected unit: Date: _____
<input type="checkbox"/> Educated family/visitors about outbreak: If yes, Date: _____
<input type="checkbox"/> Other: _____ |
|---|--|

11. # of New Cases Per Day

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
Residents														
Staff														
Total														

Indicate Date of Day 1: ___/___/___ List units/floors involved in the outbreak: _____

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Facility Licensed by State: Yes No Facility ID: _____
 Facility Certified by CMS: Yes No Facility Type: Nursing home Assisted living Other (specify): _____
 # of Licensed Beds: _____ # of staff employees: _____ # of contract employees: _____