

Tool for Public Health Staff Responding to Common Cluster Surveillance Questions

This document outlines how cluster data are categorized and counted in the surveillance system. These timeframes and definitions apply to attributing cases to a cluster and should not be considered guidelines for facility testing and infection control recommendations. For additional information on response activities in LTCFs, please refer to the [Centers for Disease Control and Prevention infection prevention and control recommendations](#) and [Centers for Medicare & Medicaid Services \(CMS\) standards on facility testing](#) or review the responses to healthcare specific questions below.

What is the definition of a COVID-19 cluster?

A **confirmed COVID-19 cluster** is two (2) or more [confirmed or probable cases of COVID-19](#) that are linked by the same location of exposure (e.g., workplace, long-term care facility, grocery store, etc.) or exposure event (e.g., work party, vacation, etc.) within a 14-day period that is **not a household or school-associated exposure**.

A **confirmed school-associated cluster** is three (3) or more confirmed or probable cases of COVID-19 within a specified core group (e.g., extracurricular activity, classroom, etc.) who were physically present during a core group activity in the 14 days prior to illness onset or positive test result. For additional information on school cluster definitions, please see [Council of State and Territorial Epidemiologists \(CSTE\) Guidance](#).

A **watch list cluster** is one (1) confirmed or probable case of COVID-19 in a non-school setting **or** two or more COVID-19 cases in a school setting where a confirmed link between cases cannot be identified.

How do I know when to attribute a case to a facility or setting?

For **long-term care facilities** (LTCFs): Resident cases are attributed to a facility's cluster count if the SARS-CoV-2 infection occurred in the nursing home. It does not include cases among residents who were known to have SARS-CoV-2 infection on admission to the facility and are placed in transmission-based precautions (TBP) or residents who are admitted directly into TBP

and develop COVID-19 before precautions are discontinued. Staff cases should be counted towards a facility's count if the staff member worked at the facility while infectious.¹

For **non-school and non-long-term care facilities** (LTCFs): cases will be attributed to a facility or setting where the patient was located five (5) days prior to symptom onset date or specimen collection date (if asymptomatic).

Any individual confirmed and probable cases resulting from **secondary transmission** from an outbreak-associated case in a family member or close contact of a worker who is not employed by the business/employer should not be classified as outbreak-associated and not included in outbreak case count.

What guidance should be provided to a healthcare facility with a cluster?

Facilities should refer to the Centers for Disease Control and Prevention (CDC) for updated guidance on [infection prevention and control recommendations for healthcare personnel during the Coronavirus disease 2019 \(COVID-19\) pandemic](#) and [managing healthcare personnel with SARS-CoV-2 infection or exposure to SARS-CoV-2](#). Identification of a positive resident or healthcare worker in a nursing home or long-term care facility may require outbreak response testing at the facility as outlined in CDC and [Centers for Medicare and Medicaid Services guidance](#) (QSO-20-38-NH).

What if assistance or education is needed for clusters involving healthcare facilities and/or regarding infection control practices at a facility?

If assistance is needed at a facility regarding infection control practices or healthcare staffing concerns, please email HAI.Health@tn.gov and COVID19.Cluster@tn.gov. Someone from the Healthcare-Associated Infections (HAI) team will reach out to you.

When can a cluster investigation be "closed"?

A cluster investigation can be considered "closed" after 14 days have passed with no new cases identified within that period of time. Some cluster response activities such as outbreak testing may be discontinued prior to the administrative closure of a cluster.

-
1. Determining the time period when the patient, visitor, or HCP with confirmed SARS-CoV-2 infection could have been infectious:
 - a. For individuals with confirmed COVID-19 who developed symptoms, consider the exposure window to be 2 days before symptom onset through the time period when the individual meets [criteria for discontinuation of Transmission-Based Precautions](#)
 - b. For individuals with confirmed SARS-CoV-2 infection who never developed symptoms, determining the infectious period can be challenging. In these situations, collecting information about when the asymptomatic individual with SARS-CoV-2 infection may have been exposed could help inform the period when they were infectious.
 - i. If the date of exposure cannot be determined, although the infectious period could be longer, it is reasonable to use a starting point of 2 days prior to the positive test through the time period when the individual meets criteria for discontinuation of Transmission-Based Precautions for contact tracing.