

Nursing Home COVID-19 Data Quality – Frequently Asked Questions

The data posted by CMS is what nursing homes submitted through the Centers of Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN) system. CMS and CDC perform quality assurance checks on the data and may suppress data that appear to be erroneous. The data is not altered from what nursing homes report to the NHSN system. Data regarding numbers of new cases, suspected cases, or deaths are aggregated. Nursing homes have the ability to correct their data so future postings include corrected data.

1) How can there be more confirmed COVID-19 cases than beds in a nursing home?

The nursing home data posted reflects cumulative cases and deaths of COVID-19 reported in a facility. A nursing home may report more confirmed COVID-19 cases than beds because they may encounter a large number of admissions and discharges of residents with COVID-19, resulting in more cumulative cases of COVID-19 over time than the number of beds at any one time.

This may also be due to a data entry error on the part of the facility – for example, a nursing home may be entering cumulative numbers of confirmed COVID-19 cases in a field where the facility should only be entering the number of new cases.

2) How can there be more COVID-19 deaths in a nursing home than confirmed COVID-19 cases?

The CMS website may show more COVID-19 deaths than confirmed COVID-19 cases because the total number of COVID-19 deaths may also include cases of residents with suspected COVID-19 infection and COVID-19 admissions (residents with COVID-19 that are newly admitted or re-admitted to the nursing home), which are reported separately from the nursing home's count of confirmed COVID-19 cases. For example, a nursing home may show 20 deaths with 10 confirmed COVID-19 cases, but also have an additional 20 COVID-19 admissions and 20 suspected COVID-19 cases (totaling 50 residents with confirmed or suspected COVID-19, including COVID-19 positive admissions, which resulted in 20 COVID-19-related deaths).

Additionally, it is possible that the nursing home did not have retrospective confirmed COVID-19 case data available at the time of reporting, but they did have and report retrospective COVID-19 death data. The National Healthcare Safety Network (NHSN) COVID-19 Long-Term Care Facility Module allows, but does not require, facilities to report retrospective COVID-19 data from January 1, 2020 to April 30, 2020.

These numbers may also be due to a data entry error on the part of the facility – for example, a facility may be entering cumulative numbers of confirmed COVID-19 deaths instead of incremental new deaths, or entering data in an incorrect field.

3) How can there be COVID-19 deaths in a nursing home, but zero confirmed or suspected COVID-19 cases or COVID-19 admissions?

The CMS website may show COVID-19 deaths and zero confirmed or suspected COVID-19 cases or COVID-19 admissions because a facility's case data was identified as not passing the Quality Assurance process. Data quality checks are performed to identify instances where facilities may have entered incorrect data, such as entering cumulative counts over time instead of new cases, and other data entry errors. When this happens, some of a facility's data may be suppressed, resulting in a facility showing zero cases, while the death totals were not suppressed and are displayed.

These numbers may also be due to a data entry error on the part of the facility – for example, a facility may be entering data in an incorrect field.

4) How come the data CMS posts is different from the state's data?

The data posted by CMS on the COVID-19 Nursing Home Data website is reported by nursing homes and collected at the federal level by the CDC through the NHSN system. This system is separate from state-level COVID-19 data collection efforts (although some states may have adopted the NHSN system after originally utilizing a state-based system). This CDC NHSN system is used to ensure a nationwide, standardized process of collecting COVID-19 data from nursing homes in each state, as each state may have different reporting requirements for their nursing homes.

As such, we expect that federally-reported data and state-reported may differ for individual facilities. It is possible that nursing homes may have reported COVID-19 cases or deaths to their state health department from earlier dates than required to be reported to the NHSN system, or that nursing homes may have reported different data to their states than through the NHSN system.

Additionally, states may report different numbers of cases or deaths for a facility because their definitions and requirements for reporting may differ from those in the NHSN system. Furthermore, it is possible that the facility's federal case or death data was identified as not passing the Quality Assurance check. In addition, some states collect information on facilities that are not required to submit to the NHSN, such as assisted living facilities.

5) CMS and CDC has updated its data Quality Assurance process. What has changed and why was it changed?

As we receive more data from nursing homes, CMS and CDC are able to identify more trends or indicators of data reporting issues by nursing homes. As we identify these trends and indicators, we refine our Quality Assurance (QA) process to screen out data that may not represent the actual numbers of COVID-19 cases or deaths that a facility may have experienced. Moving forward, we expect fewer nursing homes to submit data that is imprecise, and for the QA process to become more precise to screen out questionable data. We note that the vast majority of nursing homes have entered data correctly, and very few nursing homes entered data incorrectly. In spite of these facilities, the data posted provides an informative and actionable representation of how COVID-19 has impacted nursing homes across the U.S.

The QA criteria can be found on the dataset page of the COVID-19 Nursing Home Data website.

6) Is there technical assistance for nursing homes to help them submit data?

Yes. CMS and the CDC provide technical assistance for facilities to help them submit data accurately. This is accomplished through help desk support (email and phone) and through periodic stakeholder calls to assist nursing homes in how they can best comply with the reporting requirements.