Kentucky COVID-19 Data

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State Website: [Respiratory Viruses - Cabinet for Health and Family Services (ky.gov)](#)

Why is it used?
- To analyze trends including disease burden across the state.
- To help support public health surveillance activities and actions to control outbreaks and prevent further spread of disease or other health threats.

What data is collected?
- From 2020 through 2023, COVID-19 case investigation and laboratory report data were collected.
- October 2023 to present: COVID-19 hospital, death, and electronic laboratory reporting (ELR) surveillance data is currently published on the [Kentucky's Respiratory Virus webpage](#).
- Data collected includes:
  - Patient demographics like age, gender, race and ethnicity.
  - County of residence.
  - Date of COVID-19 test.
  - Test result.
  - Clinical data such as symptoms, medical history and outcomes including hospitalization or death.

How is data collected?
Case data was collected and reported through a standardized case reporting form, i.e., the Person Under Investigation (PUI) form, electronic cases reports, ELR, and health information exchanges from a network of reporting providers across the state. In fall 2023, COVID-19 reporting expanded to include additional data sources such as:
- Hospitalizations and Emergency Department Visits.
  - Data from the [National Syndromic Surveillance Program's (NSSP)](#) platform, the Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE), is used to describe hospitalization trends.
  - Both inpatient admissions and Emergency Department visits for respiratory illnesses are described by weekly counts. These indicators describe trends in severe outcomes due to respiratory diseases.

- Outpatient ILI activity.
  - The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) monitors outpatient visits for respiratory illness referred to as influenza-like illness (ILI), not laboratory-confirmed influenza.
  - This system might capture respiratory illness visits due to infection with any pathogen that can present with similar symptoms, including influenza, COVID-19 and RSV.
- Deaths due to respiratory diseases.
  - Death certificate data provided by the Office of Vital Statistics is used to describe overall mortality due to COVID-19 and influenza by week of death.
  - Pediatric deaths identified through provider reporting or death certificate searches are displayed in aggregate counts.
    - Pediatric deaths due to COVID-19 or influenza are reportable and reviewed by subject matter experts before being added to official counts.

Data Strengths:
- Describing overall COVID-19 levels and trends over time helps us understand the epidemiology of COVID-19 and implement prevention measures to avoid strain on the health care system and further protect those at increased risk of severe outcomes.
- Using a multidisciplinary approach to understand COVID-19 trends allows for a flexible and adaptable surveillance system.

Data Limitations:
- The COVID-19 pandemic strained public health systems and that led to reporting challenges.
  - As a result, case reports might be missing data including clinical signs and symptoms.
  - COVID-19 cases might have been underreported due to passive reporting systems.
- Since 2020, testing access has expanded to include the use of home test kits, which are not reportable to KDPH, leading to reduced utility of case report data to estimate disease burden.

How is the system evaluated?
- Case and ELR data are collected using the National Electronic Disease Surveillance System (NEDSS) that follows standards developed by CDC.
- Internally, KDPH epidemiologists routinely perform data quality assurance (i.e., ongoing updates to address data errors such as updating specimen collection dates, jurisdiction information, etc.).

Data Set Availability:
- Current COVID-19 trend information can be found here: Respiratory Viruses - Cabinet for Health and Family Services (ky.gov).
- Archived COVID-19 data can be found here: COVID-19 Reports - Cabinet for Health and Family Services (ky.gov).

Data Release Policy:
- Non-public data can be requested using the Open Records Request form found here: Records Center - Cabinet for Health and Family Services (govqa.us).
- Depending on the intended use of the data, the requestor may have to go through the IRB approval process with the Cabinet for Health and Family Services. Information on the IRB approval process can be found here: Institutional Review Board (CHFS IRB) - Cabinet for Health and Family Services (ky.gov).

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