Coronavirus Disease 2019 (COVID-19)

Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET)

Updated May 14, 2020

Purpose and Methods

Population-based surveillance is the collection, analysis, and interpretation of data on a population in a specified area.

COVID-NET is a population-based surveillance system.

About COVID-NET

Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) is a population-based surveillance system that collects data on laboratory-confirmed COVID-19-associated hospitalizations among children and adults through a network of over 250 acute-care hospitals in 14 states.

Why COVID-NET Data Is Important

COVID-NET is CDC's source for important data on hospitalization rates associated with COVID-19. Hospitalization rates are updated weekly. COVID-NET also provides important clinical information on COVID-19-associated hospitalizations, including age group, sex, race/ethnicity and underlying health conditions.

Hospitalization Rates	Patient Characteristics

COVID-NET Data Collection, Timeliness and Interpretation

Cases are identified in COVID-NET if they test positive for SARS-COV-2 (the virus that causes COVID-19 disease) through a test ordered by a health care professional and are hospitalized within 14 days of the positive test. Clinical data are collected using a standardized case reporting form by trained surveillance officers, so the data are collected in a

standardized and uniform way.

COVID-NET is expected to collect the following data for each case:

- age
- sex
- surveillance site
- date of hospital admission
- evidence of positive SARS-CoV-2 test
- demographic information (e.g., race, ethnicity)
- clinical (medical) history (underlying health conditions)
- clinical course (progression of the illness such as admission to an intensive care unit)
- medical interventions (medical care for the illness such as need for mechanical ventilation)
- outcomes (e.g., released from the hospital, death)

How COVID–NET Hospitalization Data Is Different from Hospitalizations Reported in National and State Case Counts

COVID-NET differs from hospitalizations reported in national and state case counts in two ways. First, state and national COVID-19 case reporting are based on all people who test positive for COVID-19 in the United States. COVID-NET is limited to COVID-19-associated hospitalizations captured in the COVID-NET surveillance area. Second, COVID-NET reports rates and not just counts. These rates show how many people are hospitalized with COVID-19 in the surveillance area, compared to the entire number of people residing in that area.
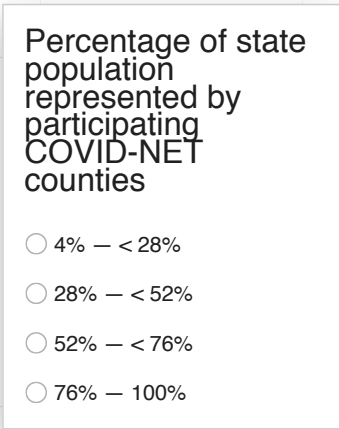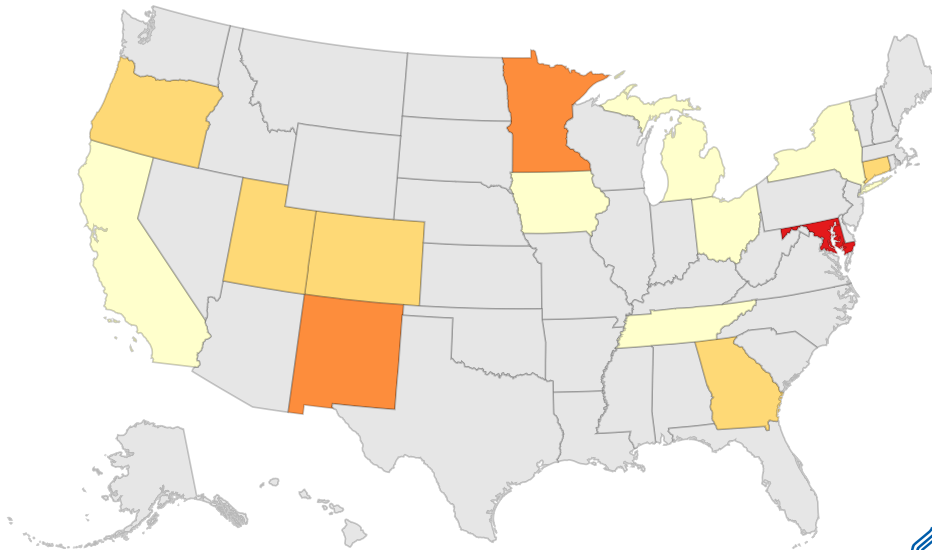
How COVID–NET Calculates Hospitalization Rates

Hospitalization rates are calculated by the number of residents of a defined area who are hospitalized with a positive SARS-CoV-2 laboratory test divided by the total population within that defined area.

COVID–NET coverage

COVID-NET comprises 99 counties in the 14 states participating in the Emerging Infections Program (EIP) and the Influenza Hospitalization Surveillance Project (IHSP). Participating states include: California, Colorado, Connecticut, Georgia, Iowa, Maryland, Michigan, Minnesota, New Mexico, New York, Ohio, Oregon, Tennessee, and Utah.

COVID-NET covers approximately 10 percent of the U.S. population. The counties covered are located in all 10 Health and Human Services (HHS) regions ↗ . The designated COVID-NET surveillance area is generally similar to the U.S. population by demographics; however, the information might not be generalizable to the entire country.

Percentage of state population represented by participating COVID-NET counties

○ 4% — < 28%

○ 28% — < 52%

○ 52% — < 76%

○ 76% — 100%

COVID-NET Sites

State	% of State Population Represented	Number of Participating Counties
○ California	9%	3
○ Colorado	49%	5
○ Connecticut	29%	2
○ Georgia	39%	8
○ Iowa	4%	1
○ Maryland	100%	24
○ Michigan	13%	5
○ Minnesota	55%	7
○ New Mexico	61%	7
○ New York	11%	15
○ Ohio	18%	10
○ Oregon	44%	3
○ Tennessee	26%	8

Accessing COVID‑NET Data

COVID-19-associated hospitalization rates are reported to CDC on a weekly basis. COVID-NET data, including hospitalization rates for different age groups and data on patient characteristics, are available on COVIDView

COVID-NET hospitalization data are preliminary and may change as more data is received. In particular, case counts and rates for recent hospital admissions are subject to lag. As data are received each week, prior case counts and rates are updated accordingly.

COVID‑NET Publications

- Study: Hospitalization Rates and Characteristics of Patients Hospitalized with Laboratory-Confirmed Coronavirus Disease 2019 – COVID-NET, 14 States, March 1-30, 2020. MMWR Morb Mortal Wklyl Rep 2020; 69:458-464

Resources

Data Visualization

COVIDView Weekly Summary

FAQ: COVID-19 Data and Surveillance

Cases, Data, and Surveillance

Emerging Infections Program