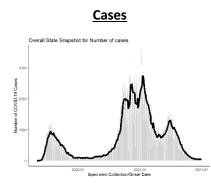
COVID-19 Update July 08, 2021

As of July 07, 2021, the total of laboratory-confirmed and probable COVID-19 cases reported among Connecticut residents is 349,798, including 319,999 laboratory-confirmed and 29,799 probable cases. Twenty-six patients are currently hospitalized with laboratory-confirmed COVID-19. There have been 8279 COVID-19-associated deaths.

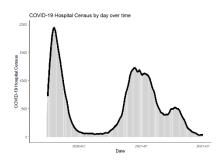
Overall Summary	Total**	Change Since Yesterday
COVID-19 Cases (confirmed and probable)	349798	+55
COVID-19 Tests Reported (molecular and antigen)	9656002	+10553
Daily Test Positivity*		0.52%
Patients Currently Hospitalized with COVID-19	26	-6
COVID-19-Associated Deaths	8279	+1

**Includes confirmed plus probable cases

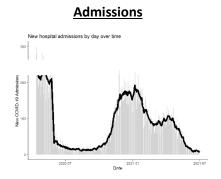


Total Cases: 349,798

Hospital Census

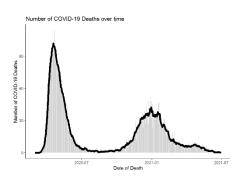


Hospital Census: 7/7/2021: 26



Total Hospitalizations: 36,528

Deaths



Total Deaths: 8279

Country	COVID-19 Cases		COVID-19-Associated Deaths	
County —	Confirmed	Probable	Confirmed	Probable
Fairfield County	91,690	8,929	1,773	428
Hartford County	78,933	5,698	2,001	438
Litchfield County	13,017	1,691	259	39
Middlesex County	11,722	1,163	287	87
New Haven County	83,024	9,510	1,838	295
New London County	21,332	1,288	349	102
Pending address validation	1,009	172	0	1
Tolland County	8,773	891	149	38
Windham County	10,499	457	154	41
Total	319999	29799	6810	1469

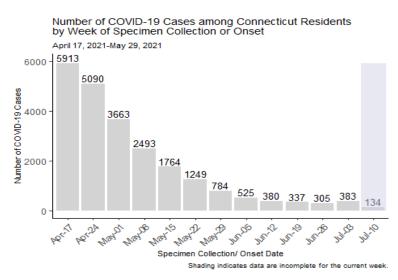
COVID-19 Cases and Associated Deaths by County of Residence as of 07/07/21.

<u>National COVID-19 statistics</u> and information about <u>preventing spread of COVID-19</u> are available from the Centers for Disease Control and Prevention.

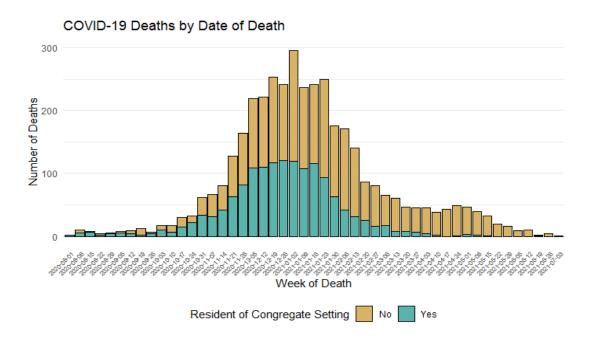
Day-to-day changes reflect newly reported cases, deaths, and tests that occurred over the last several days to week. All data in this report are preliminary; data for previous dates will be updated as new reports are received and data errors are corrected. Hospitalization data were collected by the Connecticut Hospital Association. Deaths reported to either OCME or DPH are included in the daily COVID-19 update.

COVID-19 Cases and Deaths Over Time

The chart below shows the number of new COVID-19 cases reported to CT DPH by week of specimen collection or onset of illness. Case data include probable cases based on positive antigen test results. During the past two weeks (June 20-July 03), there were 688 new COVID-19 cases, including cases among people residing in the community and congregate settings, such as nursing homes, managed residential communities, and correctional facilities.



The graph below shows the number of COVID-19 associated deaths since August 1st by week of death and whether the person was residing in a congregate setting, such as a nursing home, managed residential community, or correctional facility.

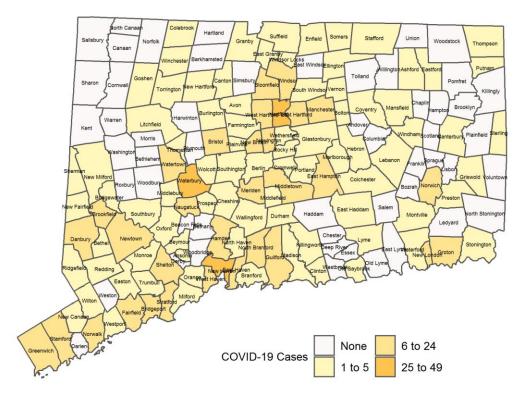


Community Transmission of COVID-19

Among 688 new COVID-19 cases with specimen collection or onset date during June 20-July 03, there were 686 cases among people living in community settings, as shown in the map below. This corresponds to an average of 1.37 new COVID-19 cases per day per 100,000 population. Cases among people residing in nursing homes, assisted living facilities, and correctional facilities are excluded. Darker colors indicate towns with more cases.

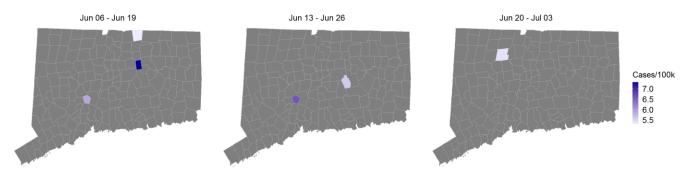
During this two-week period, no town had more than 100 new COVID-19 cases.

Number of COVID-19 Cases among People Living in Community Settings by Town with Specimen Collection or Onset Date During June 20-July 03



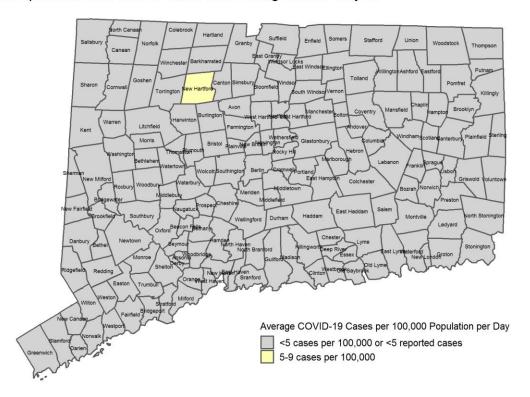
Map does not include 3 cases pending address validation

Because towns with larger populations are likely to have more cases, it is also important to look at the number of new cases per 100,000 population. The maps below show the average number of new cases per 100,000 population per day, with darker colors indicating higher rates. Cases among people residing in nursing homes, assisted living facilities, and correctional facilities are excluded.



Among towns with at least 5 new cases during June 20-July 03, no town had an average rate of 15 or more cases per 100,000 population per day, as shown in the map below.

Average Daily Rate of COVID-19 Cases among People Living in Community Settings per 100,000 Population by Town with Specimen Collection or Onset Date During June 20-July 03



Map does not include 3 cases pending address validation

*The table entitled "Population, Number and Average Daily Rate of COVID-19 Cases among People Living in Community Settings by Town with Specimen Collection or Onset Date during June 20-July03, 2021" has been removed from our PDF report. Data can be accessed at the CT Open Data Portal, <u>https://data.ct.gov/stories/s/q5as-kyim</u>. See map entitled ""Average Daily Rate of COVID-19 Cases Among Persons Living in Community Settings per 100,000 Population by Town".

SARS-CoV-2 Variant Surveillance

The Centers for Disease Control and Prevention (CDC) have identified three types of SARS-CoV-2 variants: variants of interest, variants of concern and variants of high consequence. The definitions for the three different variant categories and substitutions of therapeutic concern can be found here: <u>SARS-CoV-2 Variants of Concern | CDC.</u>

Different terminology has been developed by international scientists for naming SARS-CoV-2 variants. Recently, the World Health Organization (WHO) developed new labels for describing these variants to the public. Below, both the Pango lineage (used by CDC) and the WHO label are listed (if available) for each variant described.

Data provided are from the Global Initiative for Sharing Avian Influenza Data (GISAID). GISAID is a global science initiative established in 2008 that provides open-access to genomic data of influenza viruses and the SARS-CoV-2 virus responsible for the COVID-19 pandemic. Laboratories performing whole genome sequencing are encouraged to share their data on this website. More information about GISAID can be found at <u>GISAID - Initiative</u>. This data source provides the ability to monitor all variants of the SARS-CoV-2 virus that are circulating and might be identified in the future.

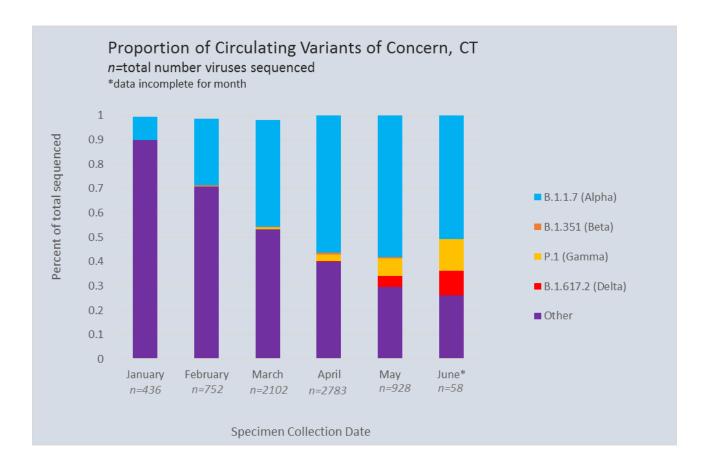
Below are data on variants of concern, variants of interest and substitutions of therapeutic concern identified among Connecticut residents. No variants of high consequence have been defined by CDC to date.

Data are from GISAID as of 07/08/2021 and represent sequences from specimens with dates of collection from 3/2/2020–6/23/2021. **The total number of SARS-CoV-2 sequences in GISAID for Connecticut residents are 7896.**

	Number	Percentage
Variants of Concern		
B.1.1.7 (Alpha)	3,309	41.9%
B.1.351 (Beta)	40	0.5%
P.1 (Gamma)	169	2.1 %
B.1.617.2 (Delta)	51	0.6%
Variants of Interest		
B.1.427/B.1.429 (Epsilon)	68	0.9%
B.1.525 (Eta)	21	0.3%
B.1.526 (Iota)	1,797	22.8%
B.1.617.1 (Kappa)	2	0.03%
B.1.617.3	0	0%
P.2 (Zeta)	9	0.1%
Substitutions of Therapeutic		
Concern		
E484K	1,080	13.7%
L452R	552	7.0%

SARS-CoV-2 Variant Surveillance, continued.

The plot below, based on data extracted from GISAID on 7/07/2021, shows the change in proportion of circulating variants of concern by month. Data include sequences from specimens with dates of collection from 1/1/2021-6/23/2021.



Nursing Home Surveillance

Connecticut nursing homes are required by the Connecticut Department of Public Health (DPH) and the Centers for Medicare and Medicaid Services (CMS) to report on the impact of COVID-19 on their residents and staff through CDC's National Healthcare Safety Network (NHSN). CT DPH uses data submitted to NHSN to produce a weekly nursing home report to depict recent COVID-19 activity in nursing homes. The following graph and table provide a quick overview of COVID-19 in CT nursing homes. For the complete DPH nursing home report, please see Nursing Home and Assisted Living Facilities Data.

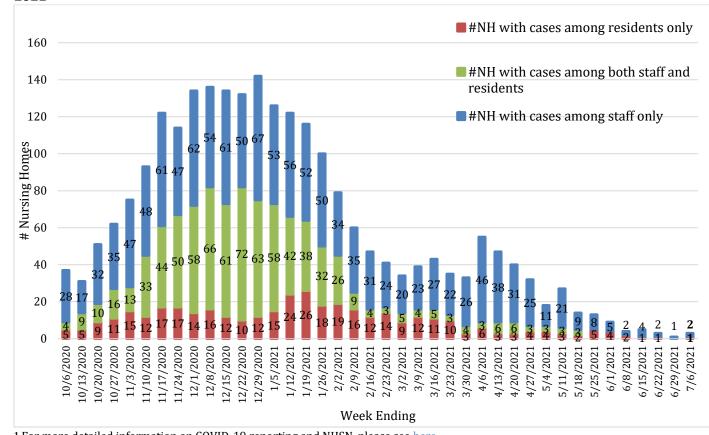


Figure 1. Nursing Homes with Positive Staff or Residents October 6, 2020–July 6, 2021^{1,2}

¹ For more detailed information on COVID-19 reporting and NHSN, please see here.

² Similar to DPH, CMS makes COVID-19 nursing home data, including vaccination rates, publicly available. Please see CMS' COVID-19 Nursing Home Data website.

Table 1: Statewide COVID-19 Vaccination coverage among nursing home residents and staff from NHSN^{1,2}

	Statewide COVID-19 Vaccination Rate Data as of June 27, 2021		
	Resident Vaccination Rates	Staff Vaccination Rates	
	N= 205 homes	N= 205 homes	
Average Vaccination Rate	89%	70%	
Median Vaccination Rate	91%	72%	
Range of Vaccination Rates	46-100%	31-98%	
% of the reporting nursing	94%	39%	
homes with vaccination rate >			
75%			

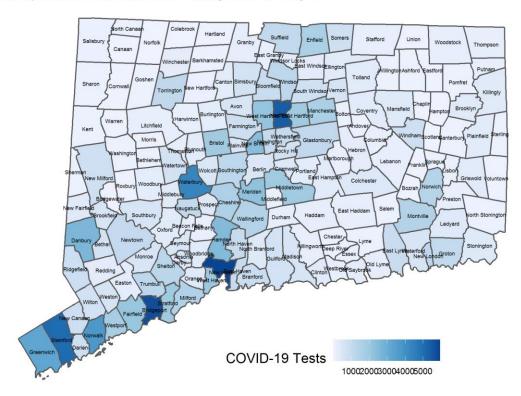
¹ NHSN vaccine reporting instructions for nursing homes can be found <u>here</u>.

² Similar to DPH, CMS makes COVID-19 nursing home data, including vaccination rates, publicly available. Please see <u>CMS'</u> <u>COVID-19 Nursing Home Data website</u>.

COVID-19 Molecular and Antigen Tests during June 20-July 03

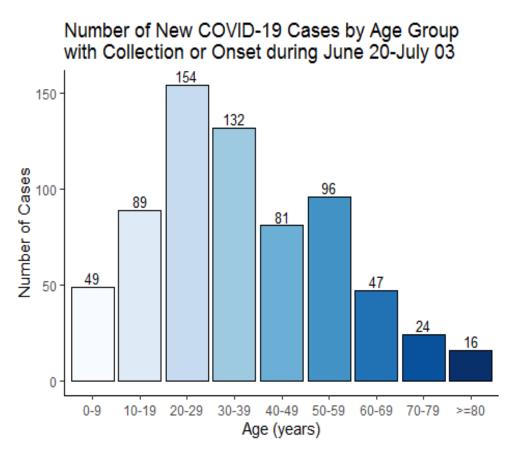
Among 131526 molecular and antigen tests for COVID-19 with specimen collection date during June 20-July 03, 125383 (95%) tests were conducted among people who did not reside in congregate settings (including nursing homes, assisted living, and correctional facilities). Of these 125383 tests, 855 (1%) were positive. The map below shows the number of molecular and antigen COVID-19 tests by town with specimen collection date during June 20-July 03 that were conducted among community residents.

Number of Molecular and Antigen Tests for COVID-19 among People Living in Community Settings by Town with Specimen Collection Date During June 20-July 03



Map does not include tests pending address validation

Age Distribution of COVID-19 Cases with Specimen Collection or Onset During June 20-July 03, 2020



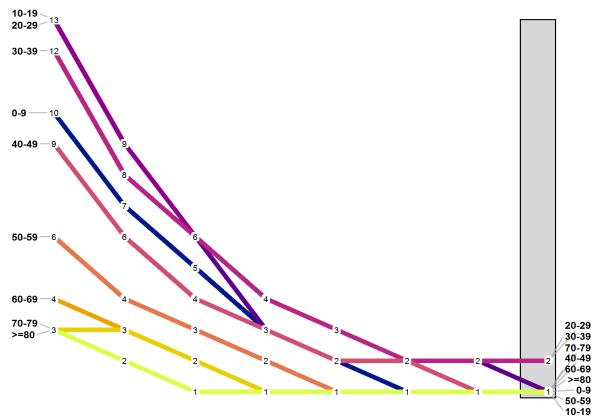
Average Daily Incidence by Age Group

The chart below shows the average number of new COVID-19 cases per day per 100,000 population by age group. The rates in this chart are calculated by averaging the number of new cases diagnosed each day during the previous two weeks, dividing by the annual population in each age group, and then multiplying by 100,000.

Average daily rate of COVID-19 cases by age group

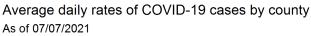
As of 07/07/2021

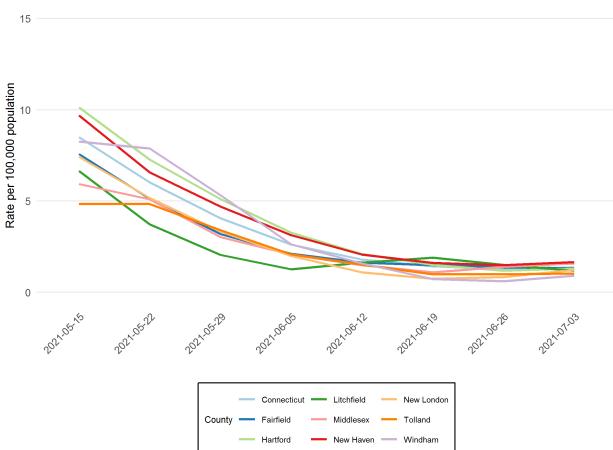
2021-05-15 2021-05-22 2021-05-29 2021-06-05 2021-06-12 2021-06-19 2021-06-26 2021-07-03



Average Daily Incidence by County

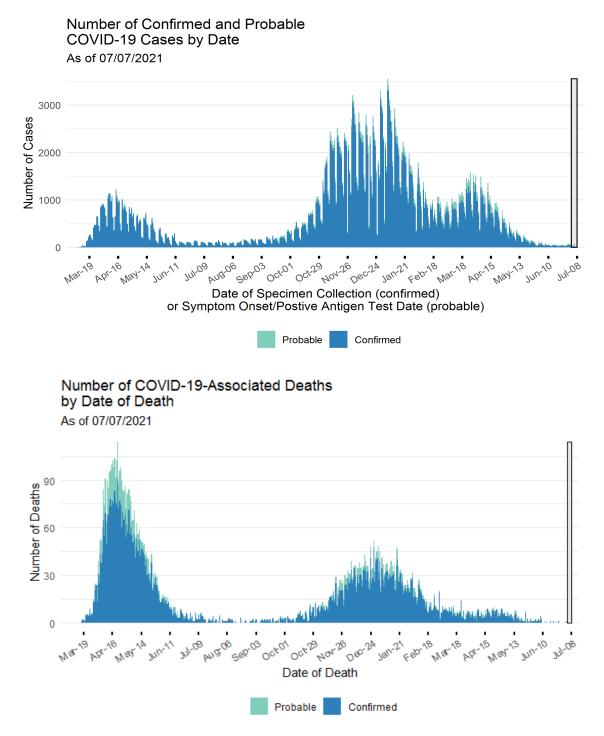
The chart below shows the average number of new COVID-19 cases per day per 100,000 population in the state of Connecticut and for each Connecticut county. The rates in this chart are calculated by averaging the number of new cases diagnosed each day during the previous two weeks, dividing by the annual estimated population, and then multiplying by 100,000.





Cumulative Number of COVID-19 Cases and COVID-19-Associated Deaths by Date

Test results may be reported several days after the result. Data are incomplete for most recent dates shaded in grey. Data from previous dates are routinely updated.

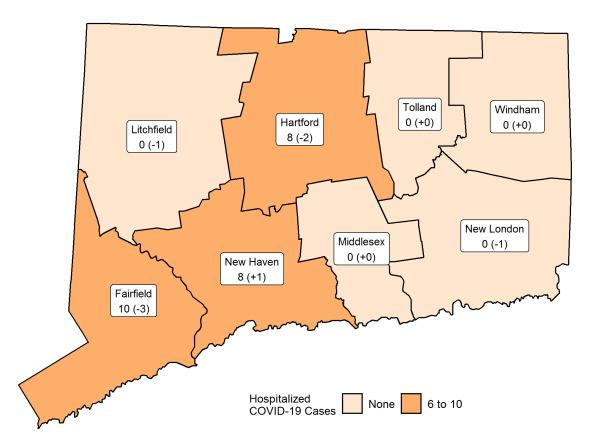


Hospitalization Surveillance

The map below shows the number of patients currently hospitalized with laboratory-confirmed COVID-19 by county based on data collected by the Connecticut Hospital Association. The distribution is by location of hospital, not patient residence. The labels indicate the number of patients currently hospitalized with the change since yesterday in parentheses.

Patients Currently Hospitalized by Connecticut County

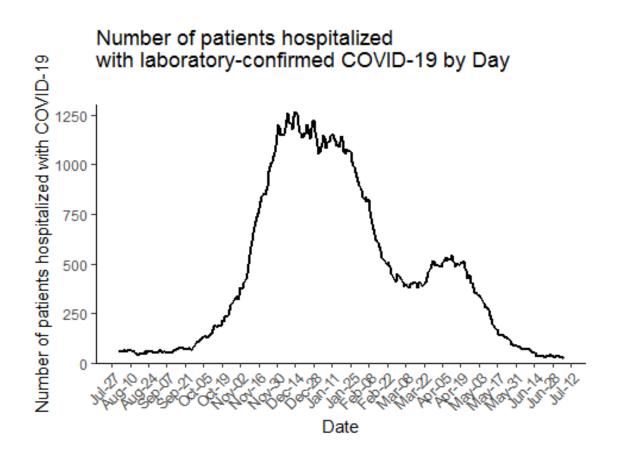
Distribution by location of hospital not patient residence. Data from the Connecticut Hospital Association.



More information about hospitalized cases of COVID-19 in New Haven and Middlesex Counties is available from <u>COVID-NET</u>.

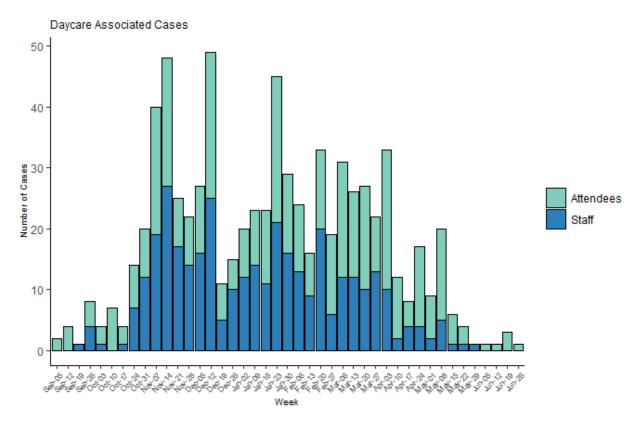
COVID-19 Hospital Census in Connecticut

The chart below shows the COVID-19 hospital census, which is the number of patients currently hospitalized with laboratory-confirmed COVID-19 on each day. Data were collected by the Connecticut Hospital Association and are shown since August 1, 2020.



Daycare Surveillance

Licensed daycare providers are required to report cases of COVID-19 among attendees and staff to the Department of Public Health (DPH) and the local health department. This figure shows the number of cases among daycare attendees and staff reported to DPH since September 1, 2020. Data are preliminary and like other passive surveillance systems, under reporting occurs and the true incidence of disease is more than the number of cases reported.

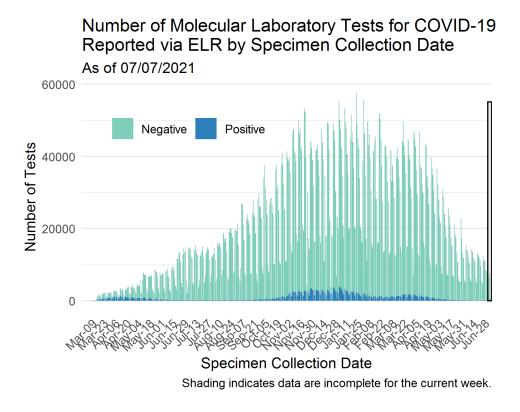


Laboratory Surveillance

Molecular Tests

To date, DPH has received reports on a total of 8926651 molecular COVID-19 laboratory tests; of these 8711371 test results were received via electronic laboratory reporting (ELR) methods from commercial laboratories, hospital laboratories, and the Dr. Katherine A. Kelley State Public Health Laboratory. The chart below shows the number of tests reported via ELR by date of specimen collection and test result.

Test results may be reported several days after specimen collection. Data are incomplete for most recent dates shaded in grey. Data for previous dates are routinely updated.



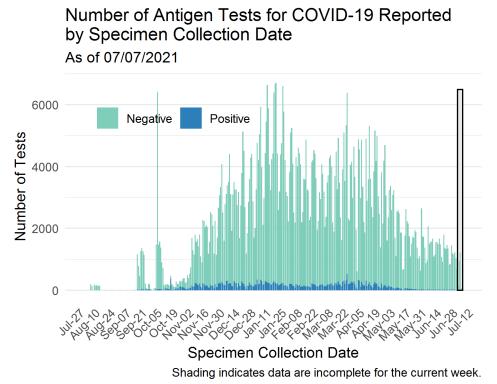
Testing of recently collected specimens is ongoing and does not reflect a decrease in testing. Chart only includes test results received by electronic laboratory reporting.

ELR = Electronic Laboratory Reporting

Antigen Tests

To date, DPH has received reports on a total of 729351 COVID-19 antigen laboratory tests. The chart below shows the number of antigen tests reported to DPH by specimen collection date and test result.

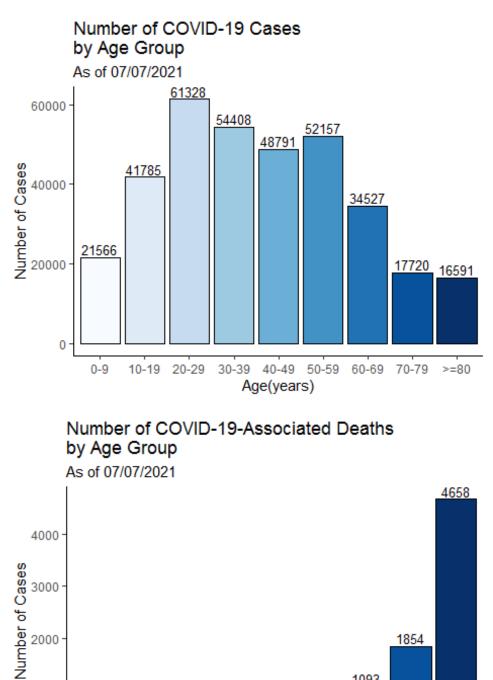
Test results may be reported several days after specimen collection. Data are incomplete for most recent dates shaded in grey. Data for previous dates are routinely updated.



Testing of recently collected specimens is ongoing and does not reflect a decrease in testing.

Characteristics of COVID-19 Cases and Associated Deaths

Counts may not add up to total case count because demographic data may be missing.



30-39 40-49

43

3

10

10-19 20-29

1000

0

0-9

1093

60-69 70-79

>=80

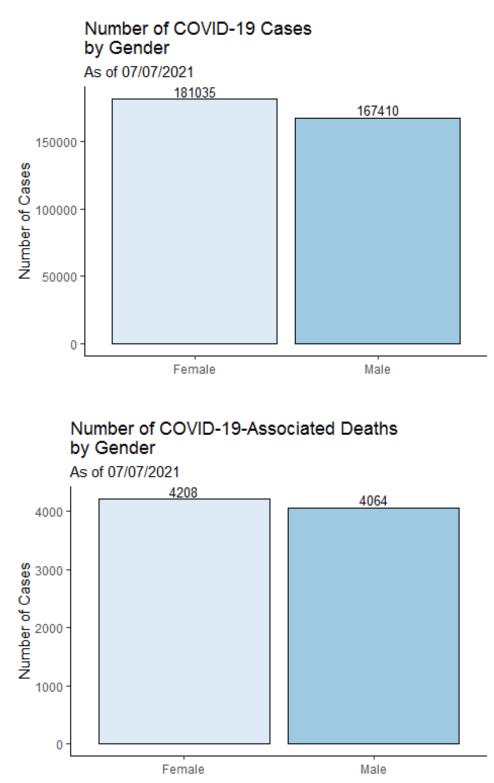
465

50-59

152

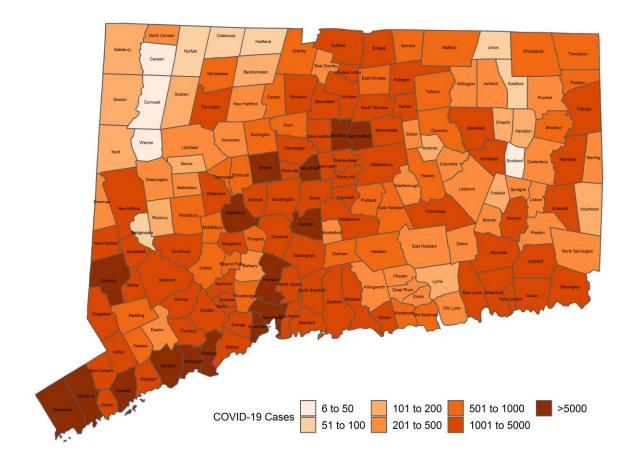
Age(years)

Counts may not add up to total case count because demographic data may be missing.

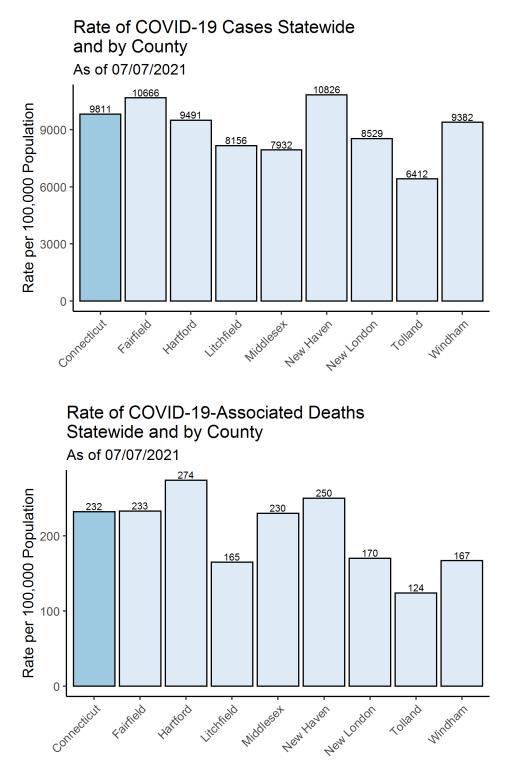


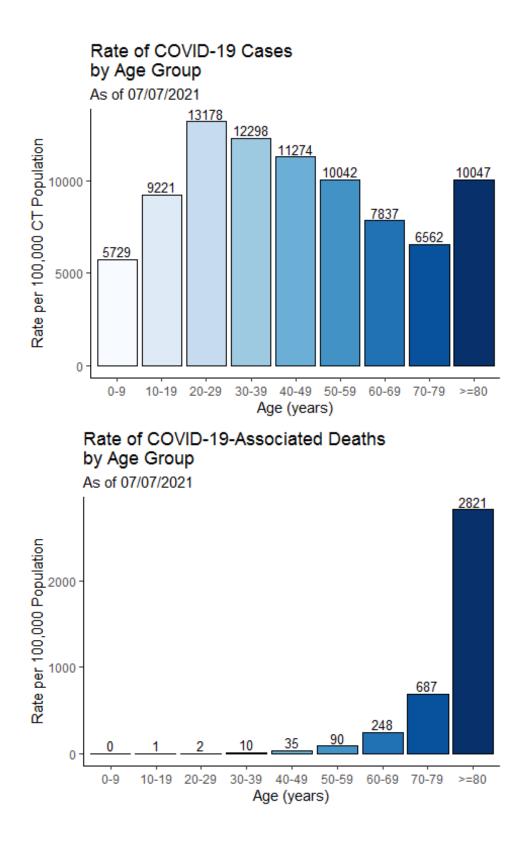
Cumulative Number of COVID-19 Cases by Town

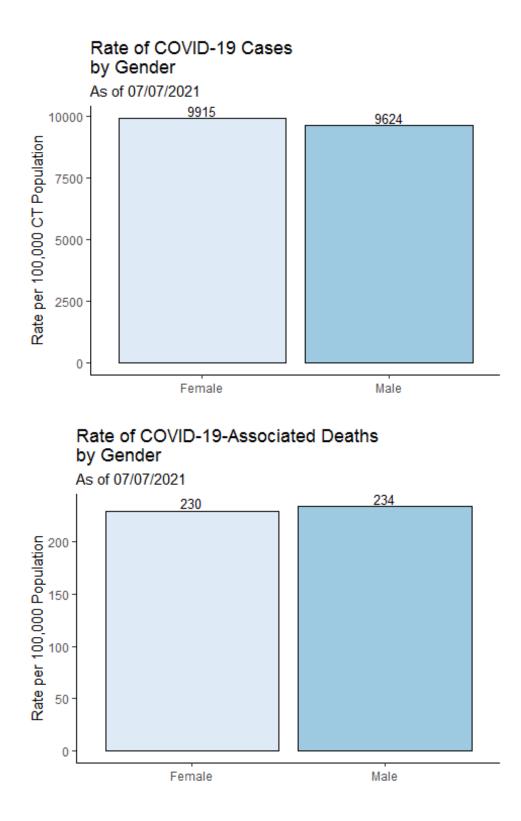
Map does not include 1181 cases pending address validation



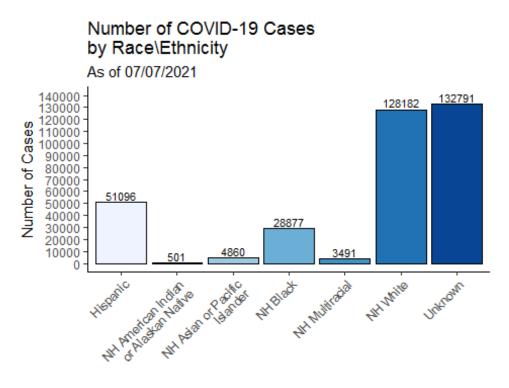
*APPENDIX A. Cumulative Number of COVID-19 Cases by Town" has been removed from our PDF report. Data can be accessed at the CT Open Data Portal, <u>https://data.ct.gov/stories/s/q5as-kyim</u>. See map entitled "Cumulative Number of COVID-19 Cases by Town". **APPENDIX A.** The following graphs show the number of cases per 100,000 Connecticut residents statewide and by county, age group, and gender. Population estimate from: <u>DPH Population Statistics</u>

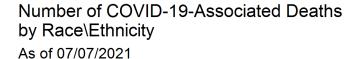


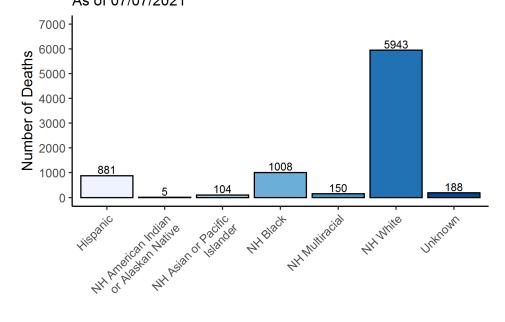




APPENDIX B. The following graphs show the number of cases and deaths by race and ethnicity. *Categories are mutually exclusive. The category "multiracial" includes people who answered 'yes' to more than one race category. NH=Non-Hispanic*

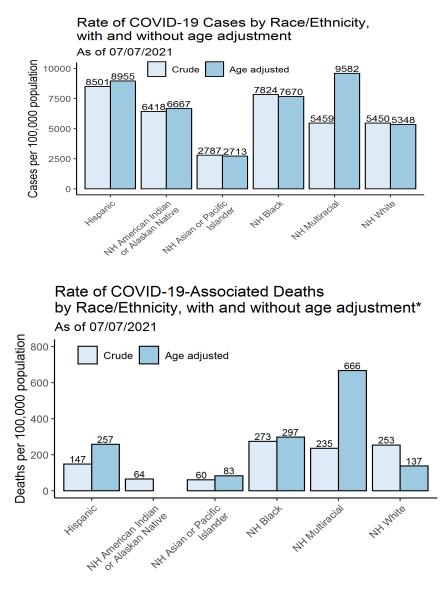






The following graphs show the number of COVID-19 cases and COVID-19-associated deaths per 100,000 population by race and ethnicity. Crude rates represent the total cases or deaths per 100,000 people. Age-adjusted rates consider the age of the person at diagnosis or death when estimating the rate and use a standardized population to provide a fair comparison between population groups with different age distributions. Age-adjustment is important in Connecticut as the median age of among the non-Hispanic white population is 47 years, whereas it is 34 years among non-Hispanic blacks, and 29 years among Hispanics. Because most non-Hispanic white residents who died were over 75 years of age, the age-adjusted rates are lower than the unadjusted rates. In contrast, Hispanic residents who died tend to be younger than 75 years of age which results in higher age-adjusted rates.

The 2018 Connecticut and 2000 US Standard Million populations were used for age adjustment; population estimates from: <u>DPH Population Statistics</u>. *Categories are mutually exclusive*. *Cases missing data on race/ethnicity are excluded from calculation of rates*. *NH=Non-Hispanic*



*Age adjusted rates only calculated for groups with at least 30 deaths