

COVID-19 Update July 21, 2022

As of **July 20, 2022**, the total of laboratory-confirmed and probable COVID-19 cases reported among Connecticut residents is **846,026**; **4,013** have been reported in the past 7 days. **Three hundred twelve** patients are currently hospitalized with laboratory-confirmed COVID-19; of these, **122** (39.1%) are not fully vaccinated.

Overall Summary	Cumulative (except for hospital census)	Past 7 days*
Positive PCR/NAAT Tests	916,973	4,299
All PCR/NAAT Tests	14,958,083	40,595
Test Positivity (pos/all PCR/NAAT)		10.59%
Patients currently hospitalized with COVID-19	312	+19
COVID-19-Associated Deaths	11,093	+8

*This column indicates all PCR/NAAT tests by specimen collection date from the past 7 days. Test positivity is calculated as a rolling 7-day test positivity by specimen collection date; all positive molecular (PCR/NAAT) test results are divided by all molecular (PCR/NAAT) test results (positive and negative) for the last 7 days and multiplied by 100 to reach a percentage. Hospitalizations over the past 7 days indicates the change in the number of patients hospitalized with COVID-19 over that period. Deaths over the past 7 days indicates the number of new COVID-19 associated deaths reported; deaths are reported once weekly.

Cumulative COVID-19 Cases and Associated Deaths by County of Residence

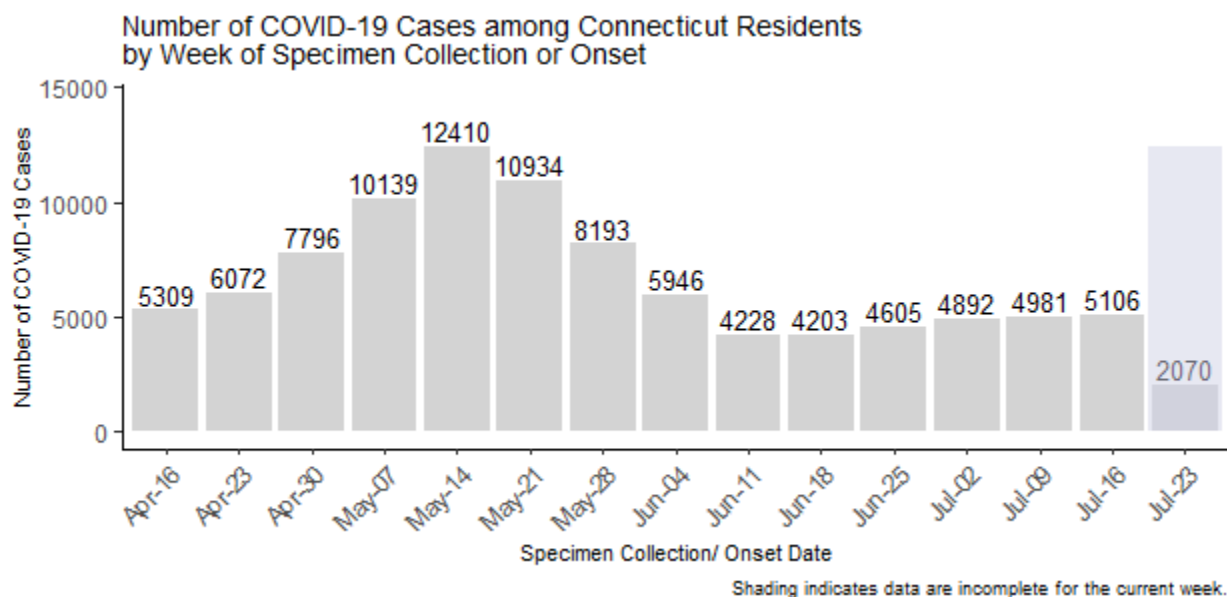
County	COVID-19 Cases		COVID-19-Associated Deaths	
	Confirmed	Probable	Confirmed	Probable
Fairfield County	207,465	24,336	2,224	535
Hartford County	183,024	21,058	2,617	589
Litchfield County	31,037	5,001	403	66
Middlesex County	30,505	3,021	350	139
New Haven County	196,928	25,256	2,494	392
New London County	57,665	5,695	530	156
Tolland County	21,542	2,557	205	82
Windham County	26,497	1,751	245	65
Pending address validation	2,339	349	0	1
Total	757002	89024	9068	2025

[National COVID-19 statistics](#) and information about [preventing spread of COVID-19](#) are available from the Centers for Disease Control and Prevention.

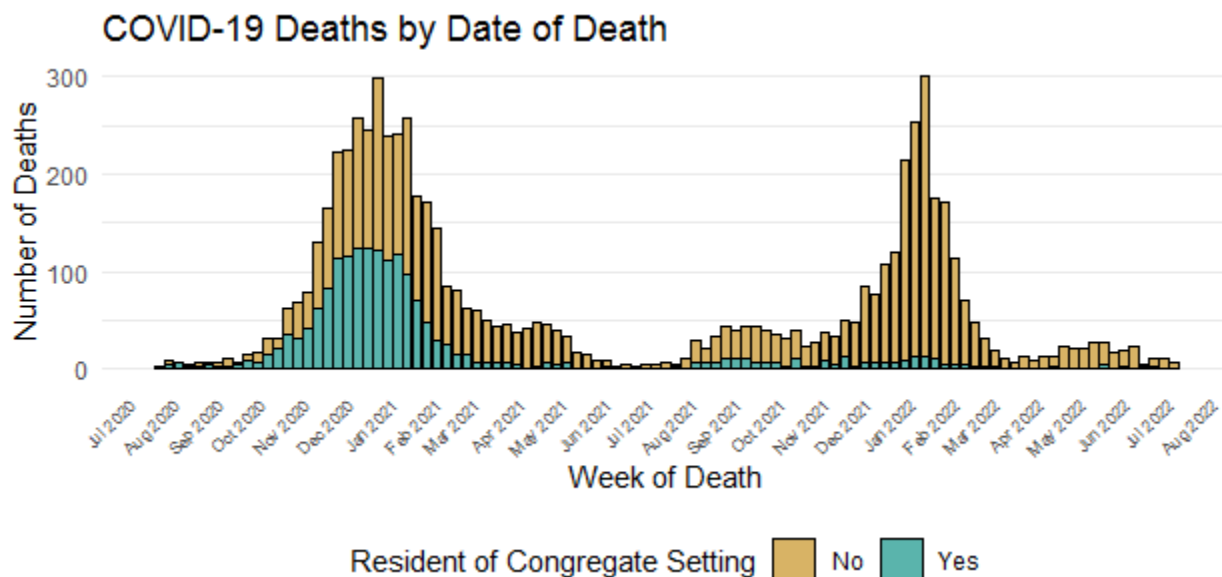
Day-to-day changes reflect newly reported cases, deaths, and tests that occurred over the last several days to week. All data in this report are preliminary; data for previous dates will be updated as new reports are received and data errors are corrected. Hospitalization data were collected by the Connecticut 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 includes probable cases based on positive antigen test results. During the previous 7 days (July 14-20), there were 4,013 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.



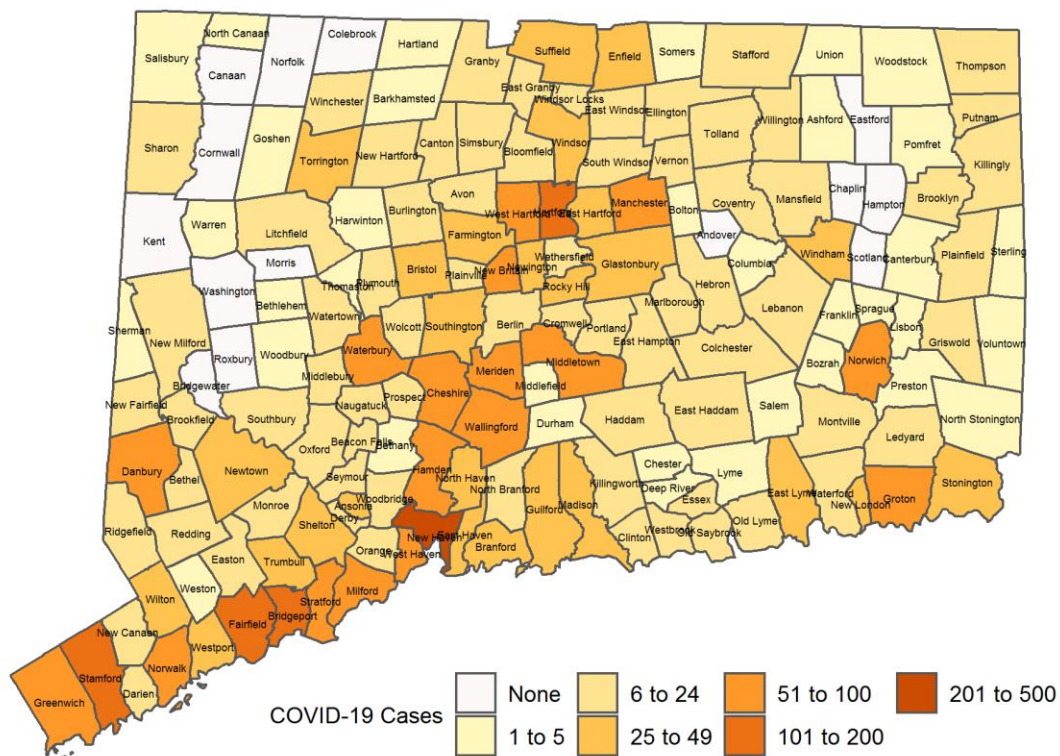
The graph below shows the number of COVID-19 associated deaths since August 1, 2020 by week of death and whether the person was residing in a congregate setting, such as a nursing home, managed residential community, or correctional facility.



Community Transmission of COVID-19

There were 4,013 new COVID-19 cases with specimen collection date during July 14-20, as shown in the map below. During this seven-day period, the statewide case rate was 111.288 per 100,000 CT population; there were more than 100 new COVID-19 cases in 5 towns.

Number of COVID-19 Cases by Town
with Specimen Collection date during July 14-20



Map does not include 11 cases pending address validation

Epidemiology of COVID-19 by Vaccine Status

Methodology

To determine cases of COVID-19 among fully vaccinated persons or among those who have received an additional dose of COVID-19 vaccine, DPH matches COVID-19 case data with the vaccine registry to determine which cases meet the definition of being fully vaccinated or having received an additional dose and which are also vaccine breakthrough cases.

- A case of COVID-19 in a fully vaccinated person (e.g., vaccine breakthrough case) is defined as a person who has a positive PCR/NAAT or antigen test in a respiratory specimen collected ≥ 14 days after completing the final dose of an FDA-authorized or approved COVID-19 vaccine series and who did not have a previously positive COVID-19 test < 90 days prior to the positive test currently under investigation.
- A case of COVID-19 in a fully vaccinated person who has received an additional dose is defined as a person who has a positive PCR/NAAT or antigen test in a respiratory specimen collected ≥ 14 days after receiving an additional dose of any COVID-19 vaccine and who did not have a previously positive COVID-19 test < 90 days prior to the positive test currently under investigation.

All data presented below are preliminary and subject to change.

Data

The table below shows new COVID-19 cases for the previous 7 days July 14, 2022 - July 20, 2022 by vaccination status. The percentage of cases among fully vaccinated individuals is influenced by the high proportion of the population that is eligible for and has completed a vaccine series, and should be considered in light of the overall proportion of vaccinated individuals who have contracted the virus.

Status	Case Count	Percent
New Cases	3,762	
Not Fully Vaccinated	1,646	43.8
Fully Vaccinated	2,116	56.2

As of **July 20, 2022**, 252,553 cases of COVID-19 among fully vaccinated persons in Connecticut have been identified. Those 252,553 cases account for 9.19 percent of the 2,748,011 persons who are fully vaccinated.

Since the beginning of the pandemic, 593,473 cases have been identified among individuals who are not fully vaccinated.

One thousand eleven COVID-19 related deaths have occurred among the 252,553 fully vaccinated persons confirmed with COVID-19.

The table below shows cases and deaths among fully vaccinated persons, and among persons who have received an additional dose, by age group. As shown below, persons who have received an additional dose are a subset of those cases that are fully vaccinated.

Cases and Deaths Among Fully Vaccinated Persons and Persons with Additional Doses by Age Group

Age groups	# (%) Cases	# (%) Additional Dose Cases	# (%) Deaths	# (%) Additional Dose Deaths
5-11	6,563 (2.6%)	29 (0%)	1 (0.1%)	
12-15	9,718 (3.8%)	832 (0.9%)		
16-24	32,435 (12.8%)	7,120 (7.9%)	2 (0.2%)	1 (0.4%)
25-34	41,074 (16.3%)	11,611 (12.9%)	3 (0.3%)	
35-44	42,016 (16.6%)	13,946 (15.5%)	13 (1.3%)	2 (0.7%)
45-54	40,879 (16.2%)	15,168 (16.9%)	24 (2.4%)	5 (1.9%)
55-64	40,005 (15.8%)	18,007 (20.1%)	118 (11.7%)	24 (9%)
65-74	22,880 (9.1%)	13,360 (14.9%)	167 (16.5%)	41 (15.3%)
75+	16,983 (6.7%)	9,614 (10.7%)	683 (67.6%)	195 (72.8%)
Total	252,553	89,687	1,011	268

SARS-CoV-2 Variant Surveillance

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

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, the WHO label are listed for each variant described.

Below are data on variants of concern and variants being monitored identified among Connecticut residents. No variants of high consequence have been defined by CDC to date.

Data presented are based on variant data reported directly to DPH and include data since January 2021-present.

Data below represent sequences that have been reported to DPH as of 07/20/2022 with specimen collection dates between 01/12/2021 and 07/11/2022. **The total number of SARS-CoV-2 sequences reported to DPH with a valid specimen collection date is 40066.** Data are preliminary and updated as new data are received.

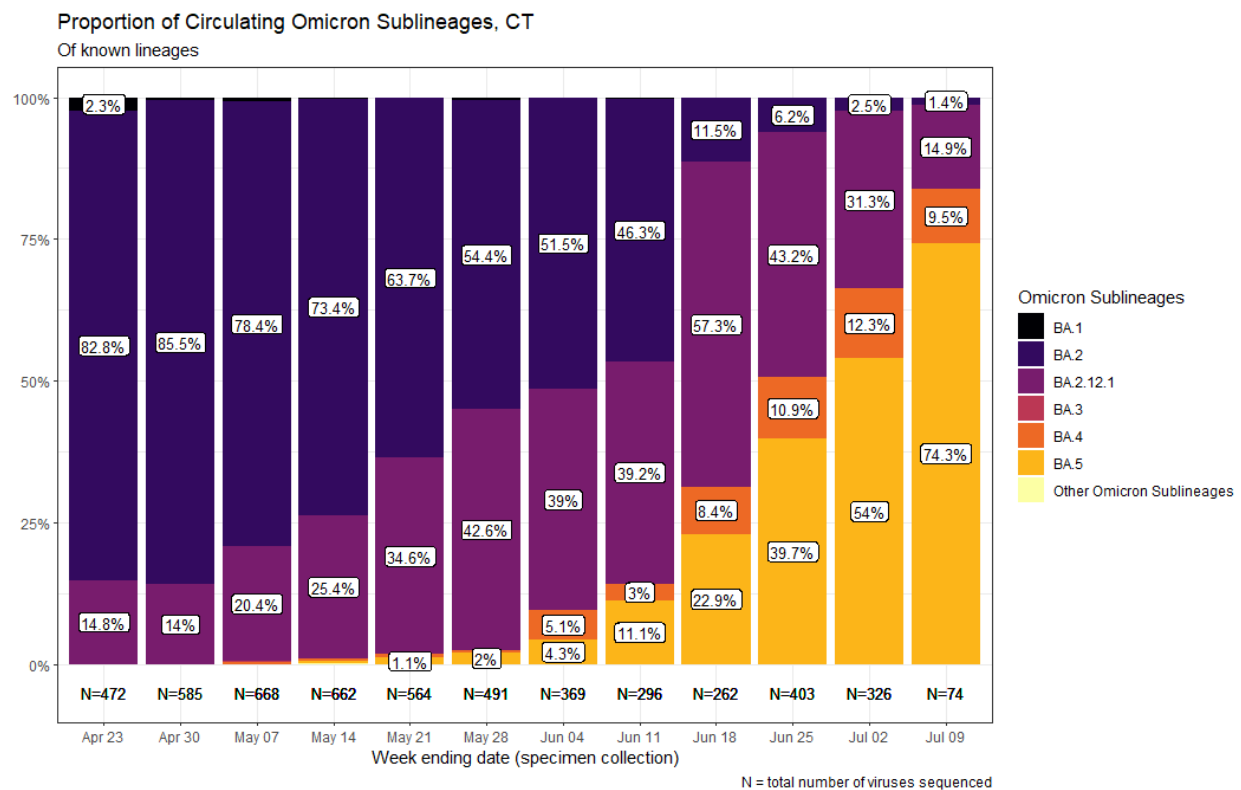
Variant	Number	Percentage
Variants of Concern		
Omicron	18,772	46.85
Variants Being Monitored		
Alpha	2,525	6.30
Beta	23	0.06
Gamma	137	0.34
Delta	16,289	40.66
Epsilon	60	0.15
Zeta	1	0.00
Eta	10	0.02
Iota	718	1.79
Kappa	2	0.00
Mu	84	0.21

SARS-CoV-2 Variant Surveillance, continued

The figure below shows the change in proportion of circulating variants of concern by week reported to DPH through July 20, 2022. Variants identified as Omicron are shown by sublineage and all other variants are included as “Other Variants”. Data include sequences from specimens with dates of collection from 04/17/2022–07/11/2022.

As of May 19, 2022, the plot below has been updated to reflect the following changes:

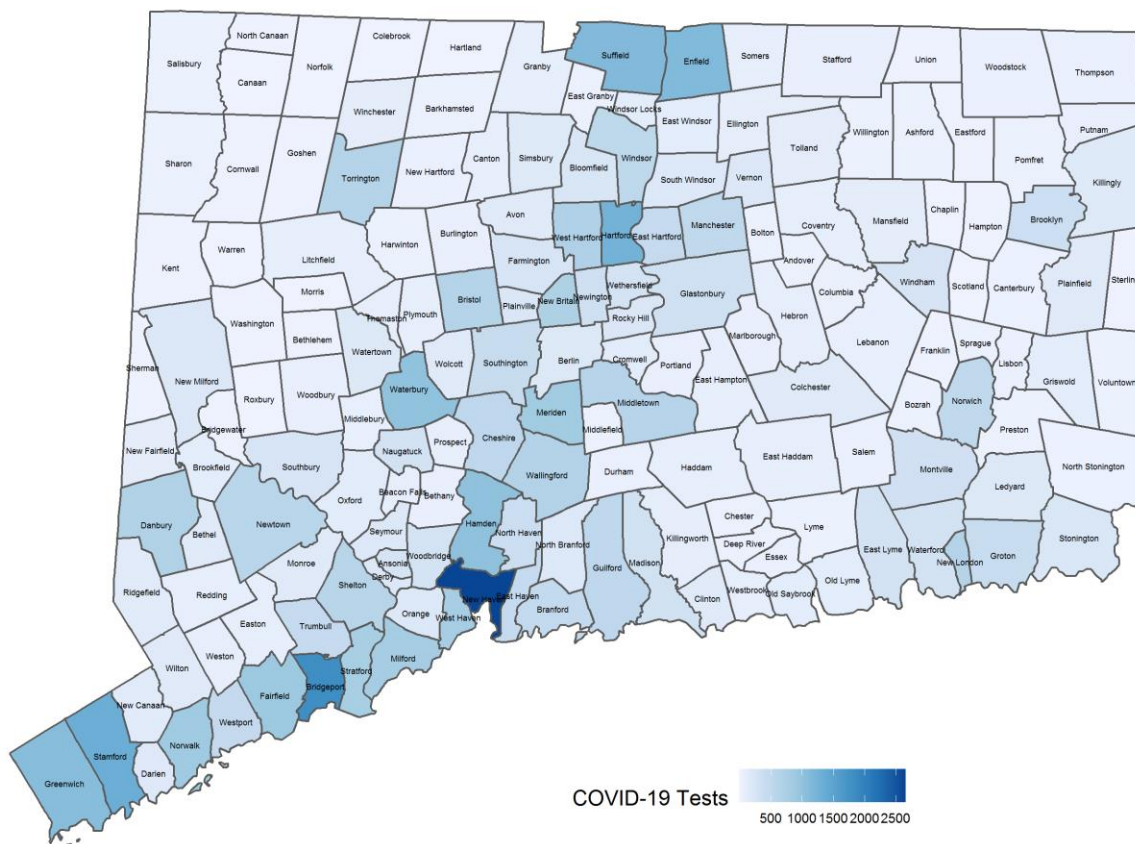
- BA.2 includes BA.2 and all sublineages except BA.2.12.1



COVID-19 Molecular and Antigen Tests during July 14 - July 20, 2022

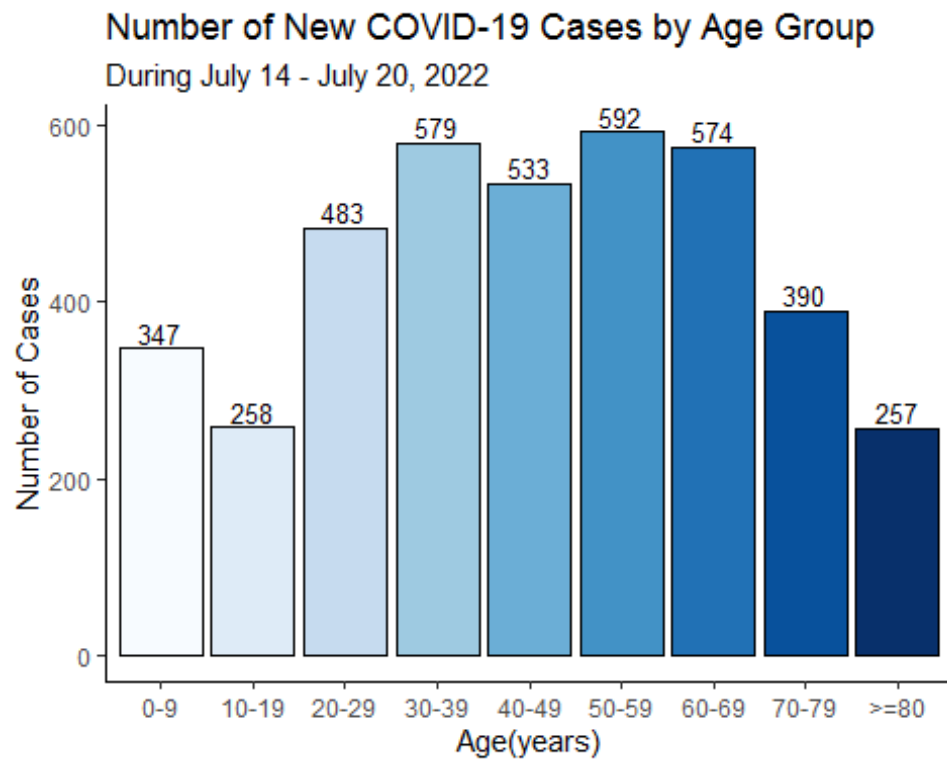
There were 44,329 molecular and antigen tests for COVID-19 performed with specimen collection date during July 14 - July 20, 2022. The map below shows the number of molecular and antigen COVID-19 tests by town with specimen collection date during July 14 - July 20, 2022.

Number of Molecular and Antigen Tests for COVID-19
with Specimen Collection Date During July 14-20



Map does not include tests pending address validation

**Age Distribution of COVID-19 Cases with Specimen Collection or Onset
During July 14 - July 20, 2022**

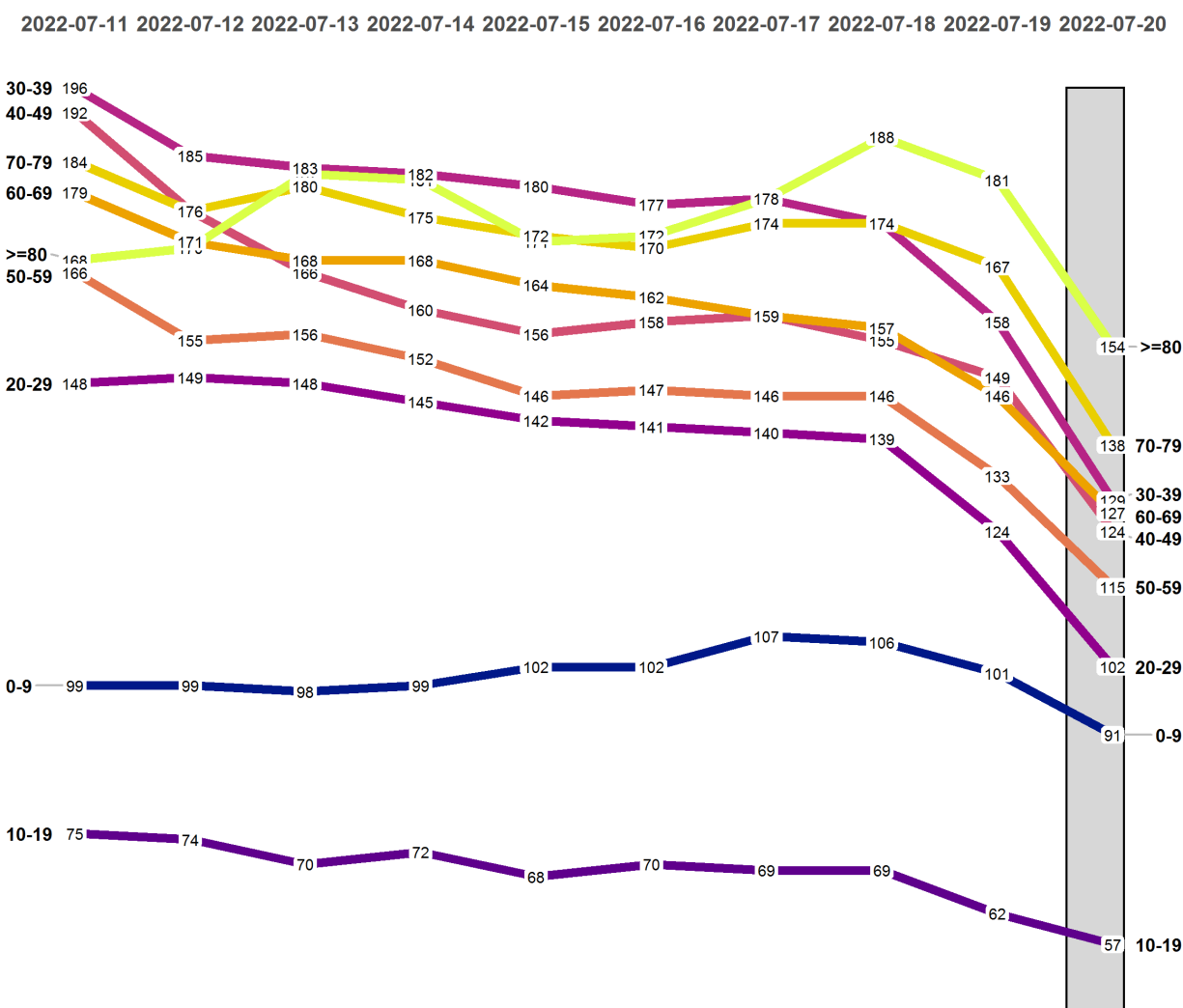


Weekly Incidence by Age Group

The chart below shows a rate of new COVID-19 cases per 100,000 population by age group based on a weekly sum of new cases. The rates in this chart are calculated by dividing the sum of the number of new cases diagnosed each day and the previous 7-days and then dividing by the annual population in each age group, and then multiplying by 100,000.

Rate of COVID-19 cases by age group

As of 07/20/2022

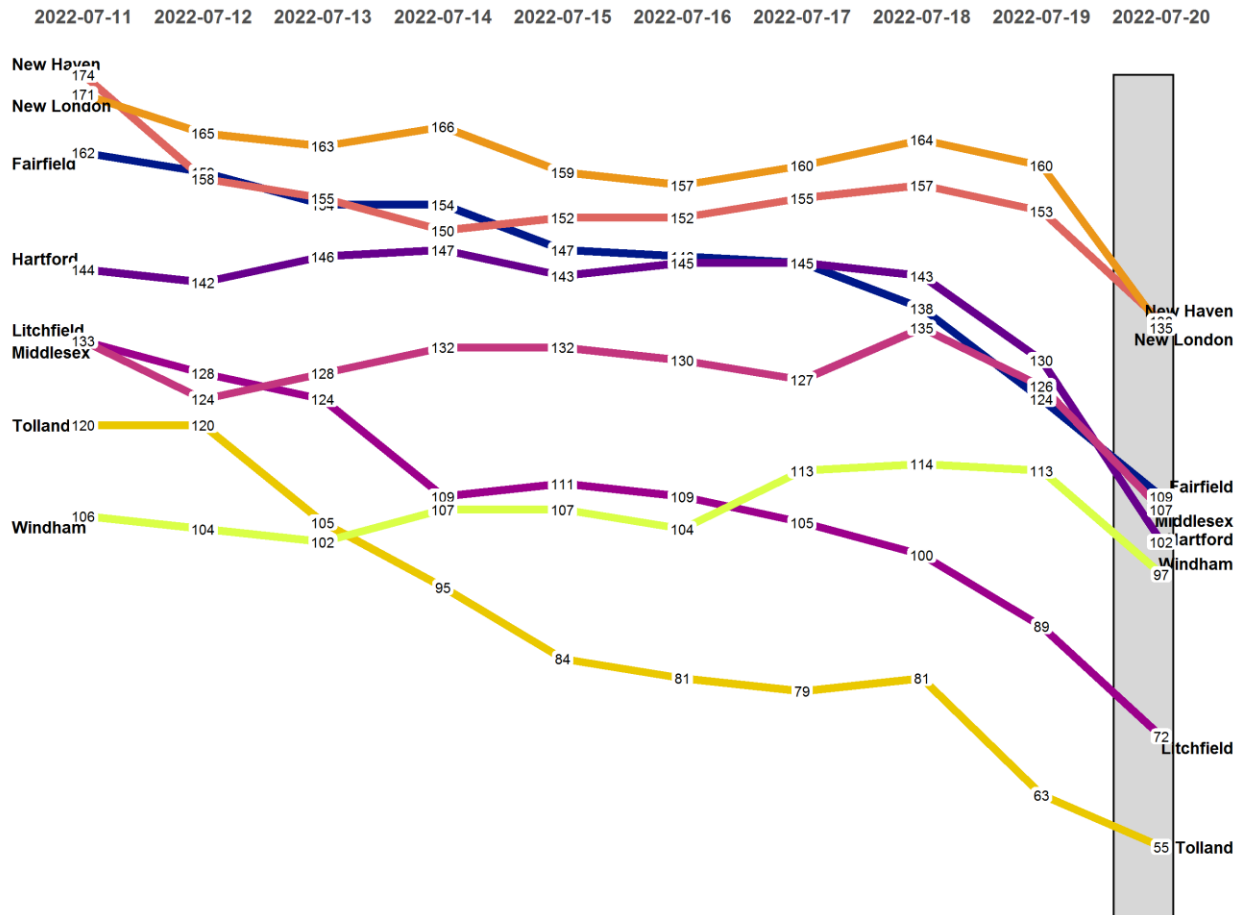


Weekly Incidence by County

The chart below shows a rate of new COVID-19 cases per 100,000 population by county based on a weekly sum of new cases. The rates in this chart are calculated by dividing the sum of the number of new cases diagnosed each day and the previous 7-days and then dividing by the annual population in each county, and then multiplying by 100,000.

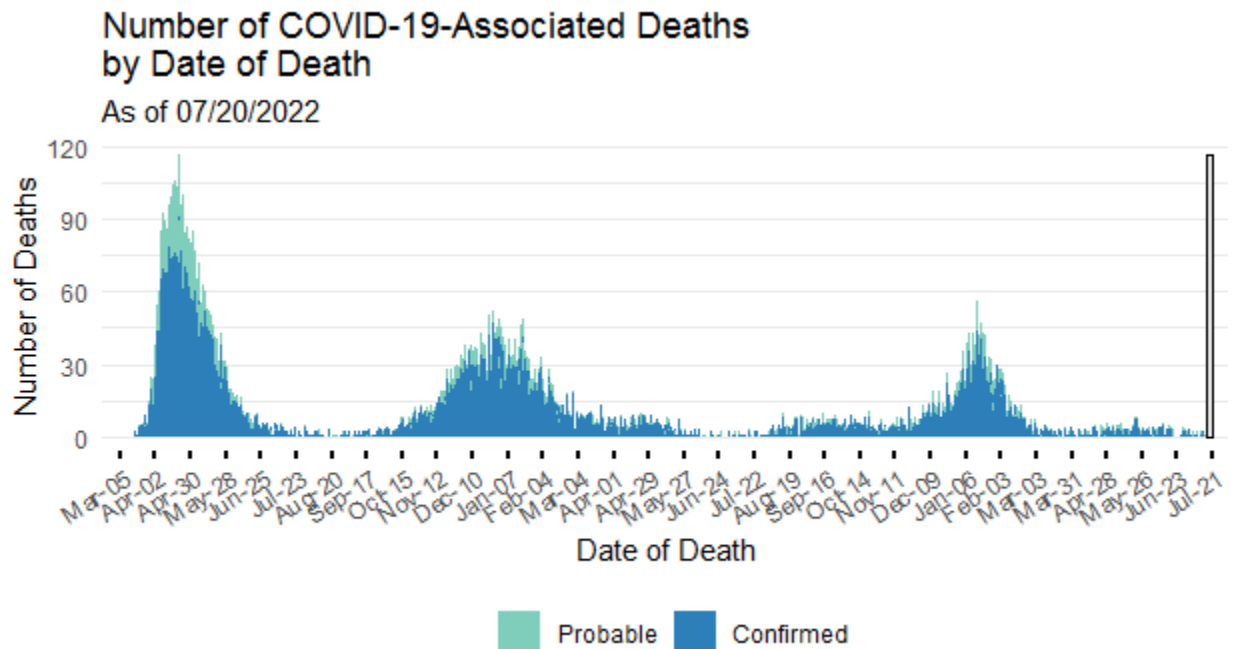
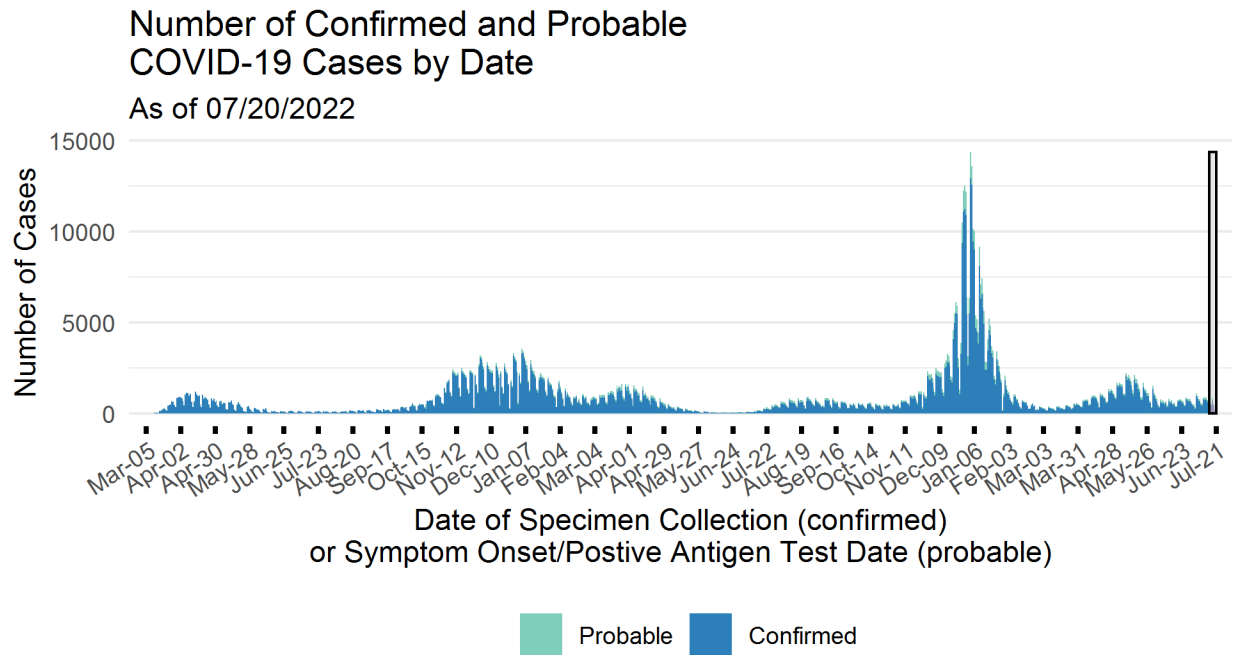
Rate of COVID-19 cases by County

As of 07/20/2022



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.

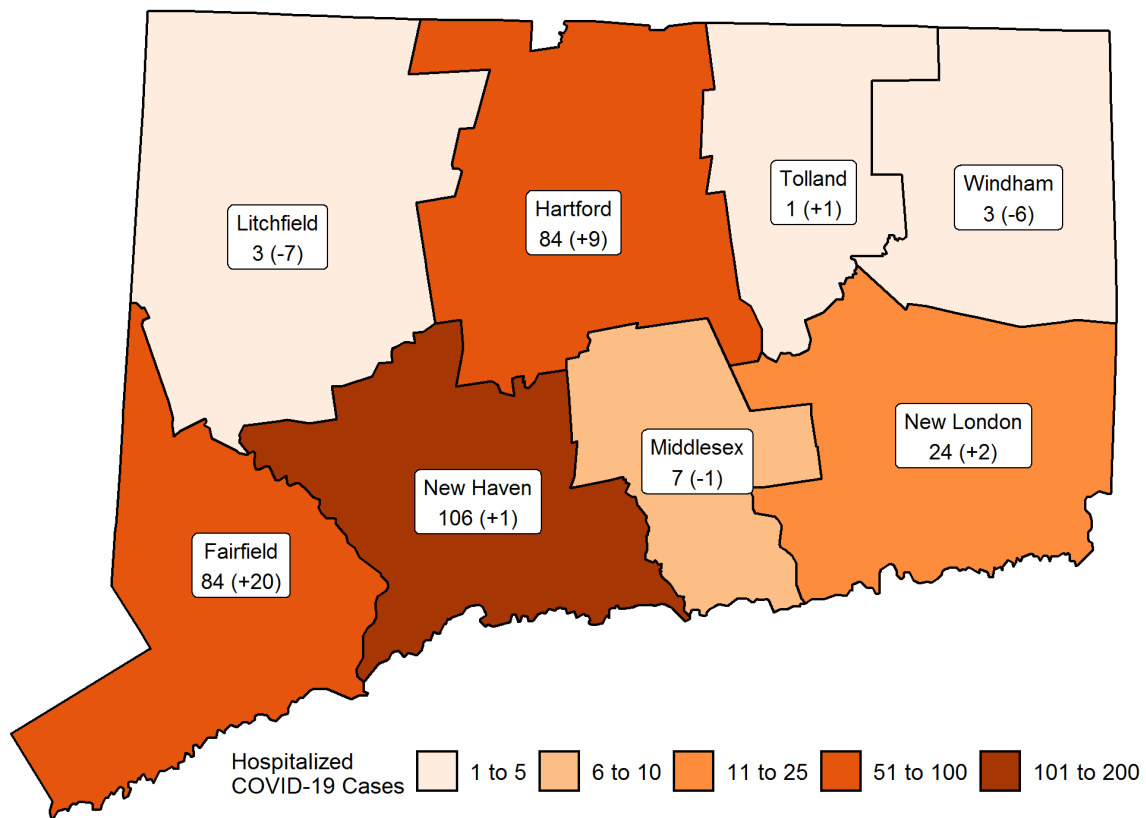


Hospitalization Surveillance

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 from 7 days ago in parentheses.

Patients Currently Hospitalized by Connecticut County

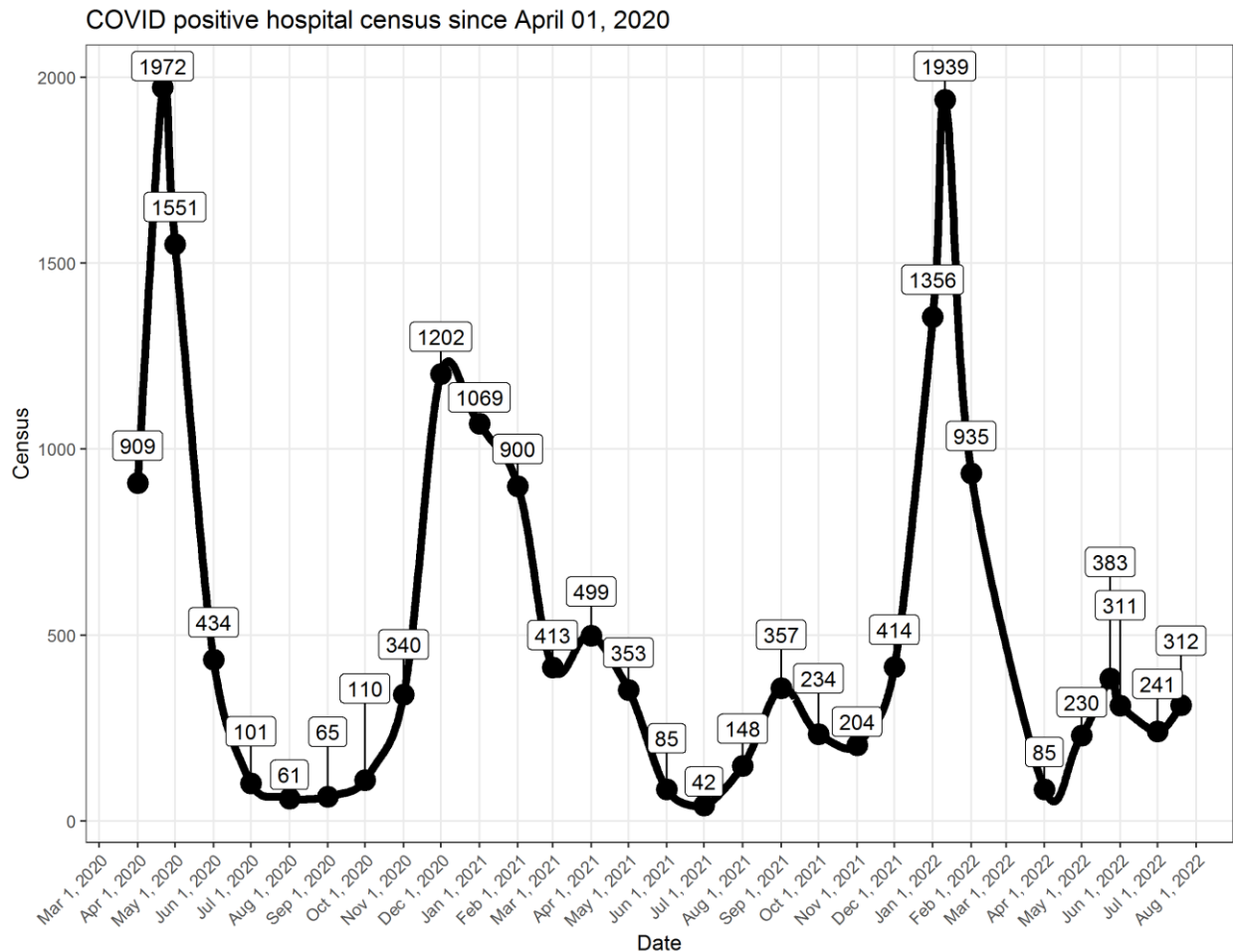
Distribution by location of hospital not patient residence. Data from the Connecticut Hospital Association.



More information about hospitalized cases of COVID-19 in New Haven and Middlesex Counties is available from [COVID-NET](#).

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.

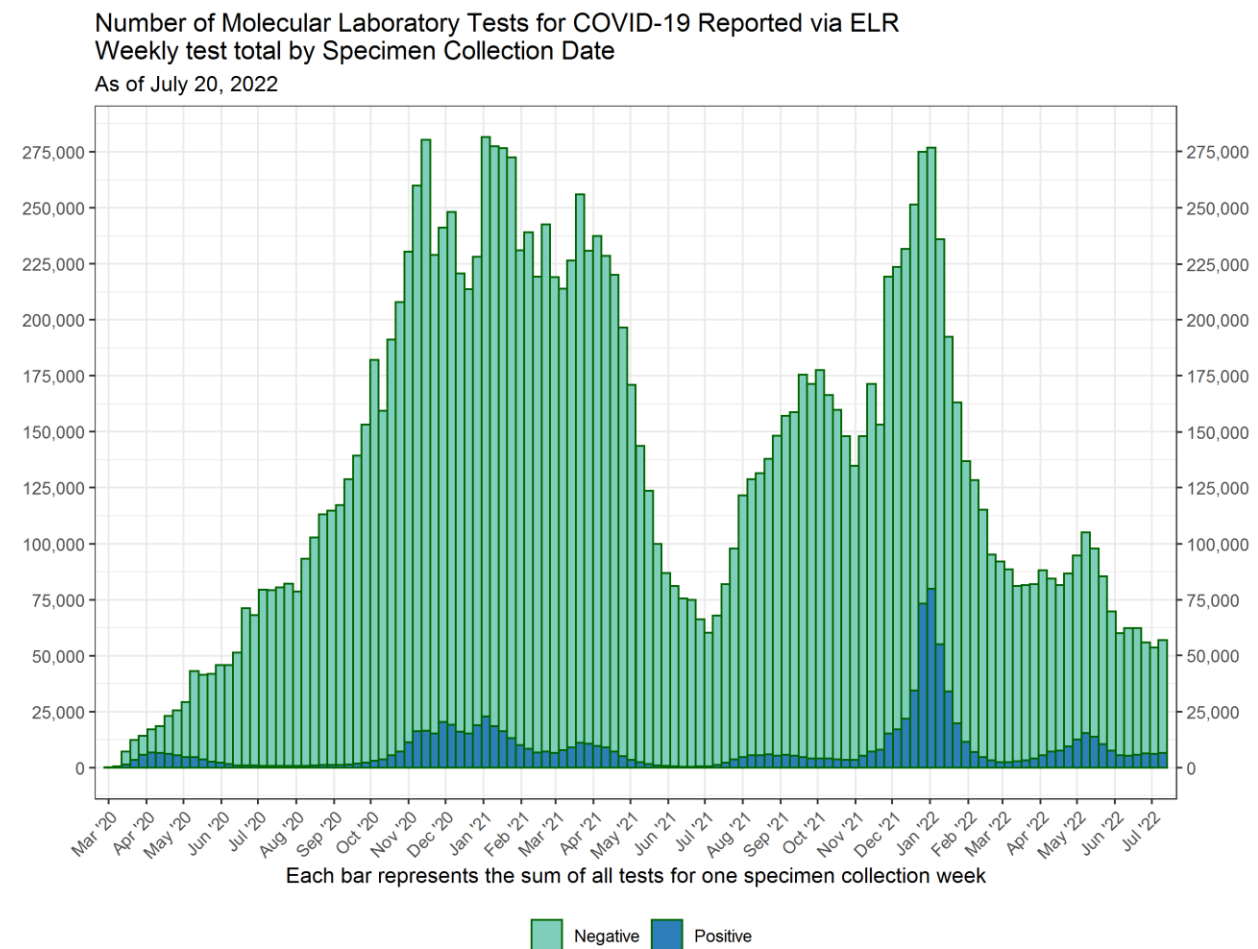


Laboratory Surveillance

Molecular Tests

To date, DPH has received reports on a total of 14,958,083 molecular COVID-19 laboratory tests; of these 14,816,169 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.

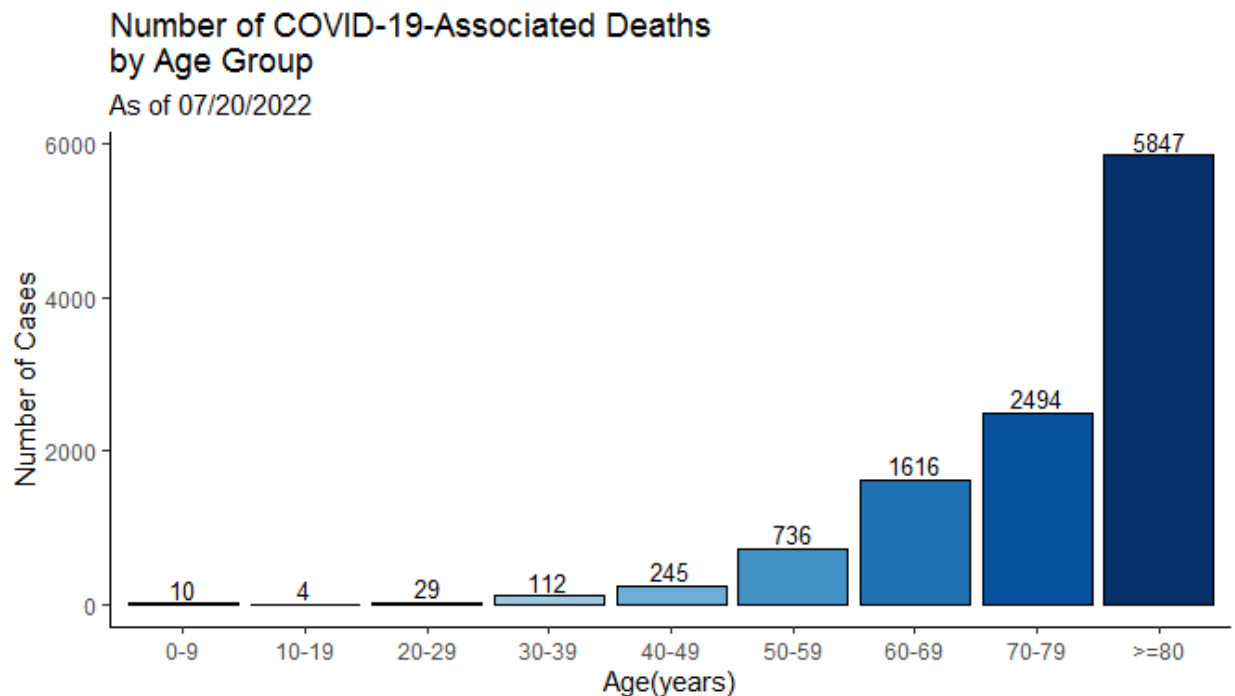
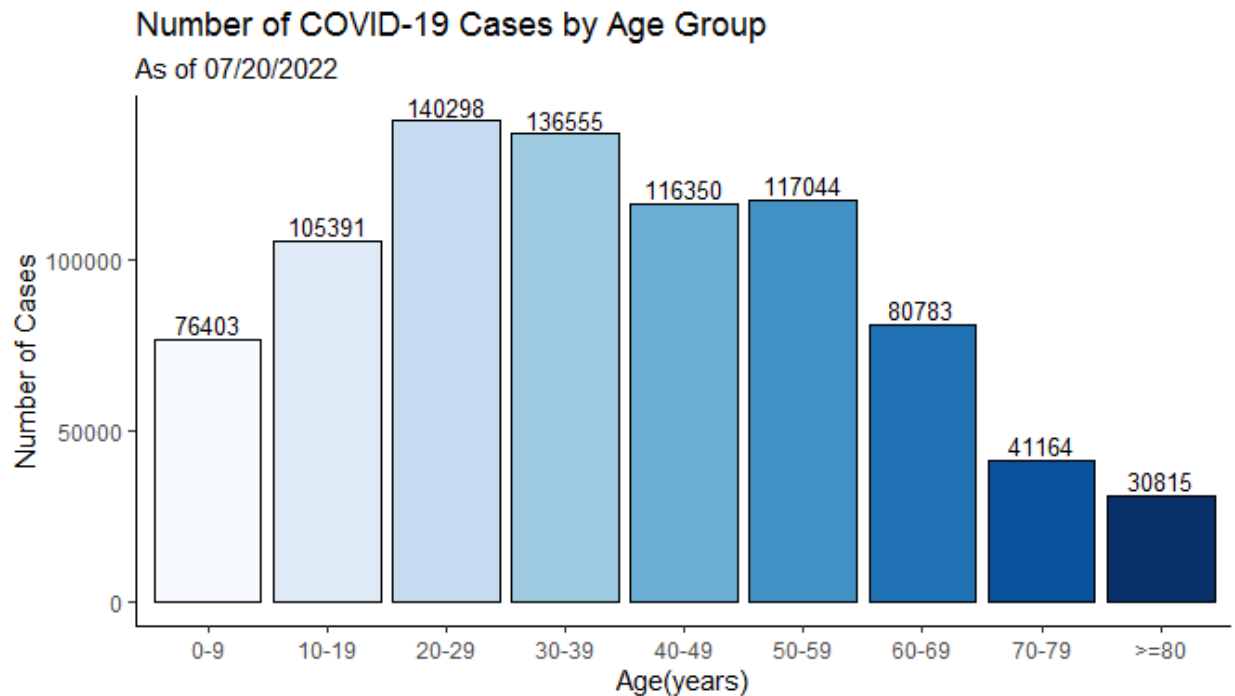


Testing of recently collected specimens is ongoing and does not reflect a decrease in testing. Chart only includes test results received by electronic laboratory reporting.

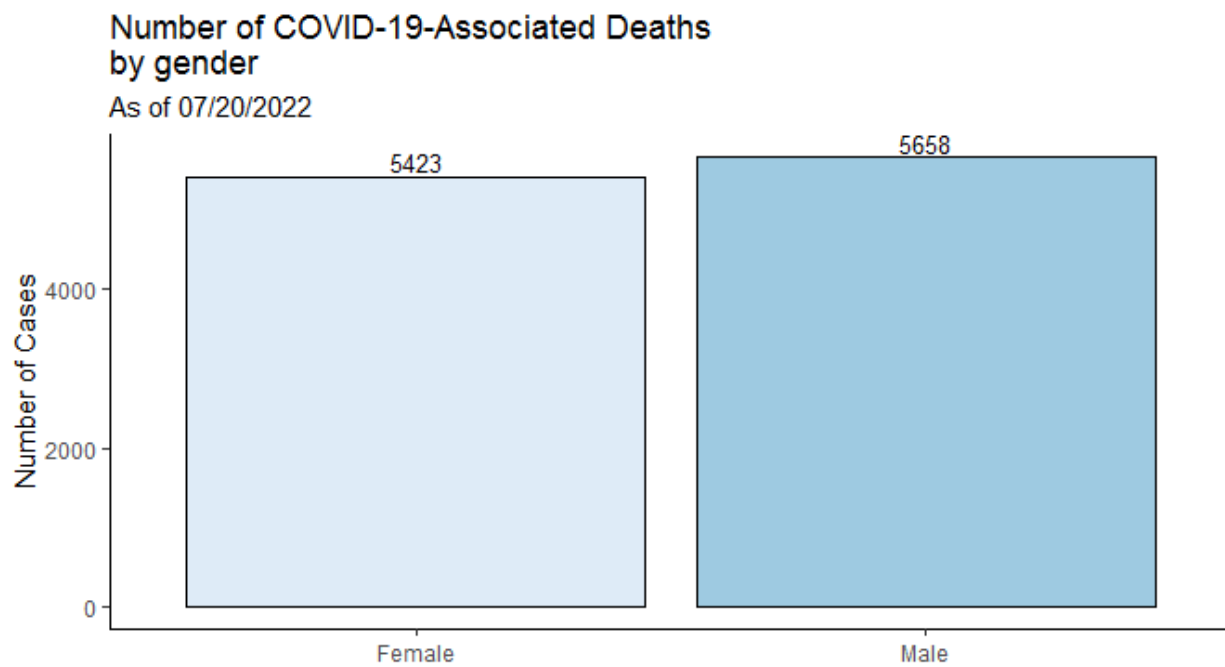
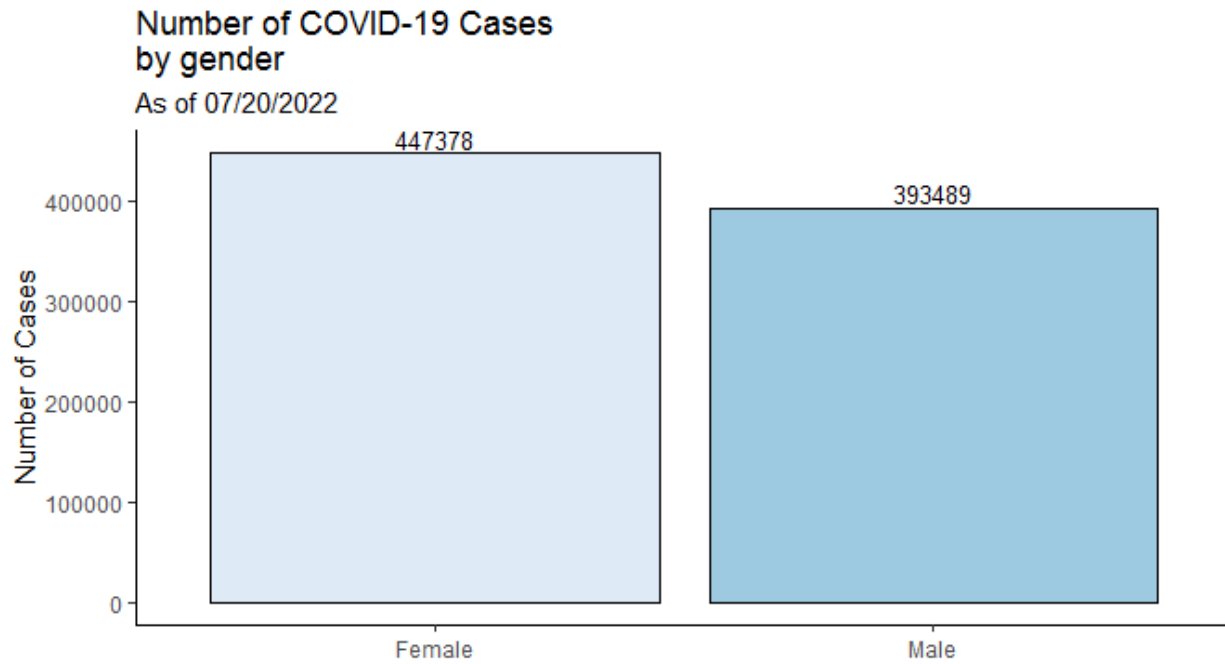
ELR = Electronic Laboratory Reporting

Characteristics of COVID-19 Cases and Associated Deaths

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

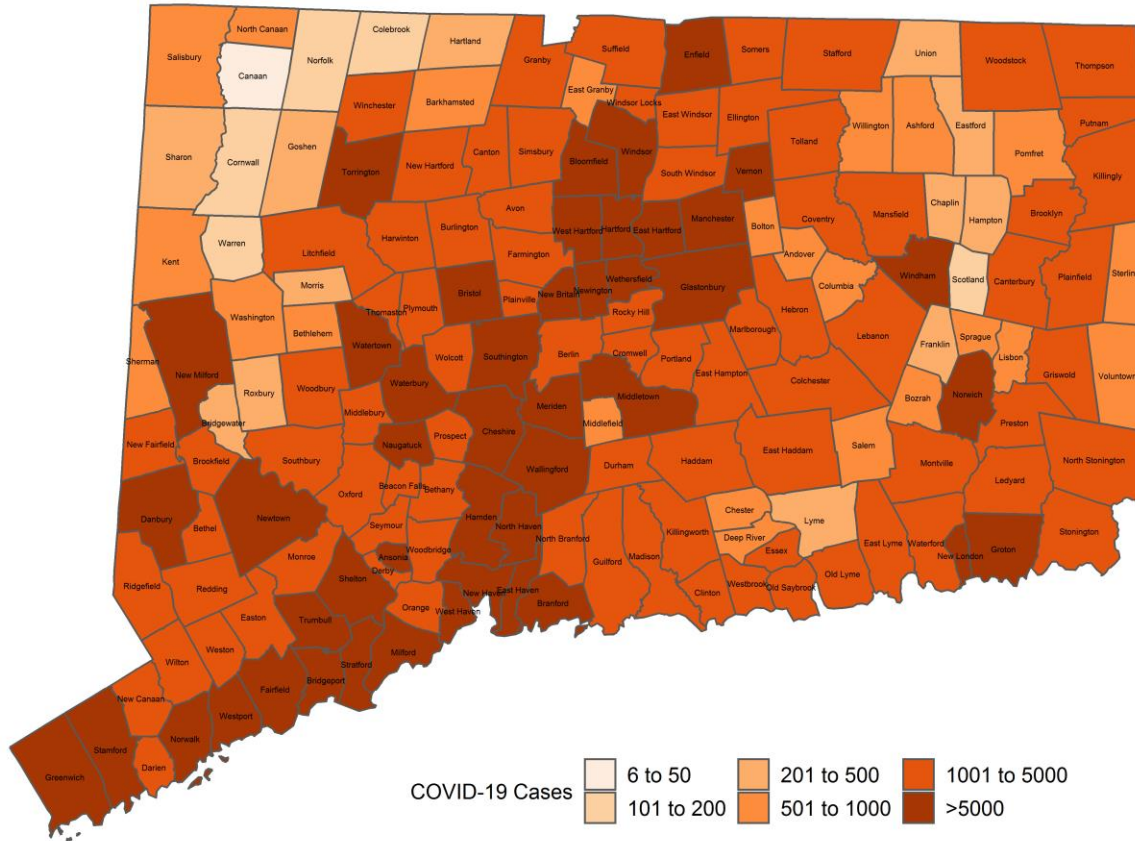


Counts may not add up to total case count because demographic data may be missing.



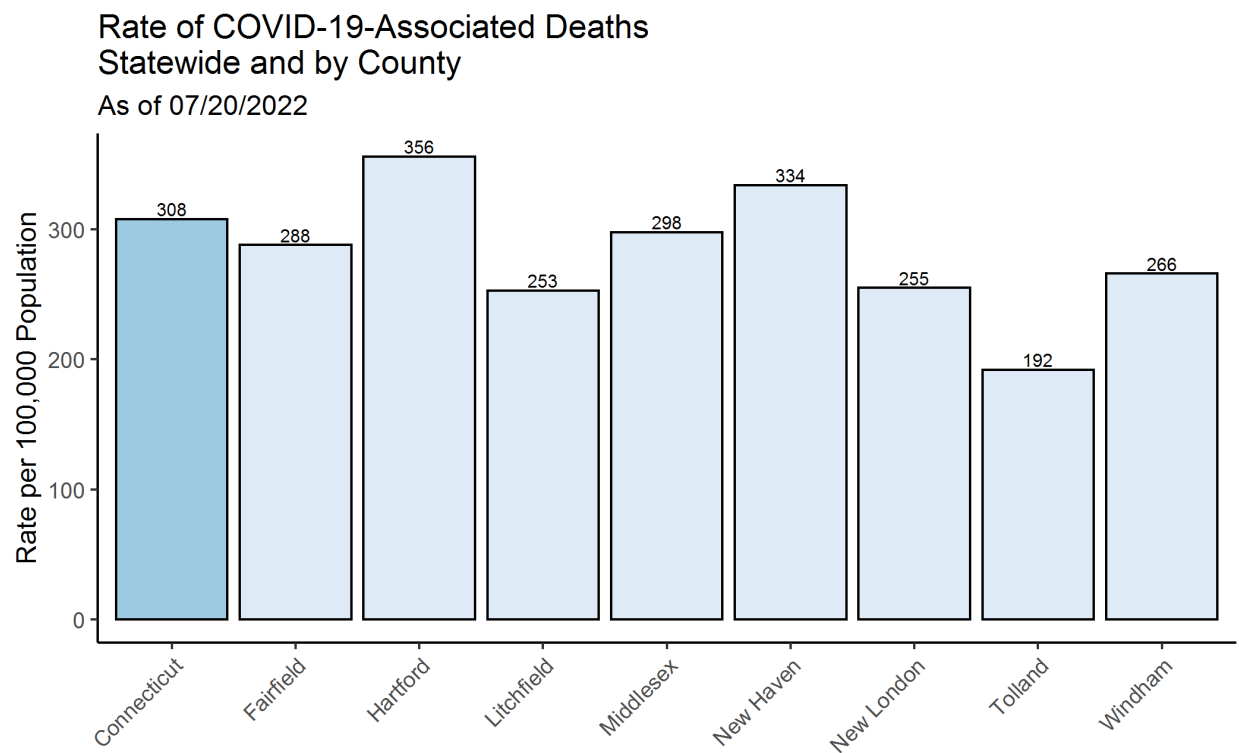
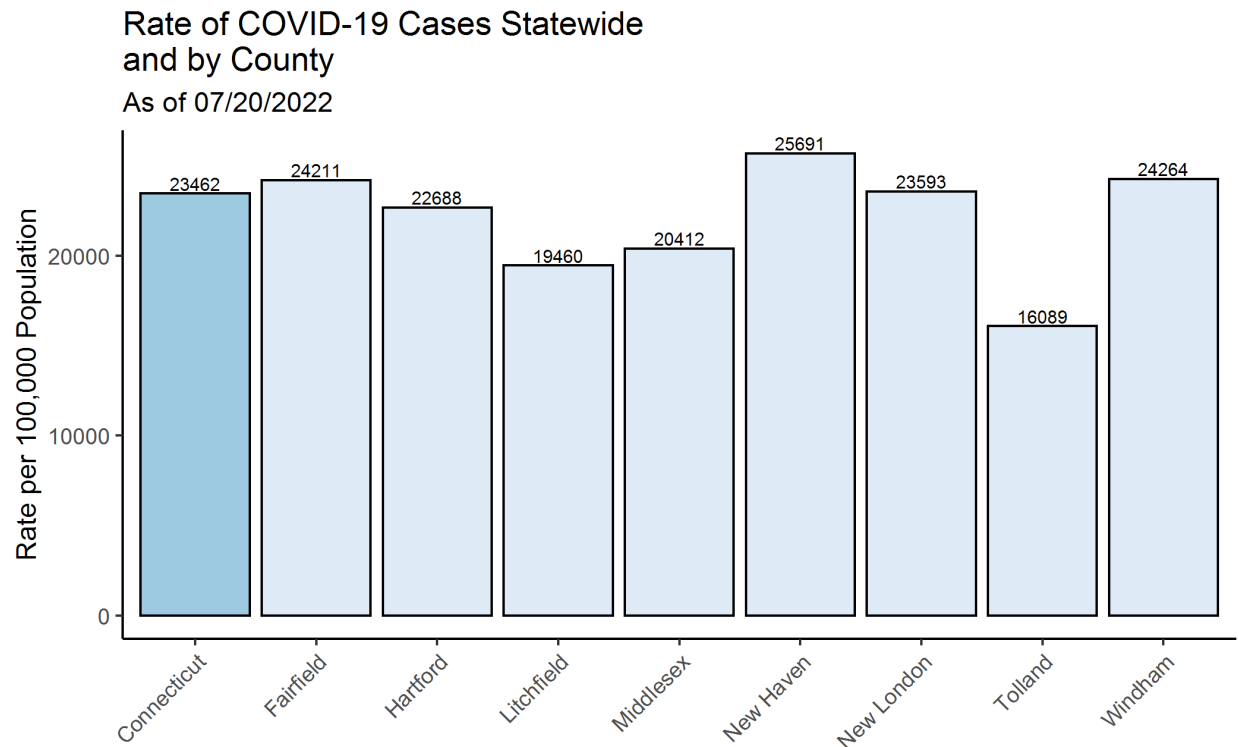
Cumulative Number of COVID-19 Cases by Town

Map does not include 2688 cases pending address validation



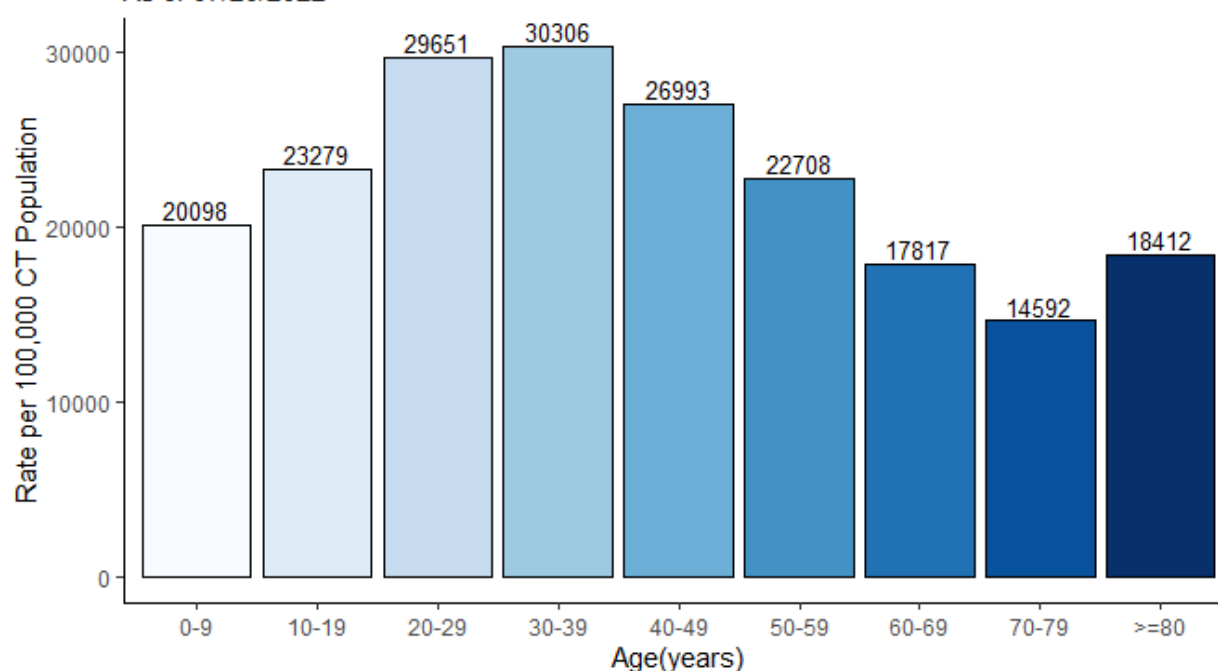
All data are preliminary and subject to change.

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: [DPH Population Statistics](#)



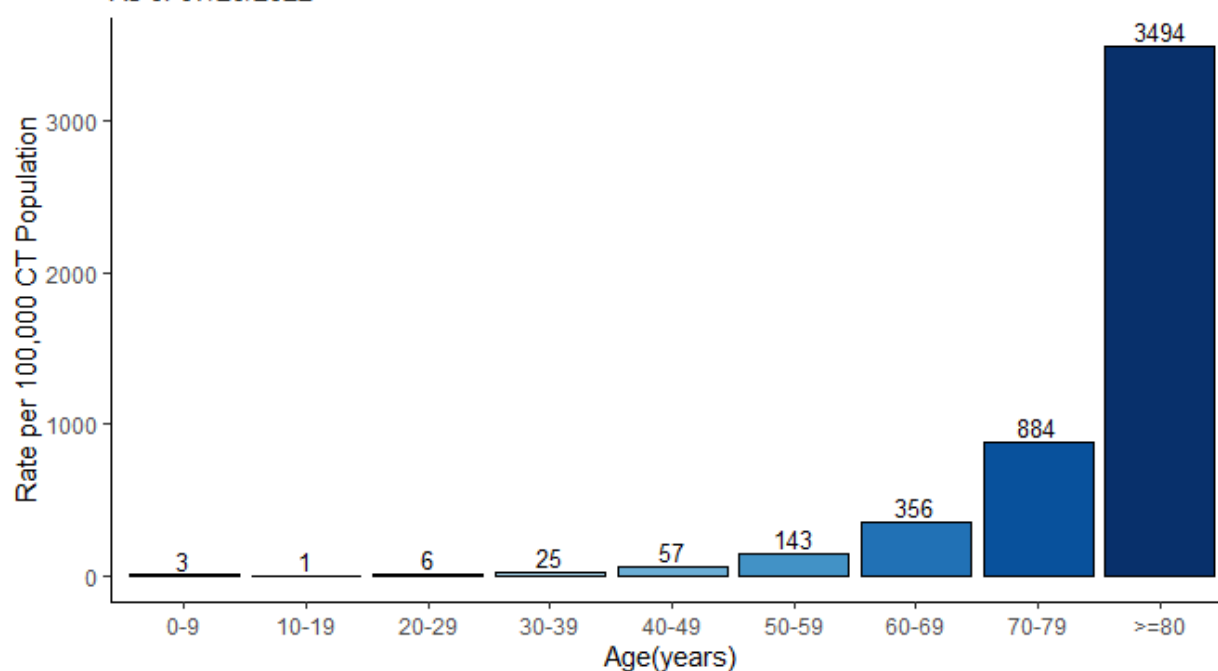
Rate of COVID-19 Cases by Age Group

As of 07/20/2022



Rate of COVID-19-Associated Deaths by Age Group

As of 07/20/2022



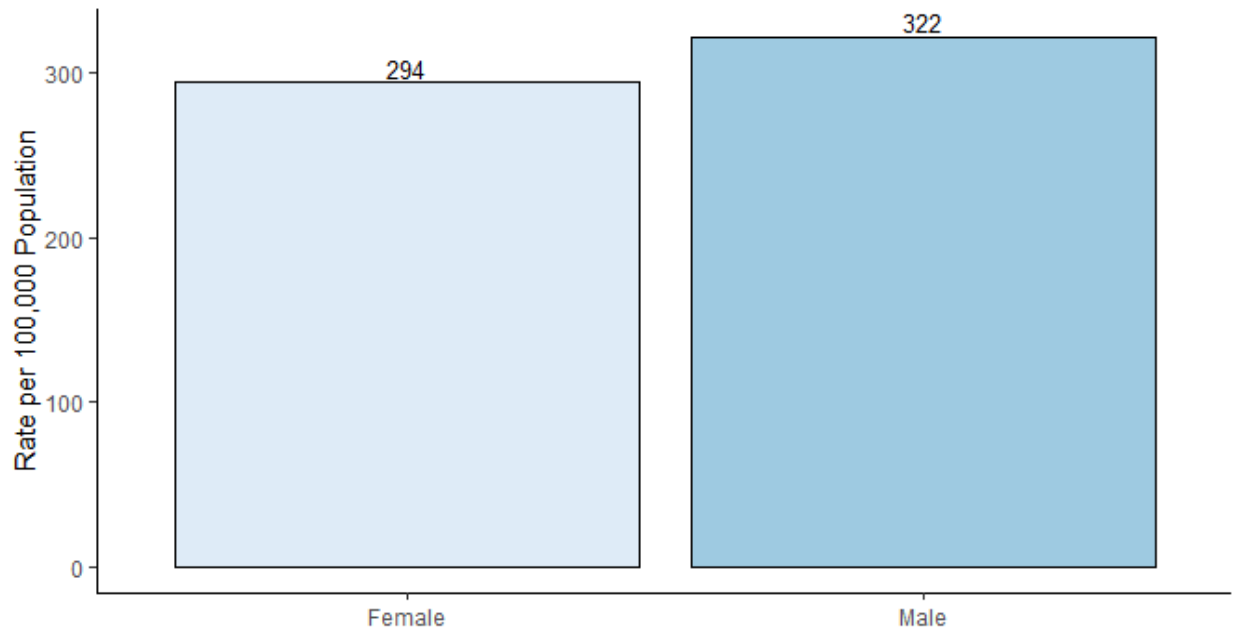
Rate of COVID-19 Cases by Gender

As of 07/20/2022

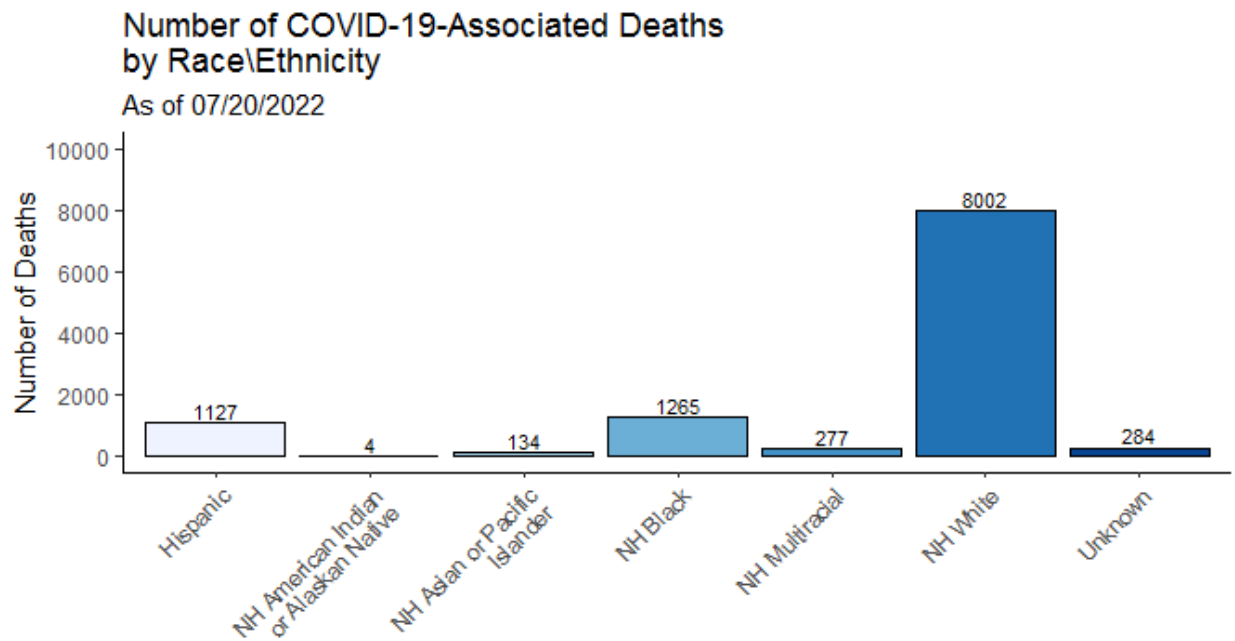
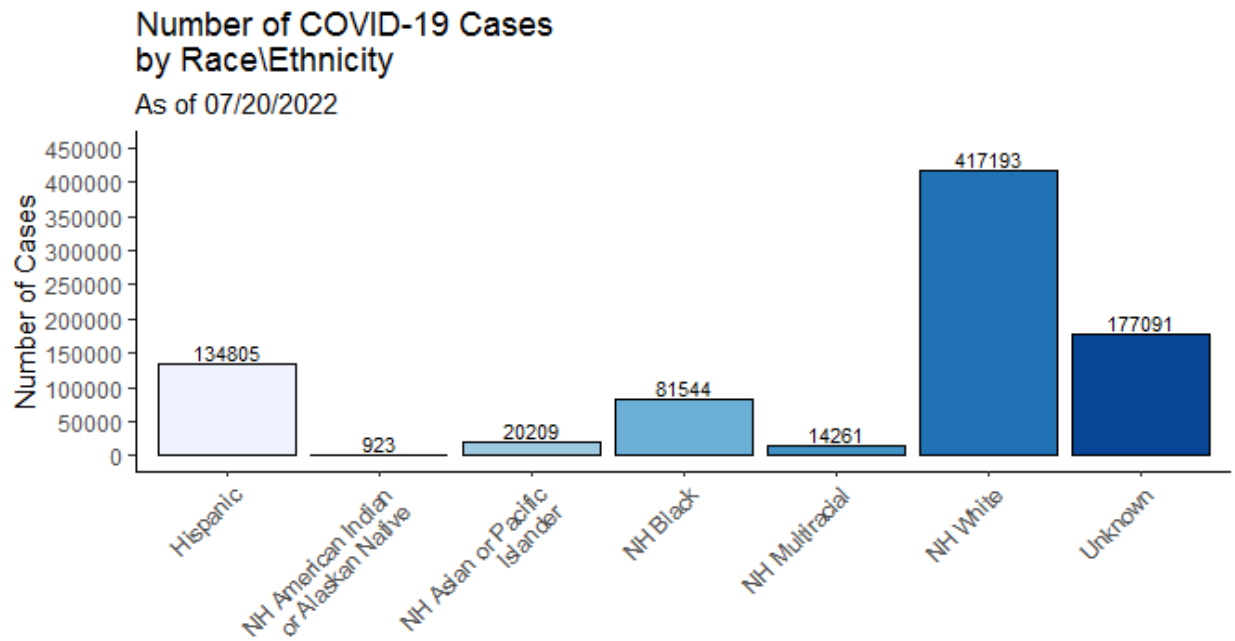


Rate of COVID-19-Associated Deaths by Gender

As of 07/20/2022

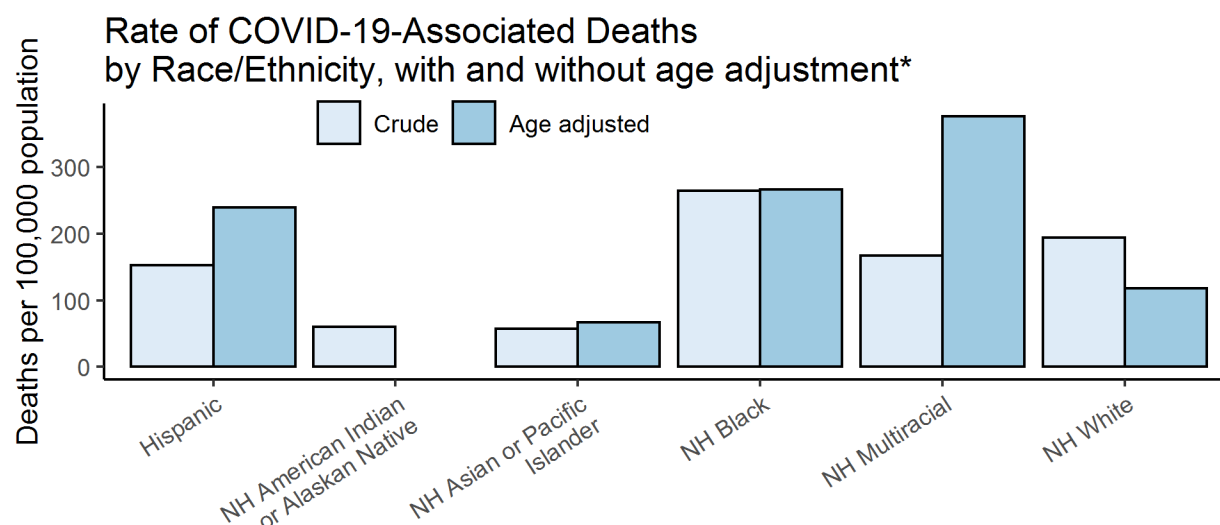
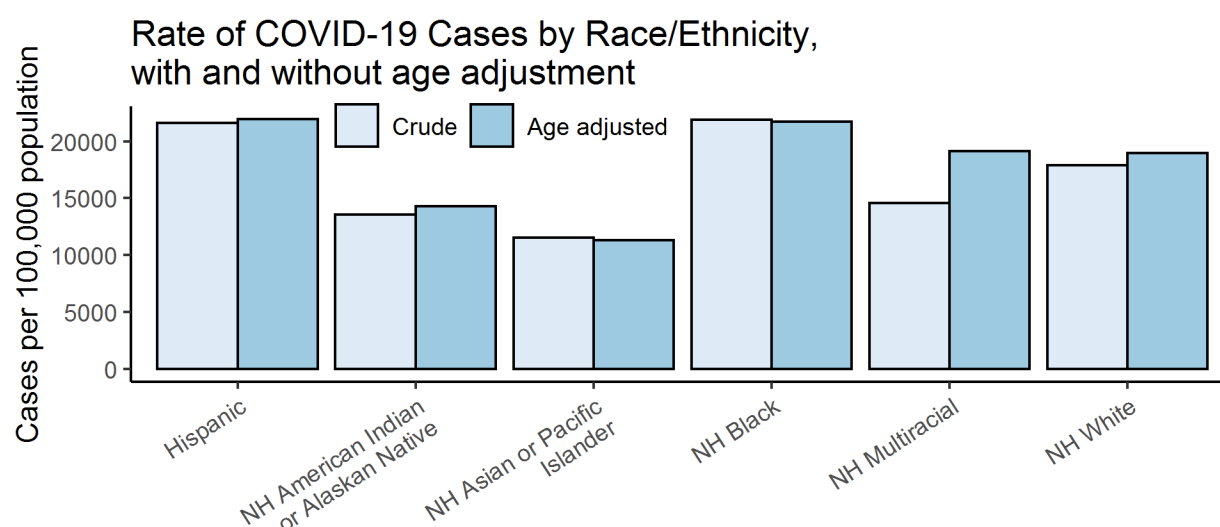


APPENDIX B. The following graphs show the number of cases and deaths by race and ethnicity. Categories are mutually exclusive. The category “multiracial” includes people who answered ‘yes’ to more than one race category. NH=Non-Hispanic



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 2020 Connecticut and 2000 US Standard Million populations were used for age adjustment; population estimates from: [DPH Population Statistics](#). 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