COVID-19 Update May 19, 2022

As of **May 18, 2022**, the total of laboratory-confirmed and probable COVID-19 cases reported among Connecticut residents is **795,492**; **9,316** have been reported in the past 7 days. **Three hundred sixty-nine** patients are currently hospitalized with laboratory-confirmed COVID-19; of these, **112** (30.35%) are not fully vaccinated.

Overall Summary	Cumulative (except for hospital census)	Past 7 days*
Positive PCR/NAAT Tests	862,822	9,751
All PCR/NAAT Tests	14,422,882	69,634
Test Positivity (pos/all PCR/NAAT)		14%
Patients currently hospitalized with COVID-19	369	+78
COVID-19-Associated Deaths	10,922	+39

*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.

As of April 4th 2022, negative rapid antigen and rapid PCR test results for SARS-CoV-2 are no longer required to be reported to the Connecticut Department of Public Health. Negative test results from laboratory based molecular (PCR/NAAT) results are still required to be reported as are all positive test results from both molecular (PCR/NAAT) and antigen tests. Both positive molecular (PCR/NAAT) and antigen tests will continue to be used for determining case status.

Starting May 19, 2022, data related to nursing homes can be found here:
https://data.ct.gov/stories/s/f8wz-xtcy

Starting May 19, 2022, data related to childcare can be found here:
https://data.ct.gov/stories/s/bdqv-9jvi

COVID-19 Cases and Associated Deaths by County of Residence As of 05/18/22.

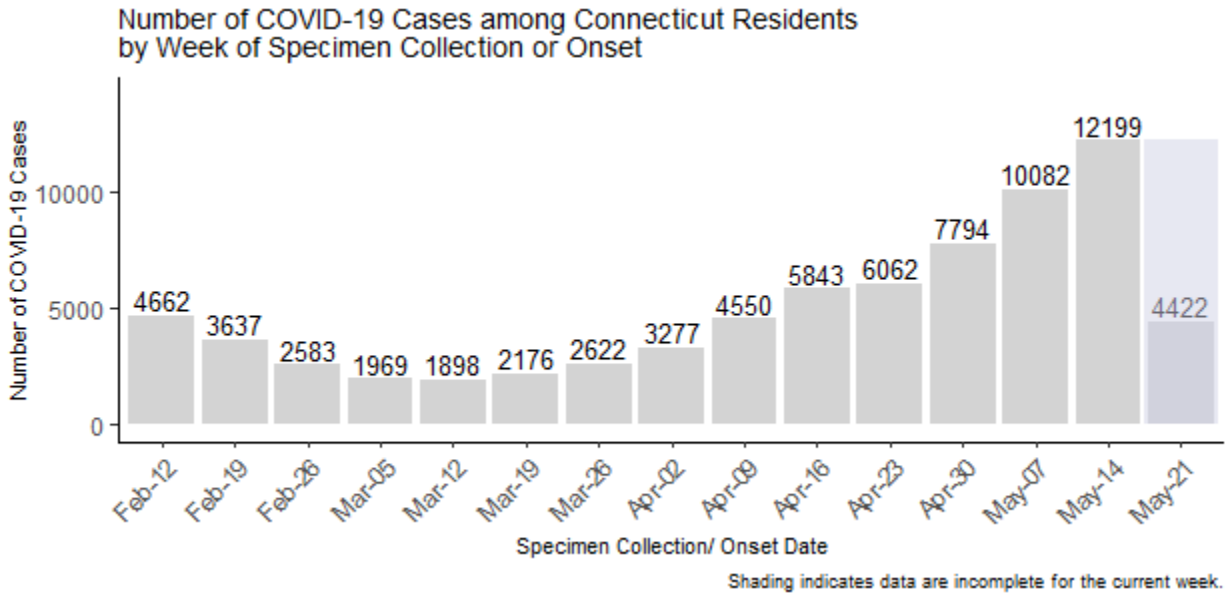
County	COVID-19 Cases		COVID-19-Associated Deaths	
	Confirmed	Probable	Confirmed	Probable
Fairfield County	194,495	23,385	2,206	529
Hartford County	173,829	17,923	2,576	582
Litchfield County	29,488	4,574	399	63
Middlesex County	28,296	2,781	344	138
New Haven County	185,474	23,878	2,459	383
New London County	54,291	4,971	516	146
Tolland County	20,246	2,288	198	77
Windham County	25,484	1,596	241	64
Pending address validation	2,175	318	0	1
Total	**713778**	**81714**	**8939**	**1983**

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

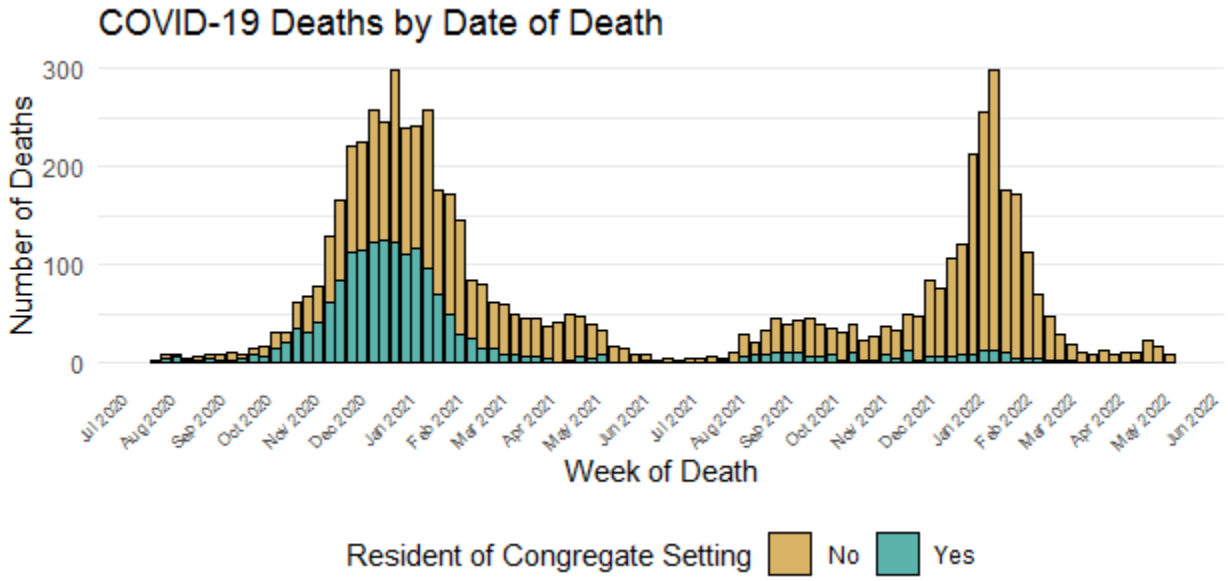
Day-to-day changes reflect newly reported cases, deaths, and tests that occurred over the last several days to week. All data in this report are preliminary; data for previous dates will be updated as new reports are received and data errors are corrected. Hospitalization data were collected by the Connecticut 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 past two weeks (May 01-14), there were 22,281 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.

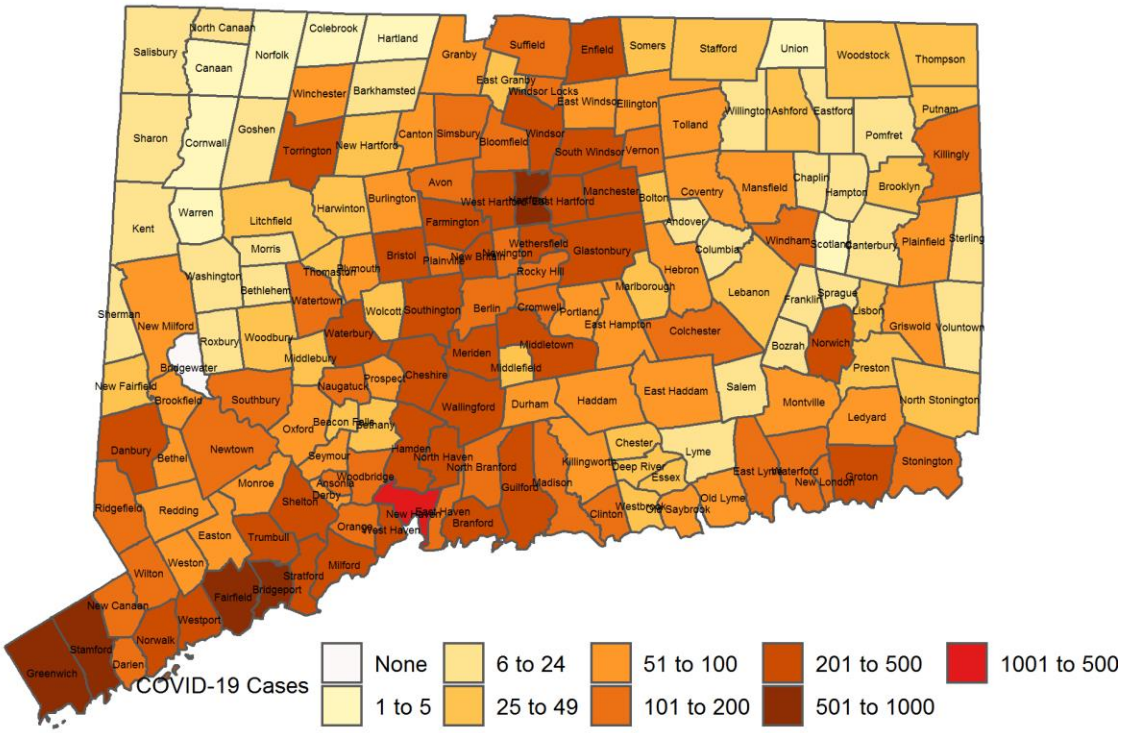


Community Transmission of COVID-19

Among 22,281 new COVID-19 cases with specimen collection or onset date during May 01-14, there were 22,266 cases among people living in community settings, as shown in the map below. This corresponds to an average of 44.61 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.

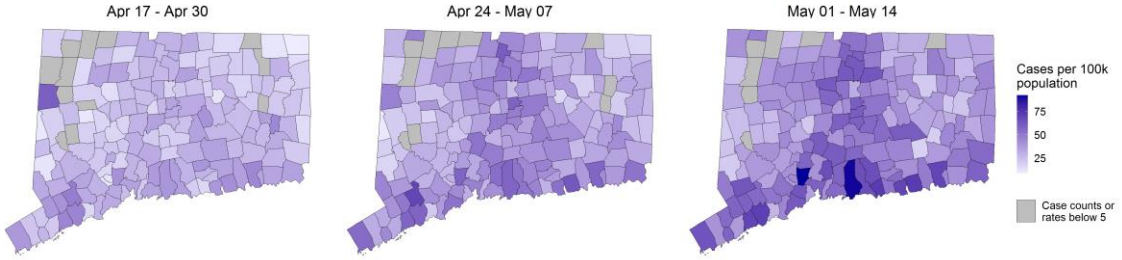
During this two-week period, there were more than 100 new COVID-19 cases in 71 towns.

Number of COVID-19 Cases among People Living in Community Settings by Town with Specimen Collection or Onset Date During May 01-14



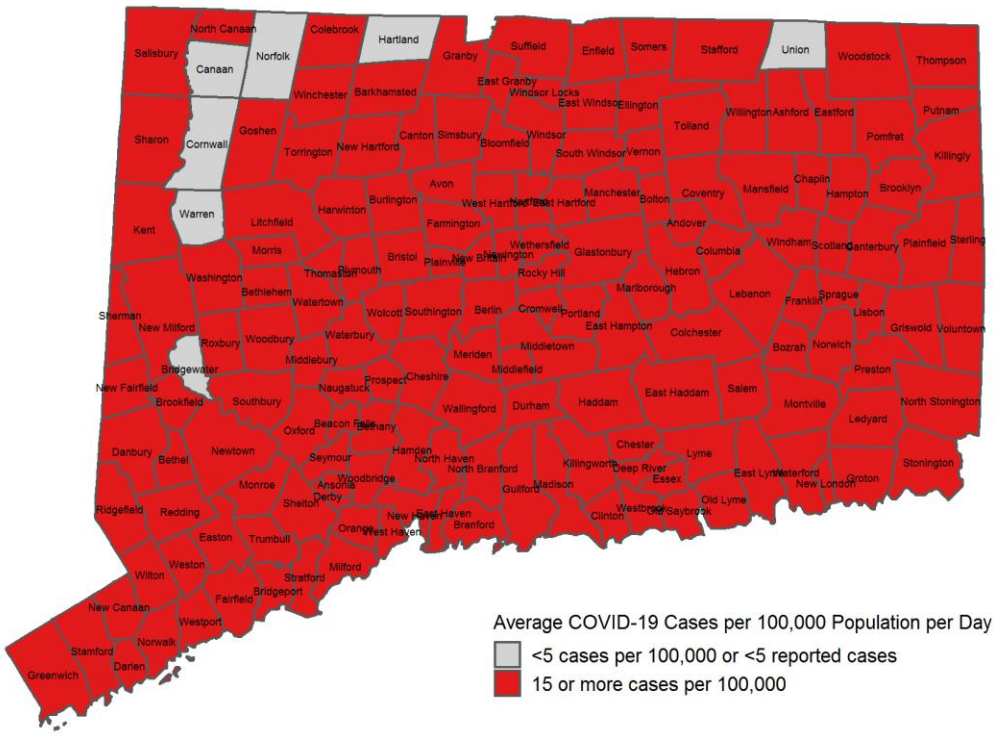
Map does not include 123 *cases pending address validation*

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 May 01-14, 162 towns had an average rate of 15 or more cases per 100,000 population per day, shown in red 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 May 01-14



Map does not include 123 *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 last two complete weeks (Sun-Sat) May 01, 2022 - May 14, 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	21,206	
Not Fully Vaccinated	6,326	29.8
Fully Vaccinated	14,880	70.2

As of **May 18, 2022**, 217,386 cases of COVID-19 among fully vaccinated persons in Connecticut have been identified. Those 217,386 cases account for 8 percent of the 2,718,945 persons who are fully vaccinated.

Since the beginning of the pandemic, 578,106 cases have been identified among individuals who are not fully vaccinated.

Nine hundred twenty-three COVID-19 related deaths have occurred among the 217,386 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	5,532 (2.5%)	5 (0%)		
12-15	8,751 (4%)	461 (0.7%)		
16-24	29,221 (13.4%)	5,154 (8%)	1 (0.1%)	
25-34	36,082 (16.6%)	8,308 (13%)	3 (0.3%)	
35-44	37,036 (17%)	10,400 (16.2%)	11 (1.2%)	1 (0.5%)
45-54	35,307 (16.2%)	10,901 (17%)	23 (2.5%)	5 (2.4%)
55-64	33,587 (15.5%)	12,758 (19.9%)	111 (12%)	19 (9.2%)
65-74	18,349 (8.4%)	9,433 (14.7%)	154 (16.7%)	35 (16.9%)
75+	13,521 (6.2%)	6,667 (10.4%)	620 (67.2%)	147 (71%)
Total	217,386	64,087	923	207

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 05/18/2022 with specimen collection dates between 01/12/2021 and 05/11/2022. **The total number of SARS-CoV-2 sequences reported to DPH with a valid specimen collection date is 34413.** Data are preliminary and updated as new data are received.

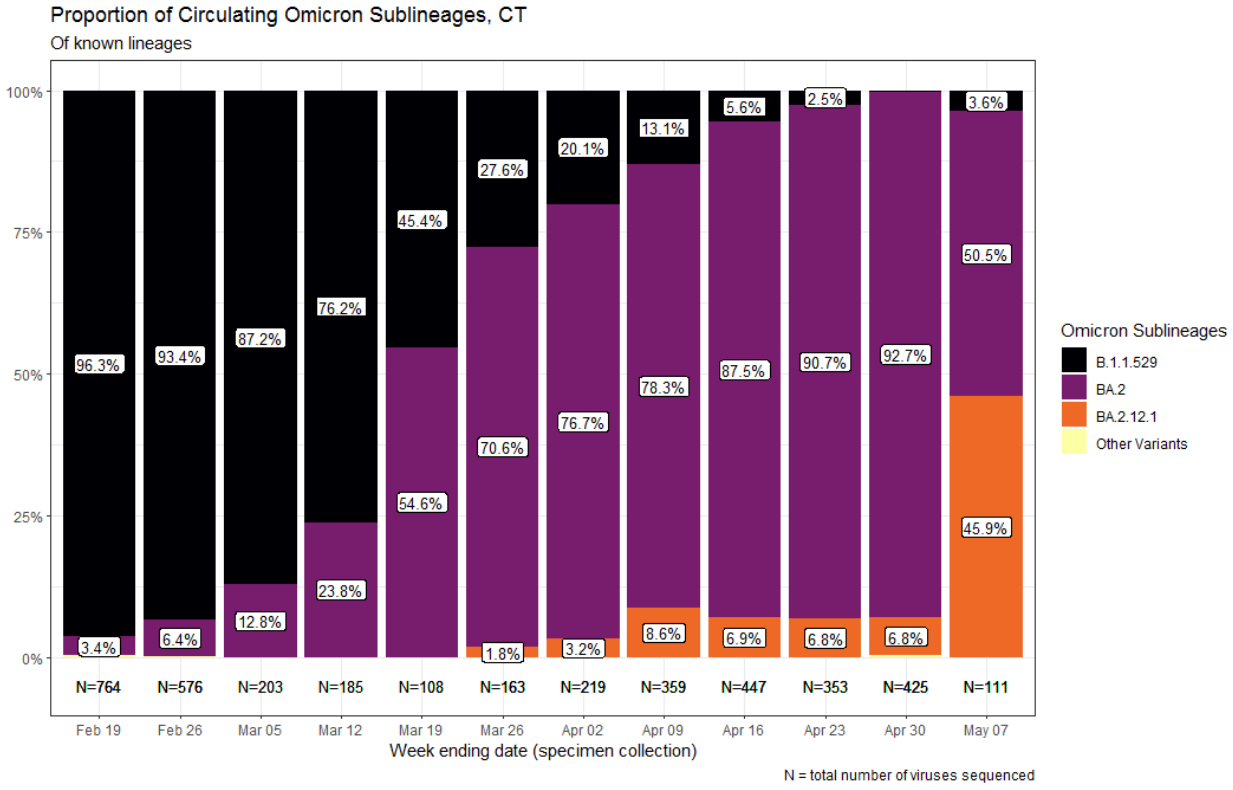
Variant	Number	Percentage
Variants of Concern		
Omicron	13,147	38.20
Variants Being Monitored		
Alpha	2,525	7.34
Beta	23	0.07
Gamma	137	0.40
Delta	16,287	47.33
Epsilon	60	0.17
Zeta	1	0.00
Eta	10	0.03
Iota	718	2.09
Kappa	2	0.01
B.1.617.3	0	0.00
Mu	84	0.24

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 May 18, 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 02/13/2022–05/11/2022.

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

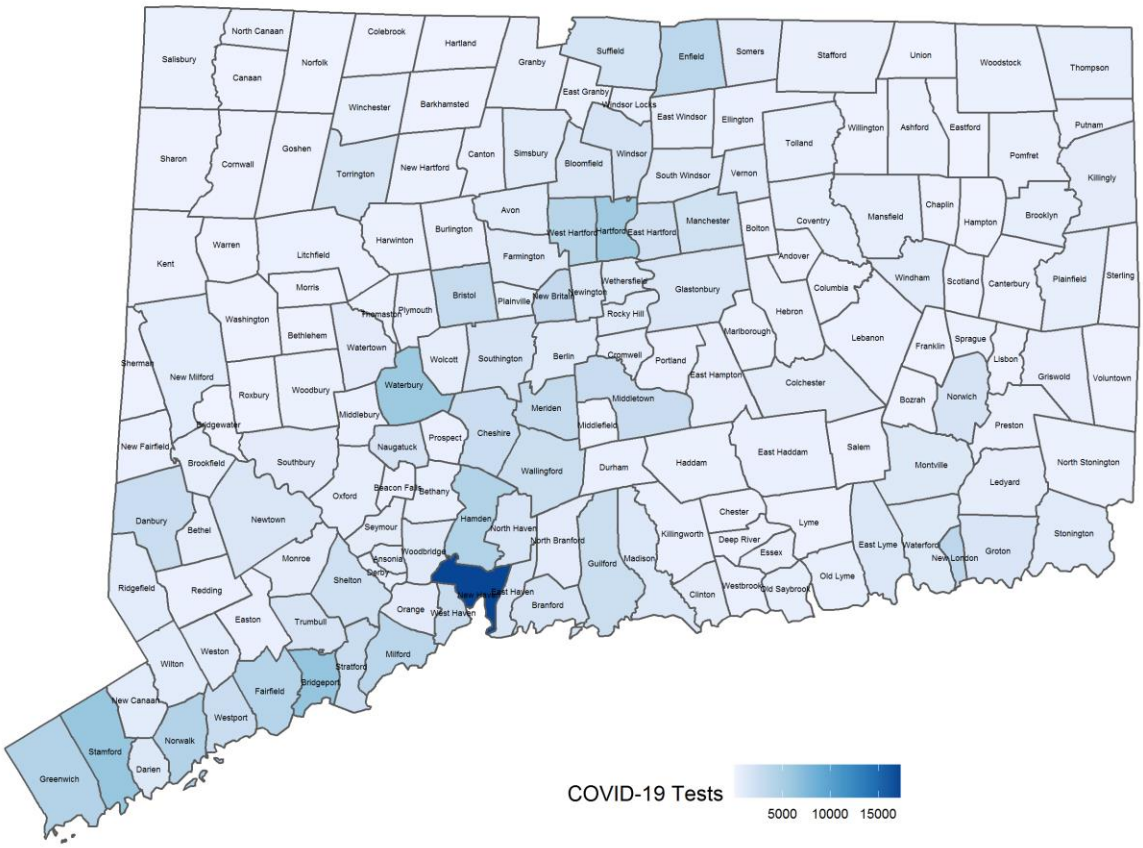
- B.1.1.529 includes B.1.1.529, BA.1, BA.1.1, BA.3, BA.4, BA.5, and their sublineages
- BA.2 includes BA.2 and all sublineages except BA.2.12.1
- BA.2.12.1 includes BA.2.12.1



COVID-19 Molecular and Antigen Tests during May 01 - May 14, 2022

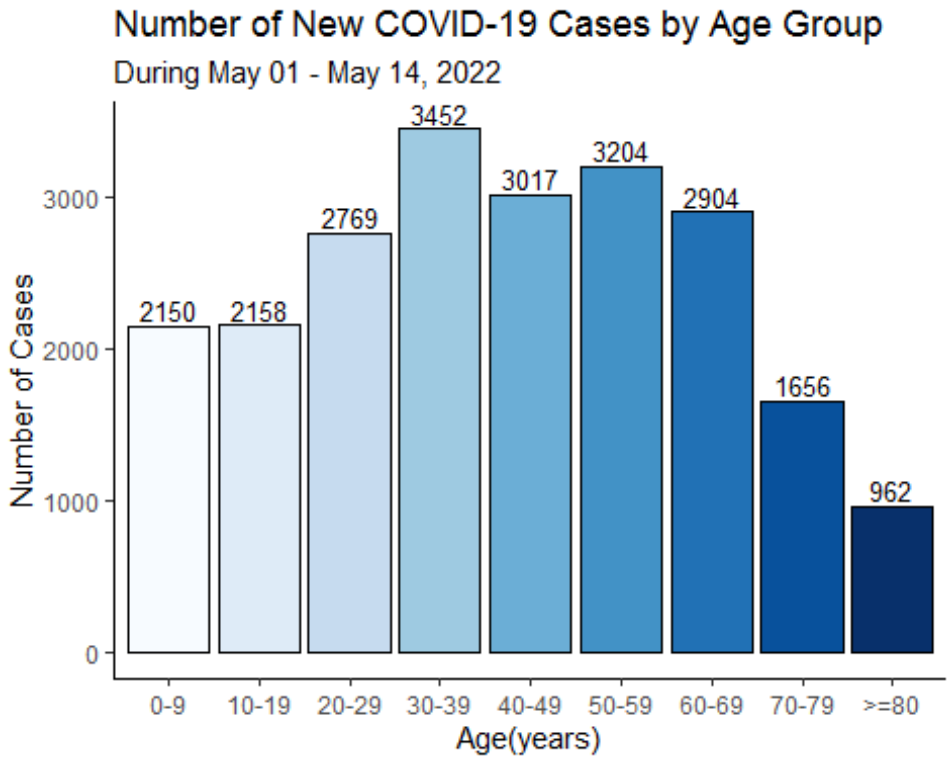
Among 196,790 molecular and antigen tests for COVID-19 with specimen collection date during May 01 - May 14, 2022, 189,798 (96%) tests were conducted among people who did not reside in congregate settings (including nursing homes, assisted living, and correctional facilities). Of these 189798 tests, 27,096 (14%) were positive. The map below shows the number of molecular and antigen COVID-19 tests by town with specimen collection date during May 01 - May 14, 2022 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 May 01-14



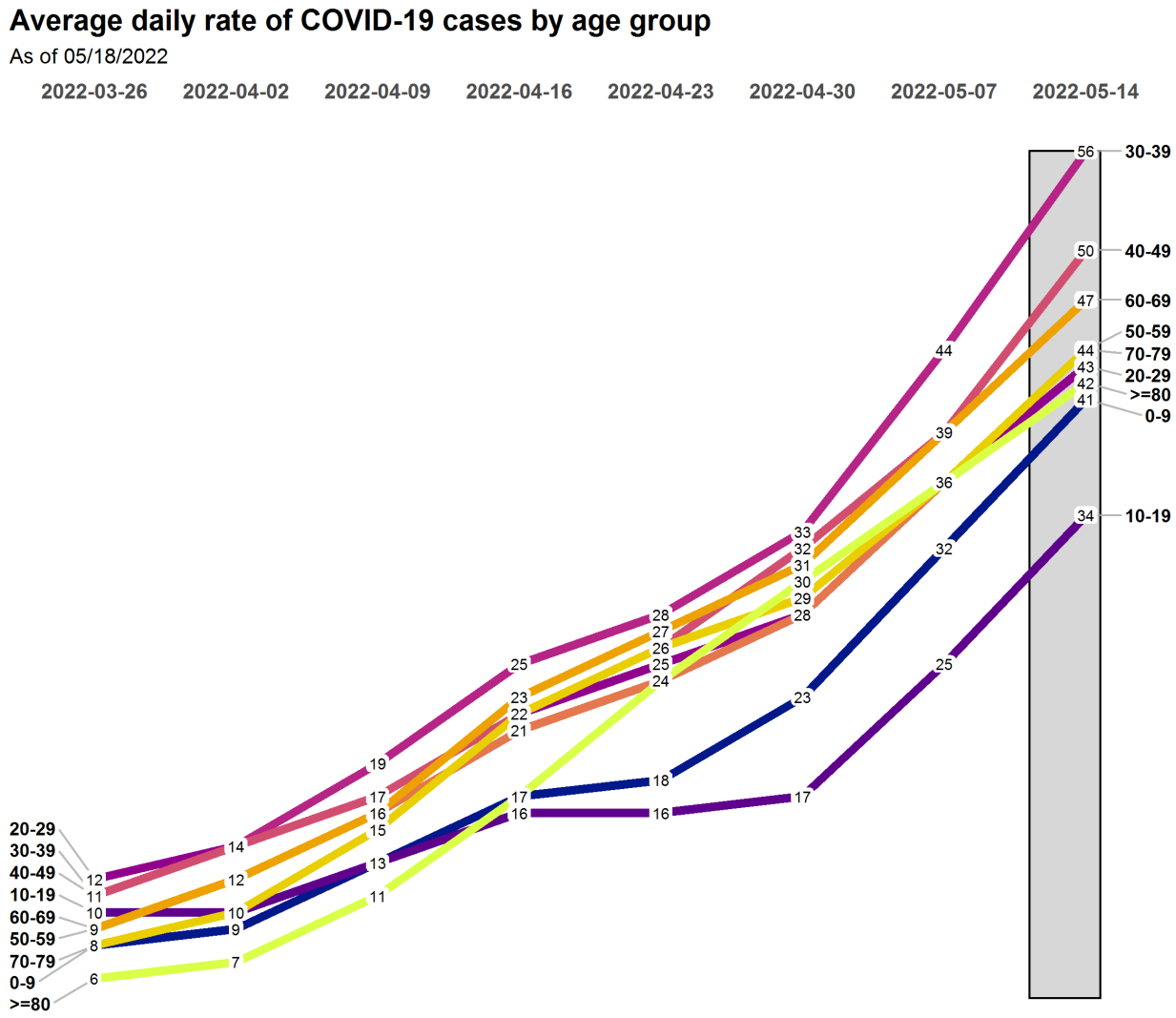
Map does not include tests pending address validation

Age Distribution of COVID-19 Cases with Specimen Collection or Onset During May 01 - May 14, 2022



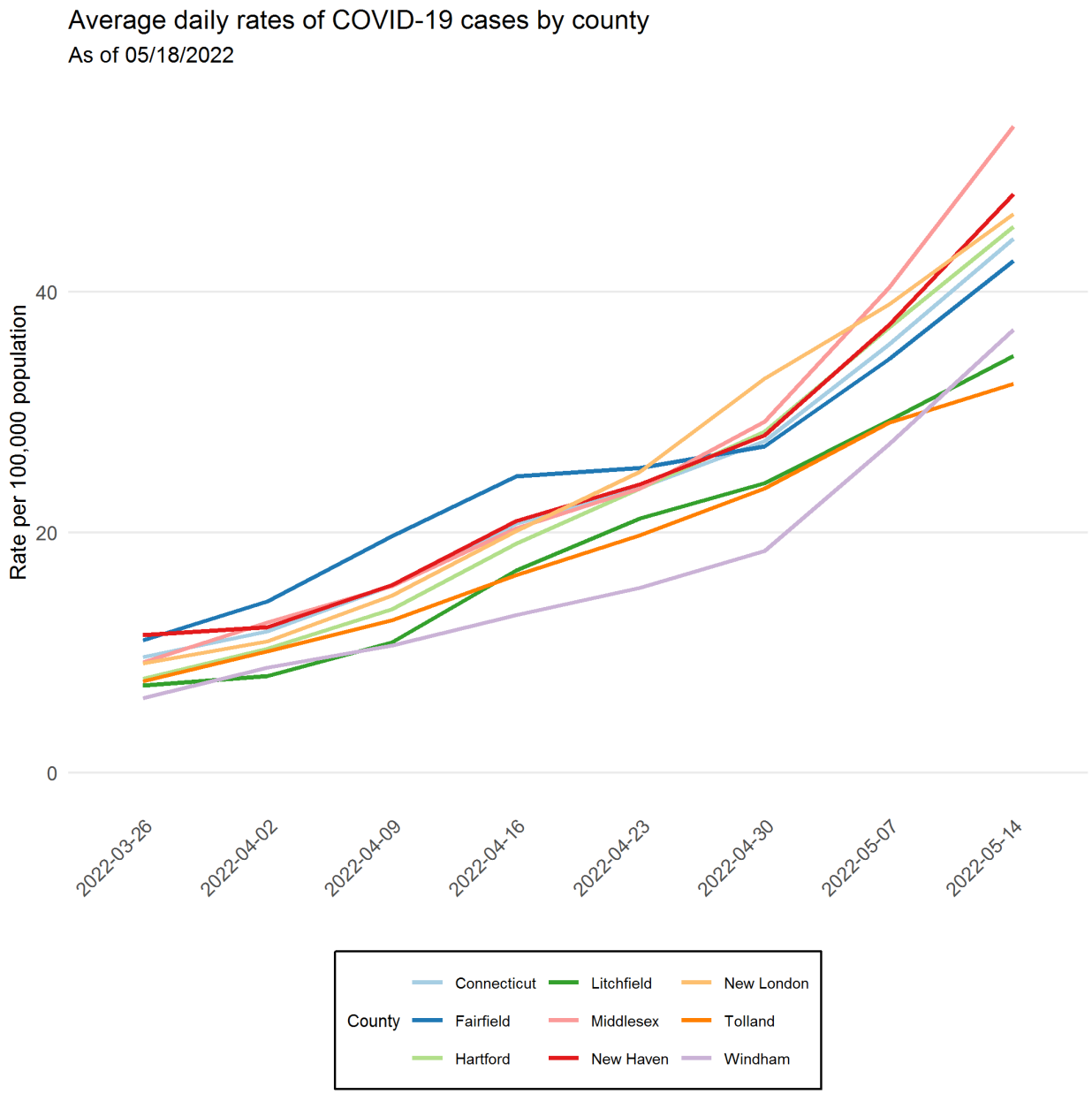
Average Daily Incidence by Age Group

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.



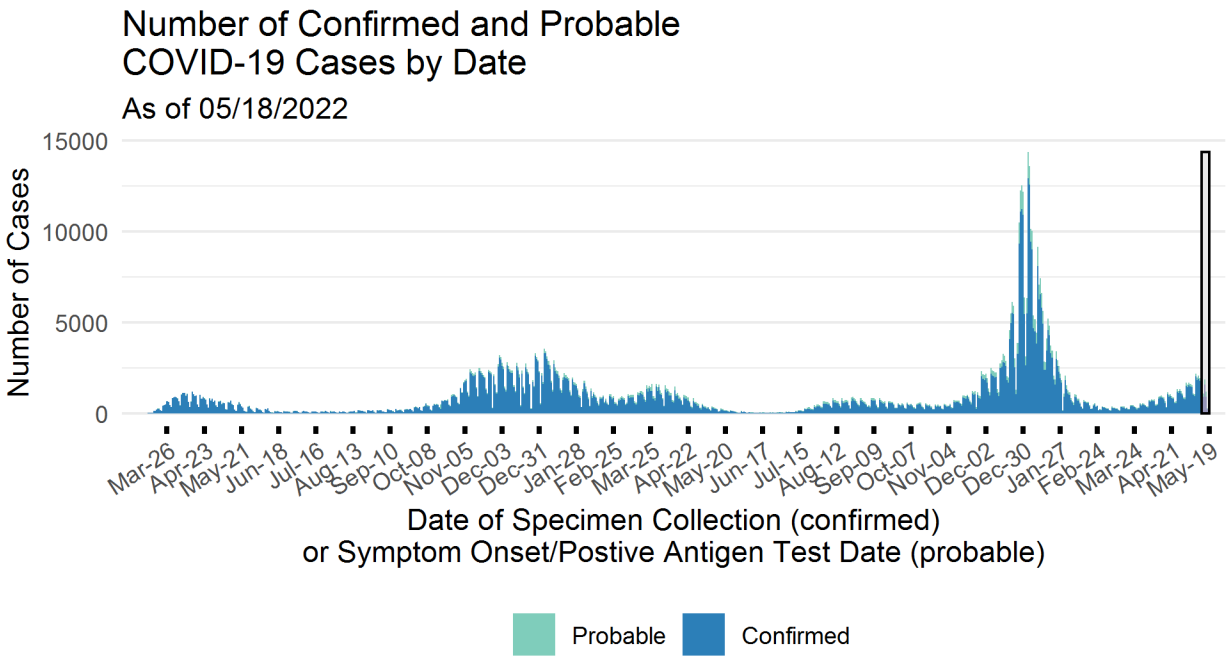
Average Daily Incidence by County

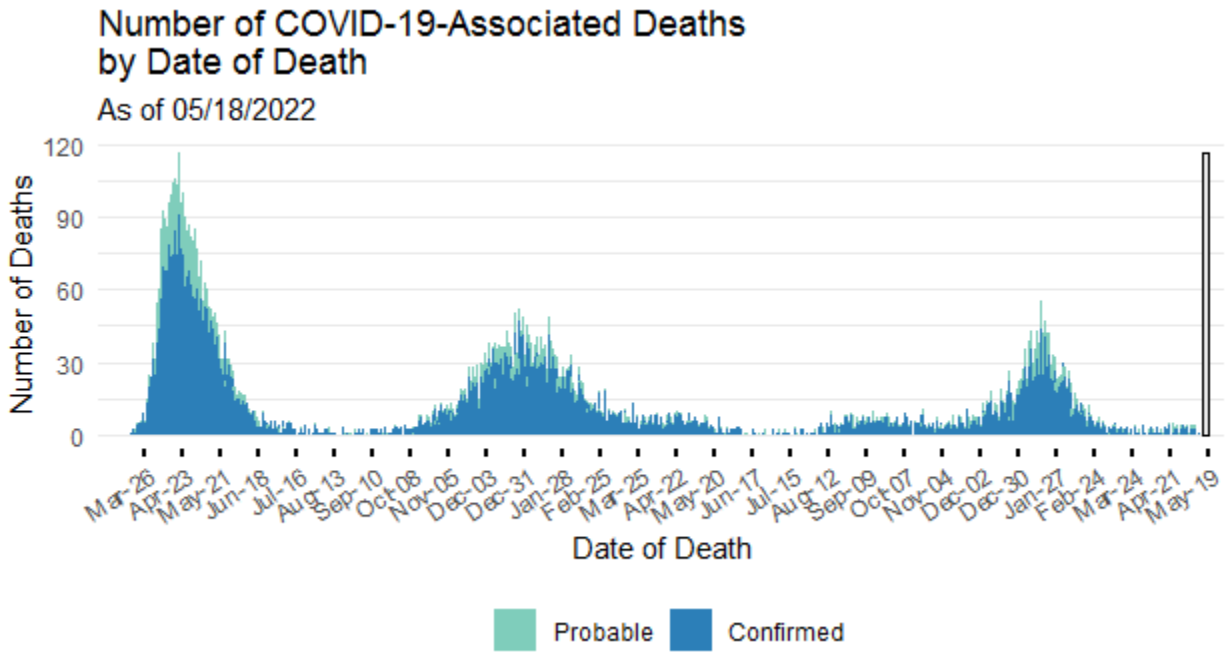
The chart below shows the average number of new COVID-19 cases per day per 100,000 population in the state of Connecticut and for each Connecticut county. The rates in this chart are calculated by averaging the number of new cases diagnosed each day during the previous two weeks, dividing by the annual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



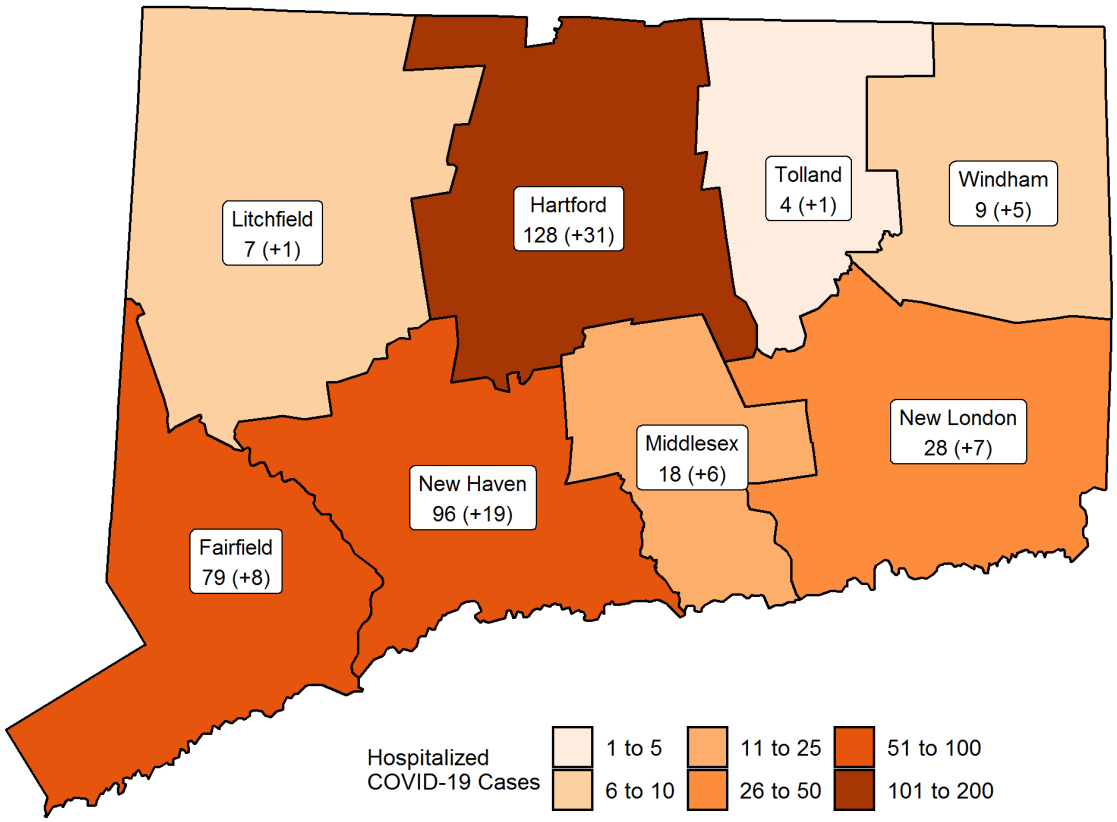


Hospitalization Surveillance

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 from 7 days ago in parentheses.

Patients Currently Hospitalized by Connecticut County

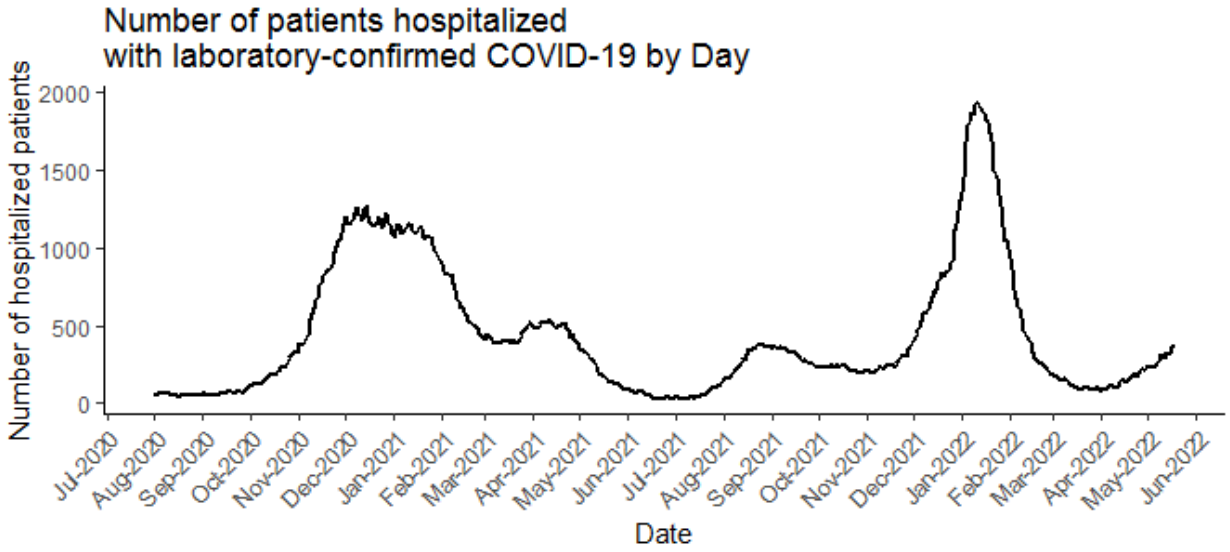
Distribution by location of hospital not patient residence. Data from the Connecticut Hospital Association.



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

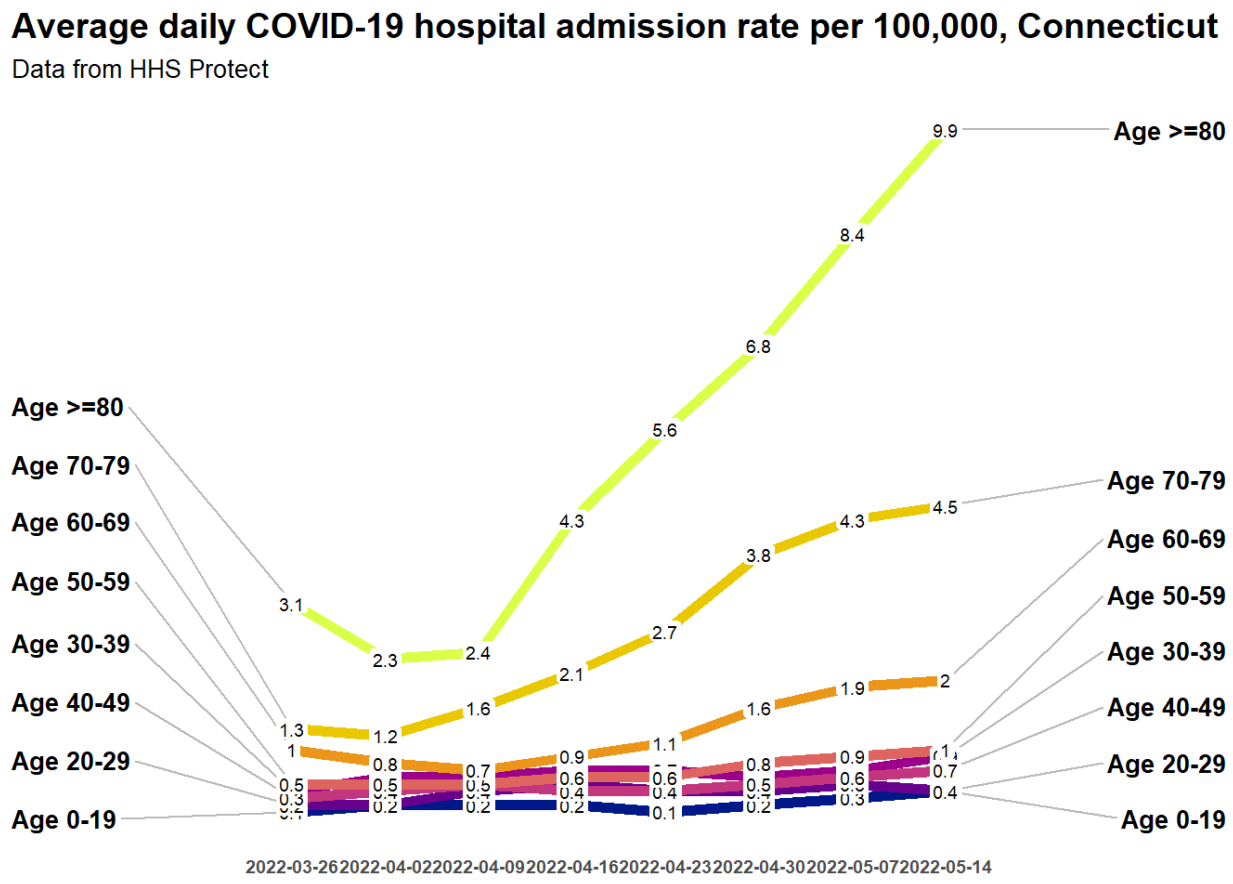
COVID-19 Hospital Census in Connecticut

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.



COVID-19 Admissions

The chart below shows the average daily rate of hospital admissions with laboratory-confirmed COVID-19 by age group. The data used to create this plot were gathered from HHS Protect. More information on HHS Protect data can be found here.

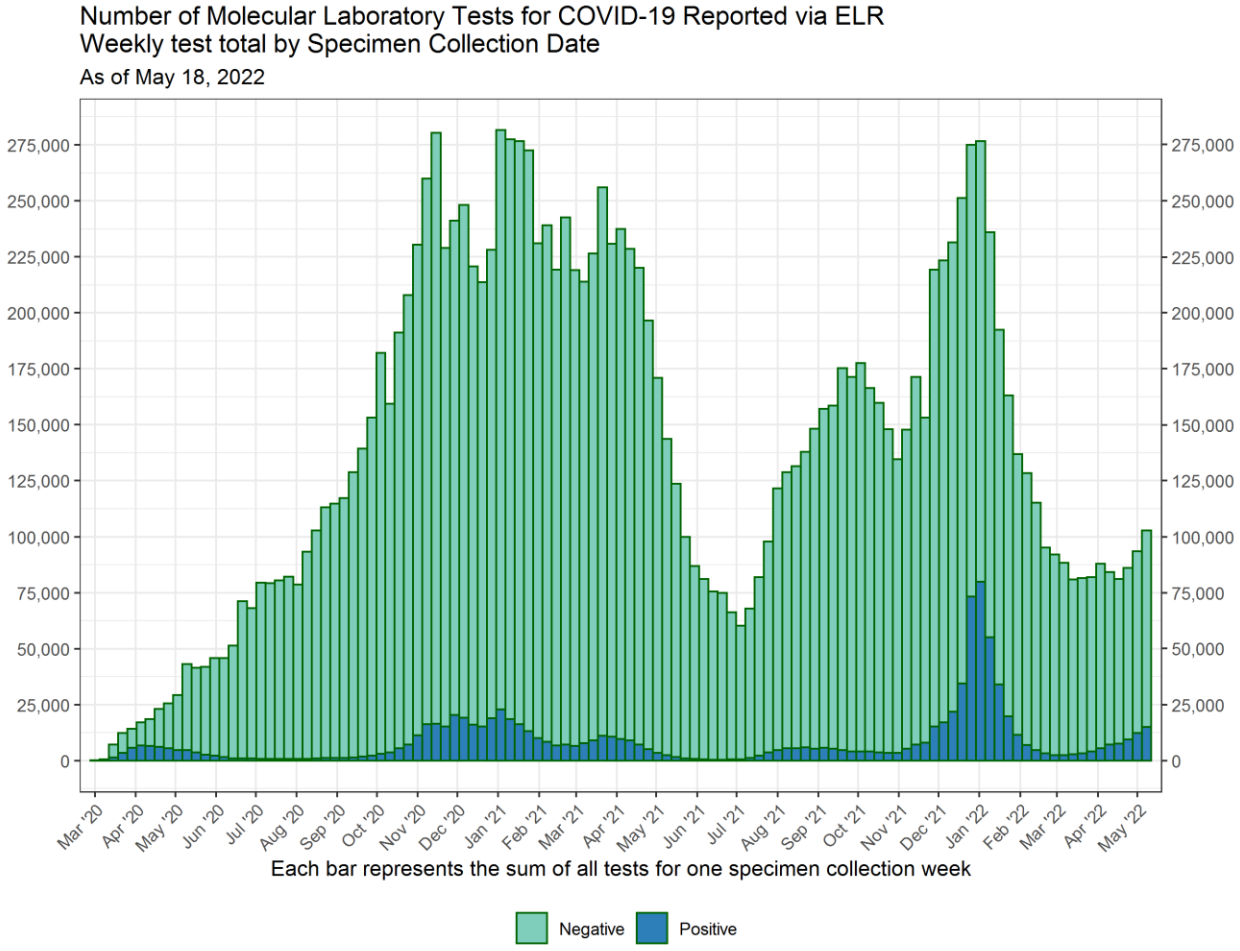


Laboratory Surveillance

Molecular Tests

To date, DPH has received reports on a total of 14,422,882 molecular COVID-19 laboratory tests; of these 14,277,206 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.

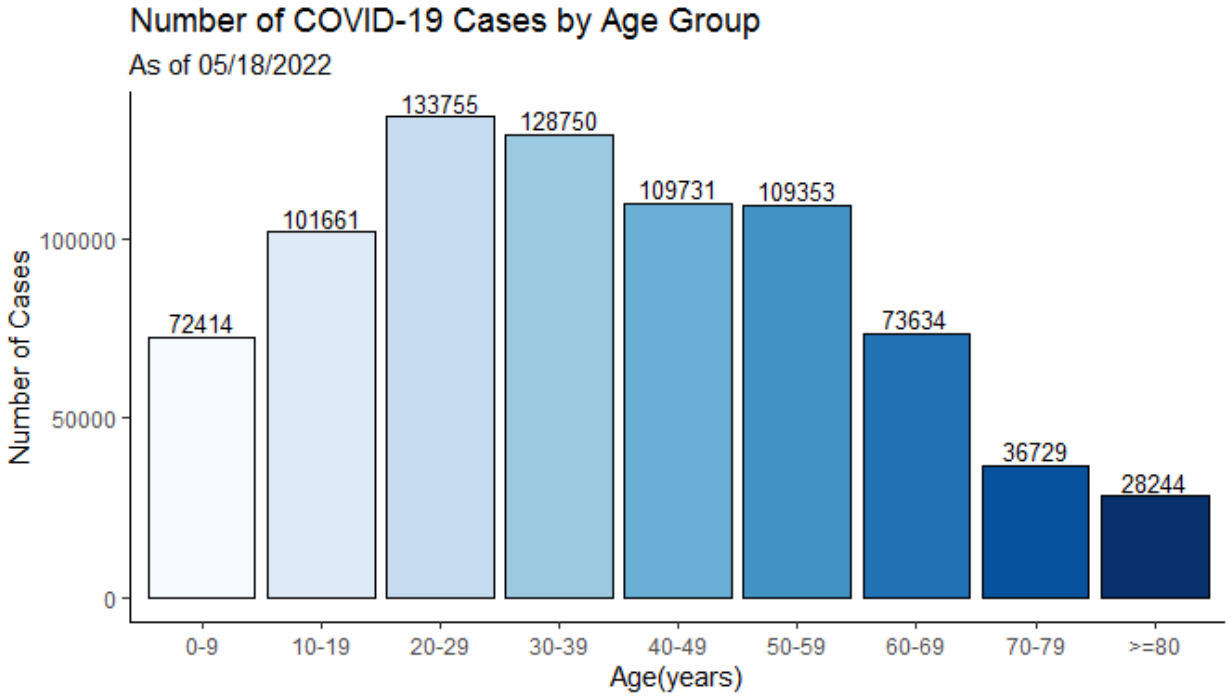


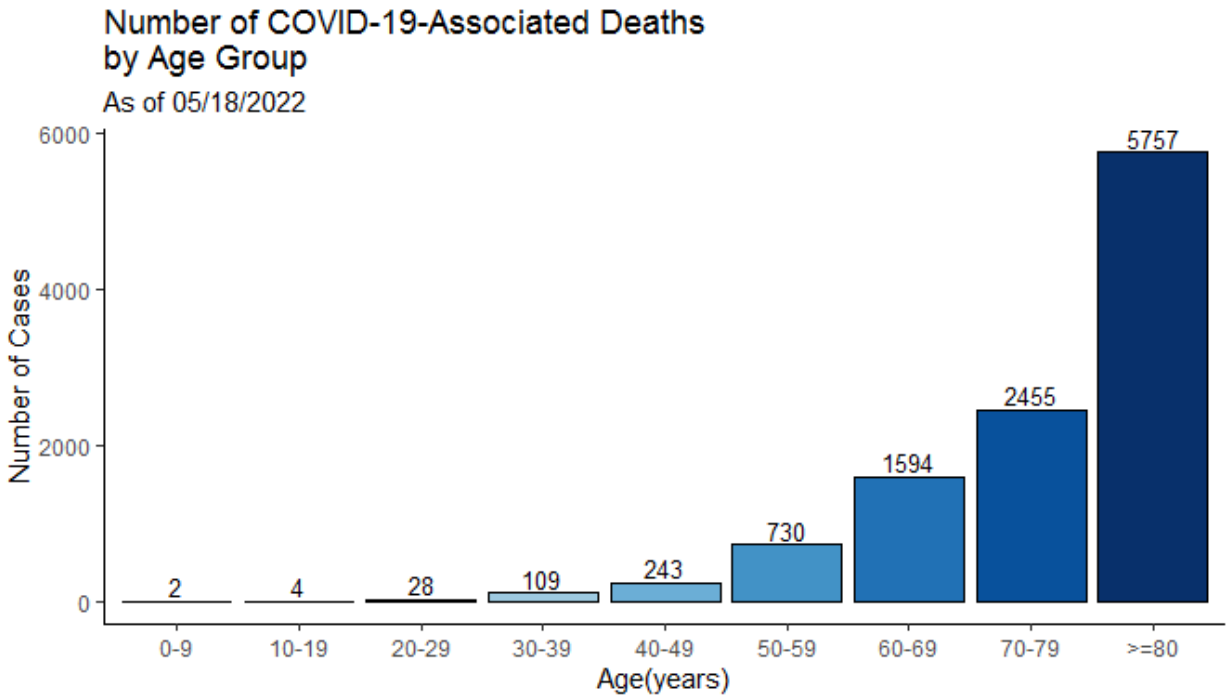
Testing of recently collected specimens is ongoing and does not reflect a decrease in testing. Chart only includes test results received by electronic laboratory reporting.

ELR = Electronic Laboratory Reporting

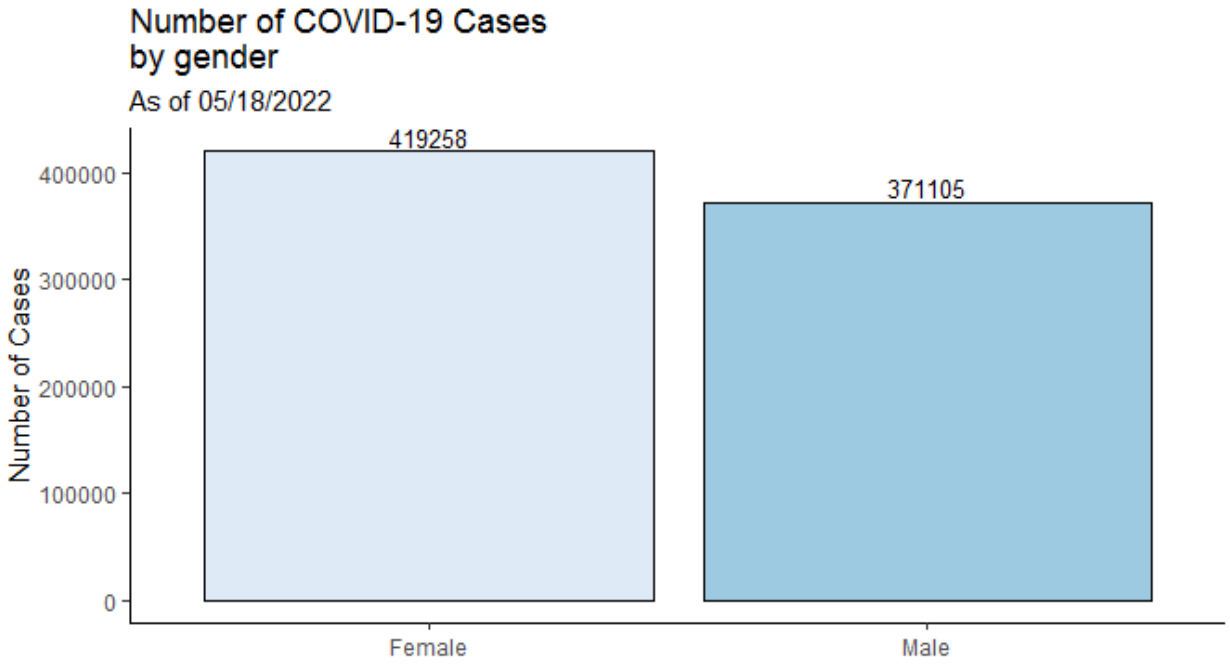
Characteristics of COVID-19 Cases and Associated Deaths

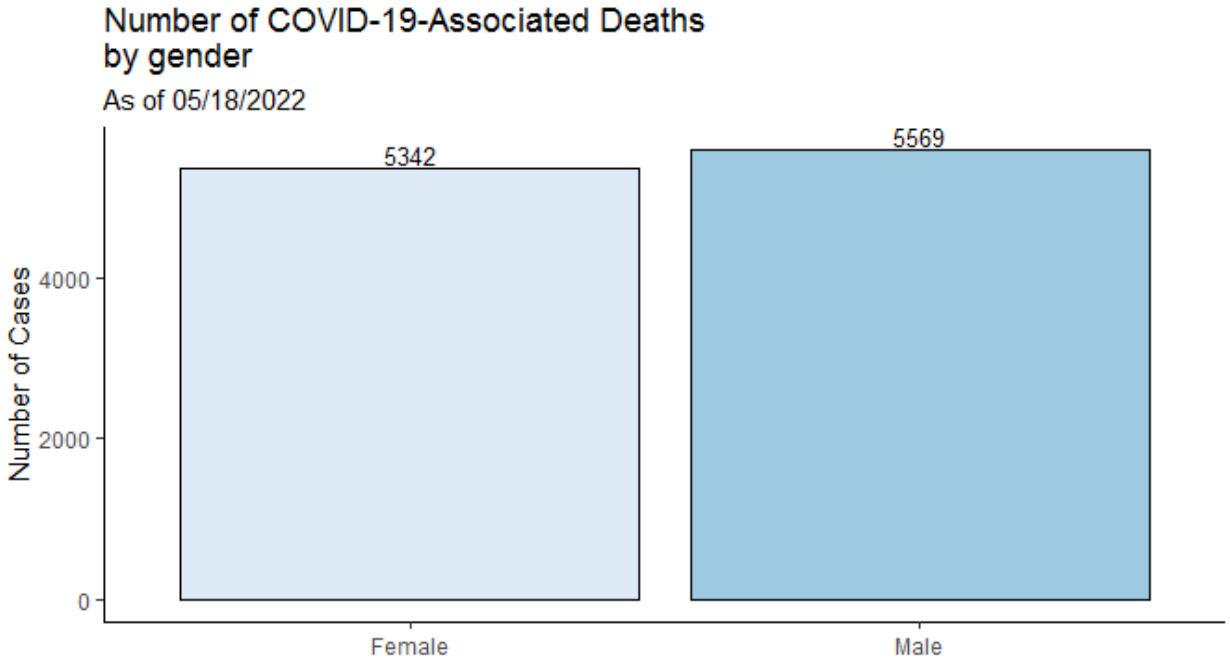
Counts may not add up to total case count because demographic data may be missing.





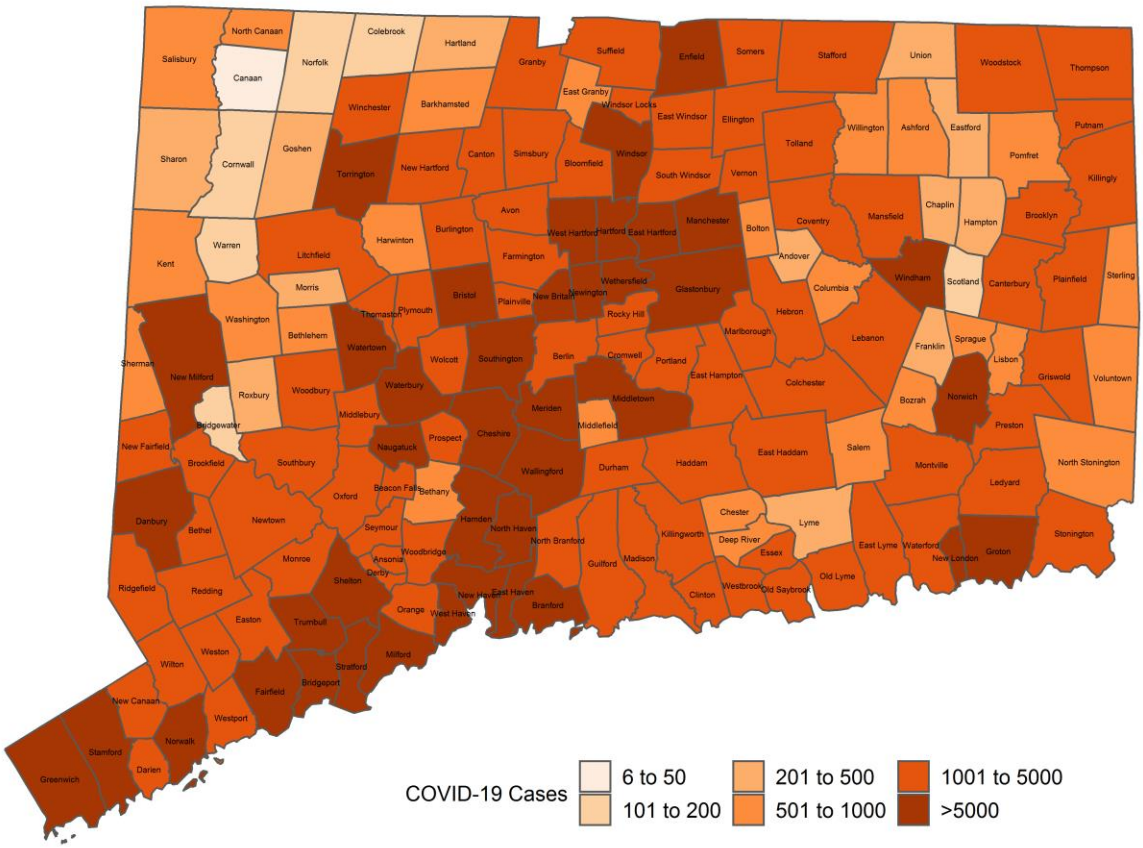
Counts may not add up to total case count because demographic data may be missing.



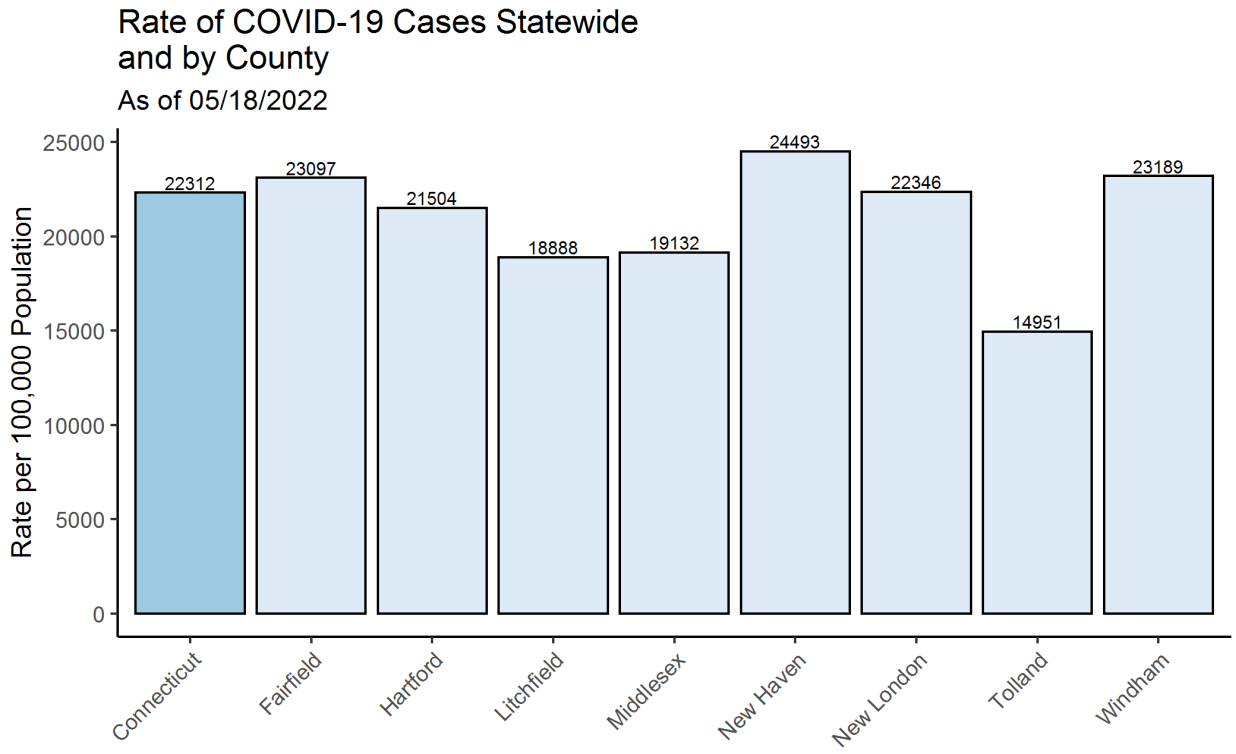


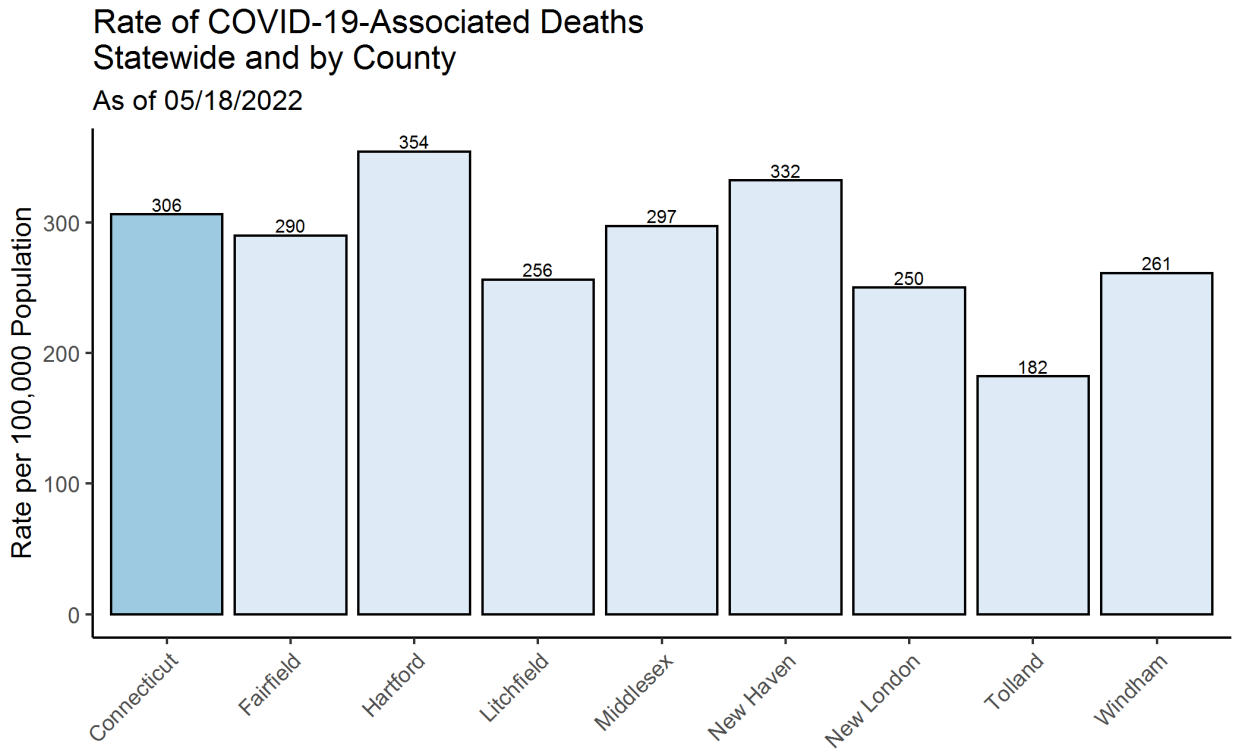
Cumulative Number of COVID-19 Cases by Town

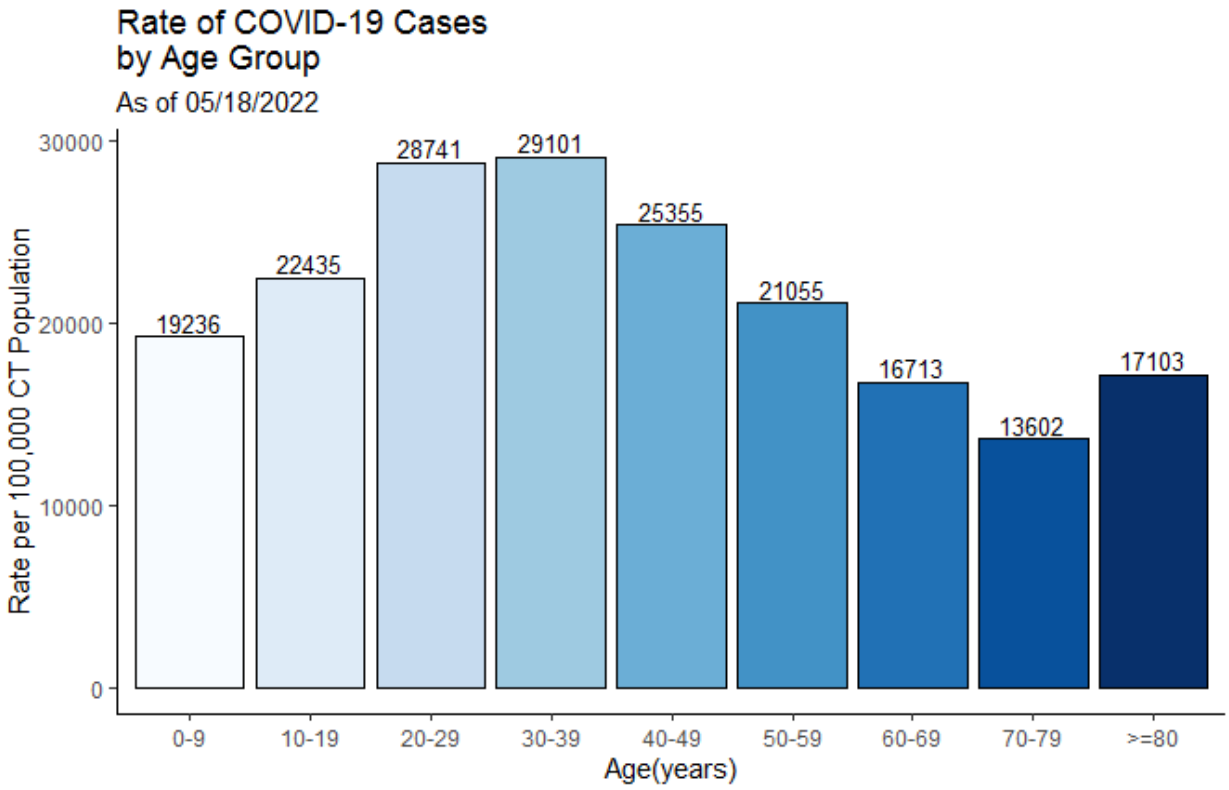
Map does not include 2493 cases pending address validation

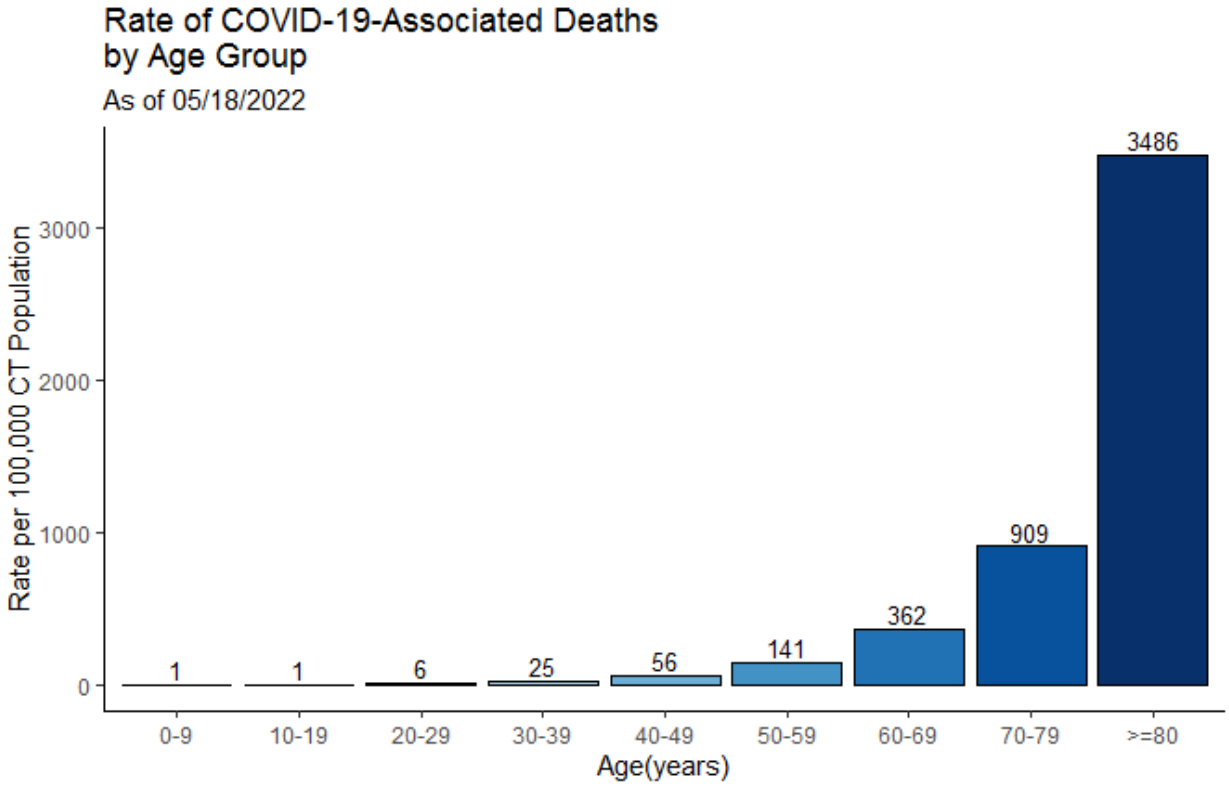


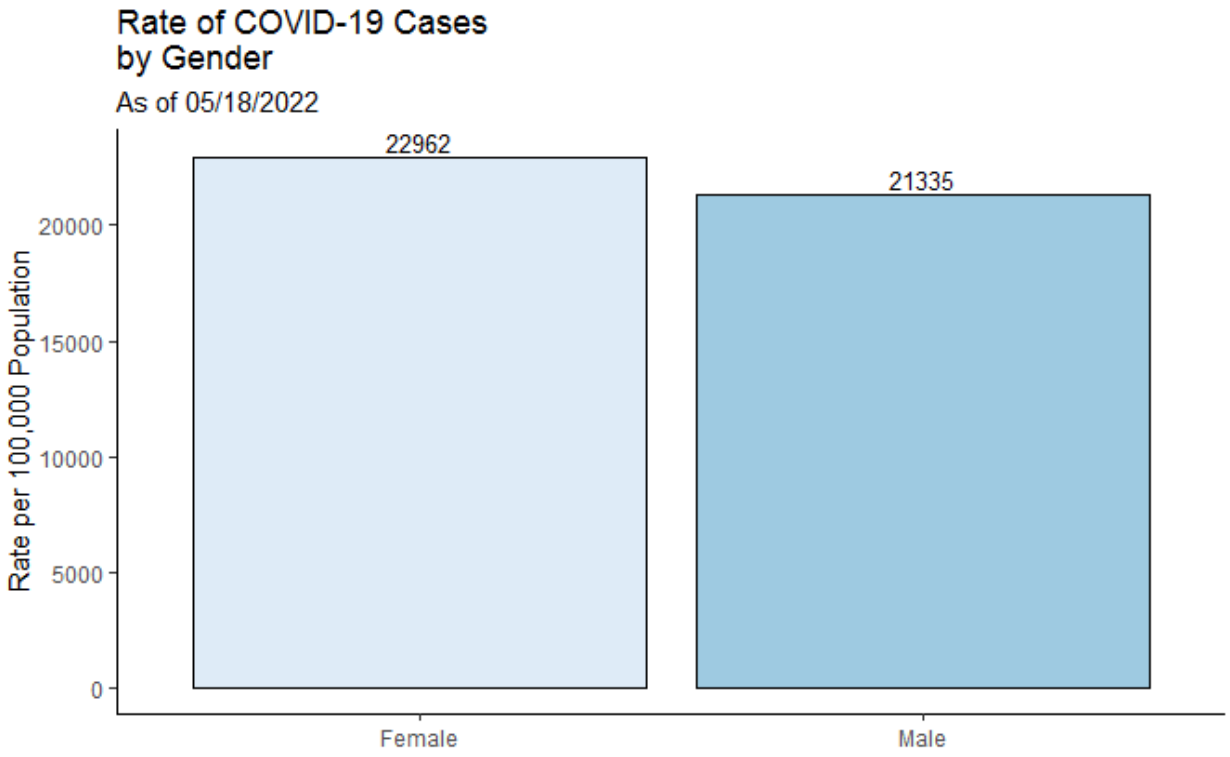
APPENDIX A. The following graphs show the number of cases per 100,000 Connecticut residents statewide and by county, age group, and gender. Population estimate from: DPH Population Statistics

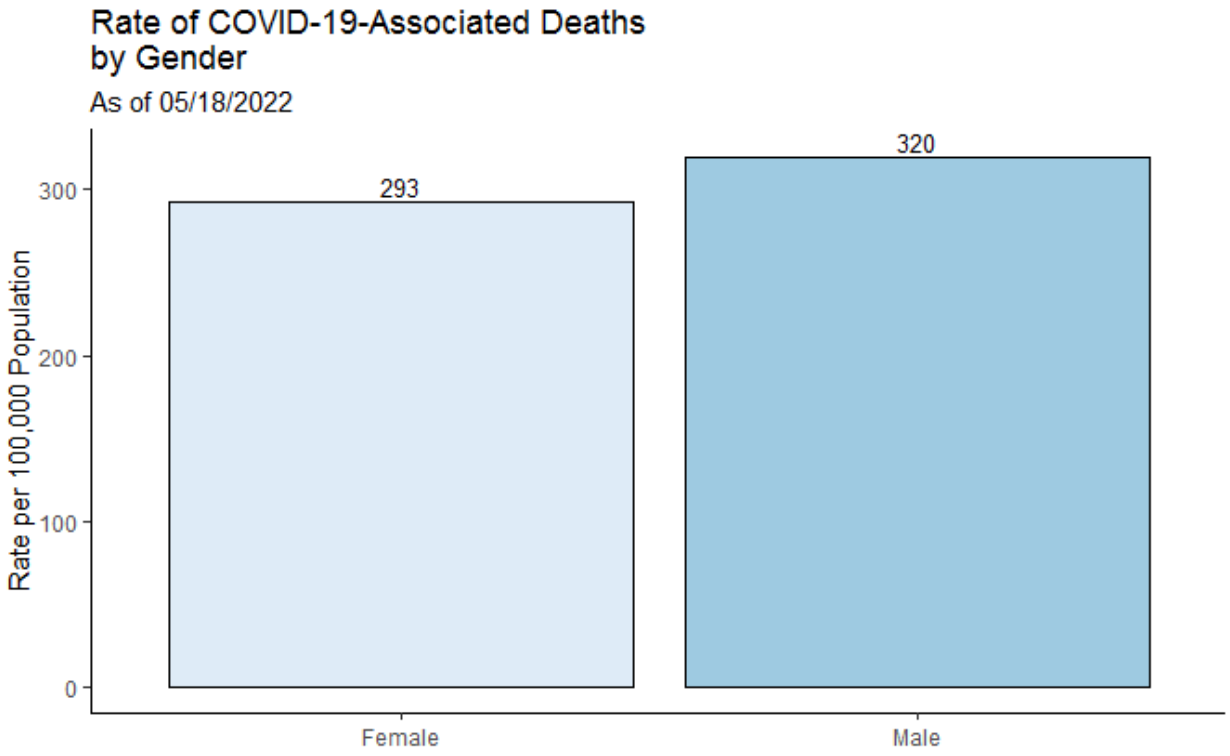




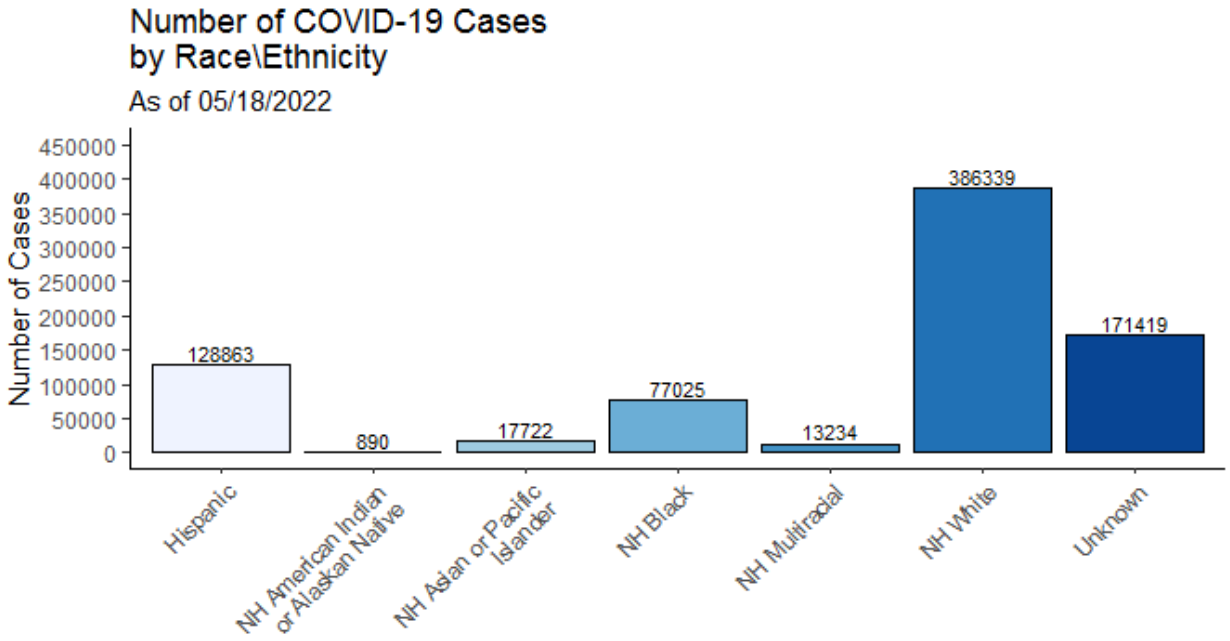

Rate of COVID-19 Cases
by Age Group
As of 05/18/2022
Rate per 100,000 CT Population
30000
20000
10000
0
19236
22435
28741
29101
25355
21055
16713
13602
17103
0-9
10-19
20-29
30-39
40-49
50-59
60-69
70-79
>=80
Age(years)

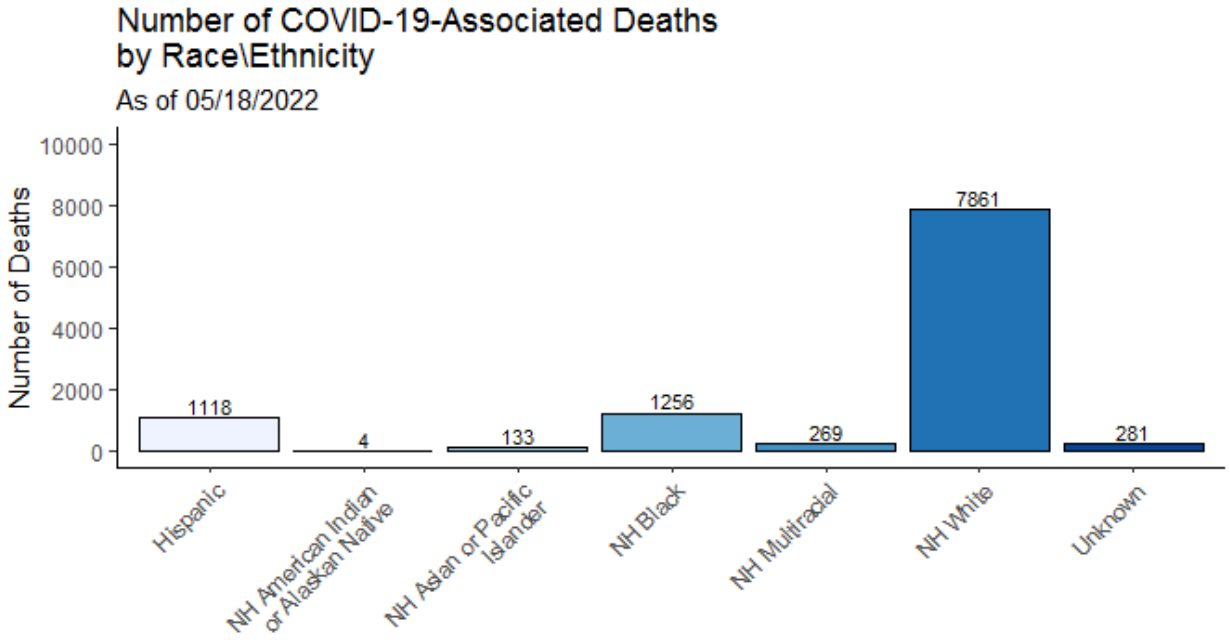

Rate of COVID-19-Associated Deaths
by Age Group
As of 05/18/2022
Rate per 100,000 CT Population
3000
2000
1000
0
1
1
6
25
56
141
362
909
3486
0-9
10-19
20-29
30-39
40-49
50-59
60-69
70-79
>=80
Age(years)


Rate of COVID-19 Cases
by Gender
As of 05/18/2022
22962
21335
20000
15000
10000
5000
0
Rate per 100,000 Population
Female
Male


Rate of COVID-19-Associated Deaths
by Gender
As of 05/18/2022
293
320
300
200
100
0
Rate per 100,000 Population
Female
Male

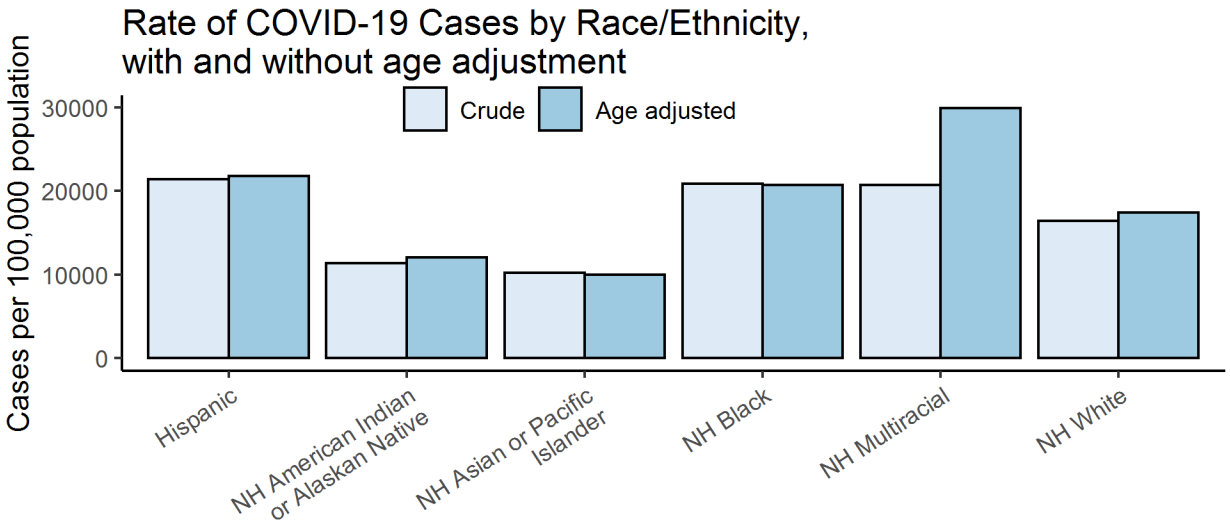
APPENDIX B. The following graphs show the number of cases and deaths by race and ethnicity. *Categories are mutually exclusive. The category "multiracial" includes people who answered 'yes' to more than one race category. NH=Non-Hispanic*

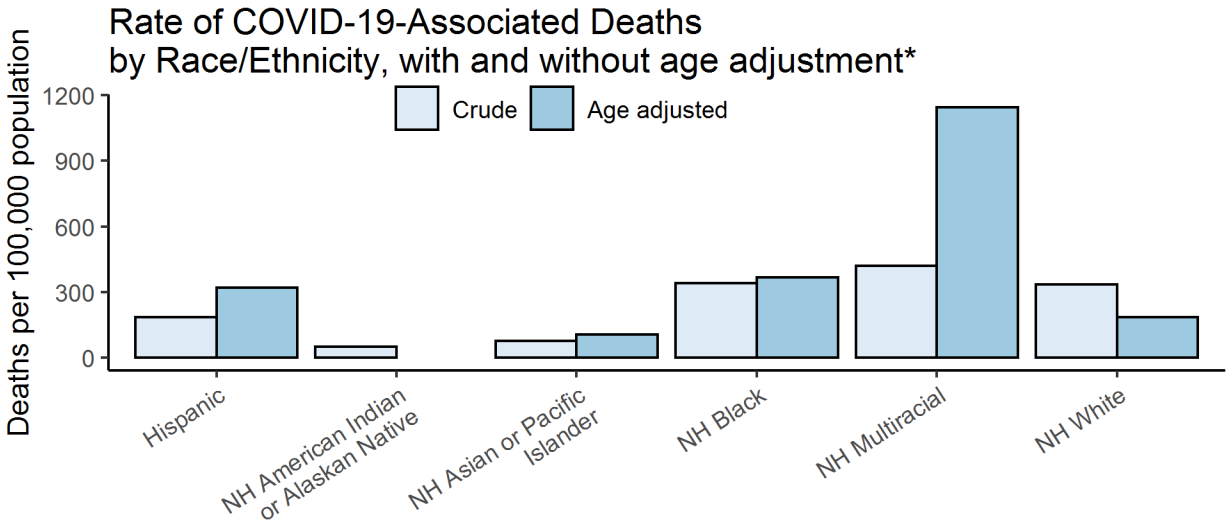




The following graphs show the number of COVID-19 cases and COVID-19-associated deaths per 100,000 population by race and ethnicity. Crude rates represent the total cases or deaths per 100,000 people. Age-adjusted rates consider the age of the person at diagnosis or death when estimating the rate and 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: 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*