COVID-19 Update May 12, 2022

As of **May 11, 2022**, the total of laboratory-confirmed and probable COVID-19 cases reported among Connecticut residents is **777,064**; **8,692** have been reported in the past 7 days. **Two hundred ninety-one** patients are currently hospitalized with laboratory-confirmed COVID-19; of these, **102** (35.05%) are not fully vaccinated.

Overall Summary	Cumulative (except for hospital census)	Past 7 days*
Positive PCR/NAAT Tests	841,365	9,606
All PCR/NAAT Tests	14,229,159	72,531
Test Positivity (pos/all PCR/NAAT)		13.24%
Patients currently hospitalized with COVID-19	291	+58
COVID-19-Associated Deaths	10,883	+25

*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.

As of **May 11, 2022**, 205632 cases of COVID-19 among fully vaccinated persons in Connecticut have been identified. Of the 2714237 persons who are fully vaccinated, 7.58 percent have contracted the virus.

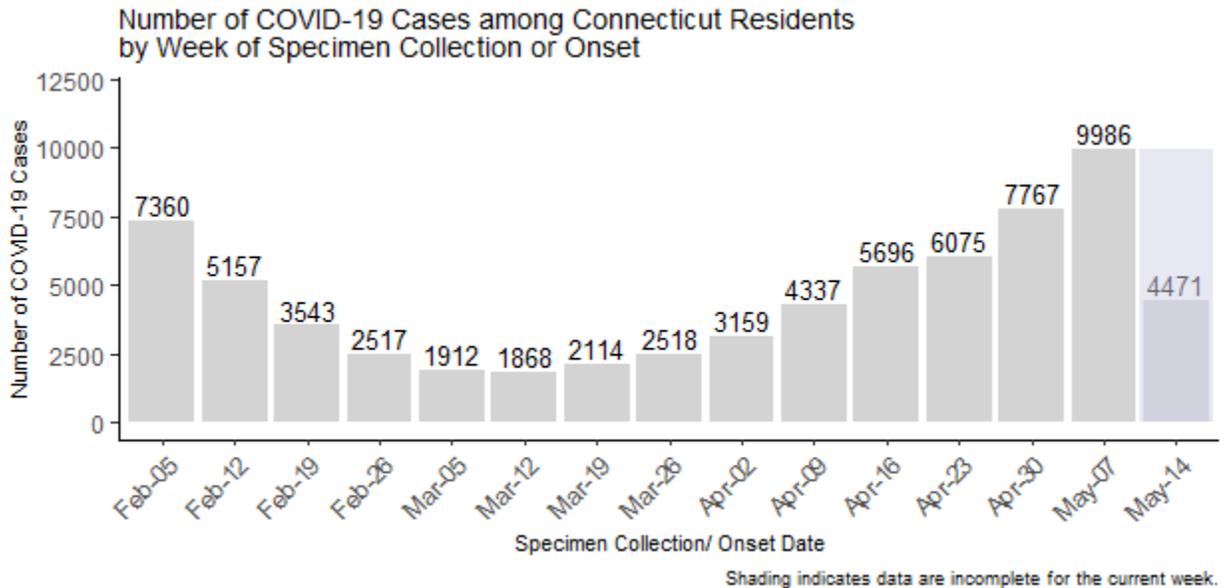**COVID-19 Cases and Associated Deaths by County of Residence As of 05/11/22.**

County	COVID-19 Cases		COVID-19-Associated Deaths	
	Confirmed	Probable	Confirmed	Probable
Fairfield County	190,127	23,305	2,198	527
Hartford County	169,272	17,421	2,566	578
Litchfield County	28,843	4,482	398	64
Middlesex County	27,176	2,734	342	139
New Haven County	181,310	23,627	2,448	383
New London County	53,096	4,862	515	145
Tolland County	19,602	2,238	198	76
Windham County	25,037	1,557	241	64
Pending address validation	2,065	310	0	1
Total	**696528**	**80536**	**8906**	**1977**

National COVID-19 statistics and information about preventing spread of COVID-19 are available from the Centers for Disease Control and Prevention.
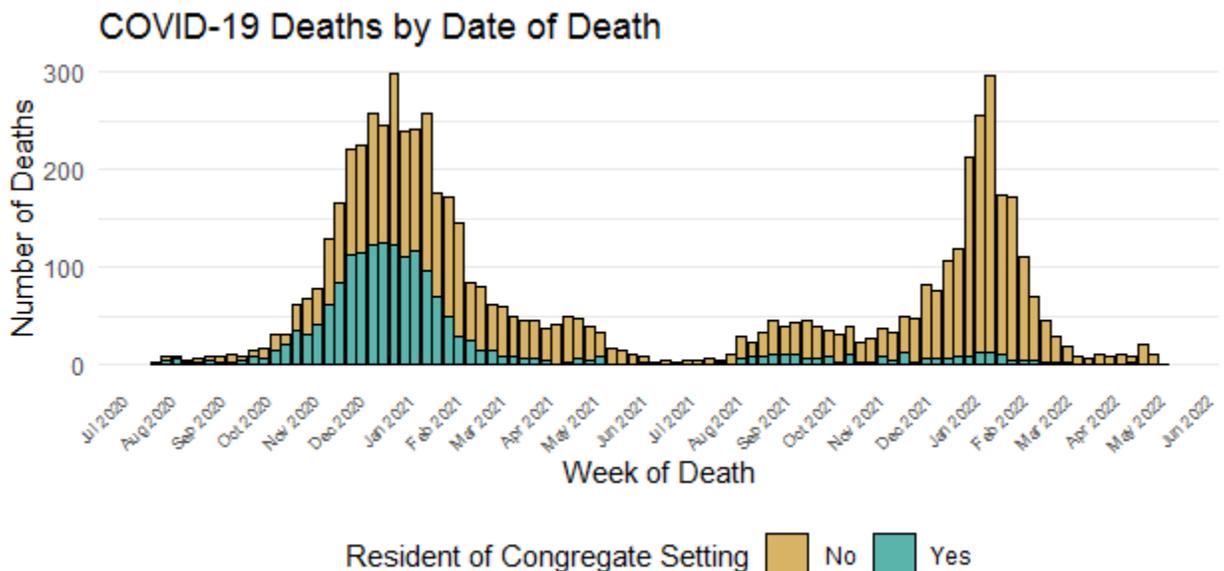
Day-to-day changes reflect newly reported cases, deaths, and tests that occurred over the last several days to week. All data in this report are preliminary; data for previous dates will be updated as new reports are received and data errors are corrected. Hospitalization data were collected by the Connecticut 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 (April 24 - May 07), there were 17,753 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.

Number of COVID-19 Cases among Connecticut Residents by Week of Specimen Collection or Onset

Specimen Collection/ Onset Date	Number of COVID-19 Cases
Feb-05	7360
Feb-12	5157
Feb-19	3543
Feb-26	2517
Mar-05	1912
Mar-12	1868
Mar-19	2114
Mar-26	2518
Apr-02	3159
Apr-09	4337
Apr-16	5696
Apr-23	6075
Apr-30	7767
May-07	9986
May-14	4471

Shading indicates data are incomplete for the current week.

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.

COVID-19 Deaths by Date of Death

Resident of Congregate Setting — No — Yes

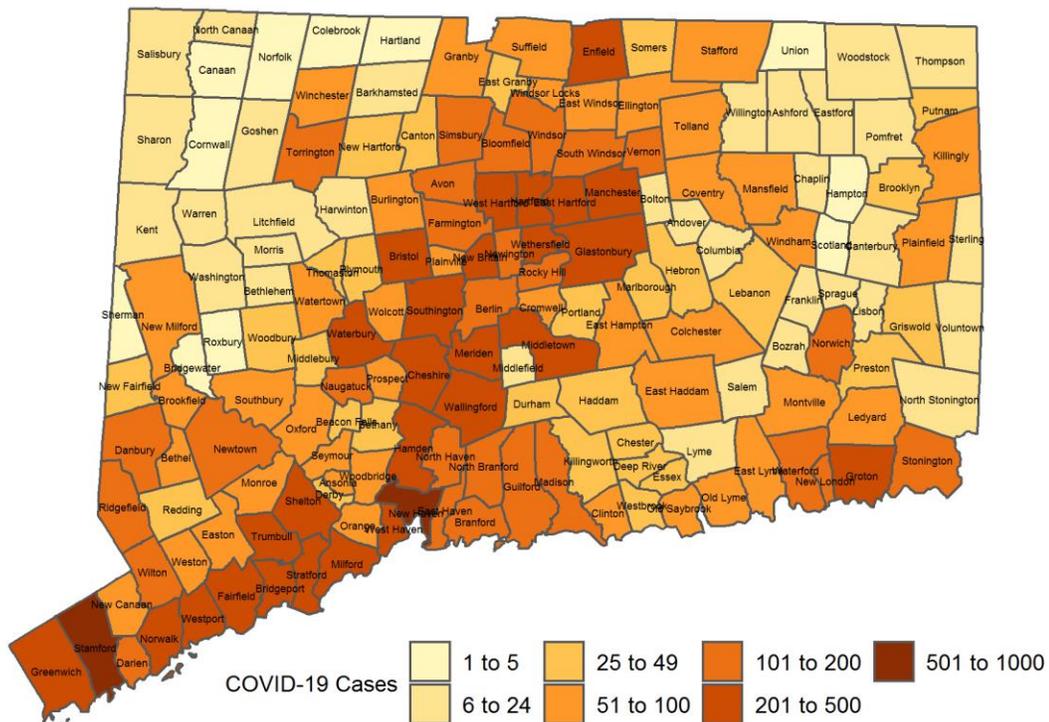All data are preliminary and subject to change.

Community Transmission of COVID-19

Among 17,753 new COVID-19 cases with specimen collection or onset date during April 24 - May 07, there were 17,735 cases among people living in community settings, as shown in the map below. This corresponds to an average of 35.53 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 56 towns.

Number of COVID-19 Cases among People Living in Community Settings by Town with Specimen Collection or Onset Date During April 24 - May 07

Map does not include 88 cases pending address validation

All data are preliminary and subject to change.

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.

Apr 10 - Apr 23   Apr 17 - Apr 30   Apr 24 - May 07

Cases per 100k population
60
50
40
30
20
10

Case counts or rates below 5

Among towns with at least 5 new cases during April 24 - May 07, 158 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 April 24 - May 07

Average COVID-19 Cases per 100,000 Population per Day
<5 cases per 100,000 or <5 reported cases
5-9 cases per 100,000
15 or more cases per 100,000

Map does not include 88 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) April 24, 2022 - May 07, 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	16,908	
Not Fully Vaccinated	5,025	29.7
Fully Vaccinated	11,883	70.3

As of **May 11, 2022**, 205,632 cases of COVID-19 among fully vaccinated persons in Connecticut have been identified. Those 205,632 cases account for 7.58 percent of the 2,714,237 persons who are fully vaccinated.

Since the beginning of the pandemic, 571,432 cases have been identified among individuals who are not fully vaccinated.

Nine hundred six COVID-19 related deaths have occurred among the 205,632 fully vaccinated persons confirmed with COVID-19.

All data are preliminary and subject to change.

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	5,070 (2.5%)	5 (0%)		
12-15	8,358 (4.1%)	345 (0.6%)		
16-24	28,002 (13.6%)	4,628 (8.1%)	1 (0.1%)	
25-34	34,209 (16.6%)	7,385 (12.9%)	3 (0.3%)	
35-44	35,135 (17.1%)	9,385 (16.4%)	9 (1%)	
45-54	33,527 (16.3%)	9,776 (17%)	23 (2.5%)	5 (2.6%)
55-64	31,575 (15.4%)	11,387 (19.9%)	111 (12.3%)	19 (9.7%)
65-74	17,084 (8.3%)	8,471 (14.8%)	149 (16.4%)	33 (16.8%)
75+	12,672 (6.2%)	5,978 (10.4%)	610 (67.3%)	139 (70.9%)
Total	205,632	57,360	906	196

All data are preliminary and subject to change.

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 now based on variant data reported directly to DPH instead of to the GISAID Initiative and only include data since January 2021-present.

Data below represent sequences that have been reported to DPH as of 05/11/2022 with specimen collection dates between 01/12/2021 and 05/05/2022. **The total number of SARS-CoV-2 sequences reported to DPH with a valid specimen collection date is 34111.** Data are preliminary and updated as new data are received.

Variant	Number	Percentage
Variants of Concern		
Delta	16,287	47.75
Omicron	12,845	37.66
Variants Being Monitored		
Alpha	2,525	7.40
Beta	23	0.07
Gamma	137	0.40
Epsilon	60	0.18
Zeta	1	0.00
Eta	10	0.03
Iota	718	2.10
Kappa	2	0.01
B.1.617.3	0	0.00
Mu	84	0.25

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 11, 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 12/26/2021–05/05/2022.

Proportion of Circulating Omicron Sublineages, CT
Of known lineages

N = total number of viruses sequenced

All data are preliminary and subject to change.
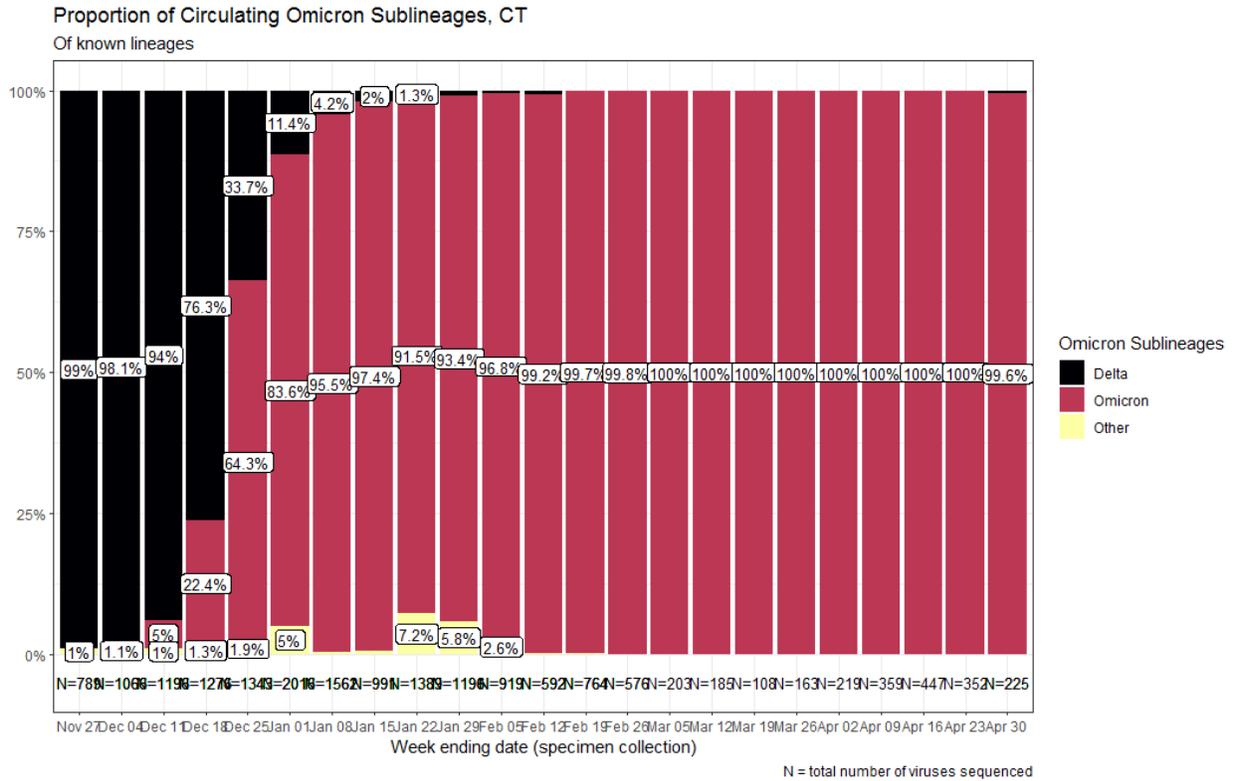
Child Care-Associated Case Surveillance

The table below shows the number of cases among child care attendees and staff reported to the Department of Public Health (DPH). Licensed child care centers are required to report cases of COVID-19 among attendees and staff to the DPH and the local health department. There are 1,388 licensed child care centers and group child care homes in Connecticut that serve approximately 50,000 children. Beginning the week of January 9th, reporting transitioned from individual case reporting to aggregate reporting of cases among attendees and staff. The form for collecting aggregate data from child care centers can be found here.

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. Data from previous weeks are updated as new data are received. Several weeks of data from the new reporting system will be needed to determine trends.

Number of Reported Child Care-Associated Cases Statewide

Overall Summary	Child Care Centers Reporting	COVID-19 Cases: Children Attendees	COVID-19 Cases: Staff
1/9/2022 - 1/15/2022	330	937	339
1/16/2022 - 1/22/2022	383	1209	384
1/23/2022 - 1/29/2022	273	751	213
1/30/2022 - 2/5/2022	160	339	66
2/6/2022 - 2/12/2022	145	266	79
2/13/2022 - 2/19/2022	79	120	37
2/20/2022 - 2/26/2022	48	68	16
2/27/2022 - 3/5/2022	40	48	19
3/6/2022 - 3/12/2022	31	40	9
3/13/2022 - 3/19/2022	31	45	19
3/20/2022 - 3/26/2022	41	56	20
3/27/2022 - 4/2/2022	54	95	27
4/3/2022 - 4/9/2022	71	115	45
4/10/2022 - 4/16/2022	134	216	84
4/17/2022 - 4/23/2022	135	219	88
4/24/2022 - 4/30/2022	139	220	95
5/1/2022 - 5/7/2022	185	385	133

All data are preliminary and subject to change.

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 – May 10, 2022[1,2,3]

Legend: ■ #NH with cases among residents only   ■ #NH with cases among both staff and residents   ■ #NH with cases among staff only
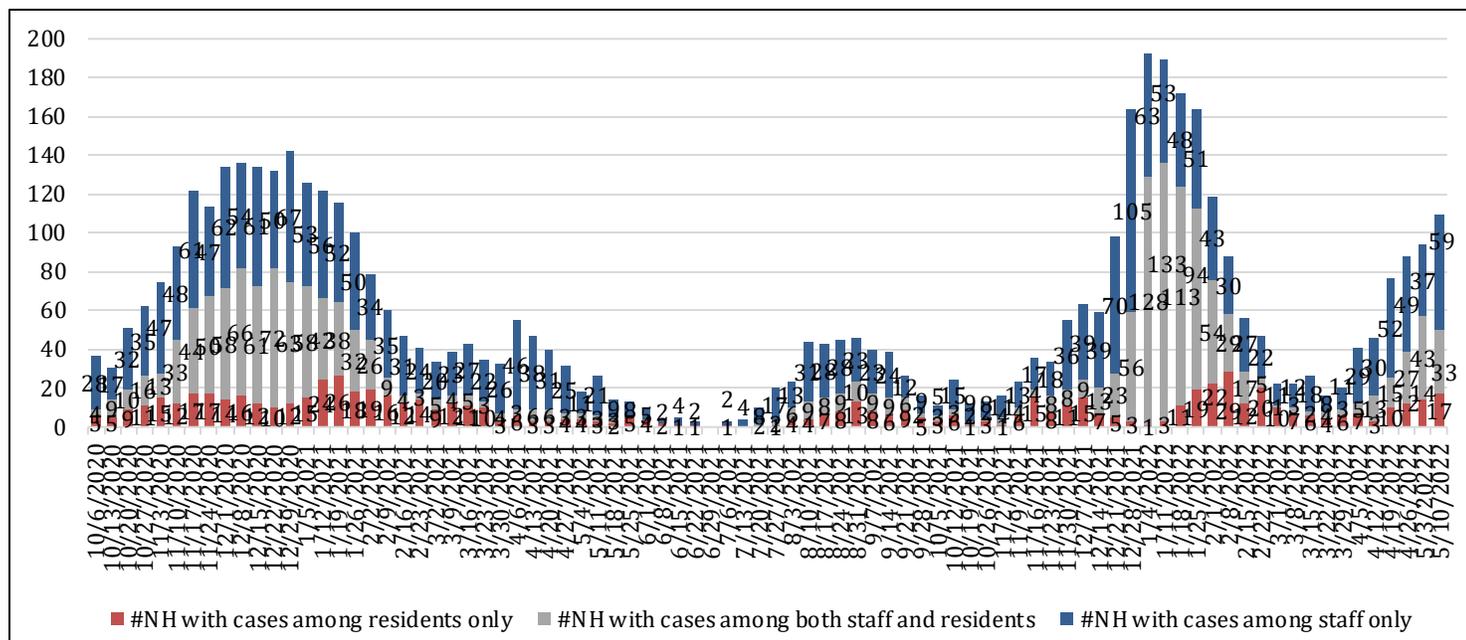
[1] For more detailed information on COVID-19 reporting and NHSN, please see here.
[2] Similar to DPH, CMS makes COVID-19 nursing home data, including vaccination rates, publicly available. Please see CMS' COVID-19 Nursing Home Data website.
[3] 18 facilities did not report for this week, as of May 12, 2022.

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 May 1, 2022	
	Resident Vaccination Rates N= 202 homes	**Staff Vaccination Rates N= 203 homes**
Average Vaccination Rate	93%	97%
Median Vaccination Rate	95%	97%
Range of Vaccination Rates	71-100%	81-100%
% of the reporting nursing homes with vaccination rate > 90%	82%	98%

[1] NHSN vaccine reporting instructions for nursing homes can be found 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.

All data are preliminary and subject to change.

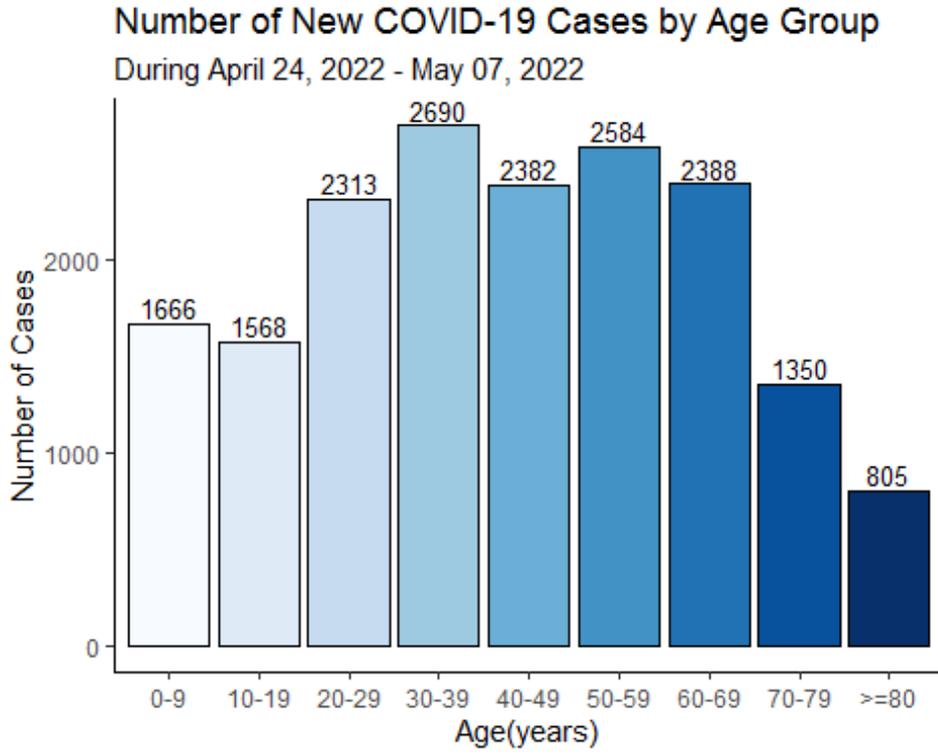**COVID-19 Molecular and Antigen Tests during April 24, 2022 - May 07, 2022**

Among 178,467 molecular and antigen tests for COVID-19 with specimen collection date during April 24, 2022 - May 07, 2022, 173,220 (97%) tests were conducted among people who did not reside in congregate settings (including nursing homes, assisted living, and correctional facilities). Of these 173220 tests, 21,413 (12%) were positive. The map below shows the number of molecular and antigen COVID-19 tests by town with specimen collection date during April 24, 2022 - May 07, 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 April 24 - May 07
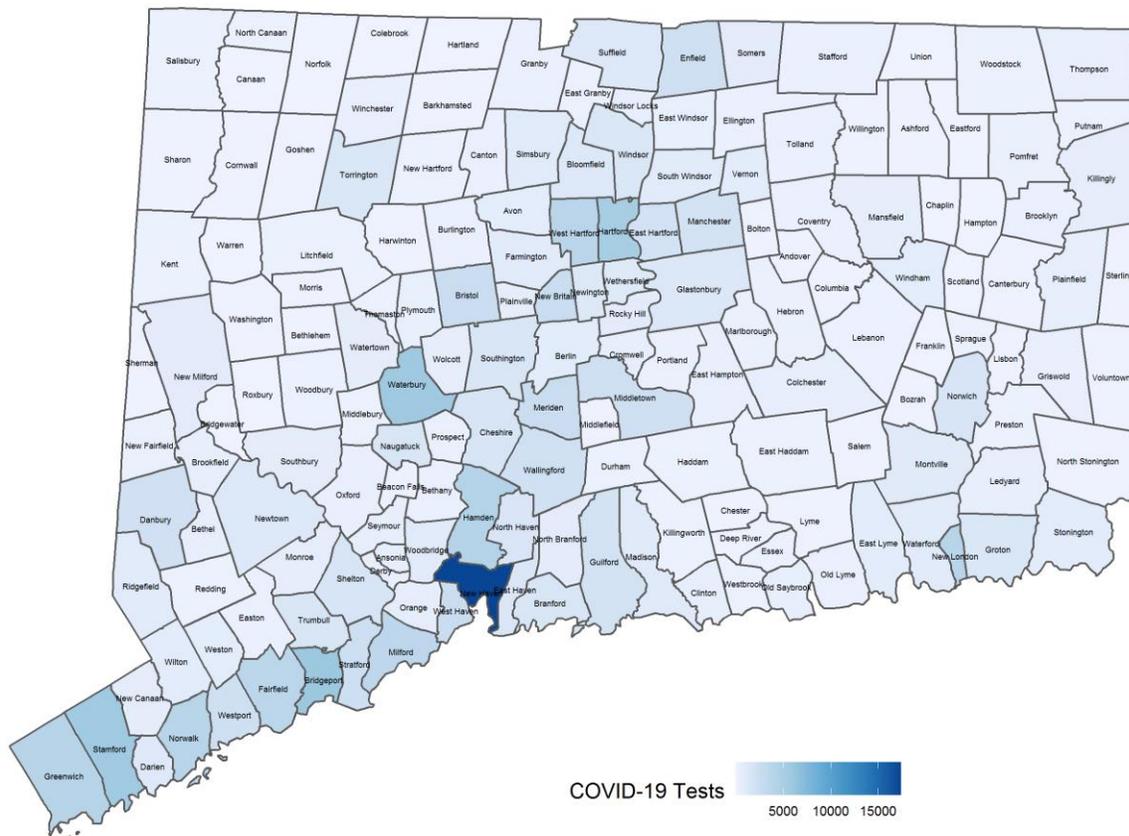
Map does not include tests pending address validation

Age Distribution of COVID-19 Cases with Specimen Collection or Onset During April 24, 2022 - May 07, 2022

Number of New COVID-19 Cases by Age Group
During April 24, 2022 - May 07, 2022

Age (years)	Number of Cases
0-9	1666
10-19	1568
20-29	2313
30-39	2690
40-49	2382
50-59	2584
60-69	2388
70-79	1350
>=80	805

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 05/11/2022

All data are preliminary and subject to change.
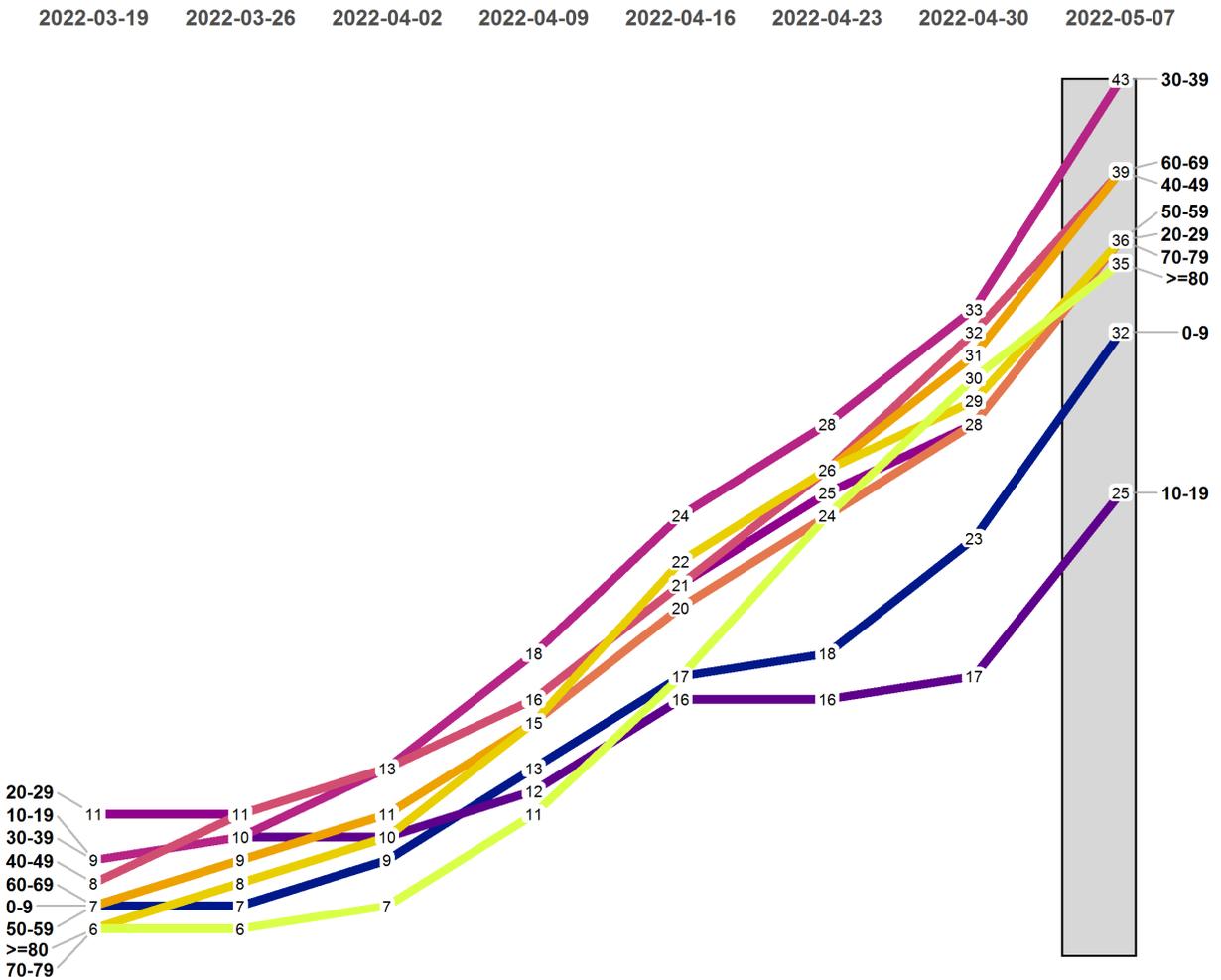
Average Daily Incidence by County

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.

Average daily rates of COVID-19 cases by county
As of 05/11/2022

All data are preliminary and subject to change.
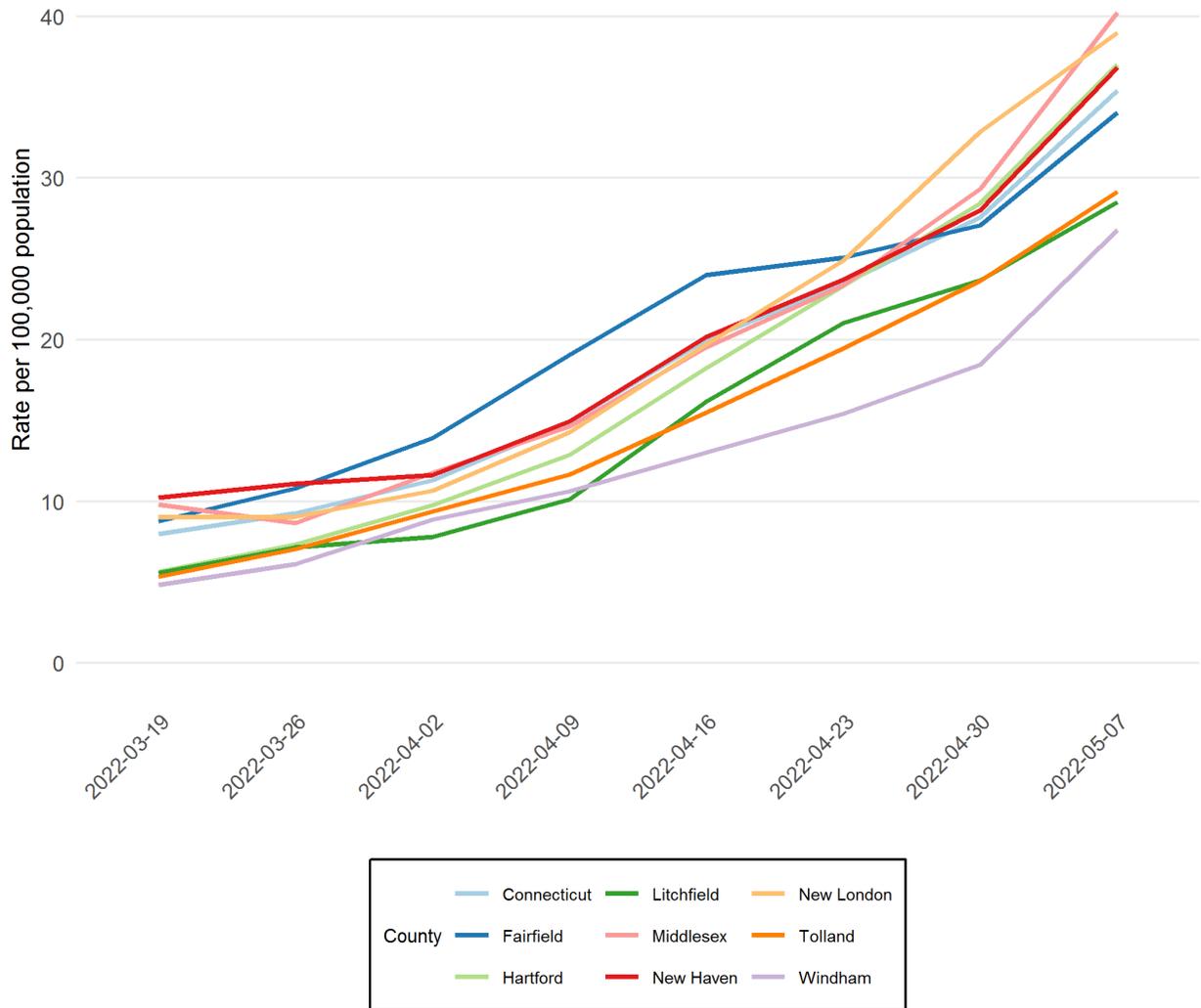
Cumulative Number of COVID-19 Cases and COVID-19-Associated Deaths by Date

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.

Number of Confirmed and Probable COVID-19 Cases by Date
As of 05/11/2022

Date of Specimen Collection (confirmed)
or Symptom Onset/Postive Antigen Test Date (probable)

Probable   Confirmed
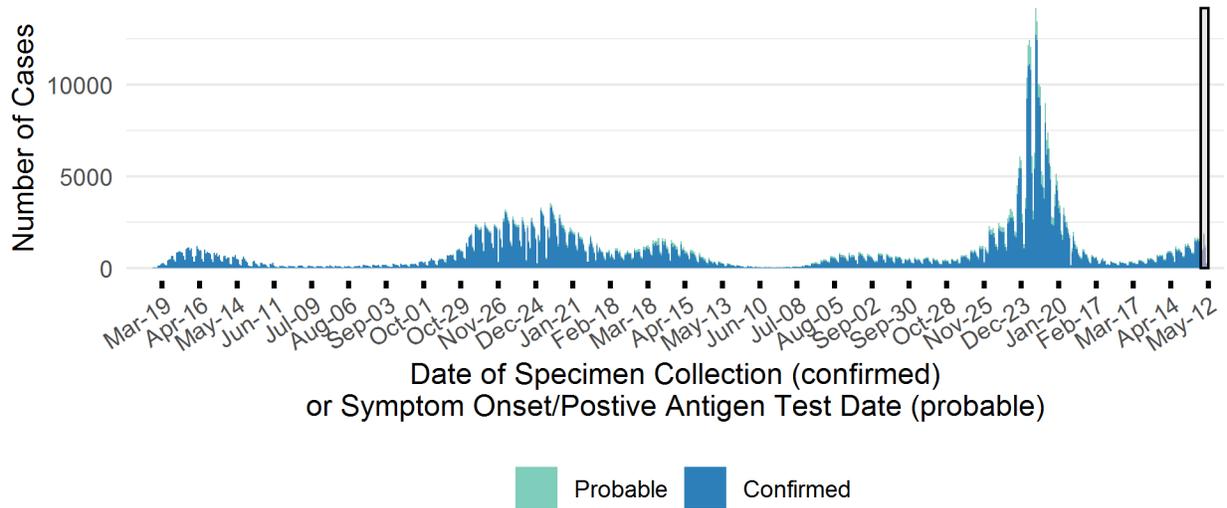
Number of COVID-19-Associated Deaths by Date of Death
As of 05/11/2022

Date of Death

Probable   Confirmed

All data are preliminary and subject to change.
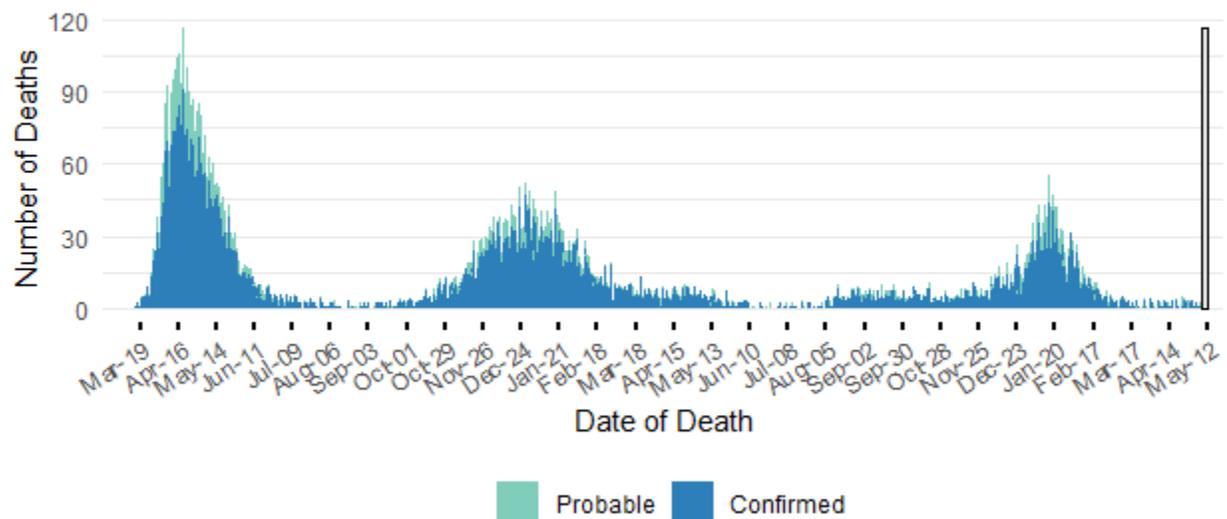
Hospitalization Surveillance

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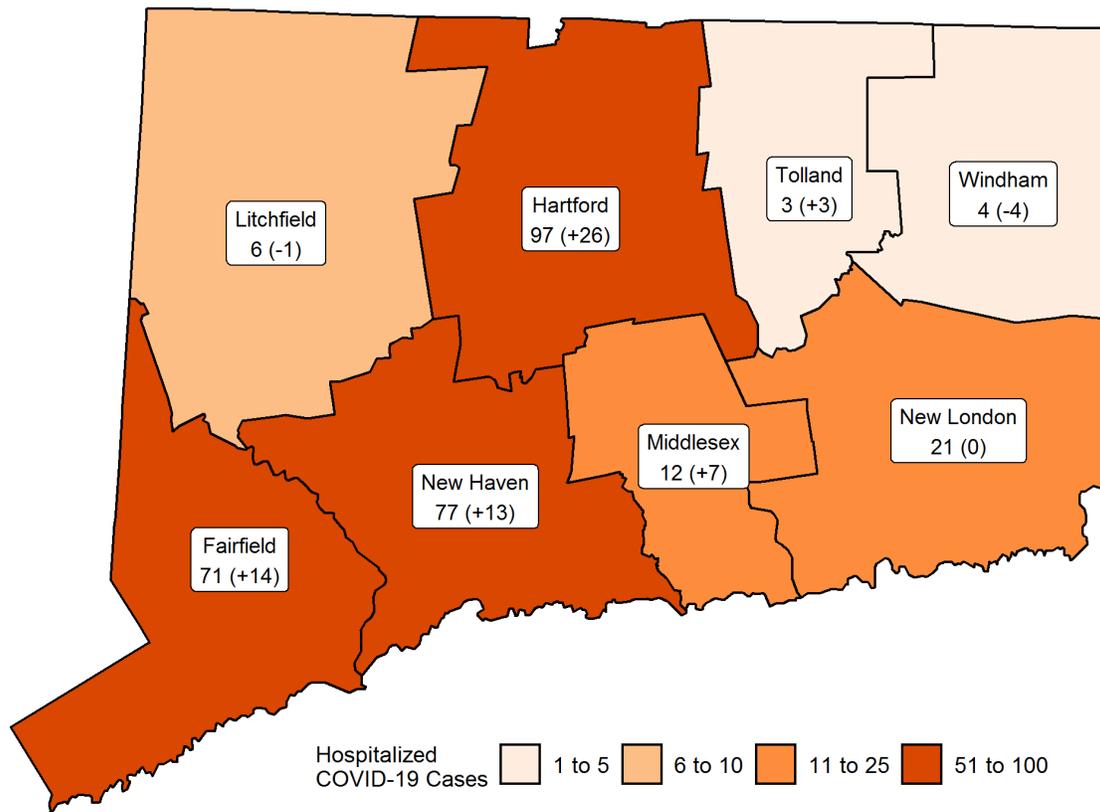
More information about hospitalized cases of COVID-19 in New Haven and Middlesex Counties is available from COVID-NET.

All data are preliminary and subject to change.

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.

Number of patients hospitalized with laboratory-confirmed COVID-19 by Day

All data are preliminary and subject to change.
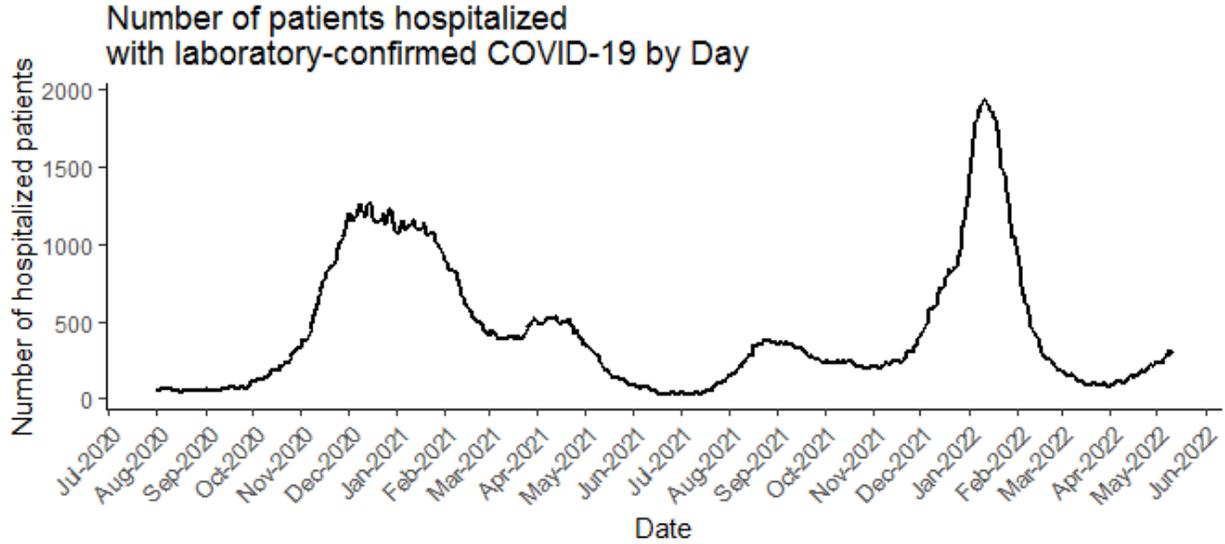
COVID-19 Admissions

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.

Average daily COVID-19 hospital admission rate per 100,000, Connecticut

Data from HHS Protect

All data are preliminary and subject to change.
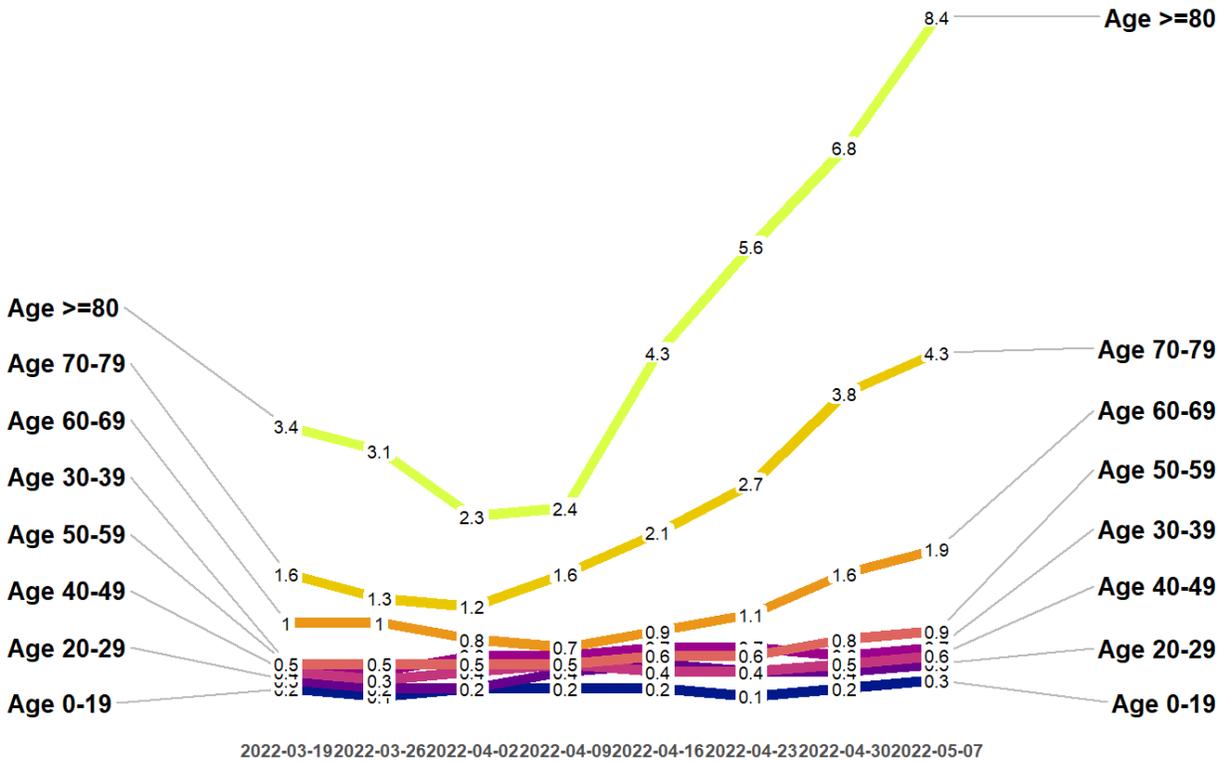
Laboratory Surveillance

Molecular Tests

To date, DPH has received reports on a total of 14,229,159 molecular COVID-19 laboratory tests; of these 14,082,122 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.

Number of Molecular Laboratory Tests for COVID-19 Reported via ELR
Weekly test total by Specimen Collection Date
As of May 11, 2022

Each bar represents the sum of all tests for one specimen collection week
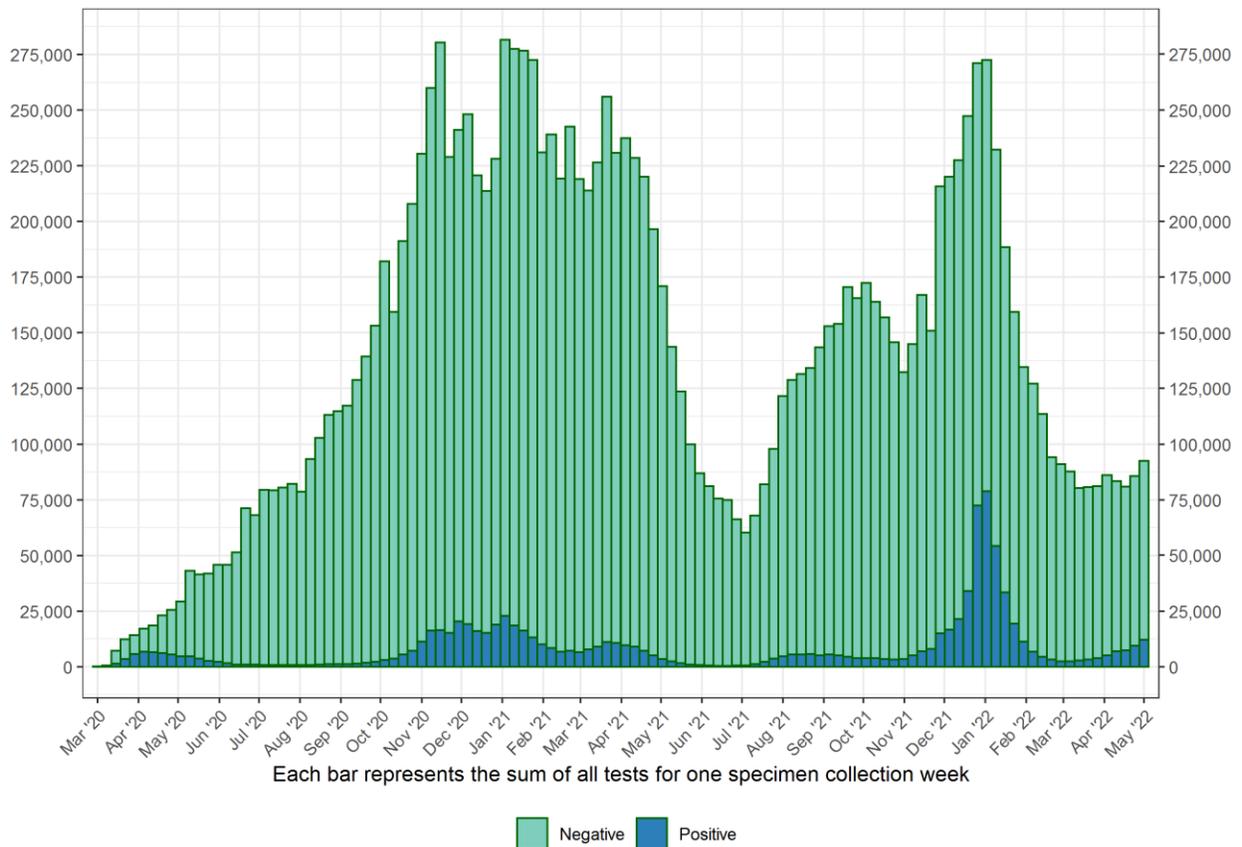
Testing of recently collected specimens is ongoing and does not reflect a decrease in testing. Chart only includes test results received by electronic laboratory reporting.

ELR = Electronic Laboratory Reporting

Characteristics of COVID-19 Cases and Associated Deaths

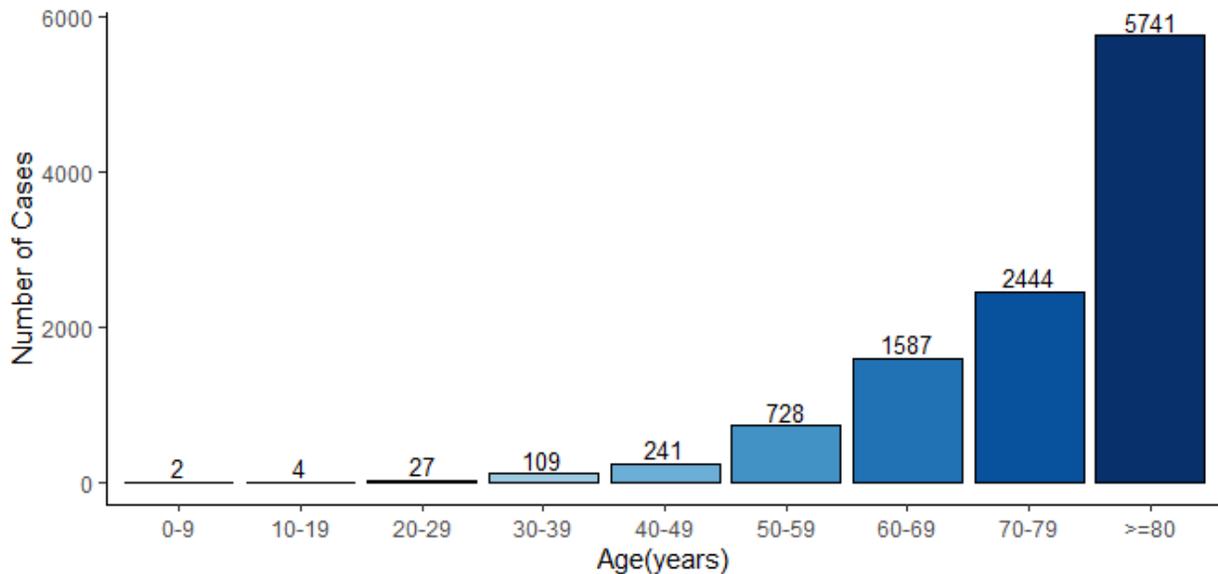*Counts may not add up to total case count because demographic data may be missing.*

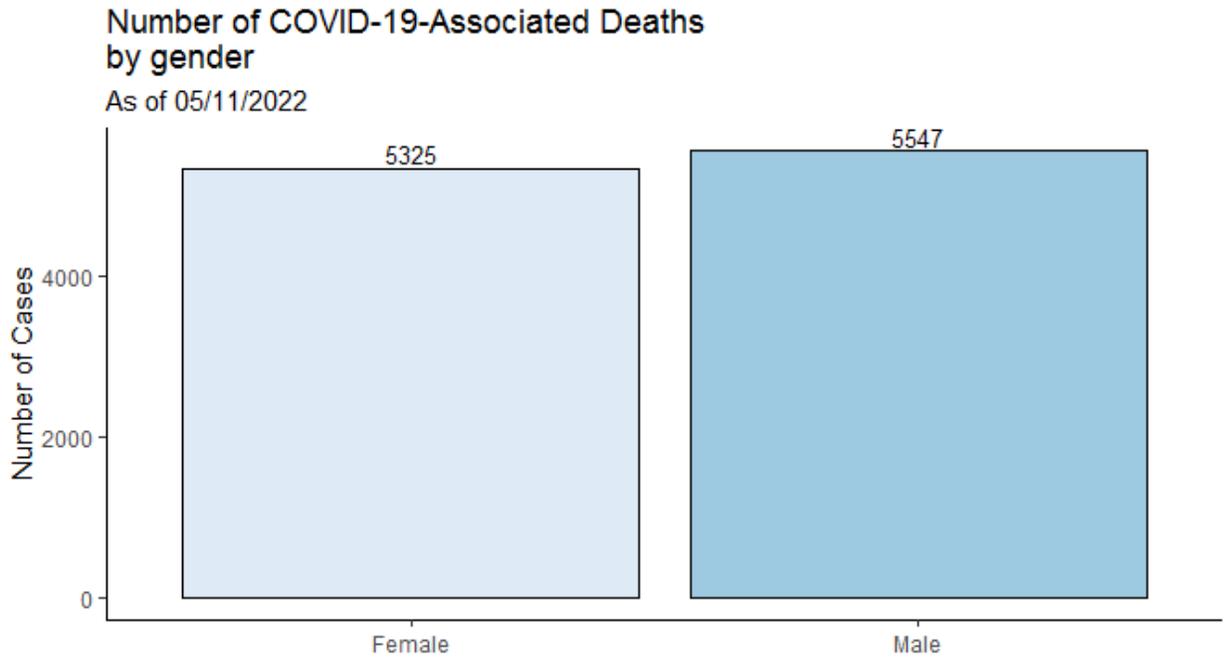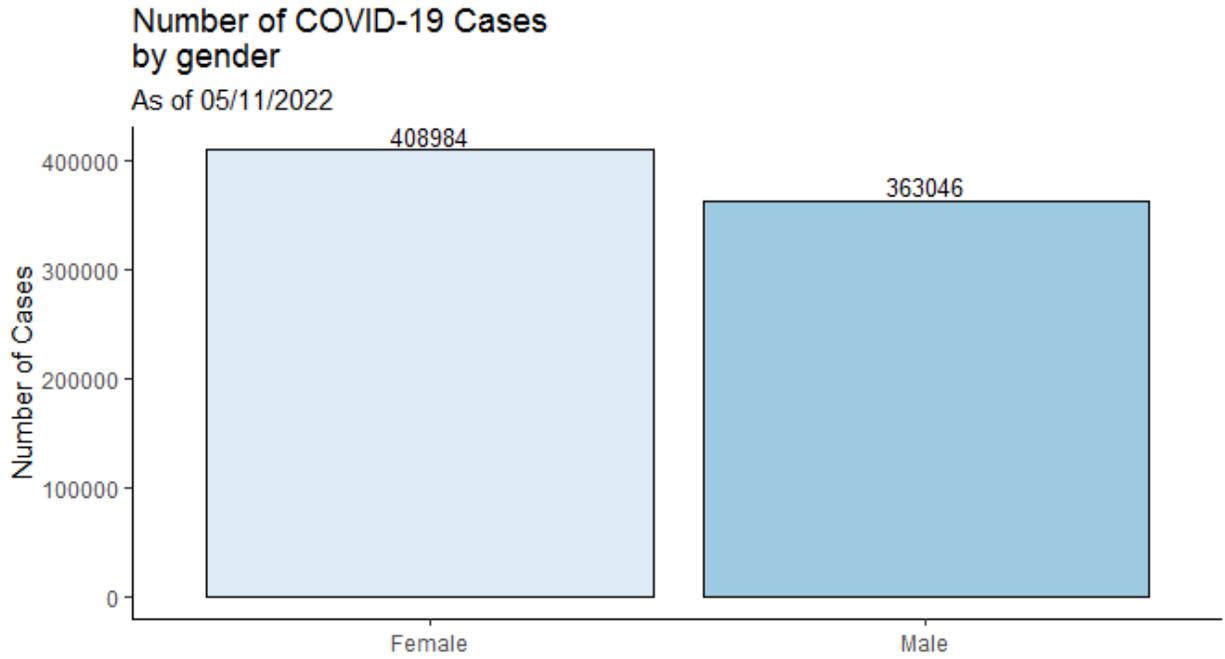## Number of COVID-19 Cases by Age Group
As of 05/11/2022

Age(years)	Number of Cases
0-9	70691
10-19	99700
20-29	131124
30-39	125767
40-49	107256
50-59	106620
60-69	71409
70-79	35645
>=80	27633

Number of COVID-19-Associated Deaths by Age Group
As of 05/11/2022

Age(years)	Number of Cases
0-9	2
10-19	4
20-29	27
30-39	109
40-49	241
50-59	728
60-69	1587
70-79	2444
>=80	5741

All data are preliminary and subject to change.

Counts may not add up to total case count because demographic data may be missing.
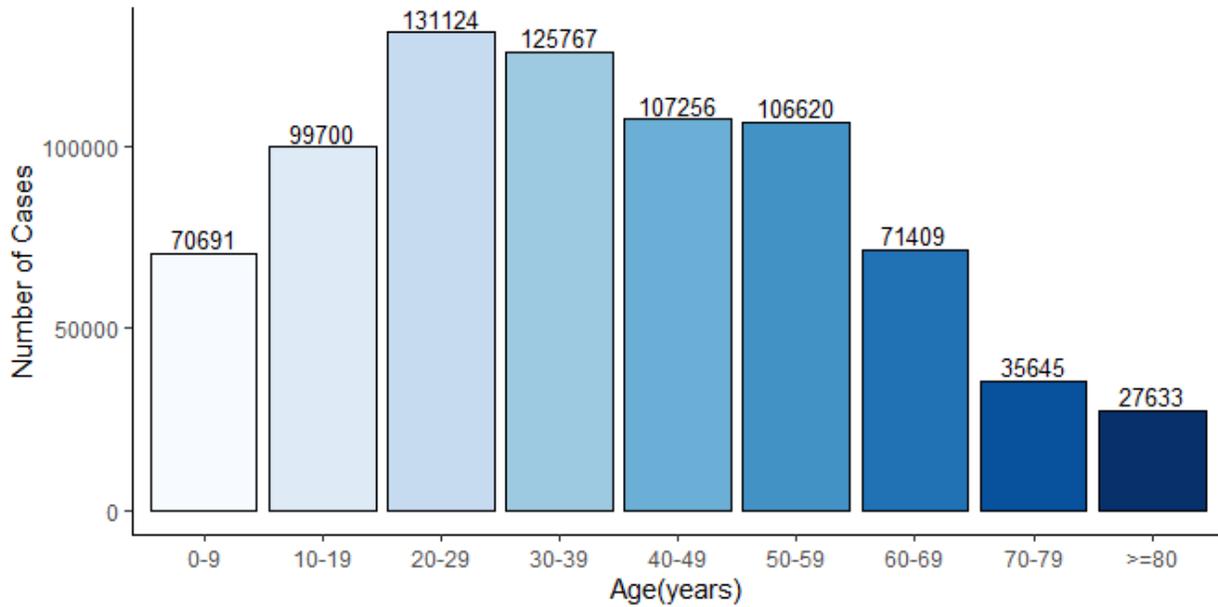
Number of COVID-19 Cases by gender
As of 05/11/2022

Number of COVID-19-Associated Deaths by gender
As of 05/11/2022

Cumulative Number of COVID-19 Cases by Town

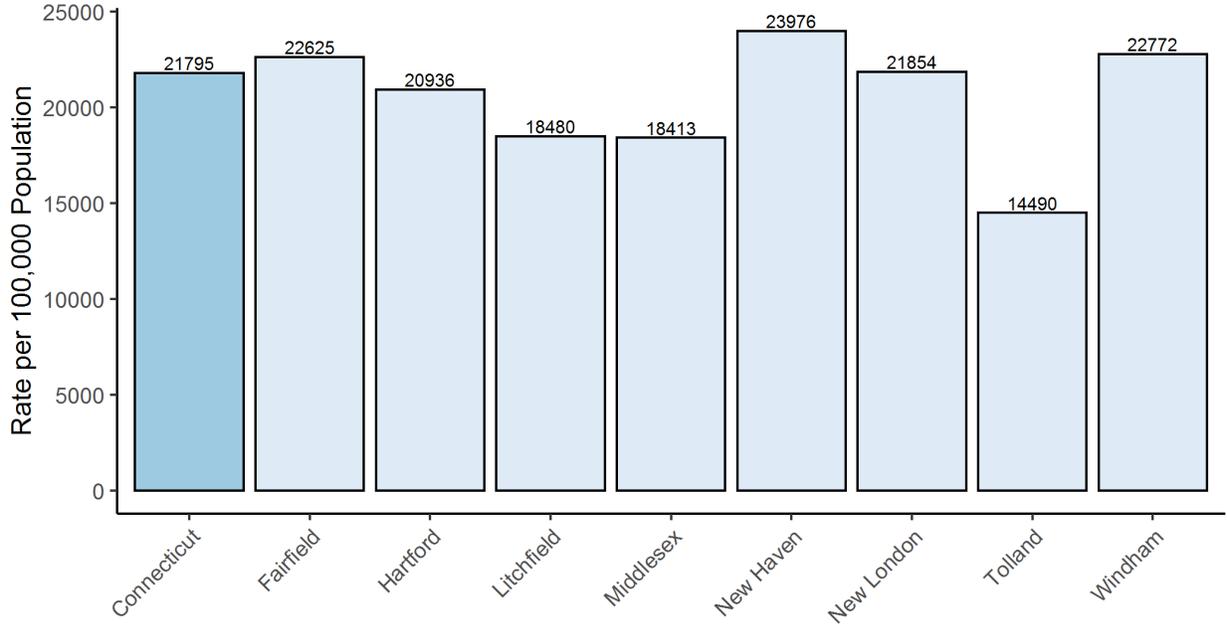*Map does not include 2375 cases pending address validation*
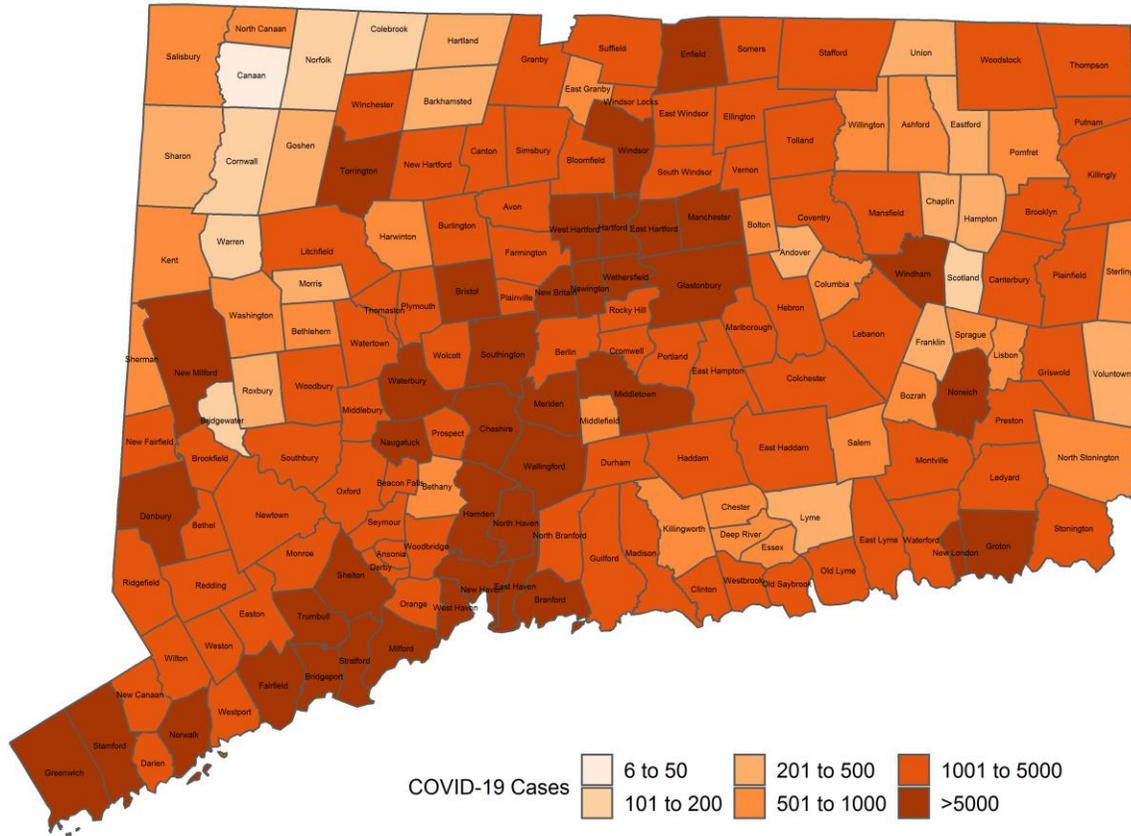
All data are preliminary and subject to change.

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

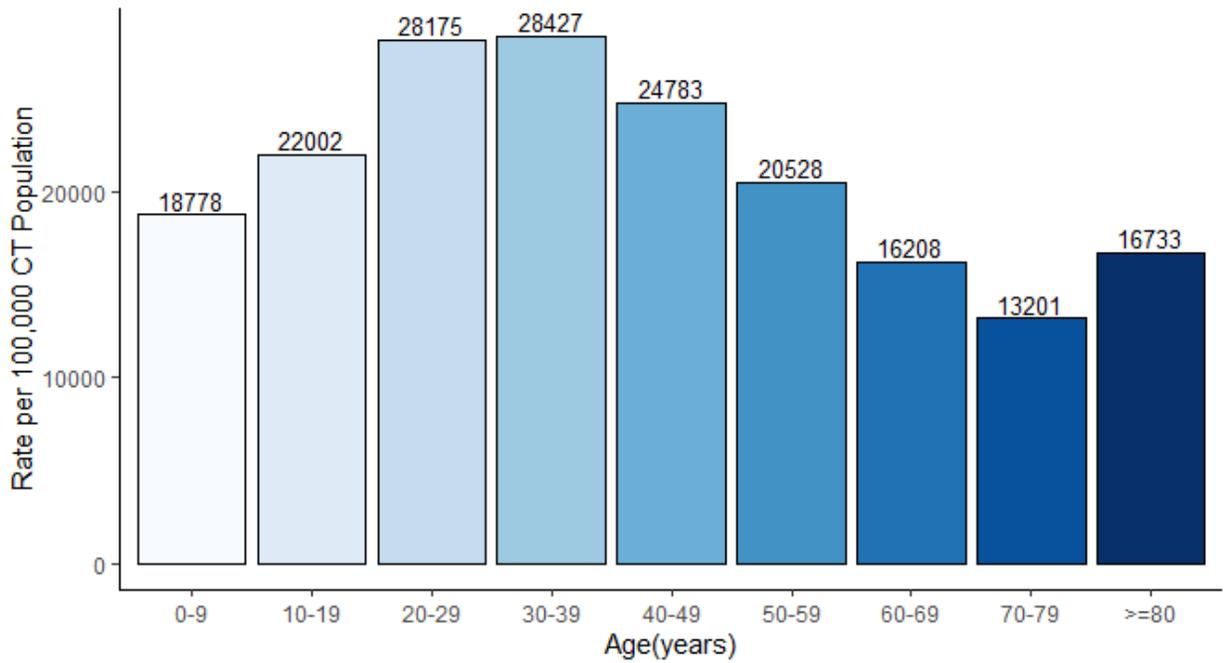## Rate of COVID-19 Cases Statewide and by County
As of 05/11/2022

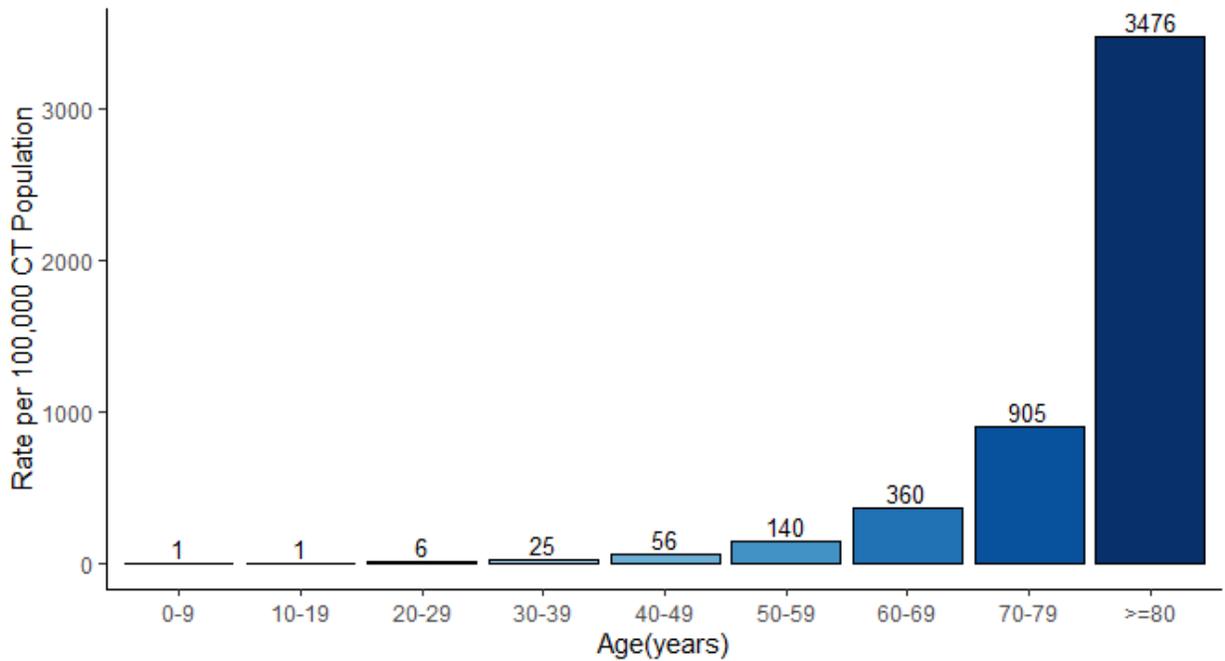## Rate of COVID-19-Associated Deaths Statewide and by County
As of 05/11/2022
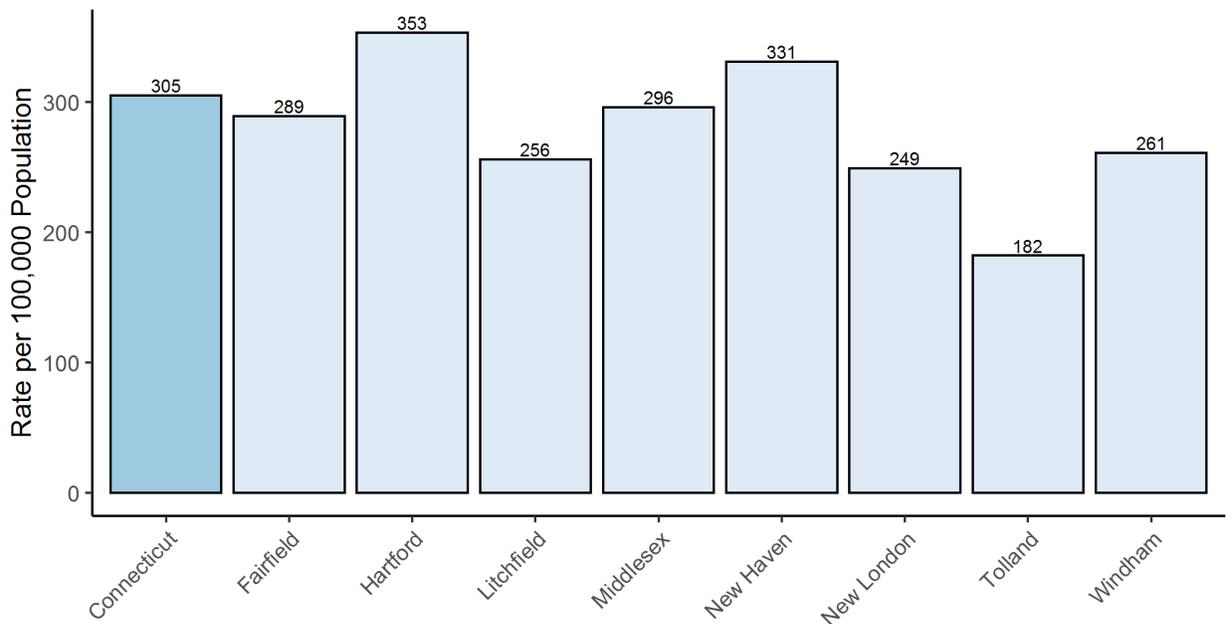
All data are preliminary and subject to change.

Rate of COVID-19 Cases
by Age Group
As of 05/11/2022

Rate per 100,000 CT Population

Age(years)	Rate
0-9	18778
10-19	22002
20-29	28175
30-39	28427
40-49	24783
50-59	20528
60-69	16208
70-79	13201
>=80	16733

Rate of COVID-19-Associated Deaths
by Age Group
As of 05/11/2022

Rate per 100,000 CT Population

Age(years)	Rate
0-9	1
10-19	1
20-29	6
30-39	25
40-49	56
50-59	140
60-69	360
70-79	905
>=80	3476

25

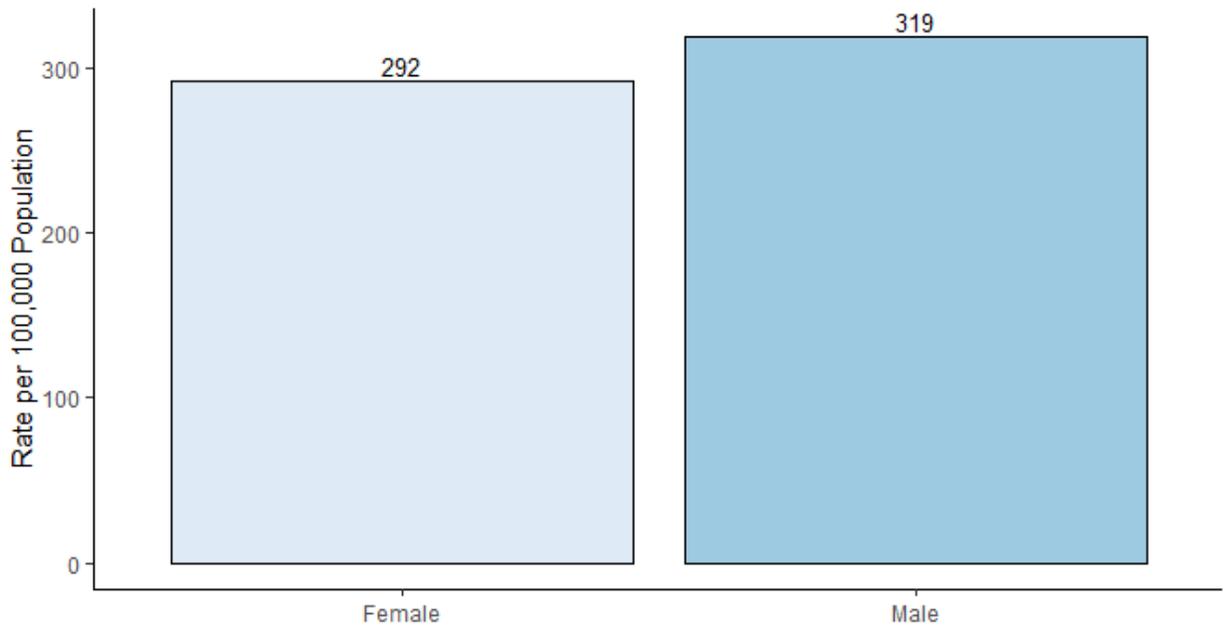All data are preliminary and subject to change.

Rate of COVID-19 Cases
by Gender
As of 05/11/2022

Rate of COVID-19-Associated Deaths
by Gender
As of 05/11/2022

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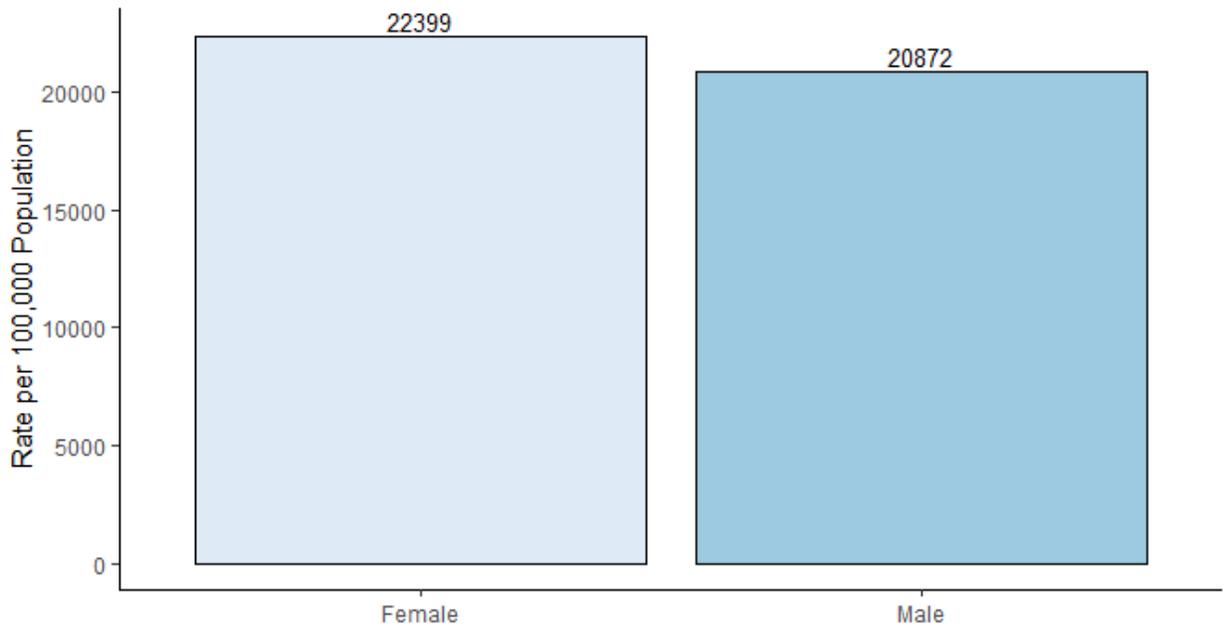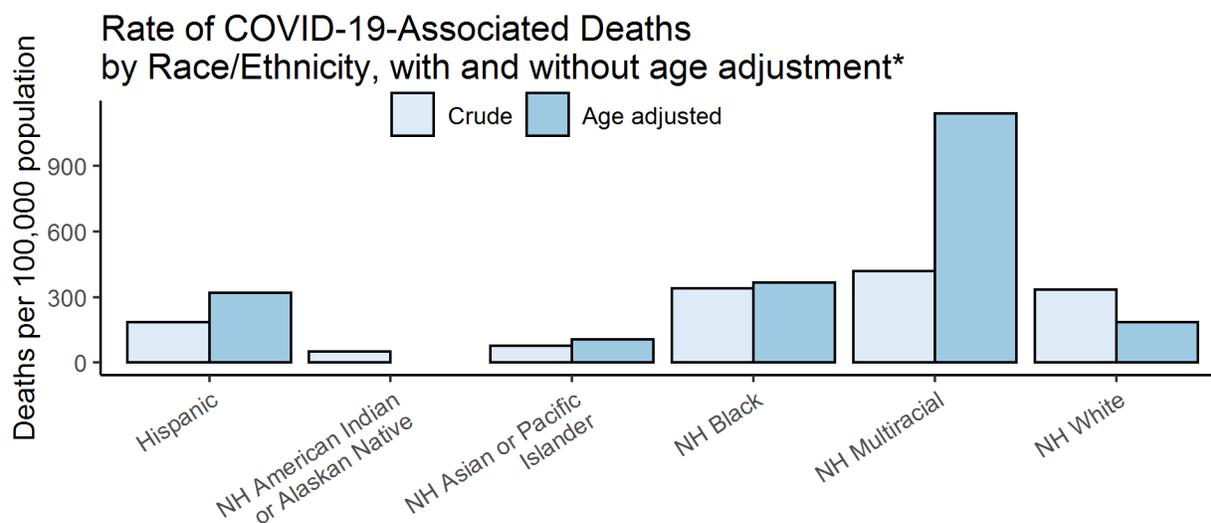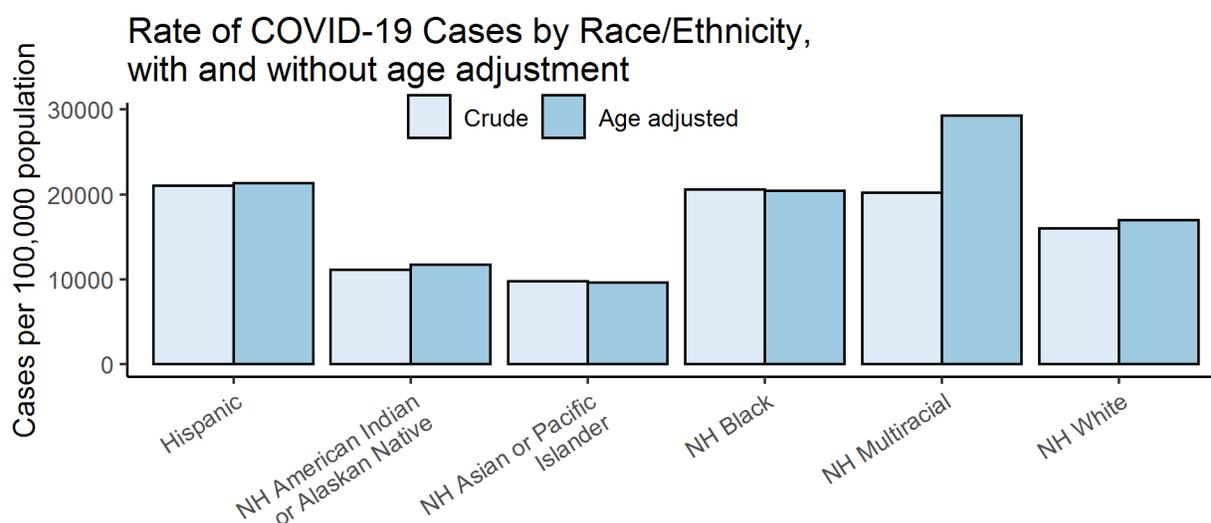
APPENDIX B. The following graphs show the number of cases and deaths by race and ethnicity. *Categories are mutually exclusive. The category "multiracial" includes people who answered 'yes' to more than one race category. NH=Non-Hispanic*

Number of COVID-19 Cases by Race\Ethnicity
As of 05/11/2022

Number of COVID-19-Associated Deaths by Race\Ethnicity
As of 05/11/2022
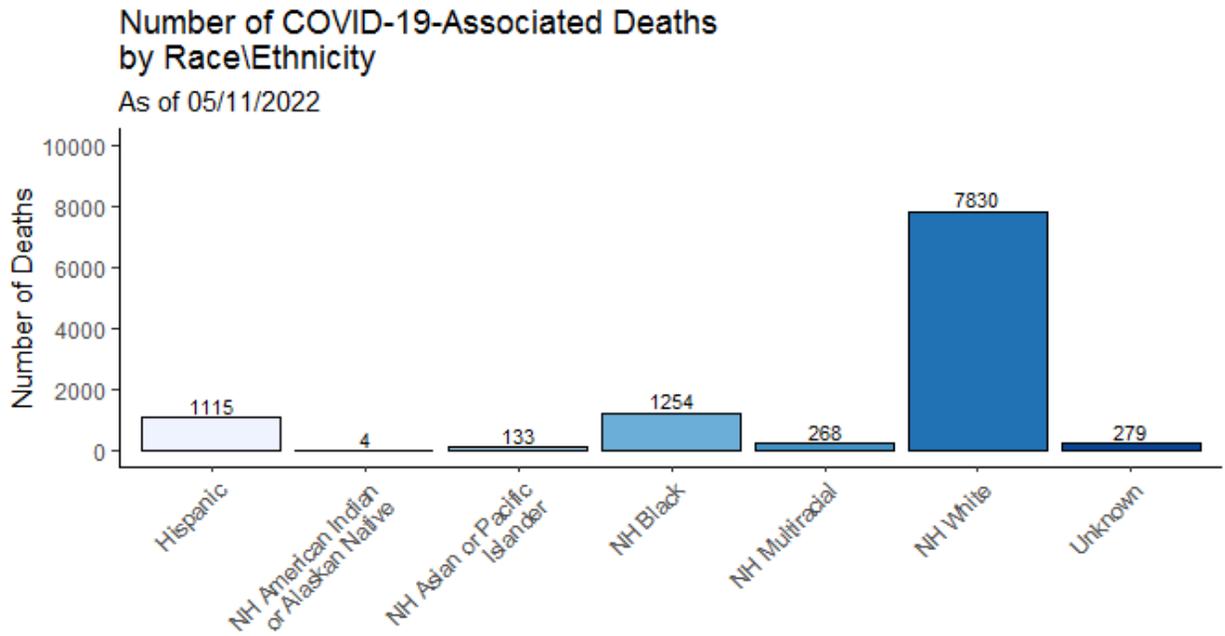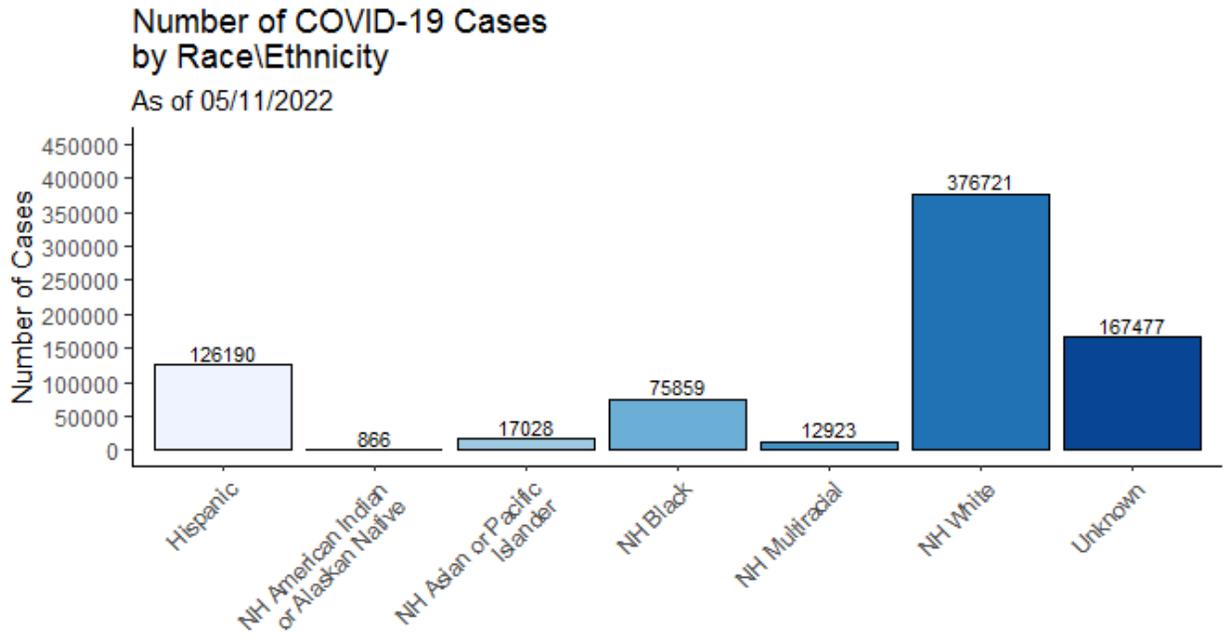
The following graphs show the number of COVID-19 cases and COVID-19-associated deaths per 100,000 population by race and ethnicity. Crude rates represent the total cases or deaths per 100,000 people. Age-adjusted rates consider the age of the person at diagnosis or death when estimating the rate and 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*

Rate of COVID-19 Cases by Race/Ethnicity, with and without age adjustment

Rate of COVID-19-Associated Deaths by Race/Ethnicity, with and without age adjustment*

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

All data are preliminary and subject to change.