COVID-19 Update January 19, 2023

As of **January 18, 2023**, the total of laboratory-confirmed and probable COVID-19 cases reported among Connecticut residents is **961,676**; **2,545** have been reported in the past 7 days. **Six hundred** patients are currently hospitalized with laboratory-confirmed COVID-19; of these, **177** (29.5%) are not fully vaccinated.

Overall Summary	Cumulative (except for hospital census)	Past 7 days*
Positive PCR/NAAT Tests	1,044,573	2,996
All PCR/NAAT Tests	16,135,554	25,889
Test Positivity (pos/all PCR/NAAT)		11.57%
Patients currently hospitalized with COVID-19	600	-98
COVID-19-Associated Deaths	11,899	+36

*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.

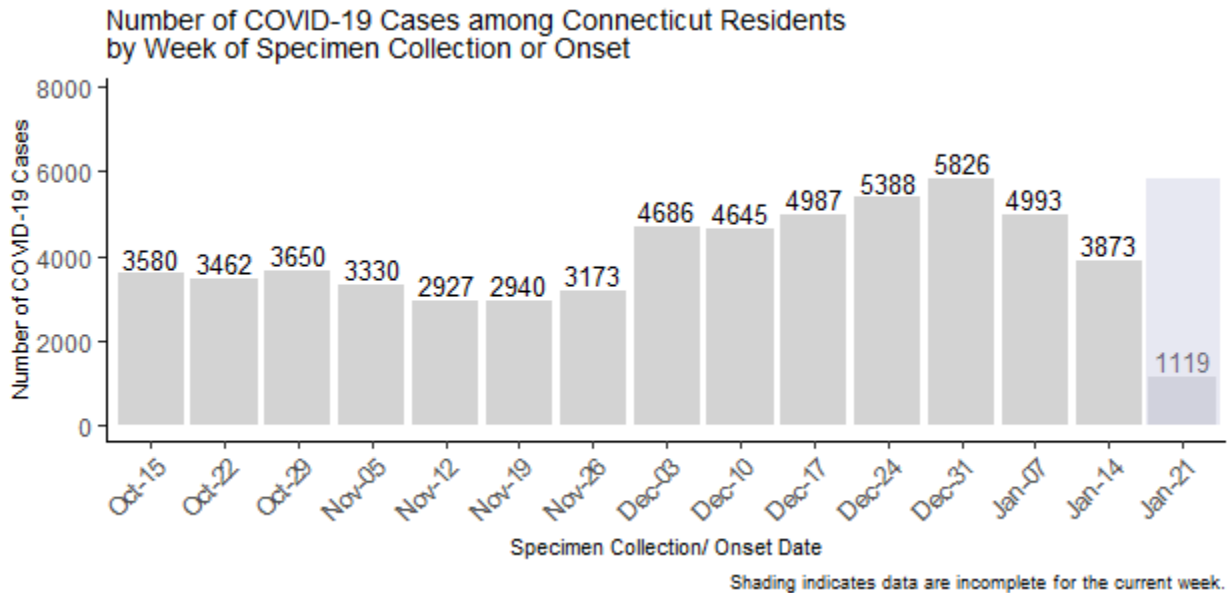**Cumulative COVID-19 Cases and Associated Deaths by County of Residence**

County	COVID-19 Cases		COVID-19-Associated Deaths	
	Confirmed	Probable	Confirmed	Probable
Fairfield County	232,992	27,712	2,364	567
Hartford County	204,168	29,395	2,765	647
Litchfield County	34,826	6,233	437	79
Middlesex County	34,633	3,685	367	168
New Haven County	224,071	29,625	2,649	436
New London County	65,037	7,644	592	167
Tolland County	24,016	3,444	217	91
Windham County	28,819	2,180	266	76
Pending address validation	2,694	502	2	9
Total	**851256**	**110420**	**9659**	**2240**

Information about preventing spread of COVID-19 are available from the Centers for Disease Control and Prevention.
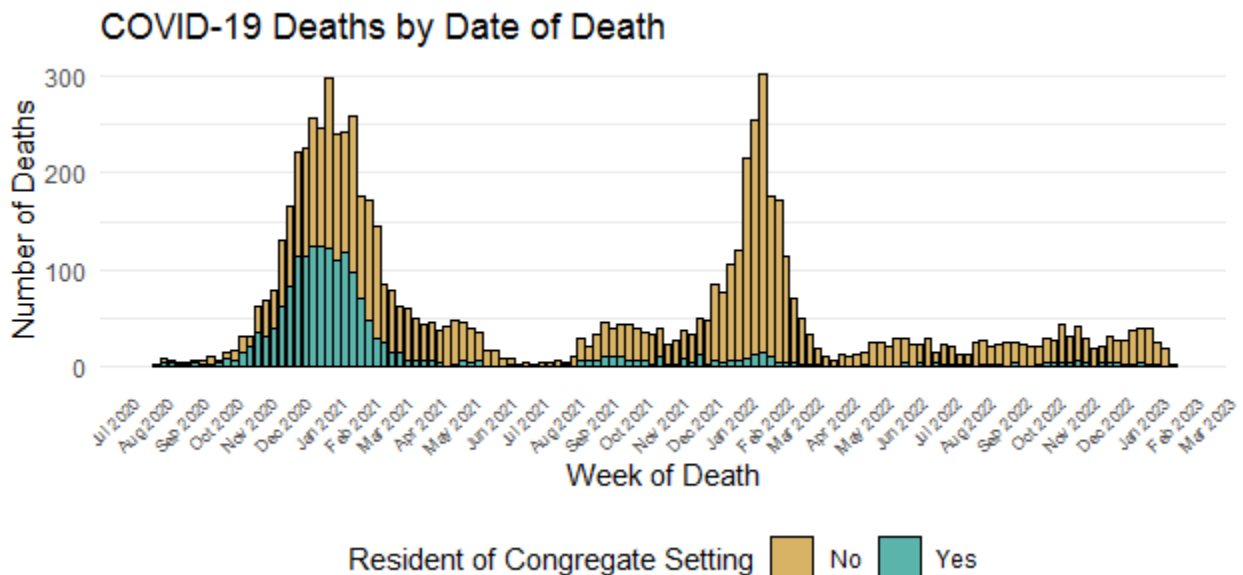
Day-to-day changes reflect newly reported cases, deaths, and tests that occurred over the last several days to week. All data in this report are preliminary; data for previous dates will be updated as new reports are received and data errors are corrected. Hospitalization data were collected by the Connecticut Hospital Association. Deaths reported to either OCME or DPH are included in the weekly 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 (January 12-18), there were 2,545 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
Oct-15	3580
Oct-22	3462
Oct-29	3650
Nov-05	3330
Nov-12	2927
Nov-19	2940
Nov-26	3173
Dec-03	4686
Dec-10	4645
Dec-17	4987
Dec-24	5388
Dec-31	5826
Jan-07	4993
Jan-14	3873
Jan-21	1119

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

There were 2,545 new COVID-19 cases with specimen collection date during January 12-18, as shown in the map below. During this seven-day period, the statewide case rate was 70.578 per 100,000 CT population; there were more than 100 new COVID-19 cases in 2 towns.

Number of COVID-19 Cases by Town
with Specimen Collection date during January 12-18
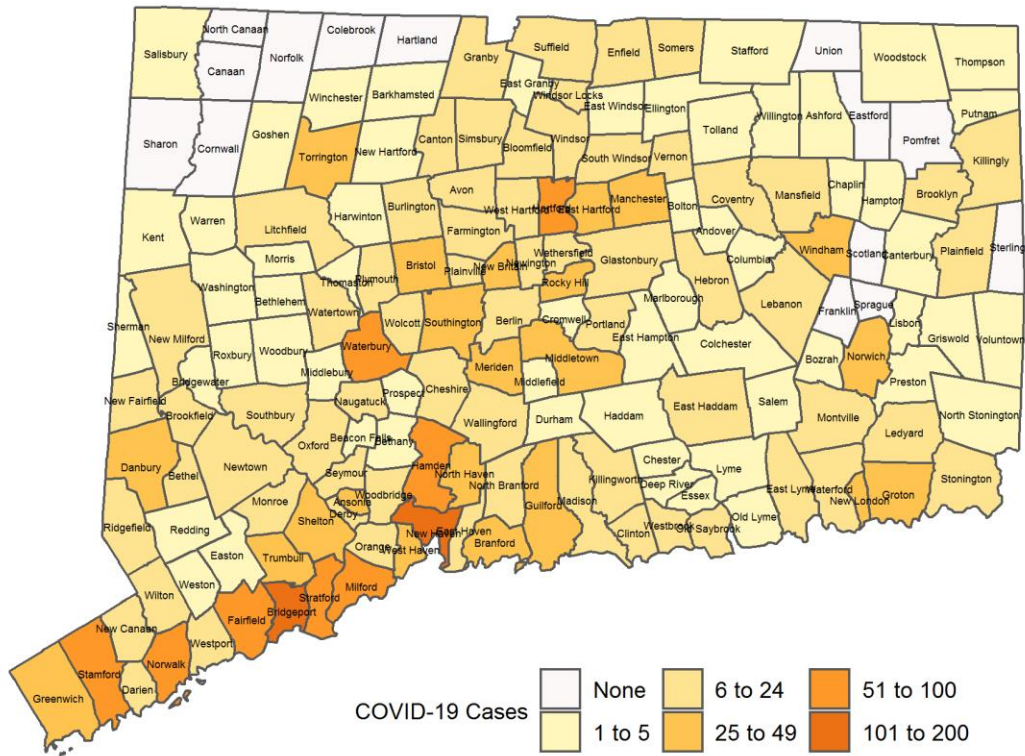
Map does not include 6 *cases pending address validation*

All data are preliminary and subject to change.

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 January 12, 2023 - January 18, 2023 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	2,540	
Not Fully Vaccinated	1,749	68.9
Fully Vaccinated	791	31.1

As of **January 04, 2023**, 315,585 cases of COVID-19 among fully vaccinated persons in Connecticut have been identified. Those 315,585 cases account for 10.43 percent of the 2,776,745 persons who are fully vaccinated.

Since the beginning of the pandemic, 646,091 cases have been identified among individuals who are not fully vaccinated.

One thousand four hundred thirty-six COVID-19 related deaths have occurred among the 315,585 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	# (%) 1 Add Dose Cases	# (%) 2 Add Dose Cases	# (%) Deaths	# (%) 1 Add Dose Deaths	# (%) 2 Add Dose Deaths
0-4	64 (0%)					
5-11	6,918 (2.2%)	212 (0.2%)	14 (0.1%)	1 (0.1%)		
12-15	10,934 (3.5%)	1,338 (1%)	38 (0.2%)			
16-24	36,859 (11.7%)	9,751 (7%)	142 (0.7%)	2 (0.1%)	1 (0.2%)	
25-34	48,579 (15.4%)	16,626 (12%)	490 (2.5%)	4 (0.3%)		
35-44	49,845 (15.8%)	19,701 (14.2%)	607 (3.1%)	17 (1.2%)	2 (0.4%)	
45-54	49,517 (15.7%)	21,916 (15.8%)	1,687 (8.6%)	36 (2.5%)	12 (2.1%)	
55-64	52,445 (16.6%)	28,255 (20.4%)	4,766 (24.2%)	145 (10.1%)	43 (7.6%)	6 (5.8%)
65-74	32,818 (10.4%)	22,053 (15.9%)	5,946 (30.2%)	227 (15.8%)	81 (14.3%)	13 (12.6%)
75+	27,606 (8.7%)	18,731 (13.5%)	5,998 (30.5%)	1,004 (69.9%)	428 (75.5%)	84 (81.6%)
Total	315,585	138,583	19,688	1,436	567	103

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 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 01/18/2023 with specimen collection dates between 01/12/2021 and 01/10/2023. **The total number of SARS-CoV-2 sequences reported to DPH with a valid specimen collection date is 52374.** Data are preliminary and updated as new data are received.
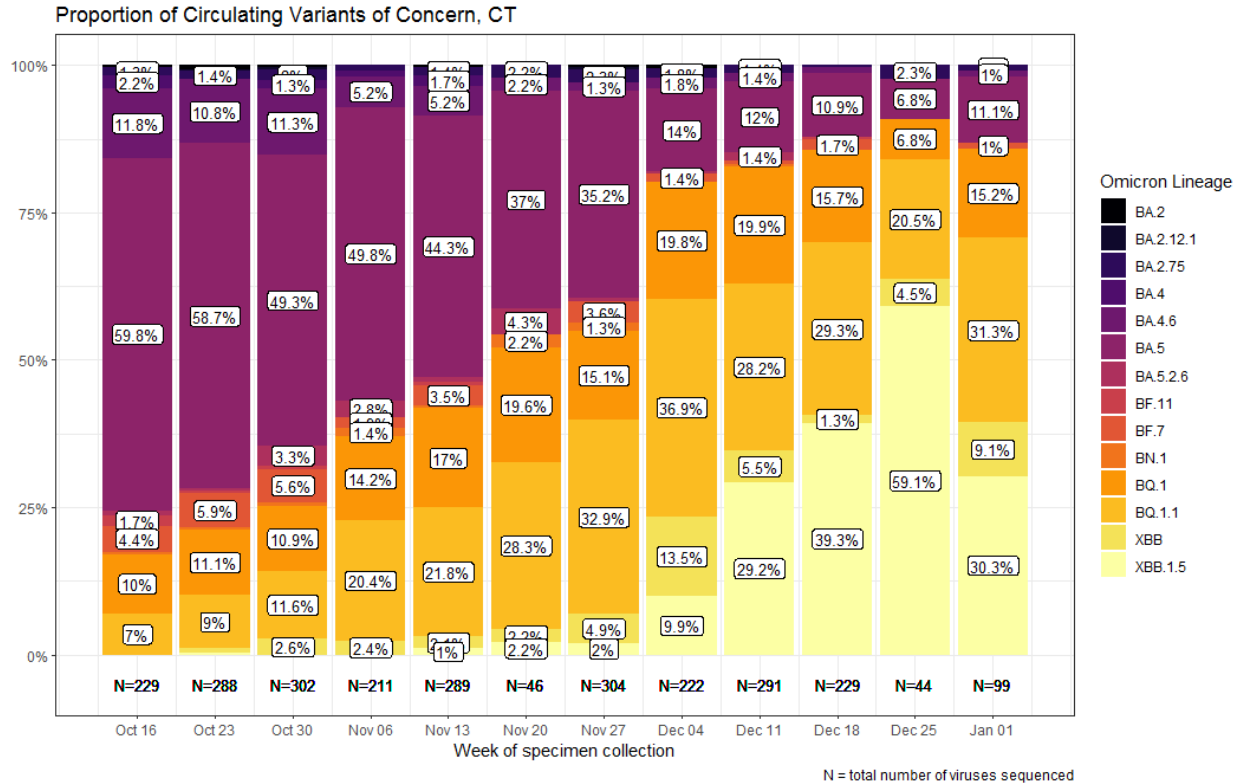
Variant	Number	Percentage
Omicron	30,125	57.52
Delta	17,235	32.91
Alpha	2,525	4.82
Iota	1,083	2.07
Other	1,051	2.01
Gamma	137	0.26
Mu	84	0.16
Epsilon	60	0.11
Lambda	38	0.07
Beta	23	0.04
Eta	10	0.02
Kappa	2	0.00
Zeta	1	0.00

All data are preliminary and subject to change.

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 January 18, 2023. 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 01/12/2021–01/10/2023.

As of July 21, 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, BA.2.75, BN.1, and XBB.

Proportion of Circulating Variants of Concern, CT

N = total number of viruses sequenced

All data are preliminary and subject to change.

COVID-19 Molecular and Antigen Tests during January 12 - January 18, 2023

There were 29,190 molecular and antigen tests for COVID-19 performed with specimen collection date during January 12 - January 18, 2023. The map below shows the number of molecular and antigen COVID-19 tests by town with specimen collection date during January 12 - January 18, 2023.

Number of Molecular and Antigen Tests for COVID-19
with Specimen Collection Date During January 12-18
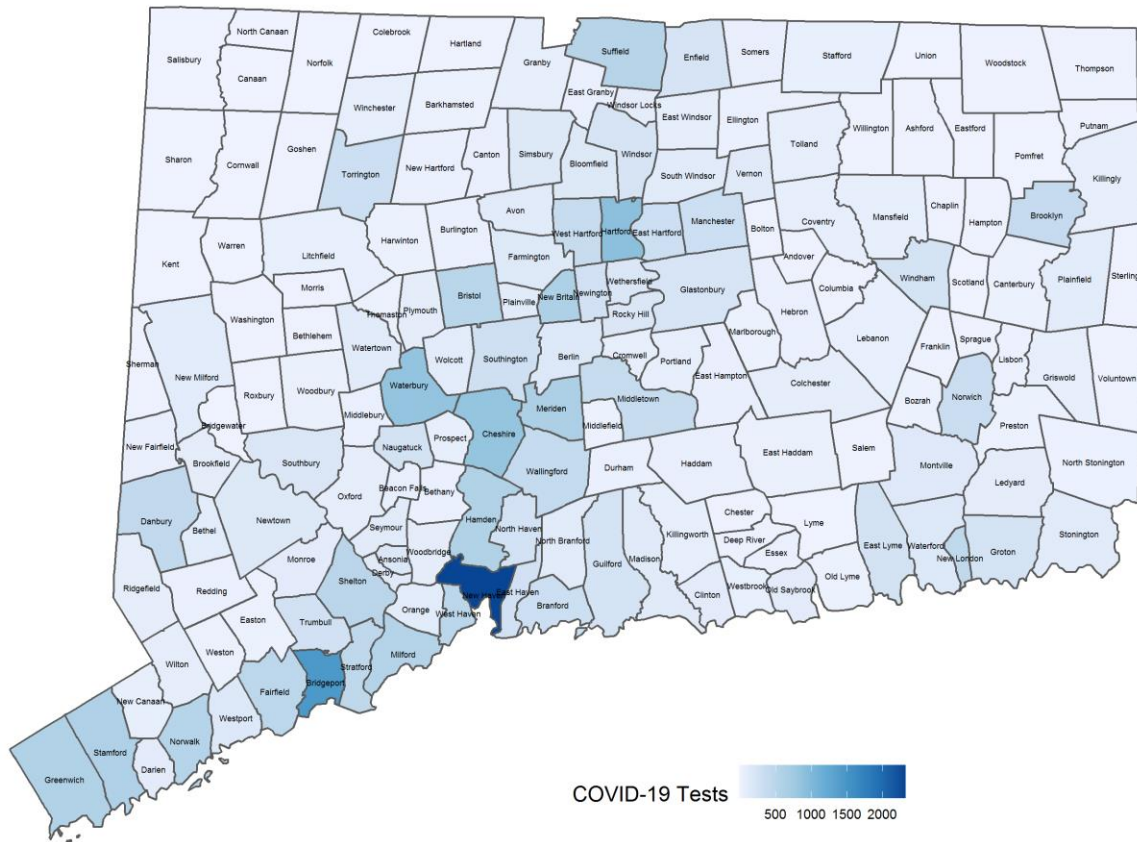
Map does not include tests pending address validation

All data are preliminary and subject to change.

Age Distribution of COVID-19 Cases with Specimen Collection or Onset During January 12 - January 18, 2023

Number of New COVID-19 Cases by Age Group
During January 12 - January 18, 2023
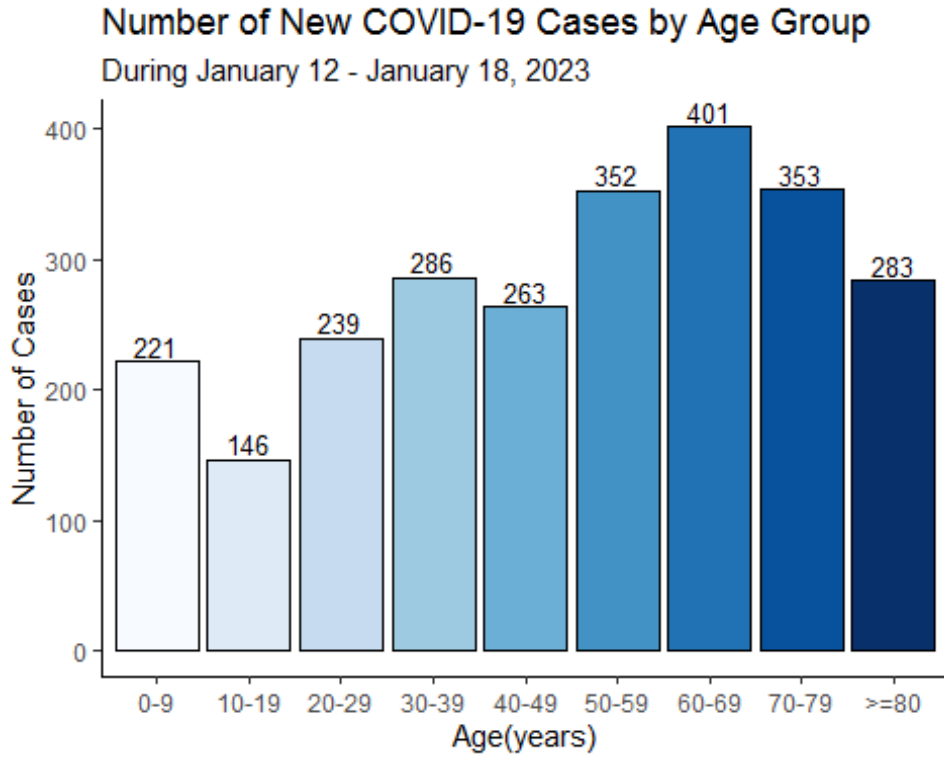
Weekly Incidence by Age Group

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 01/18/2023

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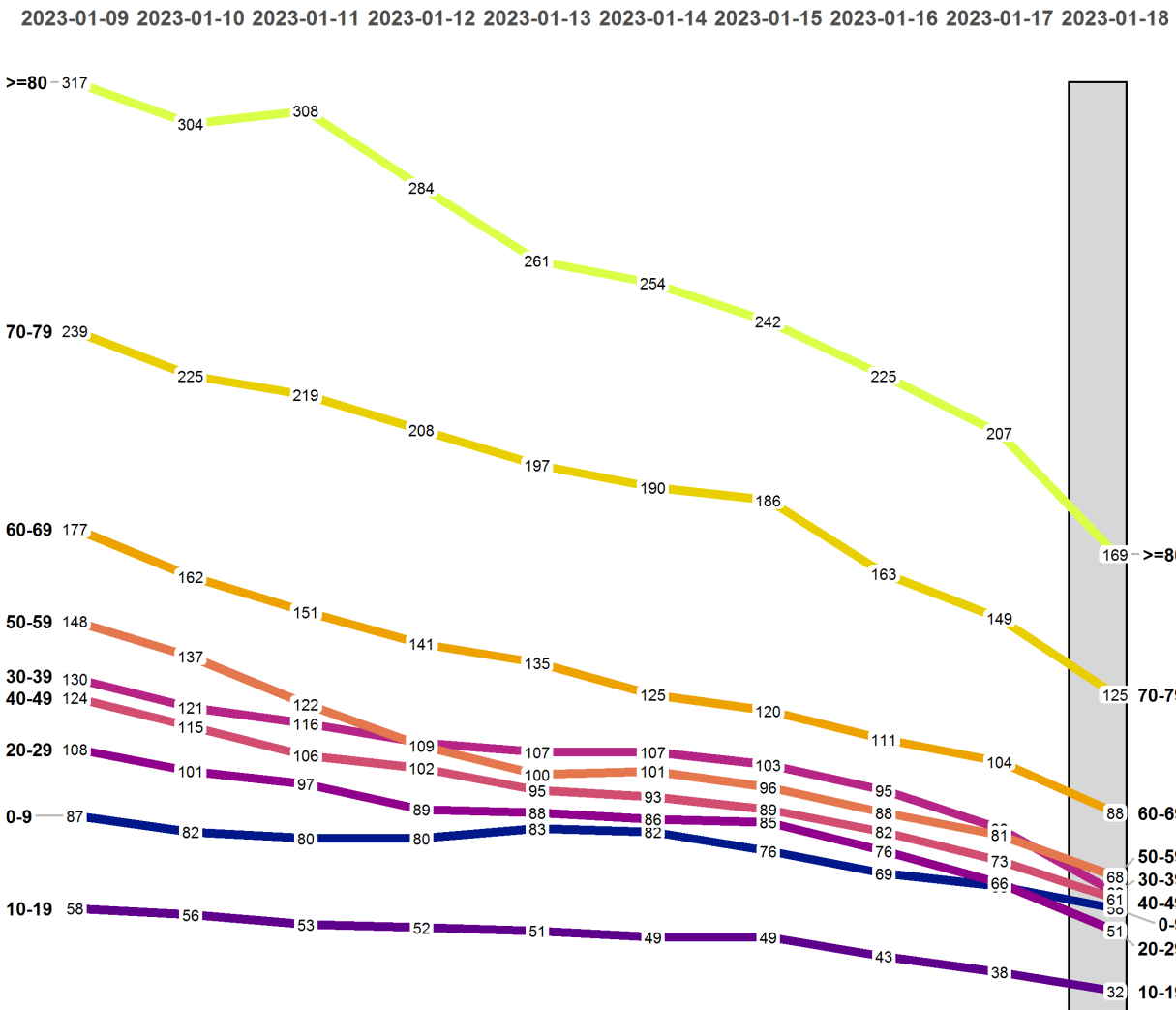
Weekly Incidence by County

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.
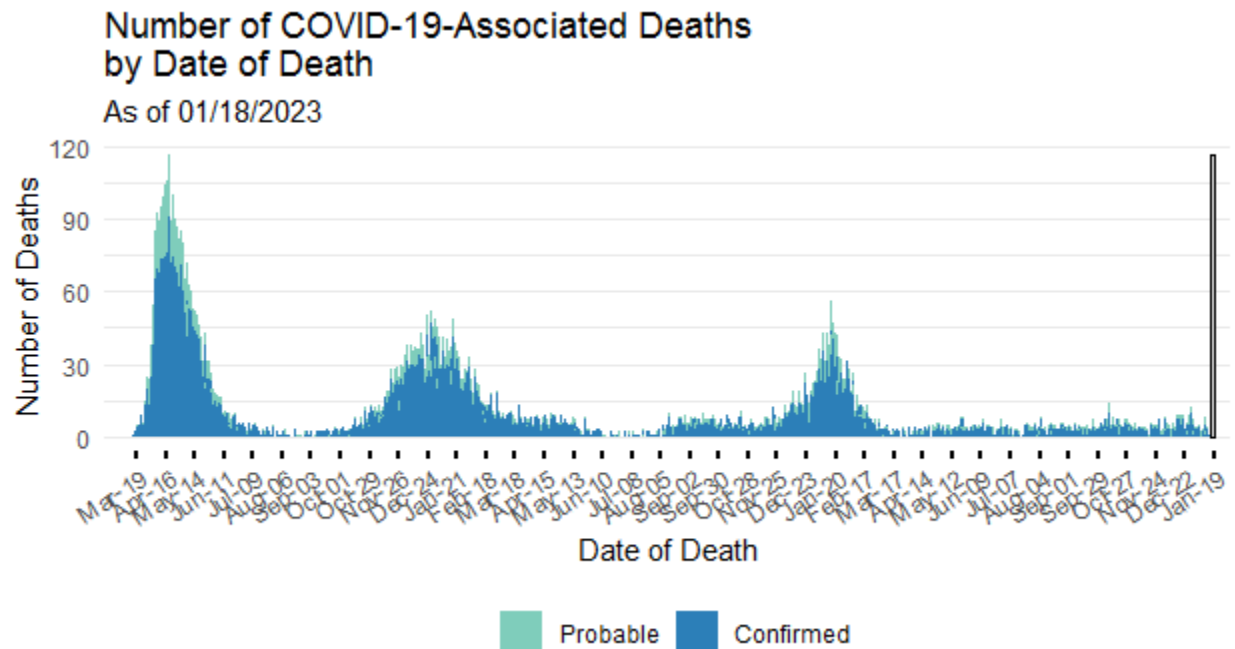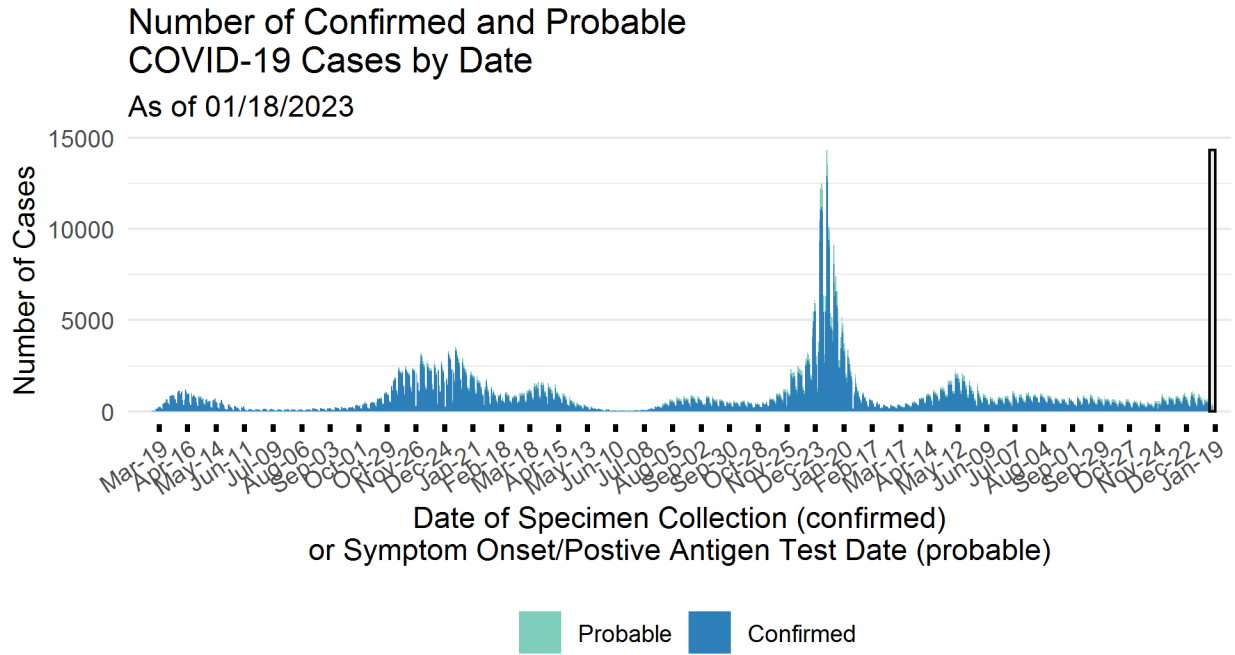
Rate of COVID-19 cases by County

As of 01/18/2023

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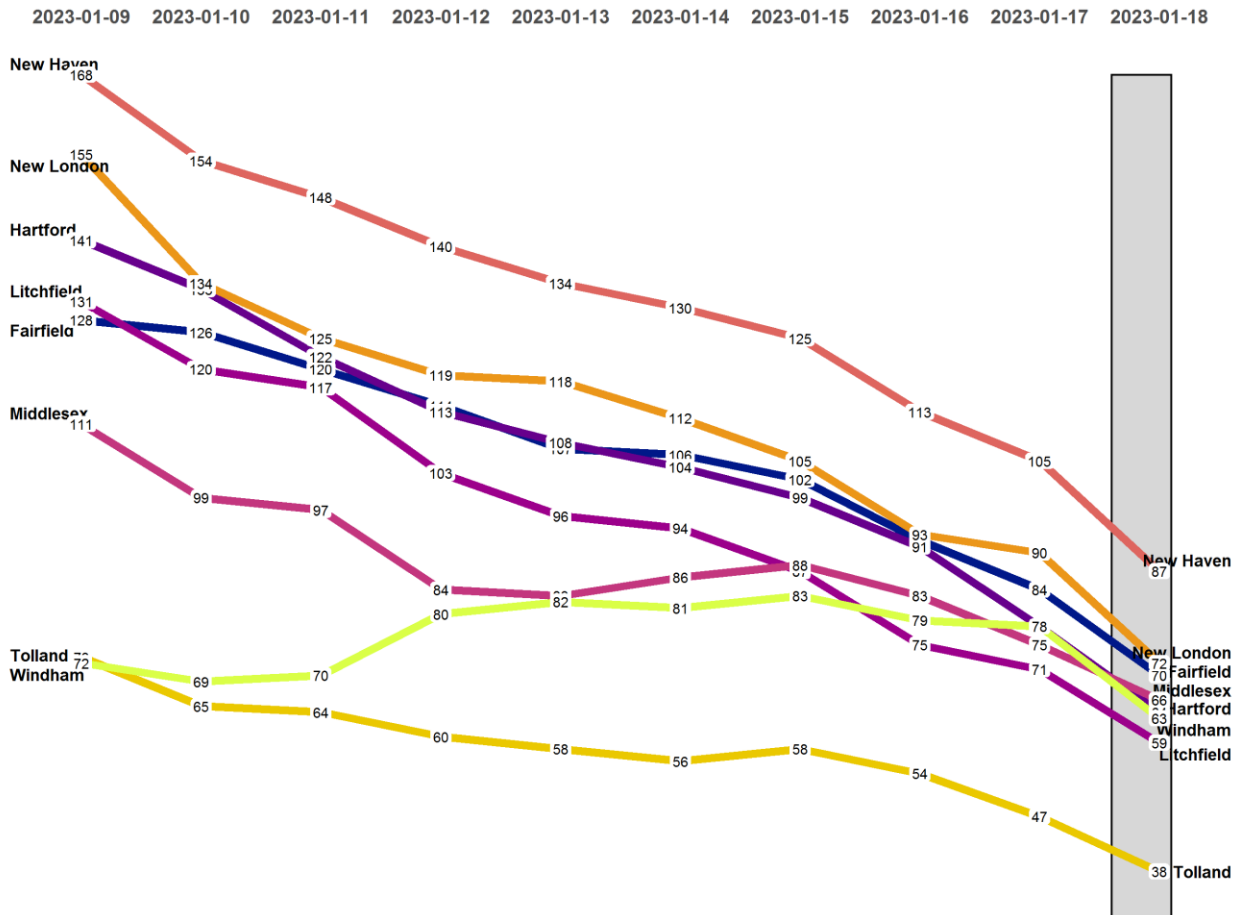
Cumulative Number of COVID-19 Cases and COVID-19-Associated Deaths by Date

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 01/18/2023

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 01/18/2023

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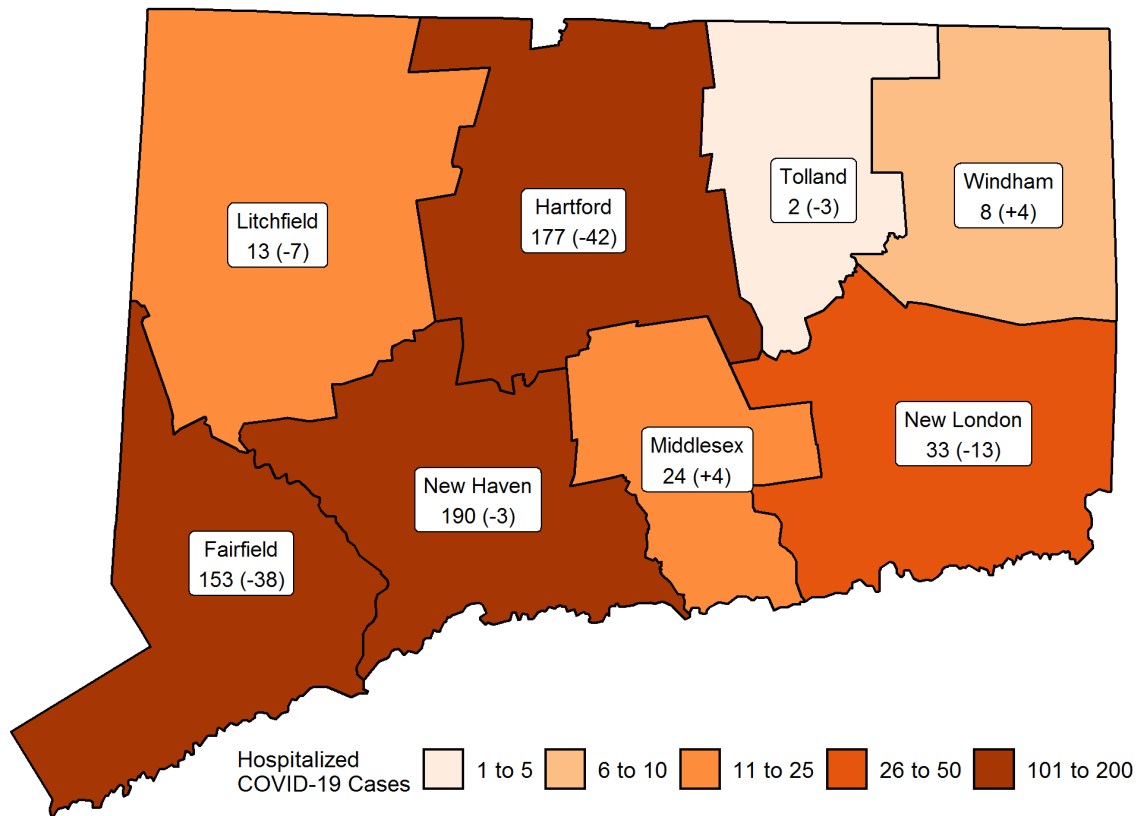
More information about hospitalized cases of COVID-19 in New Haven and Middlesex Counties is available from COVID-NET.

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 April 1, 2020.

COVID positive hospital census since April 01, 2020
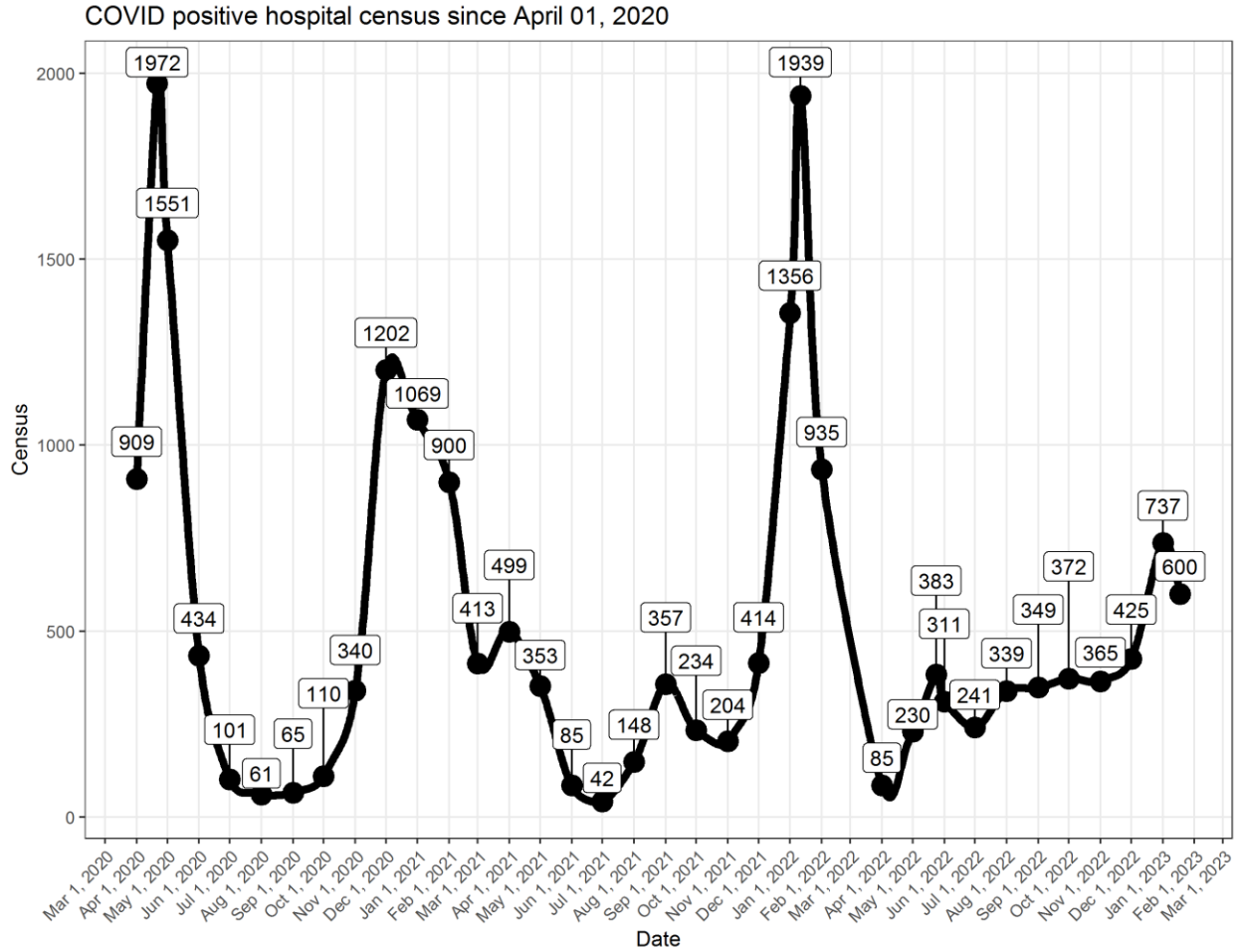
Laboratory Surveillance

Molecular Tests

To date, DPH has received reports on a total of 16,135,554 molecular COVID-19 laboratory tests; of these 16,001,385 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 January 18, 2023

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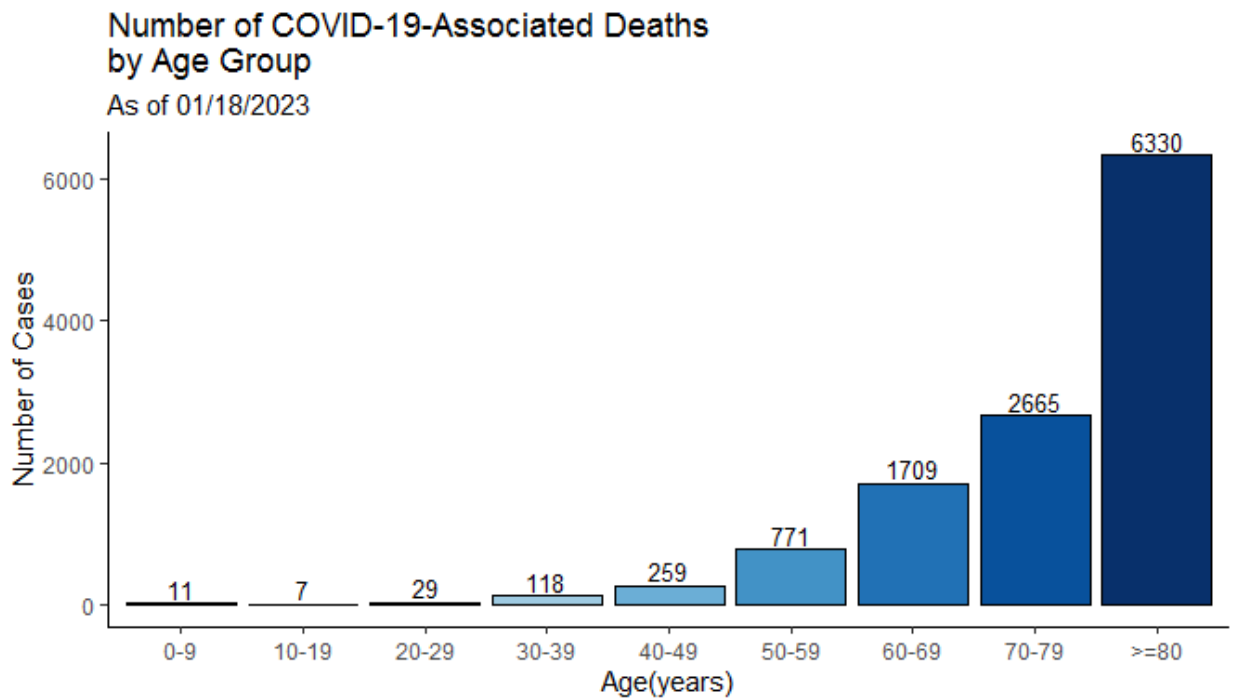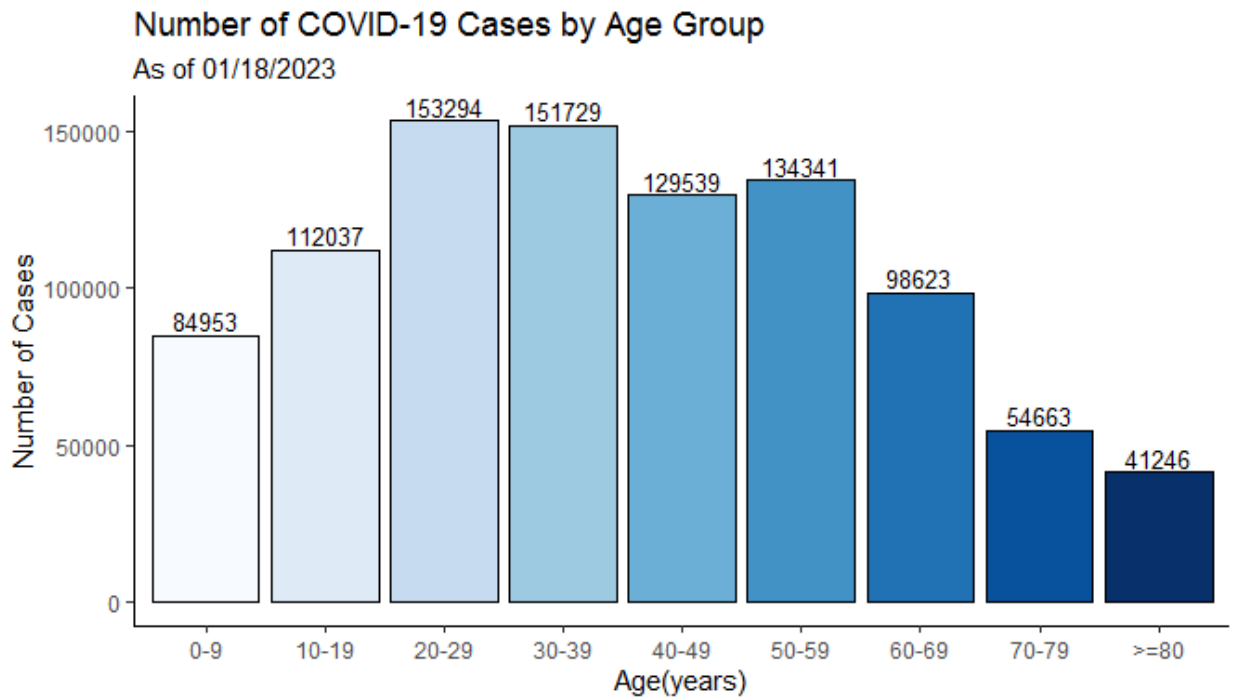
Negative   Positive
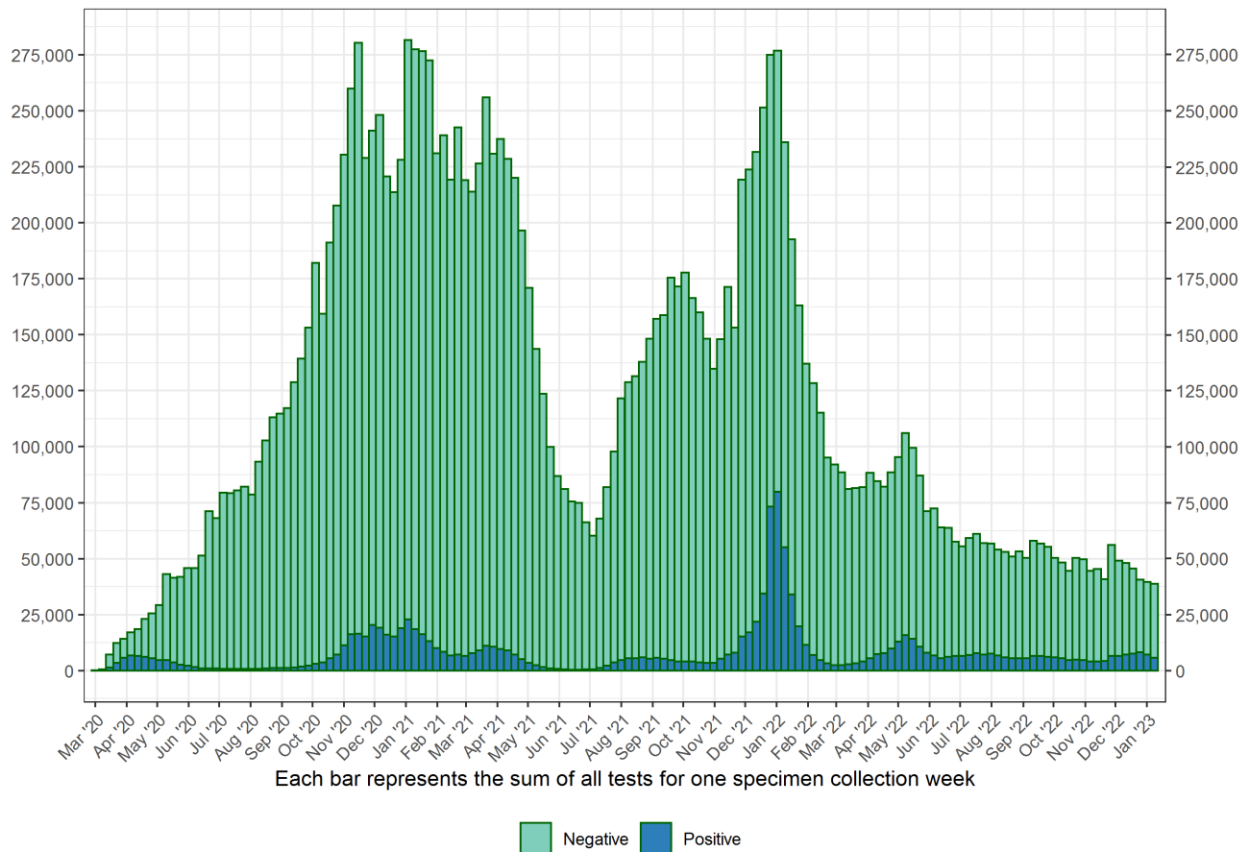
Testing of recently collected specimens is ongoing and does not reflect a decrease in testing. Chart only includes test results received by electronic laboratory reporting.
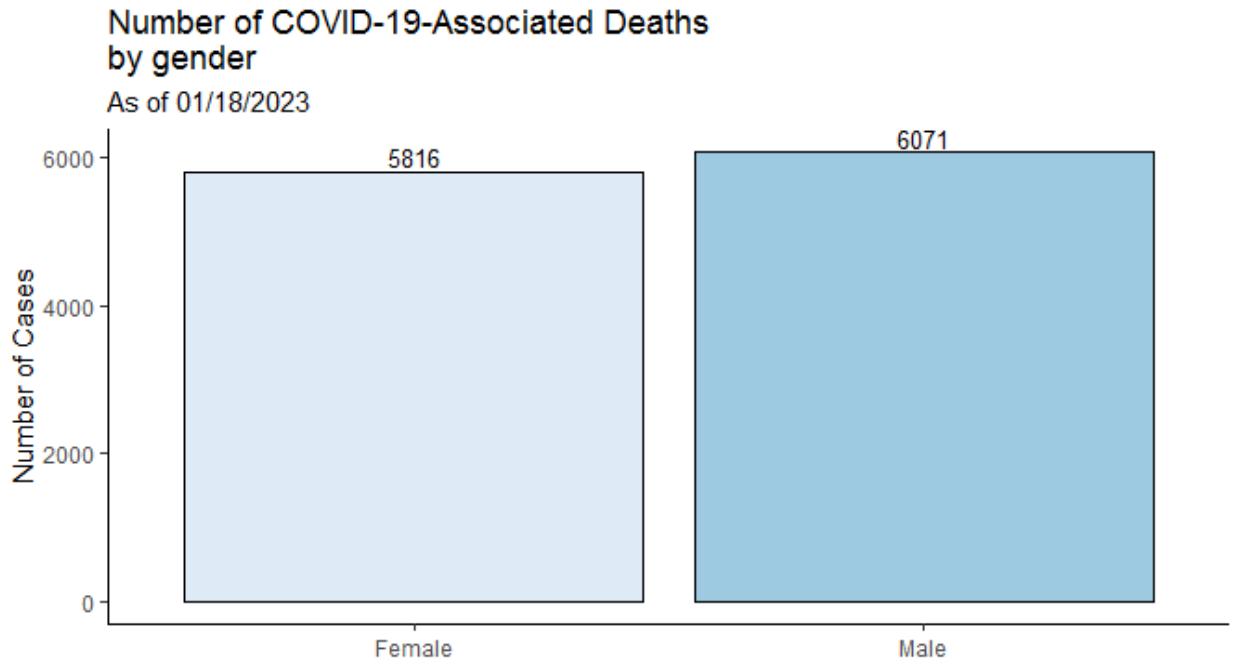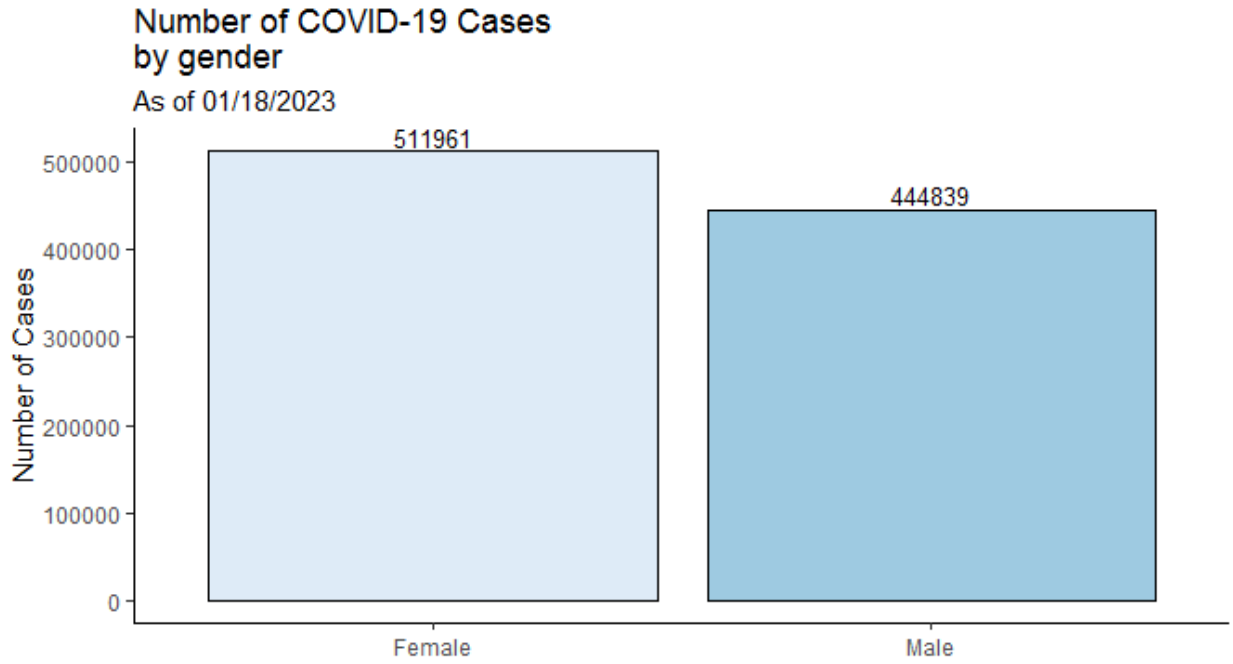
ELR = Electronic Laboratory Reporting

All data are preliminary and subject to change.

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 01/18/2023

Age(years)	Number of Cases
0-9	84953
10-19	112037
20-29	153294
30-39	151729
40-49	129539
50-59	134341
60-69	98623
70-79	54663
>=80	41246

Number of COVID-19-Associated Deaths by Age Group
As of 01/18/2023

Age(years)	Number of Cases
0-9	11
10-19	7
20-29	29
30-39	118
40-49	259
50-59	771
60-69	1709
70-79	2665
>=80	6330

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 01/18/2023

Number of COVID-19-Associated Deaths by gender
As of 01/18/2023

All data are preliminary and subject to change.

Cumulative Number of COVID-19 Cases by Town

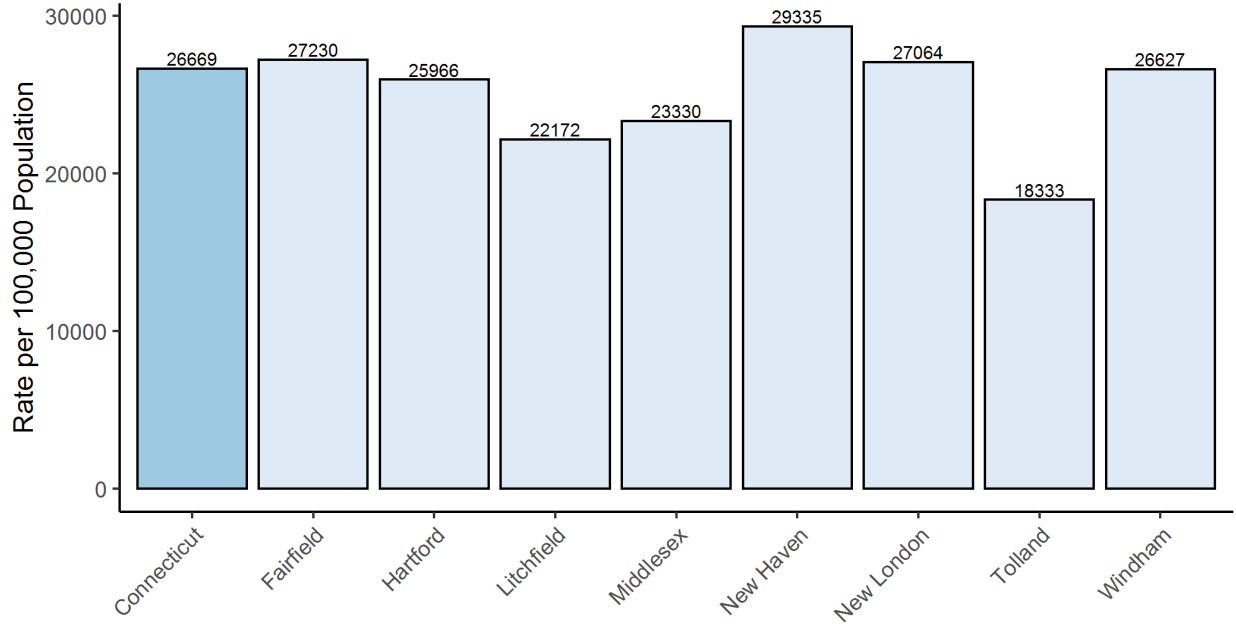*Map does not include 3196 cases pending address validation*
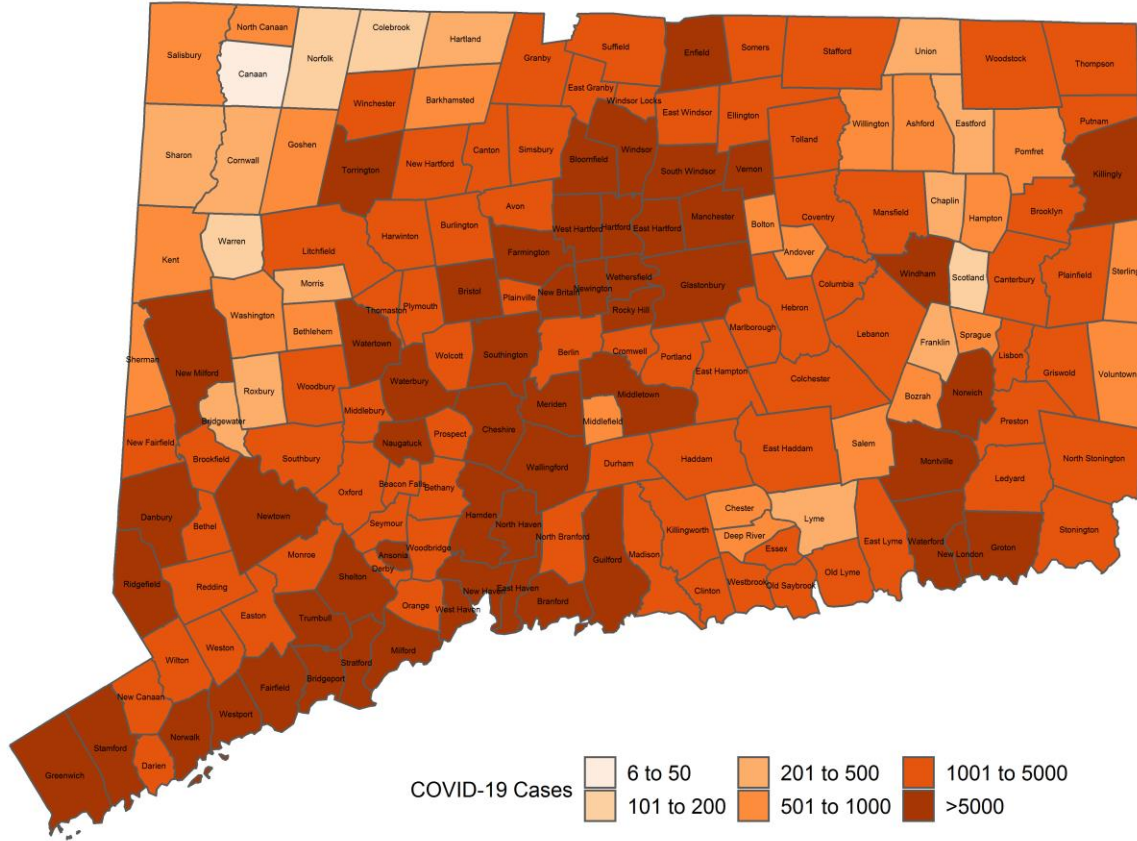
All data are preliminary and subject to change.

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

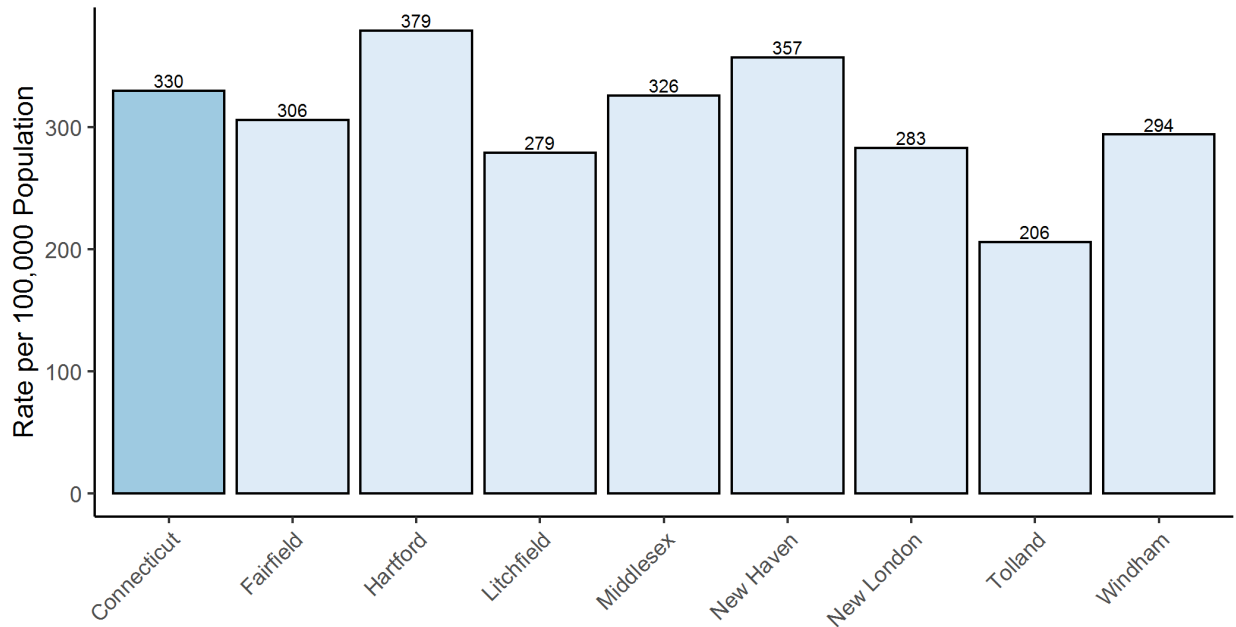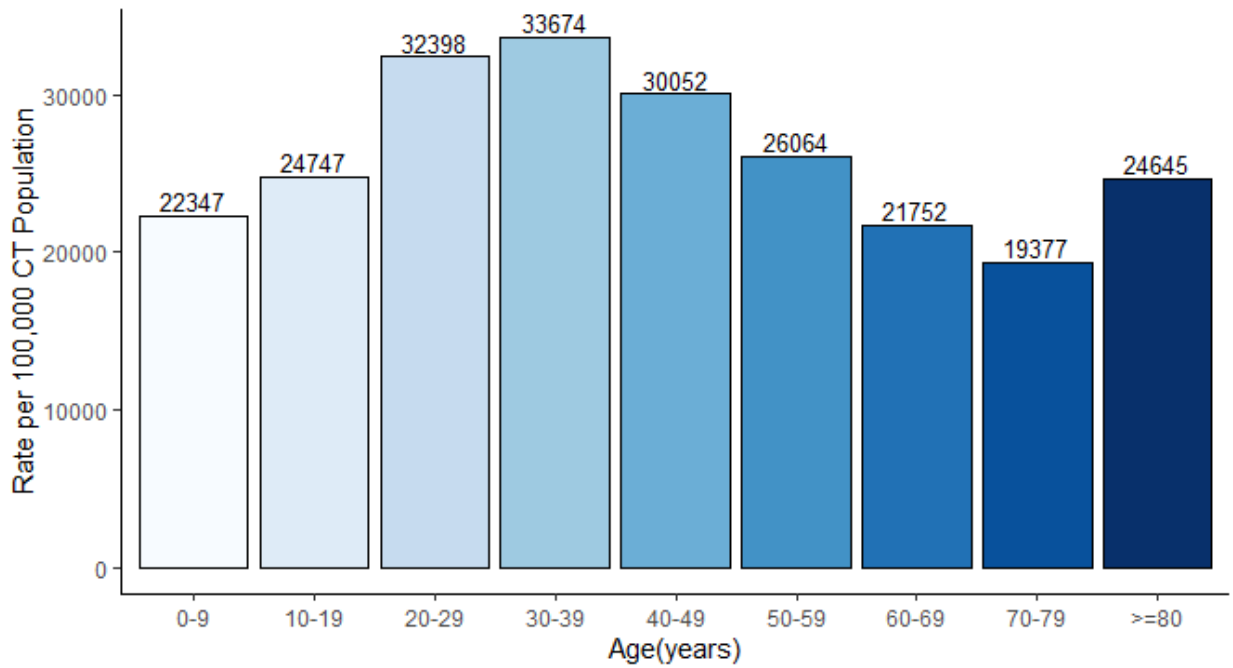## Rate of COVID-19 Cases Statewide and by County

As of 01/18/2023

Rate of COVID-19-Associated Deaths Statewide and by County
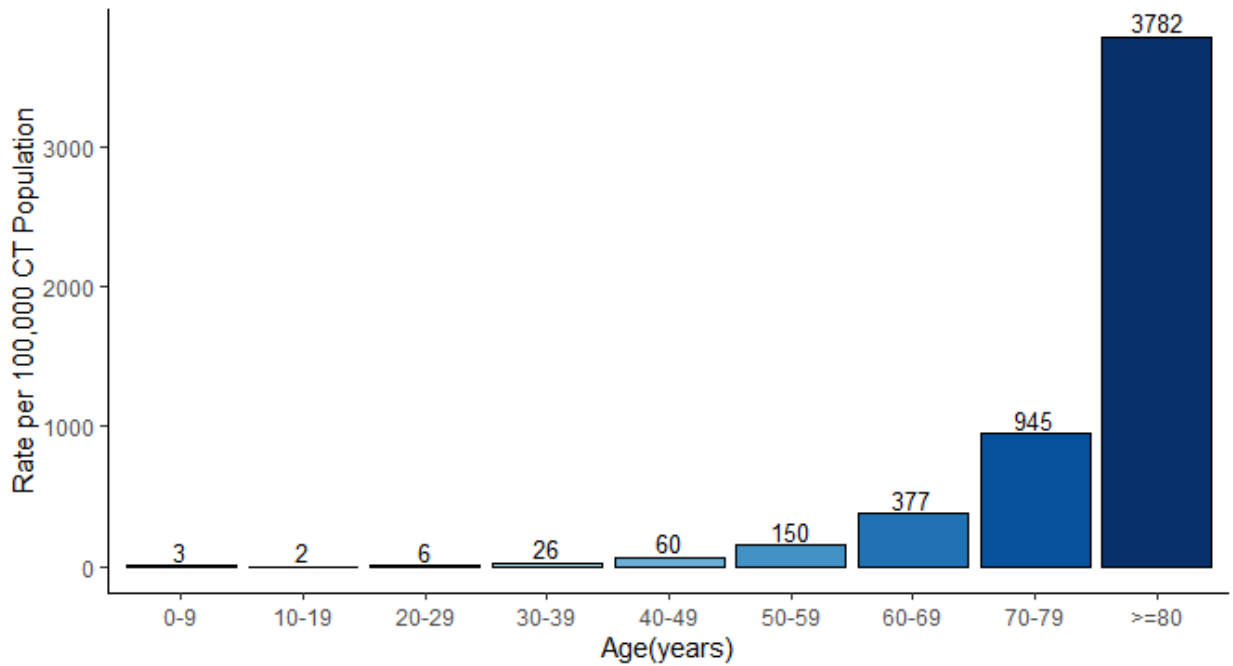
As of 01/18/2023

All data are preliminary and subject to change.

Rate of COVID-19 Cases
by Age Group
As of 01/18/2023

Rate per 100,000 CT Population

Age(years)	Rate
0-9	22347
10-19	24747
20-29	32398
30-39	33674
40-49	30052
50-59	26064
60-69	21752
70-79	19377
>=80	24645

Rate of COVID-19-Associated Deaths
by Age Group
As of 01/18/2023

Rate per 100,000 CT Population

Age(years)	Rate
0-9	3
10-19	2
20-29	6
30-39	26
40-49	60
50-59	150
60-69	377
70-79	945
>=80	3782

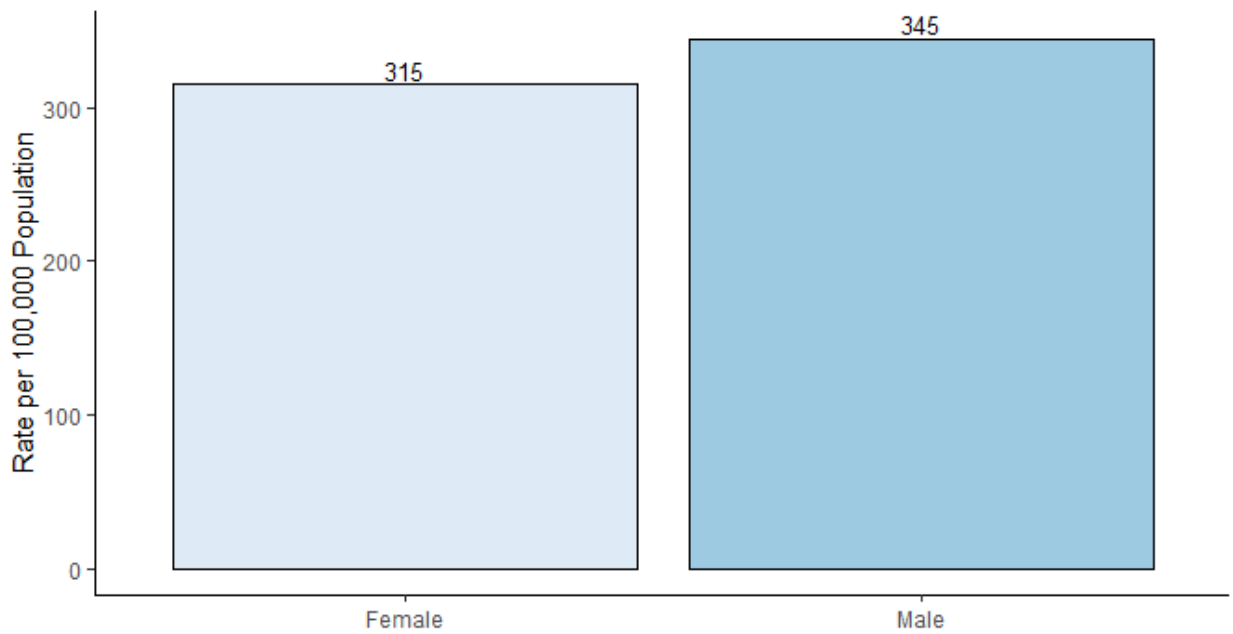All data are preliminary and subject to change.

Rate of COVID-19 Cases
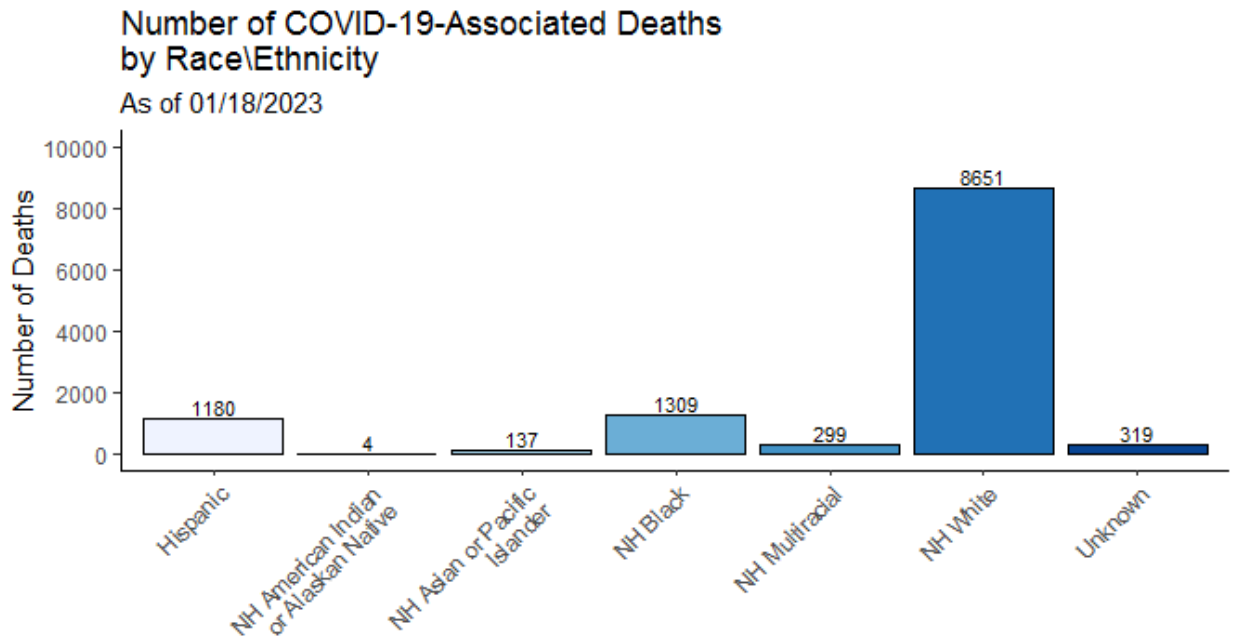## by Gender

As of 01/18/2023

Rate of COVID-19-Associated Deaths
by Gender

As of 01/18/2023

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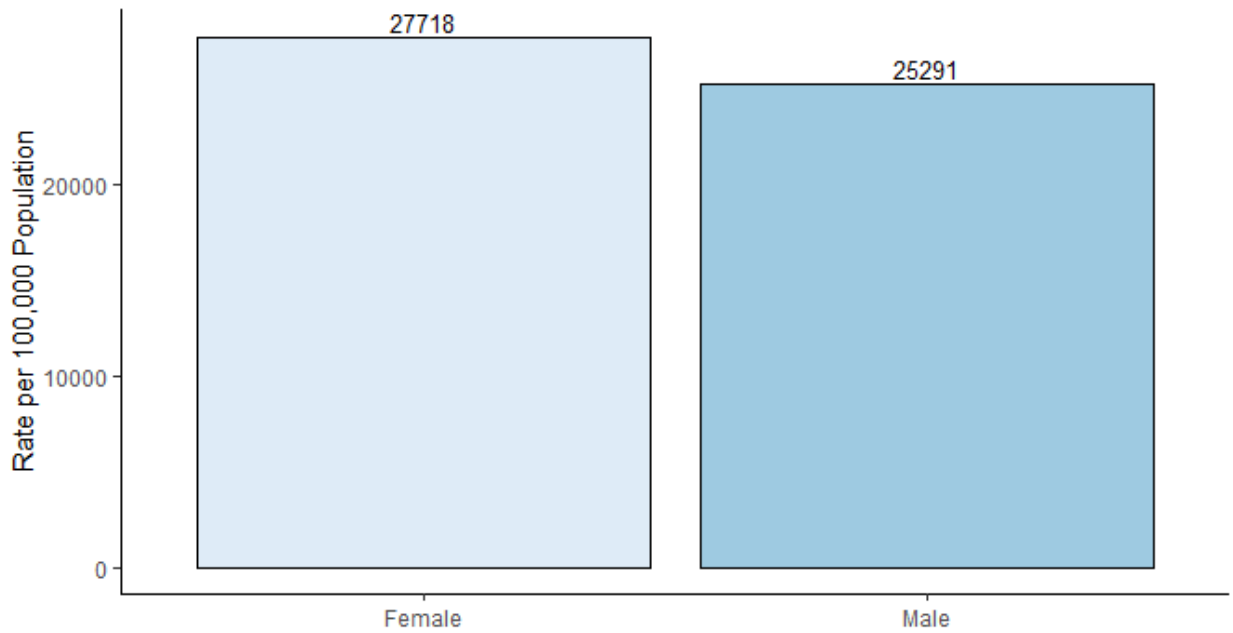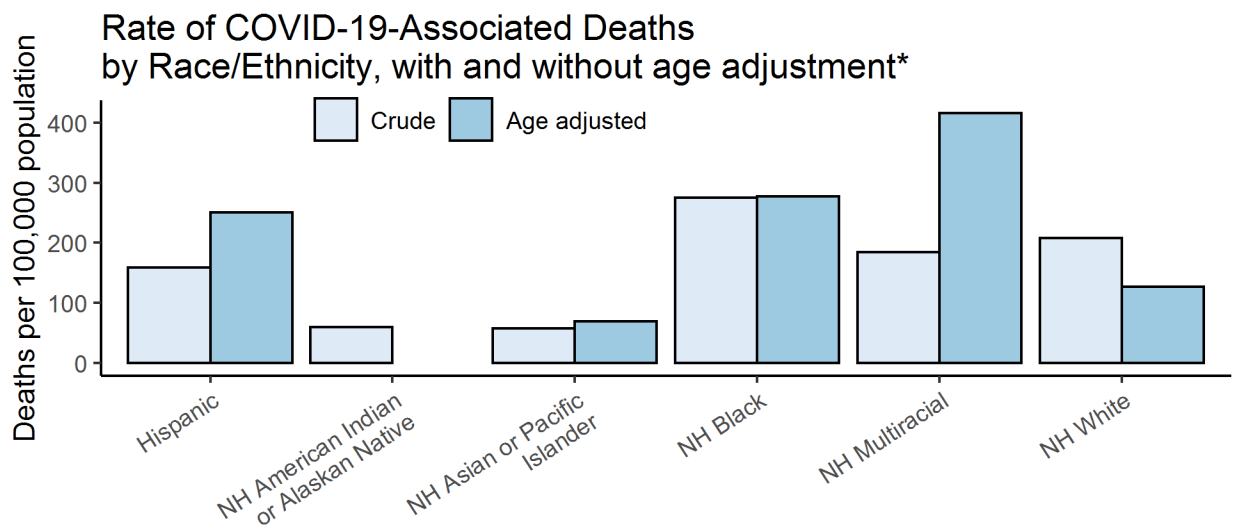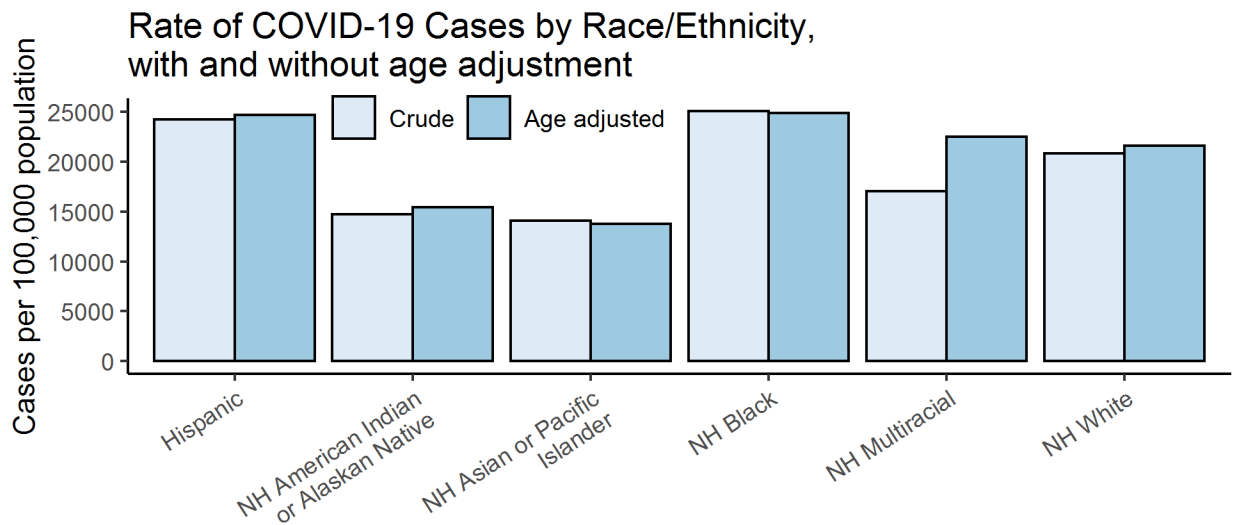
APPENDIX B. The following graphs show the number of cases and deaths by race and ethnicity. *Categories are mutually exclusive. The category "multiracial" includes people who answered 'yes' to more than one race category. NH=Non-Hispanic*

Number of COVID-19 Cases by Race\Ethnicity
As of 01/18/2023

Race/Ethnicity	Number of Cases
Hispanic	151156
NH American Indian or Alaskan Native	1001
NH Asian or Pacific Islander	24573
NH Black	93661
NH Multiracial	16622
NH White	488690
Unknown	185973

Number of COVID-19-Associated Deaths by Race\Ethnicity
As of 01/18/2023

Race/Ethnicity	Number of Deaths
Hispanic	1180
NH American Indian or Alaskan Native	4
NH Asian or Pacific Islander	137
NH Black	1309
NH Multiracial	299
NH White	8651
Unknown	319

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.

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*

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.