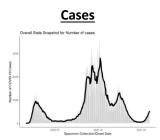
COVID-19 Update August 12, 2021

As of August 11, 2021, the total of laboratory-confirmed and probable COVID-19 cases reported among Connecticut residents is 361294, including 329441 laboratory-confirmed and 31853 probable cases. Two hundred forty-seven patients are currently hospitalized with laboratory-confirmed COVID-19. There have been 8307 COVID-19-associated deaths.

| Overall Summary | Total* | Change Since Yesterday |
|---|--------------|------------------------|
| COVID-19 Cases (confirmed and probable) | 361294 | +742 |
| COVID-19 Tests Reported (molecular and antigen) | 10141490 | +21101 |
| Daily Test Positivity* | | 3.52% |
| Patients Currently Hospitalized with COVID-19** | 247 | +17 |
| | <u>Total</u> | Change since 8/5/21 |
| COVID-19-Associated Deaths | 8307 | +11 |

^{*}Includes confirmed plus probable cases

^{**}Includes 190 unvaccinated or unknown vaccination status cases (77% of total census)



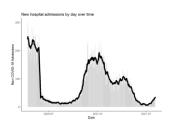
<u>Total Cases: 361,294</u>

Hospital Census

COVID-19 Hospital Census by day over time

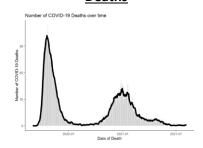
Hospital Census: 8/11/2021: 247

Admissions



Total Hospitalizations: 37,310

Deaths



Total Deaths: 8307

COVID-19 Cases and Associated Deaths by County of Residence as of 08/11/21.

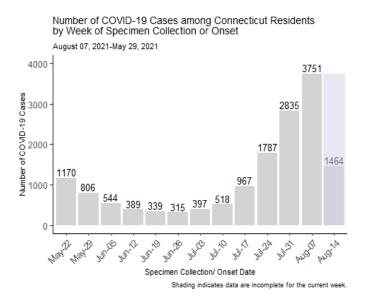
| Country | COVID-19 Cases | | COVID-19-Associated Deaths | |
|----------------------------|----------------|----------|----------------------------|----------|
| County - | Confirmed | Probable | Confirmed | Probable |
| Fairfield County | 93,907 | 9,419 | 1,776 | 429 |
| Hartford County | 81,660 | 6,259 | 2,008 | 439 |
| Litchfield County | 13,337 | 1,795 | 259 | 39 |
| Middlesex County | 12,121 | 1,258 | 288 | 87 |
| New Haven County | 85,507 | 10,045 | 1,850 | 295 |
| New London County | 22,050 | 1,443 | 351 | 101 |
| Tolland County | 9,063 | 949 | 149 | 39 |
| Windham County | 10,757 | 510 | 154 | 42 |
| Pending address validation | 1,039 | 175 | 1 | 0 |
| Total | 329441 | 31853 | 6836 | 1471 |

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

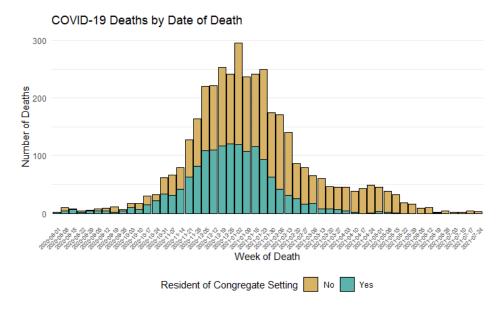
Day-to-day changes reflect newly reported cases, deaths, and tests that occurred over the last several days to week. All data in this report are preliminary; data for previous dates will be updated as new reports are received and data errors are corrected. Hospitalization data were collected by the Connecticut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

COVID-19 Cases and Deaths Over Time

The chart below shows the number of new COVID-19 cases reported to CT DPH by week of specimen collection or onset of illness. Case data now includes probable cases based on positive antigen test results. During the past two weeks (July 25-August 07), there were 6586 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.

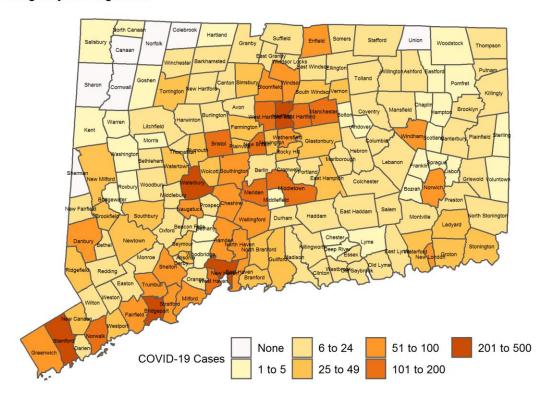


Community Transmission of COVID-19

Among 6586 new COVID-19 cases with specimen collection or onset date during July 25-August 07, there were 6555 cases among people living in community settings, as shown in the map below. This corresponds to an average of 13.13 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.

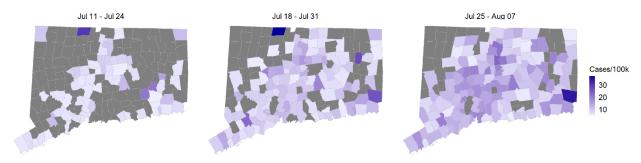
During this two-week period, there were more than 100 new COVID-19 cases in 14 towns.

Number of COVID-19 Cases among People Living in Community Settings by Town with Specimen Collection or Onset Date During July 25-August 07

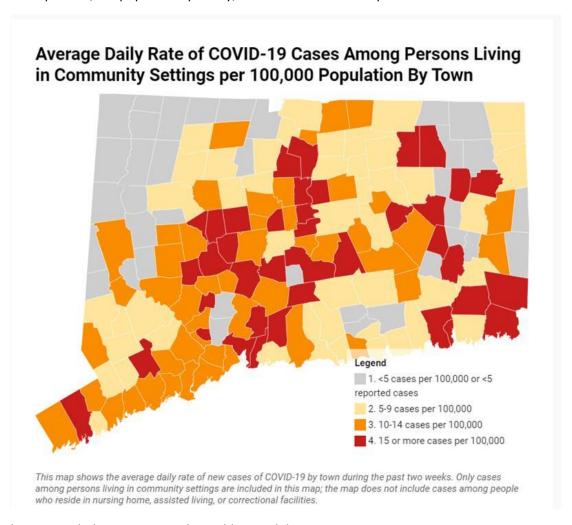


Map does not include 33 cases pending address validation

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 July 25-August 07, 39 towns had an average rate of 15 or more cases per 100,000 population per day, shown in red in the map below.



Map does not include 33 cases pending address validation

Epidemiology of COVID-19 by Vaccine Status

These data are currently being updated and will be reported next week.

SARS-CoV-2 Variant Surveillance

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

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

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

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

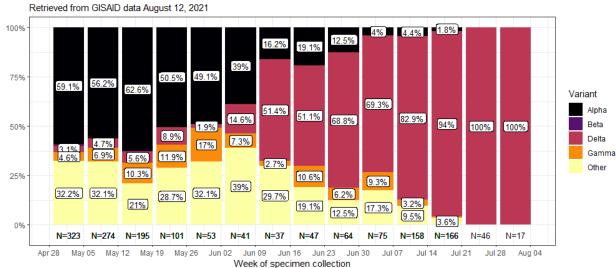
Data are from GISAID as of 08/12/2021 and represent sequences from specimens with dates of collection from 3/2/2020–8/3/2021. **The total number of SARS-CoV-2 sequences in GISAID for Connecticut residents are 8,636.**

| | Number | Percentage |
|-----------------------------|--------|------------|
| Variants of Concern | | |
| B.1.1.7 (Alpha) | 3,374 | 39.1% |
| B.1.351/B.1.351.2/B.1.351.3 | 36 | 0.4% |
| (Beta) | | |
| B.1.617.2/AY.1/AY.2/AY.3 | 540 | 6.3% |
| (Delta) | | |
| P.1/P.1.1/P.1.2 (Gamma) | 200 | 2.3% |
| | | |
| Variants of Interest | | |
| B.1.427 | 68 | 0.8% |
| B.1.429 | 141 | 1.6% |
| B.1.525 (Eta) | 21 | 0.2% |
| B.1.526 (Iota) | 1,126 | 13.0% |
| B.1.617.1 (Kappa) | 2 | 0.02% |
| B.1.617.3 | 0 | 0% |
| | | |

SARS-CoV-2 Variant Surveillance, continued.

The plot below, based on data extracted from GISAID on 8/12/2021, shows the change in proportion of circulating variants of concern by week. Data include sequences from specimens with dates of collection from 1/1/2021-8/3/2021.

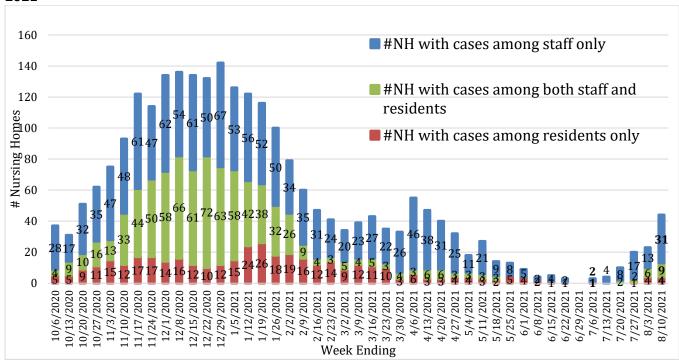
Proportion of Circulating Variants of Concern, CT



N = total number of viruses sequenced

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–August 10, 2021^{1,2}



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

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 August 1, 2021 | | |
|--|---|---|--|
| | Resident Vaccination Rates N= 205 homes | Staff Vaccination Rates N= 207 homes | |
| Average Vaccination Rate | 90% | 72% | |
| Median Vaccination Rate | 91% | 73% | |
| Range of Vaccination Rates | 30-100% | 34-100% | |
| % of the reporting nursing homes with vaccination rate ≥ 75% | 95% | 44% | |

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

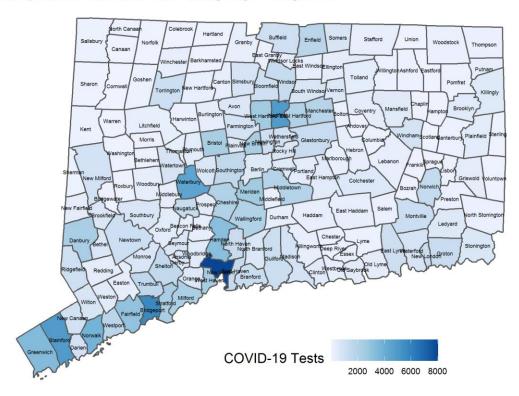
² Similar to DPH, CMS makes COVID-19 nursing home data, including vaccination rates, publicly available. Please see <u>CMS'</u> COVID-19 Nursing Home Data website.

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

COVID-19 Molecular and Antigen Tests during July 25-August 07

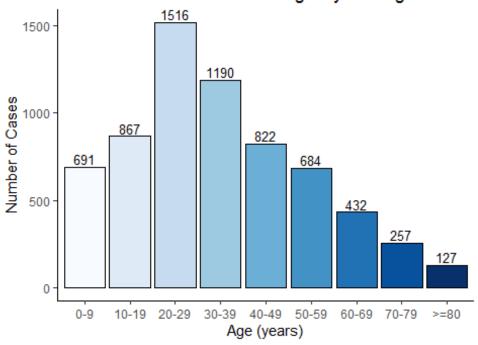
Among 151892 molecular and antigen tests for COVID-19 with specimen collection date during July 25-August 07, 141834 (93%) tests were conducted among people who did not reside in congregate settings (including nursing homes, assisted living, and correctional facilities). Of these 141834 tests, 4752 (3%) were positive. The map below shows the number of molecular and antigen COVID-19 tests by town with specimen collection date during July 25-August 07 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 July 25-August 07



Map does not include tests pending address validation

Number of New COVID-19 Cases by Age Group with Collection or Onset during July 25-August 07



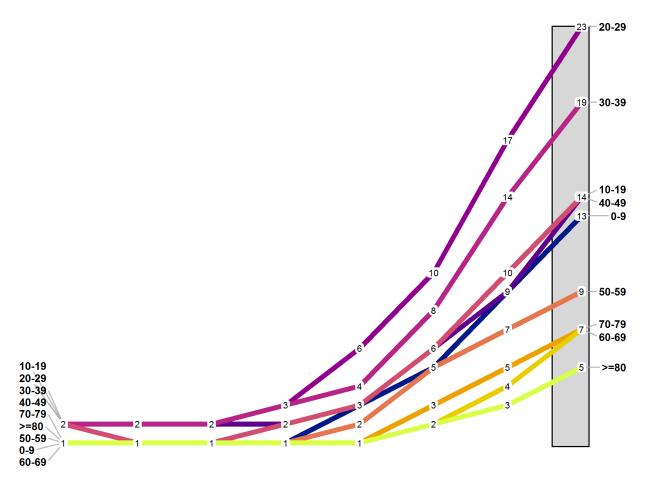
Average Daily Incidence by Age Group

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 08/11/2021

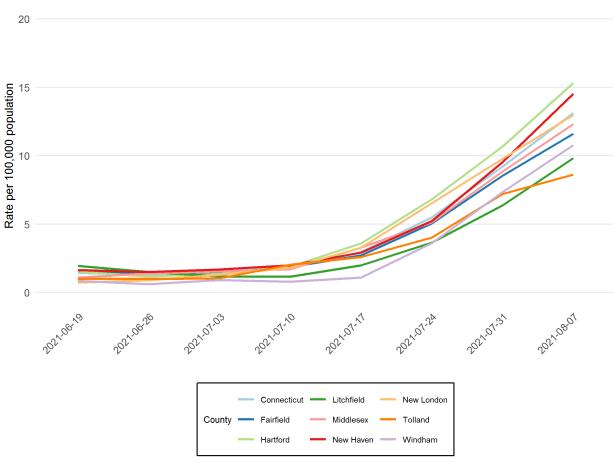
2021-06-19 2021-06-26 2021-07-03 2021-07-10 2021-07-17 2021-07-24 2021-07-31 2021-08-07



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.

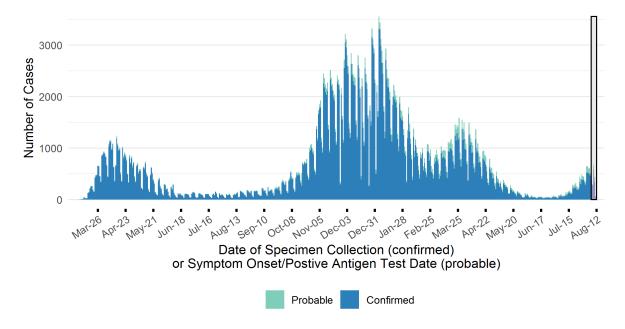




Cumulative Number of COVID-19 Cases and COVID-19-Associated Deaths by Date

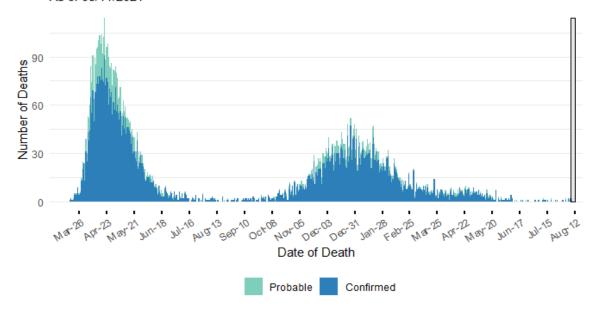
Test results may be reported several days after the result. Data are incomplete for most recent dates shaded in grey. Data from previous dates are routinely updated.

Number of Confirmed and Probable COVID-19 Cases by Date As of 08/11/2021



Number of COVID-19-Associated Deaths by Date of Death

As of 08/11/2021

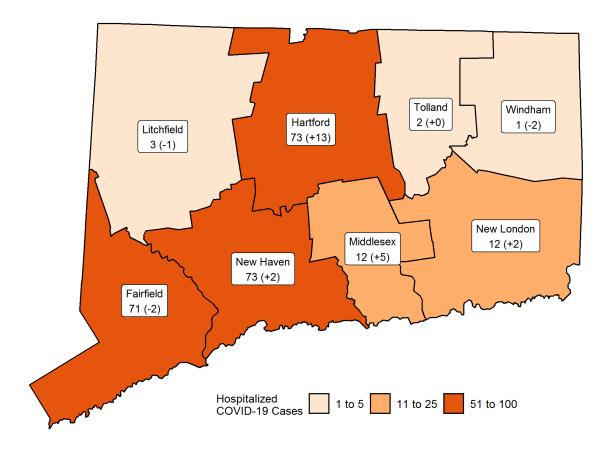


Hospitalization Surveillance

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

Patients Currently Hospitalized by Connecticut County

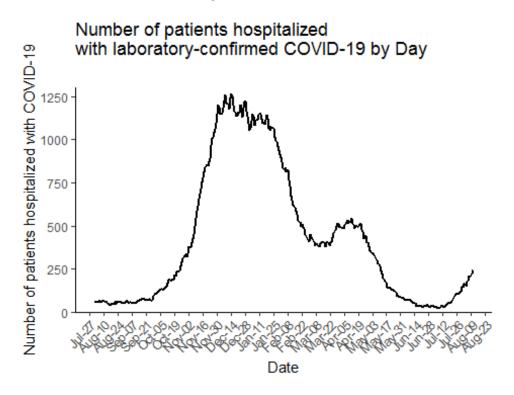
Distribution by location of hospital not patient residence. Data from the Connecticut Hospital Association.



More information about hospitalized cases of COVID-19 in New Haven and Middlesex Counties is available from $\underline{\text{COVID-NET}}$.

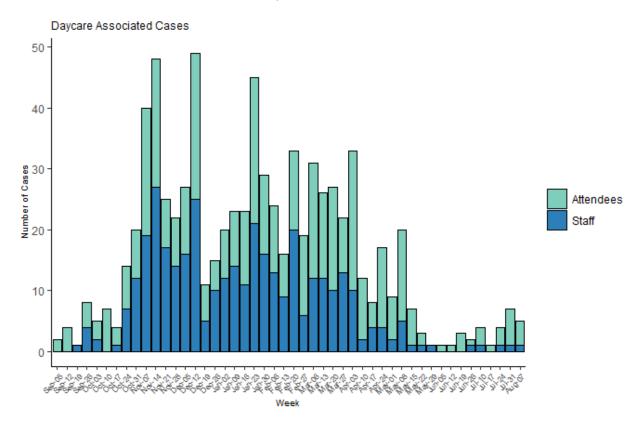
COVID-19 Hospital Census in Connecticut

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



Daycare Surveillance

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



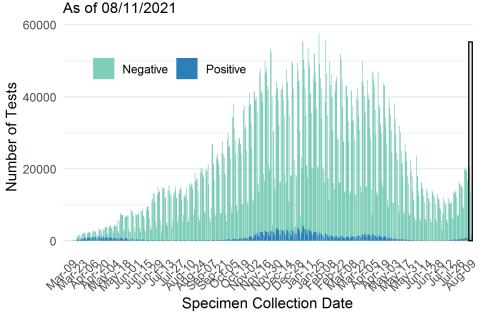
Laboratory Surveillance

Molecular Tests

To date, DPH has received reports on a total of 9,324,592 molecular COVID-19 laboratory tests; of these 9,119,186 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 by Specimen Collection Date



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.

Shading indicates data are incomplete for the current week.

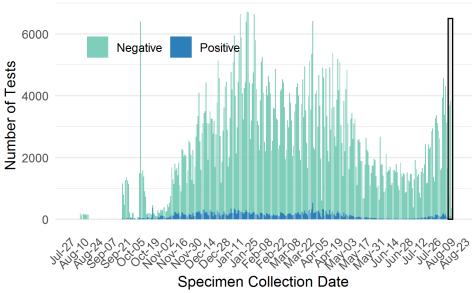
ELR = Electronic Laboratory Reporting

To date, DPH has received reports on a total of 816c,898 COVID-19 antigen laboratory tests. The chart below shows the number of antigen tests reported to DPH by specimen collection date and test result.

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

Number of Antigen Tests for COVID-19 Reported by Specimen Collection Date

As of 08/11/2021



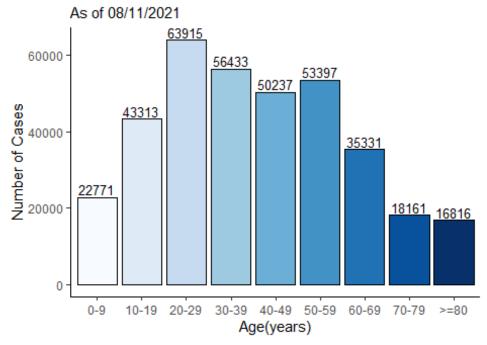
Shading indicates data are incomplete for the current week.

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

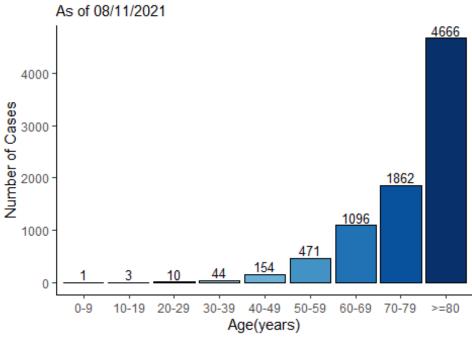
Characteristics of COVID-19 Cases and Associated Deaths

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

Number of COVID-19 Cases by Age Group

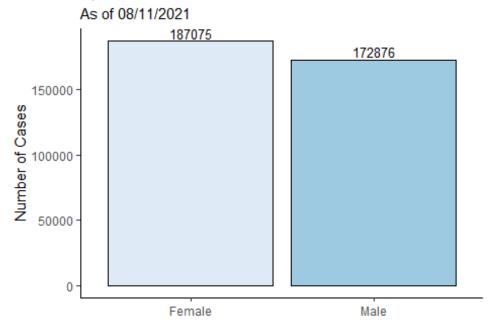


Number of COVID-19-Associated Deaths by Age Group

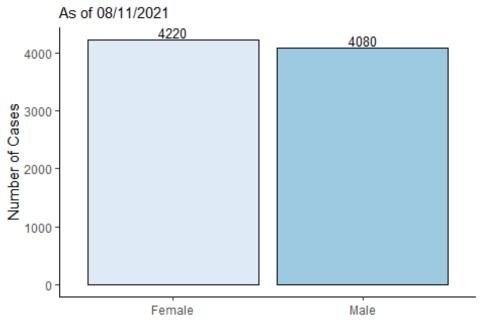


Counts may not add up to total case count because demographic data may be missing.

Number of COVID-19 Cases by Gender

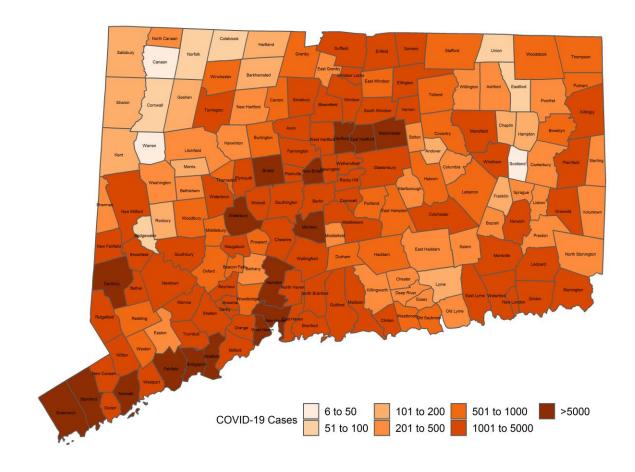


Number of COVID-19-Associated Deaths by Gender



Cumulative Number of COVID-19 Cases by Town

Map does not include 1214 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: <u>DPH Population Statistics</u>

Rate of COVID-19 Cases Statewide and by County

As of 08/11/2021 11179 Rate per 100,000 Population 10134 9859 8858 9000 8391 8236 6643 6000 3000 Faiffield Hartford Litchfield Mentordon Tolland Windham

Rate of COVID-19-Associated Deaths Statewide and by County

As of 08/11/2021

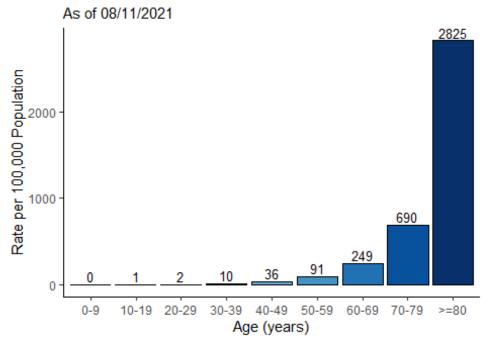
Very large of 08/11/2021

Light and the state of the

Rate of COVID-19 Cases by Age Group

As of 08/11/2021 13734 12755 Rate per 100,000 CT Population 11608 10281 10183 10000 9559 8019 6726 6049 5000 0 10-19 20-29 30-39 40-49 50-59 60-69 70-79 0-9 Age (years)

Rate of COVID-19-Associated Deaths by Age Group

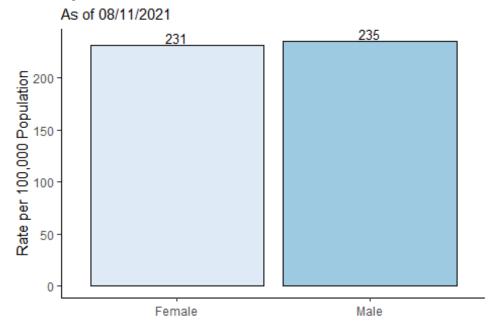


Rate of COVID-19 Cases by Gender

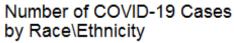
As of 08/11/2021

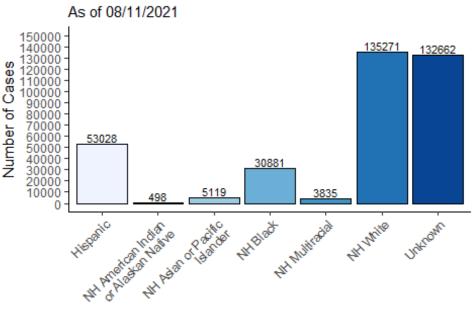
10000 - 100000 - 100000 - 10000 - 10000 - 10000 - 10000 - 10000 - 10000 - 10000 - 10

Rate of COVID-19-Associated Deaths by Gender

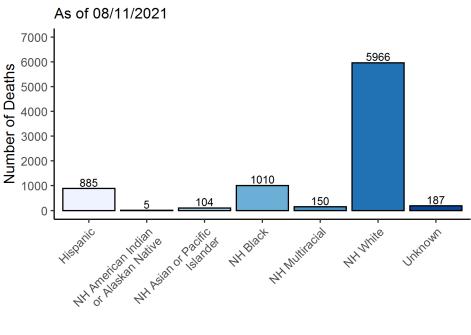


APPENDIX C. The following graphs show the number of cases and deaths by race and ethnicity. Categories are mutually exclusive. The category "multiracial" includes people who answered 'yes' to more than one race category. NH=Non-Hispanic



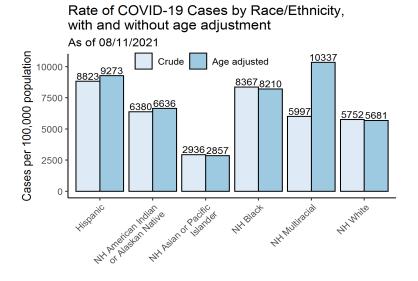


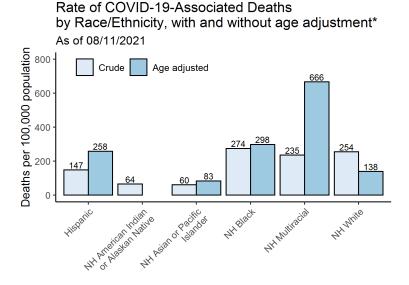
Number of COVID-19-Associated Deaths by Race\Ethnicity



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