

Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 40

October 1, 2023, to October 7, 2023
Report produced on October 9, 2023

Summary

The Texas Department of State Health Services (DSHS) is working closely with the Centers for Disease Control and Prevention (CDC) in monitoring Coronavirus Disease 2019 (COVID-19). Multiple sources of data are being used to monitor the situation in Texas.

Between March 6, 2020, and the current report week, **8,844,768 confirmed and probable cases** of COVID-19 were reported in Texas. So far for 2023, **572,099 confirmed and probable cases** of COVID-19 were reported in Texas.

Table 1: Summary of COVID-19 Cases, COVID-19-Associated Fatalities, and Hospitalizations for the Current Reporting Week*

Texas Surveillance Component	Change from Previous Week	Current Week	Previous Week
New COVID-19 Cases (Probable and Confirmed)**	▼ 3,745	9,891	13,636
New COVID-19 Confirmed Cases**	▼ 1,524	4,455	5,979
New COVID-19 Probable Cases**	▼ 2,221	5,436	7,657
Total COVID-19 Cases (Probable and Confirmed)**	▲ 9,891	8,844,768	8,834,877
Total COVID-19 Confirmed Cases**	▲ 4,455	6,831,110	6,826,655
Total COVID-19 Probable Cases**	▲ 5,436	2,013,658	2,008,222
Newly Reported COVID-19-Associated Fatalities	▼ 9	62	71
Hospitalized COVID-19 Cases (Day of Report)	▼ 144	1,070	1,214
Hospitalized COVID-19 Cases (Rolling 7-Day Average)	▼ 129	1,174	1,303

▲ = increase and ▼ = decrease

* Numbers and percentages might vary from the previous COVID-19 report due to additional data becoming available for non-finalized surveillance years. COVID-19 case data for 2020-2021 are finalized. All other data are provisional and subject to change.

** Cases for the current week include both cases reported in the last week and may include newly reported cases from prior weeks.

COVID-19 cases reported decreased in Texas by **27.5%** in **Week 40** compared to the previous MMWR week.

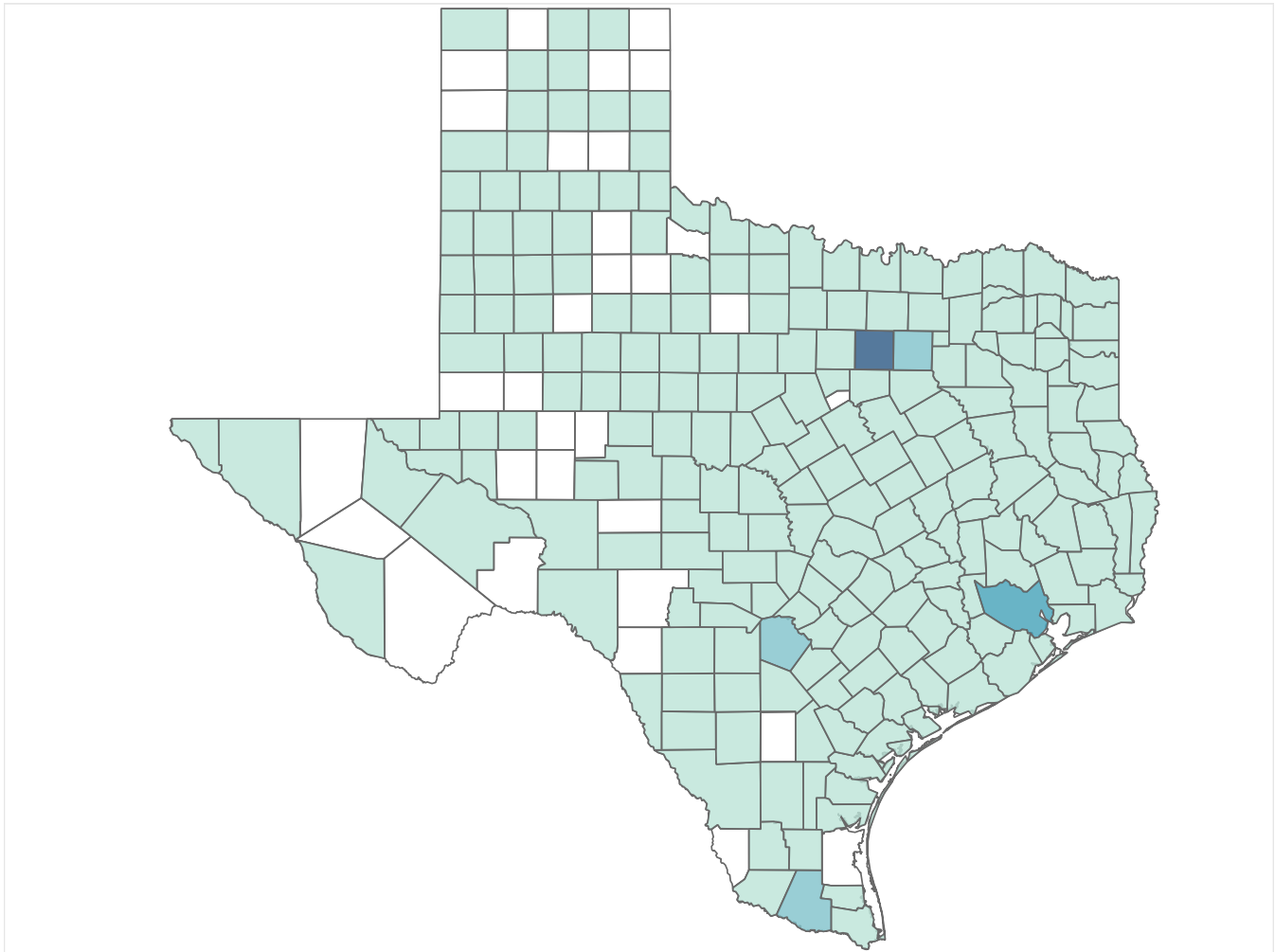
COVID-19-associated fatalities decreased by **12.7%** in **Week 37** when compared to the previous week. COVID-19-associated fatalities are shown by week during which the death occurred, up to three weeks prior to current report week because death certificates are required to be filed within 10 days of date of death.


Note: Cumulative counts will consistently reflect all cases within the National Electronic Disease Surveillance System as of report date. Counts may include cases which were provided after initial reporting, such as backlogged cases; and reflect regular case quality assurance updates.

Weekly COVID-19 Case Map

A map of weekly confirmed and probable COVID-19 cases by county can be viewed below.

Figure 1: Texas Map Displaying COVID-19 Case Counts by County for the Current Reporting Week.



Confirmed and Probable COVID-19 Cases
1  2,211
Note: Texas counties that are not shaded in teal within the map have a count of zero (0).

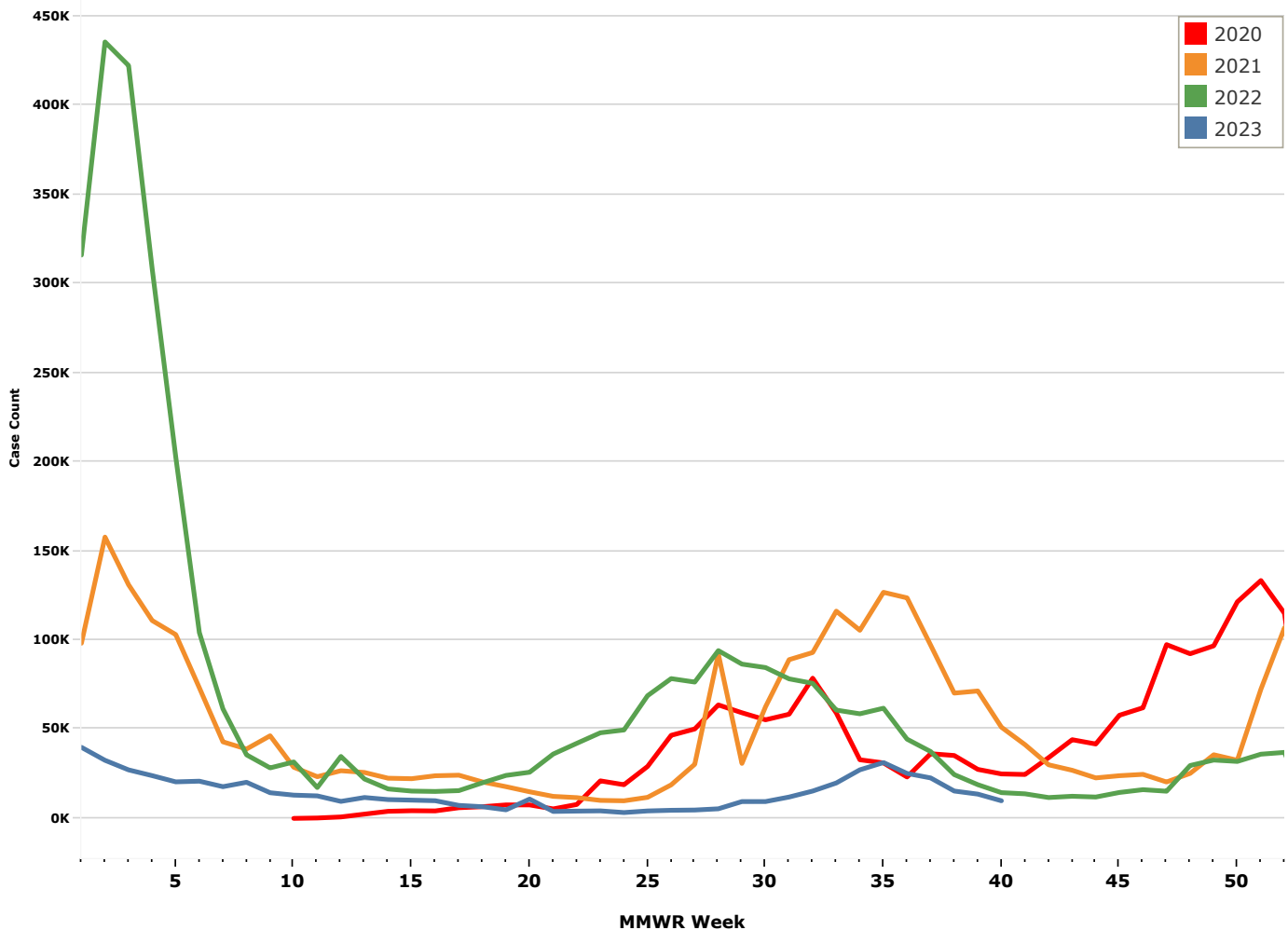
COVID-19 Case Map Notes

COVID-19 cases shown are for the MMWR week of the report. This count includes cases reported in the past week, as well as newly reported cases from prior weeks. All counts are provisional and subject to change.

The populations used are population projections from the Texas Demographic Center*. There may be COVID-19 cases with incomplete address reported to Texas DSHS which are not included in the COVID-19 Case Map by County, Figure 1.

*Refer to Appendix 4 for the link to view the population projections from Texas Demographic Center.

Figure 2: Number of Newly Reported Cases of COVID-19 by MMWR Week, Texas, 2020 to Current Report Week (N = 8,844,768)



Note: The COVID-19 pandemic reported the first locally acquired SARS-CoV-2 case in Texas during the MMWR Week 10 in 2020. Prior to MMWR Week 10 in 2020 there were no locally acquired cases of SARS-CoV-2 infection reported among Texas residents. Case counts are reported based on all MMWR weeks as they are provided.

Laboratory Results

Providers throughout Texas submit specimens for SARS CoV-2 testing to Texas laboratories which are reported to the National Electronic Disease Surveillance System (NEDSS).

Statewide, COVID-19 laboratory reporting decreased in **Week 40**.

Table 2: Summary of All COVID-19 PCR and Antigen Tests Reported for the Current Week Versus the Previous Week

Tests Reported	Change from Previous Week	Current Week	Previous Week
PCR Tests*	▼ 1,420	5,633	7,053
per 100,000 population	-	18.07	22.63
Antigen Tests*	▼ 2,369	4,996	7,365
per 100,000 population	-	16.03	23.63

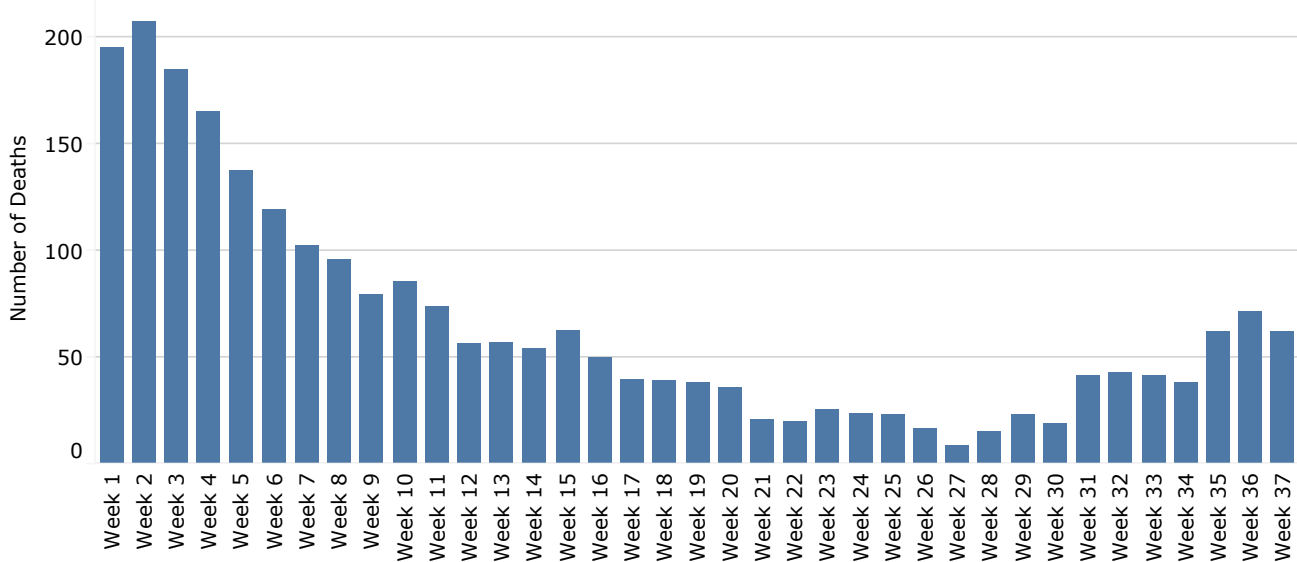
* As of June 15th, 2023, only positive tests must be reported to DSHS. Negative tests are no longer required to be reported, resulting in a decrease in the number of tests reported.

COVID-19 Mortality

COVID-19 mortality data in this report are obtained from death certificates of Texas residents whose underlying or contributing cause(s) of death is reported as COVID-19. Reporting of deaths occurs up to three weeks following date of death. Data is provisional until data close out occurs.

2,432[†] COVID-19-associated deaths were reported up to MMWR Week 37 in 2023 from death certificates of Texas residents. There were **62 COVID-19-associated deaths** reported in MMWR Week 37. In total, **93,092 COVID-19-associated deaths** have been identified from death certificates of Texas residents.

Figure 3: COVID-19 Associated Deaths Identified from Vital Statistics Data by MMWR Week of Death, MMWR Year 2023 Week 37



Note: Counts shown reflect the available death certificate data. This will be updated as death certificate data becomes available. Data exclude the most recent three MMWR weeks due to lag time inherent in death registration and reporting processes. Death certificate data should be considered provisional and subject to change as additional information becomes available.

Table 3: COVID-19-Associated Mortality Rate by Age for the Current Year*

Age Group	Total Number of COVID-19 Deaths (2023) [†]	Total Mortality Rate (Per 100,000) (2023) [†]	MMWR Week Total Number of COVID-19 Deaths	MMWR Week Mortality Rate (per 100,000)
<1 year	<10	<10	<10	<10
1-9 years	<10	<10	<10	<10
10-19 years	<10	<10	<10	<10
20-29 years	<10	<10	<10	<10
30-39 years	18	0.41	<10	<10
40-49 years	53	1.34	<10	<10
50-59 years	109	3.05	<10	<10
60-64 years	128	7.57	<10	<10
65-69 years	153	10.40	<10	<10
70-74 years	219	19.10	<10	<10
75-79 years	281	33.78	<10	<10
80+ years	1,193	124.13	30	3.12
Unknown	260	N/A	<10	<10
Overall	2,432	7.80	62	0.20

* If the cell number of deaths is less than 10, the number or percent of COVID-19 deaths is suppressed and <10 or n/a is written in the cell. The population estimates from the Texas Demographic Center are used for population rates. Data is provisional and subject to change, errors, and duplicates.

[†] Refer to Texas COVID-19 Surveillance Components and Measures on page 7, Section: Mortality.

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Table 4: COVID-19-Associated Mortality Rate by Race/Ethnicity for the Current Year*

Race/Ethnicity	Total Number of COVID-19 Deaths (2023) [†]	Total Mortality Rate (per 100,000) (2023) [†]	MMWR Report Week Number of COVID-19 Deaths	MMWR Report Week Mortality Rate (per 100,000)
White	1,547	12.53	35	0.28
Black	209	5.53	<10	<10
Hispanic	598	4.76	14	0.11
Asian	55	3.14	<10	<10
Other Race	22	3.03	<10	<10
Unknown Race/Ethnicity	<10	<10	<10	<10
Overall	2,432	7.80	62	0.20

* If the cell number of deaths is less than 10, the number or percent of COVID-19 deaths is suppressed and <10 or n/a is written in the cell. The population estimates from the Texas Demographic Center are used for population rates. Data is provisional and subject to change, errors, and duplicates.

Table 5: COVID-19-Associated Mortality Rate by PHR for the Current Year*

PHR	Total Number of COVID-19 Deaths (2023) [†]	Total Mortality Rate (per 100,000) (2023) [†]	MMWR Report Week Number of COVID-19 Deaths	MMWR Report Week Mortality Rate (per 100,000)
PHR 1	89	9.69	<10	<10
PHR 2/3	712	7.83	16	0.18
PHR 4/5N	185	11.88	<10	<10
PHR 6/5S	529	6.27	11	0.13
PHR 7	246	6.47	<10	<10
PHR 8	283	8.61	10	0.30
PHR 9/10	153	9.06	<10	<10
PHR 11	233	9.83	<10	<10
Overall**	2,432	7.80	62	0.20

* If the cell number of deaths is less than 10, the number or percent of COVID-19 deaths is suppressed and <10 or n/a is written in the cell. The population estimates from the Texas Demographic Center are used for population rates. Data is provisional and subject to change, errors, and duplicates.

** The year total includes two additional cases with unknown PHR.

Table 6: COVID-19-Associated Mortality Rate by Sex for the Current Year*

Sex	Total Number of COVID-19 Deaths (2023) [†]	Total Mortality Rate (per 100,000) (2023) [†]	MMWR Report Week Number of COVID-19 Deaths	MMWR Report Week Mortality Rate (per 100,000)
Female	1,069	6.81	24	0.15
Male	1,363	8.80	38	0.25
Overall	2,432	7.80	62	0.20

* If the cell number of deaths is less than 10, the number or percent of COVID-19 deaths is suppressed and <10 or n/a is written in the cell. The population estimates from the Texas Demographic Center are used for population rates. Data is provisional and subject to change, errors, and duplicates.

[†] Refer to Texas COVID-19 Surveillance Components and Measures on page 7, Section: Mortality.



Texas COVID-19 Surveillance Components and Measures

Provisional Data

Provisional data may not be complete. More data may be coming in to complete the data set, and DSHS and others have not completed quality checks of the information. Provisional data become final once the data set is complete and quality checks are finished. That process often takes several months.

COVID-19 Case Reporting

Investigations are performed on all cases of Coronavirus Disease 2019 (COVID-19). *This condition is reportable by law in Texas.*

Confirmed Case

A person who has tested positive through a molecular test that looks for the virus's genetic material. Texas uses the confirmed case definition adopted by the Council of State and Territorial Epidemiologists (CSTE). See the DSHS Epidemiologic Case Criteria Guide for full case definition.

Probable Case

A person who has tested positive through an antigen test. Texas uses the probable case definition adopted by the Council of State and Territorial Epidemiologists (CSTE).

New Confirmed Cases, New Probable Cases or Newly Reported Fatalities

Cases or fatalities reported for the first time on the DSHS COVID-19 report that day.

Mortality

COVID-19-associated deaths in Texas Residents

Deaths associated with COVID-19 are reported to health departments in Texas. Deaths suspected of being caused by a reportable disease are required to be reported in accordance with Texas Health and Safety Code §81.045. Death certificates must be filed with Texas DSHS within 14 days of the date of death but may be amended at a later date. COVID-19 associated deaths are deaths for which COVID-19 is listed as a cause of death on the death certificate. A medical certifier, usually a doctor, determines the cause(s) of death. DSHS does not include deaths of people who had COVID-19 but died of an unrelated cause. Fatalities are reported by where the person lived as listed on the death certificate. Fatality data may include both confirmed and probable cases. Data is considered provisional and subject to update as additional information becomes available until annual data has been finalized.

†While reviewing report production methods, the 2023 COVID-19-Associated Deaths count as well as 2023 subtotals reported within tables 3 through 6 were found to have incorporated fatalities that had been reported with dates of death up through the report date rather than up through the end of the MMWR week. This has been corrected as of the MMWR week 38 report. The 2023 count thus was adjusted from 2,513 with the original calculation method to the displayed count.

Laboratory

Positive SARS-CoV-2 laboratory results are reported to the Texas DSHS National Electronic Disease Surveillance System (NEDSS) by laboratories or local health departments. Positive SARS-CoV-2 laboratory results, including antigen, antibody and molecular tests performed under CLIA oversight must be reported to Texas DSHS in accordance with Texas Health and Safety Code §81.045. This number does not include tests with results pending. Testing data is considered provisional and subject to update as additional information becomes available until annual data has been finalized.

Genomic Surveillance

Variants of SARS-CoV-2, the virus that causes COVID-19, are expected to continue to emerge, a natural process that occurs as viruses spread. Some variants will disappear, and others will continue to spread and may overtake previous variants. For example, the ancestral strain of the virus that caused the first Texas COVID-19 cases in early 2020 is no longer being detected. It was displaced by the Alpha variant, followed by the Delta variant and Omicron variants and may continue to be replaced by other emerging variants.

The Texas SARS-CoV-2 genomic sequencing data includes data provided by the CDC's commercial partner laboratories as a part of the national SARS-CoV-2 genomic surveillance program, sequencing conducted at academic and commercial laboratories, and Texas Department of State Health Services Austin Laboratory's genomic sequencing. The programs sequence hundreds of COVID-19 cases each week to monitor the spread of variants in Texas. This information helps scientists and public health professionals understand how the virus spreads and changes over time. It also helps researchers know whether existing COVID-19 tests, treatments, and vaccines will continue to work against emerging variants.

This report shows data on variants of concern (VOC), variants of interest (VOI) and variants being monitored (VBM) with all other variants grouped together. More information on variant classification is available on the CDC website at

<https://www.cdc.gov/coronavirus/2019-ncov/variants/>

Lab Confirmed COVID-19 Patients in Texas Hospitals

The total number of patients in Texas hospitals who have tested positive for COVID-19.



Appendix 1: Data Sources and Limitations

Data sources for this report are Texas DSHS Vital Statistics, COVID-19-Associated Fatalities, and National Electronic Disease Surveillance System (NEDSS), each of which have associated limitations. The use of multiple data sources can lead to overestimation through duplication of case reports within each system, and between systems. COVID-19 case investigation data entered into NEDSS is dependent upon accurate user entry of case information into the system and resources available for public health follow up.

Limitations

Vital Statistics

- Delay in reporting of COVID-19-associated fatalities of 10-14 days on average from date of death.

NEDSS

- Cases created off electronic laboratory report (ELR) feed may be missing information, such as patient race or ethnicity, or complete address
- The completeness of case investigations is dependent on the information available to case investigators in the initial report, the resources available to local health departments for case follow up, and the availability of medical records and the information provided by the case.
- Case count data from 2020 and 2021 is considered finalized. Data from 2022 and 2023 are considered provisional and subject to update until data are finalized.

Note: DSHS completed the process of transferring case investigations from the COVID Case Investigation System (CCIS) to the Texas National Electronic Disease Surveillance System (NEDSS) in November 2021. Deduplication between cases entered into CCIS and NEDSS has taken place and the transition was completed as of 11/15/2021. NEDSS data cited in this report is provisional and subject to the limitations of resources available for case investigation, the participation of the public in case investigation, and the process of transition from CCIS to NEDSS. Deduplication of newly reported COVID-19 laboratory results in NEDSS occurs automatically prior to data ingestion into NEDSS preventing generation of duplicate case reports.

Variant Dashboard Limitations

The data shown in this report is collected by the CDC's commercial partner laboratories as a part of the national SARS-CoV-2 genomic surveillance program, commercial laboratories, academic laboratories and Texas Department of State Health Services Austin Laboratory's genomic sequencing. Because samples collected by CDC National SARS-CoV-2 Strain Surveillance (NS3) partner laboratories are intended to be representative of Texas' proportion of the national population and estimate the prevalence of variants statewide, this data is not intended to count every variant case present in Texas. It does not necessarily represent geographic trends within the state of Texas. Some areas may be oversampled due to high numbers of participating laboratories.

Local health officials may have more specific information regarding variant cases in their jurisdictions. No sample weighting is applied to this data. Sequencing results included in this data set take an average of 11 days from initial sample collection to report date. DSHS will post results after two weeks so that there will be enough results to represent a reliable estimate. The data visualization on the DSHS website is updated weekly on Tuesdays before 5 pm. Data is displayed by week of sample collection. Data should be considered preliminary and subject to change.

COVID Case Numbers

Case numbers and percentages might vary from the previous COVID-19 report due to continual changes in previous week totals. Data are provisional and are subject to change.

Possible attributes of various case numbers:

- Backlog from of COVID-19 results from reporting facilities
- Electronic laboratory reporting (ELR) failure in importing lab data
- Evidence of increased transmissibility
- Evidence of increased disease severity

Appendix 2: Data Cleaning Procedures

This report is generated on a weekly cycle, with the report prepared on Thursdays covering a one-week period beginning and ending the previous MMWR week.

Deduplication occurs routinely within NEDSS and ELR imports are prevented from creating duplicate case investigation and patient records if records matching first name, last name, date of birth and patient sex already exist. Data cleaning for this report included removal of out of state cases, matching residency based on patient address and county assignment in NEDSS. County of residency is determined based on zip code of residence, followed by provider zip code if residence zip code is unavailable. If both provider and residence zip codes are unavailable, ordering facility zip code is used. Out of bounds dates for specimen collection pre-January 1, 2020, and post report date are recoded as blank.

For the ELR Lab data file, the following cleaning procedures were used; out of state data was removed, residency is determined based on zip code of residence, followed by provider zip code if residence zip code is unavailable. If both provider and residence zip codes are unavailable, ordering facility zip code is used. Records are deduplicated by testing lab accession number, specimen collection date, ordered test code and reporting facility CLIA.

Appendix 3: MMWR Weeks

For a full list of MMWR Week dates please visit: <https://ndc.services.cdc.gov/wp-content/uploads/MMWR-Week-Log-2022-2023.pdf>

Appendix 4: Texas Demographic Center

For population projections in Texas by county, please visit: <https://demographics.texas.gov/Projections/>