COVID-19 Surveillance in Texas

What's changed over the last year?

Maher Hasan, MPH COVID-19 Epidemiologist I

Emerging and Acute Infectious Disease (EAID) Unit
Disease Surveillance and Epidemiology Section
Office of Chief State Epidemiologist
08/09/2024

Presentation Outline

- 2023 COVID-19 Cases in Texas: Morbidity and Mortality Weekly Report (MMWR) Week 28 and 52
- COVID-19 Case Reporting Update for Texas
- Preliminary 2024 COVID-19 Data in Texas
- Comparison of COVID-19 Cases in Texas: 2023 vs. 2024



Texas Department of State
Health Services

2023 COVID-19 Cases in Texas: Morbidity and Mortality Weekly Report (MMWR) Week 28 & 52

2023 - Week 28 and Week 52*

COVID-19 Cases for 2023, split for up to Week 28 and up to Week 52

- MMWR Week 28:
 - 358,677 confirmed and probable cases of COVID-19 reported in Texas
 - 1,986 COVID-19 associated deaths were reported up to MMWR Week 28
- MMWR Week 52:
 - o 721,582 confirmed and probable cases of COVID-19 reported in Texas
 - o 3,175 COVID-19 associated deaths were reported up to MMWR Week 52



Texas Department of State Health Services

Mortality Rate - MMWR Week 28 (2023)

By Race

Figure 1: COVID-19 Associated Mortality Rate by Race/Ethnicity for MMWR Week 28 (2023)*

- ~64% White
- ~8% Black
- ~25% Hispanic
- ~2% Asian
- ~1% Other Race

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	1,278	10.35	12	0.10
Black	159	4.21	<10	<10
Hispanic	487	3.87	<10	<10
Asian	41	2.34	<10	<10
Other Race	20	2.76	<10	<10
Unknown Race/Ethnicity	<10	<10	<10	<10
Overall	1,986	6.37	19	0.06

^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 – July 9,2023 to July 15, 2023

Mortality Rate - MMWR Week 28 (2023)

By Sex

Figure 2: COVID-19 Associated Mortality Rate by Sex for MMWR Week 28 (2023)*

• 44% Female

• 56% Male

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)
874	5.57	<10	<10
1,112	7.18	12	0.08
1,986	6.37	19	0.06
	874 1,112	Deaths (2023) (per 100,000) (2023) 874 5.57 1,112 7.18	Deaths (2023) Total Mortality Rate (per 100,000) (2023) Number of COVID-19

^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 – July 9,2023 to July 15, 2023

Mortality Rate – MMWR Week 52 (2023)

By Race

Figure 3: COVID-19 Associated Mortality Rate by Race/Ethnicity for MMWR Week 52 (2023)*

- ~65% White
- ~8% Black
- ~24% Hispanic
- ~2% Asian
- ~0.8% Other Race

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	2,050	16.60	29	0.23
Black	267	7.06	<10	<10
Hispanic	761	6.05	<10	<10
Asian	69	3.94	<10	<10
Other Race	27	3.72	<10	<10
Unknown Race/Ethnicity	<10	<10	<10	<10
Overall	3,175	10.19	40	0.13

^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 52 – December 24,2023 to December 30, 2023

Mortality Rate – MMWR Week 52 (2023)

By Sex

Figure 4: COVID-19 Associated Mortality Rate by Sex for MMWR Week 52 (2023)*

- 45.2% Female
- 54.8% Male

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	1,435	9.15	16	0.10
Male	1,740	11.24	24	0.15
Overall	3,175	10.19	40	0.13

^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 52 - December 24,2023 to December 30, 2023

COVID-19 Case Reporting Update in Texas

COVID-19 Case Reporting Update

COVID-19 – no longer required to be reported

- As of March 8, 2024, individual confirmed, and probable COVID-19 cases are no longer required to be reported to the Texas Department of State Health Services. Thus, as of March 8, 2024, COVID-19 case counts and associated rates represent COVID-19 cases which were reported to DSHS on a voluntary basis rather than a mandatory basis
 - o Affects our capacity to understand the true scope of positive COVID cases in Texas
 - Change made in MMWR Week 9 (2024)
- Outbreaks continue to be required to be reported
- Unusual group expression of disease that may be of public health concern should be reported – even if not an outbreak
- When comparing data from 2023 to 2024, the expected decrease in case counts can partially be attributed to change in COVID-19's reporting status.



Texas Department of State Health Services

Preliminary 2024 COVID-19 Data in Texas

2024 - MMWR Week 28*

Provisional COVID-19 Data for 2024, for up to MMWR Week 28

- MMWR Week 28:
 - 238,323 confirmed and probable cases of COVID-19 reported in Texas
 - 1,058 COVID-19 associated deaths were reported up to MMWR Week 28



Texas Department of State Health Services

Comparison of COVID-19 Cases in Texas: 2023 vs. 2024

2023 vs 2024* Case Counts

2023

- Up to MMWR Week 28
 - 358,677 confirmed and probable cases:
 - ➤ 1,986 COVID-19 associated deaths

Cumulative cases: Between March 6, 2020 and Week 28 (2023) 8,632,706 confirmed and probable cases were reported

2024*

- Up to MMWR Week 28
 - 238,323 confirmed and probable cases:
 - ➤ 1,058 COVID-19 associated deaths

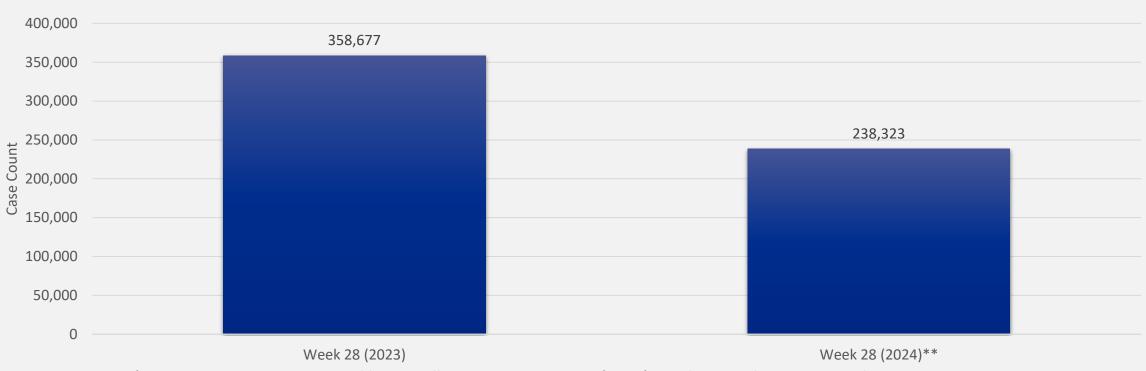
Cumulative cases: Between March 6, 2020 and Week 28 (2024) – 9,230,324 confirmed and probable cases were reported*

Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 – July 9,2023 to July 15, 2023 & Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 – July 7,2024 to July 13, 2024

^{*} Data is provisional and may change

2023 vs 2024** Continued

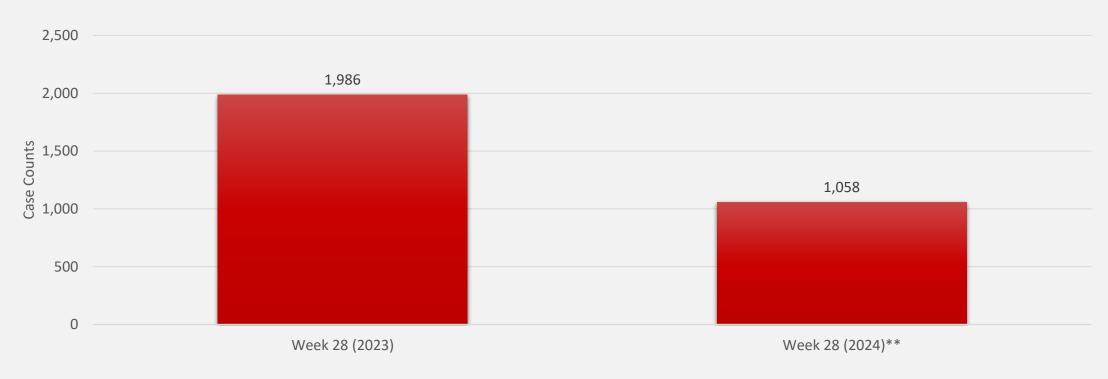
Figure 5 - Confirmed and probable COVID-19 Cases 2023 vs 2024 (MMWR Week 28)*



^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 – July 9,2023 to July 15, 2023 & Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 – July 7,2024 to July 13, 2024 ** Data is provisional and may change

2023 vs 2024** Continued

Figure 6 - COVID-19 associated Deaths 2023 vs 2024 (MMWR Week 28)*



^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 – July 9,2023 to July 15, 2023 & Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 – July 7,2024 to July 13, 2024

** Data is provisional and may change

Mortality Rate – MMWR Week 28 (2024**)

By Race

Figure 7: COVID-19 Associated Mortality Rate by Race/Ethnicity for MMWR Week 28 (2024)*

- ~64% White
- ~10% Black
- ~23% Hispanic
- ~3% Asian

Race/Ethnicity	Total Number of COVID-19 Deaths (2024) [†]	Total Mortality Rate (per 100,000) (2024) [†]	MMWR Report Week Number of COVID-19 Deaths	MMWR Report Week Mortality Rate (per 100,000)
White	673	5.43	11	0.09
Black	101	2.62	<10	<10
Hispanic	242	1.89	<10	<10
Asian	36	1.96	<10	<10
Other Race	<10	<10	<10	<10
Unknown Race/Ethnicity	<10	<10	<10	<10
Overall	1,058	3.34	15	0.05

^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 – July 7,2024 to July 13, 2024

^{**}Data is provisional and may change

Mortality Rate – MMWR Week 28 (2024**)

By Sex

Figure 8: COVID-19 Associated Mortality Rate by Sex for MMWR Week 28 (2024)*

- 46% Female
- 54% Male

Sex	Total Number of COVID-19 Deaths (2024) [†]	Total Mortality Rate (per 100,000) (2024) [†]	MMWR Report Week Number of COVID-19 Deaths	MMWR Report Week Mortality Rate (per 100,000)
Female	486	3.05	11	0.07
Male	572	3.63	<10	<10
Overall	1,058	3.34	15	0.05

^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 – July 7,2024 to July 13, 2024

^{**}Data is provisional and may change

Comparisons

COVID-19 Associated Mortality Rate by Public Health Region for the Current Year

Figure 9 – MMWR Week 28 (2023)*

PHR	Total Number of COVID-19 Deaths (2023)	Total Mortality Rate (per 100,000) (2023)
PHR 1	82	8.93
PHR 2/3	603	6.64
PHR 4/5N	154	9.89
PHR 6/5S	412	4.88
PHR 7	201	5.29
PHR 8	216	6.57
PHR 9/10	129	7.64
PHR 11	187	7.89
Overall**	1,986	6.37

^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 – July 9,2023 to July 15, 2023

†Figure 10 – MMWR Week 28 (2024)**

PHR	Total Number of COVID-19 Deaths (2024)	Total Mortality Rate (per 100,000) (2024) [†]
PHR 1	38	4.10
PHR 2/3	312	3.38
PHR 4/5N	71	4.55
PHR 6/5S	209	2.43
PHR 7	112	2.89
PHR 8	137	4.09
PHR 9/10	60	3.50
PHR 11	119	4.98
Overall	1,058	3.34

[†]Source: Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 – July 7,2024 to July 13, 2024

From MMWR Week 28 (2023) to MMWR Week 28 (2024)**:

- Confirmed and Probable COVID-19 Cases decreased by ~33%, from 2023 to 2024
 - o From 358,677 (2023) to 238,323 (2024)
- Total COVID-19 cases decreased associated deaths by ~47%, from 2023 to 2024
 - o From 1,986 (2023) to 1,058 (2024)

In our Public Health Regions:

- We noticed a shift in Mortality Rates:
 - Region 4/5N had the highest Mortality Rate up to MMWR Week 28 (2023)
 - 9.89 per 100,000
 - Region 11 had the highest Mortality Rate up to MMWR Week 28 (2024)**
 - 4.98 per 100,000
 - The change in reporting status for individual cases occurred on MMWR Week 9 (2024)

Changes in COVID-19 associated deaths in Public Health Regions, from 2023 to 2024, proportionally:

- PHR 1 reported 82 COVID-19 associated deaths out of the total 1,986 COVID-19 associated deaths reported up to MMWR Week 28 2023 in Texas
- Compared to 38 COVID-19 associated deaths out of 1,058 COVID-19 associated deaths reported up to MMWR Week 28 2024** in Texas
 - o ~4% (2023) vs. ~3.5% (2024)**
- PHR 2/3
 - o ~30% (2023) vs. ~29% (2024)**
- PHR 4/5N
 - o ~8% (2023) vs. ~7% (2024)**
- PHR 6/5S
 - ~21% (2023) vs. ~20% (2024)**

- PHR 7
 - o ~10% (2023) vs. ~11% (2024)**
- PHR 8
 - o ~11% (2023) vs. ~13% (2024)**
- PHR 9/10
 - o ~6% (2023) vs. ~5.5% (2024)**
- PHR 11
 - o ~9% (2023) vs. ~11% (2024)**

^{*}Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 – July 9,2023 to July 15, 2023 & Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 – July 7,2024 to July 13, 2024

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)
<1 year	<10	<10
1-9 years	<10	<10
10-19 years	<10	<10
20-29 years	<10	<10
30-39 years	13	0.29
40-49 years	38	0.96
50-59 years	87	2.44
60-64 years	102	6.03
65-69 years	128	8.70
70-74 years	177	15.43
75-79 years	228	27.41
80+ years	988	102.80
Unknown	210	N/A
Overall	1,986	6.37

^{*}Figure 11 – MMWR Week 28 (2023)

*Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 – July 9,2023 to July 15, 2023

Age Group	Total Number of CO /ID-19 Deaths (2024) [†]	Total Mortality Rate (Per 100,000) (2024) [†]
<1 year	<10	<10
1-9 years	<10	<10
10-19 years	<10	<10
20-29 years	<10	<10
30-39 years	<10	<10
40-49 years	20	0.50
50-59 years	48	1.34
60-64 years	31	1.81
65-69 years	62	4.11
70-74 years	88	7.42
75-79 years	137	15.66
80+ years	546	54.29
Unknown	112	N/A
Overall	1,058	3.34

†Figure 12 – MMWR Week 28 (2024)**

⁺Source: Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 – July 7,2024 to July 13, 2024

**Data is provisional and may change

Referring back to Figures 11 and 12, we take a look at some of the changes COVID-19 associated Total Deaths within age groups, from MMWR Week 28 (2023) up to MMWR Week 28 (2024)**

Age group Comparison (age group in years old)

- 40-49
 - o ~1.9% in 2023 vs. ~1.8% in 2024**
- 50-59
 - o ~4% in 2023 vs. ~5% in 2024**
- 60-64
 - o ~5% in 2023 vs. ~3% in 2024**

- 65-69
 - o ~6% in 2023 vs. ~5.8% in 2024**
- 70-74
 - o ~9% in 2023 vs. ~8.3% in 2024**
- 75-79
 - o ~11% in 2023 vs. ~13% in 2024**
- 80+
 - ~50% in 2023 vs. ~52% in 2024**

Incremental change in Total Number of COVID-19 Deaths from 2023 to 2024**, within the age-groups

Source: Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 – July 9,2023 to July 15, 2023 & Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 – July 7,2024 to July 13, 2024 ** Data is provisional and may change

Concluding Comments

- COVID-19 cases and fatalities have decreased in 2024*, compared to this time in 2023
- The decrease can be attributed to individual COVID-19 cases no longer being reportable in Texas
- Within specific groups (age cohorts, racial/ethnic groups, sex)
 - No significant changes in case counts, death counts
 - Decrease within-groups occurred, however it is proportional to the decrease in overall case counts



Texas Department of State Health Services

References

- Website: https://www.dshs.texas.gov/covid-19-coronavirus-disease/texas-covid-19-surveillance
 - Date accessed: 07/19/24
 - Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 28 July 9,2023 to July 15, 2023
 - Texas COVID-19 Weekly Surveillance Report MMWR (2023) Week 52 –
 December 24,2023 to December 30, 2023
- Website: https://www.dshs.texas.gov/texas-respiratory-virus-surveillance-report
 - Date accessed: 07/19/24
 - Texas Respiratory Virus Surveillance Report
 - Texas COVID-19 Weekly Surveillance Report MMWR (2024) Week 28 July 7,2024 to July 13, 2024



Texas Department of State Health Services

Thank you!

COVID-19 Surveillance in Texas

Maher Hasan

Maher.hasan@dshs.Texas.gov