TARRANT COUNTY PUBLIC HEALTH

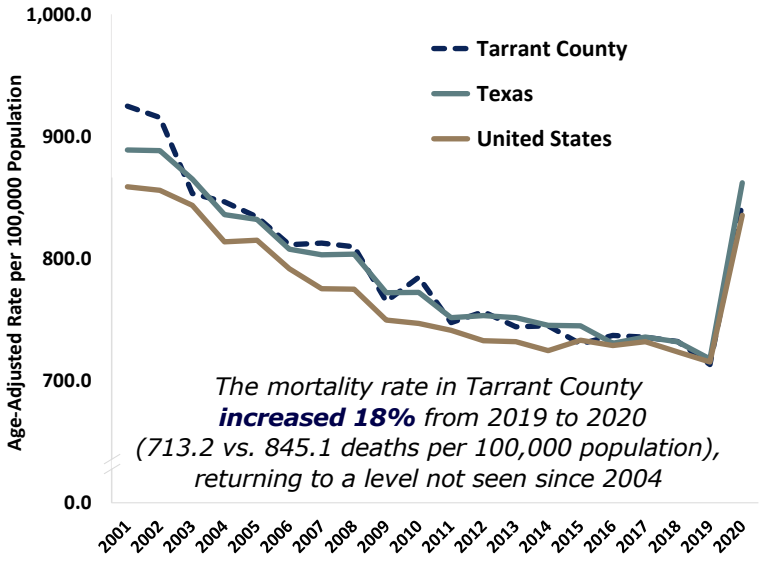
DATA BRIEF

Leading Causes Of Death in Tarrant County

- After 20+ years of steady decline, the all-cause ***mortality rate increased significantly in 2020*** at the local, state, and national level.
- From 2001-2019, ***Heart Disease, Cancer, and Stroke*** comprised the three leading causes of death in Tarrant County. However in 2020, ***COVID-19*** ranked as the ***third leading cause of death*** overall.
- In 2020, ***Heart Disease and Cancer*** together accounted for ***over a third (35%) of all deaths*** among Tarrant County residents (5,818 out of 16,418 total deaths).
- While there are many ***factors that increase the risk of death***, the greatest of these is ***age***.[†] The older a person is, the greater the risk of death. At the same time, different populations have different age distributions, with some being younger or older compared to others. Therefore, it is necessary to ***control for these age distribution differences*** so that meaningful comparisons can be made when assessing mortality. This is done by ***age-adjusting*** mortality rates. For this brief, rates have been age-adjusted except those by age group, which are age-specific mortality rates.

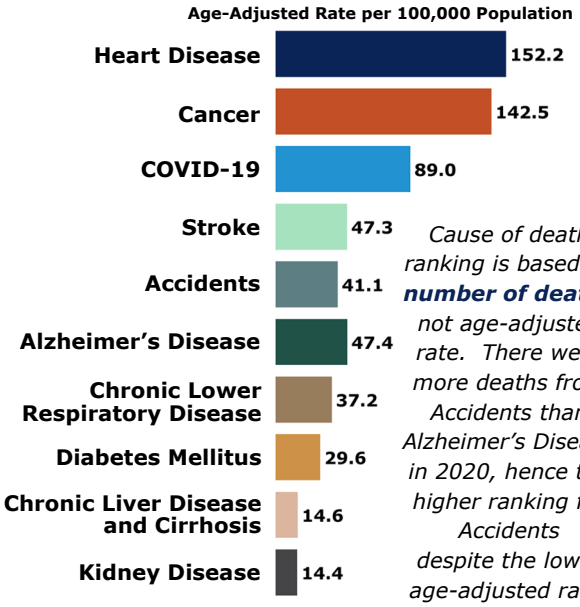
In 2020, COVID-19 was the leading cause of death among Hispanic residents in Tarrant County

Figure 1. All-cause mortality rate, Tarrant County, Texas, and the United States, 2001-2020



*The mortality rate in Tarrant County **increased 18%** from 2019 to 2020 (713.2 vs. 845.1 deaths per 100,000 population), returning to a level not seen since 2004*

Figure 2. Ten leading causes of death in Tarrant County, 2020

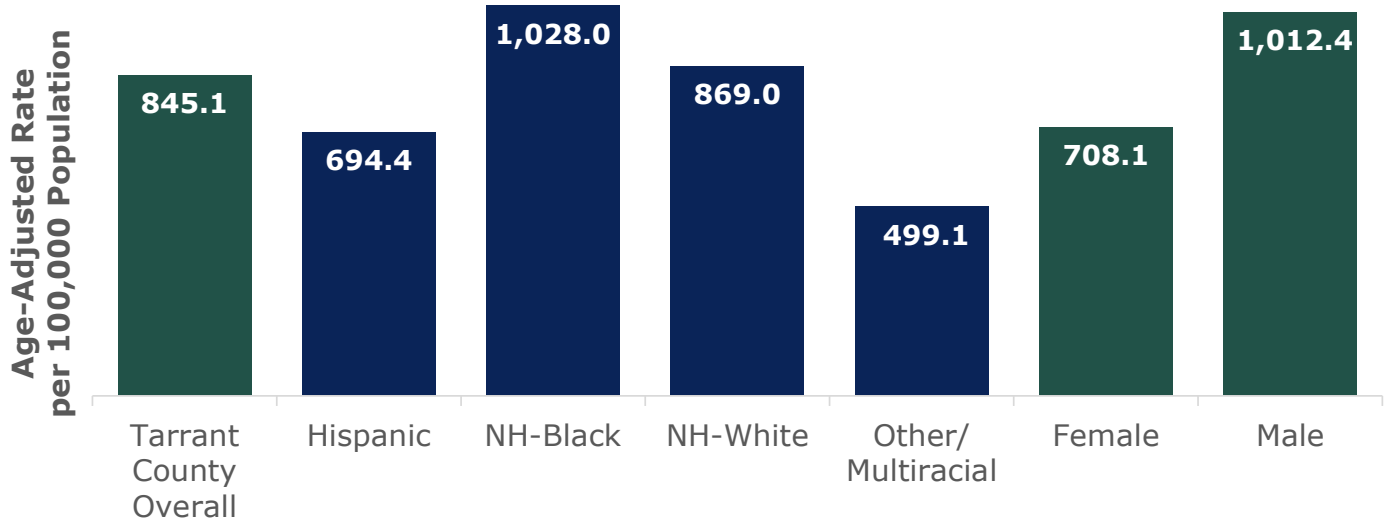


*Cause of death ranking is based on **number of deaths** not age-adjusted rate. There were more deaths from Accidents than Alzheimer's Disease in 2020, hence the higher ranking for Accidents despite the lower age-adjusted rate.*

[†]*Buescher, PA. Age-Adjusted Death Rates. Statistical Primer, No. 13, State Center for Health Statistics, August 1998, Revised May 2010.*

Rates age-adjusted to 2000 U.S. standard population; Data source: Centers for Disease Control and Prevention; Data Brief provided by: Division of Epidemiology and Health Information

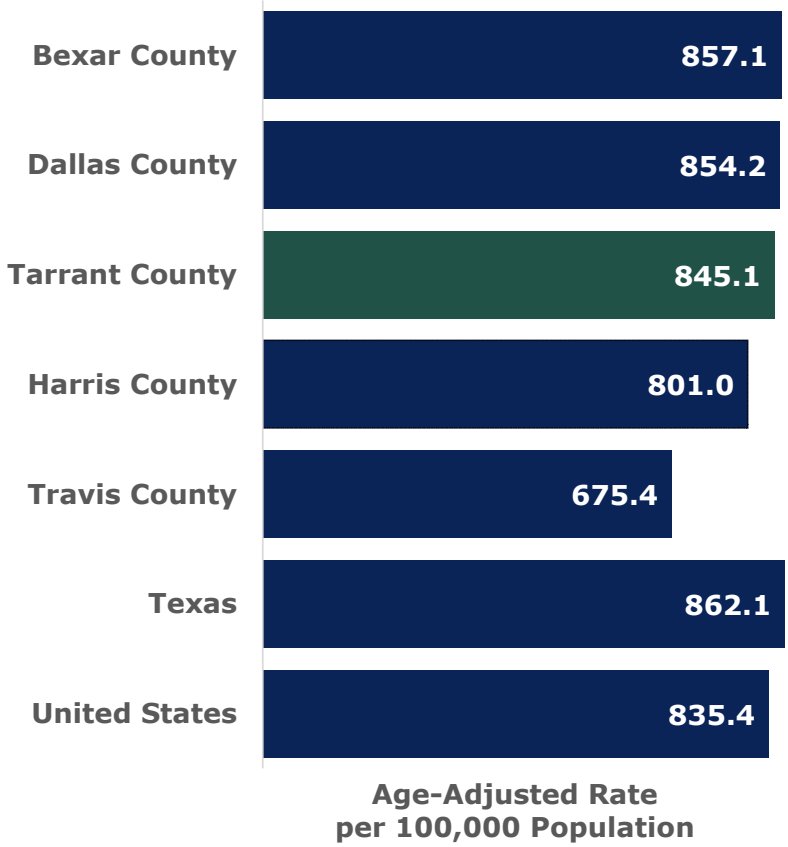
Figure 3. All-cause mortality rate by gender and race/ethnicity among Tarrant County residents, 2020



Non-Hispanic black residents had a significantly higher mortality rate compared to all other race/ethnicity groups and males had a significantly higher mortality rate compared to females

Figure 4. All-cause mortality rate by selected geographic areas, 2020

The Tarrant County mortality rate in 2020 was significantly higher than Harris County, Travis County, and the United States



Rates age-adjusted to 2000 U.S. standard population
Data source: Centers for Disease Control and Prevention
Data Brief provided by: Division of Epidemiology and Health Information

Pages 3-5 of this data brief include tables of the 10 leading causes of death among Tarrant County residents overall, by gender, by race/ethnicity, and by age group. Pages 6-14 include trends in mortality rates from 2001 to 2020 for each of the overall leading causes of death (except COVID-19, which only has one year of data currently available). For additional Data Briefs on specific diseases, causes of death, and risk factors, go to:

https://www.tarrantcounty.com/en/public-health/disease-control-and-prevention/epidemiology-and-health-information/health-data-and-information/data-briefs.html

Figure 5. Ten leading causes of death overall and by gender among Tarrant County residents, 2020

Rank	Overall Number (Rate)	Female Number (Rate)	Male Number (Rate)
1	Heart Disease 2,934 (152.2)	Cancer 1,373 (122.0)	Heart Disease 1,654 (199.2)
2	Cancer 2,884 (142.5)	Heart Disease 1,280 (116.5)	Cancer 1,511 (170.9)
3	COVID-19 1,732 (89.0)	COVID-19 713 (65.0)	COVID-19 1,019 (119.7)
4	Stroke 874 (47.3)	Alzheimer's Disease 567 (53.7)	Accidents 567 (56.5)
5	Accidents 856 (41.1)	Stroke 485 (44.8)	Stroke 389 (50.2)
6	Alzheimer's Disease 813 (47.4)	Chr Lower Resp Disease 393 (36.3)	Diabetes Mellitus 343 (38.2)
7	Chr Lower Resp Disease 705 (37.2)	Accidents 289 (26.5)	Chr Lower Resp Disease 312 (37.7)
8	Diabetes Mellitus 608 (29.6)	Diabetes Mellitus 265 (23.0)	Alzheimer's Disease 246 (37.2)
9	Chr Liver Disease 322 (14.6)	Chr Liver Disease 129 (11.2)	Suicide 206 (20.1)
10	Kidney Disease 278 (14.4)	Kidney Disease 118 (10.8)	Chr Liver Disease 193 (18.4)

Number = Number of Deaths

Rate per 100,000 population age-adjusted to 2000 U.S. standard population

Chr Liver Disease = Chronic Liver Disease; Chr Lower Resp Disease = Chronic Lower Respiratory Disease
Accidents = Unintentional Injuries; Data source: Centers for Disease Control and Prevention
Data Brief provided by: Division of Epidemiology and Health Information

Figure 6. Ten leading causes of death by race/ethnicity among Tarrant County residents, 2020

Rank	Hispanic Number (Rate)	Non-Hispanic Black Number (Rate)	Non-Hispanic White Number (Rate)	Other/Multiracial Number (Rate)
1	COVID-19 487 (149.7)	Heart Disease 495 (189.6)	Heart Disease 2,079 (161.5)	Cancer 109 (89.7)
2	Cancer 347 (107.6)	Cancer 418 (157.7)	Cancer 2,009 (152.4)	Heart Disease 87 (80.6)
3	Heart Disease 273 (91.3)	COVID-19 293 (123.1)	COVID-19 868 (67.4)	COVID-19 82 (76.2)
4	Accidents 169 (33.3)	Accidents 167 (47.5)	Alzheimer's Disease 650 (51.4)	Stroke 31 (29.6)
5	Diabetes Mellitus 106 (35.4)	Stroke 149 (67.1)	Stroke 591 (46.5)	Accidents 29 (23.0)
6	Stroke 103 (39.2)	Diabetes Mellitus 145 (54.1)	Chr Lower Resp Disease 589 (45.3)	Diabetes Mellitus 22 (18.1)
7	Chr Liver Disease 69 (16.3)	Alzheimer's Disease 89 (54.2)	Accidents 491 (45.9)	Suicide 16 (@)
8	Alzheimer's Disease 60 (29.5)	Assault (Homicide) 83 (20.6)	Diabetes Mellitus 335 (25.4)	Alzheimer's Disease 14 (@)
9	Kidney Disease 50 (18.5)	Chr Lower Resp Disease 80 (32.3)	Chr Liver Disease 203 (16.3)	Parkinson's Disease† 11 (@)
10	Suicide 45 (7.2)	Kidney Disease 62 (26.4)	Parkinson's Disease 193 (15.1)	Influenza & Pneumonia† 11 (@)

Number = Number of deaths

Rate per 100,000 population age-adjusted to 2000 U.S. standard population; @ = numerator too small for rate calculation

†Among Other/Multiracial residents, Parkinson's Disease and Influenza & Pneumonia share the 9th & 10th ranked positions

Although the rankings varied in 2020, the three leading causes of death were the same across all gender and race/ethnicity groups: Heart Disease, Cancer, and COVID-19

Figure 7. Ten leading causes of death by age group (in years) among Tarrant County residents, 2020

Rank	< 1 Number (Rate)	1 to 14 Number (Rate)	15 to 24 Number (Rate)	25 to 44 Number (Rate)	45 to 64 Number (Rate)	65+ Number (Rate)
1	Perinatal Conditions 74 (273.4)	Accidents 14 (@)	Accidents 112 (38.1)	Accidents 261 (42.8)	Cancer 786 (153.5)	Heart Disease 2,138 (841.2)
2	Birth Defects 41 (151.5)	Suicide 10 (@)	Assault (Homicide) 51 (17.3)	Heart Disease 108 (17.7)	Heart Disease 676 (132.0)	Cancer 1,978 (778.2)
3	---	---	Suicide 48 (16.3)	Cancer 102 (16.7)	COVID-19 420 (82.0)	COVID-19 1,237 (486.7)
4	---	---	Cancer 10 (@)	Suicide 90 (14.7)	Accidents 233 (45.5)	Alzheimer's Disease 802 (315.5)
5	---	---	---	Assault (Homicide) 75 (12.3)	Chr Liver Disease‡ 174 (34.0)	Stroke 721 (283.7)
6	---	---	---	COVID-19 71 (11.6)	Diabetes Mellitus‡ 174 (34.0)	Chr Lower Resp Disease 588 (231.3)
7	---	---	---	Chr Liver Disease 43 (7.0)	Stroke 126 (24.6)	Diabetes Mellitus 408 (160.5)
8	---	---	---	Diabetes Mellitus† 23 (3.8)	Chr Lower Resp Disease 106 (20.7)	Accidents 232 (91.3)
9	---	---	---	Stroke† 23 (3.8)	Suicide 76 (14.8)	Kidney Disease 217 (85.4)
10	---	---	---	Influenza & Pneumonia 12 (@)	Kidney Disease 56 (10.9)	Parkinson's disease 213 (83.8)

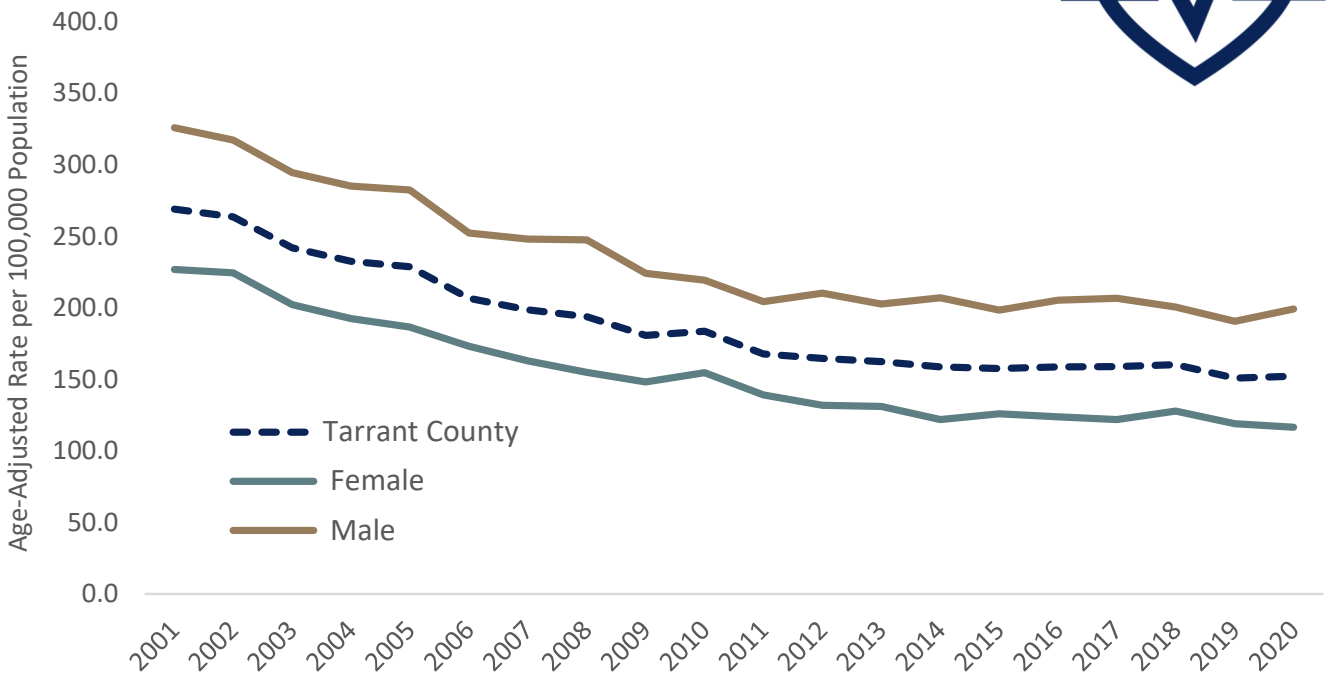
N = Number of deaths; --- = less than ten deaths not reported to protect confidentiality
Rate per 100,000 population (age group specific); @ = numerator too small for rate calculation

†For Age Group 25 to 44, Diabetes Mellitus and Stroke share the 8th & 9th ranked positions
‡For Age Group 45 to 64, Chronic Liver Disease and Diabetes Mellitus share the 5th & 6th ranked positions

The 2020 heart disease mortality rate among residents aged 65 years and older was almost 20 times higher compared to residents aged less than 65 years (841.2 vs. 42.6 deaths per 100,000 population)

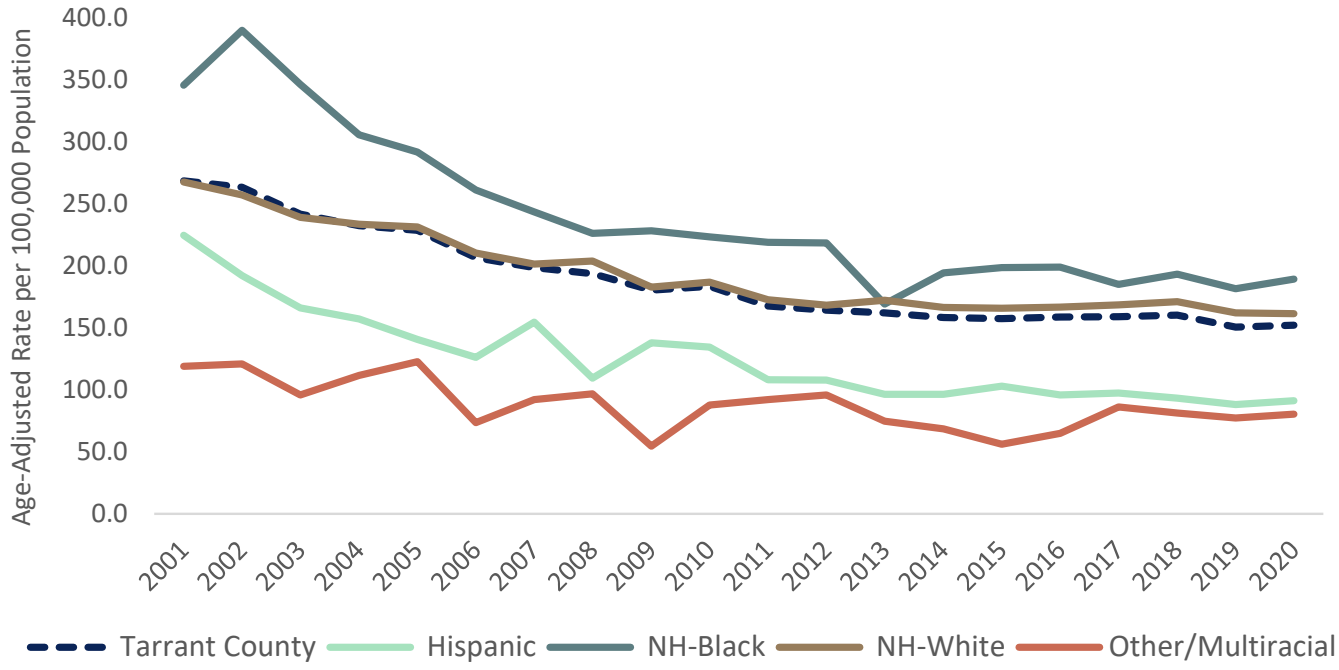
Chr Liver Disease = Chronic Liver Disease; Chr Lower Resp Disease = Chronic Lower Respiratory Disease
Accidents = Unintentional Injuries; Data source: Centers for Disease Control and Prevention
Data Brief provided by: Division of Epidemiology and Health Information

Figure 8a. Heart disease mortality by gender among Tarrant County residents, 2001-2020



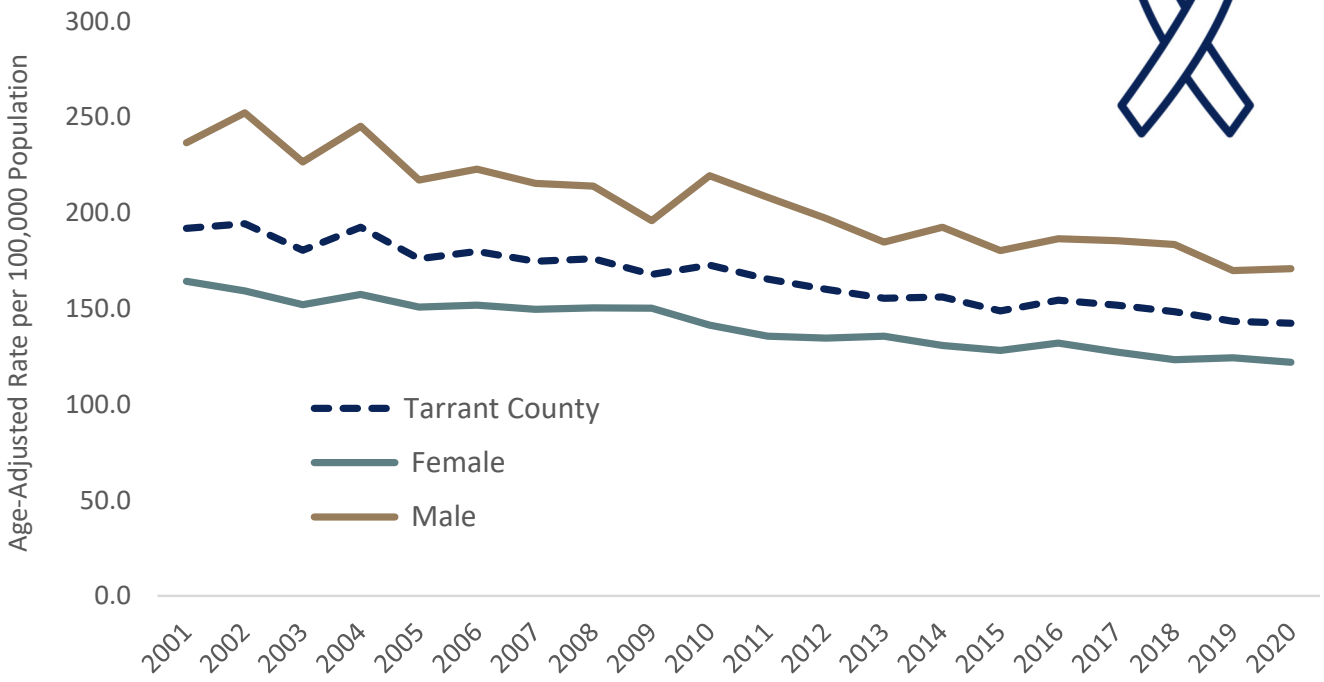
***Non-Hispanic black residents** had the greatest **decline** in heart disease mortality, **cutting the rate by more than half** from 2002 to 2020 (390.2 vs. 189.6 deaths per 100,000 population)*

Figure 8b. Heart disease mortality by race/ethnicity among Tarrant County residents, 2001-2020



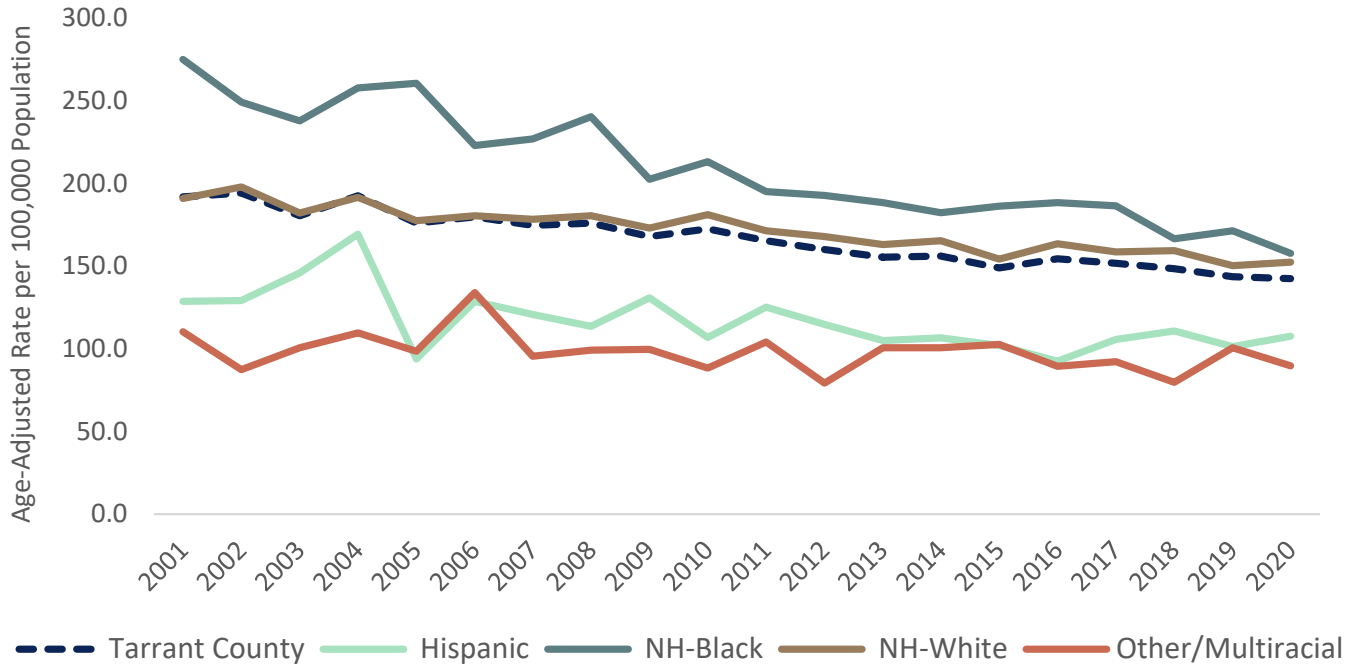
Rates age-adjusted to 2000 U.S. standard population; NH = Non-Hispanic
Data source: Centers for Disease Control and Prevention
Data Brief provided by: Division of Epidemiology and Health Information

Figure 9a. Cancer mortality by gender among Tarrant County residents, 2001-2020



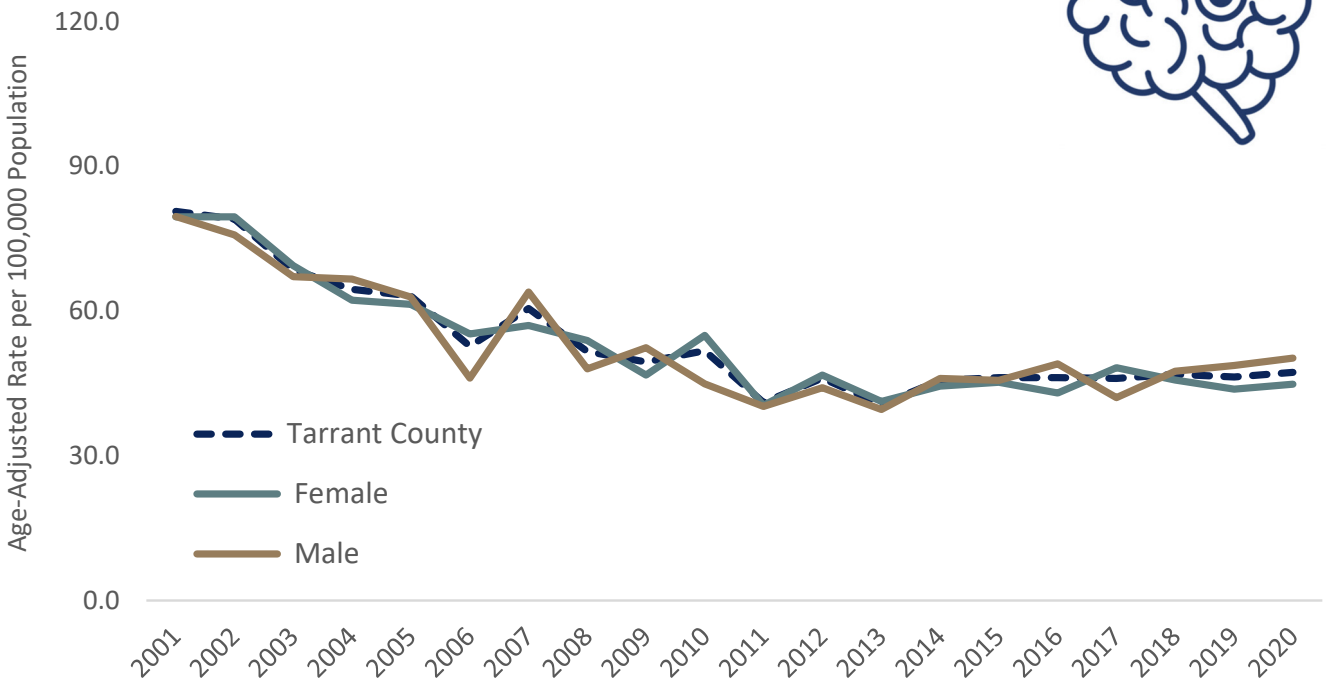
*While cancer mortality declined overall, by gender, and by race/ethnicity, the **largest improvement was among non-Hispanic black residents** with a **43% decrease** in the cancer mortality rate from 2001 to 2020*

Figure 9b. Cancer mortality by race/ethnicity among Tarrant County residents, 2001-2020



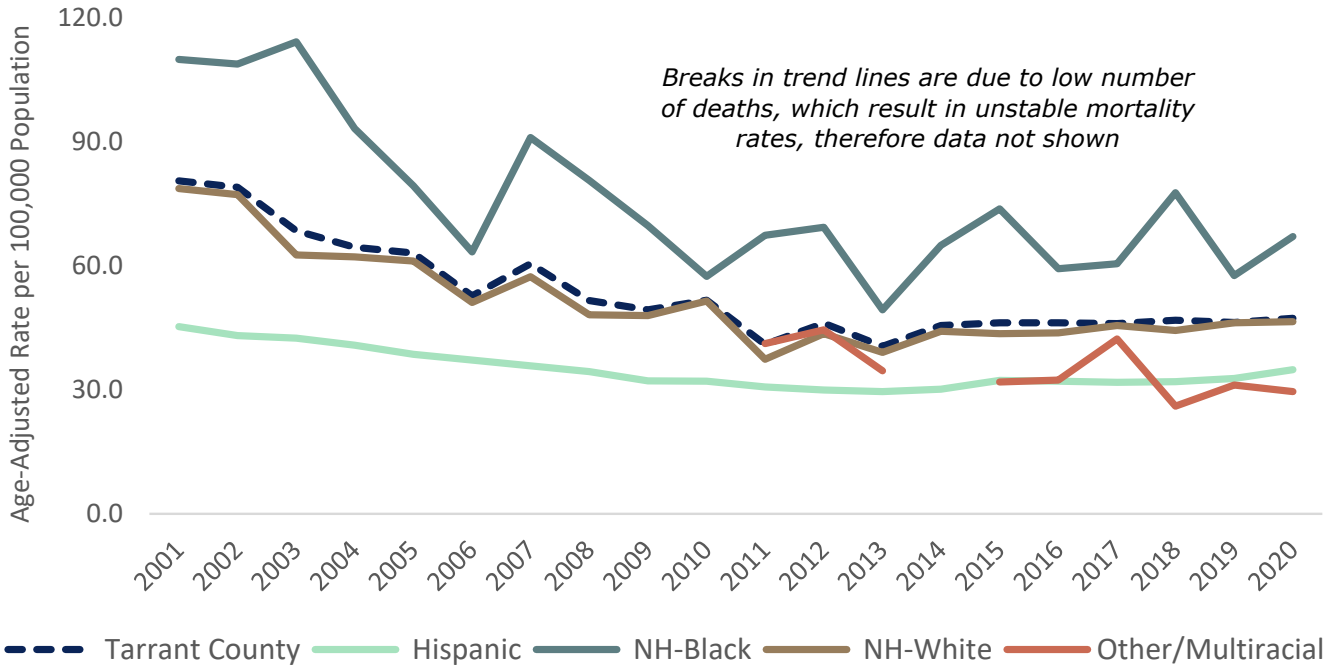
Rates age-adjusted to 2000 U.S. standard population; NH = Non-Hispanic
Data source: Centers for Disease Control and Prevention
Data Brief provided by: Division of Epidemiology and Health Information

Figure 10a. Stroke mortality by gender among Tarrant County residents, 2001-2020



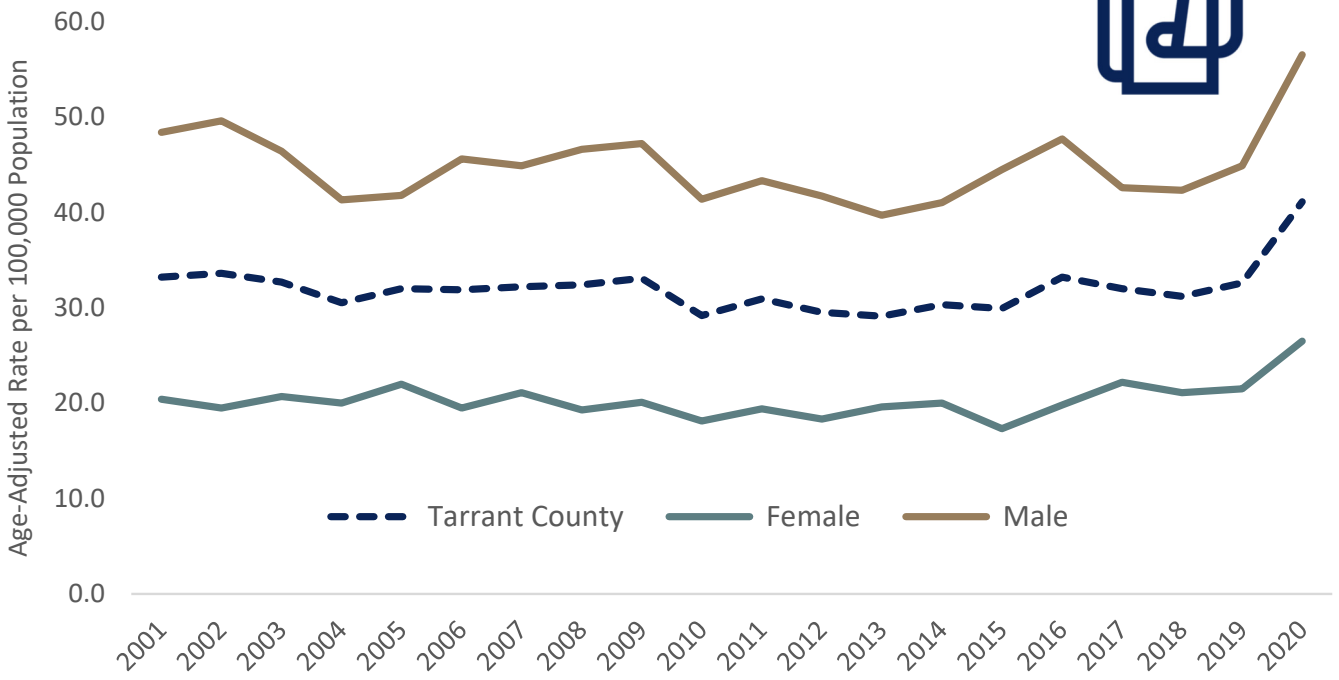
*Stroke mortality **declined** overall for Tarrant County from 2001-2020, as well as for all gender and race/ethnicity groups*

Figure 10b. Stroke mortality by race/ethnicity among Tarrant County residents, 2001-2020



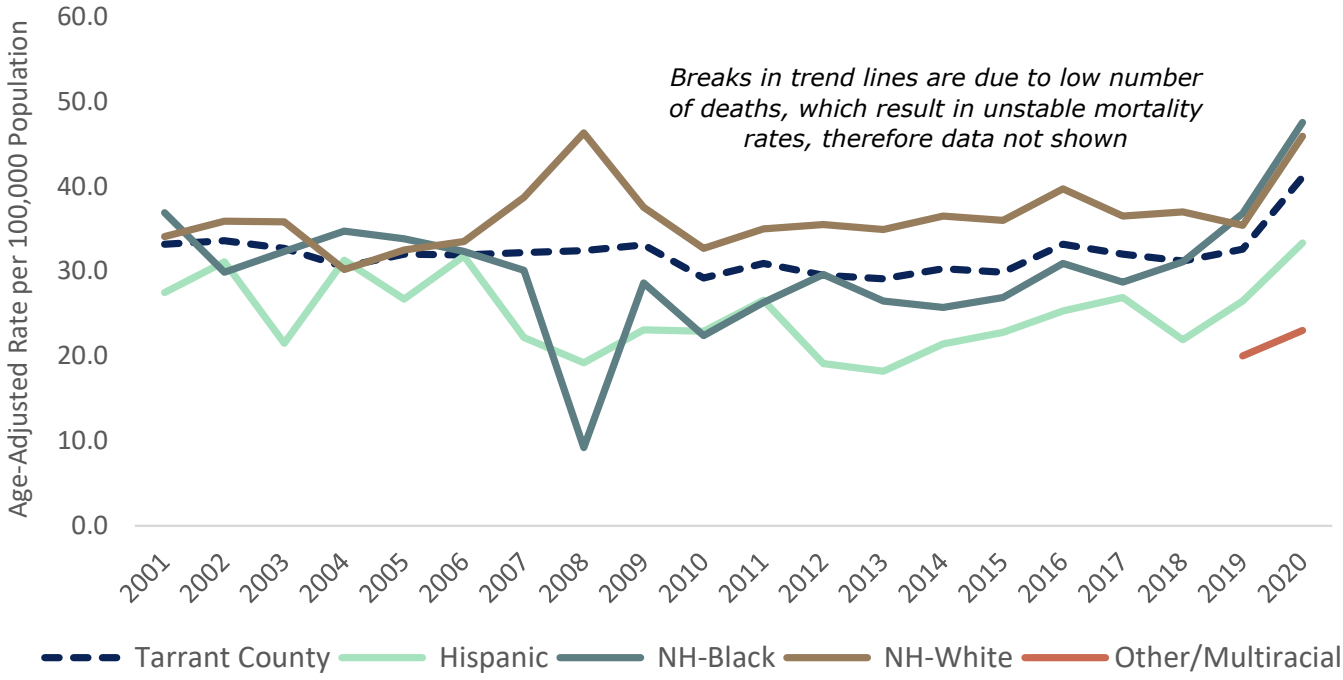
Rates age-adjusted to 2000 U.S. standard population; NH = Non-Hispanic
Data source: Centers for Disease Control and Prevention
Data Brief provided by: Division of Epidemiology and Health Information

Figure 11a. Accident (unintentional injury) mortality by gender among Tarrant County residents, 2001-2020



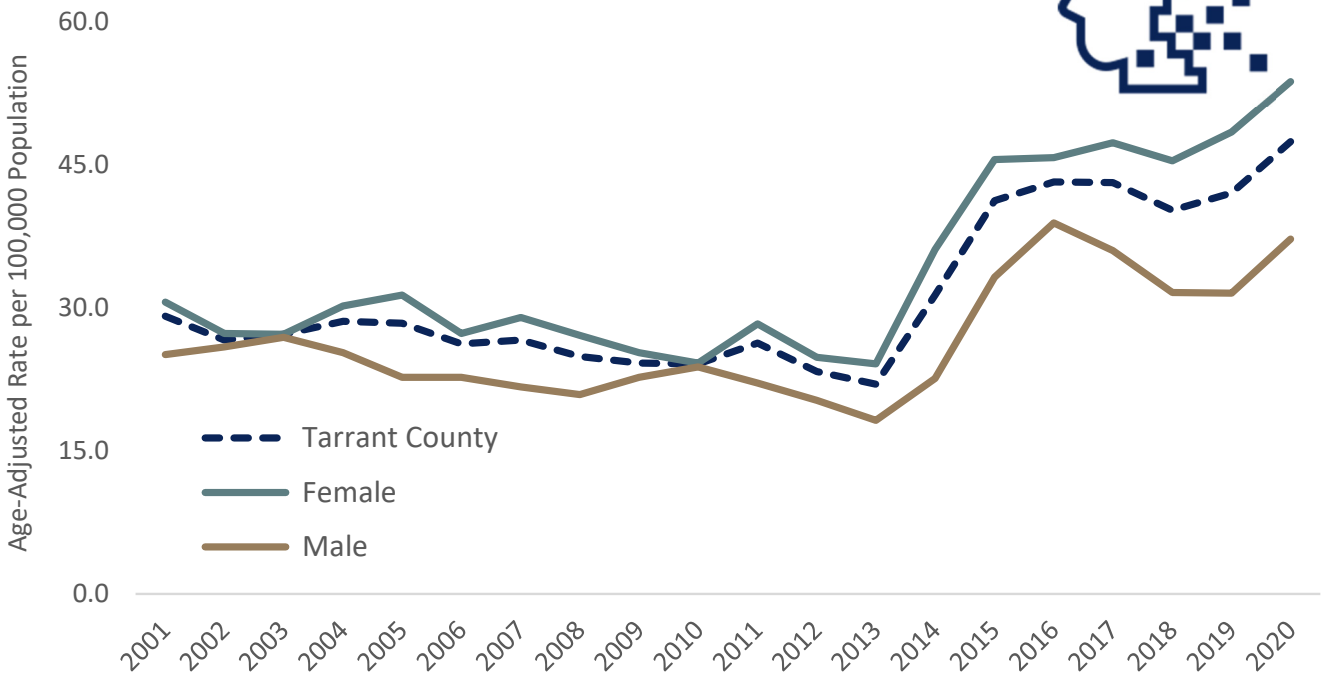
*From 2019 to 2020, accidental deaths **increased significantly for males and non-Hispanic white residents.**[†] Also, there was noticeable fluctuation in accident mortality by race/ethnicity in 2008. While these data cannot explain the reason, similar variation was seen that same year for Texas, as well as Bexar, Dallas, and Harris counties.*

Figure 11b. Accident (unintentional injury) mortality by race/ethnicity among Tarrant County residents, 2001-2020



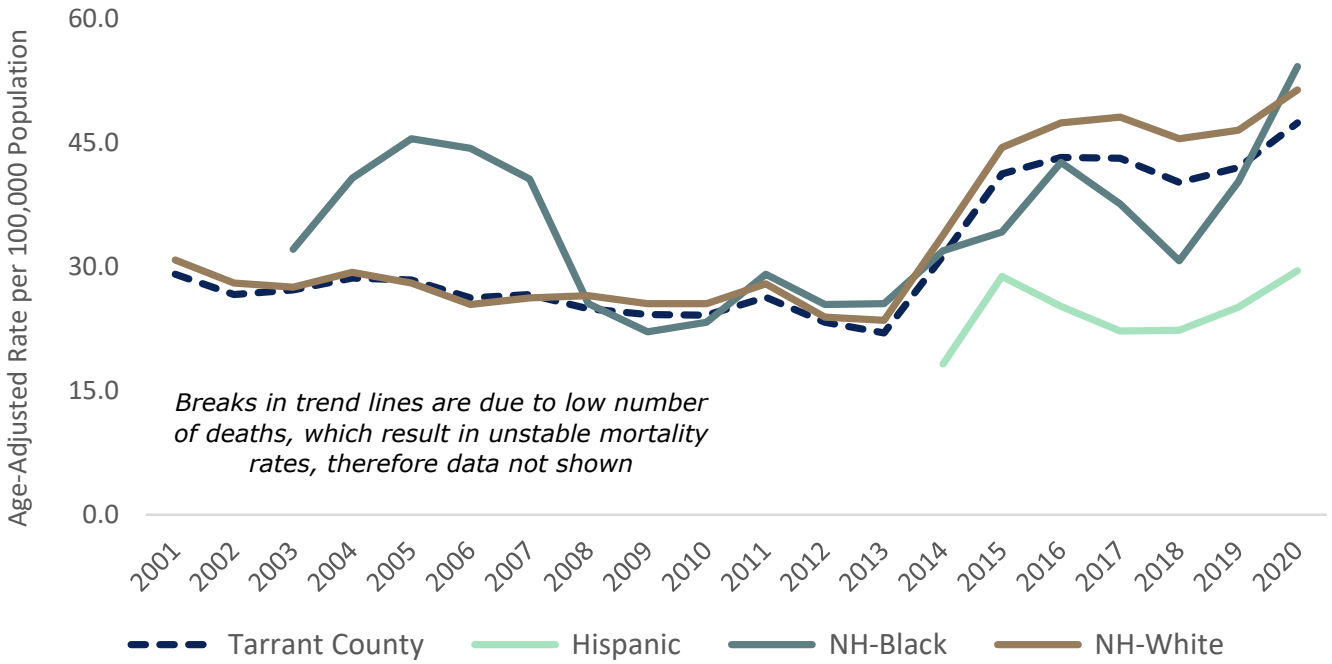
[†]All significant differences detected at the 95% confidence level; Rates age-adjusted to 2000 U.S. standard population; NH = Non-Hispanic; Data source: Centers for Disease Control and Prevention; Data Brief provided by: Division of Epidemiology and Health Information

Figure 12a. Alzheimer's disease mortality by gender among Tarrant County residents, 2001-2020



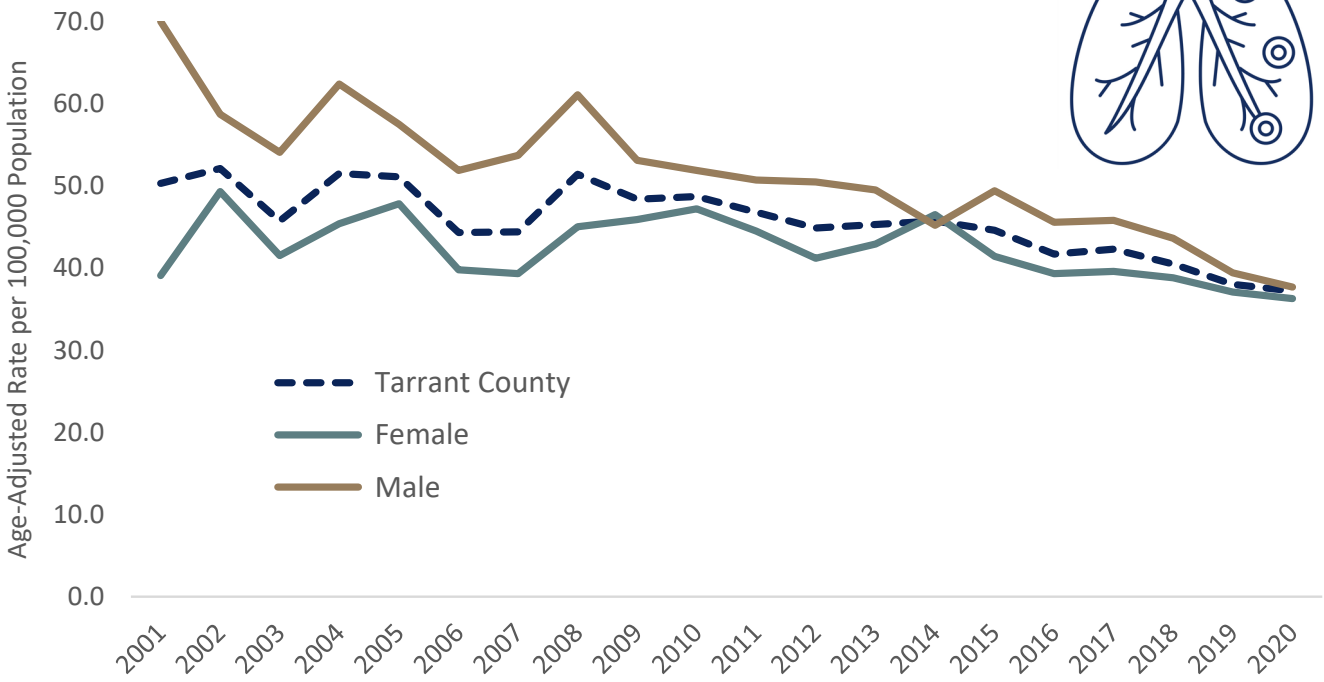
*The Alzheimer's mortality rate **more than doubled** from 2013 to 2020 (22.0 to 47.4 deaths per 100,000 population). Research findings suggest possible reasons for this striking increase include the advancing average age of our older population, fewer deaths associated with heart disease and stroke, which often occur in old age, increases in clinical diagnosis of Alzheimer's, and greater reporting by physicians as a cause of death.*[†]

Figure 12b. Alzheimer's disease mortality by race/ethnicity among Tarrant County residents, 2001-2020



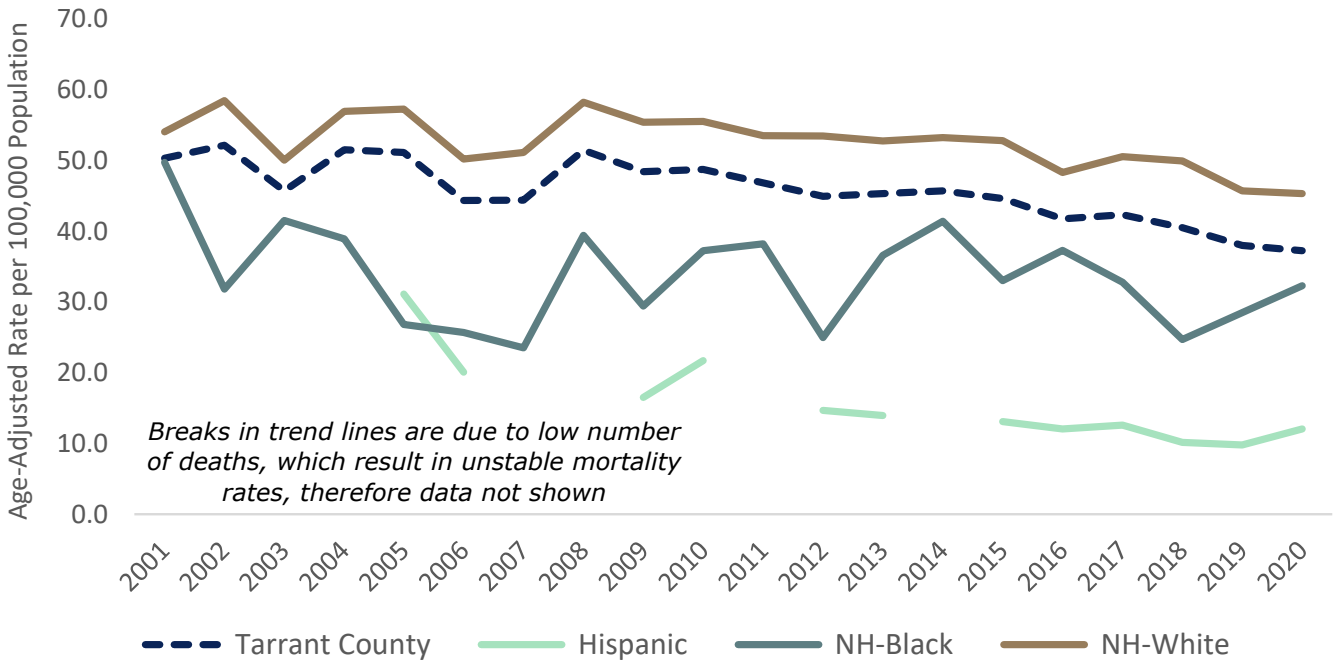
[†]*Alzheimer's Association. 2022 Alzheimer's Disease Facts and Figures. Alzheimer's Dement 2022;18.*
Rates age-adjusted to 2000 U.S. standard population; NH = Non-Hispanic; Other/Multiracial trend not shown due to unstable rates; Data source: Centers for Disease Control and Prevention
Data Brief provided by: Division of Epidemiology and Health Information

Figure 13a. Chronic lower respiratory disease mortality by gender among Tarrant County residents, 2001-2020



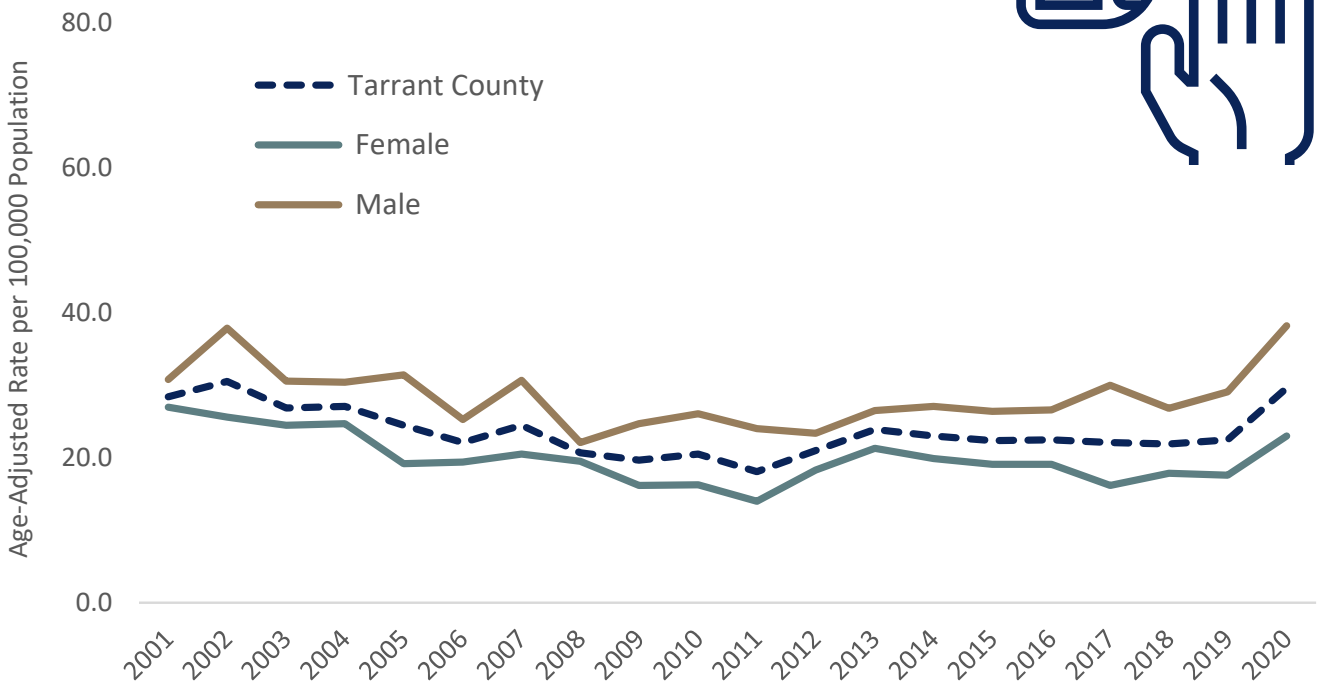
Mortality due to chronic lower respiratory disease ***decreased significantly*** *for male and Hispanic residents from 2001-2020*[†]

Figure 13b. Chronic lower respiratory disease mortality by race/ethnicity among Tarrant County residents, 2001-2020



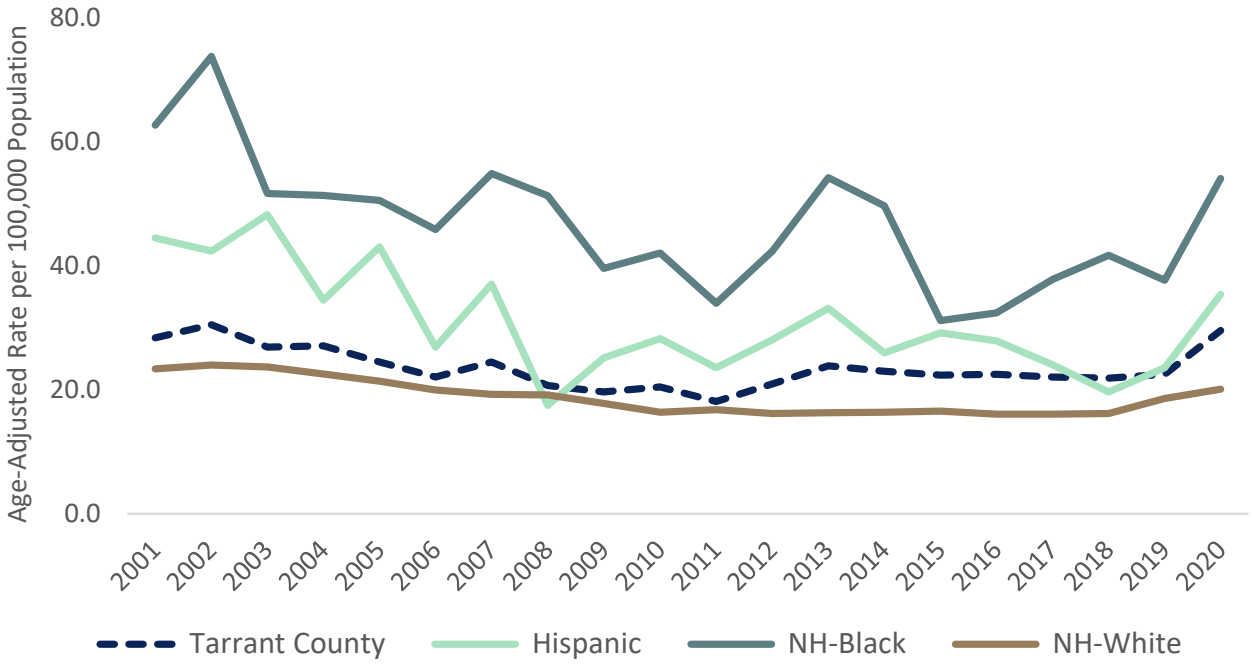
[†]*All significant differences detected at the 95% confidence level; Rates age-adjusted to 2000 U.S. standard population; NH = Non-Hispanic; Other/Multiracial trend not shown due to unstable rates; Data source: Centers for Disease Control and Prevention*
Data Brief provided by: Division of Epidemiology and Health Information

Figure 14a. Diabetes mortality by gender among Tarrant County residents, 2001-2020



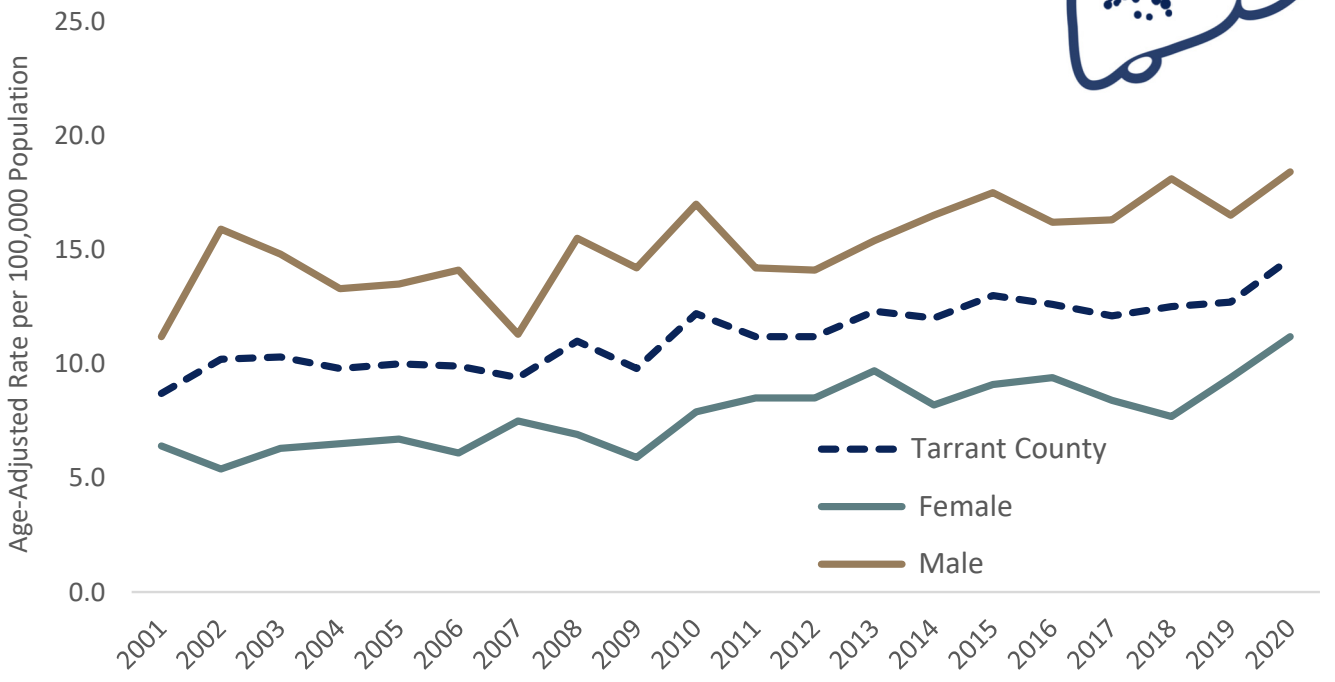
After a general decline from 2001 to 2019, diabetes mortality ***increased*** *from 2019 to 2020 overall in Tarrant County, as well as by gender and race/ethnicity*

Figure 14b. Diabetes mortality by race/ethnicity among Tarrant County residents, 2001-2020



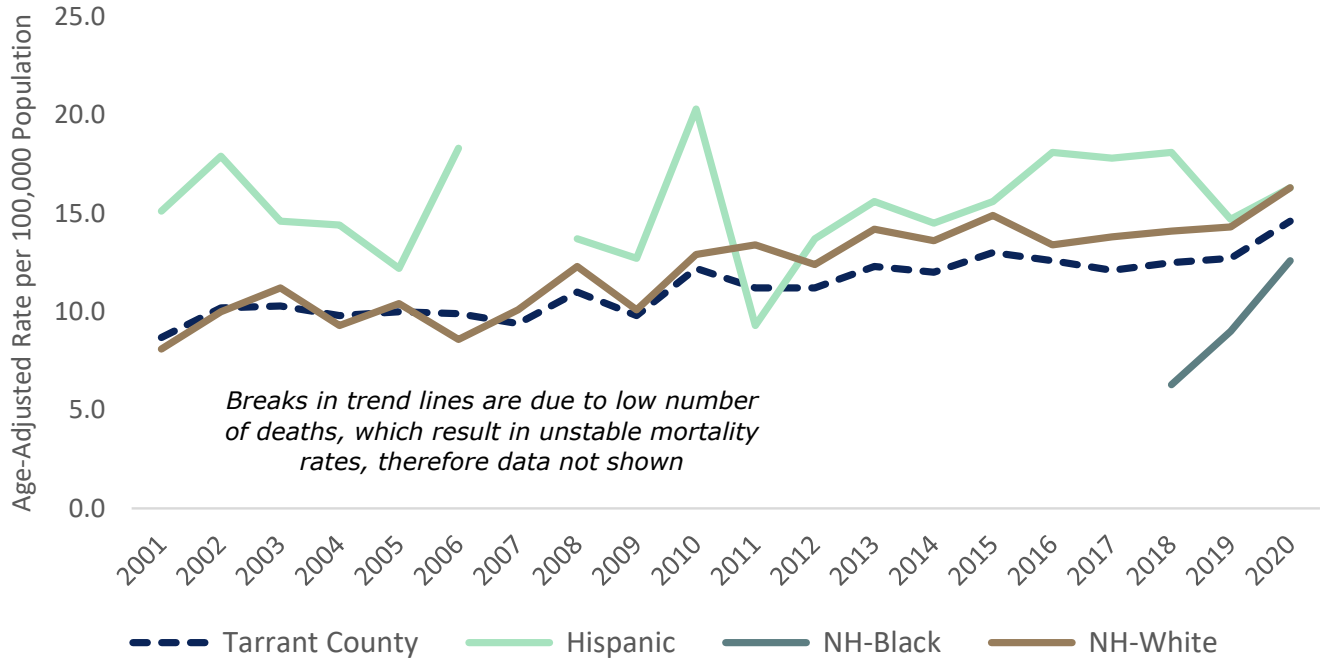
Rates age-adjusted to 2000 U.S. standard population; NH = Non-Hispanic
Other/Multiracial trend not shown due to unstable rates
Data source: Centers for Disease Control and Prevention
Data Brief provided by: Division of Epidemiology and Health Information

Figure 15a. Chronic liver disease and cirrhosis mortality by gender among Tarrant County residents, 2001-2020



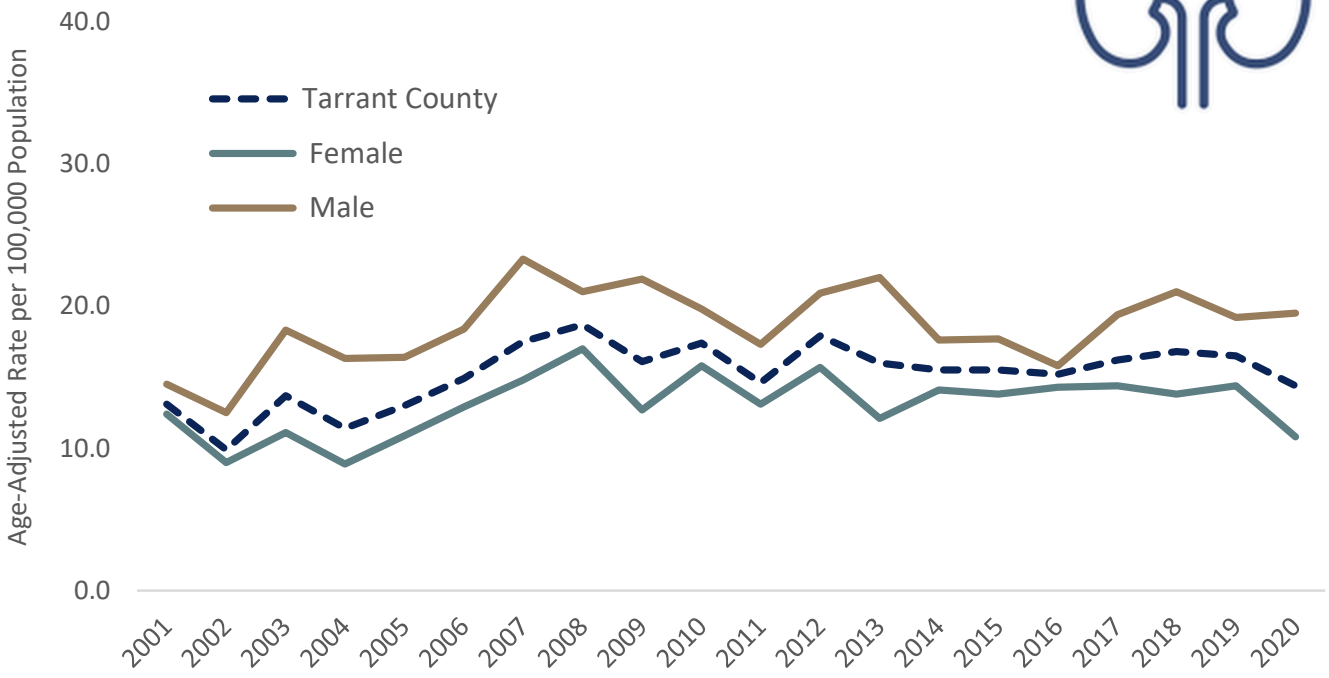
From 2001-2020 deaths due to chronic liver disease and cirrhosis ***increased significantly among males*** *and the mortality rate* ***more than doubled among non-Hispanic white residents*** *(8.1 vs. 16.3 deaths per 100,000 population)*[†]

Figure 15b. Chronic liver disease and cirrhosis mortality by race/ethnicity among Tarrant County residents, 2001-2020



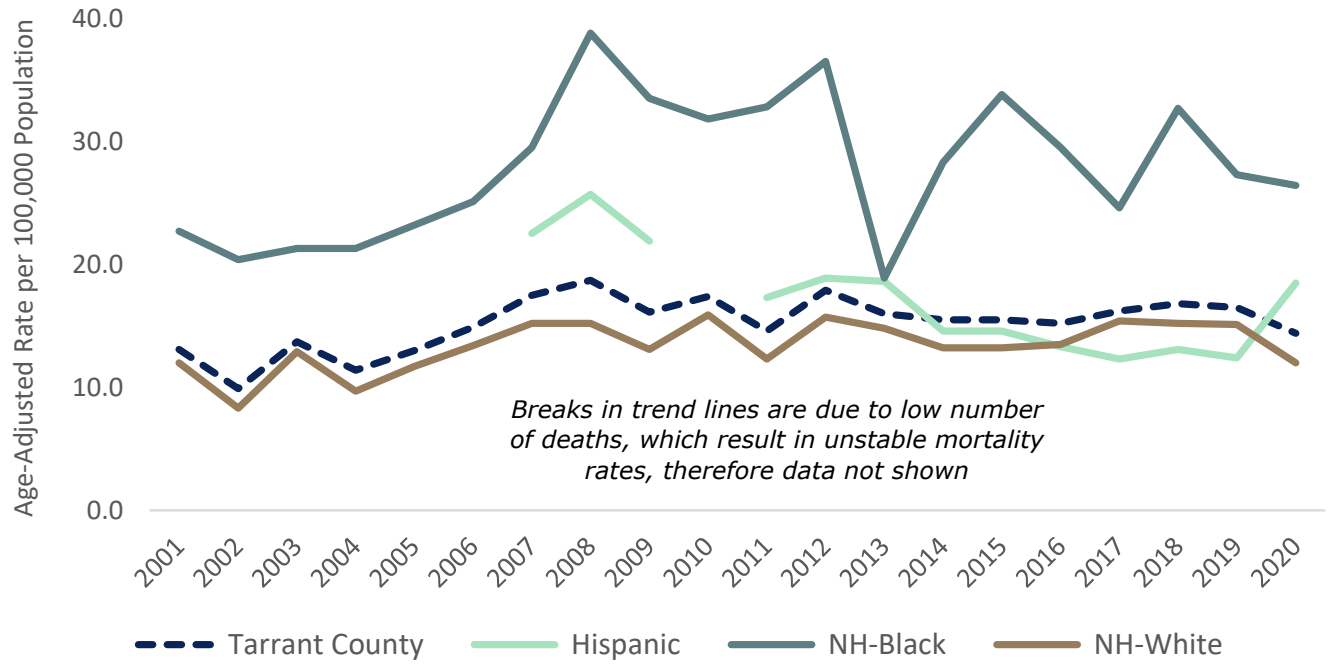
[†]*All significant differences detected at the 95% confidence level; Rates age-adjusted to 2000 U.S. standard population; NH = Non-Hispanic; Other/Multiracial trend not shown due to unstable rates*
Data source: Centers for Disease Control and Prevention
Data Brief provided by: Division of Epidemiology and Health Information

Figure 16a. Kidney disease mortality by gender among Tarrant County residents, 2001-2020



*Mortality rates for kidney disease varied over time, but **did not change significantly** overall for any demographic group between 2001 and 2020†*

Figure 16b. Kidney disease mortality by race/ethnicity among Tarrant County residents, 2001-2020



†*All significant differences detected at the 95% confidence level; Rates age-adjusted to 2000 U.S. standard population; NH = Non-Hispanic; Other/Multiracial trend not shown due to unstable rates*
Data source: Centers for Disease Control and Prevention
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