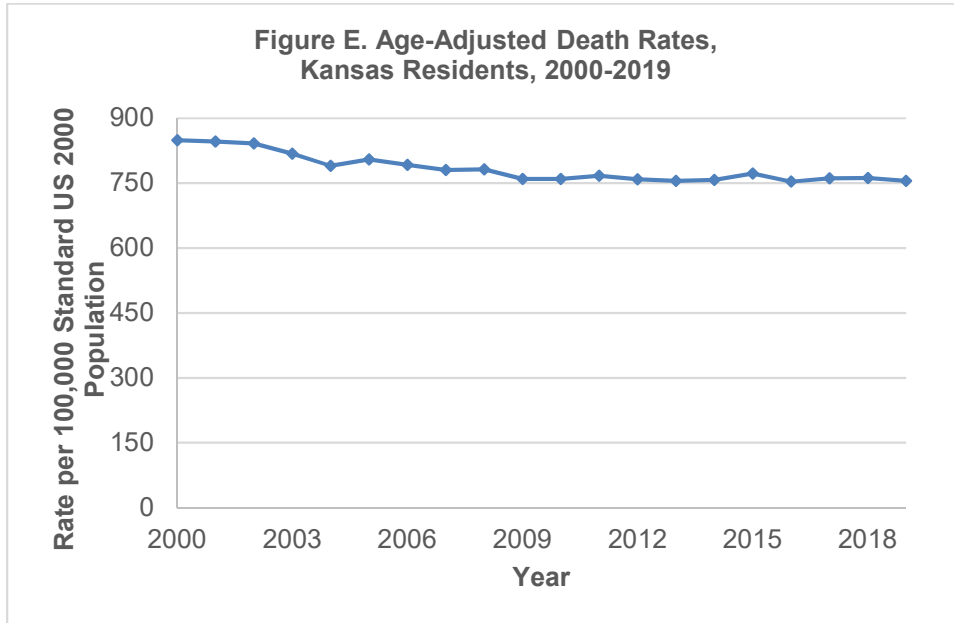


General Mortality

There were 27,312 Kansas resident deaths recorded in 2019, an increase of 0.4 percent from the 27,213 deaths recorded in 2018. The Kansas crude death rate in 2019 was 937.5 deaths per 100,000 population (Tables E1, E3, Figure E1).

The Kansas age-adjusted death rate (see Technical Notes for a discussion of age-adjusted rates) for 2019 was 755.3 deaths per 100,000 standard U.S. 2000 population, down 0.9 percent from 762.1 in 2018. The age-adjusted death rate for males (884.3) was 36.9 percent higher than that for females (645.9) (Table E3).



The Kansas age-adjusted death rate in 2019 was higher than its twenty-year low (for 2000-2019) of 753.5 in 2016, but was 11.0 percent below its peak for the period of 849.0 in 2000 (Figure E) (Figure E2, Table E3).

Age at Death

The average age at death of Kansas residents in 2019 was 74.5 years, an increase of 0.3 percent from 74.3 in 2018 (Table E4).

Average age at death varied by sex and population group. In 2019, males died 6.0 years younger than females (71.5 versus 77.5 years). The average age at death for the White non-Hispanic population was 75.8 years, 10.6 years higher than that of the Black non-Hispanic population (65.2 years), and 15.6 years higher than that of the Hispanic population (60.2 years) (Table E4).

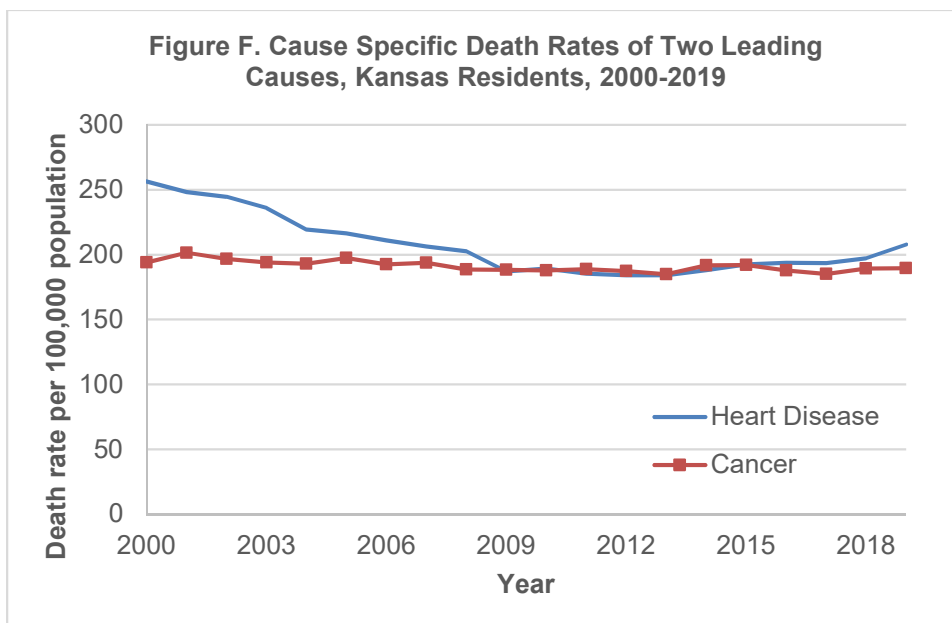
Over 60 percent (60.1) of White non-Hispanic Kansas residents who died in 2019 were 75 years of age or older, while only 35.7 percent of deceased Black non-Hispanic residents and 34.1 percent of deceased Hispanic residents had reached the age of 75 (Table E4).

Leading Causes of Death

The 10 leading causes of death in Kansas remained unchanged from 2018 to 2019, though their order changed in some cases. *Diabetes mellitus* and Alzheimer's disease changed places as 6th and 7th leading causes (*diabetes mellitus* ranked 6th in 2019). Nephritis, nephrotic syndrome and nephrosis rose from 10th to 8th leading cause, while pneumonia and influenza dropped from 8th to 10th leading cause. All other rankings remained unchanged from 2018.

The ten leading causes of death accounted for 71.4 percent of all Kansas resident deaths in 2019. Age-adjusted rate changes from 2018 to 2019 were not statistically significant for nine of the ten leading causes of death, as indicated by overlapping 95% confidence intervals. The decline in age-adjusted rates for influenza and pneumonia, from 18.4 to 13.7 deaths per 100,000 population, was statistically significant.

Historical cause-specific (crude) death rates over the past twenty years illustrate the convergence of heart disease and malignant neoplasms (cancer) mortality (Figure F). Mortality due to both diseases declined over the period 2000-2012, but heart disease death rates declined much more rapidly than cancer death rates. Since 2012, heart disease death rates have gradually increased, while cancer death rates have fluctuated. In 2019, the heart disease death rate was 207.9 deaths per 100,000 population, while the cancer death rate was 189.5 per 100,000 population (Table E8, Figure E3).



Age at Death for Leading Causes

For any given cause of death, there can be wide variations in average age of death by sex of decedent. Males and females who died from malignant neoplasms did so at about the same ages (72.3 and 72.4 years, respectively), but males who died from heart disease did so at younger ages than did females (75.6 and 81.8 years, respectively). Males dying from chronic lower respiratory disease were about the same age as females dying of that cause (76.0 and 76.9 years, respectively), but males dying of cerebrovascular disease were about four years younger than females dying of the same cause (78.1 and 82.3 years, respectively). Males who died from suicide were slightly older than females who died of that cause (44.5 and 41.8 years, respectively), but males died from unintentional injuries at much younger ages than females (54.4 and 65.6 years, respectively). Alzheimer's disease killed at the highest average ages for males and females (84.3 and 87.6 years respectively) (Table E7).

The leading causes of death also varied by age-group. In 2019, the leading cause of death for infants (up to one year of age) was congenital anomalies. For age-groups 1-4, 5-14, 15-24, and 25-44 the leading cause of death was unintentional injuries. For age-groups 45-64 and 65-84 the leading cause of death was cancer, and for ages 85 and above the leading cause of death was heart disease (Figure E4).

For the 15-24 and 25-34 age-groups, unintentional injuries were followed by suicide and homicide as leading causes of death. These three causes accounted for 69.8 percent of deaths in this age-group (Table E6).

Infectious Disease

Five hundred fourteen (514) Kansas residents died of pneumonia and influenza in 2019, for an age-adjusted death rate of 13.7 per 100,000 population (Table E9). Since 2000, the yearly count of resident pneumonia and influenza deaths has varied from a high of 740 to a low of 514. The age-adjusted pneumonia and influenza death rate in the period has varied from a high of 24.1 to a low of 13.7 deaths per 100,000 population. These numbers are not strictly comparable to the influenza and pneumonia statistics posted on the KDHE website, as they are based on a calendar year, while the latter are based on a September-May flu season. Furthermore, the rates reported on the KDHE website are crude rates, while the rates reported here are age-adjusted rates.

Twenty-two (22) Kansas residents died of HIV/AIDS in 2019, for an age-adjusted death rate of 0.7 per 100,000 population (Table E6). This surpasses the Healthy People 2020 target (HIV-12) of reducing the rate to 3.3 HIV/AIDS deaths per 100,000 population.

Cancer

Cancer was responsible for 5,520 Kansas resident deaths in 2019, for an age-adjusted death rate of 151.0 per 100,000 population (Table E8). This surpasses the Healthy People 2020 target for cancer deaths (C-1) of 160.6 per 100,000 population.

Ischemic Heart Disease

Ischemic heart disease was responsible for 3,603 Kansas resident deaths in 2019, for an age-adjusted death rate of 97.9 per 100,000 population⁴ (Table E10). This surpasses the Healthy People 2020 target for reducing coronary heart disease deaths (HDS-2, which has the same definition as used here for ischemic heart disease), to 100.8 per 100,000 population.

⁴ Age-adjusted rates for deaths due to ischemic heart disease were calculated from data presented in Table E13.

Cerebrovascular Disease

Kansas age-adjusted death rates from cerebrovascular disease decreased to 34.3 per 100,000 population in 2019, down 2.8 percent from a rate of 35.3 per 100,000 population in 2018. Since 2000, death rates due to cerebrovascular disease have declined by 35.3 percent (Table E8, Figure E3).

Healthy People 2020 uses the word “stroke” to include all the ICD-10 codes included in this report in the cerebrovascular disease category. The Healthy People 2020 target for stroke (HDS-3) is to reduce deaths to 33.8 deaths per 100,000 population. To meet this target, Kansas resident cerebrovascular disease deaths would have to decline from 1,283 in 2019 to about 1,264 by 2020 (Table E12). (The exact number would depend on decedent age distributions and on future changes to the Kansas population.)

Atherosclerosis

Note that atherosclerosis has been dropped from the list of the fifteen leading causes of death (Table E8). Atherosclerosis was diagnosed as the underlying cause of death for 345 Kansas residents in 2018, but for only 53 in 2019. Most of the state’s atherosclerosis deaths prior to 2019 were certified by (an) individual/s no longer in practice.

External Causes

In 2019, the age-adjusted unintentional injury death rate was 49.4 deaths per 100,000 population, a decrease of 4.8 percent from the rate of 51.9 in 2018. The 2019 rate was the highest unintentional injury death rate in the past twenty years (Table E8, Figure E3).

Motor-vehicle injuries resulted in 398 deaths in 2019 (377 traffic and 21 non-traffic), accounting for 25.2 percent of 1,578 unintentional injury deaths. This was a decrease of 1.5 percent from 404 motor-vehicle injury deaths in 2018 (Table E13).

The motor-vehicle traffic injury death rate in 2019 was 13.3 deaths per 100,000 population (age-adjusted).⁵ This falls short of the Healthy People 2020 target (IVP-13.1) of 12.4 deaths per 100,000 population.

Unintentional falls were responsible for 424 Kansas resident deaths in 2019 for an age-adjusted death rate of 11.4 per 100,000 population. The Healthy People 2020 target for fall related deaths (IVP-23.1) is 7.0 per 100,000 population. Meeting this target would require a reduction to about 260 unintentional fall deaths by 2020. The exact number would depend on decedent age distributions and on future changes to the Kansas population.

Kansas recorded 521 resident suicide deaths in 2019, down 6.1 percent from 555 suicide deaths in 2018. The suicide age-adjusted death rate decreased from 19.2 deaths per 100,000 population in 2018 to 18.1 deaths per 100,000 population in 2019. Although the single-year change in rate was not statistically significant, the 2019 suicide rate was one of the three highest in the last twenty years (Tables E8, E31).

Almost four-fifths (79.5%) of suicide victims were male. The three age groups with the largest number of suicides were 35-44 (106 deaths), 25-34 (104 deaths), and 15-24 (83 deaths). The three most common methods of suicide were firearms (290 deaths), suffocation (143 deaths), and poisoning (60 deaths) (Tables E14, E22).

⁵ Age-adjusted rates for deaths due to unintentional motor vehicle accidents and unintentional falls were calculated from data presented in Table E13.

Kansas recorded 136 resident homicide deaths in 2019, lower than the 159 homicide deaths in 2018, below the middle of the range (105-179) for the last twenty years (2000-2019). The homicide age-adjusted death rate decreased from 5.9 deaths per 100,000 population in 2018 to 4.8 deaths per 100,000 population in 2019. The single-year change in rate was not statistically significant, and the 2019 rate was close to the middle of the range (3.7-6.2 homicides per 100,000 population) for the 2000-2019 period. Most homicides (98, or 78.4% of homicides where the method was known) were committed using firearms (Table E8, E14, Table E31).

Drugs were the underlying cause of death for 348 Kansas residents in 2019, up from 289 in 2018 (Table E33). This is also the highest number of drug deaths in the last twenty years (2000-2019). It includes unintentional deaths and deaths of undetermined intent, but excludes suicides and homicides using drugs. The biggest change is in deaths due to psychostimulants (the category that includes methamphetamine), which rose from 74 in 2018 to 148 in 2019. Increases for counts of deaths due to specific drugs in 2019 are at least partly due to increased efforts by OVS staff, who now contact physicians to get a more specific diagnosis when the initial report was generic (as in “drug overdose” or “poly-pharmacy”).

YPLL 75 Statistics

Mortality in Kansas was responsible for 192,077 years of potential life lost before age 75 in 2019 (see Technical Notes – Years of Potential Life Lost). Cancer, unintentional injury, and heart disease accounted for the most years of potential life lost (36,473, 31,385, and 26,307 years lost, respectively). Men lost more than twice the potential years of life to unintentional injuries than did women (22,246 years and 9,139 years, respectively) (Table E20).

Tobacco and Mortality

Tobacco use contributed to 4,793 deaths in Kansas in 2019 (25.1 percent of the deaths where the tobacco contribution was known and reported on the death certificate). Tobacco use was a contributing factor in 30.5 percent of male deaths, and in 20.0 percent of female deaths. The causes of death showing the largest tobacco contribution were cancer of the trachea, bronchus and lung (86.6%), chronic lower respiratory disease (83.7%), ischemic heart disease (35.2%), and *diabetes mellitus* (28.9%). (Table E21) Physicians and coroners can state on the death certificate whether tobacco contributed to the death. Because information may not be available at the time the death certificate is completed, tobacco’s contribution may be subject to some under-reporting.

