HEALTH

IN RURAL MISSOURI

Biennial Report

2024-2025

MISSOURI DEPARTMENT OF
HEALTH &
SENIOR SERVICES

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Leading Causes of Death

The National Center for Health Statistics (NCHS) has a well-established approach to ranking different causes of death. Instead of using the age-adjusted death rate, the ranking is determined based on the actual number of deaths recorded. In the table provided, the causes of death are presented in a sequence that reflects the primary causes for individuals statewide.

Examining the data on mortality frequencies in Missouri's rural and urban areas yielded valuable observations regarding the factors contributing to the deaths of residents in these regions. The data showed that rural areas had higher death rates across almost all 10 causes compared to urban areas. The lone exception was Alzheimer's disease. Heart disease and cancer continue as the top two leading causes of death, just as they have for the last decade. Slightly less than half (42.2%) of all deaths in rural areas can be attributed to one of these two causes. This denotes a decrease compared to the 2014-2018 period, when cancer and heart disease accounted for 47.0 percent of rural deaths.

Leading Causes of Death Summary Table
Missouri, 2019-2023

Rank	Cause	Missouri Frequency	Missouri Rate	Rural Frequency	Rural Rate	Urban Frequency	Urban Rate
Rank 1	Heart Disease	77,849	195.5	31,482	218.5	46,366	182.6
Rank 2	Cancer	65,081	160.3	25,959	176.1	39,122	151.5
Rank 3	Accidents/ Unintentional Injuries	22,643	70.0	7,707	71.2	14,935	69.4
Rank 4	COVID 19	20,313	51.2	8,574	59.5	11,738	46.5
Rank 5	Chronic Lower Respiratory Diseases	18,794	45.9	9,121	60.5	9,673	37.5
Rank 6	Stroke (cerebrovascular diseases)	15,776	39.6	5,981	41.3	9,795	38.8
Rank 7	Alzheimer's Disease	13,308	33.6	4,756	32.4	8,552	34.2
Rank 8	Diabetes	9,109	23.0	4,055	28.3	5,054	20.0
Rank 9	Kidney Disease (nephritis, nephrotic syndrome and nephrosis)	8,097	20.4	3,126	21.6	4,971	19.6
Rank 10	Suicide	5,774	18.4	2,101	20.3	3,673	17.4

Source: Missouri Vital Statistics Death File
Age-adjusted rates per 100,000 population

When comparing the leading causes of death for 2014-2018 and 2019-2023 periods, the addition of COVID-19 (ranked 4th in 2019-2023) caused several disease categories to fall in the rankings.

The following pages describe rural trends for the top six leading causes of death. A section on suicide is also included due to its increase in recent years.

Accidental/Unintentional Injuries

Between 2019 and 2023, there were 7,707 accidental deaths in rural Missouri, ranking it the third leading cause of death. The most frequent types of accidental deaths during this period were:

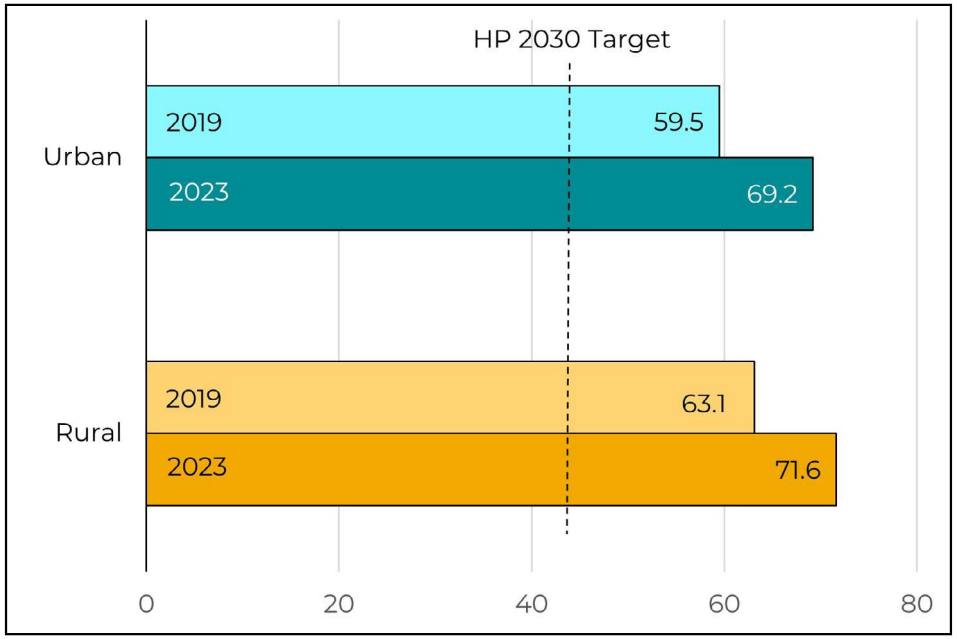
- Drug overdoses and poisonings
- Motor vehicle accidents (MVA)
- Falls
- Fires
- Drownings

Accidental/Unintentional Injury Death Rates
Missouri, 2019-2023

Rank	Rural	Urban
Frequency	7,707	14,935
Rate	71.2	69.4
Percent Chan (2019-2023)	+13.5.%	+16.4%

Source: Missouri Vital Statistics Death File
Age-adjusted rates per 100,000 population

Accidental/Unintentional Injury Death Rates
Missouri, 2019-2023

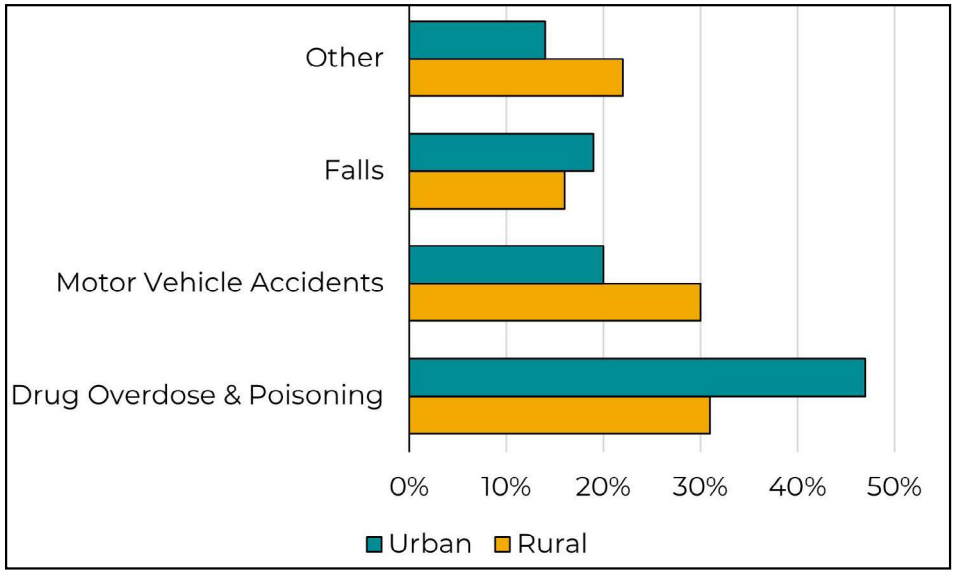


Source: Missouri Vital Statistics Death File
Age-adjusted rates per 100,000 population

Rural Missouri counties have slightly higher rates of death from accidents/unintentional injuries (71.2) compared to urban counties (69.4) over the 2019-2023 period. Other important unintentional injury statistics include:

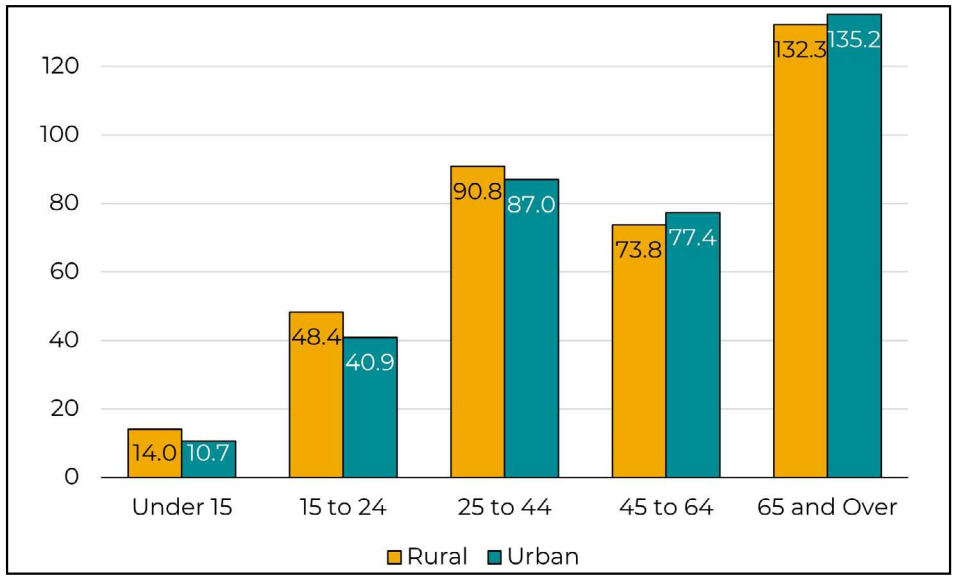
- The Healthy People 2030 goals set a target of 43.2 unintentional injury deaths per 100,000 by 2030.[xxii] Neither rural nor urban counties are on track to meet this goal. Accidental death rates were already well above the HP 2030 target in 2019 for rural and urban counties (63.1 and 59.5), and both areas experienced increases (13.5% and 16.4%, respectively) in their rate between 2019 and 2023.
- The 45-64 and 65 and older age groups were the only age groups where the rural rates were lower than the urban rates.
- Males, rural and urban, are significantly more likely to die from accidental injuries than females. Rural males (95.8) have a similar rate compared to their urban counterparts (95.9). Both were more than double the rural and urban female rates of 46.4 and 44.6, respectively.
- Drug overdose deaths (discussed in more detail in the next section) accounted for 30.8 percent of accidental deaths for rural residents compared to 46.7 percent for urban residents.
- Motor vehicle accidents made up 30.2 percent of accidental deaths for rural residents and 19.0 percent for urban residents.

Accidental/Unintentional Injury Death Rates by Cause of Death
Missouri, 2019-2023



Source: Missouri Vital Statistics Death File
Rate per 100 accidental injury deaths

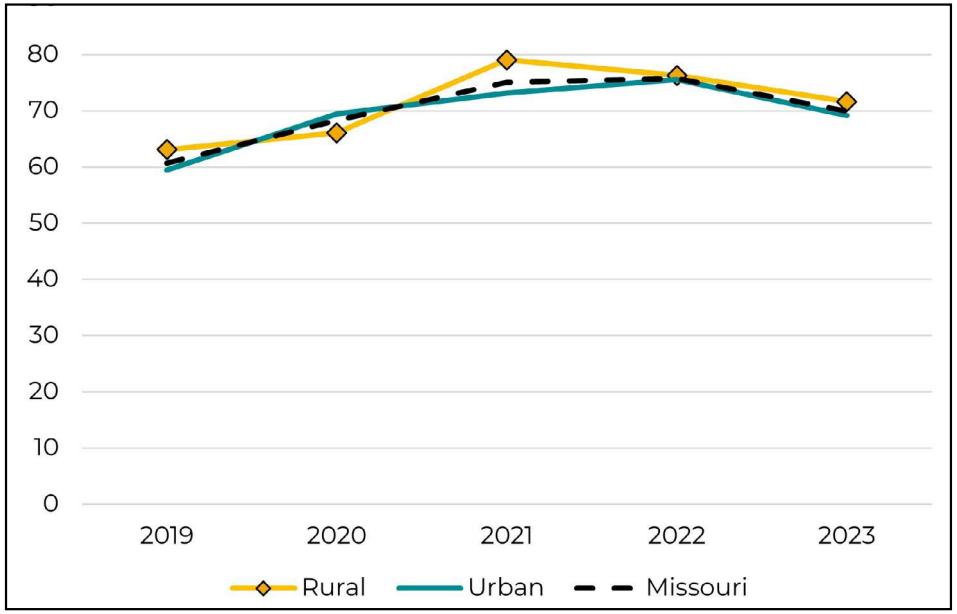
Accidental/Unintentional Injury Death Rates by Age
Missouri, 2019-2023



Source: Missouri Vital Statistics Death File
Age-adjusted rates per 100,000 population

- The difference in the rural and urban accidental death rates is decreasing. From 2014 to 2018, the rural rate was 9.6 percent higher than the urban rate (58.7 vs. 53.6). In contrast, from 2019 to 2023, the rural rate was only 2.6 percent higher than the urban rate. Drug overdose deaths in urban counties, especially with the introduction of fentanyl, are the primary reason for the gap closing.

Accidental/Unintentional Injury Death Rates by Year
Missouri, 2019-2023



Source: Missouri Vital Statistics Death File
Age-adjusted rates per 100,000 population