

Tazewell County Mortality Report

2021

This report focuses on the leading causes and rates of death among Tazewell County residents.

Megan N. Hanley, MPH
Epidemiologist



Table of Contents

Executive Summary	3
Key Findings	3
Key Terms	3
Overall Mortality	4
Summary	4
Table 1. All Causes – Count, Median Age, Crude Death Rate, & Age-Adjusted Death Rate (per 100,000) by Gender and Race, Tazewell County, Illinois, 2021	4
Mortality by Leading Causes	4
Summary	4
Table 2. Leading Cause of Death – Count (%), Overall and by Gender, Tazewell County, IL, 2021 .	5
Leading Cause of Death by Age	5
Table 3. Leading Causes of Death (% of total deaths within age category) by Age Range, Tazewell County, IL, 2021	6
Contributing Factors	6
Table 4. Contributing Factors – Count (%), Overall, Gender, Race, and Age (per 100,000) Tazewell County, IL 2021	7
Conclusion	7
Data Sources	8

Executive Summary

The 2021 Tazewell County Mortality Report intends to outline the leading causes of death among Tazewell County residents and their contributing factors. The report outlines data on the number of deaths, death rates, and trends by age, gender, race, and cause of death. This information is valuable as it informs public health policy and prevention efforts.

Key Findings

- In 2021, a total of 1,702 deaths were registered among Tazewell County residents. This is an increase of 37 deaths compared to 2020 at 1,665.
- The age adjusted death rate was 1,061.1 per 100,000 people. This is an increase of 22.9 in 2020.
- The median age at death was 78 years.
- The top 5 leading causes of death in 2021 were:
 1. Heart Disease
 2. Cancer
 3. Dementia
 4. COVID-19
 5. Respiratory Disease

Key Terms

- Crude Death Rates: Defined as the total number of deaths divided by the midyear population within a specific geographic area (i.e., county, zip code). Crude death rates are calculated in this report for specific age ranges; these are called age-specific death rates because they are a ratio of the number of deaths in each age group to the population of that age group.
- Age Adjusted death rates: These rates are based on population estimates and are standardized to remove any bias that could appear when comparing populations with varying age structures.
- Years of Potential Life Lost: Total years of life lost prior to age 75. Years of potential life lost (YPLL) measures premature mortality in a population. In other words, the higher the YPLL, the more people there are in the population who are dying prematurely (which is estimated to be before age 75).

Overall Mortality

Summary

In 2021, the Illinois Vital Records System indicated a total of 1,702 deaths among Tazewell County residents. The crude death rate for 2021 was 1,284.6 deaths per 100,000 people with an age-adjusted death rate of 1,061.1 per 100,000 people. Of the total deaths, 51.6% were male; females accounted for 48.4% of all deaths (Table 1). The total years of potential life lost (YPLL) was 10,690. This is an increase of 1,219 years compared to 2020. The increase in YPLL from 2020 to 2021 illustrates the impact of SARS-CoV-2 on the mortality of Tazewell County residents.

The overall median age at death was 78 years, meaning half of Tazewell County deaths in 2021 were greater than or equal to 78 years of age. The median age at death for women is 82 years compared to 74 years among their male counterparts (Table 1). In other words, women who are residents of Tazewell County are more likely to live longer than their male counterparts. Additionally, whites have a higher cumulative median age at death of 78 compared to 60.5 years among their Black counterparts (Table 1). The median age at death of 64 for Asian, native American, or multi-racial backgrounds; this suggests that individuals of non-white racial or ethnic backgrounds have a lower life expectancy than their white counterparts. White individuals accounted for 98.2% of all deaths in 2021, while Blacks/African American individuals accounted for 1.1% of deaths, and individuals of Asian, native American, or Multi-racial backgrounds made up 0.24% of total deaths.

Table 1. All Causes – Count, Median Age, Crude Death Rate, & Age-Adjusted Death Rate (per 100,000) by Gender and Race, Tazewell County, Illinois, 2021.

	Count	Median Age	Crude Death Rate
Overall Population	1,702	78	1,284.6
Male	878	74	1,358.0
Female	828	82	1,214.6
White	1671	78	1,378.4
Black/African American	18	60.5	1,021.6
Asian, Native American, or Multi-Racial	4	64	42.1

Mortality by Leading Causes

Summary

The leading causes of death by count among Tazewell County residents in 2021 were heart disease, cancer, COVID-19, respiratory disease, and dementia (Table 2). Specific leading causes of death by age range are provided in Table 3.

The causes of death outlined in Tables 2 and 3 are grouped based on ICD-10 codes. Heart disease includes conditions such as myocardial infarction (heart attack), coronary artery disease, peripheral vascular disease, congestive heart failure, stroke, and cardiac arrhythmias. Dementia includes dementia of all types including Alzheimer's Disease, Lewy Body Dementia, and Parkinson's Disease. The grouping of respiratory disease includes chronic lower respiratory conditions such as chronic obstructive pulmonary

disease (COPD), emphysema, and acute conditions such as respiratory failure and pneumonia. Additionally, the grouping of accident/injury includes deaths relating to substance use, motor vehicle accidents, and deaths directly related to trauma (i.e. falls, drownings, etc.)

Table 2. Leading Cause of Death – Count (%), Overall and by Gender, Tazewell County, IL, 2021

Leading Cause	Overall	Gender	
		Male	Female
All Deaths	1,702	878	824
Heart Disease	474 (27.8%)	256	218
Cancer	287 (16.9%)	156	131
Dementia	179 (10.5%)	63	116
COVID-19	169 (9.69%)	102	63
Lung Disease	139 (8.2%)	71	68
Accident/Injury	112 (6.6%)	70	42
Gastrointestinal Disease	60 (3.5%)	36	24
Renal Failure	52 (2.1%)	17	35

Leading Cause of Death by Age

When stratified by age, the leading causes of death differ. The top three leading causes of death among Tazewell County residents between the ages of 15-34 in 2021 are motor vehicle accident, substance use related, and suicide. Over half of deaths (55.6%) among ages 15-24 were related to a motor vehicle accident.

The leading cause of death among individuals ages 25-34 was substance use related (40%); this definition includes all substances including alcohol, prescription medications, opioids, illicit drugs, etc. Additionally, about a quarter (24%) of deaths among individuals ages 25-34 were deaths by suicide. This illustrates the continued need for mental health care and suicide prevention efforts in Tazewell County.

Table 3. Leading Causes of Death (% of total deaths within age category) by Age Range, Tazewell County, IL, 2021

RANK	Age Range							
	0-14	15-24	25-34	35-44	45-54	55-64	65-74	75+
1	Congenital Abnormalities (50)	Motor Vehicle Accident (55.6)	Substance Use Related (40)	Substance Use Related (26.3)	Cancer (20.6)	Heart Disease (26.8)	Cancer (24.7)	Heart Disease (31.8)
2	Accidents (33.3)	Suicide (11.1)	Suicide (24)	Heart Disease (18.4)	Heart Disease (20.6)	Cancer (22.9)	Heart Disease (24.3)	Dementia (15.0)
3	Cancer (16.7)	Substance Use Related (11.1)	Motor Vehicle Accident (8.0)	Cancer (10.5)	COVID-19 (14.4)	COVID-19 (12.2)	COVID-19 (12.8)	Cancer (13.1)
4				COVID-19 (7.9)	Substance Use Related (7.2)	Gastrointestinal Disease (8.8)	Lung Disease (12.8)	Lung Disease (9.0)
5				Suicide (7.9)	Dementia (4.1)	Lung Disease (6.8)	Dementia (5.7)	Diabetes (4.5)
6						Substance Use Related (4.4)		

Contributing Factors

Contributing factors are conditions that may directly increase the risk for death and are obtained from individual death certificates. Table 4 provides information on 6 different factors that contributed to deaths of Tazewell County residents in 2021. The column labeled COPD consists of cases where COPD was not the primary cause of death, but played a role, because those cases would not have been included in the deaths due to respiratory disease.

Hypertension, also known as high blood pressure, and hyperlipidemia, also known as high cholesterol, are known risk factors for heart disease and cancer. These are the most prevalent contributing factors and are mostly found in individuals over the age of 45. Like 2020's mortality report, this correlates with the increase in heart disease and cancer-related deaths in older age groups. From a public health perspective, this data highlights the importance of preventing the development of high blood pressure and high cholesterol, as well as managing the conditions with medication and lifestyle changes as necessary.

Table 4. Contributing Factors – Count (%), Overall, Gender, Race, and Age (per 100,000)
Tazewell County, IL 2021

	Hypertension	Hyperlipidemia	Diabetes	Alcohol	COPD	Obesity
Overall	255	87	28	0	95	11
Percentage of total deaths	15.0%	5.1%	1.6%	0	5.6%	0.06%
Male	144	52	16	0	54	5
Female	111	35	12	0	41	6
Age Group						
0-14	0	0	0	0	0	0
15-24	0	0	0	0	0	0
25-34	0	0	0	0	0	0
35-44	1	0	0	0	0	0
45-54	6	3	3	0	2	2
55-64	27	14	3	0	19	3
65-74	68	16	6	0	28	3
75 and older	153	55	16	0	46	3

Conclusion

This concludes the 2021 Tazewell County Mortality Report. This report is meant to inform the community regarding the leading causes of death and contributing factors; however, TCHD hopes that it might also motivate readers to further evaluate the health conditions that are impacting the community and any inequalities that may be contributing to unnecessary mortality. Research shows that social determinants of health such as economic resources, occupation, education, and racial/ethnic groups prove to be accurate predictors of health status and longevity. Inequities in these social and economic factors can contribute to long-term stress, difficulty in accessing the health care systems and consequently reduce health and cause premature mortality. Any disadvantages should be a priority for action to reduce unnecessary mortality and improve the overall well-being of our community.

Any questions or requests for additional information may be sent to:

Megan N. Hanley, MPH
Epidemiologist, Tazewell County Health Department
213036 Illinois Route 9, Tremont, IL 61568
mhanley@tchd.net

Data Sources

Tazewell County Mortality Data:

This report represents information on the causes of death among Tazewell County residents as compiled by the Illinois Department of Public Health Vital Records Division. Classification and coding of the causes of death utilize the International Classification of Diseases Version 10 (ICD-10).

Population Data:

Crude death rates were calculated using population estimates from the U.S. Census Bureau's 2020-2025 American Community 5-Year estimates. Information includes estimates on total population, gender, race, and age groups for Tazewell County, Illinois, United States and specific zip codes. Age adjusted rates were calculated using the year 2000 standard.

Limitations:

Raw death data analyzed for the purpose of this report is based on information from a decedent's death certificate. The death certificate is compiled by the coroner and the funeral directors based on information provided by physicians. The information included on the death certificate is dependent on known medical conditions, history of illness, risk factors, and professional discretion.