

# Tazewell County Mortality Report

# 2020

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

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## Executive Summary

The 2020 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 2020, a total of 1,665 deaths were registered among Tazewell County residents.
- The age adjusted death rate was 1,038.2 per 100,000 people.
- The median age at death was 78 years.
- The top 5 leading causes of death in 2020 were:
  1. Heart Disease
  2. Cancer
  3. Respiratory Disease
  4. Dementia
  5. COVID-19

### 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 2020, the Illinois Vital Records System indicated a total of 1,665 deaths among Tazewell County residents. The crude death rate for 2020 was 1,256.7 deaths per 100,000 people with an age-adjusted death rate of 1,038.2 per 100,000 people. Of the total deaths, 50.6% were male with a crude death rate of 1,305.4 per 100,000. Females accounted for 49.3% of all deaths with a crude death rate of 1,210.2 per 100,000 (Table 1). The total years of potential life lost (YPLL) was 9,471.

The overall median age at death was 79 years, meaning half of Tazewell County deaths in 2020 were greater than or equal to 79 years of age. The median age at death for women is 82 compared to 77 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 79 compared to 54 years among their Black counterparts (Table 1). The median age at death of 73 for Asian, native American, or multi-racial backgrounds, which are combined to “Other Race;” this suggests that individuals of non-white racial or ethnic backgrounds have a lower life expectancy than their white counterparts. White individuals accounted for 98.9% of all deaths in 2020, while Blacks/African American individuals accounted for 0.66% of deaths, and individuals identifying of other racial backgrounds made up 0.66% of total deaths.

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

	Count	Median Age	Crude Death Rate
<b>Overall Population</b>	1,665	79	1256.7
Male	844	77	1305.4
Female	821	82	1210.2
<b>White</b>	1647	79	1293.3
Male	835	77	1348.6
Female	812	82	1240.8
<b>Black/African American</b>	11	54	35.35
<b>Other Races</b>	11	73	121.27

## Mortality by Leading Causes

### Summary

The leading causes of death by count among Tazewell County residents in 2020 were heart disease, cancer, respiratory disease, dementia, COVID-19, gastrointestinal disease, and renal failure (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 lung 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, 2020

Leading Cause	Overall	Gender	
		Male	Female
All Deaths	1665	844	821
Heart Disease	465 (27.9%)	249	216
Cancer	293 (17.6%)	162	131
Lung Disease	181 (10.9%)	79	102
Dementia	173 (10.4%)	73	100
COVID-19	109 (6.5%)	66	43
Accident/Injury	79 (4.7%)	50	29
Gastrointestinal Disease	61 (3.7%)	24	37
Renal Failure	42 (2.5%)	18	24

### Leading Cause of Death by Age

When stratified by age, the leading causes of death differ. Suicide and substance use remain leading causes of death for individuals ages 15-34.

The leading cause of death among individuals ages 25-34 was substance use related (50%); this definition includes all substances including alcohol, prescription medications, opioids, illicit drugs, etc. Chronic diseases such as heart disease, lung disease, and neurological diseases like dementia and Parkinson's Disease remain in the leading causes of death for individuals 45 years and older. Further, cancer is also the leading cause of death for individuals ages 45-74 years.

Table 3. Leading Causes of Death (% of total deaths within age category) by Age Range, Tazewell County, IL, 2020

RANK	Age Range							
	0-14	15-24	25-34	35-44	45-54	55-64	65-74	75+
<b>1</b>	Congenital Abnormalities (71.4)	Suicide (25)	Substance Use Related (50)	Substance Use Related (25)	Cancer (22)	Cancer (28.3)	Cancer (29)	Heart Disease (31.5)
<b>2</b>	Accidents (28.6)	Substance Use Related (25)	Heart Disease (16.7)	Cancer (19.4)	Heart Disease (22)	Heart Disease (22.4)	Heart Disease (24.7)	Dementia (14.0)
<b>3</b>		Natural Causes (25)	Suicide (11.1)	Heart Disease (11.1)	Gastrointestinal Disease (13)	Lung Disease (13.2)	Lung Disease (12.8)	Cancer (11.9)
<b>4</b>		Motor Vehicle Accident (12.5)	Motor Vehicle Accident (11.1)	Suicide (8.3)	Motor Vehicle Accident (9.6)	Gastrointestinal Disease (8.3)	COVID-19 (7)	Lung Disease (11)
<b>5</b>		Cancer (12.5)	Cancer (11.1)	Homicide (8.3)	Dementia (7.4)	COVID-19 (5.4)	Dementia (4.0)	COVID-19 (7.5)
<b>6</b>				Lung Disease (8.3)		Dementia (4.9)		

### 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 2020. 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 two contributing factors are more prevalent in individuals above age 45. This corresponds with the increase in heart disease and cancer-related deaths in older age groups. Thus, the elevation of these hypertension and hyperlipidemia in individuals over age 45 contributes to the increased heart disease and cancer related mortality as Tazewell County residents age.

Table 4. Contributing Factors – Count (%), Overall, Gender, and Age Tazewell County, IL 2020

	<b>Hypertension</b>	<b>Hyperlipidemia</b>	<b>Diabetes</b>	<b>Alcohol</b>	<b>COPD</b>	<b>Obesity</b>
<b>Overall</b>	213	82	22	0	81	16
Percentage of total deaths	(12.8)	(4.9)	(1.3)	(0.0)	(4.9)	(0.96)
Male	126	47	13	0	38	8
Female	87	35	9	0	43	8
<b>Age Group</b>						
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	2	1	0	0	0	2
45-54	8	3	0	0	1	1
55-64	28	14	3	0	17	7
65-74	44	24	4	0	20	3
75 and older	131	40	15	0	43	3

## Conclusion

This concludes the 2020 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:

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## 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.