

# **2021 Minnesota Health Statistics**

ANNUAL SUMMARY

11/17/2023

## **2021 MN Health Statistics Annual Summary**

Minnesota Department of Health  
Minnesota Center for Health Statistics  
PO Box 64882  
St. Paul, MN 55164-64882  
[healthstats@state.mn.us](mailto:healthstats@state.mn.us)  
[www.health.state.mn.us/divs/mchs](http://www.health.state.mn.us/divs/mchs)

*To obtain this information in a different format, email [healthstats@state.mn.us](mailto:healthstats@state.mn.us).*

# Contents

|                                                                                                                                                                    |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Overview.....                                                                                                                                                      | 1  |
| 1. Table 1. Percent change between 2020 AND 2021, Selected Minnesota Health Statistics for Minnesota Residents.....                                                | 2  |
| 2. Table 2. Percent change between 2020 AND 2021, Selected Demographic and Socioeconomic Characteristics for Minnesota Residents.....                              | 3  |
| 3. Table 3. State Population by Race/Ethnicity and Age Groups, Minnesota, 2021.....                                                                                | 4  |
| 4. Table 4. State Population by Race/Ethnicity, Age Groups, and Sex, Minnesota 2021.....                                                                           | 5  |
| 5. Table 5. Births, Birth Rates, and Fertility Rates, Minnesota and U.S., 1945, 1950, 1955, 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995, 2000, 2005 - 2021..... | 6  |
| 6. Table 6. Resident Deaths, Infant and Neonatal Deaths Minnesota and United States, 1955, 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995, 2000, 2005 - 2021.....  | 7  |
| 7. Table 7. Summary of Selected Vital Statistics by Race and Hispanic Ethnicity, Minnesota Residents, 2021.....                                                    | 8  |
| 8. Table 8. Summary of Selected Vital Statistics by Urban/Rural Residence, Minnesota Residents, 2021.....                                                          | 9  |
| Natality.....                                                                                                                                                      | 11 |
| 1. Table 1. Resident Live Births Distributed by County of Occurrence; Live Births by County of Occurrence Distributed by Residence, Minnesota 2021.....            | 12 |
| 2. Table 2. Demographic Characteristics of Women who Gave Birth by Race/ Ethnicity, Minnesota Residents, 2021.....                                                 | 14 |
| 3. Table 3. Counts and Percentages of Pregnancy Characteristics by Race/Ethnicity, Minnesota Residents, 2021.....                                                  | 15 |
| 4. Table 4. Counts and Percentages of Delivery Characteristics and Birth Outcomes by Race/Ethnicity, Minnesota Residents, 2021.....                                | 16 |
| 5. Table 5. Counts and Percentages of Selected Pregnancy Characteristics by Urban/Rural Residence, Minnesota Residents, 2021.....                                  | 17 |
| 6. Table 6. Counts and Percentages of Delivery Characteristics and Birth Outcomes by Urban/Rural Residence, Minnesota Residents, 2021.....                         | 18 |
| 7. Table 7. Route of Delivery by Characteristics of Women Giving Birth, Minnesota Residents, 2021.....                                                             | 19 |
| 8. Table 8. Selected Outcomes by Demographic Characteristics of Women Giving Birth, Minnesota Residents, 2021.....                                                 | 20 |
| 9. Table 9. Number of Race and Hispanic Checkboxes Selected by Minnesota Resident Women Who Gave Birth in 2021.....                                                | 21 |
| 10. Table 10. Live Births by Birth Country of Women Giving Birth, Minnesota Residents, 2021.....                                                                   | 22 |
| 11. Table 11. Selected Characteristics and Outcomes for Women Who Smoked Before and During Pregnancy, Minnesota Residents, 2021.....                               | 23 |

# 2021 MINNESOTA HEALTH STATISTICS ANNUAL SUMMARY

|                                                                                                                                                        |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 12. Table 12. Pregnancies Resulting from Infertility Treatments, Minnesota Residents, 2021.....                                                        | 24 |
| Fertility.....                                                                                                                                         | 25 |
| 1. Table 1. Total Reported Pregnancies by Pregnancy Outcome, Pregnancy Rate, and Fertility Rate, Minnesota Residents, 2006 - 2021.....                 | 26 |
| 2. Table 2. Pregnancy Outcomes and Rates by Age of Woman, Minnesota Residents, 2010 - 2021.....                                                        | 27 |
| Mortality .....                                                                                                                                        | 29 |
| 1. Table 1. Resident Deaths Distributed by County of Occurrence; Deaths by County of Occurrence Distributed by Place of Residence, Minnesota 2021..... | 30 |
| 2. Table 2. Deaths from Selected Causes by Age Group and Sex Minnesota Residents, 2021.....                                                            | 32 |
| 3. Table 3. MN Ten Leading Causes of Death, Death Rates, Percent of Total Deaths, and Rank Order, Minnesota Residents and U.S., 2021.....              | 48 |
| 4. Table 4. Leading Cause of Death by Age Group, Minnesota Residents, 2021.....                                                                        | 49 |
| 5. Table 5a. Deaths Due to Selected Causes of Death by Race/Ethnicity, Minnesota Residents, 2021.....                                                  | 50 |
| 6. Table 5b. Crude Death Rates for Selected Causes by Race/Ethnicity, Minnesota Residents, 2021.....                                                   | 51 |
| 7. Table 6a. Deaths Due to Selected Causes by Rural/Urban Residence, Minnesota Residents, 2021.....                                                    | 52 |
| 8. Table 6b. Crude Death Rates for Selected Causes by Rural/Urban Residence, Minnesota Residents, 2021.....                                            | 53 |
| Appendices.....                                                                                                                                        | 55 |
| Appendix A -- Technical Notes.....                                                                                                                     | 56 |
| Sources of Data .....                                                                                                                                  | 56 |
| Rates .....                                                                                                                                            | 56 |
| Data Supression .....                                                                                                                                  | 58 |
| Race/Hispanic Ethnicity Data Collection and Reporting .....                                                                                            | 59 |
| Geographic Allocation .....                                                                                                                            | 59 |
| Rural/Urban Classification .....                                                                                                                       | 59 |
| Appendix B -- Definitions.....                                                                                                                         | 61 |

## Overview Tables

---

Table 1. Selected Vital Statistics for Minnesota Residents, 2020 and 2021

Table 2. Sociodemographic Characteristics of Minnesota Residents, 2020 and 2021

Table 3. State Population by Race/Ethnicity and Age Group, MN Residents, 2021

Table 4. State Population by Race/Ethnicity, Age Group, and Sex, MN Residents, 2021

Table 5. Births, Birth Rates, and Fertility Rates, Minnesota and U.S., 1945 - 2021

Table 6. Deaths and Death Rates, Minnesota and U.S., 1955 - 2021

Table 7. Selected Vital Statistics by Race/Ethnicity, Minnesota Residents, 2021

Table 8. Selected Vital Statistics by Urban/Rural Residence, Minnesota Residents, 2021

**Table 1. Percent change between 2020 and 2021 selected Minnesota Health Statistics for Minnesota residents.**

| Category                                                    | 2020      | 2021      | Percent Change |
|-------------------------------------------------------------|-----------|-----------|----------------|
| Total Population                                            | 5,657,342 | 5,707,390 | 0.9%           |
| Population of Females 15-44                                 | 1,087,455 | 1,100,012 | 1.2%           |
| Total Pregnancies to MN Residents                           | 72,039    | 73,898    | 2.6%           |
| Live Births to MN Residents                                 | 63,462    | 64,449    | 1.6%           |
| Birth Rate (births per 1,000 total MN population)           | 11.2      | 11.3      | 0.7%           |
| Pregnancy Rate (pregnancies per 1,000 females ages 15-44)   | 66.2      | 67.2      | 1.4%           |
| Fertility Rate (births per 1,000 Females Ages 15-44)        | 58.4      | 58.6      | 0.4%           |
| Births to Unmarried Mothers (%)                             | 32.7%     | 31.8%     | -2.7%          |
| Low birthweight (Less than 2,500 grams)                     | 6.7%      | 7.3%      | 8.6%           |
| Preterm (Less than 37 weeks gestation) <sup>1</sup>         | 9.1%      | 9.6%      | 5.5%           |
| Fetal Deaths <sup>2</sup>                                   | 326       | 322       | -1.2%          |
| Infant Deaths (Infants aged < 1 year)                       | 264       | 310       | 17.4%          |
| Neonatal Deaths (Infants aged < 28 days)                    | 185       | 212       | 14.6%          |
| Postneonatal Deaths (Infants aged 28 days to < 1 year)      | 79        | 98        | 24.1%          |
| Fetal Mortality Rate (per 1,000 live births + Fetal Deaths) | 5.1       | 5.0       | -2.7%          |
| Infant Mortality Rate (per 1,000 live births)               | 4.2       | 4.8       | 15.6%          |
| Neonatal Mortality Rate (per 1,000 live births)             | 2.9       | 3.3       | 12.8%          |
| Postneonatal Mortality Rate (per 1,000 live births)         | 1.2       | 1.5       | 22.2%          |
| All Deaths                                                  | 52,372    | 51,647    | -1.4%          |
| Death Rate (per 1,000 Total MN Population)                  | 9.3       | 9.0       | -2.2%          |
| COVID-19 Deaths                                             | 5,215     | 4,439     | -14.9%         |
| COVID-19 Crude Rate (per 1,000 Total MN Population)         | 0.9       | 0.8       | -11.1%         |
| COVID-19 Crude Rate (per 100,000 Total MN Population)       | 92.2      | 77.8      | -15.6%         |
| Cancer Deaths (Malignant Neoplasms)                         | 9,941     | 10,178    | 2.4%           |
| Heart Disease Deaths                                        | 8,563     | 8,570     | 0.1%           |
| Unintentional Injury Deaths                                 | 3,321     | 3,752     | 13.0%          |
| Stroke Deaths (Cerebrovascular Diseases)                    | 2,316     | 2,384     | 2.9%           |
| Alzheimer's Disease Deaths                                  | 2,587     | 2,251     | -13.0%         |
| Chronic Lower Respiratory Disease Deaths                    | 2,211     | 2,066     | -6.6%          |
| Diabetes Deaths                                             | 1,493     | 1,575     | 5.5%           |
| Suicide Deaths (Intentional Self-harm)                      | 757       | 809       | 6.9%           |

<sup>1</sup> Based on Clinical Estimate of Gestation, all live births.

<sup>2</sup> Fetal deaths of less than 20 weeks gestation are not included in the counts.

**Table 2. Selected Demographic and Socioeconomic Characteristics of Minnesota Residents, Changes from 2020 to 2021**

| Category                                                                                                | 2020        | 2021        | Percent Change |
|---------------------------------------------------------------------------------------------------------|-------------|-------------|----------------|
| Total Population                                                                                        | 5,657,342   | 5,707,390   | 0.9%           |
| <b>Age groups</b>                                                                                       |             |             |                |
| Population < 5 years                                                                                    | 345,991     | 337,504     | -2.5%          |
| Population 0-19 years                                                                                   | 1,441,077   | 1,461,405   | 1.4%           |
| Population >= 65 years                                                                                  | 948,841     | 955,683     | 0.7%           |
| <b>Race/ethnicity<sup>1</sup></b>                                                                       |             |             |                |
| White, non-Hispanic                                                                                     | 4,513,407   | 4,458,035   | NA             |
| African American, non-Hispanic                                                                          | 438,264     | 409,602     | NA             |
| American Indian, non-Hispanic                                                                           | 68,257      | 60,687      | NA             |
| Asian/Pacific Islander, non-Hispanic                                                                    | 315,728     | 305,845     | NA             |
| Multiracial                                                                                             | NA          | 139,747     | NA             |
| Hispanic/Latino (any race)                                                                              | 321,686     | 333,474     | NA             |
| <b>Socioeconomic characteristics<sup>2</sup></b>                                                        |             |             |                |
| Adults 25 years with HS diploma/GED or less                                                             | 30.5%       | 29.1%       | NA             |
| Total population living in poverty                                                                      | 8.3%        | 9.3%        | NA             |
| Kids < 18 living in poverty                                                                             | 15.7%       | 10.8%       | NA             |
| Kids < 18 living in single-parent headed households                                                     | 28.7%       | 25.9%       | NA             |
| Unemployed (annual average)                                                                             | 5.4%        | 4.9%        | NA             |
| Median household income                                                                                 | \$75,523.00 | \$77,720.00 | NA             |
| Owner occupied houses                                                                                   | 78.8%       | 73.0%       | NA             |
| <b>Rural/urban residence<sup>3</sup></b>                                                                |             |             |                |
| Large urban metropolitan area<br>(population >= 1,000,000 and<br>largest city >= 250,000 population)    | 1,816,311   | 1,810,673   | -0.3%          |
| Large suburban metropolitan area<br>(population >= 1,000,000 & largest city < 250,000)                  | 1,721,343   | 1,757,125   | 2.1%           |
| Medium metropolitan area<br>(county with population 250,000-999,999)                                    | 234,307     | 235,591     | 0.5%           |
| Small metropolitan area<br>(county with population < 250,000)                                           | 643,003     | 646,278     | 0.5%           |
| Micropolitan area<br>(county population 10,000-49,999 and<br>urban area with at least 2,500 population) | 667,598     | 676,627     | 1.4%           |
| Non-core (Rural) area<br>(county with population < 49,999 and<br>no urban area with > 2,500 population) | 574,780     | 581,096     | 1.1%           |

<sup>1</sup> Annual Estimates are single-race Vintage 2021 postcensal estimates of the July 1 resident population. These estimates were prepared by the Census Bureau in collaboration with NCHS. Single race estimates created for six single race categories (including multiracial) or Hispanic categories based on the 1997 OMB standards. There are no population estimates for other/unknown. For more information or access to the data, see: <https://wonder.cdc.gov/wonder/help/single-race.html>

<sup>2</sup> Data for 2020 from the 2020 American Community Survey (ACS), 1-year experimental data tables created due to the COVID19 pandemic disruption. Data from 2020 should not be compared to other 1-year ACS estimates.

<sup>3</sup> Classification is based on the National Center for Health Statistics (NCHS) Urban-Rural Classification Scheme for Counties. See [https://www.cdc.gov/nchs/data\\_access/urban\\_rural.htm](https://www.cdc.gov/nchs/data_access/urban_rural.htm) for more detail.

**Table 3. State Population by Race/Ethnicity and Age Group, MN Residents, 2021**

|                      | Non-Hispanic |         |                 |                        |             | Hispanic |
|----------------------|--------------|---------|-----------------|------------------------|-------------|----------|
|                      | White        | Black   | American Indian | Asian/Pacific Islander | Multiracial |          |
| <b>&lt; 1 year</b>   | 41,549       | 6,551   | 849             | 4,060                  | 3,746       | 6,142    |
| <b>1 - 4 years</b>   | 181,108      | 30,425  | 3,668           | 18,579                 | 15,382      | 25,445   |
| <b>5 - 9 years</b>   | 242,130      | 41,391  | 5,279           | 25,428                 | 19,380      | 32,944   |
| <b>10 - 14 years</b> | 256,494      | 39,482  | 5,439           | 24,062                 | 20,463      | 36,523   |
| <b>15 - 19 years</b> | 261,018      | 34,678  | 5,192           | 22,551                 | 17,476      | 33,971   |
| <b>20 - 24 years</b> | 254,053      | 30,161  | 4,626           | 22,997                 | 13,334      | 28,520   |
| <b>25 - 29 years</b> | 264,785      | 32,259  | 4,587           | 27,656                 | 11,333      | 26,609   |
| <b>30 - 34 years</b> | 276,377      | 35,342  | 4,615           | 31,625                 | 8,588       | 24,541   |
| <b>35 - 39 years</b> | 300,606      | 33,701  | 4,193           | 28,463                 | 6,829       | 24,488   |
| <b>40 - 44 years</b> | 286,571      | 27,271  | 3,545           | 22,227                 | 5,503       | 23,761   |
| <b>45 - 49 years</b> | 250,081      | 22,852  | 3,028           | 19,615                 | 4,036       | 19,852   |
| <b>50 - 54 years</b> | 287,160      | 20,264  | 3,322           | 15,511                 | 3,490       | 15,810   |
| <b>55 - 59 years</b> | 327,252      | 17,365  | 3,222           | 12,571                 | 2,860       | 11,925   |
| <b>60 - 64 years</b> | 342,246      | 14,296  | 3,147           | 9,762                  | 2,609       | 8,860    |
| <b>65 - 69 years</b> | 294,627      | 9,667   | 2,314           | 7,581                  | 1,836       | 5,602    |
| <b>70 - 74 years</b> | 236,900      | 6,358   | 1,702           | 5,614                  | 1,331       | 3,655    |
| <b>75 - 79 years</b> | 150,747      | 3,618   | 949             | 3,291                  | 716         | 2,116    |
| <b>80 - 84 years</b> | 100,455      | 2,169   | 562             | 2,171                  | 437         | 1,362    |
| <b>85+ years</b>     | 103,876      | 1,752   | 448             | 2,081                  | 398         | 1,348    |
| <b>TOTAL</b>         | 4,458,035    | 409,602 | 60,687          | 305,845                | 139,747     | 333,474  |

**NOTES:** Annual Estimates are single-race Vintage 2021 postcensal estimates of the July 1 resident population. These estimates were developed by the Census Bureau in collaboration with NCHS. Single race estimates created for six single race categories (including multiracial categories based on the 1997 OMB standards. There are no population estimates for other/unknown. For more information or a data, see: <https://wonder.cdc.gov/wonder/help/single-race.html>

Estimates by sex are on Table 4.

**Table 4. State Population by Race/Ethnicity, Age Group, and Sex, MN Residents, 2021.**

| <u>Females</u> | <u>Non-Hispanic</u> |                |                            |                                   |                    |                 | <u>TOTAL</u>     |
|----------------|---------------------|----------------|----------------------------|-----------------------------------|--------------------|-----------------|------------------|
|                | <u>White</u>        | <u>Black</u>   | <u>American<br/>Indian</u> | <u>Asian/Pacific<br/>Islander</u> | <u>Multiracial</u> | <u>Hispanic</u> |                  |
| < 1 year       | 20,382              | 3,233          | 430                        | 1,965                             | 1,824              | 3,008           | 30,842           |
| 1 - 4 years    | 88,433              | 15,007         | 1,797                      | 9,052                             | 7,507              | 12,436          | 134,232          |
| 5 - 9 years    | 117,974             | 20,422         | 2,582                      | 12,501                            | 9,508              | 16,133          | 179,120          |
| 10 - 14 years  | 124,915             | 19,167         | 2,680                      | 11,929                            | 9,925              | 17,812          | 186,428          |
| 15 - 19 years  | 127,638             | 17,012         | 2,565                      | 11,216                            | 8,649              | 16,745          | 183,825          |
| 20 - 24 years  | 126,133             | 14,822         | 2,237                      | 11,577                            | 6,686              | 13,779          | 175,234          |
| 25 - 29 years  | 130,247             | 15,826         | 2,213                      | 13,677                            | 5,625              | 12,511          | 180,099          |
| 30 - 34 years  | 134,836             | 16,901         | 2,263                      | 15,918                            | 4,526              | 11,535          | 185,979          |
| 35 - 39 years  | 147,301             | 16,105         | 2,102                      | 14,916                            | 3,577              | 11,186          | 195,187          |
| 40 - 44 years  | 139,519             | 12,887         | 1,784                      | 11,670                            | 2,921              | 10,907          | 179,688          |
| 45 - 49 years  | 122,345             | 10,920         | 1,505                      | 10,014                            | 2,143              | 9,207           | 156,134          |
| 50 - 54 years  | 141,213             | 9,604          | 1,691                      | 7,893                             | 1,837              | 7,451           | 169,689          |
| 55 - 59 years  | 163,056             | 8,178          | 1,674                      | 6,444                             | 1,474              | 5,569           | 186,395          |
| 60 - 64 years  | 171,501             | 6,883          | 1,639                      | 5,297                             | 1,367              | 4,287           | 190,974          |
| 65 - 69 years  | 149,110             | 4,853          | 1,298                      | 4,095                             | 966                | 2,799           | 163,121          |
| 70 - 74 years  | 122,374             | 3,506          | 984                        | 3,167                             | 736                | 1,905           | 132,672          |
| 75 - 79 years  | 80,823              | 2,024          | 564                        | 1,838                             | 392                | 1,071           | 86,712           |
| 80 - 84 years  | 56,502              | 1,372          | 341                        | 1,238                             | 255                | 774             | 60,482           |
| 85+ years      | 66,451              | 1,083          | 286                        | 1,303                             | 275                | 766             | 70,164           |
| <b>TOTAL</b>   | <b>2,230,753</b>    | <b>199,805</b> | <b>30,635</b>              | <b>155,710</b>                    | <b>70,193</b>      | <b>159,881</b>  | <b>2,846,977</b> |
| <u>Males</u>   |                     |                |                            |                                   |                    |                 |                  |
| < 1 year       | 21,167              | 3,318          | 419                        | 2,095                             | 1,922              | 3,134           | 32,055           |
| 1 - 4 years    | 92,675              | 15,418         | 1,871                      | 9,527                             | 7,875              | 13,009          | 140,375          |
| 5 - 9 years    | 124,156             | 20,969         | 2,697                      | 12,927                            | 9,872              | 16,811          | 187,432          |
| 10 - 14 years  | 131,579             | 20,315         | 2,759                      | 12,133                            | 10,538             | 18,711          | 196,035          |
| 15 - 19 years  | 133,380             | 17,666         | 2,627                      | 11,335                            | 8,827              | 17,226          | 191,061          |
| 20 - 24 years  | 127,920             | 15,339         | 2,389                      | 11,420                            | 6,648              | 14,741          | 178,457          |
| 25 - 29 years  | 134,538             | 16,433         | 2,374                      | 13,979                            | 5,708              | 14,098          | 187,130          |
| 30 - 34 years  | 141,541             | 18,441         | 2,352                      | 15,707                            | 4,062              | 13,006          | 195,109          |
| 35 - 39 years  | 153,305             | 17,596         | 2,091                      | 13,547                            | 3,252              | 13,302          | 203,093          |
| 40 - 44 years  | 147,052             | 14,384         | 1,761                      | 10,557                            | 2,582              | 12,854          | 189,190          |
| 45 - 49 years  | 127,736             | 11,932         | 1,523                      | 9,601                             | 1,893              | 10,645          | 163,330          |
| 50 - 54 years  | 145,947             | 10,660         | 1,631                      | 7,618                             | 1,653              | 8,359           | 175,868          |
| 55 - 59 years  | 164,196             | 9,187          | 1,548                      | 6,127                             | 1,386              | 6,356           | 188,800          |
| 60 - 64 years  | 170,745             | 7,413          | 1,508                      | 4,465                             | 1,242              | 4,573           | 189,946          |
| 65 - 69 years  | 145,517             | 4,814          | 1,016                      | 3,486                             | 870                | 2,803           | 158,506          |
| 70 - 74 years  | 114,526             | 2,852          | 718                        | 2,447                             | 595                | 1,750           | 122,888          |
| 75 - 79 years  | 69,924              | 1,594          | 385                        | 1,453                             | 324                | 1,045           | 74,725           |
| 80 - 84 years  | 43,953              | 797            | 221                        | 933                               | 182                | 588             | 46,674           |
| 85+ years      | 37,425              | 669            | 162                        | 778                               | 123                | 582             | 39,739           |
| <b>TOTAL</b>   | <b>2,227,282</b>    | <b>209,797</b> | <b>30,052</b>              | <b>150,135</b>                    | <b>69,554</b>      | <b>173,593</b>  | <b>2,860,413</b> |

**Table 5. Resident Live Births, Crude Birth Rates<sup>1</sup>, Fertility Rates<sup>2</sup>, Minnesota and United States, 1945, 1950, 1955, 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995, 2000, 2005-2021**

| Year | Live Births |           | Crude Birth Rate <sup>1</sup> |      | Fertility Rate <sup>2</sup> |       |
|------|-------------|-----------|-------------------------------|------|-----------------------------|-------|
|      | Minnesota   | U.S.      | Minnesota                     | U.S. | Minnesota                   | U.S.  |
| 1945 | 54,656      | 2,858,000 | 20.9                          | 20.4 | 85.1                        | 85.9  |
| 1950 | 75,078      | 3,632,000 | 25.2                          | 24.1 | 119.1                       | 106.2 |
| 1955 | 81,532      | 4,097,000 | 25.7                          | 25.0 | 130.1                       | 118.3 |
| 1960 | 87,523      | 4,257,850 | 25.6                          | 23.7 | 136.0                       | 118.0 |
| 1965 | 70,810      | 3,760,358 | 19.7                          | 19.4 | 105.9                       | 96.3  |
| 1970 | 68,449      | 3,731,386 | 18.0                          | 18.4 | 88.4                        | 89.7  |
| 1975 | 56,463      | 3,144,198 | 14.4                          | 14.6 | 65.4                        | 66.0  |
| 1980 | 67,843      | 3,612,258 | 16.6                          | 15.9 | 70.8                        | 68.4  |
| 1985 | 67,412      | 3,760,561 | 16.1                          | 15.8 | 68.0                        | 66.2  |
| 1990 | 67,985      | 4,158,212 | 15.5                          | 16.7 | 66.3                        | 70.9  |
| 1995 | 63,259      | 3,899,589 | 13.7                          | 14.7 | 60.1                        | 65.6  |
| 2000 | 67,451      | 4,058,814 | 13.7                          | 14.7 | 62.3                        | 67.5  |
| 2005 | 70,920      | 4,140,419 | 13.8                          | 14.0 | 64.9                        | 66.7  |
| 2006 | 73,515      | 4,265,555 | 14.2                          | 14.2 | 68.6                        | 68.5  |
| 2007 | 73,675      | 4,316,233 | 14.2                          | 14.3 | 69.6                        | 69.5  |
| 2008 | 72,382      | 4,251,095 | 13.9                          | 13.9 | 69.0                        | 68.4  |
| 2009 | 70,617      | 4,130,665 | 13.4                          | 13.5 | 67.5                        | 66.7  |
| 2010 | 68,407      | 3,999,386 | 12.9                          | 13.0 | 65.4                        | 64.1  |
| 2011 | 68,416      | 3,953,593 | 12.8                          | 12.7 | 65.5                        | 63.2  |
| 2012 | 68,783      | 3,952,841 | 12.8                          | 12.6 | 65.7                        | 63.0  |
| 2013 | 69,183      | 3,932,181 | 12.8                          | 12.4 | 65.9                        | 62.5  |
| 2014 | 69,916      | 3,988,076 | 12.8                          | 12.5 | 66.4                        | 62.9  |
| 2015 | 69,835      | 3,978,497 | 12.7                          | 12.4 | 66.3                        | 62.5  |
| 2016 | 69,746      | 3,945,875 | 12.6                          | 12.2 | 66.2                        | 62.0  |
| 2017 | 68,603      | 3,855,500 | 12.3                          | 11.8 | 64.3                        | 60.3  |
| 2018 | 67,348      | 3,791,712 | 12.0                          | 11.6 | 62.7                        | 59.1  |
| 2019 | 66,033      | 3,745,540 | 11.7                          | 11.4 | 61.0                        | 58.2  |
| 2020 | 63,462      | 3,613,647 | 11.2                          | 11.0 | 58.4                        | 56.0  |
| 2021 | 64,449      | 3,664,292 | 11.3                          | 11.0 | 58.6                        | 56.3  |

<sup>1</sup> Live Births per 1,000 total population.

<sup>2</sup> Live Births per 1,000 Female Population Ages 15-44.

**Table 6. Numbers and Rates of Resident Deaths, Infant and Neonatal Deaths; Minnesota and United States, 1955, 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995, 2000, 2005-2021.**

| Year | Deaths    |                   |               |                   | Infant Deaths |                   |               |                   | Neonatal Deaths |                   |               |                   |
|------|-----------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|-----------------|-------------------|---------------|-------------------|
|      | Minnesota |                   | United States |                   | Minnesota     |                   | United States |                   | Minnesota       |                   | United States |                   |
|      | Number    | Rate <sup>1</sup> | Number        | Rate <sup>2</sup> | Number        | Rate <sup>2</sup> | Number        | Rate <sup>2</sup> | Number          | Rate <sup>3</sup> | Number        | Rate <sup>3</sup> |
| 1955 | 28,574    | 9.0               | 1,528,717     | 9.3               | 1,779         | 21.8              | 106,903       | 26.4              | 1,386           | 17.0              | 77,351        | 19.1              |
| 1960 | 31,596    | 9.3               | 1,711,982     | 9.5               | 1,881         | 21.5              | 110,873       | 26.0              | 1,397           | 16.0              | 79,733        | 18.7              |
| 1965 | 32,477    | 9.0               | 1,828,136     | 9.4               | 1,432         | 20.2              | 92,866        | 24.7              | 1,075           | 15.2              | 66,419        | 17.7              |
| 1970 | 33,919    | 8.9               | 1,921,031     | 9.5               | 1,203         | 17.6              | 74,667        | 20.0              | 944             | 13.8              | 56,279        | 15.1              |
| 1975 | 32,686    | 8.3               | 1,892,879     | 8.8               | 771           | 13.7              | 50,525        | 16.1              | 582             | 10.3              | 36,416        | 11.6              |
| 1980 | 33,415    | 8.2               | 1,989,841     | 8.8               | 679           | 10.0              | 45,526        | 12.6              | 421             | 6.2               | 30,618        | 8.5               |
| 1985 | 34,793    | 0.0               | 2,086,440     | 8.7               | 591           | 8.8               | 40,030        | 10.6              | 364             | 5.4               | 26,179        | 7.0               |
| 1990 | 34,739    | 7.9               | 2,148,463     | 8.6               | 796           | 7.3               | 38,100        | 9.2               | 295             | 4.3               | 24,309        | 5.8               |
| 1995 | 37,427    | 8.1               | 2,312,132     | 8.8               | 427           | 6.8               | 29,583        | 7.6               | 255             | 4.0               | 19,155        | 4.9               |
| 2000 | 37,595    | 7.6               | 2,403,351     | 8.7               | 377           | 5.6               | 28,035        | 6.9               | 252             | 3.7               | 18,776        | 4.6               |
| 2005 | 37,498    | 7.3               | 2,447,903     | 8.0               | 363           | 5.1               | 28,534        | 6.9               | 232             | 3.3               | 18,834        | 4.6               |
| 2006 | 36,963    | 7.2               | 2,426,264     | 8.1               | 381           | 5.2               | 28,527        | 6.7               | 243             | 3.3               | 18,989        | 4.5               |
| 2007 | 37,086    | 7.1               | 2,423,712     | 8.0               | 407           | 5.5               | 29,138        | 6.8               | 278             | 3.8               | 19,058        | 4.4               |
| 2008 | 38,431    | 7.4               | 2,471,984     | 8.1               | 433           | 6.0               | 28,059        | 6.6               | 275             | 3.8               | 18,211        | 4.3               |
| 2009 | 37,801    | 7.2               | 2,437,163     | 7.9               | 324           | 4.5               | 26,412        | 6.4               | 188             | 2.7               | 17,255        | 4.2               |
| 2010 | 38,857    | 7.3               | 2,468,435     | 8.0               | 309           | 4.5               | 24,586        | 6.2               | 210             | 3.1               | 16,188        | 4.1               |
| 2011 | 39,799    | 7.4               | 2,515,458     | 8.1               | 339           | 5.0               | 23,985        | 6.1               | 224             | 3.3               | 15,954        | 4.0               |
| 2012 | 40,020    | 7.4               | 2,543,279     | 8.1               | 347           | 5.0               | 23,629        | 6.0               | 249             | 3.6               | 15,850        | 4.0               |
| 2013 | 40,981    | 7.6               | 2,596,993     | 8.2               | 349           | 5.0               | 23,440        | 6.0               | 248             | 3.6               | 15,867        | 4.0               |
| 2014 | 41,271    | 7.6               | 2,626,418     | 8.2               | 352           | 5.0               | 23,215        | 5.8               | 233             | 3.3               | 15,720        | 3.9               |
| 2015 | 42,652    | 7.8               | 2,712,630     | 8.4               | 361           | 5.2               | 23,455        | 5.9               | 262             | 3.8               | 15,652        | 3.9               |
| 2016 | 43,050    | 7.8               | 2,744,248     | 8.5               | 357           | 5.1               | 23,161        | 5.9               | 242             | 3.5               | 15,282        | 3.9               |
| 2017 | 44,361    | 8.0               | 2,813,503     | 8.6               | 329           | 4.8               | 22,335        | 5.8               | 225             | 3.3               | 14,821        | 3.8               |
| 2018 | 44,730    | 8.0               | 2,839,205     | 8.7               | 342           | 4.5               | 21,467        | 5.7               | 230             | 3.0               | 14,289        | 3.8               |
| 2019 | 45,516    | 7.9               | 2,854,838     | 8.7               | 302           | 4.6               | 20,927        | 5.6               | 208             | 3.1               | 13,834        | 3.7               |
| 2020 | 52,372    | 9.3               | 3,383,729     | 10.3              | 264           | 4.2               | 19,578        | 5.4               | 185             | 2.9               | 12,866        | 3.6               |
| 2021 | 51,647    | 9.0               | 3,464,231     | 10.4              | 310           | 4.8               | N/A           | N/A               | 212             | 3.3               | N/A           | N/A               |

<sup>1</sup> Deaths per 1,000 Population.

<sup>2</sup> Infant Deaths per 1,000 Live Births.

<sup>3</sup> Neonatal Deaths (infant born alive and died within first 28 days) per 1,000 Live Births.

**Table 7. Summary of Selected Vital Statistics by Race and Hispanic Ethnicity<sup>1</sup>, Minnesota Residents, 2021.**

|                                                                | Non-Hispanic |                  |                 |                        |             |                   | Hispanic | TOTAL  |
|----------------------------------------------------------------|--------------|------------------|-----------------|------------------------|-------------|-------------------|----------|--------|
|                                                                | White        | African American | American Indian | Asian/<br>Pacific Isl. | Multiracial | Other/<br>Unknown |          |        |
| Fertility (counts)                                             |              |                  |                 |                        |             |                   |          |        |
| Total pregnancies                                              | 47,375       | 10,323           | 985             | 5,536                  | 2,649       | 690               | 6,340    | 73,898 |
| Live births                                                    | 43,595       | 7,594            | 792             | 4,903                  | 2,064       | 159               | 5,342    | 64,449 |
| Induced abortions <sup>2</sup>                                 | 3,606        | 2,661            | 185             | 620                    | 572         | 517               | 966      | 9,127  |
| Fetal deaths <sup>3</sup>                                      | 174          | 68               | 8               | 13                     | 13          | 14                | 32       | 322    |
| <i>Late fetal deaths</i>                                       | 86           | 33               | 7               | 3                      | 9           | 7                 | 15       | 160    |
| Nativity (percents)                                            |              |                  |                 |                        |             |                   |          |        |
| First-time mothers                                             | 37.9%        | 24.8%            | 25.8%           | 32.7%                  | 36.2%       | 20.8%             | 33.9%    | 35.4%  |
| Late PNC                                                       | 1.7%         | 5.5%             | 17.0%           | 2.9%                   | 4.3%        | 17.0%             | 5.4%     | 2.9%   |
| Inadequate PNC                                                 | 4.7%         | 17.0%            | 26.3%           | 11.1%                  | 11.1%       | 17.0%             | 14.8%    | 8.0%   |
| C-section (any) delivery                                       | 28.9%        | 31.6%            | 31.2%           | 24.5%                  | 29.8%       | 22.6%             | 28.6%    | 28.9%  |
| Low birthweight                                                | 6.2%         | 11.2%            | 8.8%            | 8.6%                   | 9.7%        | 9.4%              | 7.6%     | 7.3%   |
| Preterm                                                        | 9.1%         | 11.0%            | 14.4%           | 9.2%                   | 11.7%       | 11.3%             | 10.3%    | 9.6%   |
| Mortality (counts)                                             |              |                  |                 |                        |             |                   |          |        |
| Female deaths                                                  | 21,596       | 886              | 402             | 519                    | 156         | 525               | 329      | 24,413 |
| Male deaths                                                    | 23,301       | 1,287            | 412             | 641                    | 216         | 844               | 533      | 27,234 |
| Total deaths <sup>4</sup>                                      | 44,897       | 2,173            | 814             | 1,160                  | 372         | 1,369             | 862      | 51,647 |
| Perinatal Mortality                                            |              |                  |                 |                        |             |                   |          |        |
| Perinatal deaths <sup>5</sup><br>(Late fetal + Early neonatal) | 173          | 66               | 9               | 12                     | 15          | 21                | 29       | 325    |
| Total infant deaths <sup>6</sup>                               | 149          | 71               | 15              | 16                     | 14          | 18                | 27       | 310    |
| Neonatal deaths<br>( <i>&lt; 28 days</i> )                     | 112          | 42               | 7               | 11                     | 8           | 15                | 17       | 212    |
| <i>Early neonatal death</i><br>( <i>&lt; 7 days</i> )          | 87           | 33               | 2               | 9                      | 6           | 14                | 14       | 165    |
| Postneonatal deaths<br>(28 days - 1 yr)                        | 37           | 29               | 8               | 5                      | 6           | 3                 | 10       | 98     |

<sup>1</sup> Race/ethnicity based on self-identified race/ethnicity of woman.

<sup>2</sup> Race and ethnicity data for abortions are not collected and processed the same as for natality data. The other/unknown race category for abortion includes those with multiple races, while multiple races are probabilistically assigned to one of the other four race categories. Thus, the other/unknown race category for natality statistics only includes those with unknown race. Abortion statistics should be examined with this difference in mind.

<sup>3</sup> Fetal deaths of less than 20 weeks gestation are not included in the counts. Late fetal deaths are a subset of fetal deaths occurring at 28 weeks or later gestation.

<sup>4</sup> Perinatal deaths include late fetal deaths (28 or more weeks gestation) plus early neonatal deaths (under 7 days of age).

<sup>5</sup> Deaths that do not have an assigned gender are not included in the data.

<sup>6</sup> Infant deaths are period events that occurred in the reporting period and are included in the mortality files.

**NOTE:** Counts based on  $< 20$  events should not be used to calculate rates due to instability of the estimates.

**Table 8. Summary of Selected Vital Statistics by Urban/Rural Classification<sup>1</sup>, Minnesota Residents, 2021.**

|                                                                | Metropolitan   |                   |        |       | Non-Metropolitan<br>(Rural) |          | TOTAL  |
|----------------------------------------------------------------|----------------|-------------------|--------|-------|-----------------------------|----------|--------|
|                                                                | Large<br>Urban | Large<br>Suburban | Medium | Small | Micro                       | Non-Core |        |
| Fertility (counts)                                             |                |                   |        |       |                             |          |        |
| Total pregnancies                                              | 26,237         | 22,390            | 2,555  | 8,301 | 7,832                       | 6,573    | 73,888 |
| Live births                                                    | 21,363         | 19,857            | 2,226  | 7,528 | 7,280                       | 6,188    | 64,442 |
| Induced abortions                                              | 4,760          | 2,442             | 315    | 741   | 517                         | 350      | 9,125  |
| Fetal deaths <sup>2</sup>                                      | 114            | 91                | 14     | 32    | 35                          | 35       | 321    |
| <i>Late fetal deaths</i><br><i>(&gt; 28 weeks)</i>             | 55             | 43                | 7      | 16    | 19                          | 19       | 159    |
| Natality (percents)                                            |                |                   |        |       |                             |          |        |
| First-time mothers                                             | 38.6%          | 34.4%             | 37.9%  | 34.1% | 32.2%                       | 31.7%    | 35.4%  |
| Late PNC                                                       | 3.6%           | 2.0%              | 2.1%   | 2.1%  | 3.4%                        | 3.3%     | 2.9%   |
| Inadequate PNC                                                 | 10.1%          | 6.8%              | 5.9%   | 5.5%  | 8.2%                        | 8.0%     | 8.0%   |
| C-section                                                      | 28.7%          | 29.8%             | 28.1%  | 27.8% | 27.3%                       | 30.0%    | 28.9%  |
| Low birthweight                                                | 8.3%           | 6.8%              | 7.9%   | 6.7%  | 6.5%                        | 6.6%     | 7.3%   |
| Preterm                                                        | 10.0%          | 9.3%              | 10.0%  | 8.5%  | 9.4%                        | 10.2%    | 9.6%   |
| Mortality (counts) <sup>3</sup>                                |                |                   |        |       |                             |          |        |
| Female deaths                                                  | 7,265          | 6,263             | 1,287  | 2,635 | 3,553                       | 3,398    | 24,401 |
| Male deaths                                                    | 7,617          | 6,990             | 1,559  | 2,979 | 4,008                       | 4,061    | 27,214 |
| Total deaths                                                   | 14,882         | 13,253            | 2,846  | 5,614 | 7,561                       | 7,459    | 51,615 |
| Perinatal Mortality                                            |                |                   |        |       |                             |          |        |
| Perinatal deaths <sup>4</sup><br>(Late fetal + Early neonatal) | 114            | 84                | 12     | 36    | 43                          | 33       | 322    |
| Total infant deaths <sup>5</sup>                               | 121            | 68                | 7      | 40    | 40                          | 32       | 308    |
| Neonatal deaths<br>(< 28 days)                                 | 78             | 53                | 6      | 24    | 30                          | 19       | 210    |
| <i>Early neonatal death</i><br><i>(&lt; 7 days)</i>            | 59             | 41                | 5      | 20    | 24                          | 14       | 163    |
| Postneonatal deaths<br>(28 days - 1 yr)                        | 43             | 15                | 1      | 16    | 10                          | 13       | 98     |

<sup>1</sup> Classification is based on the National Center for Health Statistics (NCHS) Urban-Rural Classification Scheme for Counties. See Introduction to this report or [https://www.cdc.gov/nchs/data\\_access/urban\\_rural.htm](https://www.cdc.gov/nchs/data_access/urban_rural.htm). Missing county of residence is not included in this variable.

<sup>2</sup> Fetal deaths of less than 20 weeks gestation are not included in the counts. Late fetal deaths are a subset of fetal deaths occurring at 28 weeks or later gestation.

<sup>3</sup> Total mortality counts do not include missing geography.

<sup>4</sup> Perinatal deaths include late fetal deaths (28 or more weeks gestation) plus early neonatal deaths (under 7 days of age).

<sup>5</sup> Infant deaths are period events that occurred in the reporting period and are from the annual mortality file.

**NOTE:** Counts based on <20 events should not be used to calculate rates due to instability of the estimates.

This page intentionally left blank.

## Nativity Tables

---

Table 1. Births by County of Residence and County of Occurrence, 2021

Table 2. Characteristics of Women who Gave Birth by Race/Ethnicity, MN Residents, 2021

Table 3. Selected Pregnancy Characteristics by Race/Ethnicity, MN Residents, 2021

Table 4. Delivery Characteristics and Infant Outcomes by Race/Ethnicity, MN Residents, 2021

Table 5. Selected Pregnancy Characteristics by Urban/Rural Residence, MN Residents, 2021

Table 6. Delivery Characteristics and Infant Outcomes by Urban/Rural, MN Residents, 2021

Table 7. Route of Delivery by Selected Maternal Characteristics, MN Residents, 2021

Table 8. Birth Outcomes by Selected Maternal Characteristics, MN Residents, 2021

Table 9. Number of Race and Hispanic Checkboxes Selected at Birth, MN Residents, 2021

Table 10. Live Births by Birth Country of Women Giving Birth, MN Residents, 2021

Table 11. Characteristics and Outcomes for Women Who Smoke, MN Residents, 2021

Table 12. Pregnancies Resulting from Infertility Treatments, MN Residents, 2021

**Table 1. Resident Live Births Distributed by County of Occurrence (n=64,449); Live Births by County of Occurrence Distributed by Residence (n=63,520), Minnesota 2021.**

| County             | Total <sup>1</sup> | Births to MN County Residents<br>across Place of Birth |                             |                      | Births Occurring in EACH County<br>across Place of Residence |                                 |                              |
|--------------------|--------------------|--------------------------------------------------------|-----------------------------|----------------------|--------------------------------------------------------------|---------------------------------|------------------------------|
|                    |                    | Within<br>County                                       | Outside County of Residence |                      | Total <sup>2</sup>                                           | Other<br>Minnesota<br>Residents | Out of<br>State<br>Residents |
|                    |                    |                                                        | Within<br>Minnesota         | Outside<br>Minnesota |                                                              |                                 |                              |
| <b>State Total</b> | <b>64,444</b>      | <b>37,482</b>                                          | <b>24,408</b>               | <b>2,554</b>         | <b>63,520</b>                                                | <b>24,408</b>                   | <b>1,630</b>                 |
| Aitkin             | 97                 | 48                                                     | 49                          | 0                    | 62                                                           | 14                              | 0                            |
| Anoka              | 4,189              | 1,764                                                  | 2,414                       | 11                   | 2,934                                                        | 1,158                           | 12                           |
| Becker             | 359                | 242                                                    | 59                          | 58                   | 450                                                          | 206                             | 2                            |
| Beltrami           | 580                | 532                                                    | 31                          | 17                   | 827                                                          | 292                             | 3                            |
| Benton             | 476                | 15                                                     | 461                         | 0                    | 15                                                           | 0                               | 0                            |
| Big Stone          | 62                 | 43                                                     | 7                           | 12                   | 98                                                           | 26                              | 29                           |
| Blue Earth         | 701                | 626                                                    | 71                          | 4                    | 1,349                                                        | 717                             | 6                            |
| Brown              | 266                | 212                                                    | 53                          | 1                    | 378                                                          | 166                             | 0                            |
| Carlton            | 385                | 79                                                     | 306                         | 0                    | 159                                                          | 79                              | 1                            |
| Carver             | 1,207              | 656                                                    | 549                         | 2                    | 1,447                                                        | 790                             | 1                            |
| Cass               | 278                | 2                                                      | 273                         | 3                    | 2                                                            | 0                               | 0                            |
| Chippewa           | 168                | 90                                                     | 72                          | 6                    | 149                                                          | 59                              | 0                            |
| Chisago            | 600                | 262                                                    | 279                         | 59                   | 545                                                          | 270                             | 13                           |
| Clay               | 828                | 11                                                     | 30                          | 787                  | 11                                                           | 0                               | 0                            |
| Clearwater         | 85                 | 12                                                     | 69                          | 4                    | 12                                                           | 0                               | 0                            |
| Cook               | 33                 | 2                                                      | 31                          | 0                    | 2                                                            | 0                               | 0                            |
| Cottonwood         | 145                | 73                                                     | 47                          | 25                   | 106                                                          | 33                              | 0                            |
| Crow Wing          | 626                | 437                                                    | 189                         | 0                    | 612                                                          | 173                             | 2                            |
| Dakota             | 5,036              | 1,928                                                  | 3,083                       | 25                   | 3,017                                                        | 1,047                           | 42                           |
| Dodge              | 265                | 4                                                      | 260                         | 1                    | 4                                                            | 0                               | 0                            |
| Douglas            | 399                | 347                                                    | 47                          | 5                    | 599                                                          | 252                             | 0                            |
| Faribault          | 125                | 46                                                     | 77                          | 2                    | 102                                                          | 50                              | 6                            |
| Fillmore           | 242                | 35                                                     | 158                         | 49                   | 35                                                           | 0                               | 0                            |
| Freeborn           | 309                | 7                                                      | 296                         | 6                    | 7                                                            | 0                               | 0                            |
| Goodhue            | 492                | 171                                                    | 315                         | 6                    | 272                                                          | 59                              | 42                           |
| Grant              | 70                 | 0                                                      | 66                          | 4                    | 0                                                            | 0                               | 0                            |
| Hennepin           | 14,722             | 12,958                                                 | 1,723                       | 41                   | 20,412                                                       | 7,329                           | 125                          |
| <i>Bloomington</i> | 931                | 7                                                      | 922                         | 2                    | 7                                                            | 0                               | 0                            |
| <i>Edina</i>       | 447                | 226                                                    | 220                         | 1                    | 226                                                          | 2,884                           | 13                           |
| <i>Minneapolis</i> | 4,949              | 3,015                                                  | 1,919                       | 15                   | 3,015                                                        | 5,305                           | 102                          |
| <i>Richfield</i>   | 445                | 2                                                      | 442                         | 1                    | 2                                                            | 0                               | 0                            |
| Houston            | 164                | 0                                                      | 8                           | 156                  | 0                                                            | 0                               | 0                            |
| Hubbard            | 221                | 83                                                     | 127                         | 11                   | 110                                                          | 27                              | 0                            |
| Isanti             | 478                | 182                                                    | 292                         | 4                    | 299                                                          | 115                             | 2                            |
| Itasca             | 381                | 297                                                    | 81                          | 3                    | 379                                                          | 80                              | 2                            |
| Jackson            | 103                | 1                                                      | 65                          | 37                   | 1                                                            | 0                               | 0                            |
| Kanabec            | 168                | 103                                                    | 65                          | 0                    | 230                                                          | 127                             | 0                            |
| Kandiyohi          | 521                | 422                                                    | 95                          | 4                    | 544                                                          | 121                             | 1                            |
| Kittson            | 40                 | 2                                                      | 14                          | 24                   | 2                                                            | 0                               | 0                            |
| Koochiching        | 103                | 3                                                      | 98                          | 2                    | 3                                                            | 0                               | 0                            |
| Lac Qui Parle      | 70                 | 2                                                      | 52                          | 16                   | 3                                                            | 1                               | 0                            |
| Lake               | 83                 | 4                                                      | 79                          | 0                    | 4                                                            | 0                               | 0                            |
| Lake of the Woods  | 38                 | 1                                                      | 37                          | 0                    | 1                                                            | 0                               | 0                            |
| Le Sueur           | 318                | 1                                                      | 317                         | 0                    | 1                                                            | 0                               | 0                            |
| Lincoln            | 68                 | 2                                                      | 31                          | 35                   | 2                                                            | 0                               | 0                            |
| Lyon               | 334                | 258                                                    | 18                          | 58                   | 415                                                          | 156                             | 1                            |
| McLeod             | 378                | 232                                                    | 146                         | 0                    | 384                                                          | 149                             | 3                            |
| Mahnomen           | 67                 | 2                                                      | 57                          | 8                    | 2                                                            | 0                               | 0                            |

**Table 1. Resident Live Births Distributed by County of Occurrence (n=64,449); Live Births by County of Occurrence Distributed by Residence (n=63,520), Minnesota 2021.**

| County          | Total <sup>1</sup> | Births to MN County Residents<br>across Place of Birth |                             |                      | Births Occurring in EACH County<br>across Place of Residence |                                 |                              |
|-----------------|--------------------|--------------------------------------------------------|-----------------------------|----------------------|--------------------------------------------------------------|---------------------------------|------------------------------|
|                 |                    | Within<br>County                                       | Outside County of Residence |                      | Total <sup>2</sup>                                           | Other<br>Minnesota<br>Residents | Out of<br>State<br>Residents |
|                 |                    |                                                        | Within<br>Minnesota         | Outside<br>Minnesota |                                                              |                                 |                              |
| Marshall        | 105                | 5                                                      | 47                          | 53                   | 5                                                            | 0                               | 0                            |
| Martin          | 222                | 133                                                    | 87                          | 2                    | 169                                                          | 28                              | 8                            |
| Meeker          | 253                | 99                                                     | 154                         | 0                    | 121                                                          | 21                              | 1                            |
| Mille Lacs      | 289                | 24                                                     | 265                         | 0                    | 86                                                           | 61                              | 1                            |
| Morrison        | 343                | 84                                                     | 258                         | 1                    | 99                                                           | 15                              | 0                            |
| Mower           | 490                | 352                                                    | 136                         | 2                    | 647                                                          | 250                             | 45                           |
| Murray          | 79                 | 1                                                      | 50                          | 28                   | 1                                                            | 0                               | 0                            |
| Nicollet        | 317                | 13                                                     | 303                         | 1                    | 52                                                           | 38                              | 1                            |
| Nobles          | 380                | 259                                                    | 30                          | 91                   | 350                                                          | 80                              | 11                           |
| Norman          | 76                 | 1                                                      | 8                           | 67                   | 1                                                            | 0                               | 0                            |
| Olmsted         | 1,988              | 1,955                                                  | 24                          | 9                    | 3,332                                                        | 1,222                           | 155                          |
| Otter Tail      | 637                | 369                                                    | 212                         | 56                   | 471                                                          | 97                              | 5                            |
| Pennington      | 158                | 121                                                    | 6                           | 31                   | 234                                                          | 110                             | 3                            |
| Pine            | 298                | 6                                                      | 291                         | 1                    | 6                                                            | 0                               | 0                            |
| Pipestone       | 142                | 63                                                     | 31                          | 48                   | 90                                                           | 23                              | 4                            |
| Polk            | 362                | 113                                                    | 25                          | 224                  | 149                                                          | 34                              | 2                            |
| Pope            | 127                | 56                                                     | 70                          | 1                    | 115                                                          | 59                              | 0                            |
| Ramsey          | 6,641              | 4,350                                                  | 2,266                       | 25                   | 8,823                                                        | 4,227                           | 246                          |
| St. Paul        | 4,125              | 2,096                                                  | 2,011                       | 18                   | 2,096                                                        | 4,195                           | 198                          |
| Red Lake        | 51                 | 4                                                      | 34                          | 13                   | 4                                                            | 0                               | 0                            |
| Redwood         | 194                | 84                                                     | 104                         | 6                    | 108                                                          | 24                              | 0                            |
| Renville        | 134                | 32                                                     | 101                         | 1                    | 45                                                           | 12                              | 1                            |
| Rice            | 656                | 223                                                    | 433                         | 0                    | 288                                                          | 64                              | 1                            |
| Rock            | 104                | 32                                                     | 2                           | 70                   | 111                                                          | 65                              | 14                           |
| Roseau          | 180                | 146                                                    | 18                          | 16                   | 181                                                          | 29                              | 6                            |
| St. Louis       | 1,841              | 1,800                                                  | 35                          | 6                    | 2,806                                                        | 551                             | 455                          |
| Duluth          | 1,043              | 1,027                                                  | 14                          | 2                    | 1,027                                                        | 856                             | 455                          |
| Scott           | 1,727              | 639                                                    | 1,086                       | 2                    | 1,031                                                        | 388                             | 4                            |
| Sherburne       | 1,167              | 127                                                    | 1,038                       | 2                    | 344                                                          | 216                             | 1                            |
| Sibley          | 187                | 2                                                      | 185                         | 0                    | 2                                                            | 0                               | 0                            |
| Stearns         | 1,963              | 1,756                                                  | 202                         | 5                    | 2,958                                                        | 1,197                           | 5                            |
| Steele          | 436                | 297                                                    | 137                         | 2                    | 464                                                          | 166                             | 1                            |
| Stevens         | 112                | 61                                                     | 45                          | 6                    | 86                                                           | 25                              | 0                            |
| Swift           | 110                | 0                                                      | 109                         | 1                    | 0                                                            | 0                               | 0                            |
| Todd            | 313                | 195                                                    | 115                         | 3                    | 590                                                          | 393                             | 2                            |
| Traverse        | 33                 | 0                                                      | 18                          | 15                   | 0                                                            | 0                               | 0                            |
| Wabasha         | 222                | 2                                                      | 215                         | 5                    | 2                                                            | 0                               | 0                            |
| Wadena          | 190                | 59                                                     | 127                         | 4                    | 135                                                          | 75                              | 1                            |
| Waseca          | 196                | 2                                                      | 193                         | 1                    | 2                                                            | 0                               | 0                            |
| Washington      | 2,795              | 1,049                                                  | 1,704                       | 42                   | 2,586                                                        | 1,197                           | 340                          |
| Watsonwan       | 172                | 2                                                      | 169                         | 1                    | 2                                                            | 0                               | 0                            |
| Wilkin          | 69                 | 2                                                      | 8                           | 59                   | 2                                                            | 0                               | 0                            |
| Winona          | 430                | 178                                                    | 115                         | 137                  | 216                                                          | 17                              | 21                           |
| Wright          | 1,865              | 575                                                    | 1,287                       | 3                    | 793                                                          | 216                             | 2                            |
| Yellow Medicine | 110                | 14                                                     | 68                          | 28                   | 27                                                           | 12                              | 1                            |

<sup>1</sup> Missing county of residence or occurrence is not included in this data.

<sup>2</sup> Total births occurring in each county includes births to MN county residents within county of residence (second column).

**Table 2. Counts and Percentages for Characteristics of Birth Mother by Race/Ethnicity, MN Residents, 2021.**

| Total births in each group                | Non-Hispanic |             |                  |             |                 |             |                        |             |             |             | Hispanic/Latino |             | TOTAL        |             |
|-------------------------------------------|--------------|-------------|------------------|-------------|-----------------|-------------|------------------------|-------------|-------------|-------------|-----------------|-------------|--------------|-------------|
|                                           | White        |             | African American |             | American Indian |             | Asian/Pacific Islander |             | Multiracial |             |                 |             |              |             |
|                                           | 43,595       |             | 7,594            |             | 792             |             | 4,903                  |             | 2,064       |             | 5,342           |             | 64,449       |             |
|                                           | #            | Col %       | #                | Col %       | #               | Col %       | #                      | Col %       | #           | Col %       | #               | Col %       | #            | Col %       |
| <b>Age of Mother<sup>1</sup></b>          |              |             |                  |             |                 |             |                        |             |             |             |                 |             |              |             |
| < 18 years                                | 139          | 0.3%        | 85               | 1.1%        | 26              | 3.3%        | 19                     | --          | 54          | 2.6%        | 120             | 2.2%        | 445          | 0.7%        |
| 18-19 years                               | 456          | 1.0%        | 207              | 2.7%        | 52              | 6.6%        | 55                     | 1.1%        | 98          | 4.7%        | 271             | 5.1%        | 1,143        | 1.8%        |
| <b>Teen Mom Total</b>                     | <b>595</b>   | <b>1.4%</b> | <b>292</b>       | <b>3.8%</b> | <b>78</b>       | <b>9.8%</b> | <b>74</b>              | <b>1.5%</b> | <b>152</b>  | <b>7.4%</b> | <b>391</b>      | <b>7.3%</b> | <b>1,588</b> | <b>2.5%</b> |
| 20-24 years                               | 4,224        | 9.7%        | 1,150            | 15.1%       | 207             | 26.1%       | 526                    | 10.7%       | 449         | 21.8%       | 1,301           | 24.4%       | 7,873        | 12.2%       |
| 25-29 years                               | 12,416       | 28.5%       | 2,025            | 26.7%       | 192             | 24.2%       | 1,347                  | 27.5%       | 586         | 28.4%       | 1,510           | 28.3%       | 18,122       | 28.1%       |
| 30-34 years                               | 16,942       | 38.9%       | 2,318            | 30.5%       | 202             | 25.5%       | 1,762                  | 35.9%       | 557         | 27.0%       | 1,234           | 23.1%       | 23,057       | 35.8%       |
| 35-39 years                               | 8,005        | 18.4%       | 1,447            | 19.1%       | 104             | 13.1%       | 1,002                  | 20.4%       | 263         | 12.7%       | 723             | 13.5%       | 11,581       | 18.0%       |
| 40-44 years                               | 1,334        | 3.1%        | 319              | 4.2%        | 9               | --          | 178                    | 3.6%        | 52          | 2.5%        | 170             | 3.2%        | 2,073        | 3.2%        |
| 45+ years                                 | 73           | 0.2%        | 43               | 0.6%        | 0               | --          | 14                     | --          | 5           | --          | 12              | --          | 148          | 0.2%        |
| <b>Educational Attainment<sup>2</sup></b> |              |             |                  |             |                 |             |                        |             |             |             |                 |             |              |             |
| < High School                             | 687          | 1.8%        | 1,449            | 23.6%       | 119             | 23.5%       | 441                    | 10.2%       | 145         | 9.9%        | 1,001           | 27.4%       | 3,855        | 7.0%        |
| HS Diploma / GED                          | 3,496        | 9.0%        | 1,615            | 26.3%       | 151             | 29.8%       | 680                    | 15.8%       | 256         | 17.5%       | 844             | 23.1%       | 7,059        | 12.8%       |
| Some College, No degree                   | 5,361        | 13.8%       | 1,301            | 21.1%       | 138             | 27.2%       | 596                    | 13.9%       | 407         | 27.8%       | 638             | 17.5%       | 8,454        | 15.4%       |
| Associate Degree                          | 5,320        | 13.7%       | 613              | 10.0%       | 42              | 8.3%        | 407                    | 9.5%        | 161         | 11.0%       | 333             | 9.1%        | 6,887        | 12.5%       |
| Bachelor's Degree                         | 15,457       | 39.9%       | 785              | 12.8%       | 33              | 6.5%        | 1,224                  | 28.4%       | 311         | 21.3%       | 561             | 15.4%       | 18,382       | 33.4%       |
| Graduate / Professional Degree            | 8,363        | 21.6%       | 321              | 5.2%        | 16              | --          | 940                    | 21.8%       | 178         | 12.2%       | 238             | 6.5%        | 10,062       | 18.3%       |
| Unknown                                   | 86           | 0.2%        | 68               | 1.1%        | 8               | --          | 15                     | --          | 5           | --          | 34              | 0.9%        | 282          | 0.5%        |
| <b>Urban/Rural Residence<sup>3</sup></b>  |              |             |                  |             |                 |             |                        |             |             |             |                 |             |              |             |
| Large Urban Metro Area                    | 10,932       | 25.1%       | 4,381            | 57.7%       | 130             | 16.4%       | 2,967                  | 60.5%       | 821         | 39.8%       | 2,087           | 39.1%       | 21,363       | 33.1%       |
| Large Suburban Metro Area                 | 14,470       | 33.2%       | 1,854            | 24.4%       | 71              | 9.0%        | 1,380                  | 28.1%       | 546         | 26.5%       | 1,484           | 27.8%       | 19,857       | 30.8%       |
| Medium/ Small Metro Area                  | 7,565        | 17.4%       | 1,002            | 13.2%       | 126             | 15.9%       | 247                    | 5.0%        | 334         | 16.2%       | 451             | 8.4%        | 9,754        | 15.1%       |
| Micropolitan Area                         | 5,446        | 12.5%       | 321              | 4.2%        | 291             | 36.7%       | 215                    | 4.4%        | 181         | 8.8%        | 812             | 15.2%       | 7,280        | 11.3%       |
| Noncore (Rural) Area                      | 5,177        | 11.9%       | 35               | 0.5%        | 174             | 22.0%       | 94                     | 1.9%        | 181         | 8.8%        | 508             | 9.5%        | 6,188        | 9.6%        |
| <b>Nativity Status</b>                    |              |             |                  |             |                 |             |                        |             |             |             |                 |             |              |             |
| US born                                   | 42,256       | 96.9%       | 2,839            | 37.4%       | 782             | 98.7%       | 1,672                  | 34.1%       | 1,785       | 86.5%       | 2,534           | 47.4%       | 51,988       | 80.7%       |
| Foreign-born                              | 1,339        | 3.1%        | 4,755            | 62.6%       | 10              | --          | 3,231                  | 65.9%       | 279         | 13.5%       | 2,808           | 52.6%       | 12,461       | 19.3%       |

<sup>1</sup> Women missing age are not included in this data.

<sup>2</sup> Educational attainment calculated for mothers age 25 years and older.

<sup>3</sup> Missing county of residence is not included in this variable. See Appendix B for more information and definitions of each geographic area type.

**Table 3. Counts and Percentages<sup>1</sup> for Selected Pregnancy Characteristics by Race/Ethnicity, MN Residents, 2021.**

| Total births in each group       | Non-Hispanic |       |                  |       |                 |       |                        |       |             |       |                 |       | TOTAL  |       |
|----------------------------------|--------------|-------|------------------|-------|-----------------|-------|------------------------|-------|-------------|-------|-----------------|-------|--------|-------|
|                                  | White        |       | African American |       | American Indian |       | Asian/Pacific Islander |       | Multiracial |       | Hispanic/Latino |       |        |       |
|                                  | 43,595       |       | 7,594            |       | 792             |       | 4,903                  |       | 2,064       |       | 5,342           |       | 64,449 |       |
|                                  | #            | Col % | #                | Col % | #               | Col % | #                      | Col % | #           | Col % | #               | Col % | #      | Col % |
| Previous Live Births             |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| None                             | 16,513       | 37.9% | 1,887            | 24.8% | 204             | 25.8% | 1,602                  | 32.7% | 747         | 36.2% | 1,812           | 33.9% | 22,798 | 35.4% |
| One                              | 14,766       | 33.9% | 1,747            | 23.0% | 192             | 24.2% | 1,492                  | 30.4% | 604         | 29.3% | 1,548           | 29.0% | 20,381 | 31.6% |
| Two or more                      | 12,280       | 28.2% | 3,954            | 52.1% | 395             | 49.9% | 1,807                  | 36.9% | 711         | 34.4% | 1,978           | 37.0% | 21,203 | 32.9% |
| Prepregnancy BMI <sup>2</sup>    |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| Underweight (BMI < 19.0)         | 1,193        | 2.7%  | 250              | 3.3%  | 14              | --    | 208                    | 4.2%  | 71          | 3.4%  | 113             | 2.1%  | 1,855  | 2.9%  |
| Acceptable (BMI 19.0 - 24.9)     | 17,941       | 41.2% | 2,029            | 26.7% | 187             | 23.6% | 2,139                  | 43.6% | 643         | 31.2% | 1,555           | 29.1% | 24,548 | 38.1% |
| Overweight (BMI 25.0 - 29.9)     | 11,843       | 27.2% | 2,467            | 32.5% | 198             | 25.0% | 1,464                  | 29.9% | 554         | 26.8% | 1,608           | 30.1% | 18,169 | 28.2% |
| Obese (BMI 30.0 - 40.9)          | 10,205       | 23.4% | 2,352            | 31.0% | 292             | 36.9% | 995                    | 20.3% | 605         | 29.3% | 1,652           | 30.9% | 16,124 | 25.0% |
| Morbidly Obese (BMI > 40.9)      | 2,034        | 4.7%  | 378              | 5.0%  | 72              | 9.1%  | 60                     | 1.2%  | 156         | 7.6%  | 321             | 6.0%  | 3,029  | 4.7%  |
| Height/weight missing            | 379          | 0.9%  | 118              | 1.6%  | 29              | 3.7%  | 37                     | 0.8%  | 35          | 1.7%  | 93              | 1.7%  | 724    | 1.1%  |
| Trimester Prenatal Care Began    |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| First                            | 36,621       | 84.0% | 5,127            | 67.5% | 438             | 55.3% | 3,800                  | 77.5% | 1,525       | 73.9% | 3,931           | 73.6% | 51,507 | 79.9% |
| Second                           | 3,706        | 8.5%  | 1,854            | 24.4% | 164             | 20.7% | 905                    | 18.5% | 317         | 15.4% | 1,061           | 19.9% | 8,032  | 12.5% |
| Third                            | 593          | 1.4%  | 324              | 4.3%  | 70              | 8.8%  | 119                    | 2.4%  | 57          | 2.8%  | 237             | 4.4%  | 1,412  | 2.2%  |
| No prenatal care                 | 140          | 0.3%  | 94               | 1.2%  | 65              | 8.2%  | 26                     | 0.5%  | 30          | 1.5%  | 56              | 1.0%  | 426    | 0.7%  |
| Out of state births <sup>3</sup> | 2,184        | 5.0%  | 144              | 1.9%  | 42              | 5.3%  | 27                     | 0.6%  | 119         | 5.8%  | 13              | --    | 2,552  | 4.0%  |
| Prenatal care not reported       | 351          | 0.8%  | 51               | 0.7%  | 13              | --    | 26                     | 0.5%  | 16          | --    | 44              | 0.8%  | 520    | 0.8%  |
| Adequacy of Prenatal Care        |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| None                             | 140          | 0.3%  | 94               | 1.2%  | 65              | 8.2%  | 26                     | 0.5%  | 30          | 1.5%  | 56              | 1.0%  | 426    | 0.7%  |
| Inadequate                       | 2,065        | 4.7%  | 1,294            | 17.0% | 208             | 26.3% | 543                    | 11.1% | 230         | 11.1% | 790             | 14.8% | 5,157  | 8.0%  |
| Intermediate                     | 3,980        | 9.1%  | 1,340            | 17.6% | 101             | 12.8% | 606                    | 12.4% | 231         | 11.2% | 643             | 12.0% | 6,910  | 10.7% |
| Adequate                         | 21,288       | 48.8% | 2,871            | 37.8% | 246             | 31.1% | 2,217                  | 45.2% | 851         | 41.2% | 2,175           | 40.7% | 29,684 | 46.1% |
| Intensive                        | 13,442       | 30.8% | 1,789            | 23.6% | 114             | 14.4% | 1,446                  | 29.5% | 583         | 28.2% | 1,605           | 30.0% | 19,008 | 29.5% |
| Out of state births <sup>3</sup> | 2,184        | 5.0%  | 144              | 1.9%  | 42              | 5.3%  | 27                     | 0.6%  | 119         | 5.8%  | 13              | --    | 2,552  | 4.0%  |
| Prenatal care not reported       | 496          | 1.1%  | 62               | 0.8%  | 16              | --    | 38                     | 0.8%  | 20          | 1.0%  | 60              | 1.1%  | 712    | 1.1%  |

<sup>1</sup> Percentages are column (within each race/ethnicity group) percentages.

<sup>2</sup> BMI = Body Mass Index calculated as weight (kg) / height (meters)<sup>2</sup>.

<sup>3</sup> Out of state births are MN residents giving birth outside the state of MN. Prenatal care data are not available from some states.

**Table 4. Counts and Percentages for Delivery Characteristics and Infant Outcomes by Race/Ethnicity, MN Residents, 2021.**

| Total births in each group           | Non-Hispanic |       |                  |       |                 |       |                        |       |             |       |                 |       | TOTAL  |       |
|--------------------------------------|--------------|-------|------------------|-------|-----------------|-------|------------------------|-------|-------------|-------|-----------------|-------|--------|-------|
|                                      | White        |       | African American |       | American Indian |       | Asian/Pacific Islander |       | Multiracial |       | Hispanic/Latino |       |        |       |
|                                      | #            | Col % | #                | Col % | #               | Col % | #                      | Col % | #           | Col % | #               | Col % | #      | Col % |
|                                      | 43,595       |       | 7,594            |       | 792             |       | 4,903                  |       | 2,064       |       | 5,342           |       | 64,449 |       |
|                                      | #            | Col % | #                | Col % | #               | Col % | #                      | Col % | #           | Col % | #               | Col % | #      | Col % |
| Birth Attendant <sup>1</sup>         |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| MD or DO                             | 36,392       | 83.5% | 6,096            | 80.3% | 712             | 89.9% | 4,174                  | 85.1% | 1,730       | 83.8% | 4,241           | 79.4% | 53,447 | 82.9% |
| Certified Nurse Midwife              | 6,066        | 13.9% | 1,414            | 18.6% | 66              | 8.3%  | 700                    | 14.3% | 301         | 14.6% | 1,048           | 19.6% | 9,603  | 14.9% |
| Other licensed or lay midwife        | 355          | 0.8%  | 6                | --    | 0               | --    | 7                      | --    | 8           | --    | 6               | --    | 390    | 0.6%  |
| Other (RN, EMT, non-med/ or missing) | 782          | 1.8%  | 78               | 1.0%  | 14              | --    | 22                     | 0.4%  | 25          | 1.2%  | 47              | 0.9%  | 1,009  | 1.6%  |
| Delivery setting <sup>2</sup>        |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| Hospital                             | 42,092       | 96.6% | 7,512            | 98.9% | 780             | 98.5% | 4,866                  | 99.2% | 2,015       | 97.6% | 5,276           | 98.8% | 62,646 | 97.2% |
| Free-standing birth center           | 593          | 1.4%  | 35               | 0.5%  | 2               | --    | 16                     | --    | 25          | 1.2%  | 35              | 0.7%  | 712    | 1.1%  |
| Home                                 | 888          | 2.0%  | 42               | 0.6%  | 6               | --    | 20                     | 0.4%  | 23          | 1.1%  | 30              | 0.6%  | 1,054  | 1.6%  |
| Method of Delivery <sup>3</sup>      |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| Vaginal                              | 30,236       | 69.4% | 4,888            | 64.4% | 524             | 66.2% | 3,579                  | 73.0% | 1,404       | 68.0% | 3,713           | 69.5% | 44,449 | 69.0% |
| Vaginal Birth after C-Section        | 711          | 1.6%  | 310              | 4.1%  | 21              | 2.7%  | 124                    | 2.5%  | 44          | 2.1%  | 100             | 1.9%  | 1,313  | 2.0%  |
| C-Section                            | 12,604       | 28.9% | 2,396            | 31.6% | 247             | 31.2% | 1,200                  | 24.5% | 616         | 29.8% | 1,528           | 28.6% | 18,627 | 28.9% |
| Infant Outcomes                      |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| Gestational Age <sup>4</sup>         |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| Preterm (< 37 weeks)                 | 3,957        | 9.1%  | 835              | 11.0% | 114             | 14.4% | 452                    | 9.2%  | 241         | 11.7% | 549             | 10.3% | 6,166  | 9.6%  |
| Term (37 - 41 weeks)                 | 39,403       | 90.4% | 6,596            | 86.9% | 662             | 83.6% | 4,433                  | 90.4% | 1,807       | 87.5% | 4,771           | 89.3% | 57,795 | 89.7% |
| Post Term (42+ weeks)                | 164          | 0.4%  | 153              | 2.0%  | 4               | --    | 15                     | --    | 11          | --    | 13              | --    | 365    | 0.6%  |
| Birthweight <sup>5</sup>             |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| Very low birth weight                | 438          | 1.0%  | 154              | 2.0%  | 14              | --    | 55                     | 1.1%  | 28          | 1.4%  | 76              | 1.4%  | 768    | 1.2%  |
| Low birth weight                     | 2,272        | 5.2%  | 696              | 9.2%  | 56              | 7.1%  | 370                    | 7.5%  | 172         | 8.3%  | 333             | 6.2%  | 3,911  | 6.1%  |
| Normal birth weight                  | 35,935       | 82.4% | 6,159            | 81.1% | 591             | 74.6% | 4,226                  | 86.2% | 1,695       | 82.1% | 4,523           | 84.7% | 53,248 | 82.6% |
| High birth weight                    | 4,950        | 11.4% | 585              | 7.7%  | 131             | 16.5% | 252                    | 5.1%  | 169         | 8.2%  | 410             | 7.7%  | 6,522  | 10.1% |
| Number of Infants at Birth           |              |       |                  |       |                 |       |                        |       |             |       |                 |       |        |       |
| Singleton                            | 42,036       | 96.4% | 7,314            | 96.3% | 774             | 97.7% | 4,796                  | 97.8% | 1,991       | 96.5% | 5,222           | 97.8% | 62,285 | 96.6% |
| Twins                                | 1,512        | 3.5%  | 274              | 3.6%  | 18              | --    | 107                    | 2.2%  | 73          | 3.5%  | 105             | 2.0%  | 2,096  | 3.3%  |
| Triplets or more                     | 47           | 0.1%  | 6                | --    | 0               | --    | 0                      | --    | 0           | --    | 15              | --    | 68     | 0.1%  |

<sup>1</sup> DO = Doctor of Osteopathy; Certified Nurse Midwife includes Certified Nurse midwives and Certified (non-nurse) Midwives.

<sup>2</sup> Delivery setting missing is not included in this data.

<sup>3</sup> Method of Delivery missing is not included in this data.

<sup>4</sup> Calculated based on clinician's estimate of completed weeks of gestation. Missing gestational age is not included in this data.

<sup>5</sup> Birthweight: VLBW < 1,500 gms (3 lbs 5 oz); LBW < 2,500 (5.5 lbs); normal range 2,500 - 3,900 gms High birthweight 4,000+ grams (8 pounds, 13 ounces). Missing birthweight is not included in this data.

**Table 5. Counts and Percentages<sup>1</sup> for Selected Pregnancy Characteristics by Urban/Rural Residence,<sup>2</sup> MN Residents, 2021.**

| Total births in each group           | Metropolitan  |       |              |       |        |       |       |       | Non-Metropolitan<br>(Rural) |       |          |       | TOTAL <sup>2</sup> |       |
|--------------------------------------|---------------|-------|--------------|-------|--------|-------|-------|-------|-----------------------------|-------|----------|-------|--------------------|-------|
|                                      | Large Central |       | Large Fringe |       | Medium |       | Small |       | Micropolitan                |       | Non-Core |       |                    |       |
|                                      | #             | Col % | #            | Col % | #      | Col % | #     | Col % | #                           | Col % | #        | Col % | #                  | Col % |
|                                      | 21,363        |       | 19,857       |       | 2,226  |       | 7,528 |       | 7,280                       |       | 6,188    |       | 64,442             |       |
| <b>Previous Live Births</b>          |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| None                                 | 8,252         | 38.6% | 6,821        | 34.4% | 844    | 37.9% | 2,567 | 34.1% | 2,347                       | 32.2% | 1,964    | 31.7% | 22,795             | 35.4% |
| One                                  | 6,578         | 30.8% | 6,652        | 33.5% | 747    | 33.6% | 2,316 | 30.8% | 2,237                       | 30.7% | 1,851    | 29.9% | 20,381             | 31.6% |
| Two or more                          | 6,514         | 30.5% | 6,367        | 32.1% | 632    | 28.4% | 2,640 | 35.1% | 2,686                       | 36.9% | 2,361    | 38.2% | 21,200             | 32.9% |
| <b>Prepregnancy BMI<sup>3</sup></b>  |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| Underweight (BMI < 19.0)             | 702           | 3.3%  | 519          | 2.6%  | 56     | 2.5%  | 228   | 3.0%  | 188                         | 2.6%  | 162      | 2.6%  | 1,855              | 2.9%  |
| Acceptable (BMI 19.0 - 24.9)         | 8,884         | 41.6% | 7,548        | 38.0% | 842    | 37.8% | 2,811 | 37.3% | 2,447                       | 33.6% | 2,014    | 32.5% | 24,546             | 38.1% |
| Overweight (BMI 25.0 - 29.9)         | 6,031         | 28.2% | 5,698        | 28.7% | 644    | 28.9% | 2,126 | 28.2% | 2,002                       | 27.5% | 1,667    | 26.9% | 18,168             | 28.2% |
| Obese (BMI 30.0 - 40.9)              | 4,736         | 22.2% | 4,963        | 25.0% | 528    | 23.7% | 1,954 | 26.0% | 2,094                       | 28.8% | 1,848    | 29.9% | 16,123             | 25.0% |
| Morbidly Obese (BMI > 40.9)          | 734           | 3.4%  | 908          | 4.6%  | 141    | 6.3%  | 365   | 4.8%  | 480                         | 6.6%  | 400      | 6.5%  | 3,028              | 4.7%  |
| Height/weight missing                | 276           | 1.3%  | 221          | 1.1%  | 15     | --    | 44    | 0.6%  | 69                          | 0.9%  | 97       | 1.6%  | 722                | 1.1%  |
| <b>Trimester Prenatal Care Began</b> |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| First                                | 17,164        | 80.3% | 16,854       | 84.9% | 1,935  | 86.9% | 5,360 | 71.2% | 5,673                       | 77.9% | 4,517    | 73.0% | 51,503             | 79.9% |
| Second                               | 3,252         | 15.2% | 2,266        | 11.4% | 223    | 10.0% | 738   | 9.8%  | 820                         | 11.3% | 732      | 11.8% | 8,031              | 12.5% |
| Third                                | 581           | 2.7%  | 341          | 1.7%  | 29     | 1.3%  | 121   | 1.6%  | 182                         | 2.5%  | 157      | 2.5%  | 1,411              | 2.2%  |
| No prenatal care                     | 189           | 0.9%  | 64           | 0.3%  | 17     | --    | 39    | 0.5%  | 69                          | 0.9%  | 48       | 0.8%  | 426                | 0.7%  |
| Out of state births <sup>4</sup>     | 65            | 0.3%  | 150          | 0.8%  | 6      | --    | 1,240 | 16.5% | 447                         | 6.1%  | 644      | 10.4% | 2,552              | 4.0%  |
| Prenatal care not reported           | 112           | 0.5%  | 182          | 0.9%  | 16     | --    | 30    | 0.4%  | 89                          | 1.2%  | 90       | 1.5%  | 519                | 0.8%  |
| <b>Adequacy of Prenatal Care</b>     |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| None                                 | 189           | 0.9%  | 64           | 0.3%  | 17     | --    | 39    | 0.5%  | 69                          | 0.9%  | 48       | 0.8%  | 426                | 0.7%  |
| Inadequate                           | 2,159         | 10.1% | 1,356        | 6.8%  | 132    | 5.9%  | 412   | 5.5%  | 598                         | 8.2%  | 498      | 8.0%  | 5,155              | 8.0%  |
| Intermediate                         | 2,385         | 11.2% | 2,091        | 10.5% | 221    | 9.9%  | 964   | 12.8% | 722                         | 9.9%  | 526      | 8.5%  | 6,909              | 10.7% |
| Adequate                             | 9,493         | 44.4% | 9,817        | 49.4% | 1,179  | 53.0% | 3,177 | 42.2% | 3,301                       | 45.3% | 2,716    | 43.9% | 29,683             | 46.1% |
| Intensive                            | 6,920         | 32.4% | 6,104        | 30.7% | 650    | 29.2% | 1,655 | 22.0% | 2,030                       | 27.9% | 1,647    | 26.6% | 19,006             | 29.5% |
| Out of state births <sup>4</sup>     | 65            | 0.3%  | 150          | 0.8%  | 6      | --    | 1,240 | 16.5% | 447                         | 6.1%  | 644      | 10.4% | 2,552              | 4.0%  |
| Prenatal care not reported           | 152           | 0.7%  | 275          | 1.4%  | 21     | 0.9%  | 41    | 0.5%  | 113                         | 1.6%  | 109      | 1.8%  | 711                | 1.1%  |

<sup>1</sup> Percentages are column (within each urban/rural group) percentages.

<sup>2</sup> Missing county of residence and are not included in this data.

<sup>3</sup> BMI = Body Mass Index calculated as weight (kg) / height (meters)<sup>2</sup>.

<sup>4</sup> Out of state births are MN residents giving birth outside the state of MN. Prenatal care data are not available from some states.

**Table 6. Counts and Percentages<sup>1</sup> for Delivery Characteristics and Infant Outcomes by Urban/Rural Residence, MN Residents, 2021.**

| Total births in each group            | Metropolitan  |       |              |       |        |       |       |       | Non-Metropolitan<br>(Rural) |       |          |       | TOTAL <sup>2</sup> |       |
|---------------------------------------|---------------|-------|--------------|-------|--------|-------|-------|-------|-----------------------------|-------|----------|-------|--------------------|-------|
|                                       | Large Central |       | Large Fringe |       | Medium |       | Small |       | Micropolitan                |       | Non-Core |       |                    |       |
|                                       | #             | Col % | #            | Col % | #      | Col % | #     | Col % | #                           | Col % | #        | Col % | #                  | Col % |
|                                       | 21,363        |       | 19,857       |       | 2,226  |       | 7,528 |       | 7,280                       |       | 6,188    |       | 64,442             |       |
| <b>Birth Attendant<sup>3</sup></b>    |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| MD or DO                              | 17,118        | 80.1% | 16,979       | 85.5% | 2,003  | 90.0% | 5,796 | 77.0% | 6,256                       | 85.9% | 5,288    | 85.5% | 53,440             | 82.9% |
| Certified Nurse Midwife               | 3,944         | 18.5% | 2,512        | 12.7% | 168    | 7.5%  | 1,483 | 19.7% | 809                         | 11.1% | 687      | 11.1% | 9,603              | 14.9% |
| Other licensed or lay midwife         | 69            | 0.3%  | 100          | 0.5%  | 30     | 1.3%  | 56    | 0.7%  | 61                          | 0.8%  | 74       | 1.2%  | 390                | 0.6%  |
| Other (RN, EMT, non-med/ or missing)  | 232           | 1.1%  | 266          | 1.3%  | 25     | 1.1%  | 193   | 2.6%  | 154                         | 2.1%  | 139      | 2.2%  | 1,009              | 1.6%  |
| <b>Delivery setting<sup>4</sup></b>   |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| Hospital                              | 20,781        | 97.3% | 19,332       | 97.4% | 2,176  | 97.8% | 7,316 | 97.2% | 7,069                       | 97.1% | 5,965    | 96.4% | 62,639             | 97.2% |
| Free-standing birth center            | 366           | 1.7%  | 252          | 1.3%  | 4      | --    | 40    | 0.5%  | 26                          | 0.4%  | 24       | 0.4%  | 712                | 1.1%  |
| Home                                  | 208           | 1.0%  | 259          | 1.3%  | 43     | 1.9%  | 170   | 2.3%  | 180                         | 2.5%  | 194      | 3.1%  | 1,054              | 1.6%  |
| <b>Method of Delivery<sup>5</sup></b> |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| Vaginal                               | 14,737        | 69.0% | 13,543       | 68.2% | 1,551  | 69.7% | 5,274 | 70.1% | 5,114                       | 70.2% | 4,226    | 68.3% | 44,445             | 69.0% |
| Vaginal Birth after C-Section         | 482           | 2.3%  | 374          | 1.9%  | 49     | 2.2%  | 150   | 2.0%  | 155                         | 2.1%  | 102      | 1.6%  | 1,312              | 2.0%  |
| C-Section                             | 6,134         | 28.7% | 5,927        | 29.8% | 625    | 28.1% | 2,096 | 27.8% | 1,989                       | 27.3% | 1,854    | 30.0% | 18,625             | 28.9% |
| <b>Infant Outcomes</b>                |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| <b>Gestational Age<sup>6</sup></b>    |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| Preterm (< 37 weeks)                  | 2,137         | 10.0% | 1,853        | 9.3%  | 223    | 10.0% | 640   | 8.5%  | 681                         | 9.4%  | 631      | 10.2% | 6,165              | 9.6%  |
| Term (37 - 41 weeks)                  | 19,021        | 89.0% | 17,907       | 90.2% | 1,991  | 89.4% | 6,823 | 90.6% | 6,540                       | 89.8% | 5,507    | 89.0% | 57,789             | 89.7% |
| Post Term (42+ weeks)                 | 177           | 0.8%  | 73           | 0.4%  | 6      | --    | 48    | 0.6%  | 30                          | 0.4%  | 31       | 0.5%  | 365                | 0.6%  |
| <b>Birthweight<sup>7</sup></b>        |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| Very low birth weight                 | 282           | 1.3%  | 240          | 1.2%  | 19     | --    | 67    | 0.9%  | 86                          | 1.2%  | 74       | 1.2%  | 768                | 1.2%  |
| Low birth weight                      | 1,496         | 7.0%  | 1,105        | 5.6%  | 156    | 7.0%  | 436   | 5.8%  | 385                         | 5.3%  | 333      | 5.4%  | 3,911              | 6.1%  |
| Normal birth weight                   | 17,669        | 82.7% | 16,379       | 82.5% | 1,808  | 81.2% | 6,238 | 82.9% | 6,052                       | 83.1% | 5,095    | 82.3% | 53,241             | 82.6% |
| High birth weight                     | 1,916         | 9.0%  | 2,133        | 10.7% | 243    | 10.9% | 787   | 10.5% | 757                         | 10.4% | 686      | 11.1% | 6,522              | 10.1% |
| <b>Number of Infants at Birth</b>     |               |       |              |       |        |       |       |       |                             |       |          |       |                    |       |
| Singleton                             | 20,650        | 96.7% | 19,118       | 96.3% | 2,158  | 96.9% | 7,309 | 97.1% | 7,069                       | 97.1% | 5,974    | 96.5% | 62,278             | 96.6% |
| Twins                                 | 695           | 3.3%  | 708          | 3.6%  | 68     | 3.1%  | 216   | 2.9%  | 203                         | 2.8%  | 206      | 3.3%  | 2,096              | 3.3%  |
| Triplets or more                      | 18            | --    | 31           | 0.2%  | 0      | --    | 3     | --    | 8                           | --    | 8        | --    | 68                 | 0.1%  |

<sup>1</sup> Percentages are column (within each urban/rural group) percentages.

<sup>2</sup> Missing county of residence is not included in this data.

<sup>3</sup> DO = Doctor of Osteopathy; Certified Nurse Midwife includes Certified Nurse midwives and Certified (non-nurse) Midwives.

<sup>4</sup> Delivery setting missing is not included in this data.

<sup>5</sup> Method of Delivery missing is not included in this data.

<sup>6</sup> Calculated based on clinician's estimate of completed weeks of gestation. Missing gestational age is not included in this data.

<sup>7</sup> Birthweight: VLBW < 1,500 gms (3 lbs 5 oz); LBW < 2,500 (5.5 lbs); normal range 2,500 - 3,900 gms High birthweight 4,000+ grams (8 pounds, 13 ounces). Missing birth weight is not included in this data.

**Table 7. Route of Delivery<sup>1</sup> by Characteristics of Women Giving Birth, MN Residents, 2021.**

|                                              | Vaginal      |              | VBAC     |           | C-Section  |              |
|----------------------------------------------|--------------|--------------|----------|-----------|------------|--------------|
|                                              | #            | Row %        | #        | Row %     | #          | Row %        |
| <b>All Births</b>                            | 44,449       | 69.0%        | 1,313    | 2.0%      | 18,627     | 28.9%        |
| <b>Race / Ethnicity</b>                      |              |              |          |           |            |              |
| White                                        | 30,236       | 69.4%        | 711      | 1.6%      | 12,604     | 28.9%        |
| African American                             | 4,888        | 64.4%        | 310      | 4.1%      | 2,396      | 31.6%        |
| American Indian                              | 524          | 66.2%        | 21       | 2.7%      | 247        | 31.2%        |
| Asian/Pacific Islander                       | 3,579        | 73.0%        | 124      | 2.5%      | 1,200      | 24.5%        |
| Multiracial                                  | 1,404        | 68.0%        | 44       | 2.1%      | 616        | 29.8%        |
| Other/Unknown                                | 105          | 72.9%        | 3        | --        | 36         | 25.0%        |
| Hispanic/Latino                              | 3,713        | 69.5%        | 100      | 1.9%      | 1,528      | 28.6%        |
| <b>Age of Mother</b>                         |              |              |          |           |            |              |
| < 18 years                                   | 361          | 81.1%        | 1        | --        | 83         | 18.7%        |
| 18-19 years                                  | 929          | 81.3%        | 1        | --        | 212        | 18.6%        |
| <b>Teen Mom Total</b>                        | <b>1,290</b> | <b>81.3%</b> | <b>2</b> | <b>--</b> | <b>295</b> | <b>18.6%</b> |
| 20-24 years                                  | 5,986        | 76.1%        | 76       | 1.0%      | 1,805      | 22.9%        |
| 25-29 years                                  | 13,278       | 73.3%        | 320      | 1.8%      | 4,510      | 24.9%        |
| 30-34 years                                  | 15,642       | 67.9%        | 536      | 2.3%      | 6,861      | 29.8%        |
| 35-39 years                                  | 7,079        | 61.2%        | 309      | 2.7%      | 4,180      | 36.1%        |
| 40-44 years                                  | 1,104        | 53.5%        | 65       | 3.1%      | 896        | 43.4%        |
| 45+ years                                    | 64           | 43.2%        | 5        | --        | 79         | 53.4%        |
| <b>Educational Attainment<sup>2</sup></b>    |              |              |          |           |            |              |
| < High School                                | 4,295        | 71.7%        | 177      | 3.0%      | 1,519      | 25.4%        |
| HS Diploma / GED                             | 7,341        | 69.1%        | 244      | 2.3%      | 3,037      | 28.6%        |
| Some College, No degree                      | 7,271        | 68.0%        | 216      | 2.0%      | 3,210      | 30.0%        |
| Associate Degree                             | 5,191        | 68.0%        | 133      | 1.7%      | 2,306      | 30.2%        |
| Bachelor's Degree                            | 13,254       | 69.6%        | 343      | 1.8%      | 5,434      | 28.6%        |
| Graduate / Professional Degree               | 6,876        | 68.1%        | 189      | 1.9%      | 3,032      | 30.0%        |
| Unknown                                      | 221          | 68.8%        | 11       | --        | 89         | 27.7%        |
| <b>Prepregnancy BMI</b>                      |              |              |          |           |            |              |
| Underweight (BMI < 19.0)                     | 1,489        | 80.4%        | 16       | --        | 346        | 18.7%        |
| Acceptable (BMI 19.0 - 24.9)                 | 18,544       | 75.6%        | 478      | 1.9%      | 5,501      | 22.4%        |
| Overweight (BMI 25.0 - 29.9)                 | 12,527       | 69.0%        | 425      | 2.3%      | 5,209      | 28.7%        |
| Obese (BMI 30.0 - 40.9)                      | 9,877        | 61.3%        | 334      | 2.1%      | 5,910      | 36.7%        |
| Morbidly Obese (BMI > 40.9)                  | 1,517        | 50.1%        | 42       | 1.4%      | 1,470      | 48.5%        |
| Height or weight not reported                | 495          | 70.3%        | 18       | --        | 191        | 27.1%        |
| <b>Adequacy of Prenatal Care<sup>3</sup></b> |              |              |          |           |            |              |
| No Prenatal Care                             | 285          | 67.5%        | 17       | --        | 120        | 28.4%        |
| Inadequate                                   | 3,605        | 70.4%        | 161      | 3.1%      | 1,358      | 26.5%        |
| Intermediate                                 | 5,140        | 74.4%        | 169      | 2.4%      | 1,599      | 23.1%        |
| Adequate                                     | 21,471       | 72.3%        | 617      | 2.1%      | 7,592      | 25.6%        |
| Intensive                                    | 11,666       | 61.4%        | 333      | 1.8%      | 7,009      | 36.9%        |
| Out of state births <sup>4</sup>             | 1,778        | 69.8%        | 0        | --        | 771        | 30.2%        |
| <b>Previous Live Births</b>                  |              |              |          |           |            |              |
| No previous births                           | 15,728       | 69.0%        | 4        | --        | 7,062      | 31.0%        |
| One previous live birth                      | 13,863       | 68.0%        | 444      | 2.2%      | 6,068      | 29.8%        |
| Two or more previous births                  | 14,826       | 70.0%        | 863      | 4.1%      | 5,482      | 25.9%        |

**NOTE:** Row percentages (route of delivery within each category). Missing data for each variable not included except where shown. -- are not calculated due to < 20 count.

<sup>1</sup> Route of delivery missing is not included in this data. VBAC = Vaginal Birth after [previous] Cesarean-section.

<sup>2</sup> Educational attainment reported for mothers age 25 years and older.

<sup>3</sup> Adequacy is determined using the Adequacy of Prenatal Care Utilization (APNCU) Index and is not comparable to GINDEX Index used in previous years. See glossary for definitions.

<sup>4</sup> Out of state births are MN residents giving birth outside the state of MN. Prenatal care data not available from some states.

**Table 8. Counts and Percentages<sup>1</sup> of Selected Birth Outcomes by Demographic Characteristics of Women Giving Birth, MN Residents, 2021.**

|                                              | Preterm <sup>2</sup> |             | Low Birthweight <sup>3</sup> |             | High Birthweight <sup>3</sup> |             |
|----------------------------------------------|----------------------|-------------|------------------------------|-------------|-------------------------------|-------------|
|                                              | #                    | Row %       | #                            | Row %       | #                             | Row %       |
| <b>All Births</b>                            | 6,166                | 9.6%        | 4,679                        | 7.3%        | 6,467                         | 10.0%       |
| <b>Race and Ethnicity</b>                    |                      |             |                              |             |                               |             |
| White                                        | 3,957                | 9.1%        | 2,710                        | 6.2%        | 4,918                         | 11.3%       |
| African American                             | 835                  | 11.0%       | 850                          | 11.2%       | 577                           | 7.6%        |
| American Indian                              | 114                  | 14.6%       | 70                           | 8.8%        | 130                           | 16.4%       |
| Asian/Pacific Islander                       | 452                  | 9.2%        | 425                          | 8.7%        | 250                           | 5.1%        |
| Multiracial                                  | 241                  | 11.7%       | 200                          | 9.7%        | 168                           | 8.1%        |
| Other/Unknown                                | 18                   | --          | 15                           | --          | 23                            | 14.5%       |
| Hispanic/Latino                              | 549                  | 10.3%       | 409                          | 7.7%        | 401                           | 7.5%        |
| <b>Age of Mother</b>                         |                      |             |                              |             |                               |             |
| < 18 years                                   | 40                   | 9.1%        | 41                           | 9.2%        | 27                            | 6.1%        |
| 18-19 years                                  | 103                  | 9.0%        | 105                          | 9.2%        | 72                            | 6.3%        |
| <b>Teen Mom Total</b>                        | <b>143</b>           | <b>9.0%</b> | <b>146</b>                   | <b>9.2%</b> | <b>99</b>                     | <b>6.2%</b> |
| 20-24 years                                  | 775                  | 9.9%        | 631                          | 8.0%        | 623                           | 7.9%        |
| 25-29 years                                  | 1,501                | 8.3%        | 1,165                        | 6.4%        | 1,723                         | 9.5%        |
| 30-34 years                                  | 2,167                | 9.4%        | 1,584                        | 6.9%        | 2,532                         | 11.0%       |
| 35-39 years                                  | 1,262                | 10.9%       | 935                          | 8.1%        | 1,261                         | 10.9%       |
| 40-44 years                                  | 277                  | 13.4%       | 193                          | 9.3%        | 215                           | 10.4%       |
| 45+ years                                    | 40                   | 27.2%       | 24                           | 16.2%       | 14                            | --          |
| <b>Educational Attainment<sup>4</sup></b>    |                      |             |                              |             |                               |             |
| < High School                                | 575                  | 9.6%        | 517                          | 8.6%        | 493                           | 8.2%        |
| HS Diploma / GED                             | 1,100                | 10.4%       | 948                          | 8.9%        | 887                           | 8.3%        |
| Some College, No degree                      | 1,203                | 11.3%       | 883                          | 8.3%        | 1,035                         | 9.7%        |
| Associate Degree                             | 759                  | 10.0%       | 537                          | 7.0%        | 796                           | 10.4%       |
| Bachelor's Degree                            | 1,619                | 8.5%        | 1,166                        | 6.1%        | 2,140                         | 11.2%       |
| Graduate / Professional Degree               | 868                  | 8.6%        | 599                          | 5.9%        | 1,088                         | 10.8%       |
| Unknown                                      | 42                   | 13.3%       | 29                           | 8.8%        | 28                            | 8.5%        |
| <b>Prepregnancy BMI</b>                      |                      |             |                              |             |                               |             |
| Underweight (BMI < 19.0)                     | 150                  | 8.1%        | 181                          | 9.8%        | 61                            | 3.3%        |
| Acceptable (BMI 19.0 - 24.9)                 | 2,005                | 8.2%        | 1,656                        | 6.7%        | 1,994                         | 8.1%        |
| Overweight (BMI 25.0 - 29.9)                 | 1,664                | 9.2%        | 1,271                        | 7.0%        | 1,905                         | 10.5%       |
| Obese (BMI 30.0 - 40.9)                      | 1,810                | 11.2%       | 1,231                        | 7.6%        | 2,009                         | 12.5%       |
| Morbidly Obese (BMI > 40.9)                  | 402                  | 13.3%       | 252                          | 8.3%        | 422                           | 13.9%       |
| Height or weight not reported                | 135                  | 19.8%       | 88                           | 12.2%       | 76                            | 10.5%       |
| <b>Adequacy of Prenatal Care<sup>5</sup></b> |                      |             |                              |             |                               |             |
| None                                         | 118                  | 31.4%       | 85                           | 20.0%       | 23                            | 5.4%        |
| Inadequate                                   | 514                  | 10.0%       | 459                          | 8.9%        | 432                           | 8.4%        |
| Intermediate                                 | 366                  | 5.3%        | 283                          | 4.1%        | 781                           | 11.3%       |
| Adequate                                     | 1,061                | 3.6%        | 943                          | 3.2%        | 3,427                         | 11.5%       |
| Intensive                                    | 3,651                | 19.2%       | 2,549                        | 13.4%       | 1,457                         | 7.7%        |
| Out of state births                          | 373                  | 14.6%       | 294                          | 11.5%       | 260                           | 10.2%       |
| <b>Previous Live Births</b>                  |                      |             |                              |             |                               |             |
| No previous births                           | 2,295                | 10.1%       | 1,976                        | 8.7%        | 1,789                         | 7.8%        |
| One previous birth                           | 1,723                | 8.5%        | 1,231                        | 6.0%        | 2,249                         | 11.0%       |
| Two or more previous births                  | 2,142                | 10.1%       | 1,467                        | 6.9%        | 2,421                         | 11.4%       |

<sup>1</sup> Percentages are row percentages (outcome within each characteristic category).

<sup>2</sup> Preterm are infants born after 20 weeks but before 37 weeks of gestation.

<sup>3</sup> Low birthweight < 2,500 grams (5.5 pounds). High birthweight >= 4,000 grams (8 pounds, 13 ounces). Missing birthweight is not included in this data.

<sup>4</sup> Educational attainment reported for mothers age 25 years and older.

<sup>5</sup> Adequacy is determined using the Adequacy of Prenatal Care Utilization (APNCU) Index, and is not comparable to GINDEK Index used in previous years. See glossary for more information. Out of state births are MN residents giving birth outside the state of MN. Prenatal care data not available from some states. Missing data is not included in this variable.

**Table 9. Number of Race and Hispanic Checkboxes Selected by Women Who Gave Birth, Minnesota Residents, 2021.**

|                                   | Number that selected <sup>1</sup><br>each checkbox |        |
|-----------------------------------|----------------------------------------------------|--------|
|                                   | 2020                                               | 2021   |
| <b>Race Checkboxes</b>            |                                                    |        |
| White                             | 46,902                                             | 48,269 |
| African American                  | 4,979                                              | 4,776  |
| Somali                            | 2,559                                              | 2,378  |
| Ethiopian                         | 714                                                | 700    |
| Liberian                          | 336                                                | 325    |
| Sudanese                          | 74                                                 | 75     |
| Nigerian                          | 141                                                | 121    |
| Other African                     | 653                                                | 692    |
| American Indian                   | 1,625                                              | 1,640  |
| Asian Indian                      | 833                                                | 820    |
| Chinese                           | 374                                                | 330    |
| Filipino                          | 246                                                | 276    |
| Japanese                          | 90                                                 | 95     |
| Korean                            | 257                                                | 247    |
| Vietnamese                        | 357                                                | 326    |
| Hmong                             | 2,174                                              | 2,111  |
| Cambodian                         | 188                                                | 151    |
| Laotian                           | 164                                                | 157    |
| Other Asian                       | 767                                                | 784    |
| Hawaiian                          | 22                                                 | 19     |
| Other Pacific Islander            | 95                                                 | 110    |
| <i>Guamanian/Chamorro</i>         | 19                                                 | 15     |
| <i>Samoan</i>                     | 8                                                  | 4      |
| Other Race                        | 2,280                                              | 2,406  |
| Unknown Race                      | 188                                                | 203    |
| <b>Hispanic/Latino Checkboxes</b> |                                                    |        |
| Mexican                           | 3,279                                              | 3,371  |
| Cuban                             | 62                                                 | 48     |
| Puerto Rican                      | 240                                                | 252    |
| Other Hispanic                    | 1,598                                              | 1,671  |
| Not Hispanic/Latino               | 57,186                                             | 57,873 |
| Unknown/Nothing Selected          | 1,097                                              | 1,234  |

<sup>1</sup> More than one category may be selected, thus counts sum to more than the Minnesota resident birth total.

**Note:** Categories correspond to those listed on the birth certificate worksheet and are self-selected by each woman. Counts are the number of records on which that checkbox was indicated. Race(s) chosen do not necessarily correspond to birth country of mother.

**Note:** Classification of the checkboxes changed from 2016 to 2017. In 2016, all checkboxes selected were documented regardless of other information provided by the woman. In 2017, checkboxes are edited and corrected for inconsistencies to reflect complete race/ethnicity information provided by each woman. Edited codes are the national standard for reporting vital statistics by race/ethnicity.

**Table 10. Live Births by Birth Country<sup>1</sup> of Women Giving Birth, MN Residents, 2021.**

| Woman's Birth Country | Number of Women Born in Each Country |
|-----------------------|--------------------------------------|
| <b>United States</b>  | <b>51,988</b>                        |
| <b>Foreign-Born</b>   | <b>12,461</b>                        |
| Somalia               | 2,123                                |
| Mexico                | 1,327                                |
| Ethiopia              | 955                                  |
| Thailand              | 771                                  |
| India                 | 678                                  |
| Kenya                 | 532                                  |
| Guatemala             | 433                                  |
| Liberia               | 357                                  |
| Laos                  | 312                                  |
| Myanmar (Burma)       | 301                                  |
| El Salvador           | 254                                  |
| Ecuador               | 243                                  |
| Vietnam               | 225                                  |
| Canada                | 209                                  |
| Honduras              | 192                                  |
| South Korea           | 191                                  |
| Philippines           | 190                                  |
| China                 | 188                                  |
| Russia                | 132                                  |
| Nigeria               | 129                                  |
| Ukraine               | 117                                  |
| Germany               | 110                                  |
| Cameroon              | 90                                   |
| Brazil                | 78                                   |
| Colombia              | 78                                   |
| Ghana                 | 78                                   |
| All Others            | 2,168                                |

<sup>1</sup> The list represents home countries of women giving birth where there were at least 75 women from that country.

**Table 11. Selected Characteristics and Outcomes for Women Who Smoked Before or During Pregnancy, Minnesota Residents, 2021.**

|                                  | Total Births | % that Smoked Before or During Pregnancy |       | % Smokers that Quit Prior to Pregnancy |       | % Smokers that Quit During Pregnancy |       |
|----------------------------------|--------------|------------------------------------------|-------|----------------------------------------|-------|--------------------------------------|-------|
|                                  |              | #                                        | %     | #                                      | %     | #                                    | %     |
| <b>All Births</b>                | 64,449       | 4,690                                    | 7.3%  | 1,064                                  | 22.7% | 726                                  | 15.5% |
| <b>Race and Ethnicity</b>        |              |                                          |       |                                        |       |                                      |       |
| White                            | 43,595       | 3,303                                    | 7.6%  | 780                                    | 23.6% | 507                                  | 15.3% |
| African American                 | 7,594        | 352                                      | 4.6%  | 61                                     | 17.3% | 53                                   | 15.1% |
| American Indian                  | 792          | 324                                      | 40.9% | 39                                     | 12.0% | 49                                   | 15.1% |
| Asian/Pacific Islander           | 4,903        | 126                                      | 2.6%  | 52                                     | 41.3% | 24                                   | 19.0% |
| Multiracial                      | 2,064        | 366                                      | 17.7% | 72                                     | 19.7% | 57                                   | 15.6% |
| Other/Unknown                    | 159          | 4                                        | --    | 0                                      | --    | 0                                    | --    |
| Hispanic/Latino                  | 5,342        | 215                                      | 4.0%  | 60                                     | 27.9% | 36                                   | 16.7% |
| <b>Age of Mother</b>             |              |                                          |       |                                        |       |                                      |       |
| < 18 years                       | 445          | 24                                       | 5.4%  | 2                                      | --    | 9                                    | --    |
| 18-19 years                      | 1,143        | 169                                      | 14.8% | 44                                     | 26.0% | 35                                   | 20.7% |
| 20-24 years                      | 7,873        | 961                                      | 12.2% | 243                                    | 25.3% | 176                                  | 18.3% |
| 25-29 years                      | 18,122       | 1,407                                    | 7.8%  | 327                                    | 23.2% | 208                                  | 14.8% |
| 30-34 years                      | 23,057       | 1,363                                    | 5.9%  | 306                                    | 22.5% | 194                                  | 14.2% |
| 35-39 years                      | 11,581       | 658                                      | 5.7%  | 129                                    | 19.6% | 86                                   | 13.1% |
| 40+ years                        | 2,221        | 108                                      | 4.9%  | 13                                     | --    | 18                                   | --    |
| <b>Trimester PNC began</b>       |              |                                          |       |                                        |       |                                      |       |
| First                            | 51,507       | 3,320                                    | 6.4%  | 871                                    | 26.2% | 522                                  | 15.7% |
| Second                           | 8,032        | 699                                      | 8.7%  | 105                                    | 15.0% | 115                                  | 16.5% |
| Third                            | 1,412        | 222                                      | 15.7% | 17                                     | --    | 36                                   | 16.2% |
| None                             | 426          | 156                                      | 36.6% | 9                                      | --    | 8                                    | --    |
| Out of state births <sup>2</sup> | 2,552        | 243                                      | 9.5%  | 49                                     | 20.2% | 41                                   | 16.9% |
| Not reported                     | 520          | 50                                       | 9.6%  | 13                                     | --    | 4                                    | --    |
| <b>Delivery Method</b>           |              |                                          |       |                                        |       |                                      |       |
| Vaginal                          | 44,449       | 3,061                                    | 6.9%  | 686                                    | 22.4% | 500                                  | 16.3% |
| VBAC <sup>3</sup>                | 1,313        | 85                                       | 6.5%  | 16                                     | --    | 16                                   | --    |
| C-section                        | 18,627       | 1,544                                    | 8.3%  | 362                                    | 23.4% | 210                                  | 13.6% |
| <b>Preterm</b>                   |              |                                          |       |                                        |       |                                      |       |
| < 37 weeks                       | 6,166        | 627                                      | 10.2% | 106                                    | 16.9% | 90                                   | 14.4% |
| <b>Low Birth Weight</b>          |              |                                          |       |                                        |       |                                      |       |
| < 2500 grams                     | 4,679        | 595                                      | 12.7% | 84                                     | 14.1% | 93                                   | 15.6% |

<sup>1</sup> Percentages are row percentages (smoking within each characteristic category). -- are not calculated due to < 20 count.

<sup>2</sup> Out of state births are MN residents giving birth outside the state of MN. Prenatal care data not available from some states.

<sup>3</sup> VBAC - Vaginal Birth After [previous] Cesarean-Section.

**Table 12. Pregnancies Resulting from Infertility Treatments, MN Residents, 2021.**

|                                         |        | Birth Purity |       |                       |
|-----------------------------------------|--------|--------------|-------|-----------------------|
|                                         | Total  | Singleton    | Twin  | Triplet+ <sup>2</sup> |
| Pregnancies <sup>1</sup>                |        |              |       |                       |
| Total pregnancies                       | 63,363 | 62290        | 1050  | 23                    |
| # resulting from infertility treatments | 1,795  | 1619         | 166   | 10                    |
| % resulting from infertility treatments | 2.8%   | 2.6%         | 15.8% | --                    |
| Age of Mother                           |        |              |       |                       |
| <20 years                               | 0      | 0            | 0     | 0                     |
| 20-24 years                             | 26     | 21           | 5     | 0                     |
| 25-29 years                             | 237    | 207          | 28    | 2                     |
| 30-34 years                             | 655    | 582          | 70    | 3                     |
| 35-39 years                             | 610    | 561          | 46    | 3                     |
| 40-44 years                             | 220    | 207          | 12    | 1                     |
| 45+ years                               | 46     | 40           | 5     | 1                     |
| Treatment Type                          |        |              |       |                       |
| Drugs/Artificial Insemination Only      | 457    | 405          | 49    | 3                     |
| Assisted Reproductive Technologies Only | 1,309  | 1,185        | 117   | 7                     |
| Both Methods                            | 10     | 10           | 0     | 0                     |
| Method Not Specified                    | 19     | 19           | 0     | 0                     |

<sup>1</sup> Number of pregnancies, not number of births. Each mother is counted only once regardless of the plurality of the pregnancy.

<sup>2</sup> Due to the small numbers triplets or more are combined. -- rates not calculated due to < 20.

## Fertility Tables

---

Table 1: Pregnancies, Pregnancy Outcome, Birth/Fertility Rates, Minnesota Residents, 2006 - 2021

Table 2: Pregnancies and Pregnancy Rates by Age of Mother, Minnesota Residents, 2010 - 2021

**Fertility Table 1. Total Reported Pregnancies by Pregnancy Outcome, Pregnancy Rate, and Fertility Rate, MN Residents, 2006 - 2021.**

|                                      | Total Reported Pregnancies <sup>1</sup> | Live Births | Induced Abortions | Fetal Deaths <sup>2</sup> | Female <sup>3</sup> Population Ages 15-44 | Pregnancy Rate <sup>4</sup> | Fertility Rate <sup>5</sup> |
|--------------------------------------|-----------------------------------------|-------------|-------------------|---------------------------|-------------------------------------------|-----------------------------|-----------------------------|
| <b>Year</b>                          |                                         |             |                   |                           |                                           |                             |                             |
| 2006                                 | 86,814                                  | 73,515      | 12,948            | 351                       | 1,070,877                                 | 81.1                        | 68.6                        |
| 2007                                 | 86,832                                  | 73,675      | 12,770            | 387                       | 1,058,541                                 | 82.0                        | 69.6                        |
| 2008                                 | 84,653                                  | 72,382      | 11,896            | 375                       | 1,048,477                                 | 80.7                        | 69.0                        |
| 2009                                 | 82,353                                  | 70,617      | 11,391            | 345                       | 1,046,457                                 | 78.7                        | 67.5                        |
| 2010                                 | 79,329                                  | 68,407      | 10,570            | 352                       | 1,045,681                                 | 75.9                        | 65.4                        |
| 2011                                 | 78,942                                  | 68,416      | 10,150            | 376                       | 1,044,201                                 | 75.6                        | 65.5                        |
| 2012                                 | 78,906                                  | 68,783      | 9,758             | 365                       | 1,046,298                                 | 75.4                        | 65.7                        |
| 2013                                 | 78,600                                  | 69,183      | 9,030             | 387                       | 1,049,636                                 | 74.9                        | 65.9                        |
| 2014                                 | 79,534                                  | 69,916      | 9,180             | 438                       | 1,053,340                                 | 75.5                        | 66.4                        |
| 2015                                 | 79,197                                  | 69,835      | 8,898             | 464                       | 1,054,063                                 | 75.1                        | 66.3                        |
| 2016                                 | 79,219                                  | 69,746      | 9,053             | 420                       | 1,054,178                                 | 75.1                        | 66.2                        |
| 2017                                 | 78,227                                  | 68,603      | 9,218             | 406                       | 1,066,806                                 | 73.3                        | 64.3                        |
| 2018                                 | 76,636                                  | 67,348      | 8,896             | 392                       | 1,074,005                                 | 71.4                        | 62.7                        |
| 2019                                 | 75,430                                  | 66,033      | 9,034             | 363                       | 1,081,656                                 | 69.7                        | 61.0                        |
| 2020                                 | 72,039                                  | 63,462      | 8,251             | 326                       | 1,087,455                                 | 66.2                        | 58.4                        |
| 2021                                 | 73,898                                  | 64,449      | 9,127             | 322                       | 1,100,012                                 | 67.2                        | 58.6                        |
| <b>.....2021.....</b>                |                                         |             |                   |                           |                                           |                             |                             |
| <b>Race/ethnicity</b>                |                                         |             |                   |                           |                                           |                             |                             |
| White, non-Hispanic (NH)             | 47,375                                  | 43,595      | 3,606             | 174                       | 805,674                                   | 58.8                        | 54.1                        |
| Black, NH                            | 10,323                                  | 7,594       | 2,661             | 68                        | 93,553                                    | 110.3                       | 81.2                        |
| American Indian, NH                  | 985                                     | 792         | 185               | 8                         | 13,164                                    | 74.8                        | 60.2                        |
| Asian/Pacific Islander, NH           | 5,536                                   | 4,903       | 620               | 13                        | 78,974                                    | 70.1                        | 62.1                        |
| Multiracial, NH                      | 2,649                                   | 2,064       | 572               | 13                        | 31,984                                    | 82.8                        | 64.5                        |
| Other/Unknown, NH                    | 690                                     | 159         | 517               | 14                        | N/A <sup>6</sup>                          | --                          | --                          |
| Hispanic (any race)                  | 6,340                                   | 5,342       | 966               | 32                        | 76,663                                    | 82.7                        | 69.7                        |
| <b>Woman's age group<sup>7</sup></b> |                                         |             |                   |                           |                                           |                             |                             |
| <15 years                            | 44                                      | 26          | 18                | 0                         | N/A <sup>6</sup>                          | --                          | --                          |
| 15-19 years                          | 2,333                                   | 1,562       | 751               | 20                        | 183,825                                   | 12.7                        | 8.5                         |
| 20-24 years                          | 10,386                                  | 7,873       | 2,478             | 35                        | 175,234                                   | 59.3                        | 44.9                        |
| 25-29 years                          | 20,729                                  | 18,122      | 2,517             | 90                        | 180,099                                   | 115.1                       | 100.6                       |
| 30-34 years                          | 25,047                                  | 23,057      | 1,905             | 85                        | 185,979                                   | 134.7                       | 124.0                       |
| 35-39 years                          | 12,728                                  | 11,581      | 1,087             | 60                        | 195,187                                   | 65.2                        | 59.3                        |
| 40-44 years                          | 2,440                                   | 2,073       | 343               | 24                        | 179,688                                   | 13.6                        | 11.5                        |
| 45+ years                            | 171                                     | 148         | 15                | 8                         | N/A <sup>6</sup>                          | --                          | --                          |

<sup>1</sup> Includes Live Births, Fetal Deaths and Induced Abortions.

<sup>2</sup> Fetal Deaths of less than 20 weeks gestation are not included in the counts.

<sup>3</sup> Female population for race/ethnicity and age groups retrieved from CDC WONDER: <https://wonder.cdc.gov/wonder/help/single-race.html> Single-Race Population Estimates.

<sup>4</sup> Number of pregnancies per 1,000 women ages 15 - 44 years.

<sup>5</sup> Number of live births per 1,000 women ages 15 - 44 years.

<sup>6</sup> Population estimates for these age groups not calculated because population denominator data not available.

<sup>7</sup> Missing age is not included in this data.

**Fertility Table 2. Pregnancy Rates by Age of Woman over Time, Minnesota Residents, 2010-2021.**

| Year/<br>Event                           | Total  | Age of Woman |       |        |        |        |        |       |         |
|------------------------------------------|--------|--------------|-------|--------|--------|--------|--------|-------|---------|
|                                          |        | <15          | 15-19 | 20-24  | 25-29  | 30-34  | 35-39  | 40+   | Unkwn   |
| 2010                                     |        |              |       |        |        |        |        |       |         |
| Reported Pregnancies <sup>1</sup>        | 79,329 | 89           | 5,351 | 16,455 | 25,102 | 21,031 | 9,023  | 2,275 | 3       |
| Age Specific Pregnancy Rate <sup>2</sup> | 75.9   | ***          | 29.9  | 94.1   | 135.6  | 124.9  | 55.6   | 13.0  | ***     |
| 2011                                     |        |              |       |        |        |        |        |       |         |
| Reported Pregnancies <sup>1</sup>        | 78,942 | 72           | 4,743 | 15,622 | 24,946 | 22,090 | 9,102  | 2,356 | 11      |
| Age Specific Pregnancy Rate <sup>2</sup> | 75.6   | ***          | 26.4  | 90.6   | 134.9  | 125.9  | 57.9   | 13.5  | ***     |
| 2012                                     |        |              |       |        |        |        |        |       |         |
| Reported Pregnancies <sup>1</sup>        | 78,906 | 77           | 4,392 | 15,501 | 24,543 | 22,865 | 9,189  | 2,333 | 6       |
| Age Specific Pregnancy Rate <sup>2</sup> | 75.4   | ***          | 24.7  | 88.7   | 134.3  | 126.1  | 58.4   | 13.5  | ***     |
| 2013                                     |        |              |       |        |        |        |        |       |         |
| Reported Pregnancies <sup>1</sup>        | 78,600 | 57           | 3,878 | 14,698 | 24,416 | 23,771 | 9,604  | 2,174 | 2       |
| Age Specific Pregnancy Rate <sup>2</sup> | 74.9   | ***          | 22.1  | 82.7   | 135.5  | 128.0  | 59.6   | 12.9  | ***     |
| 2014                                     |        |              |       |        |        |        |        |       |         |
| Reported Pregnancies <sup>1</sup>        | 79,534 | 53           | 3,561 | 14,330 | 24,435 | 24,726 | 10,182 | 2,243 | 4       |
| Age Specific Pregnancy Rate <sup>2</sup> | 75.5   | ***          | 20.4  | 80.0   | 135.9  | 131.0  | 61.5   | 13.6  | ***     |
| 2015                                     |        |              |       |        |        |        |        |       |         |
| Reported Pregnancies <sup>1</sup>        | 79,197 | 38           | 3,161 | 13,534 | 24,119 | 25,357 | 10,805 | 2,181 | 2       |
| Age Specific Pregnancy Rate <sup>2</sup> | 75.1   | ***          | 18.1  | 75.2   | 135.7  | 133.2  | 63.2   | 13.6  | ***     |
| 2016                                     |        |              |       |        |        |        |        |       |         |
| Reported Pregnancies <sup>1</sup>        | 79,219 | 41           | 3,004 | 12,939 | 23,975 | 25,552 | 11,453 | 2,255 | 0       |
| Age Specific Pregnancy Rate <sup>2</sup> | 75.1   | ***          | 17.2  | 71.9   | 135.1  | 134.8  | 64.8   | 14.4  | ***     |
| 2017                                     |        |              |       |        |        |        |        |       |         |
|                                          |        | <15          | 15-19 | 20-24  | 25-29  | 30-34  | 35-39  | 40-44 | 45+/unk |
| Reported Pregnancies <sup>3</sup>        | 78,227 | 25           | 2,878 | 12,442 | 23,314 | 25,519 | 11,683 | 2,155 | 175     |
| Age Specific Pregnancy Rate <sup>2</sup> | 73.3   | ***          | 16.4  | 69.4   | 129.0  | 138.4  | 63.4   | 13.7  | ***     |
| 2018                                     |        |              |       |        |        |        |        |       |         |
|                                          |        | <15          | 15-19 | 20-24  | 25-29  | 30-34  | 35-39  | 40-44 | 45+/unk |
| Reported Pregnancies <sup>3</sup>        | 76,636 | 33           | 2,496 | 11,610 | 22,908 | 25,251 | 11,988 | 2,135 | 208     |
| Age Specific Pregnancy Rate <sup>2</sup> |        | ***          | 14.3  | 65.3   | 125.2  | 133.9  | 63.6   | 13.3  | ***     |
| 2019                                     |        |              |       |        |        |        |        |       |         |
|                                          |        | <15          | 15-19 | 20-24  | 25-29  | 30-34  | 35-39  | 40-44 | 45+/unk |
| Reported Pregnancies <sup>3</sup>        | 75,430 | 36           | 2,544 | 11,289 | 21,773 | 25,171 | 12,170 | 2,231 | 216     |
| Age Specific Pregnancy Rate <sup>2</sup> |        | ***          | 14.5  | 63.5   | 119.0  | 133.4  | 64.5   | 13.9  | ***     |
| 2020                                     |        |              |       |        |        |        |        |       |         |
|                                          |        | <15          | 15-19 | 20-24  | 25-29  | 30-34  | 35-39  | 40-44 | 45+/unk |
| Reported Pregnancies <sup>3</sup>        | 72,039 | 42           | 2,309 | 10,500 | 20,790 | 24,101 | 11,787 | 2,320 | 190     |
| Age Specific Pregnancy Rate <sup>2</sup> |        | ***          | 13.2  | 59.1   | 113.6  | 127.8  | 62.5   | 14.4  | ***     |
| 2021                                     |        |              |       |        |        |        |        |       |         |
|                                          |        | <15          | 15-19 | 20-24  | 25-29  | 30-34  | 35-39  | 40-44 | 45+/unk |
| Reported Pregnancies <sup>3</sup>        | 73,898 | 44           | 2,333 | 10,386 | 20,729 | 25,047 | 12,728 | 2,440 | 191     |
| Age Specific Pregnancy Rate <sup>2</sup> |        | ***          | 12.7  | 59.3   | 115.1  | 134.7  | 65.2   | 13.6  | ***     |

<sup>1</sup> Includes live births, all reported fetal deaths and induced abortions

<sup>2</sup> Pregnancies within a specific age group per 1,000 female population of that same age group. Total rate is calculated per 1,000 female population age 15-44.

<sup>3</sup> Beginning with 2017, the older age groups 40+ split to 40-44 and 45+ in order to isolate those in the 15-44 range.

\*\*\* Appropriate age-specific female population is not available for use in rate calculations.

This page intentionally left blank.

## Mortality Tables

---

Table 1. Deaths by County of Residence and County of Occurrence, Minnesota Residents, 2021

Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021

Table 3. Leading Causes of Death, Death Rates, and Rank Order, Minnesota and U.S., 2021

Table 4. Leading Causes of Death by Age Groups, Minnesota Residents, 2021

Table 5a. Deaths Due to Selected Causes by Race/Ethnicity, MN Residents, 2021

Table 5b. Cause-Specific Mortality Rates by Race/Ethnicity, MN Residents, 2021

Table 6a. Deaths Due to Selected Causes by Rural/Urban Residence, MN Residents, 2021

Table 6b. Cause-Specific Mortality Rates by Rural/Urban Residence, MN Residents, 2021

**Table 1. Resident Deaths Distributed by County of Occurrence (n=51,647); Deaths by County of Occurrence Distributed by Place of Residence (n=51,455), Minnesota 2021.**

| County             | Total         | Deaths to MN County Residents<br>across Place of Death |                                    |                      | Deaths Occurring in Each County<br>across Place of Residence |                                 |                              |
|--------------------|---------------|--------------------------------------------------------|------------------------------------|----------------------|--------------------------------------------------------------|---------------------------------|------------------------------|
|                    |               | Within<br>County                                       | <i>Outside County of Residence</i> |                      | Total <sup>1</sup>                                           | Other<br>Minnesota<br>Residents | Out of<br>State<br>Residents |
|                    |               |                                                        | Within<br>Minnesota                | Outside<br>Minnesota |                                                              |                                 |                              |
| <b>State Total</b> | <b>51,614</b> | <b>39,764</b>                                          | <b>9,707</b>                       | <b>2,143</b>         | <b>51,455</b>                                                | <b>9,738</b>                    | <b>1,953</b>                 |
| Aitkin             | 248           | 185                                                    | 54                                 | 9                    | 219                                                          | 32                              | 2                            |
| Anoka              | 2,768         | 2,058                                                  | 665                                | 45                   | 2,571                                                        | 480                             | 33                           |
| Becker             | 413           | 312                                                    | 22                                 | 79                   | 347                                                          | 26                              | 9                            |
| Beltrami           | 523           | 429                                                    | 29                                 | 65                   | 530                                                          | 94                              | 7                            |
| Benton             | 407           | 244                                                    | 160                                | 3                    | 296                                                          | 52                              | 0                            |
| Big Stone          | 76            | 62                                                     | 2                                  | 12                   | 75                                                           | 3                               | 10                           |
| Blue Earth         | 595           | 505                                                    | 83                                 | 7                    | 704                                                          | 182                             | 17                           |
| Brown              | 342           | 257                                                    | 83                                 | 2                    | 286                                                          | 29                              | 0                            |
| Carlton            | 473           | 295                                                    | 168                                | 10                   | 332                                                          | 35                              | 2                            |
| Carver             | 673           | 450                                                    | 213                                | 10                   | 568                                                          | 106                             | 12                           |
| Cass               | 428           | 225                                                    | 173                                | 30                   | 262                                                          | 28                              | 9                            |
| Chippewa           | 172           | 134                                                    | 32                                 | 6                    | 143                                                          | 9                               | 0                            |
| Chisago            | 544           | 372                                                    | 157                                | 15                   | 499                                                          | 119                             | 8                            |
| Clay               | 551           | 311                                                    | 13                                 | 227                  | 347                                                          | 14                              | 22                           |
| Clearwater         | 125           | 87                                                     | 22                                 | 16                   | 97                                                           | 9                               | 1                            |
| Cook               | 49            | 28                                                     | 17                                 | 4                    | 31                                                           | 1                               | 2                            |
| Cottonwood         | 165           | 122                                                    | 18                                 | 25                   | 140                                                          | 16                              | 2                            |
| Crow Wing          | 819           | 633                                                    | 164                                | 22                   | 756                                                          | 108                             | 15                           |
| Dakota             | 3,245         | 2,100                                                  | 1081                               | 64                   | 2,420                                                        | 271                             | 49                           |
| Dodge              | 163           | 83                                                     | 79                                 | 1                    | 91                                                           | 7                               | 1                            |
| Douglas            | 449           | 363                                                    | 54                                 | 32                   | 424                                                          | 53                              | 8                            |
| Faribault          | 185           | 140                                                    | 42                                 | 3                    | 155                                                          | 9                               | 6                            |
| Fillmore           | 248           | 169                                                    | 57                                 | 22                   | 200                                                          | 25                              | 6                            |
| Freeborn           | 392           | 274                                                    | 107                                | 11                   | 302                                                          | 20                              | 8                            |
| Goodhue            | 567           | 430                                                    | 126                                | 11                   | 488                                                          | 48                              | 10                           |
| Grant              | 78            | 51                                                     | 17                                 | 10                   | 59                                                           | 7                               | 1                            |
| Hennepin           | 9,900         | 9,020                                                  | 728                                | 152                  | 12,125                                                       | 2,790                           | 315                          |
| <i>Bloomington</i> | 915           | 517                                                    | 385                                | 13                   | 619                                                          | 95                              | 7                            |
| <i>Edina</i>       | 520           | 384                                                    | 129                                | 7                    | 1,253                                                        | 834                             | 35                           |
| <i>Minneapolis</i> | 2,882         | 2,149                                                  | 678                                | 55                   | 4,634                                                        | 2,291                           | 194                          |
| <i>Richfield</i>   | 338           | 164                                                    | 169                                | 5                    | 184                                                          | 19                              | 1                            |
| Houston            | 202           | 128                                                    | 7                                  | 67                   | 145                                                          | 5                               | 12                           |
| Hubbard            | 242           | 151                                                    | 59                                 | 32                   | 173                                                          | 20                              | 2                            |
| Isanti             | 435           | 290                                                    | 144                                | 1                    | 331                                                          | 38                              | 3                            |
| Itasca             | 684           | 501                                                    | 163                                | 20                   | 544                                                          | 37                              | 6                            |
| Jackson            | 106           | 58                                                     | 20                                 | 28                   | 64                                                           | 6                               | 0                            |
| Kanabec            | 213           | 134                                                    | 74                                 | 5                    | 163                                                          | 29                              | 0                            |
| Kandiyohi          | 439           | 355                                                    | 76                                 | 8                    | 398                                                          | 42                              | 1                            |
| Kittson            | 62            | 46                                                     | 6                                  | 10                   | 52                                                           | 2                               | 4                            |
| Koochiching        | 186           | 131                                                    | 44                                 | 11                   | 133                                                          | 1                               | 1                            |
| Lac Qui Parle      | 102           | 86                                                     | 7                                  | 9                    | 90                                                           | 4                               | 0                            |
| Lake               | 169           | 105                                                    | 61                                 | 3                    | 122                                                          | 15                              | 2                            |
| Lake of the Woods  | 50            | 35                                                     | 3                                  | 12                   | 41                                                           | 4                               | 2                            |
| Le Sueur           | 284           | 172                                                    | 111                                | 1                    | 194                                                          | 16                              | 6                            |
| Lincoln            | 101           | 83                                                     | 8                                  | 10                   | 94                                                           | 7                               | 4                            |
| Lyon               | 247           | 189                                                    | 23                                 | 35                   | 218                                                          | 29                              | 0                            |
| McLeod             | 417           | 297                                                    | 117                                | 3                    | 339                                                          | 39                              | 3                            |
| Mahnomen           | 90            | 56                                                     | 15                                 | 19                   | 61                                                           | 5                               | 0                            |

**Table 1. Resident Deaths Distributed by County of Occurrence (n=51,647); Deaths by County of Occurrence Distributed by Place of Residence (n=51,455), Minnesota 2021.**

| County          | Total        | Deaths to MN County Residents<br>across Place of Death |                             |                      | Deaths Occurring in Each County<br>across Place of Residence |                                 |                              |
|-----------------|--------------|--------------------------------------------------------|-----------------------------|----------------------|--------------------------------------------------------------|---------------------------------|------------------------------|
|                 |              | Within<br>County                                       | Outside County of Residence |                      | Total <sup>1</sup>                                           | Other<br>Minnesota<br>Residents | Out of<br>State<br>Residents |
|                 |              |                                                        | Within<br>Minnesota         | Outside<br>Minnesota |                                                              |                                 |                              |
| Marshall        | 99           | 52                                                     | 20                          | 27                   | 57                                                           | 5                               | 0                            |
| Martin          | 303          | 218                                                    | 70                          | 15                   | 234                                                          | 11                              | 5                            |
| Meeker          | 244          | 166                                                    | 77                          | 1                    | 183                                                          | 13                              | 4                            |
| Mille Lacs      | 377          | 246                                                    | 122                         | 9                    | 292                                                          | 44                              | 2                            |
| Morrison        | 415          | 306                                                    | 103                         | 6                    | 337                                                          | 29                              | 2                            |
| Mower           | 447          | 341                                                    | 97                          | 9                    | 383                                                          | 38                              | 4                            |
| Murray          | 109          | 70                                                     | 17                          | 22                   | 83                                                           | 11                              | 2                            |
| Nicollet        | 298          | 191                                                    | 103                         | 4                    | 221                                                          | 30                              | 0                            |
| Nobles          | 185          | 121                                                    | 15                          | 49                   | 141                                                          | 18                              | 2                            |
| Norman          | 87           | 59                                                     | 6                           | 22                   | 61                                                           | 1                               | 1                            |
| Olmsted         | 1,267        | 1,191                                                  | 56                          | 20                   | 2,432                                                        | 834                             | 407                          |
| Otter Tail      | 785          | 581                                                    | 72                          | 132                  | 631                                                          | 34                              | 16                           |
| Pennington      | 156          | 117                                                    | 12                          | 27                   | 141                                                          | 20                              | 4                            |
| Pine            | 394          | 231                                                    | 156                         | 7                    | 260                                                          | 25                              | 4                            |
| Pipestone       | 129          | 95                                                     | 7                           | 27                   | 111                                                          | 11                              | 5                            |
| Polk            | 381          | 271                                                    | 16                          | 94                   | 305                                                          | 24                              | 10                           |
| Pope            | 148          | 103                                                    | 37                          | 8                    | 113                                                          | 10                              | 0                            |
| Ramsey          | 4,981        | 4,171                                                  | 750                         | 60                   | 6,067                                                        | 1,586                           | 310                          |
| <i>St. Paul</i> | <i>2,506</i> | <i>2,000</i>                                           | <i>471</i>                  | <i>35</i>            | <i>3,910</i>                                                 | <i>1,619</i>                    | <i>291</i>                   |
| Red Lake        | 44           | 28                                                     | 9                           | 7                    | 31                                                           | 2                               | 1                            |
| Redwood         | 187          | 126                                                    | 51                          | 10                   | 143                                                          | 17                              | 0                            |
| Renville        | 203          | 153                                                    | 45                          | 5                    | 172                                                          | 17                              | 2                            |
| Rice            | 616          | 444                                                    | 160                         | 12                   | 522                                                          | 73                              | 5                            |
| Rock            | 122          | 91                                                     | 5                           | 26                   | 110                                                          | 13                              | 6                            |
| Roseau          | 173          | 133                                                    | 9                           | 31                   | 142                                                          | 8                               | 1                            |
| St. Louis       | 2,373        | 2,230                                                  | 94                          | 49                   | 3,113                                                        | 491                             | 392                          |
| <i>Duluth</i>   | <i>1,051</i> | <i>1001</i>                                            | <i>42</i>                   | <i>8</i>             | <i>2,095</i>                                                 | <i>713</i>                      | <i>381</i>                   |
| Scott           | 912          | 590                                                    | 311                         | 11                   | 741                                                          | 134                             | 17                           |
| Sherburne       | 727          | 435                                                    | 287                         | 5                    | 541                                                          | 100                             | 6                            |
| Sibley          | 170          | 108                                                    | 57                          | 5                    | 128                                                          | 20                              | 0                            |
| Stearns         | 1,283        | 1127                                                   | 136                         | 20                   | 1,821                                                        | 669                             | 25                           |
| Steele          | 384          | 290                                                    | 89                          | 5                    | 341                                                          | 47                              | 4                            |
| Stevens         | 74           | 54                                                     | 13                          | 7                    | 60                                                           | 6                               | 0                            |
| Swift           | 94           | 63                                                     | 29                          | 2                    | 76                                                           | 13                              | 0                            |
| Todd            | 252          | 159                                                    | 79                          | 14                   | 200                                                          | 39                              | 2                            |
| Traverse        | 63           | 33                                                     | 8                           | 22                   | 38                                                           | 2                               | 3                            |
| Wabasha         | 219          | 145                                                    | 68                          | 6                    | 167                                                          | 9                               | 13                           |
| Wadena          | 222          | 162                                                    | 37                          | 23                   | 217                                                          | 51                              | 4                            |
| Waseca          | 188          | 127                                                    | 58                          | 3                    | 140                                                          | 13                              | 0                            |
| Washington      | 2,020        | 1,322                                                  | 651                         | 47                   | 1,633                                                        | 259                             | 52                           |
| Watonwan        | 128          | 76                                                     | 46                          | 6                    | 95                                                           | 19                              | 0                            |
| Wilkin          | 90           | 60                                                     | 5                           | 25                   | 81                                                           | 2                               | 19                           |
| Winona          | 431          | 318                                                    | 52                          | 61                   | 346                                                          | 14                              | 14                           |
| Wright          | 1,098        | 731                                                    | 348                         | 19                   | 823                                                          | 87                              | 5                            |
| Yellow Medicine | 109          | 73                                                     | 20                          | 16                   | 93                                                           | 17                              | 3                            |

<sup>1</sup> Total deaths occurring in each county also includes deaths to MN county residents within county of residence (second column).

**NOTE:** Total deaths by county excludes those for whom county of residence or both county of residence and county of occurrence are unknown.

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death     |                   |                                                            | Total | < 1    | 1-4    | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+   |        |        |
|--------------------|-------------------|------------------------------------------------------------|-------|--------|--------|-----|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code      | ALL CAUSES, Total |                                                            | Sex   | T      | 51,603 | 308 | 51    | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                    |                   |                                                            | M     | 27,214 | 183    | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986 | 10,319 |        |
|                    |                   |                                                            | F     | 24,389 | 125    | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759 | 13,195 |        |
|                    |                   |                                                            |       |        |        |     |       |       |       |       |       |       |       |        |        |
| A00-<br>B99        | I.                | INFECTIOUS AND<br>PARASITIC DISEASES                       | T     | 823    | 1      | 2   | 0     | 2     | 1     | 5     | 47    | 145   | 283   | 337    |        |
|                    |                   |                                                            | M     | 432    | 1      | 2   | 0     | 1     | 1     | 2     | 32    | 89    | 157   | 147    |        |
|                    |                   |                                                            | F     | 391    | 0      | 0   | 0     | 1     | 0     | 3     | 15    | 56    | 126   | 190    |        |
| A00-<br>A09        |                   | Intestinal Infections                                      | T     | 100    | 1      | 0   | 0     | 1     | 0     | 0     | 3     | 7     | 29    | 59     |        |
|                    |                   |                                                            | M     | 43     | 1      | 0   | 0     | 0     | 0     | 0     | 2     | 4     | 15    | 21     |        |
|                    |                   |                                                            | F     | 57     | 0      | 0   | 0     | 1     | 0     | 0     | 1     | 3     | 14    | 38     |        |
| A40-<br>A41        |                   | Septicemia                                                 | T     | 473    | 0      | 1   | 0     | 1     | 0     | 3     | 16    | 83    | 167   | 202    |        |
|                    |                   |                                                            | M     | 243    | 0      | 1   | 0     | 1     | 0     | 2     | 11    | 46    | 90    | 92     |        |
|                    |                   |                                                            | F     | 230    | 0      | 0   | 0     | 0     | 0     | 1     | 5     | 37    | 77    | 110    |        |
| B15-<br>B19        |                   | Viral Hepatitis                                            | T     | 42     | 0      | 0   | 0     | 0     | 0     | 0     | 1     | 18    | 20    | 3      |        |
|                    |                   |                                                            | M     | 24     | 0      | 0   | 0     | 0     | 0     | 0     | 1     | 12    | 10    | 1      |        |
|                    |                   |                                                            | F     | 18     | 0      | 0   | 0     | 0     | 0     | 0     | 0     | 6     | 10    | 2      |        |
| Re-<br>sid-<br>ual |                   | Other Infectious<br>and Parasitic<br>Diseases and Sequelae | T     | 208    | 0      | 1   | 0     | 0     | 1     | 2     | 27    | 37    | 67    | 73     |        |
|                    |                   |                                                            | M     | 122    | 0      | 1   | 0     | 0     | 1     | 0     | 18    | 27    | 42    | 33     |        |
|                    |                   |                                                            | F     | 86     | 0      | 0   | 0     | 0     | 0     | 2     | 9     | 10    | 25    | 40     |        |
| C00-<br>D48        | II.               | NEOPLASMS                                                  | T     | 10,491 | 0      | 5   | 8     | 6     | 5     | 65    | 359   | 2,013 | 4,497 | 3,533  |        |
|                    |                   |                                                            | M     | 5,555  | 0      | 1   | 7     | 1     | 5     | 36    | 180   | 1,068 | 2,461 | 1,796  |        |
|                    |                   |                                                            | F     | 4,936  | 0      | 4   | 1     | 5     | 0     | 29    | 179   | 945   | 2,036 | 1,737  |        |
| C00-<br>C97        |                   | Malignant Neoplasms                                        | T     | 10,178 | 0      | 5   | 8     | 6     | 5     | 58    | 353   | 1,995 | 4,393 | 3,355  |        |
|                    |                   |                                                            | M     | 5,391  | 0      | 1   | 7     | 1     | 5     | 32    | 176   | 1,060 | 2,402 | 1,707  |        |
|                    |                   |                                                            | F     | 4,787  | 0      | 4   | 1     | 5     | 0     | 26    | 177   | 935   | 1,991 | 1,648  |        |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                |                                            |     | Total  | < 1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79  | 80+    |
|-------------------------------|--------------------------------------------|-----|--------|-----|-----|-----|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                 |                                            | Sex |        |     |     |     |       |       |       |       |       |        |        |
|                               | ALL CAUSES, Total                          | T   | 51,603 | 308 | 51  | 49  | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                               |                                            | M   | 27,214 | 183 | 23  | 27  | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                               |                                            | F   | 24,389 | 125 | 28  | 22  | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Malignant Neoplasms continued |                                            |     |        |     |     |     |       |       |       |       |       |        |        |
| C00-<br>C14                   | ...of Lip, Oral Cavity,<br>and Pharynx     | T   | 182    | 0   | 0   | 0   | 0     | 0     | 1     | 10    | 42    | 90     | 39     |
|                               |                                            | M   | 138    | 0   | 0   | 0   | 0     | 0     | 1     | 7     | 28    | 73     | 29     |
|                               |                                            | F   | 44     | 0   | 0   | 0   | 0     | 0     | 0     | 3     | 14    | 17     | 10     |
| C15                           | ...of Esophagus                            | T   | 293    | 0   | 0   | 0   | 0     | 0     | 1     | 11    | 80    | 124    | 77     |
|                               |                                            | M   | 235    | 0   | 0   | 0   | 0     | 0     | 1     | 8     | 65    | 101    | 60     |
|                               |                                            | F   | 58     | 0   | 0   | 0   | 0     | 0     | 0     | 3     | 15    | 23     | 17     |
| C16                           | ...of Stomach                              | T   | 158    | 0   | 0   | 0   | 0     | 0     | 0     | 6     | 45    | 58     | 49     |
|                               |                                            | M   | 93     | 0   | 0   | 0   | 0     | 0     | 0     | 3     | 27    | 36     | 27     |
|                               |                                            | F   | 65     | 0   | 0   | 0   | 0     | 0     | 0     | 3     | 18    | 22     | 22     |
| C18-<br>C21                   | ...of Colon, Rectum,<br>and Anus           | T   | 832    | 0   | 0   | 0   | 0     | 0     | 2     | 58    | 175   | 289    | 308    |
|                               |                                            | M   | 436    | 0   | 0   | 0   | 0     | 0     | 2     | 40    | 108   | 156    | 130    |
|                               |                                            | F   | 396    | 0   | 0   | 0   | 0     | 0     | 0     | 18    | 67    | 133    | 178    |
| C22                           | ...of Liver and<br>Intrahepatic Bile Ducts | T   | 375    | 0   | 1   | 1   | 0     | 0     | 4     | 11    | 83    | 185    | 90     |
|                               |                                            | M   | 243    | 0   | 0   | 1   | 0     | 0     | 1     | 6     | 57    | 122    | 56     |
|                               |                                            | F   | 132    | 0   | 1   | 0   | 0     | 0     | 3     | 5     | 26    | 63     | 34     |
| C25                           | ...of Pancreas                             | T   | 829    | 0   | 0   | 0   | 0     | 0     | 1     | 20    | 177   | 395    | 236    |
|                               |                                            | M   | 444    | 0   | 0   | 0   | 0     | 0     | 0     | 11    | 107   | 224    | 102    |
|                               |                                            | F   | 385    | 0   | 0   | 0   | 0     | 0     | 1     | 9     | 70    | 171    | 134    |
| C32                           | ...of Larynx                               | T   | 47     | 0   | 0   | 0   | 0     | 0     | 0     | 1     | 13    | 15     | 18     |
|                               |                                            | M   | 41     | 0   | 0   | 0   | 0     | 0     | 0     | 1     | 11    | 13     | 16     |
|                               |                                            | F   | 6      | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 2     | 2      | 2      |
| C33-<br>C34                   | ....of Trachea,<br>Bronchus, and Lung      | T   | 2,224  | 0   | 0   | 0   | 0     | 0     | 0     | 31    | 465   | 1,097  | 631    |
|                               |                                            | M   | 1,157  | 0   | 0   | 0   | 0     | 0     | 0     | 20    | 247   | 584    | 306    |
|                               |                                            | F   | 1,067  | 0   | 0   | 0   | 0     | 0     | 0     | 11    | 218   | 513    | 325    |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                |                                  |     | Total  | < 1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79  | 80+    |
|-------------------------------|----------------------------------|-----|--------|-----|-----|-----|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                 |                                  | Sex |        |     |     |     |       |       |       |       |       |        |        |
|                               | ALL CAUSES, Total                | T   | 51,603 | 308 | 51  | 49  | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                               |                                  | M   | 27,214 | 183 | 23  | 27  | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                               |                                  | F   | 24,389 | 125 | 28  | 22  | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Malignant Neoplasms continued |                                  |     |        |     |     |     |       |       |       |       |       |        |        |
| C43-                          | ...Skin                          | T   | 176    | 0   | 0   | 0   | 0     | 0     | 2     | 8     | 38    | 72     | 56     |
| C44                           |                                  | M   | 115    | 0   | 0   | 0   | 0     | 0     | 1     | 5     | 23    | 51     | 35     |
|                               |                                  | F   | 61     | 0   | 0   | 0   | 0     | 0     | 1     | 3     | 15    | 21     | 21     |
| C50                           | ...of Breast                     | T   | 674    | 0   | 0   | 0   | 0     | 0     | 5     | 47    | 177   | 240    | 205    |
|                               |                                  | M   | 12     | 0   | 0   | 0   | 0     | 0     | 0     | 1     | 2     | 5      | 4      |
|                               |                                  | F   | 662    | 0   | 0   | 0   | 0     | 0     | 5     | 46    | 175   | 235    | 201    |
| C53                           | ...of Cervix Uteri               | T   | 54     | 0   | 0   | 0   | 0     | 0     | 1     | 13    | 16    | 16     | 8      |
|                               |                                  | M   | 0      | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 0     | 0      | 0      |
|                               |                                  | F   | 54     | 0   | 0   | 0   | 0     | 0     | 1     | 13    | 16    | 16     | 8      |
| C54-<br>C55                   | ...of Corpus Uteri and<br>Uterus | T   | 193    | 0   | 0   | 0   | 0     | 0     | 1     | 6     | 34    | 100    | 52     |
|                               |                                  | M   | 0      | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 0     | 0      | 0      |
|                               |                                  | F   | 193    | 0   | 0   | 0   | 0     | 0     | 1     | 6     | 34    | 100    | 52     |
| C56                           | ...of Ovary                      | T   | 221    | 0   | 0   | 0   | 0     | 0     | 1     | 8     | 41    | 114    | 57     |
|                               |                                  | M   | 0      | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 0     | 0      | 0      |
|                               |                                  | F   | 221    | 0   | 0   | 0   | 0     | 0     | 1     | 8     | 41    | 114    | 57     |
| C61                           | ...of Prostate                   | T   | 602    | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 56    | 221    | 325    |
|                               |                                  | M   | 602    | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 56    | 221    | 325    |
|                               |                                  | F   | 0      | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 0     | 0      | 0      |
| C64-<br>C65                   | ...of Kidney and<br>Renal Pelvis | T   | 258    | 0   | 0   | 0   | 0     | 0     | 1     | 7     | 51    | 116    | 83     |
|                               |                                  | M   | 175    | 0   | 0   | 0   | 0     | 0     | 1     | 4     | 37    | 83     | 50     |
|                               |                                  | F   | 83     | 0   | 0   | 0   | 0     | 0     | 0     | 3     | 14    | 33     | 33     |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                |                                                                        |     | Total  | < 1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79  | 80+    |
|-------------------------------|------------------------------------------------------------------------|-----|--------|-----|-----|-----|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                 |                                                                        | Sex |        |     |     |     |       |       |       |       |       |        |        |
|                               | ALL CAUSES, Total                                                      | T   | 51,603 | 308 | 51  | 49  | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                               |                                                                        | M   | 27,214 | 183 | 23  | 27  | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                               |                                                                        | F   | 24,389 | 125 | 28  | 22  | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Malignant Neoplasms continued |                                                                        |     |        |     |     |     |       |       |       |       |       |        |        |
| C67                           | ...of Bladder                                                          | T   | 294    | 0   | 0   | 0   | 0     | 0     | 0     | 6     | 21    | 111    | 156    |
|                               |                                                                        | M   | 209    | 0   | 0   | 0   | 0     | 0     | 0     | 4     | 18    | 88     | 99     |
|                               |                                                                        | F   | 85     | 0   | 0   | 0   | 0     | 0     | 0     | 2     | 3     | 23     | 57     |
| C69-<br>C72                   | ...of Eye, Brain, and<br>Other Parts of Central<br>Nervous System      | T   | 318    | 0   | 0   | 4   | 3     | 0     | 13    | 35    | 94    | 132    | 37     |
|                               |                                                                        | M   | 194    | 0   | 0   | 3   | 0     | 0     | 10    | 22    | 57    | 80     | 22     |
|                               |                                                                        | F   | 124    | 0   | 0   | 1   | 3     | 0     | 3     | 13    | 37    | 52     | 15     |
| C82-<br>C85                   | ...Non-Hodgkin's<br>Lymphoma                                           | T   | 408    | 0   | 0   | 0   | 0     | 0     | 2     | 9     | 57    | 164    | 176    |
|                               |                                                                        | M   | 226    | 0   | 0   | 0   | 0     | 0     | 2     | 5     | 43    | 90     | 86     |
|                               |                                                                        | F   | 182    | 0   | 0   | 0   | 0     | 0     | 0     | 4     | 14    | 74     | 90     |
| C91-<br>C95                   | ...Leukemia                                                            | T   | 409    | 0   | 3   | 1   | 1     | 1     | 14    | 10    | 44    | 180    | 155    |
|                               |                                                                        | M   | 261    | 0   | 1   | 1   | 1     | 1     | 8     | 6     | 27    | 122    | 94     |
|                               |                                                                        | F   | 148    | 0   | 2   | 0   | 0     | 0     | 6     | 4     | 17    | 58     | 61     |
| C88<br>C90                    | ...Multiple Myeloma<br>and Immunoproliferative<br>Neoplasms            | T   | 253    | 0   | 0   | 0   | 0     | 0     | 0     | 1     | 34    | 112    | 106    |
|                               |                                                                        | M   | 145    | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 19    | 76     | 50     |
|                               |                                                                        | F   | 108    | 0   | 0   | 0   | 0     | 0     | 0     | 1     | 15    | 36     | 56     |
| Re-<br>sid-<br>ual            | ...Other Malignant<br>Neoplasms                                        | T   | 1,378  | 0   | 1   | 2   | 2     | 4     | 9     | 55    | 252   | 562    | 491    |
|                               |                                                                        | M   | 665    | 0   | 0   | 2   | 0     | 4     | 5     | 33    | 128   | 277    | 216    |
|                               |                                                                        | F   | 713    | 0   | 1   | 0   | 2     | 0     | 4     | 22    | 124   | 285    | 275    |
| D00-<br>D48                   | In Situ and Benign<br>Neoplasms and Neoplasms<br>of Uncertain Behavior | T   | 313    | 0   | 0   | 0   | 0     | 0     | 7     | 6     | 18    | 104    | 178    |
|                               |                                                                        | M   | 164    | 0   | 0   | 0   | 0     | 0     | 4     | 4     | 8     | 59     | 89     |
|                               |                                                                        | F   | 149    | 0   | 0   | 0   | 0     | 0     | 3     | 2     | 10    | 45     | 89     |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death     |                                                                                 |   | Total | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|--------------------|---------------------------------------------------------------------------------|---|-------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code      | ALL CAUSES, Total                                                               |   | Sex   |        |     |     |       |       |       |       |       |       |        |        |
|                    |                                                                                 |   | T     | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                    |                                                                                 |   | M     | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                    |                                                                                 |   | F     | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| D50-<br>D89        | III. DISEASES OF THE<br>BLOOD AND BLOOD-<br>FORMING ORGANS                      | T | 214   | 5      | 1   | 0   | 0     | 0     | 2     | 9     | 34    | 57    | 106    |        |
|                    |                                                                                 | M | 103   | 2      | 0   | 0   | 0     | 0     | 1     | 3     | 21    | 24    | 52     |        |
|                    |                                                                                 | F | 111   | 3      | 1   | 0   | 0     | 0     | 1     | 6     | 13    | 33    | 54     |        |
| D50-<br>D64        | Anemias                                                                         | T | 119   | 0      | 0   | 0   | 0     | 0     | 0     | 3     | 8     | 26    | 82     |        |
|                    |                                                                                 | M | 54    | 0      | 0   | 0   | 0     | 0     | 0     | 2     | 4     | 11    | 37     |        |
|                    |                                                                                 | F | 65    | 0      | 0   | 0   | 0     | 0     | 0     | 1     | 4     | 15    | 45     |        |
| D65-<br>D89        | Other Diseases of the<br>Blood and Blood-Forming<br>Organs                      | T | 95    | 5      | 1   | 0   | 0     | 0     | 2     | 6     | 26    | 31    | 24     |        |
|                    |                                                                                 | M | 49    | 2      | 0   | 0   | 0     | 0     | 1     | 1     | 17    | 13    | 15     |        |
|                    |                                                                                 | F | 46    | 3      | 1   | 0   | 0     | 0     | 1     | 5     | 9     | 18    | 9      |        |
| E00-<br>E90        | IV. ENDOCRINE, NUTRITIONAL,<br>AND METABOLIC DISEASES<br>AND IMMUNITY DISORDERS | T | 2,423 | 3      | 2   | 1   | 3     | 4     | 35    | 131   | 510   | 896   | 838    |        |
|                    |                                                                                 | M | 1,342 | 2      | 1   | 0   | 1     | 1     | 22    | 80    | 334   | 524   | 377    |        |
|                    |                                                                                 | F | 1,081 | 1      | 1   | 1   | 2     | 3     | 13    | 51    | 176   | 372   | 461    |        |
| E10-<br>E14        | Diabetes Mellitus                                                               | T | 1,575 | 0      | 0   | 0   | 1     | 2     | 18    | 81    | 343   | 600   | 530    |        |
|                    |                                                                                 | M | 904   | 0      | 0   | 0   | 1     | 1     | 11    | 45    | 228   | 356   | 262    |        |
|                    |                                                                                 | F | 671   | 0      | 0   | 0   | 0     | 1     | 7     | 36    | 115   | 244   | 268    |        |
| Re-<br>sid-<br>ual | Other Endocrine,<br>Nutritional, Metabolic,<br>and Immunity Disorders           | T | 848   | 3      | 2   | 1   | 2     | 2     | 17    | 50    | 167   | 296   | 308    |        |
|                    |                                                                                 | M | 438   | 2      | 1   | 0   | 0     | 0     | 11    | 35    | 106   | 168   | 115    |        |
|                    |                                                                                 | F | 410   | 1      | 1   | 1   | 2     | 2     | 6     | 15    | 61    | 128   | 193    |        |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death     |                                                                                          |   | Total | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|--------------------|------------------------------------------------------------------------------------------|---|-------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code      |                                                                                          |   | Sex   |        |     |     |       |       |       |       |       |       |        |        |
|                    | ALL CAUSES, Total                                                                        |   | T     | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                    |                                                                                          |   | M     | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                    |                                                                                          |   | F     | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| F00-<br>F99        | V. MENTAL AND<br>BEHAVIORAL DISORDERS                                                    | T | 3,183 | 0      | 0   | 0   | 0     | 2     | 47    | 98    | 248   | 579   | 2,209  |        |
|                    |                                                                                          | M | 1,298 | 0      | 0   | 0   | 0     | 1     | 31    | 68    | 168   | 283   | 747    |        |
|                    |                                                                                          | F | 1,885 | 0      | 0   | 0   | 0     | 1     | 16    | 30    | 80    | 296   | 1,462  |        |
| F01                | Vascular Dementia<br>result of infarction of the brain<br>due to vascular disease        | T | 408   | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 1     | 82    | 325    |        |
|                    |                                                                                          | M | 143   | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 0     | 30    | 113    |        |
|                    |                                                                                          | F | 265   | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 1     | 52    | 212    |        |
| F03                | Unspecified dementia<br><b>excludes</b> Alzheimer's Disease<br>[See G30 for Alzheimer's] | T | 2,118 | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 15    | 301   | 1,802  |        |
|                    |                                                                                          | M | 711   | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 6     | 117   | 588    |        |
|                    |                                                                                          | F | 1,407 | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 9     | 184   | 1,214  |        |
| F10-<br>F18, F19   | Disorders due to Psychoactive<br>Substance use [excl. tobacco]                           | T | 438   | 0      | 0   | 0   | 0     | 1     | 41    | 93    | 178   | 108   | 17     |        |
|                    |                                                                                          | M | 314   | 0      | 0   | 0   | 0     | 0     | 28    | 65    | 127   | 83    | 11     |        |
|                    |                                                                                          | F | 124   | 0      | 0   | 0   | 0     | 1     | 13    | 28    | 51    | 25    | 6      |        |
| Re-<br>sid-<br>ual | Other Mental Illness and<br>Disorders of Psychological<br>Development                    | T | 219   | 0      | 0   | 0   | 0     | 1     | 6     | 5     | 54    | 88    | 65     |        |
|                    |                                                                                          | M | 130   | 0      | 0   | 0   | 0     | 1     | 3     | 3     | 35    | 53    | 35     |        |
|                    |                                                                                          | F | 89    | 0      | 0   | 0   | 0     | 0     | 3     | 2     | 19    | 35    | 30     |        |
| G00-<br>G99        | VI. DISEASES OF THE<br>NERVOUS SYSTEM                                                    | T | 4,243 | 2      | 3   | 5   | 7     | 12    | 45    | 61    | 252   | 1,101 | 2,755  |        |
|                    |                                                                                          | M | 1,841 | 0      | 2   | 4   | 5     | 5     | 28    | 33    | 143   | 578   | 1,043  |        |
|                    |                                                                                          | F | 2,402 | 2      | 1   | 1   | 2     | 7     | 17    | 28    | 109   | 523   | 1,712  |        |
| G20-<br>G21        | Parkinson's Disease                                                                      | T | 696   | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 13    | 239   | 444    |        |
|                    |                                                                                          | M | 443   | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 9     | 157   | 277    |        |
|                    |                                                                                          | F | 253   | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 4     | 82    | 167    |        |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                       |                                                                    |   | Total  | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|--------------------------------------|--------------------------------------------------------------------|---|--------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                        | Sex                                                                |   |        |        |     |     |       |       |       |       |       |       |        |        |
|                                      | ALL CAUSES, Total                                                  |   | T      | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                                      |                                                                    |   | M      | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                                      |                                                                    |   | F      | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Diseases of Nervous System Continued |                                                                    |   |        |        |     |     |       |       |       |       |       |       |        |        |
| G30                                  | Alzheimer's Disease                                                |   | T      | 2,251  | 0   | 0   | 0     | 0     | 0     | 1     | 19    | 375   | 1,856  |        |
|                                      |                                                                    |   | M      | 703    | 0   | 0   | 0     | 0     | 0     | 1     | 7     | 148   | 547    |        |
|                                      |                                                                    |   | F      | 1,548  | 0   | 0   | 0     | 0     | 0     | 0     | 12    | 227   | 1,309  |        |
| Re-<br>sid-<br>ual                   | Other Diseases of the<br>Nervous System                            |   | T      | 1,296  | 2   | 3   | 5     | 7     | 12    | 45    | 60    | 220   | 487    | 455    |
|                                      |                                                                    |   | M      | 695    | 0   | 2   | 4     | 5     | 5     | 28    | 32    | 127   | 273    | 219    |
|                                      |                                                                    |   | F      | 601    | 2   | 1   | 1     | 2     | 7     | 17    | 28    | 93    | 214    | 236    |
| I00-<br>I99                          | IX. DISEASES OF THE<br>CIRCULATORY SYSTEM                          | T | 12,354 | 5      | 1   | 0   | 4     | 8     | 64    | 373   | 1,409 | 3,334 | 7,156  |        |
|                                      |                                                                    | M | 6,447  | 4      | 0   | 0   | 1     | 4     | 45    | 261   | 989   | 2,063 | 3,080  |        |
|                                      |                                                                    | F | 5,907  | 1      | 1   | 0   | 3     | 4     | 19    | 112   | 420   | 1,271 | 4,076  |        |
| I00-<br>I78                          | Major Cardiovascular<br>Diseases                                   |   | T      | 12,275 | 5   | 1   | 0     | 4     | 8     | 64    | 363   | 1,388 | 3,310  | 7,132  |
|                                      |                                                                    |   | M      | 6,407  | 4   | 0   | 0     | 1     | 4     | 45    | 256   | 977   | 2,052  | 3,068  |
|                                      |                                                                    |   | F      | 5,868  | 1   | 1   | 0     | 3     | 4     | 19    | 107   | 411   | 1,258  | 4,064  |
| I00-I09,<br>I11,I13,<br>I20-I51      | **Diseases of the Heart                                            |   | T      | 8,570  | 4   | 0   | 0     | 2     | 7     | 51    | 268   | 946   | 2,256  | 5,036  |
|                                      |                                                                    |   | M      | 4,677  | 3   | 0   | 0     | 1     | 4     | 38    | 186   | 677   | 1,451  | 2,317  |
|                                      |                                                                    |   | F      | 3,893  | 1   | 0   | 0     | 1     | 3     | 13    | 82    | 269   | 805    | 2,719  |
| I00-<br>I09                          | --Acute Rheumatic Fever<br>and Chronic Rheumatic<br>Heart Diseases |   | T      | 147    | 0   | 0   | 0     | 0     | 0     | 1     | 3     | 9     | 34     | 100    |
|                                      |                                                                    |   | M      | 47     | 0   | 0   | 0     | 0     | 0     | 2     | 2     | 18    | 25     |        |
|                                      |                                                                    |   | F      | 100    | 0   | 0   | 0     | 0     | 0     | 1     | 1     | 7     | 16     | 75     |
| I11                                  | --Hypertensive Heart<br>Disease                                    |   | T      | 494    | 0   | 0   | 0     | 0     | 0     | 3     | 19    | 54    | 74     | 344    |
|                                      |                                                                    |   | M      | 196    | 0   | 0   | 0     | 0     | 0     | 2     | 13    | 38    | 43     | 100    |
|                                      |                                                                    |   | F      | 298    | 0   | 0   | 0     | 0     | 0     | 1     | 6     | 16    | 31     | 244    |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                           |                                                      |     | Total  | < 1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79  | 80+    |
|------------------------------------------|------------------------------------------------------|-----|--------|-----|-----|-----|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                            | ALL CAUSES, Total                                    | Sex |        |     |     |     |       |       |       |       |       |        |        |
|                                          |                                                      | T   | 51,603 | 308 | 51  | 49  | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                                          |                                                      | M   | 27,214 | 183 | 23  | 27  | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                                          |                                                      | F   | 24,389 | 125 | 28  | 22  | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Diseases of Circulatory System Continued |                                                      |     |        |     |     |     |       |       |       |       |       |        |        |
| I13                                      | --Hypertensive Heart<br>and Renal Disease            | T   | 284    | 0   | 0   | 0   | 0     | 0     | 0     | 1     | 11    | 29     | 243    |
|                                          |                                                      | M   | 100    | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 4     | 12     | 84     |
|                                          |                                                      | F   | 184    | 0   | 0   | 0   | 0     | 0     | 0     | 1     | 7     | 17     | 159    |
| I20-<br>I25                              | --Ischaemic Heart Disease                            | T   | 4,325  | 0   | 0   | 0   | 0     | 0     | 15    | 141   | 567   | 1,333  | 2,269  |
|                                          |                                                      | M   | 2,761  | 0   | 0   | 0   | 0     | 0     | 14    | 110   | 430   | 940    | 1,267  |
|                                          |                                                      | F   | 1,564  | 0   | 0   | 0   | 0     | 0     | 1     | 31    | 137   | 393    | 1,002  |
| I21-<br>I22                              | ~Acute Myocardial<br>Infarction                      | T   | 1,057  | 0   | 0   | 0   | 0     | 0     | 4     | 45    | 173   | 348    | 487    |
|                                          |                                                      | M   | 638    | 0   | 0   | 0   | 0     | 0     | 4     | 36    | 133   | 225    | 240    |
|                                          |                                                      | F   | 419    | 0   | 0   | 0   | 0     | 0     | 0     | 9     | 40    | 123    | 247    |
| I23-<br>I24                              | ~Other Acute Ischaemic<br>Heart Diseases             | T   | 35     | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 4     | 19     | 12     |
|                                          |                                                      | M   | 13     | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 1     | 8      | 4      |
|                                          |                                                      | F   | 22     | 0   | 0   | 0   | 0     | 0     | 0     | 0     | 3     | 11     | 8      |
| I25.0,<br>I25.1                          | ~Atherosclerotic (chronic)<br>Cardiovascular Disease | T   | 2,888  | 0   | 0   | 0   | 0     | 0     | 11    | 91    | 358   | 879    | 1,549  |
|                                          |                                                      | M   | 1,884  | 0   | 0   | 0   | 0     | 0     | 10    | 71    | 273   | 641    | 889    |
|                                          |                                                      | F   | 1,004  | 0   | 0   | 0   | 0     | 0     | 1     | 20    | 85    | 238    | 660    |
| I20,<br>I25.2-<br>I25.9                  | ~Other Chronic Ischaemic<br>Heart Diseases           | T   | 345    | 0   | 0   | 0   | 0     | 0     | 0     | 5     | 32    | 87     | 221    |
|                                          |                                                      | M   | 226    | 0   | 0   | 0   | 0     | 0     | 0     | 3     | 23    | 66     | 134    |
|                                          |                                                      | F   | 119    | 0   | 0   | 0   | 0     | 0     | 0     | 2     | 9     | 21     | 87     |
| I26-<br>I51                              | --Other Heart Disease                                | T   | 3,320  | 4   | 0   | 0   | 2     | 7     | 32    | 104   | 305   | 786    | 2,080  |
|                                          |                                                      | M   | 1,573  | 3   | 0   | 0   | 1     | 4     | 22    | 61    | 203   | 438    | 841    |
|                                          |                                                      | F   | 1,747  | 1   | 0   | 0   | 1     | 3     | 10    | 43    | 102   | 348    | 1,239  |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                           |                                                                     |   | Total | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|------------------------------------------|---------------------------------------------------------------------|---|-------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                            | Sex                                                                 |   |       |        |     |     |       |       |       |       |       |       |        |        |
|                                          | ALL CAUSES, Total                                                   |   | T     | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                                          |                                                                     |   | M     | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                                          |                                                                     |   | F     | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Diseases of Circulatory System Continued |                                                                     |   |       |        |     |     |       |       |       |       |       |       |        |        |
| I50                                      | ~Heart Failure                                                      | T | 967   | 0      | 0   | 0   | 0     | 0     | 1     | 6     | 53    | 185   | 722    |        |
|                                          |                                                                     | M | 450   | 0      | 0   | 0   | 0     | 0     | 1     | 3     | 38    | 99    | 309    |        |
|                                          |                                                                     | F | 517   | 0      | 0   | 0   | 0     | 0     | 0     | 3     | 15    | 86    | 413    |        |
| I26-I28,<br>I30-I39,<br>I42-I49,I51      | ~All Other Forms<br>of Heart Disease                                | T | 2,353 | 4      | 0   | 0   | 2     | 7     | 31    | 98    | 252   | 601   | 1,358  |        |
|                                          |                                                                     | M | 1,123 | 3      | 0   | 0   | 1     | 4     | 21    | 58    | 165   | 339   | 532    |        |
|                                          |                                                                     | F | 1,230 | 1      | 0   | 0   | 1     | 3     | 10    | 40    | 87    | 262   | 826    |        |
| I10,<br>I12,<br>I15                      | **Essential Hypertension<br>& Hypertensive Renal Disease            | T | 908   | 0      | 0   | 0   | 0     | 0     | 1     | 24    | 151   | 275   | 457    |        |
|                                          |                                                                     | M | 452   | 0      | 0   | 0   | 0     | 0     | 0     | 19    | 112   | 172   | 149    |        |
|                                          |                                                                     | F | 456   | 0      | 0   | 0   | 0     | 0     | 1     | 5     | 39    | 103   | 308    |        |
| I60-<br>I69                              | **Cerebrovascular<br>Diseases                                       | T | 2,384 | 1      | 1   | 0   | 2     | 1     | 10    | 48    | 229   | 649   | 1,443  |        |
|                                          |                                                                     | M | 1,058 | 1      | 0   | 0   | 0     | 0     | 5     | 32    | 146   | 349   | 525    |        |
|                                          |                                                                     | F | 1,326 | 0      | 1   | 0   | 2     | 1     | 5     | 16    | 83    | 300   | 918    |        |
| I70-<br>I78                              | **Diseases of arteries,<br>arterioles and capillaries               | T | 413   | 0      | 0   | 0   | 0     | 0     | 2     | 23    | 62    | 130   | 196    |        |
|                                          |                                                                     | M | 220   | 0      | 0   | 0   | 0     | 0     | 2     | 19    | 42    | 80    | 77     |        |
|                                          |                                                                     | F | 193   | 0      | 0   | 0   | 0     | 0     | 0     | 4     | 20    | 50    | 119    |        |
| I71                                      | --Aortic Aneurysm and<br>Dissection                                 | T | 224   | 0      | 0   | 0   | 0     | 0     | 1     | 16    | 39    | 76    | 92     |        |
|                                          |                                                                     | M | 134   | 0      | 0   | 0   | 0     | 0     | 1     | 14    | 27    | 51    | 41     |        |
|                                          |                                                                     | F | 90    | 0      | 0   | 0   | 0     | 0     | 0     | 2     | 12    | 25    | 51     |        |
| I72-<br>I78                              | --Other Diseases of the<br>Arteries, Arterioles,<br>and Capillaries | T | 189   | 0      | 0   | 0   | 0     | 0     | 1     | 7     | 23    | 54    | 104    |        |
|                                          |                                                                     | M | 86    | 0      | 0   | 0   | 0     | 0     | 1     | 5     | 15    | 29    | 36     |        |
|                                          |                                                                     | F | 103   | 0      | 0   | 0   | 0     | 0     | 0     | 2     | 8     | 25    | 68     |        |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                           |                                              |   | Total | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|------------------------------------------|----------------------------------------------|---|-------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                            | ALL CAUSES, Total                            |   | Sex   |        |     |     |       |       |       |       |       |       |        |        |
|                                          |                                              |   | T     | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                                          |                                              |   | M     | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                                          |                                              |   | F     | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Diseases of Circulatory System Continued |                                              |   |       |        |     |     |       |       |       |       |       |       |        |        |
| I80-<br>I99                              | Other Disorders of the<br>Circulatory System | T | 79    | 0      | 0   | 0   | 0     | 0     | 0     | 10    | 21    | 24    | 24     |        |
|                                          |                                              | M | 40    | 0      | 0   | 0   | 0     | 0     | 0     | 5     | 12    | 11    | 12     |        |
|                                          |                                              | F | 39    | 0      | 0   | 0   | 0     | 0     | 0     | 5     | 9     | 13    | 12     |        |
| J00-<br>J99                              | X. DISEASES OF THE<br>RESPIRATORY SYSTEM     | T | 3,409 | 11     | 2   | 5   | 3     | 0     | 15    | 42    | 395   | 1,283 | 1,653  |        |
|                                          |                                              | M | 1,764 | 7      | 2   | 4   | 1     | 0     | 10    | 20    | 213   | 688   | 819    |        |
|                                          |                                              | F | 1,645 | 4      | 0   | 1   | 2     | 0     | 5     | 22    | 182   | 595   | 834    |        |
| J10-<br>J18                              | Influenza and<br>Pneumonia                   | T | 392   | 5      | 0   | 2   | 0     | 0     | 2     | 13    | 49    | 99    | 222    |        |
|                                          |                                              | M | 205   | 4      | 0   | 1   | 0     | 0     | 0     | 8     | 29    | 52    | 111    |        |
|                                          |                                              | F | 187   | 1      | 0   | 1   | 0     | 0     | 2     | 5     | 20    | 47    | 111    |        |
| J10-<br>J11                              | ...Influenza                                 | T | 9     | 2      | 0   | 1   | 0     | 0     | 0     | 0     | 2     | 1     | 3      |        |
|                                          |                                              | M | 5     | 1      | 0   | 0   | 0     | 0     | 0     | 0     | 2     | 0     | 2      |        |
|                                          |                                              | F | 4     | 1      | 0   | 1   | 0     | 0     | 0     | 0     | 0     | 1     | 1      |        |
| J12-<br>J18                              | ...Pneumonia                                 | T | 383   | 3      | 0   | 1   | 0     | 0     | 2     | 13    | 47    | 98    | 219    |        |
|                                          |                                              | M | 200   | 3      | 0   | 1   | 0     | 0     | 0     | 8     | 27    | 52    | 109    |        |
|                                          |                                              | F | 183   | 0      | 0   | 0   | 0     | 0     | 2     | 5     | 20    | 46    | 110    |        |
| J40-<br>J47                              | Chronic Lower<br>Respiratory Diseases        | T | 2,066 | 0      | 0   | 2   | 1     | 0     | 5     | 8     | 238   | 880   | 932    |        |
|                                          |                                              | M | 986   | 0      | 0   | 2   | 1     | 0     | 4     | 1     | 121   | 445   | 412    |        |
|                                          |                                              | F | 1,080 | 0      | 0   | 0   | 0     | 0     | 1     | 7     | 117   | 435   | 520    |        |
| J43                                      | ...Emphysema                                 | T | 138   | 0      | 0   | 0   | 0     | 0     | 0     | 1     | 14    | 63    | 60     |        |
|                                          |                                              | M | 79    | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 9     | 41    | 29     |        |
|                                          |                                              | F | 59    | 0      | 0   | 0   | 0     | 0     | 0     | 1     | 5     | 22    | 31     |        |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                           |                                                |   | Total | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|------------------------------------------|------------------------------------------------|---|-------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                            | Sex                                            |   |       |        |     |     |       |       |       |       |       |       |        |        |
|                                          | ALL CAUSES, Total                              |   | T     | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                                          |                                                |   | M     | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                                          |                                                |   | F     | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Diseases of Respiratory System Continued |                                                |   |       |        |     |     |       |       |       |       |       |       |        |        |
| J45-<br>J46                              | ...Asthma                                      | T | 58    | 0      | 0   | 2   | 1     | 0     | 5     | 4     | 17    | 12    | 17     |        |
|                                          |                                                | M | 24    | 0      | 0   | 2   | 1     | 0     | 4     | 1     | 7     | 6     | 3      |        |
|                                          |                                                | F | 34    | 0      | 0   | 0   | 0     | 0     | 1     | 3     | 10    | 6     | 14     |        |
| J44,<br>J47                              | ...Other Chronic Lower<br>Respiratory Diseases | T | 1,870 | 0      | 0   | 0   | 0     | 0     | 0     | 3     | 207   | 805   | 855    |        |
|                                          |                                                | M | 883   | 0      | 0   | 0   | 0     | 0     | 0     | 0     | 105   | 398   | 380    |        |
|                                          |                                                | F | 987   | 0      | 0   | 0   | 0     | 0     | 0     | 3     | 102   | 407   | 475    |        |
| J69                                      | Pneumonitis Due to<br>Solids and Liquids       | T | 239   | 0      | 0   | 0   | 0     | 0     | 3     | 3     | 22    | 65    | 146    |        |
|                                          |                                                | M | 157   | 0      | 0   | 0   | 0     | 0     | 3     | 2     | 10    | 44    | 98     |        |
|                                          |                                                | F | 82    | 0      | 0   | 0   | 0     | 0     | 0     | 1     | 12    | 21    | 48     |        |
| Re-<br>sid-<br>ual                       | Other Disease of the<br>Respiratory System     | T | 712   | 6      | 2   | 1   | 2     | 0     | 5     | 18    | 86    | 239   | 353    |        |
|                                          |                                                | M | 416   | 3      | 2   | 1   | 0     | 0     | 3     | 9     | 53    | 147   | 198    |        |
|                                          |                                                | F | 296   | 3      | 0   | 0   | 2     | 0     | 2     | 9     | 33    | 92    | 155    |        |
| K00-<br>K93                              | XI. DISEASES OF THE<br>DIGESTIVE SYSTEM        | T | 2,188 | 1      | 2   | 0   | 0     | 3     | 58    | 241   | 547   | 648   | 688    |        |
|                                          |                                                | M | 1,153 | 1      | 0   | 0   | 0     | 2     | 42    | 156   | 317   | 356   | 279    |        |
|                                          |                                                | F | 1,035 | 0      | 2   | 0   | 0     | 1     | 16    | 85    | 230   | 292   | 409    |        |
| K70,<br>K73-<br>K74                      | Chronic Liver Disease<br>and Cirrhosis         | T | 885   | 0      | 0   | 0   | 0     | 0     | 42    | 182   | 361   | 253   | 47     |        |
|                                          |                                                | M | 562   | 0      | 0   | 0   | 0     | 0     | 28    | 120   | 223   | 170   | 21     |        |
|                                          |                                                | F | 323   | 0      | 0   | 0   | 0     | 0     | 14    | 62    | 138   | 83    | 26     |        |
| K70                                      | ...Alcoholic Liver<br>Disease                  | T | 675   | 0      | 0   | 0   | 0     | 0     | 39    | 157   | 305   | 162   | 12     |        |
|                                          |                                                | M | 452   | 0      | 0   | 0   | 0     | 0     | 27    | 102   | 194   | 120   | 9      |        |
|                                          |                                                | F | 223   | 0      | 0   | 0   | 0     | 0     | 12    | 55    | 111   | 42    | 3      |        |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                           |                         |                         | Total | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|------------------------------------------|-------------------------|-------------------------|-------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                            |                         |                         | Sex   |        |     |     |       |       |       |       |       |       |        |        |
|                                          | ALL CAUSES, Total       |                         | T     | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                                          |                         |                         | M     | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                                          |                         |                         | F     | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Diseases of Respiratory System Continued |                         |                         |       |        |     |     |       |       |       |       |       |       |        |        |
| K73-<br>K74                              | ...Other Chronic Liver  |                         | T     | 210    | 0   | 0   | 0     | 0     | 0     | 3     | 25    | 56    | 91     | 35     |
|                                          | Disease and Cirrhosis   |                         | M     | 110    | 0   | 0   | 0     | 0     | 0     | 1     | 18    | 29    | 50     | 12     |
|                                          |                         |                         | F     | 100    | 0   | 0   | 0     | 0     | 0     | 2     | 7     | 27    | 41     | 23     |
| Re-<br>sid-<br>ual                       | Other Disease of the    |                         | T     | 1,303  | 1   | 2   | 0     | 0     | 3     | 16    | 59    | 186   | 395    | 641    |
|                                          | Digestive System        |                         | M     | 591    | 1   | 0   | 0     | 0     | 2     | 14    | 36    | 94    | 186    | 258    |
|                                          |                         |                         | F     | 712    | 0   | 2   | 0     | 0     | 1     | 2     | 23    | 92    | 209    | 383    |
| L00-<br>L99                              | XII.                    | DISEASES OF THE SKIN    | T     | 102    | 0   | 0   | 0     | 0     | 0     | 1     | 2     | 13    | 40     | 46     |
|                                          |                         | AND SUBCUTANEOUS TISSUE | M     | 52     | 0   | 0   | 0     | 0     | 0     | 1     | 1     | 7     | 22     | 21     |
|                                          |                         |                         | F     | 50     | 0   | 0   | 0     | 0     | 0     | 0     | 1     | 6     | 18     | 25     |
| M00-<br>M99                              | XIII.                   | DISEASES OF THE         | T     | 323    | 0   | 0   | 0     | 0     | 0     | 4     | 11    | 46    | 112    | 150    |
|                                          |                         | MUSCULOSKELETAL SYSTEM  | M     | 124    | 0   | 0   | 0     | 0     | 0     | 1     | 4     | 23    | 42     | 54     |
|                                          |                         | AND CONNECTIVE TISSUE   | F     | 199    | 0   | 0   | 0     | 0     | 0     | 3     | 7     | 23    | 70     | 96     |
| N00-<br>N99                              | XIV.                    | DISEASES OF THE         | T     | 894    | 1   | 0   | 0     | 0     | 0     | 2     | 20    | 91    | 279    | 501    |
|                                          |                         | GENITOURINARY SYSTEM    | M     | 450    | 1   | 0   | 0     | 0     | 0     | 1     | 13    | 51    | 144    | 240    |
|                                          |                         |                         | F     | 444    | 0   | 0   | 0     | 0     | 0     | 1     | 7     | 40    | 135    | 261    |
| N00-N07,<br>N17-N19,<br>N25-N27          | Nephritis, Nephrotic    |                         | T     | 509    | 1   | 0   | 0     | 0     | 0     | 1     | 15    | 55    | 163    | 274    |
|                                          | Syndrome, and Nephrosis |                         | M     | 277    | 1   | 0   | 0     | 0     | 0     | 1     | 10    | 33    | 94     | 138    |
|                                          |                         |                         | F     | 232    | 0   | 0   | 0     | 0     | 0     | 0     | 5     | 22    | 69     | 136    |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                             |                                                                                   |   | Total | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|--------------------------------------------|-----------------------------------------------------------------------------------|---|-------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                              |                                                                                   |   | Sex   |        |     |     |       |       |       |       |       |       |        |        |
|                                            | ALL CAUSES, Total                                                                 |   | T     | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                                            |                                                                                   |   | M     | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                                            |                                                                                   |   | F     | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| Diseases of Genitourinary System Continued |                                                                                   |   |       |        |     |     |       |       |       |       |       |       |        |        |
| N17-<br>N19                                | Renal Failure                                                                     | T | 484   | 0      | 0   | 0   | 0     | 0     | 1     | 15    | 49    | 151   | 268    |        |
|                                            |                                                                                   | M | 263   | 0      | 0   | 0   | 0     | 0     | 1     | 10    | 30    | 86    | 136    |        |
|                                            |                                                                                   | F | 221   | 0      | 0   | 0   | 0     | 0     | 0     | 5     | 19    | 65    | 132    |        |
| Re-<br>sid-<br>ual                         | Other Diseases of the<br>Genitourinary System                                     | T | 385   | 0      | 0   | 0   | 0     | 0     | 1     | 5     | 36    | 116   | 227    |        |
|                                            |                                                                                   | M | 173   | 0      | 0   | 0   | 0     | 0     | 0     | 3     | 18    | 50    | 102    |        |
|                                            |                                                                                   | F | 212   | 0      | 0   | 0   | 0     | 0     | 1     | 2     | 18    | 66    | 125    |        |
| P00-<br>P96                                | XVI. CERTAIN CONDITIONS<br>ORIGINATING IN THE<br>PERINATAL PERIOD                 | T | 143   | 142    | 1   | 0   | 0     | 0     | 0     | 0     | 0     | 0     | 0      |        |
|                                            |                                                                                   | M | 85    | 85     | 0   | 0   | 0     | 0     | 0     | 0     | 0     | 0     | 0      |        |
|                                            |                                                                                   | F | 58    | 57     | 1   | 0   | 0     | 0     | 0     | 0     | 0     | 0     | 0      |        |
| Q00-<br>Q99                                | XVII. CONGENITAL MALFORMATIONS,<br>DEFORMATIONS, AND<br>CHROMOSOMAL ABNORMALITIES | T | 236   | 84     | 8   | 4   | 4     | 8     | 9     | 16    | 58    | 35    | 10     |        |
|                                            |                                                                                   | M | 119   | 45     | 3   | 0   | 2     | 2     | 6     | 10    | 31    | 15    | 5      |        |
|                                            |                                                                                   | F | 117   | 39     | 5   | 4   | 2     | 6     | 3     | 6     | 27    | 20    | 5      |        |
| R00-<br>R99                                | XVIII. SYMPTOMS, SIGNS, AND<br>ABNORMAL CLINICAL AND<br>LABORATORY FINDINGS       | T | 1,152 | 24     | 2   | 1   | 1     | 2     | 15    | 25    | 140   | 324   | 618    |        |
|                                            |                                                                                   | M | 569   | 15     | 1   | 0   | 0     | 2     | 12    | 17    | 102   | 193   | 227    |        |
|                                            |                                                                                   | F | 583   | 9      | 1   | 1   | 1     | 0     | 3     | 8     | 38    | 131   | 391    |        |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                                                                                                                                |                           |                                                          | Total | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------|-------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
|                                                                                                                                               |                           |                                                          | Sex   |        |     |     |       |       |       |       |       |       |        |        |
| ICD10<br>Code                                                                                                                                 | ALL CAUSES, Total         |                                                          | T     | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                                                                                                                                               |                           |                                                          | M     | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                                                                                                                                               |                           |                                                          | F     | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| V01-<br>Y98                                                                                                                                   | XX. EXTERNAL CAUSES       |                                                          | T     | 4,986  | 29  | 22  | 24    | 30    | 157   | 991   | 929   | 868   | 724    | 1,212  |
|                                                                                                                                               |                           |                                                          | M     | 3,254  | 20  | 11  | 12    | 22    | 99    | 732   | 701   | 635   | 485    | 537    |
|                                                                                                                                               |                           |                                                          | F     | 1,732  | 9   | 11  | 12    | 8     | 58    | 259   | 228   | 233   | 239    | 675    |
| V01-<br>X59,<br>Y85-Y86                                                                                                                       | Accidents                 |                                                          | T     | 3,752  | 19  | 16  | 16    | 15    | 94    | 640   | 655   | 601   | 559    | 1,137  |
|                                                                                                                                               |                           |                                                          | M     | 2,314  | 15  | 9   | 8     | 13    | 58    | 457   | 483   | 431   | 357    | 483    |
|                                                                                                                                               |                           |                                                          | F     | 1,438  | 4   | 7   | 8     | 2     | 36    | 183   | 172   | 170   | 202    | 654    |
| V01-<br>V99,<br>Y85                                                                                                                           | **Transport Accidents     |                                                          | T     | 654    | 2   | 8   | 5     | 7     | 41    | 146   | 134   | 133   | 128    | 50     |
|                                                                                                                                               |                           |                                                          | M     | 473    | 2   | 4   | 2     | 6     | 22    | 104   | 105   | 103   | 93     | 32     |
|                                                                                                                                               |                           |                                                          | F     | 181    | 0   | 4   | 3     | 1     | 19    | 42    | 29    | 30    | 35     | 18     |
|                                                                                                                                               | +                         | --Motor Vehicle<br>Accidents                             | T     | 604    | 2   | 8   | 5     | 6     | 40    | 139   | 129   | 116   | 109    | 50     |
|                                                                                                                                               |                           |                                                          | M     | 428    | 2   | 4   | 2     | 5     | 21    | 97    | 101   | 87    | 77     | 32     |
|                                                                                                                                               |                           |                                                          | F     | 176    | 0   | 4   | 3     | 1     | 19    | 42    | 28    | 29    | 32     | 18     |
| V90-<br>V99,Y85                                                                                                                               | ++                        | --Other Transport Accidents<br>(land, water, air, space) | T     | 50     | 0   | 0   | 0     | 1     | 1     | 7     | 5     | 17    | 19     | 0      |
|                                                                                                                                               |                           |                                                          | M     | 45     | 0   | 0   | 0     | 1     | 1     | 7     | 4     | 16    | 16     | 0      |
|                                                                                                                                               |                           |                                                          | F     | 5      | 0   | 0   | 0     | 0     | 0     | 0     | 1     | 1     | 3      | 0      |
| + V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2 |                           |                                                          |       |        |     |     |       |       |       |       |       |       |        |        |
| ++ V1,V5-V6,V09.1,V09.3-V09.9,V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9,V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9 |                           |                                                          |       |        |     |     |       |       |       |       |       |       |        |        |
| W00-<br>X59,<br>Y86                                                                                                                           | **Non-Transport Accidents |                                                          | T     | 3,098  | 17  | 8   | 11    | 8     | 53    | 494   | 521   | 468   | 431    | 1,087  |
|                                                                                                                                               |                           |                                                          | M     | 1,841  | 13  | 5   | 6     | 7     | 36    | 353   | 378   | 328   | 264    | 451    |
|                                                                                                                                               |                           |                                                          | F     | 1,257  | 4   | 3   | 5     | 1     | 17    | 141   | 143   | 140   | 167    | 636    |
| W00-<br>W19                                                                                                                                   | --Falls                   |                                                          | T     | 1,340  | 0   | 0   | 1     | 0     | 0     | 10    | 20    | 79    | 272    | 958    |
|                                                                                                                                               |                           |                                                          | M     | 636    | 0   | 0   | 1     | 0     | 0     | 9     | 17    | 55    | 160    | 394    |
|                                                                                                                                               |                           |                                                          | F     | 704    | 0   | 0   | 0     | 0     | 0     | 1     | 3     | 24    | 112    | 564    |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                         |                                                                              |     | Total  | < 1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79  | 80+    |
|----------------------------------------|------------------------------------------------------------------------------|-----|--------|-----|-----|-----|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                          |                                                                              | Sex |        |     |     |     |       |       |       |       |       |        |        |
|                                        | ALL CAUSES, Total                                                            | T   | 51,603 | 308 | 51  | 49  | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                                        |                                                                              | M   | 27,214 | 183 | 23  | 27  | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                                        |                                                                              | F   | 24,389 | 125 | 28  | 22  | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| External Causes -- Accidents Continued |                                                                              |     |        |     |     |     |       |       |       |       |       |        |        |
| X00-<br>X09                            | --Accidental Exposure<br>to Smoke, Fire, and Flames                          | T   | 39     | 0   | 1   | 3   | 0     | 1     | 1     | 6     | 9     | 14     | 4      |
|                                        |                                                                              | M   | 26     | 0   | 1   | 0   | 0     | 0     | 1     | 5     | 7     | 11     | 1      |
|                                        |                                                                              | F   | 13     | 0   | 0   | 3   | 0     | 1     | 0     | 1     | 2     | 3      | 3      |
| X40-<br>X49                            | --Accidental Poisoning <sup>1</sup><br>and Exposure to<br>Noxious Substances | T   | 1,306  | 1   | 0   | 1   | 4     | 41    | 448   | 437   | 306   | 57     | 11     |
|                                        |                                                                              | M   | 906    | 1   | 0   | 1   | 4     | 26    | 318   | 311   | 209   | 30     | 6      |
|                                        |                                                                              | F   | 400    | 0   | 0   | 0   | 0     | 15    | 130   | 126   | 97    | 27     | 5      |
| Re-<br>sid-<br>ual                     | --Other Non-Transport<br>Accidents and Their<br>Sequelae                     | T   | 413    | 16  | 7   | 6   | 4     | 11    | 35    | 58    | 74    | 88     | 114    |
|                                        |                                                                              | M   | 273    | 12  | 4   | 4   | 3     | 10    | 25    | 45    | 57    | 63     | 50     |
|                                        |                                                                              | F   | 140    | 4   | 3   | 2   | 1     | 1     | 10    | 13    | 17    | 25     | 64     |
| X60-<br>X84,<br>Y87.0                  | <u>Intentional Self-Harm</u><br><u>(Suicide)</u>                             | T   | 809    | 0   | 0   | 1   | 8     | 39    | 236   | 191   | 204   | 97     | 33     |
|                                        |                                                                              | M   | 650    | 0   | 0   | 1   | 4     | 23    | 193   | 152   | 165   | 83     | 29     |
|                                        |                                                                              | F   | 159    | 0   | 0   | 0   | 4     | 16    | 43    | 39    | 39    | 14     | 4      |
| X72-<br>X74                            | **By Discharge of<br>Firearms                                                | T   | 394    | 0   | 0   | 0   | 1     | 15    | 97    | 87    | 111   | 59     | 24     |
|                                        |                                                                              | M   | 359    | 0   | 0   | 0   | 0     | 13    | 87    | 79    | 99    | 57     | 24     |
|                                        |                                                                              | F   | 35     | 0   | 0   | 0   | 1     | 2     | 10    | 8     | 12    | 2      | 0      |
| X60-X71,<br>X75-X84,<br>Y87.0          | **By Other and Unspecified<br>Means and Their Sequelae                       | T   | 415    | 0   | 0   | 1   | 7     | 24    | 139   | 104   | 93    | 38     | 9      |
|                                        |                                                                              | M   | 291    | 0   | 0   | 1   | 4     | 10    | 106   | 73    | 66    | 26     | 5      |
|                                        |                                                                              | F   | 124    | 0   | 0   | 0   | 3     | 14    | 33    | 31    | 27    | 12     | 4      |

**Table 2. Deaths from Selected Causes by Age Group and Sex, Minnesota Residents, 2021.**

| Cause of Death                |                                                        |   | Total | < 1    | 1-4 | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50-64 | 65-79 | 80+    |        |
|-------------------------------|--------------------------------------------------------|---|-------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|--------|
| ICD10<br>Code                 | Sex                                                    |   |       |        |     |     |       |       |       |       |       |       |        |        |
|                               | ALL CAUSES, Total                                      |   | T     | 51,603 | 308 | 51  | 49    | 60    | 206   | 1,419 | 2,595 | 7,656 | 15,745 | 23,514 |
|                               |                                                        |   | M     | 27,214 | 183 | 23  | 27    | 34    | 125   | 1,010 | 1,733 | 4,774 | 8,986  | 10,319 |
|                               |                                                        |   | F     | 24,389 | 125 | 28  | 22    | 26    | 81    | 409   | 862   | 2,882 | 6,759  | 13,195 |
| External Causes Continued     |                                                        |   |       |        |     |     |       |       |       |       |       |       |        |        |
| X85-<br>Y09,<br>Y87.1         | <u>Assault (Homicide)</u>                              | T | 231   | 6      | 3   | 4   | 6     | 18    | 91    | 63    | 27    | 12    | 1      |        |
|                               |                                                        | M | 173   | 2      | 1   | 1   | 5     | 14    | 68    | 50    | 21    | 10    | 1      |        |
|                               |                                                        | F | 58    | 4      | 2   | 3   | 1     | 4     | 23    | 13    | 6     | 2     | 0      |        |
| X93-<br>X95                   | **By Discharge of<br>Firearms                          | T | 164   | 0      | 1   | 2   | 5     | 17    | 78    | 45    | 13    | 3     | 0      |        |
|                               |                                                        | M | 126   | 0      | 0   | 0   | 4     | 14    | 59    | 36    | 11    | 2     | 0      |        |
|                               |                                                        | F | 38    | 0      | 1   | 2   | 1     | 3     | 19    | 9     | 2     | 1     | 0      |        |
| X85-X92,<br>X96-Y09,<br>Y87.1 | **By Other and Unspecified<br>Means and Their Sequelae | T | 67    | 6      | 2   | 2   | 1     | 1     | 13    | 18    | 14    | 9     | 1      |        |
|                               |                                                        | M | 47    | 2      | 1   | 1   | 1     | 0     | 9     | 14    | 10    | 8     | 1      |        |
|                               |                                                        | F | 20    | 4      | 1   | 1   | 0     | 1     | 4     | 4     | 4     | 1     | 0      |        |
| Y10-<br>Y34,<br>Y87.2,Y89.9   | <u>Events of Undetermined<br/>Intent</u>               | T | 75    | 4      | 3   | 2   | 0     | 6     | 21    | 19    | 13    | 5     | 2      |        |
|                               |                                                        | M | 51    | 3      | 1   | 2   | 0     | 4     | 11    | 16    | 8     | 4     | 2      |        |
|                               |                                                        | F | 24    | 1      | 2   | 0   | 0     | 2     | 10    | 3     | 5     | 1     | 0      |        |
| Y40-<br>Y84,<br>Y88           | <u>Complications of Medical<br/>and Surgical Care</u>  | T | 119   | 0      | 0   | 1   | 1     | 0     | 3     | 1     | 23    | 51    | 39     |        |
|                               |                                                        | M | 66    | 0      | 0   | 0   | 0     | 0     | 3     | 0     | 10    | 31    | 22     |        |
|                               |                                                        | F | 53    | 0      | 0   | 1   | 1     | 0     | 0     | 1     | 13    | 20    | 17     |        |
| U071                          | XXII. Codes for Special Purposes<br>(COVID-19)         | T | 4,439 | 0      | 0   | 1   | 0     | 4     | 61    | 231   | 887   | 1,553 | 1,702  |        |
|                               |                                                        | M | 2,626 | 0      | 0   | 0   | 0     | 3     | 40    | 154   | 583   | 951   | 895    |        |
|                               |                                                        | F | 1,813 | 0      | 0   | 1   | 0     | 1     | 21    | 77    | 304   | 602   | 807    |        |

**Note:** Some deaths were unclassified including [H00-H99] Diseases of the eye or ear; [O00-O99] Pregnancy and childbirth; [Y35] Legal intervention; [Y89] Sequelae of war operations; missing cause.

<sup>1</sup> 75.4% of accidental poisonings are due to narcotics and hallucinogens in ages 20-64 years.

**Table 3. MN Ten Leading Causes of Death<sup>1</sup>, Death Rates per 100,000 Population, Percent of Total Deaths, and Rank Order, Minnesota Residents, 2021.**

| Cause of Death                                                        | Minnesota        |             |                  |      | United States <sup>2</sup> |      |
|-----------------------------------------------------------------------|------------------|-------------|------------------|------|----------------------------|------|
|                                                                       | Number of Deaths | Death Rates | Percent of Total | RANK | Death Rates                | RANK |
| Malignant Neoplasms [Cancer] (C00-C97)                                | 10,178           | 178.3       | 19.7%            | 1    | 182.4                      | 2    |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)                       | 8,570            | 150.2       | 16.6%            | 2    | 209.6                      | 1    |
| COVID-19 (U071)                                                       | 4,439            | 77.8        | 8.6%             | 3    | 125.6                      | 3    |
| Accidents (V01-X59,Y85-Y86)                                           | 3,752            | 65.7        | 7.3%             | 4    | 67.8                       | 4    |
| Falls (W00-W19)                                                       | 1,340            | 23.5        | 2.6%             |      |                            |      |
| Accidental poisoning (X40-X49)                                        | 1,306            | 22.9        | 2.5%             |      |                            |      |
| Motor Vehicle <sup>3</sup>                                            | 604              | 10.6        | 1.2%             |      |                            |      |
| Cerebrovascular Diseases [Stroke] (I60-I69)                           | 2,384            | 41.8        | 4.6%             | 5    | 49.1                       | 5    |
| Alzheimer's Disease (G30)                                             | 2,251            | 39.4        | 4.4%             | 6    | 36.0                       | 7    |
| Chronic Lower Respiratory Diseases (J40-J47)                          | 2,066            | 36.2        | 4.0%             | 7    | 42.9                       | 6    |
| Diabetes Mellitus (E10-E14)                                           | 1,575            | 27.6        | 3.1%             | 8    | 31.1                       | 8    |
| Essential Hypertension and Hypertensive Renal Disease (I10, I12, I15) | 908              | 15.9        | 1.8%             | 9    | 12.9                       | 12   |
| Chronic Liver Disease (K70, K73-K74)                                  | 885              | 15.5        | 1.7%             | 10   | 17.0                       | 9    |
| All Other Causes                                                      | 14,595           | 255.7       | 28.3%            |      | 238.6                      |      |
| Total - All Causes                                                    | 51,603           | 904.1       |                  |      | 1,043.8                    |      |

<sup>1</sup>These are the 10 leading causes of death for residents of Minnesota listed in descending order of prevalence. Categories based on US 113 causes deemed rankable. MN rates and rank order are compared with US rates and rank order.

<sup>2</sup>United States data are from Mortality in the United States, 2021 & CDC WONDER

<sup>3</sup>Motor Vehicle cause codes: V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0,V89.2

**Note:** Codes listed in parentheses are the ICD10 codes included in each category.

**Note:** Some deaths are unclassified including [H00-H99] Diseases of the eye or ear; [O00-O99] Pregnancy and childbirth; [Y35] Legal intervention; [Y89] Sequelae of war operations; and missing cause.

**Mortality Table 4. Leading Causes of Death by Age Groups, Counts, and Age/Cause-specific Death Rates, Minnesota Residents, 2021.**

|                                   | No. <sup>1</sup> of Deaths |       | Death Rate <sup>2</sup> % Per 100,000 |                                      | No. <sup>1</sup> of Deaths |       | Death Rate <sup>2</sup> % Per 100,000 |
|-----------------------------------|----------------------------|-------|---------------------------------------|--------------------------------------|----------------------------|-------|---------------------------------------|
| <b>1-4 Years</b>                  |                            |       |                                       | <b>35-49 Years</b>                   |                            |       |                                       |
| Total - all causes                | 51                         |       | 18.6                                  | Total - all causes                   | 2,595                      |       | 238.8                                 |
| Accidents                         | 16                         | 31.4% | --                                    | Accidents                            | 655                        | 25.2% | 60.3                                  |
| Motor Vehicle                     | 8                          | 15.7% | --                                    | Accidental poisoning <sup>3</sup>    | 437                        | 16.8% | 40.2                                  |
| Congenital Anomalies              | 8                          | 15.7% | --                                    | Motor Vehicle                        | 129                        | 5.0%  | 11.9                                  |
| Malignant Neoplasms               | 5                          | 9.8%  | --                                    | Malignant Neoplasms                  | 353                        | 13.6% | 32.5                                  |
| Assault (Homicide)                | 3                          | 5.9%  | --                                    | Diseases of the Heart                | 268                        | 10.3% | 24.7                                  |
| Septicemia                        | 1                          | 2.0%  | --                                    | Covid-19                             | 231                        | 8.9%  | 21.3                                  |
|                                   |                            |       |                                       | Intentional Self-Harm                | 191                        | 7.4%  | 17.6                                  |
| <b>5-9 Years</b>                  |                            |       |                                       | <b>50-64 Years</b>                   |                            |       |                                       |
| Total - all causes                | 49                         |       | 13.4                                  | Total - all causes                   | 7,656                      |       | 694.9                                 |
| Accidents                         | 16                         | 32.7% | --                                    | Malignant Neoplasms                  | 1,995                      | 26.1% | 181.1                                 |
| Motor Vehicle                     | 5                          | 10.2% | --                                    | Diseases of the Heart                | 946                        | 12.4% | 85.9                                  |
| Malignant Neoplasms               | 8                          | 16.3% | --                                    | Covid-19                             | 887                        | 11.6% | 80.5                                  |
| Assault (Homicide)                | 4                          | 8.2%  | --                                    | Accidents                            | 601                        | 7.9%  | 54.6                                  |
| Influenza and Pneumonia           | 2                          | 4.1%  | --                                    | Accidental poisoning <sup>3</sup>    | 306                        | 4.0%  | 27.8                                  |
| Influenza                         | 1                          | 2.0%  | --                                    | Motor Vehicle                        | 116                        | 1.5%  | 10.5                                  |
| Pneumonia                         | 1                          | 2.0%  | --                                    | Liver Disease, Cirrhosis             | 361                        | 4.7%  | 32.8                                  |
| Covid-19                          | 1                          | 2.0%  | --                                    | Diabetes Mellitus                    | 343                        | 4.5%  | 31.1                                  |
| <b>10-14 Years</b>                |                            |       |                                       | Chron. Lower Resp Dis.               | 238                        | 3.1%  | 21.6                                  |
| Total - all causes                | 60                         |       | 15.7                                  | Cerebrovascular                      | 229                        | 3.0%  | 20.8                                  |
| Accidents                         | 15                         | 25.0% | --                                    | <b>65-79 Years<sup>2</sup></b>       |                            |       |                                       |
| Motor Vehicle                     | 6                          | 10.0% | --                                    | Total - all causes                   | 15,745                     |       | 2131.7                                |
| Accidental poisoning <sup>3</sup> | 4                          | 6.7%  | --                                    | Malignant Neoplasms                  | 4393                       | 27.9% | 594.8                                 |
| Other Transport                   | 1                          | 1.7%  | --                                    | Diseases of the Heart                | 2256                       | 14.3% | 305.4                                 |
| Intentional Self-Harm             | 8                          | 13.3% | --                                    | Covid-19                             | 1553                       | 9.9%  | 210.3                                 |
| Malignant Neoplasms               | 6                          | 10.0% | --                                    | Chron. Lower Resp Dis.               | 880                        | 5.6%  | 119.1                                 |
| Assault (Homicide)                | 6                          | 10.0% | --                                    | Cerebrovascular Diseases             | 649                        | 4.1%  | 87.9                                  |
| Congenital Anomalies              | 4                          | 6.7%  | --                                    | Diabetes Mellitus                    | 600                        | 3.8%  | 81.2                                  |
| <b>15-19 Years</b>                |                            |       |                                       | Accidents                            | 559                        | 3.6%  | 75.7                                  |
| Total - all causes                | 206                        |       | 55.0                                  | Falls                                | 272                        | 1.7%  | 36.8                                  |
| Accidents                         | 94                         | 45.6% | 25.1                                  | Motor Vehicle                        | 109                        | 0.7%  | 14.8                                  |
| Accidental poisoning <sup>3</sup> | 41                         | 19.9% | 10.9                                  | Alzheimer's Disease                  | 375                        | 2.4%  | 50.8                                  |
| Motor Vehicle                     | 40                         | 19.4% | 10.7                                  | Unspecified Dementia                 | 301                        | 1.9%  | 40.8                                  |
| Intentional Self-Harm             | 39                         | 18.9% | 10.4                                  | <b>80 Years and Over<sup>2</sup></b> |                            |       |                                       |
| Assault (Homicide)                | 18                         | 8.7%  | --                                    | Total - all causes                   | 23,514                     |       | 10,833.0                              |
| Congenital Malformations          | 8                          | 3.9%  | --                                    | Diseases of the Heart                | 5,036                      | 21.4% | 2,320.1                               |
| Diseases of the Heart             | 7                          | 3.4%  | --                                    | Malignant Neoplasms                  | 3,355                      | 14.3% | 1,545.7                               |
| <b>20-34 Years</b>                |                            |       |                                       | Alzheimer's Disease                  | 1,856                      | 7.9%  | 855.1                                 |
| Total - all causes                | 1,419                      |       | 128.8                                 | Unspecified Dementia                 | 1,802                      | 7.7%  | 830.2                                 |
| Accidents                         | 640                        | 45.1% | 58.1                                  | Covid-19                             | 1,702                      | 7.2%  | 784.1                                 |
| Accidental poisoning <sup>3</sup> | 448                        | 31.6% | 40.7                                  | Cerebrovascular Diseases             | 1,443                      | 6.1%  | 664.8                                 |
| Motor Vehicle                     | 139                        | 9.8%  | 12.6                                  | Accidents                            | 1,137                      | 4.8%  | 523.8                                 |
| Intentional Self-Harm             | 236                        | 16.6% | 21.4                                  | Falls                                | 958                        | 4.1%  | 441.4                                 |
| Assault (Homicide)                | 91                         | 6.4%  | 8.3                                   | Chron. Lower Resp Dis.               | 932                        | 4.0%  | 429.4                                 |
| Covid-19                          | 61                         | 4.3%  | 5.5                                   |                                      |                            |       |                                       |
| Malignant Neoplasms               | 58                         | 4.1%  | 5.3                                   |                                      |                            |       |                                       |

<sup>1</sup> Rates are per 100,000 age group-specific population. Rates are only calculated for those with a count of 20 or more due to the instability and unreliability of rate estimates with fewer than 20 deaths.

<sup>2</sup> Age groups for those 65 and older were redefined and are not comparable to 65-74 and 75+ from previous years.

<sup>3</sup> 75.4% of accidental poisonings are due to narcotics and hallucinogens in ages 20-64 years.

**Mortality Table 5a. Deaths Due to Selected Causes by Race/Ethnicity, MN Residents, 2021.**

|                                              | Total         | Non-Hispanic  |                  |                 |                           |             |               | Hispanic   |
|----------------------------------------------|---------------|---------------|------------------|-----------------|---------------------------|-------------|---------------|------------|
|                                              |               | White         | African American | American Indian | Asian or Pacific Islander | Multiracial | Other/Unknown |            |
| <b>TOTAL POPULATION<sup>1</sup></b>          | 5,707,390     | 4,458,035     | 409,602          | 60,687          | 305,845                   | 139,747     | N/A           | 333,474    |
| <b>TOTAL - ALL CAUSES</b>                    | <b>51,647</b> | <b>46,041</b> | <b>2,217</b>     | <b>896</b>      | <b>1,169</b>              | <b>390</b>  | <b>72</b>     | <b>862</b> |
| <b>TOTAL - Natural Causes</b>                | <b>46,661</b> | <b>42,241</b> | <b>1,691</b>     | <b>670</b>      | <b>1,055</b>              | <b>274</b>  | <b>64</b>     | <b>666</b> |
| Malignant Neoplasms                          | 10,178        | 9,274         | 354              | 102             | 219                       | 60          | 12            | 157        |
| Stomach                                      | 158           | 134           | 5                | 0               | 16                        | 2           | 0             | 1          |
| Colon, Rectum and Anus                       | 832           | 740           | 39               | 7               | 26                        | 4           | 0             | 16         |
| Pancreas                                     | 829           | 768           | 30               | 6               | 9                         | 2           | 1             | 13         |
| Trachea, Bronchus, Lung                      | 2,224         | 2,022         | 80               | 42              | 41                        | 15          | 4             | 20         |
| Breast                                       | 674           | 622           | 20               | 5               | 10                        | 7           | 3             | 7          |
| Cervix, Uterus, Ovary                        | 468           | 418           | 18               | 3               | 16                        | 3           | 0             | 10         |
| Prostate                                     | 602           | 566           | 16               | 6               | 4                         | 2           | 0             | 8          |
| Non-Hodgkins Lymphoma                        | 408           | 385           | 11               | 2               | 1                         | 2           | 0             | 7          |
| Leukemia                                     | 409           | 381           | 13               | 4               | 4                         | 1           | 0             | 6          |
| Other Malignancies                           | 3,574         | 3,238         | 122              | 27              | 92                        | 22          | 4             | 69         |
| Diabetes Mellitus                            | 1,575         | 1,323         | 95               | 55              | 56                        | 7           | 0             | 39         |
| Alzheimer's Disease                          | 2,251         | 2,157         | 38               | 11              | 21                        | 6           | 0             | 18         |
| Major Cardiovascular                         | 12,276        | 11,249        | 431              | 128             | 261                       | 61          | 13            | 133        |
| Diseases of the Heart                        | 8,571         | 7,950         | 269              | 83              | 127                       | 43          | 9             | 90         |
| Essential Hypertension & Hypertensive Renal  | 908           | 802           | 52               | 10              | 30                        | 4           | 1             | 9          |
| Cerebrovascular                              | 2,384         | 2,119         | 96               | 31              | 95                        | 11          | 2             | 30         |
| Influenza & Pneumonia                        | 392           | 355           | 10               | 2               | 20                        | 1           | 1             | 3          |
| Chronic Lower Respiratory Diseases           | 2,066         | 1,944         | 53               | 25              | 25                        | 8           | 2             | 9          |
| Chronic Liver Disease and Cirrhosis          | 885           | 734           | 35               | 60              | 21                        | 14          | 1             | 20         |
| Nephritis, Nephrotic Syndrome, and Nephrosis | 509           | 442           | 20               | 14              | 18                        | 3           | 1             | 11         |
| All Other Diseases                           | 16,529        | 14,763        | 655              | 273             | 414                       | 114         | 34            | 276        |
| <b>Total Accidents</b>                       | <b>3,752</b>  | <b>2,940</b>  | <b>351</b>       | <b>176</b>      | <b>69</b>                 | <b>78</b>   | <b>5</b>      | <b>133</b> |
| Motor Vehicle Accidents                      | 604           | 472           | 56               | 23              | 19                        | 11          | 3             | 20         |
| Falls                                        | 1,340         | 1,285         | 9                | 9               | 15                        | 5           | 1             | 16         |
| Accidental poisoning                         | 1,306         | 777           | 246              | 125             | 22                        | 59          | 1             | 76         |
| <b>Intentional Self-Harm (Suicide)</b>       | <b>809</b>    | <b>656</b>    | <b>29</b>        | <b>29</b>       | <b>36</b>                 | <b>19</b>   | <b>3</b>      | <b>37</b>  |
| <b>Assault (Homicide)</b>                    | <b>231</b>    | <b>67</b>     | <b>122</b>       | <b>8</b>        | <b>5</b>                  | <b>13</b>   | <b>0</b>      | <b>16</b>  |
| <b>Other External Causes</b>                 | <b>194</b>    | <b>137</b>    | <b>24</b>        | <b>13</b>       | <b>4</b>                  | <b>6</b>    | <b>0</b>      | <b>10</b>  |
| <b>COVID-19</b>                              | <b>4,439</b>  | <b>3,762</b>  | <b>206</b>       | <b>112</b>      | <b>190</b>                | <b>29</b>   | <b>3</b>      | <b>137</b> |

<sup>1</sup> Annual Estimates are single-race Vintage 2021 postcensal estimates of the July 1 resident population. These estimates were prepared by the Census Bureau in collaboration with NCHS. Single race estimates created for six single race categories (including multiracial) or Hispanic categories based on the 1997 OMB standards. There are no population estimates for other/unknown. For more information or access to the data, see: <https://wonder.cdc.gov/wonder/help/single-race.html>

**Note:** see Table 5b for crude rates.

**Mortality Table 5b. Cause-Specific Mortality Rates<sup>1,2</sup> by Race/Ethnicity, MN Residents, 2021.**

|                                              | Total | Non-Hispanic |                  |                 |                           |             | Hispanic |                             |
|----------------------------------------------|-------|--------------|------------------|-----------------|---------------------------|-------------|----------|-----------------------------|
|                                              |       | White        | African American | American Indian | Asian or Pacific Islander | Multiracial |          | Other/ <sup>3</sup> Unknown |
| TOTAL - ALL CAUSES                           | 904.9 | 1,032.8      | 541.3            | 1,476.4         | 382.2                     | 279.1       | N/A      | 258.5                       |
| TOTAL - Natural Causes                       | 817.6 | 947.5        | 412.8            | 1,104.0         | 344.9                     | 196.1       | N/A      | 199.7                       |
| Malignant Neoplasms                          | 178.3 | 208.0        | 86.4             | 168.1           | 71.6                      | 42.9        | N/A      | 47.1                        |
| Stomach                                      | 2.8   | 3.0          | --               | --              | --                        | --          | N/A      | --                          |
| Colon, Rectum and Anus                       | 14.6  | 16.6         | 9.5              | --              | 8.5                       | --          | N/A      | --                          |
| Pancreas                                     | 14.5  | 17.2         | 7.3              | --              | --                        | --          | N/A      | --                          |
| Trachea, Bronchus, Lung                      | 39.0  | 45.4         | 19.5             | 69.2            | 13.4                      | --          | N/A      | 6.0                         |
| Breast                                       | 11.8  | 14.0         | 4.9              | --              | --                        | --          | N/A      | --                          |
| Cervix, Uterus, Ovary                        | 8.2   | 9.4          | --               | --              | --                        | --          | N/A      | --                          |
| Prostate                                     | 10.5  | 12.7         | --               | --              | --                        | --          | N/A      | --                          |
| Non-Hodgkins Lymphoma                        | 7.1   | 8.6          | --               | --              | --                        | --          | N/A      | --                          |
| Leukemia                                     | 7.2   | 8.5          | --               | --              | --                        | --          | N/A      | --                          |
| Other Malignancies                           | 62.6  | 72.6         | 29.8             | 44.5            | 30.1                      | 15.7        | N/A      | 20.7                        |
| Diabetes Mellitus                            | 27.6  | 29.7         | 23.2             | 90.6            | 18.3                      | --          | N/A      | 11.7                        |
| Alzheimer's Disease                          | 39.4  | 48.4         | 9.3              | --              | 6.9                       | --          | N/A      | --                          |
| Major Cardiovascular                         | 215.1 | 252.3        | 105.2            | 210.9           | 85.3                      | 43.7        | N/A      | 39.9                        |
| Diseases of the Heart                        | 150.2 | 178.3        | 65.7             | 136.8           | 41.5                      | 30.8        | N/A      | 27.0                        |
| Essential Hypertension & Hypertensive Renal  | 15.9  | 18.0         | 12.7             | --              | 9.8                       | --          | N/A      | --                          |
| Cerebrovascular                              | 41.8  | 47.5         | 23.4             | 51.1            | 31.1                      | --          | N/A      | 9.0                         |
| Influenza & Pneumonia                        | 6.9   | 8.0          | --               | --              | 6.5                       | --          | N/A      | --                          |
| Chronic Lower Respiratory Diseases           | 36.2  | 43.6         | 12.9             | 41.2            | 8.2                       | --          | N/A      | --                          |
| Chronic Liver Disease and Cirrhosis          | 15.5  | 16.5         | 8.5              | 98.9            | 6.9                       | --          | N/A      | 6.0                         |
| Nephritis, Nephrotic Syndrome, and Nephrosis | 8.9   | 9.9          | 4.9              | --              | --                        | --          | N/A      | --                          |
| All Other Diseases                           | 289.6 | 331.2        | 159.9            | 449.8           | 135.4                     | 81.6        | N/A      | 82.8                        |
| Total Accidents                              | 65.7  | 65.9         | 85.7             | 290.0           | 22.6                      | 55.8        | N/A      | 39.9                        |
| Motor Vehicle Accidents                      | 10.6  | 10.6         | 13.7             | 37.9            | --                        | --          | N/A      | 6.0                         |
| Falls                                        | 23.5  | 28.8         | --               | --              | --                        | --          | N/A      | --                          |
| Accidental poisoning                         | 22.9  | 17.4         | 60.1             | 206.0           | 7.2                       | 42.2        | N/A      | 22.8                        |
| Intentional Self-Harm (Suicide)              | 14.2  | 14.7         | 7.1              | 47.8            | 11.8                      | --          | N/A      | 11.1                        |
| Assault (Homicide)                           | 4.0   | 1.5          | 29.8             | --              | --                        | --          | N/A      | --                          |
| Other External Causes                        | 3.4   | 3.1          | 5.9              | --              | --                        | --          | N/A      | --                          |
| COVID-19                                     | 77.8  | 84.4         | 50.3             | 184.6           | 62.1                      | 20.8        | N/A      | 41.1                        |

<sup>1</sup> Rates are per 100,000 race/ethnicity specific population. Rates not computed for counts <20 due to unreliability (--).

<sup>2</sup> Population denominator data are single-race postcensal estimates obtained from CDC WONDER: wonder.cdc.gov.

<sup>3</sup> No cause-specific rates can be calculated for persons of other or unknown races due to no population data for this subgroup.

**Note:** see Table 5a for counts.

**Mortality Table 6a. Deaths Due to Selected Causes by Rural/Urban Residence, MN Residents, 2021.**

|                                              | Total <sup>1</sup> | Geographic Residence <sup>2</sup> |                |                     |              |              |
|----------------------------------------------|--------------------|-----------------------------------|----------------|---------------------|--------------|--------------|
|                                              |                    | Large Urban                       | Large Suburban | Medium/ Small Metro | Micropolitan | Noncore      |
| <b>TOTAL POPULATION</b>                      | 5,707,390          | 1,810,673                         | 1,757,125      | 881,869             | 676,627      | 581,096      |
| <b>TOTAL - ALL CAUSES</b>                    | 51,615             | 14,882                            | 13,253         | 8,460               | 7,561        | 7,459        |
| <b>TOTAL - Natural Causes</b>                | <b>46,646</b>      | <b>13,100</b>                     | <b>12,074</b>  | <b>7,670</b>        | <b>6,943</b> | <b>6,859</b> |
| Malignant Neoplasms                          | 10,178             | 2,829                             | 2,756          | 1,621               | 1,436        | 1,536        |
| Stomach                                      | 158                | 56                                | 44             | 18                  | 25           | 15           |
| Colon, Rectum and Anus                       | 832                | 235                               | 197            | 136                 | 127          | 137          |
| Pancreas                                     | 829                | 240                               | 224            | 136                 | 104          | 125          |
| Trachea, Bronchus, Lung                      | 2,224              | 576                               | 594            | 372                 | 303          | 379          |
| Breast                                       | 674                | 210                               | 197            | 91                  | 92           | 84           |
| Cervix, Uterus, Ovary                        | 468                | 152                               | 116            | 77                  | 64           | 59           |
| Prostate                                     | 602                | 135                               | 181            | 110                 | 92           | 84           |
| Non-Hodgkins Lymphoma                        | 408                | 104                               | 111            | 73                  | 67           | 53           |
| Leukemia                                     | 409                | 99                                | 107            | 60                  | 74           | 69           |
| Other Malignancies                           | 3,574              | 1,022                             | 985            | 548                 | 488          | 531          |
| Diabetes Mellitus                            | 1,574              | 492                               | 369            | 213                 | 226          | 274          |
| Alzheimer's Disease                          | 2,251              | 609                               | 576            | 436                 | 343          | 287          |
| Major Cardiovascular                         | 12,272             | 3,430                             | 2,933          | 2,122               | 1,832        | 1,955        |
| Diseases of the Heart                        | 8,567              | 2,220                             | 1,989          | 1,537               | 1,380        | 1,441        |
| Essential Hypertension & Hypertensive Renal  | 908                | 326                               | 247            | 112                 | 85           | 138          |
| Cerebrovascular                              | 2,384              | 759                               | 589            | 402                 | 308          | 326          |
| Influenza & Pneumonia                        | 392                | 106                               | 94             | 63                  | 57           | 72           |
| Chronic Lower Respiratory Diseases           | 2,065              | 472                               | 536            | 364                 | 359          | 334          |
| Chronic Liver Disease and Cirrhosis          | 885                | 301                               | 220            | 135                 | 124          | 105          |
| Nephritis, Nephrotic Syndrome, and Nephrosis | 509                | 146                               | 131            | 85                  | 74           | 73           |
| All Other Diseases                           | 16,520             | 4,715                             | 4,459          | 2,631               | 2,492        | 2,223        |
| <b>Total Accidents</b>                       | <b>3,740</b>       | <b>1,350</b>                      | <b>872</b>     | <b>587</b>          | <b>467</b>   | <b>464</b>   |
| Motor Vehicle Accidents                      | 603                | 152                               | 137            | 101                 | 94           | 119          |
| Falls                                        | 1,340              | 426                               | 364            | 207                 | 183          | 160          |
| Accidental Poisoning                         | 1,295              | 606                               | 267            | 201                 | 115          | 106          |
| <b>Intentional Self-Harm (Suicide)</b>       | <b>806</b>         | <b>208</b>                        | <b>218</b>     | <b>152</b>          | <b>116</b>   | <b>112</b>   |
| <b>Assault (Homicide)</b>                    | <b>230</b>         | <b>140</b>                        | <b>40</b>      | <b>25</b>           | <b>17</b>    | <b>8</b>     |
| <b>Other External Causes</b>                 | <b>193</b>         | <b>84</b>                         | <b>49</b>      | <b>26</b>           | <b>18</b>    | <b>16</b>    |
| <b>COVID-19</b>                              | <b>4,435</b>       | <b>1,032</b>                      | <b>1,431</b>   | <b>613</b>          | <b>691</b>   | <b>668</b>   |

<sup>1</sup> Total excludes missing cause of death and/or missing county of residence.

<sup>2</sup> Classification is based on the National Center for Health Statistics (NCHS) Urban-Rural Classification Scheme for Counties. See [https://www.cdc.gov/nchs/data\\_access/urban\\_rural.htm](https://www.cdc.gov/nchs/data_access/urban_rural.htm) for more information.

**Note:** see Table 6b for crude rates.

**Mortality Table 6b. Cause-Specific Mortality Rates<sup>1,2</sup> by Rural/Urban Residence, MN Residents, 2021.**

|                                              | Total <sup>1</sup> | Geographic Residence |                |                     |                |                |
|----------------------------------------------|--------------------|----------------------|----------------|---------------------|----------------|----------------|
|                                              |                    | Large Urban          | Large Suburban | Medium/ Small Metro | Micropolitan   | Noncore        |
| <b>TOTAL - ALL CAUSES</b>                    | <b>904.4</b>       | <b>821.9</b>         | <b>754.2</b>   | <b>959.3</b>        | <b>1,117.5</b> | <b>1,283.6</b> |
| <b>TOTAL - Natural Causes</b>                | <b>817.3</b>       | <b>723.5</b>         | <b>687.1</b>   | <b>869.7</b>        | <b>1,026.1</b> | <b>1,180.4</b> |
| Malignant Neoplasms                          | 178.3              | 156.2                | 156.8          | 183.8               | 212.2          | 264.3          |
| Stomach                                      | 2.8                | 3.1                  | 2.5            | --                  | 3.7            | --             |
| Colon, Rectum and Anus                       | 14.6               | 13.0                 | 11.2           | 15.4                | 18.8           | 23.6           |
| Pancreas                                     | 14.5               | 13.3                 | 12.7           | 15.4                | 15.4           | 21.5           |
| Trachea, Bronchus, Lung                      | 39.0               | 31.8                 | 33.8           | 42.2                | 44.8           | 65.2           |
| Breast                                       | 11.8               | 11.6                 | 11.2           | 10.3                | 13.6           | 14.5           |
| Cervix, Uterus, Ovary                        | 8.2                | 8.4                  | 6.6            | 8.7                 | 9.5            | 10.2           |
| Prostate                                     | 10.5               | 7.5                  | 10.3           | 12.5                | 13.6           | 14.5           |
| Non-Hodgkins Lymphoma                        | 7.1                | 5.7                  | 6.3            | 8.3                 | 9.9            | 9.1            |
| Leukemia                                     | 7.2                | 5.5                  | 6.1            | 6.8                 | 10.9           | 11.9           |
| Other Malignancies                           | 62.6               | 56.4                 | 56.1           | 62.1                | 72.1           | 91.4           |
| Diabetes Mellitus                            | 27.6               | 27.2                 | 21.0           | 24.2                | 33.4           | 47.2           |
| Alzheimer's Disease                          | 39.4               | 33.6                 | 32.8           | 49.4                | 50.7           | 49.4           |
| Major Cardiovascular                         | 215.0              | 189.4                | 166.9          | 240.6               | 270.8          | 336.4          |
| Diseases of the Heart                        | 150.1              | 122.6                | 113.2          | 174.3               | 204.0          | 248.0          |
| Essential Hypertension & Hypertensive Renal  | 15.9               | 18.0                 | 14.1           | 12.7                | 12.6           | 23.7           |
| Cerebrovascular                              | 41.8               | 41.9                 | 33.5           | 45.6                | 45.5           | 56.1           |
| Influenza & Pneumonia                        | 36.2               | 5.9                  | 5.3            | 7.1                 | 8.4            | 12.4           |
| Chronic Lower Respiratory Diseases           | 15.5               | 26.1                 | 30.5           | 41.3                | 53.1           | 57.5           |
| Chronic Liver Disease and Cirrhosis          | 8.9                | 16.6                 | 12.5           | 15.3                | 18.3           | 18.1           |
| Nephritis, Nephrotic Syndrome, and Nephrosis | 8.9                | 8.1                  | 7.5            | 9.6                 | 10.9           | 12.6           |
| All Other Diseases                           | 289.4              | 260.4                | 253.8          | 298.3               | 368.3          | 382.6          |
| <b>Total Accidents</b>                       | <b>65.5</b>        | <b>74.6</b>          | <b>49.6</b>    | <b>66.6</b>         | <b>69.0</b>    | <b>79.8</b>    |
| Motor Vehicle Accidents                      | 10.6               | 8.4                  | 7.8            | 11.5                | 13.9           | 20.5           |
| Falls                                        | 23.5               | 23.5                 | 20.7           | 23.5                | 27.0           | 27.5           |
| Accidental Poisoning                         | 22.7               | 33.5                 | 15.2           | 22.8                | 17.0           | 18.2           |
| <b>Intentional Self-Harm (Suicide)</b>       | <b>14.1</b>        | <b>11.5</b>          | <b>12.4</b>    | <b>17.2</b>         | <b>17.1</b>    | <b>19.3</b>    |
| <b>Assault (Homicide)</b>                    | <b>4.0</b>         | <b>7.7</b>           | <b>2.3</b>     | <b>2.8</b>          | --             | --             |
| <b>Other External Causes</b>                 | <b>3.4</b>         | <b>4.6</b>           | <b>2.8</b>     | <b>2.9</b>          | --             | --             |
| <b>COVID-19</b>                              | <b>77.7</b>        | <b>57.0</b>          | <b>81.4</b>    | <b>69.5</b>         | <b>102.1</b>   | <b>115.0</b>   |

<sup>1</sup> Rates are per 100,000 rural/urban specific population. Rates not computed for counts <20 due to instability and unreliability.

<sup>2</sup> Population denominator data are summed from CDC NCHS Vintage 2021 single-race estimates of population:

<https://wonder.cdc.gov/wonder/help/single-race.html>

**Note:** see Table 6a for counts.

This page intentionally left blank.

# Appendices

## Appendix A -- Technical Notes

### Sources of Data

#### Vital Events

Birth and death registration and fetal death reports filed with the Office of the Vital Records, Minnesota Department of Health for calendar year 2021 are the source documents for data on vital statistics of Minnesota residents. Late 2021 vital event certificates may have been filed after preparation of the annual report. Future data obtained from MDH may differ from that which appears in this report due to updates to the data year made after the cutoff date.

Live births and deaths to Minnesota residents that occurred in another state are included in this report insofar as they are reported to the Office of Vital Records. The inclusion of these data is made possible by an agreement for exchange of copies of resident certificates among all registration areas in the United States. Not all of the states participate in the exchange of fetal death reports; thus, this report includes only fetal deaths that occurred to Minnesota residents.

#### Population Data

Annual Estimates are single-race Vintage 2021 postcensal estimates of the July 1 resident population. These estimates were prepared by the Census Bureau in collaboration with NCHS. Single race estimates created for six single race categories (including multiracial) or Hispanic categories based on the 1997 OMB standards. There are no population estimates for other/unknown. For more information or access to the data, see: <https://wonder.cdc.gov/wonder/help/single-race.html> This is a change from previous years which used the bridged-race estimates for populations. The bridged race program was sunset in 2020. The single-race data should not be compared to the bridged-race population estimates due to differences in how populations are classified.

Sociodemographic data are obtained from the American Community Survey, 1-year and 5-year estimates, which are produced by the United States Census Bureau. The 1-year estimates for the preceding year are available in late summer. The 5-year estimates are based on pooled data from the preceding five years and are typically available in December. Five-year estimates are more reliable because they are based on a larger sample size. The 1-year and 5-year estimates are not typically dramatically different from one another.

Estimates of the total populations for Minneapolis, Edina, Bloomington, Richfield, St. Paul, and Duluth were also obtained from the U.S. Census Bureau. However, no age or race-specific data are available for cities.

### Rates

Absolute counts of health-related events do not readily lend themselves to comparison between years or across various geographic areas because of population differences and, in some cases, the small number of reported events. These demographic differences include total numbers of events and of the population, age and sex distributions, and ethnic and/or racial

composition. In order to assess the health status of a particular population at a specified time, the absolute number of events is converted to a relative number such as a rate, a ratio, or an index. In cases where there are a small number of birth or death events, rate calculations and sometimes counts, are suppressed (see description at the end of the section). Some of the most common rates are described below. Additional definitions are provided in Appendix B at the end of this document.

## Crude Rates

A crude rate is a good measure of the overall magnitude of an event (e.g., birth or death) in a population. The crude rate is useful information for some purposes, such as planning for the delivery of health care services. One should be cautious when comparing crude rates over time or across other geographies such as a county or another state. Notably, differences in crude rates may be due to a substantially younger or older population.

A crude birth or death rate is simply the number of events divided by the total population (the denominator), multiplied by some constant so that the result is not a fraction. For birth rates and death rates, 100,000 is the most commonly used multiplier, resulting in rates per 100,000 total population.

Other frequently reported rates include crude fertility rates, pregnancy rates, and abortion rates, all of which use the population of women ages 15 to 44 years as the denominator. Fertility rates are the number of births divided by the population of women ages 15 to 44 years. Pregnancy rates are the number of pregnancies divided by the population of women ages 15 to 44 years. Abortion rates are the number of abortions divided by the population of women ages 15 to 44 years.

## Age-Specific Death Rates

An age-specific death rate is useful in understanding the influence each age group has on the overall crude death rate. Mortality Table 4 shows age-specific death rates for the state of Minnesota using nine age groups.

An age-specific death rate is the number of deaths to an age group divided by the population for that age group, often multiplied by some constant so that the result is not a fraction (for death rates, 100,000 is the most commonly used multiplier). Not surprisingly, the death rates are many times higher in the oldest age groups.

## Infant Death Rates

Because infant deaths are strongly associated with characteristics of their birth mothers, the standard is to use a linked birth/infant death data set, which comprises infant death records linked with their individual birth records. This allows for a more thorough examination of maternal demographic, pregnancy, or labor and delivery characteristics, and birth outcomes. This also allows for a more relevant denominator, namely the number of live-born infants rather than the total population of infants.

The national standard for reporting infant mortality is an annual period rate. Annual period rates are based on the linked birth/infant death records for all infants who die in a given year (period) using all live births from that same period as the denominator. Cohort rates are also used in infant mortality research, although they are not reported here (see Infant Mortality in Appendix B for additional information). The infant mortality rate is then defined as the number of infants born alive in a given year that die within the first year of life for every 1,000 live births in that same year.

Additional details about several other infant death-related measures are included in the appendix. This includes fetal deaths, neonatal deaths, and postneonatal deaths.

## Data suppression

In cases where there are fewer than 20 birth or deaths in a specific geography or by a certain characteristic, data may be suppressed in this report. There is a range of different suppression rules used by different agencies. However, we are reporting vital statistics data, so we use the rules from the National Vital Statistics System. Suppression of data serves two purposes: 1) to protect confidentiality and 2) to ensure statistical reliability when calculating rates. Local public health agencies may request unsuppressed counts by sending a request to [HealthStats@state.mn.us](mailto:HealthStats@state.mn.us).

Suppression rules for confidentiality are based on both the size of the geographic area and the number of events. For example, a county can be an area that is sparsely populated or it can have a large population but small cells still occur when stratifying outcomes by other factors such as small ethnicity groups and small age groups. In these cases, there is risk of deductive disclosure. In other words, with the combination of variables, it may be possible to identify a specific person and deduce something about their private health information. In national reports, small counts are sometimes reported (but not a corresponding rate). However, these counts are for VERY large geographic areas, so there is no risk of deductive disclosure. Risk of deductive disclosure only applies to data that include protected health information, most commonly birth or fetal death data.

Suppression rules for reliability are based on the production of unstable rate estimates due to the increased amount of variability (standard deviation) around the estimate. This means that the actual rate may be much higher or much lower. Moreover, a change of one or two events more or less can change the rate dramatically, giving the impression that there is a large change when in fact it is due to random variability of the estimates. For example, in a fictitious place where there are 146 births and 2 infant deaths, the infant mortality rate appears to be 13.7 deaths per 1,000 live births. The following year, in this same place, there are 154 births and 3 infant deaths. The infant mortality rate now appears to be 19.5 deaths per 1,000 live births. It is inappropriate to draw any conclusion from these data because the numbers are too small to produce an estimate that is not subject to random variation. More events in a given time and place will produce relatively stable estimates over time, unless there is an actual cause for a change. This situation applies to any vital event that is reported.

## Race/Hispanic Ethnicity Data Collection and Reporting

More than one race may be selected when reporting race of mother and father on a birth record or fetal death report or when reporting the race of decedent on a death record. In 2021, approximately 3.2% of Minnesota resident birth mothers chose more than one race, while approximately 2.5% of resident death records indicated multiple races. Values may differ from in the past due to changes in classification for race from bridged-race to single-race classification.

For those who report more than one race, they are categorized as Multiracial. White, Black, American Indian, or Asian/Pacific Islander are categorized as such when only one race is reported. Single-race began in 2021, with bridged-race phased out in 2020, and should not be compared to previous years due to change in categorization. Due to the small number of other/unknown persons in Minnesota, there is little or no effect on the percentages and rates by race reported in this report.

Beginning with reporting year 2017, race/ethnicity data reporting changed from reporting race and Hispanic ethnicity separately to reporting each non-Hispanic race group individually. All birth and death events to those identified as Hispanic are included in the Hispanic group regardless of any other reported races. The final set of mutually exclusive groups are now: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian, non-Hispanic Asian or other Pacific Islander, non-Hispanic Multiracial, non-Hispanic Other or Unknown, and Hispanic. These changes are based on National Vital Statistics System (NVSS) and NCHS practices for reporting race and ethnicity.

## Geographic Allocation

Vital events are classified geographically in two ways. The first is by place of occurrence, (i.e., the state, county, and city in which the birth or death took place). The second and more customary way is by place of residence, (i.e., the state, county, and city that is the usual residence of the decedent in the case of a death or of the mother in the case of a birth). Fetal deaths and infant deaths in cases where the child was never discharged from the hospital are classified to the residence of the mother. While occurrence statistics are accurate and have both administrative value and some statistical importance, resident statistics are the more useful tool when constructing health indices for planning and evaluation purposes. The statistics provided in this report are residence data unless otherwise stated.

## Rural/Urban Classification

It is often meaningful to examine health differences across the urban/rural continuum. For many health indicators, residents of large suburban metropolitan areas fare better than residents of either urban metro areas or rural areas. In this report, we use the urban-rural classification scheme for counties that was developed by the National Center for Health Statistics. Counties are classified into six urbanization levels (four metropolitan and two nonmetropolitan) and range from most urban to most rural based on the 2013 classification.

2021 MINNESOTA HEALTH STATISTICS ANNUAL SUMMARY

|                     | Urbanization Level   | Population        | Largest city                |
|---------------------|----------------------|-------------------|-----------------------------|
| Metropolitan        | Large urban metro    | $\geq 1,000,000$  | largest city $\geq 250,000$ |
|                     | Large suburban metro | $\geq 1,000,000$  | largest city $< 250,000$    |
|                     | Medium metro         | 250,000 - 999,999 | N/A                         |
|                     | Small metro          | $< 250,000$       | N/A                         |
| Nonmetro<br>(rural) | Micropolitan         | 10,000 - 49,999   | urban area $\geq 2,500$     |
|                     | Non-core             | $< 49,999$        | no urban area $> 2,500$     |

## Appendix B -- Definitions

### **Abortion (induced termination of pregnancy):**

An act, procedure, or use of any instrument, medicine, or drug, which is supplied or prescribed for or administered to a pregnant woman, which results in the termination of pregnancy.

### **Age/cause-specific death rate:**

Number of deaths due to a particular underlying cause for a specified age group per 100,000 population comprising the same specified age group.

### **Age-specific pregnancy rate:**

Number of pregnancies (live births plus fetal deaths plus induced abortions) to women of a specified age group per 1,000 females in the population of the same specified age group. The standard pregnancy rate is the number of pregnancies per 1,000 females ages 15-44.

### **Birthweight:**

Birthweight is documented and reported in grams. An infant is considered to have low birthweight if it weighs less than 2,500 grams (5.5 pounds) at birth. Infants defined as macrosomic or high birthweight weigh equal to or more than 4,000 grams (8 pounds, 13 ounces) at birth.

### **Cause of death:**

Causes of death are classified according to the International Classification of Diseases of the World Health Organization (ICD-10). In this report, the underlying cause of death is used to classify the cause of death. The underlying cause of death is either the disease or injury that initiated the series of events leading directly to death or the accident or violence that produced the fatal injury. Other potentially contributing causes of death are not shown in this report.

### **Crude birth rate:**

Number of live births per 1,000 total population.

### **Crude death rate:**

Number of deaths per 1,000 total population or per 100,000 total population.

### **Fertility rate:**

Total number of live births per 1,000 females ages 15 to 44 years.

### **Fetal death:**

Death prior to the complete expulsion or extraction of a product of conception from its mother, irrespective of the duration of the pregnancy. The death is indicated by the fact that, after expulsion or extraction, the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. All fetal deaths of 20 weeks or more are required by state statute to be reported using the report of stillbirth/fetal death. In the Minnesota Annual reports, only fetal deaths of 20 weeks or more gestation are reported unless otherwise noted.

**Fetal death rate:**

Number of fetal deaths per 1,000 live births plus fetal deaths.

**Gestation or gestational age:**

The period of intrauterine development of the fetus, expressed in completed weeks, defined by the physician's estimate of gestation. Gestational age was previously reported based on documented last menstrual period. Beginning in 2017, gestational age is based on physician's estimate. Comparisons of the classifications are remarkably similar, except physician's estimate has fewer missing cases.

**Infant death:**

The death of a live-born infant under one year of age. Infants born with no signs of life are classified as fetal deaths (see Fetal death, above).

**Infant mortality rate:**

The national standard for reporting infant mortality is an annual period rate using linked birth/infant death records. Annual period rates are calculated from records for all infants who die in a given year (period) using all live births from that same period as the denominator. In other words, all infants that die in 2021, regardless of whether they were born in 2020 or 2021 are included for annual period rate calculations. The infant mortality rate is then defined as the number of infants born alive in a given year that die within the first year of life for every 1,000 live births in that same year.

**Live birth:**

The complete expulsion or extraction of a product of conception from its mother irrespective of the duration of pregnancy which, after such separation, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered a live birth and is required by state statute to be registered as a live birth, regardless of gestation or length of time living after birth.

**Neonatal death:**

The death of a live-born infant under 28 days of age.

**Neonatal death rate:**

Number of neonatal deaths per 1,000 live births.

**Perinatal death:**

The death of a fetus after 28 weeks of gestation or a live-born infant under 7 days of age.

**Perinatal death rate:**

Number of perinatal deaths per 1,000 live births plus fetal deaths.

**Postneonatal death:**

The death of a live-born infant between 28 days and 1 year of age.

**Postneonatal death rate:**

Number of postneonatal deaths per 1,000 live births.

**Prenatal Care (Indices):**

Late prenatal care is defined as a woman entering prenatal care in the third trimester or receiving no prenatal care.

Adequacy of prenatal care can be calculated using a variety of indices. For the Minnesota Annual reports, a new index is being used. In previous years, prenatal care adequacy was assessed using the graduated index (GINDEX). The GINDEX is calculated by combining measures of the month or trimester that prenatal care began, the number of prenatal visits, and the gestational age of the infant/fetus at the time of birth. Starting in 2017, Kotelchuck's Adequacy of Prenatal Care Utilization (APNCU) is being used, in keeping with the standards for national reporting. It should be noted that the APNCU results in a different distribution of the adequacy of prenatal care than provided by the previously used GINDEX; thus, previous years' adequacy measures are not comparable. Specifically, in national data, the APNCU identified both a greater number of intensive and slightly more inadequate PNC users.

The APNCU is also calculated using the month prenatal care began, the number of prenatal visits, and the gestational age of the infant/fetus at the time of birth. However, this measure incorporates an estimate of the expected number of prenatal care visits compared with the actual number of prenatal care visits received. The month prenatal care began is used to calculate the adequacy of entry into prenatal care. The expected number of prenatal care visits given gestational age (defined by the American College of Obstetricians and Gynecologists (ACOG)) is calculated and divided by the actual number of visits to create a ratio of expected to actual visits. This ratio is then combined with the adequacy of entry into prenatal care variable to classify the adequacy of prenatal care as Adequate Plus, Adequate, Intermediate, Inadequate, or None.

Intensive use of prenatal care (adequate plus) is associated with poor birth outcomes, due in most part to more prenatal care needed for high risk pregnancies. Thus, distinguishing those with intensive use of prenatal care from those with adequate/expected prenatal care is meaningful for understanding pregnancy risks and adverse birth outcomes.

**Residence:**

Residence is the geographic area of the usual place of residence of the mother (in the case of a live birth or fetal death) or of the deceased at the time of death. This means, in general, the place where one lives and sleeps most of the time. However, when the decedent's usual residence is in a nursing home or other institution where a patient resided for receiving care, residence is coded to the place, if known, where the patient lived prior to admission to the institution.

**Trimester:**

One third of the total gestational period necessary for a full-term pregnancy (9 months). Thirteen weeks are allotted to each trimester. The count of weeks begins with the first day of the last menstrual period.