

February 2024

2021 Health Status Report: Surprise

Maricopa County
Department of Public Health
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Table 1. Crude Hospitalization Rates (per 100,000), by Race/Ethnicity, for Select Morbidities—Surprise, 2021

| | MORBIDITY | RACE/ETHNICITY | | | | | OVERALL |
|-------------------------------------|---------------------------------------|----------------|---------------------|---------------------------|--------------------|-------|---------|
| | | White | Hispanic/ Latinx | African American/Black | American Indian | Asian | |
| CHRONIC DISEASES | Alzheimer’s Disease | * | 0.0 | 0.0 | 0.0 | * | 14.1 |
| | Arthritis | 10.5 | 0.0 | * | 0.0 | * | 11.3 |
| | Asthma | 25.4 | 34.0 | * | 0.0 | * | 31.0 |
| | Cardiovascular Disease | 1509.7 | 516.8 | 1725.3 | 24.4 | 912.6 | 1452.0 |
| | Chronic Obstructive Pulmonary Disease | 78.9 | * | * | 0.0 | * | 69.1 |
| | Diabetes | 150.8 | 102.0 | 240.7 | * | * | 157.9 |
| | Liver Disease | * | * | * | * | 0.0 | 76.8 |
| | Stroke | * | * | * | * | 206.1 | 321.4 |
| CANCER ¹ | Lung Cancer | 39.5 | * | * | 0.0 | * | 35.2 |
| | Breast Cancer | * | * | 0.0 | 0.0 | 0.0 | 8.1 |
| | Prostate Cancer | * | 0.0 | * | * | * | 8.9 |
| MENTAL HEALTH DISORDERS | Schizophrenic Disorders | 106.1 | 105.4 | 254.1 | * | * | 125.5 |
| | Mood Disorders | 877.6 | 778.6 | 1471.2 | 73.2 | 264.9 | 973.4 |
| | Drug-induced Disorders | * | * | * | * | 0.0 | 133.2 |
| | All Mental Health Disorders | 939.9 | 829.6 | 1524.7 | 73.2 | 353.3 | 1038.9 |
| SUBSTANCE ABUSE AND OTHER INJURY | Alcohol-related | 42.1 | * | 107.0 | * | 0.0 | 42.3 |
| | Drug Overdose | * | * | * | 0.0 | * | 59.9 |
| | Opioid-related | 10.5 | * | * | 0.0 | 0.0 | 12.0 |
| | Violence-related | * | * | * | 0.0 | 0.0 | 14.8 |
| | Motor Vehicle Crash | 76.3 | 61.2 | * | 0.0 | * | 86.0 |
| | Suicide | * | * | * | 0.0 | 0.0 | 31.7 |
| | Falls | 343.7 | 51.0 | 173.9 | * | * | 305.2 |
| | Heat Related | * | * | 0.0 | 0.0 | 0.0 | * |
| INFECTIOUS DISEASE | Influenza/Pneumonia | * | * | * | * | * | 148.7 |

¹ Breast cancer rates are per 100,000 females; prostate cancer rates are per 100,000 males.

* Denotes indicators with a count of 5 or less

Table 2. Crude Emergency Department Visit Rates (per 100,000), by Race/Ethnicity, for Select Morbidities—Surprise, 2021

| | MORBIDITY | RACE/ETHNICITY | | | | | OVERALL |
|----------------------------------|---------------------------------------|----------------|-----------------|------------------------|-----------------|--------|---------|
| | | White | Hispanic/Latinx | African American/Black | American Indian | Asian | |
| CHRONIC DISEASES | Alzheimer’s Disease | * | * | 0.0 | 0.0 | 0.0 | 7.1 |
| | Arthritis | * | * | * | * | 0.0 | 65.6 |
| | Asthma | * | * | * | 0.0 | * | 250.9 |
| | Cardiovascular Disease | * | * | * | * | 1059.8 | 1404.8 |
| | Chronic Obstructive Pulmonary Disease | 185.0 | 71.4 | 214.0 | * | * | 176.2 |
| | Diabetes | 183.2 | 207.4 | 508.2 | * | * | 222.7 |
| | Liver Disease | 34.2 | 57.8 | * | * | 0.0 | 44.4 |
| | Stroke | * | * | * | 0.0 | * | 98.0 |
| CANCER ¹ | Lung Cancer | * | 0.0 | 0.0 | 0.0 | 0.0 | * |
| | Breast Cancer | * | 0.0 | 0.0 | 0.0 | 0.0 | * |
| | Prostate Cancer | * | 0.0 | 0.0 | 0.0 | 0.0 | * |
| MENTAL HEALTH DISORDERS | Schizophrenic Disorders | * | * | * | 0.0 | 0.0 | 28.9 |
| | Mood Disorders | * | * | * | * | * | 418.7 |
| | Drug-induced Disorders | * | * | * | * | * | 255.2 |
| | All Mental Health Disorders | 718.9 | 788.8 | 1257.2 | 51.9 | 382.7 | 836.0 |
| SUBSTANCE ABUSE AND OTHER INJURY | Alcohol-related | 9.6 | * | * | * | 0.0 | 11.3 |
| | Drug Overdose | * | * | * | 0.0 | * | 193.8 |
| | Opioid-related | 40.3 | 40.8 | 93.6 | 0.0 | 0.0 | 45.8 |
| | Violence-related | 114.0 | 136.0 | 387.9 | 0.0 | 0.0 | 143.1 |
| | Motor Vehicle Crash | * | * | * | * | 735.9 | 699.9 |
| | Suicide | * | * | * | * | 0.0 | 114.9 |
| | Falls | 2681.1 | 1519.8 | 2206.8 | 67.1 | 1942.9 | 2667.8 |
| | Heat Related | * | * | * | 0.0 | 0.0 | 27.5 |
| Infectious Disease | Influenza/Pneumonia | * | * | * | * | * | 456.0 |

¹ Breast cancer rates are per 100,000 females; prostate cancer rates are per 100,000 males.

* Denotes indicators with a count of 5 or less

Table 3. Crude Hospitalization Rates (per 100,000), by Sex, for Select Morbidities— Surprise, 2021

| | MORBIDITY | SEX | | OVERALL |
|----------------------------------|---------------------------------------|--------|--------|---------|
| | | Male | Female | |
| CHRONIC DISEASES | Alzheimer’s Disease | 13.3 | 14.8 | 14.1 |
| | Arthritis | 11.8 | 10.8 | 11.3 |
| | Asthma | 28.1 | 33.7 | 31.0 |
| | Cardiovascular Disease | 1686.9 | 1237.9 | 1452.0 |
| | Chronic Obstructive Pulmonary Disease | 54.7 | 82.2 | 69.1 |
| | Diabetes | 205.5 | 114.5 | 157.9 |
| | Liver Disease | 72.4 | 80.8 | 76.8 |
| | Stroke | 322.3 | 320.6 | 321.4 |
| CANCER ¹ | Lung Cancer | 32.5 | 37.7 | 35.2 |
| | Breast Cancer | - | 8.1 | 8.1 |
| | Prostate Cancer | 8.9 | - | 8.9 |
| MENTAL HEALTH DISORDERS | Schizophrenic Disorders | 184.8 | 71.4 | 125.5 |
| | Mood Disorders | 1060.1 | 894.4 | 973.4 |
| | Drug-induced Disorders | 183.3 | 87.6 | 133.2 |
| | All Mental Health Disorders | 1122.2 | 963.1 | 1038.9 |
| SUBSTANCE ABUSE AND OTHER INJURY | Alcohol-related | 44.4 | 40.4 | 42.3 |
| | Drug Overdose | 47.3 | 71.4 | 59.9 |
| | Opioid-related | 17.7 | * | 12.0 |
| | Violence-related | 23.7 | * | 14.8 |
| | Motor Vehicle Crash | 125.7 | 49.8 | 86.0 |
| | Suicide | 19.2 | 43.1 | 31.7 |
| | Falls | 255.8 | 350.2 | 305.2 |
| | Heat Related | * | 0.0 | * |
| INFECTIOUS DISEASE | Influenza/Pneumonia | 158.2 | 140.1 | 148.7 |

¹ Breast cancer rates are per 100,000 females; prostate cancer rates are per 100,000 males.

* Denotes indicators with a count of 5 or less

Table 4. Crude Emergency Department Visit Rates (per 100,000), by Sex, for Select Morbidities—Surprise, 2021

| MORBIDITY | SEX | | OVERALL | |
|----------------------------------|---------------------------------------|--------|---------|--------|
| | Male | Female | | |
| CHRONIC DISEASES | Alzheimer’s Disease | * | 8.1 | 7.1 |
| | Arthritis | 90.2 | 43.1 | 65.6 |
| | Asthma | 260.2 | 242.5 | 250.9 |
| | Cardiovascular Disease | 1437.1 | 1375.3 | 1404.8 |
| | Chronic Obstructive Pulmonary Disease | 152.3 | 198.0 | 176.2 |
| | Diabetes | 233.6 | 212.8 | 222.7 |
| | Liver Disease | 38.4 | 49.8 | 44.4 |
| | Stroke | 105.0 | 91.6 | 98.0 |
| CANCER ¹ | Lung Cancer | * | * | * |
| | Breast Cancer | - | * | * |
| | Prostate Cancer | * | - | * |
| MENTAL HEALTH DISORDERS | Schizophrenic Disorders | 38.4 | 20.2 | 28.9 |
| | Mood Disorders | 467.2 | 374.5 | 418.7 |
| | Drug-induced Disorders | 323.8 | 192.6 | 255.2 |
| | All Mental Health Disorders | 856.0 | 817.7 | 836.0 |
| SUBSTANCE ABUSE AND OTHER INJURY | Alcohol-related | * | * | 11.3 |
| | Drug Overdose | 183.3 | 203.4 | 193.8 |
| | Opioid-related | 62.1 | 31.0 | 45.8 |
| | Violence-related | 152.3 | 134.7 | 143.1 |
| | Motor Vehicle Crash | 668.3 | 728.8 | 699.9 |
| | Suicide | 60.6 | 164.3 | 114.9 |
| | Falls | 2327.1 | 2978.3 | 2667.8 |
| | Heat Related | 34.0 | 21.6 | 27.5 |
| INFECTIOUS DISEASE | Influenza/Pneumonia | 486.4 | 428.4 | 456.0 |

¹ Breast cancer rates are per 100,000 females; prostate cancer rates are per 100,000 males.

* Denotes indicators with a count of 5 or less

Table 5. Crude Hospitalization Rates (per 100,000), by Age Group, for Select Morbidities—Surprise, 2021

| MORBIDITY | | AGE GROUP | | | | | OVERALL |
|----------------------------------|---------------------------------------|-----------|--------|--------|-------|--------|---------|
| | | 1–14 | 15–24 | 25–44 | 45–64 | 65+ | |
| CHRONIC DISEASES | Alzheimer’s Disease | 0.0 | 0.0 | 0.0 | * | * | 14.1 |
| | Arthritis | 0.0 | * | 0.0 | * | 34.1 | 11.3 |
| | Asthma | 71.4 | * | 31.0 | 18.4 | 21.7 | 31.0 |
| | Cardiovascular Disease | * | * | * | * | * | 1452.0 |
| | Chronic Obstructive Pulmonary Disease | 0.0 | 0.0 | * | * | * | 69.1 |
| | Diabetes | 39.3 | 42.0 | 151.9 | 242.2 | 241.6 | 157.9 |
| | Liver Disease | 0.0 | * | * | * | * | 76.8 |
| | Stroke | 0.0 | * | * | * | * | 321.4 |
| CANCER ¹ | Lung Cancer | 0.0 | 0.0 | 0.0 | 21.5 | 133.2 | 35.2 |
| | Breast Cancer | 0.0 | 0.0 | * | * | * | 8.1 |
| | Prostate Cancer | 0.0 | 0.0 | 0.0 | * | * | 8.9 |
| MENTAL HEALTH DISORDERS | Schizophrenic Disorders | 0.0 | 155.8 | 269.6 | 141.0 | 58.9 | 125.5 |
| | Mood Disorders | 574.6 | 1905.7 | 1596.2 | 824.7 | 365.5 | 973.4 |
| | Drug-induced Disorders | * | * | * | * | * | 133.2 |
| | All Mental Health Disorders | 617.4 | 2079.5 | 1664.3 | 886.0 | 396.5 | 1038.9 |
| SUBSTANCE ABUSE AND OTHER INJURY | Alcohol-related | * | * | 83.7 | 52.1 | 31.0 | 42.3 |
| | Drug Overdose | 39.3 | 101.9 | 43.4 | 67.5 | 65.1 | 59.9 |
| | Opioid-related | * | * | 18.6 | * | 18.6 | 12.0 |
| | Violence-related | * | * | 21.7 | * | * | 14.8 |
| | Motor Vehicle Crash | * | * | * | * | * | 86.0 |
| | Suicide | 25.0 | 89.9 | 24.8 | 30.7 | 15.5 | 31.7 |
| | Falls | * | * | 46.5 | 150.2 | 1124.4 | 305.2 |
| | Heat Related | 0.0 | 0.0 | * | * | 0.0 | * |
| INFECTIOUS DISEASE | Influenza/Pneumonia | * | * | * | * | * | 148.7 |

¹ Breast cancer rates are per 100,000 females; prostate cancer rates are per 100,000 males.

* Denotes indicators with a count of 5 or less

Table 6. Crude Emergency Department Visit Rates (per 100,000), by Age Group, for Select Morbidities—Surprise, 2021

| MORBIDITY | AGE GROUP | | | | | OVERALL |
|---|-----------|--------|--------|--------|--------|---------|
| | 1–14 | 15–24 | 25–44 | 45–64 | 65+ | |
| CHRONIC DISEASES | | | | | | |
| Alzheimer’s Disease | 0.0 | 0.0 | 0.0 | 0.0 | 31.0 | 7.1 |
| Arthritis | 0.0 | * | * | * | * | 65.6 |
| Asthma | 439.0 | 371.6 | 263.4 | 147.2 | 117.7 | 250.9 |
| Cardiovascular Disease | 82.1 | 227.7 | 678.8 | 1631.0 | 3658.2 | 1404.8 |
| Chronic Obstructive Pulmonary Disease | 46.4 | 95.9 | 111.6 | 174.8 | 396.5 | 176.2 |
| Diabetes | 60.7 | 137.8 | 170.5 | 410.8 | 269.5 | 222.7 |
| Liver Disease | 0.0 | * | * | * | * | 44.4 |
| Stroke | * | * | 24.8 | 61.3 | 334.5 | 98.0 |
| CANCER¹ | | | | | | |
| Lung Cancer | 0.0 | 0.0 | 0.0 | * | * | * |
| Breast Cancer | 0.0 | 0.0 | * | * | 0.0 | * |
| Prostate Cancer | 0.0 | 0.0 | 0.0 | 0.0 | * | * |
| MENTAL HEALTH DISORDERS | | | | | | |
| Schizophrenic Disorders | * | 36.0 | 49.6 | 46.0 | * | 28.9 |
| Mood Disorders | 146.3 | 809.0 | 669.5 | 361.8 | 260.2 | 418.7 |
| Drug-induced Disorders | 21.4 | 491.4 | 486.6 | 233.0 | 127.0 | 255.2 |
| All Mental Health Disorders | 339.0 | 1324.4 | 1388.5 | 864.6 | 433.7 | 836.0 |
| SUBSTANCE ABUSE AND OTHER INJURY | | | | | | |
| Alcohol-related | 0.0 | * | 18.6 | 18.4 | * | 11.3 |
| Drug Overdose | 189.1 | 551.3 | 201.5 | 113.4 | 86.7 | 193.8 |
| Opioid-related | * | * | * | * | * | 45.8 |
| Violence-related | 67.8 | 407.5 | 244.9 | 92.0 | 21.7 | 143.1 |
| Motor Vehicle Crash | 242.7 | 1456.2 | 1125.1 | 671.4 | 309.8 | 699.9 |
| Suicide | 174.9 | 389.5 | 89.9 | 39.9 | 21.7 | 114.9 |
| Falls | 2919.2 | 1336.4 | 1153.0 | 1842.5 | 5485.7 | 2667.8 |
| Heat Related | * | * | * | * | * | 27.5 |
| INFECTIOUS DISEASE | | | | | | |
| Influenza/Pneumonia | 463.9 | 455.4 | 393.6 | 429.2 | 539.0 | 456.0 |

¹ Breast cancer rates are per 100,000 females; prostate cancer rates are per 100,000 males.

* Denotes indicators with a count of 5 or less

Table 7. Crude Death Rates (per 100,000), by Race/Ethnicity, for Select Morbidities—Surprise, 2021

| MORBIDITY | RACE/ETHNICITY | | | | | OVERALL | |
|---|---------------------------------------|-----------------|------------------------|-----------------|-------|---------|-------|
| | White | Hispanic/Latinx | African American/Black | American Indian | Asian | | |
| CHRONIC DISEASES | Alzheimer’s Disease | * | * | * | 0.0 | 0.0 | 71.2 |
| | Asthma | * | * | 0.0 | 0.0 | 0.0 | * |
| | Cardiovascular Disease | * | * | * | 0.0 | * | 234.7 |
| | Chronic Obstructive Pulmonary Disease | 64.0 | * | * | 0.0 | * | 55.0 |
| | Diabetes | 27.2 | 37.4 | * | 0.0 | * | 31.7 |
| | Liver Disease | 14.9 | * | * | 0.0 | 0.0 | 14.1 |
| | Stroke | * | * | * | 0.0 | * | 50.8 |
| CANCER¹ | Lung Cancer | 49.1 | * | * | 0.0 | * | 44.4 |
| | Breast Cancer | 19.3 | * | * | 0.0 | * | 20.2 |
| | Prostate Cancer | 27.4 | * | * | 0.0 | 0.0 | 26.6 |
| SUBSTANCE ABUSE AND OTHER INJURY | Alcohol-related | 25.4 | * | * | 0.0 | 0.0 | 25.4 |
| | Drug Overdose | 21.0 | 23.8 | * | 0.0 | * | 24.7 |
| | Opioid-related | 13.2 | * | * | 0.0 | * | 17.6 |
| | Violence-related | * | * | 0.0 | 0.0 | 0.0 | * |
| | Motor Vehicle Crash | 6.1 | * | * | 0.0 | 0.0 | 7.8 |
| | Suicide | 14.0 | * | 0.0 | 0.0 | * | 15.5 |
| | Falls | * | 0.0 | * | 0.0 | 0.0 | 23.3 |
| INFECTIOUS DISEASE | Influenza/Pneumonia | 18.4 | 0.0 | * | 0.0 | * | 18.3 |

¹ Breast cancer rates are per 100,000 females; prostate cancer rates are per 100,000 males.

* Denotes indicators with a count of 5 or less

Table 8. Crude Death Rates (per 100,000), by Sex, for Select Morbidities— Surprise, 2021

| MORBIDITY | SEX | | OVERALL | |
|----------------------------------|---------------------------------------|--------|---------|-------|
| | Male | Female | | |
| CHRONIC DISEASES | Alzheimer’s Disease | 41.4 | 98.3 | 71.2 |
| | Asthma | * | * | * |
| | Cardiovascular Disease | 291.3 | 183.2 | 234.7 |
| | Chronic Obstructive Pulmonary Disease | 54.7 | 55.2 | 55.0 |
| | Diabetes | 32.5 | 31.0 | 31.7 |
| | Liver Disease | 14.8 | 13.5 | 14.1 |
| | Stroke | 53.2 | 48.5 | 50.8 |
| CANCER ¹ | Lung Cancer | 45.8 | 43.1 | 44.4 |
| | Breast Cancer | - | 20.2 | 20.2 |
| | Prostate Cancer | 26.6 | - | 26.6 |
| SUBSTANCE ABUSE AND OTHER INJURY | Alcohol-related | 37.0 | 14.8 | 25.4 |
| | Drug Overdose | 35.5 | 14.8 | 24.7 |
| | Opioid-related (excluding heroin) | 23.7 | 12.1 | 17.6 |
| | Violence-related | * | * | * |
| | Motor Vehicle Crash | * | * | 7.8 |
| | Suicide | 22.2 | 9.4 | 15.5 |
| | Falls | 23.7 | 22.9 | 23.3 |
| INFECTIOUS DISEASE | Influenza/Pneumonia | * | * | 18.3 |

¹ Breast cancer rates are per 100,000 females; prostate cancer rates are per 100,000 males.

* Denotes indicators with a count of 5 or less

Table 9. Crude Death Rates (per 100,000), by Age Group, for Select Diseases— Surprise, 2021

| MORBIDITY | | AGE GROUP | | | | | OVERALL |
|----------------------------------|---------------------------------------|-----------|-------|-------|-------|-------|---------|
| | | 1-14 | 15-24 | 25-44 | 45-64 | 65+ | |
| CHRONIC DISEASES | Alzheimer's Disease | 0.0 | 0.0 | 0.0 | * | * | 71.2 |
| | Asthma | 0.0 | 0.0 | * | 0.0 | * | * |
| | Cardiovascular Disease | 0.0 | 0.0 | 21.7 | 107.3 | 901.4 | 234.7 |
| | Chronic Obstructive Pulmonary Disease | 0.0 | 0.0 | 0.0 | * | * | 55.0 |
| | Diabetes | 0.0 | 0.0 | * | * | 117.7 | 31.7 |
| | Liver Disease | 0.0 | 0.0 | * | * | * | 14.1 |
| | Stroke | 0.0 | 0.0 | * | * | * | 50.8 |
| CANCER ¹ | Lung Cancer | 0.0 | 0.0 | 0.0 | 27.6 | 167.3 | 44.4 |
| | Breast Cancer | 0.0 | 0.0 | 0.0 | 40.9 | 46.2 | 20.2 |
| | Prostate Cancer | 0.0 | 0.0 | 0.0 | 0.0 | 120.4 | 26.6 |
| SUBSTANCE ABUSE AND OTHER INJURY | Alcohol-related | 0.0 | 0.0 | 31.0 | 42.9 | 37.2 | 25.4 |
| | Drug Overdose | 0.0 | * | 68.2 | 21.5 | * | 24.7 |
| | Opioid-related | 0.0 | * | 52.7 | * | * | 17.6 |
| | Violence-Related | 0.0 | * | * | 0.0 | 0.0 | * |
| | Motor Vehicle Crash | 0.0 | * | 21.7 | * | * | 7.8 |
| | Suicide | 0.0 | * | * | 18.4 | 27.9 | 15.5 |
| | Falls | 0.0 | 0.0 | 0.0 | * | 99.1 | 23.3 |
| INFECTIOUS DISEASE | Influenza/Pneumonia | * | 0.0 | * | 18.4 | 52.7 | 18.3 |

¹ Breast cancer rates are per 100,000 females; prostate cancer rates are per 100,000 males.

* Denotes indicators with a count of 5 or less

Figure 1. Top 10¹ Reasons for Hospitalizations— Surprise, 2021

| Rank | Reason for Hospitalization |
|------|--|
| 1 | Cardiovascular Disease |
| 2 | Bacterial Infection |
| 3 | All Mental Health Related Conditions |
| 4 | COVID-19 |
| 5 | Injuries |
| 6 | Complications of Surgical and Medical Care |
| 7 | Stroke |
| 8 | All Cancer |
| 9 | Disease of the Intestines |
| 10 | Disorders of Gallbladder and Pancreas |

¹ Pregnancy and early life care were not considered part of this analysis.

Figure 2. Top 10 Reasons¹ for ED Visits— Surprise, 2021

| Rank | Reason for ED Visit |
|------|--------------------------------------|
| 1 | Injuries |
| 2 | Respiratory and Circulatory Issues |
| 3 | Digestive and Abdominal Issues |
| 4 | COVID-19 |
| 5 | Cardiovascular Disease |
| 6 | Acute Upper Respiratory Infections |
| 7 | Diseases of the Urinary System |
| 8 | All Mental Health Related Conditions |
| 9 | Disease of the Intestines |
| 10 | Infectious and Parasitic |

¹ The top 10 excluded the “General Symptoms and Signs” reasons for ED visit.

Figure 3. Top 10 Causes for Deaths— Surprise, 2021

| Rank | Cause of Death |
|------|-----------------------------------|
| 1 | Heart Disease |
| 2 | All Cancer |
| 3 | COVID-19 |
| 4 | Alzheimer |
| 5 | Chronic Lower Respiratory Disease |
| 6 | Stroke |
| 7 | Unintentional Injuries |
| 8 | Diabetes |
| 9 | Parkinson Disease |
| 10 | Fall |

Table 10. Crude Rate (per 1,000) of Select Birth Indicators¹, by Race/Ethnicity— Surprise, 2021

| INDICATOR | RACE/ETHNICITY | | | | | OVERALL |
|-------------------------|----------------|---------------------|----------------------------|--------------------|-------|---------|
| | White | Hispanic/ Latinx | African American/ Black | American Indian | Asian | |
| Low birth weight | * | * | * | * | * | 68.3 |
| Pre-term infants | 104.0 | 89.0 | 164.6 | * | * | 101.0 |
| Infant mortality | * | * | 0.0 | 0.0 | 0.0 | 4.1 |
| Teen pregnancy | 22.1 | 37.5 | * | 0.0 | * | 25.9 |

¹ Rates for each indicator were calculated per 1,000 live births.

* Denotes indicators with a count of 5 or less

Note: See technical notes for more detailed description information on each birth indicator.

Table 11. Crude Rates (per 100,000) of Select Infectious Diseases¹, by Sex— Surprise, 2021

| | DISEASE | SEX | | OVERALL | |
|----------------------------------|--|--------------------|--------|---------|-------|
| | | Male | Female | | |
| VACCINE PREVENTABLE DISEASES | H. influenzae, Invasive Disease ² | 0.0 | 0.0 | 0.0 | |
| | Pertussis | 0.0 | 0.0 | 0.0 | |
| CENTRAL NERVOUS SYSTEM | Aseptic Meningitis, Viral | 0.0 | 0.0 | 0.0 | |
| | Encephalitis, Viral | 0.0 | 0.0 | 0.0 | |
| | Meningococcal Invasive Disease | 0.0 | 0.0 | 0.0 | |
| ENTERICS | Amebiasis | 0.0 | 0.0 | 0.0 | |
| | Campylobacteriosis | * | * | 4.9 | |
| | Cryptosporidiosis | 0.0 | 0.0 | 0.0 | |
| | E. coli, Shiga Toxin-Producing | * | * | 4.2 | |
| | Giardiasis | * | 0.0 | * | |
| | Listeriosis | 0.0 | 0.0 | 0.0 | |
| | Norovirus | * | * | 4.9 | |
| | Paratyphoid Fever | 0.0 | 0.0 | 0.0 | |
| | Salmonellosis | * | * | 5.6 | |
| | Shigellosis | * | * | * | |
| | Typhoid Fever | 0.0 | 0.0 | 0.0 | |
| | MYCOSIS | Coccidioidomycosis | 331.2 | 367.7 | 350.3 |
| | ZOOSES/ VECTORBORNE | Brucellosis | 0.0 | 0.0 | 0.0 |
| Dengue | | 0.0 | 0.0 | 0.0 | |
| Malaria | | * | * | * | |
| St. Louis Encephalitis Virus | | 0.0 | 0.0 | 0.0 | |
| West Nile Virus | | 23.7 | 21.6 | 22.6 | |
| HEPATITIDES | Hepatitis A | 0.0 | 0.0 | 0.0 | |
| | Hepatitis B ³ | 8.9 | 0.0 | 7.8 | |
| OTHER | Legionellosis | * | 0.0 | * | |
| | MRSA | * | * | 6.3 | |
| | RSV | 99.1 | 62 | 79.6 | |
| | Streptococcal Group A, Invasive | 11.8 | 8.1 | 9.9 | |
| | Streptococcal Group B, Invasive ⁴ | 0.0 | 0.0 | 0.0 | |
| | Streptococcus pneumoniae, Invasive | * | * | 4.9 | |
| | Tuberculosis | * | * | * | |
| | Vibrio Infection | 0.0 | 0.0 | 0.0 | |
| | Yersiniosis | 0.0 | 0.0 | 0.0 | |
| | SEXUALLY TRANSMITTED DISEASES | Gonorrhea | 177.4 | 128.0 | 151.5 |
| Syphilis – Primary and Secondary | | 25.1 | * | 15.5 | |
| Syphilis – All Others | | 47.3 | 18.9 | 32.4 | |
| Chlamydia | | 249.9 | 445.9 | 352.4 | |
| HIV/AIDS ⁵ | | 13.3 | * | 6.3 | |

¹ Rates were calculated using total confirmed and probable cases.

² Includes only *H. influenzae* Type B cases.

³ Includes only acute cases of Hepatitis B.

⁴ Streptococcal Group B Invasive disease is only reportable for cases in infants under 90 days.

⁵ HIV and Aids were combined starting in 2021

* Denotes indicators with a count of 5 or less

Technical Notes

Calculating Rates

Rates were calculated for this report using the 5-year population statistics for 2021, available from the [United States Census](#).

While we stratified rates by age for many of the indicators presented in this report, only crude rates were calculated for overall county rates, with no adjustment for age. Age-adjusting can remove the effect of a disproportionately large population of young or old individuals being affected by a certain morbidity or disease.

Indicators where the count is 5 or less are recorded as *.

Data Sources

Hospital Discharge Data

Hospital Discharge Data (HDD) are submitted by Arizona Hospitals to Arizona Department of Health Services (ADHS). Data are submitted by half years, with the first half (January 1 – June 30) due August 15 of the same year and the second half (July 1 – December 31) due by February 15th of the following year. ADHS then prepares the data for public release and the data are released between 3 and 6 months after collection. These datasets only contain hospitalizations from facilities within the state of Arizona. Hospitalizations of Maricopa Residents that occur outside of Arizona are not captured. Both inpatient and emergency department (ED) visits are included in this dataset and are analyzed separately. These datasets also only contain data for Maricopa County residents that are seen at a facility within the State of Arizona. Also federal facilities such as Veterans Affairs or Indian Health Services are not included in the data set which will affect disease rates among American Indians.

Hospitalization Discharges represent the number of discharges from facilities within Arizona during a calendar year and are not unique patients. Therefore, if a person is hospitalized multiple times in a calendar year, that person will be represented multiple times in the dataset. Most hospitals bill under the “72-hour rule”. This means that if a patient comes into the ER and is admitted as an inpatient within a 72-hour period, the visit is bundled into one account for billing. In the data this patient would show up as an IP record. There are a few exceptions that will do “split billing”, specifically with Critical Access Hospitals and with some insurance carriers. These cases will show up in both the ED and IP.

All data are calculated utilizing the rules of the International Classification of Disease, 10th Revision (ICD-10).

Mortality Data

All data on mortality statistics are from death certificates included in the Arizona Department of Health Services (ADHS) final annual files. The data presented in this report include Maricopa County residents only. This includes Maricopa County residents who died in Maricopa County and residents who died elsewhere. Non-Maricopa County residents who died in Maricopa County are not included.

Unless otherwise noted, all deaths are attributed to one underlying condition, based on death certificate information, using the rules of the International Classification of Diseases, 10th Revision (ICD-10). Causes of death are classified by ICD-10 codes. Although other causes may have contributed to death, the underlying cause of death is the cause that began the disease process that resulted in death. The underlying causes of death shown in this report were selected to align with reports MCDPH has created for hospital and FQHC partners. The number for certain cause of death in this report could be different from other reports generated from our office due to different initiatives or protocols set for that specific cause of death.

Birth Data

Birth statistics are from birth certificates included in the ADHS final annual files. The data presented in this report include births to mothers whose county of residence is Maricopa County. This may include births that did not occur in Maricopa County. Also included are some births that occurred outside of Arizona to mothers who reside in Arizona but whose county and city of residence is unknown. National Center for Health Statistics rules state that if a birth does not occur in the state of residency and the county and city are unknown, the city of residency is assigned to the largest city in the state of residency.

Infant mortality statistics are from unlinked data or the number of infant deaths in a given year. The infant mortality rate is defined by the number of deaths per 1,000 live births. Teen pregnancy is the rate of live births to females under the age of 20 years. Pre-term birth is defined as any neonate whose birth occurs through the end of the last day of the 37th week (259th day), following onset of the last menstrual period. Finally, low birthweight is defined as any neonate weighing less than 2,500 grams at birth (less than 5 pounds 8 ounces).

Infectious Disease Data

The data presented in this report include communicable diseases among residents of Maricopa County. This includes Maricopa County residents who acquired a disease in Maricopa County and residents who acquired a disease elsewhere. Non-Maricopa County residents are not included, even if they acquired a disease in Maricopa County. Other reports may show different morbidity rates because they include non-residents

who acquired disease in Maricopa County, or they exclude residents who were exposed outside of the county. For example, residents were reported with malaria in 2019, but all these individuals acquired malaria outside of Maricopa County.

All data on communicable diseases are new cases of reportable diseases from the ADHS final annual files. There are several exceptions: data on gonorrhea, chlamydia, and syphilis are from MCDPH data files. Data on tuberculosis, STDs, HIV, and AIDS may differ from other reports published by MCDPH and ADHS. Data on these diseases are in databases that may have been updated during the time between reports. The data for this report were acquired on August 9, 2023.

Communicable disease data include only confirmed and probable cases. Data can be classified by date of onset, date of diagnosis, or date of report to the health department. All diseases/conditions listed in this report are classified by the date of report to the health department. The only exceptions are HIV and AIDS which are classified by the date of diagnosis.

Definitions of Morbidities

Below is a brief description of indicators, not including infectious diseases, and the corresponding ICD codes.

| Indicator | Description | HDD ICD Codes ¹ | Mortality ICD Codes ² |
|--|---|--|----------------------------------|
| Alzheimer's Disease | Alzheimer's Disease | G30 | G30 |
| Arthritis | Rheumatoid arthritis, osteoarthritis in different regions of the body, gout, arthritis due to infections or parasites, and a variety of other joint and connective tissue disorders | A54, A52, D481, D690, E79, G83, G54, G57, G63, G83, I01, I67, I73, M00, M1A, M3, M02, M05, M06, M11, M15, M16, M17, M18, M19, M21, M25, M60, M66, M67, M75, M76, M77, R26, R29, 716, 7281, 729 | Not applicable |
| Asthma | Mild intermittent and persistent asthma, moderate persistent asthma, severe asthma, and unspecified asthma | J45 | J45 |
| Cardiovascular Disease | Hypertensive diseases, ischemic heart diseases, pulmonary heart diseases and other forms of heart diseases | I00–I99, I09, I110, I13, I50, 398, 402, 404, 428 | I00–I09, I11, I13, I20–I51 |
| Chronic Obstructive Pulmonary Disease | COPD, and includes emphysema, chronic bronchitis | J41, J42, J43, J44, J47 | J449 |
| Diabetes | Diabetes Mellitus Type 1 and 2, other specified diabetes mellitus | E08–E13, PQ10, 250 | E149, N40 |
| Liver Disease | Alcoholic liver disease, toxic liver disease, hepatic failure, cirrhosis of the liver, and other diseases of the liver | K70–K77 | K70, K73–K74 |
| Stroke | Cerebral infarction, non-traumatic subarachnoid hemorrhage, and other cerebrovascular diseases | I60–I69 | I60–I69 |
| Lung Cancer | Cancer of lung and bronchus, malignant neoplasm of trachea, Kaposi's sarcoma of unspecified lung, secondary malignant neoplasm of respiratory organ | C33, C34, C464, C78, D02 | C33–C34 |

¹ Simplified for purposes of this report; not all subcategories may have been used.

² Simplified for purposes of this report; not all subcategories may have been used.



| | | | |
|------------------------------------|---|---|---|
| Breast Cancer | Malignant neoplasm of breast, secondary malignant neoplasm of breast | C50, C79 | C50, C79 |
| Prostate Cancer | Malignant neoplasm of prostate | C61 | C61 |
| Schizophrenic Disorders | Schizophrenia, schizotypal, and delusional disorders | F20–F29 | Not applicable |
| Mood Disorders | Mood disorders, depression, and bipolar disorders | F30–F39 | Not applicable |
| Drug-Induced Disorders | Mental and behavioral disorders due to psychoactive substance abuse | F10–F19 | Not applicable |
| All Mental Health Disorders | All mental disorders including, schizophrenic disorders, mood disorders, drug-induced disorders, personality disorders, intellectual disabilities, and other unspecified mental disorders | F01–F99 | Not applicable |
| Alcohol-Related | Alcohol use (specified and unspecified), alcohol-induced Cushing’s syndrome, | E244, F100-F109, G621, G312, G721, I426, K292, K700-K704, K709, K860, O354, P043, Q860, R780, T510, T511, X45, Y15, X65 | E244, F100-F109, G621, G312, G721, I426, K292, K700-K704, K709, K860, O354, P043, Q860, R780, T510, T511, X45, Y15, X65 |
| Drug Overdose | Drug overdose (unintentional) | T400, T401, T402, T403, T404 | T400, T401, T402, T403, T404 |
| Opioid-Related | Opioid-related, not including heroine | T400, T402, T403, T404, T406, F424 | T400, T402, T403, T404, T406, F424 |
| Violence-Related | Injury from assault | X92–Y09, S00 - T88 | X85–X90, X92–X99, Y20–Y24, Y26–Y29 |
| Motor Vehicle Crash | Motor vehicle crash, injury to occupant, pedestrian-related crash, injury to a pedal cyclist, injury to a motor cyclist | V00–V89, E810, E811, E812, E813, E814, E815, E816, E817, E818, E819 | V00–V29, V79, V80, V81, V82, V83, V87, V88, V89, |
| Suicide | Intentional self-harm, including multiple methods of inflicting self-injury | X71–X83 | U03, X60, X84, X87 |
| Falls | Falls including from slipping, stumbling, or otherwise unspecified | W00-W19, X80, Y01, Y30 | W00-W19 |
| Influenza/ Pneumonia | Influenza and pneumonia | J09–J18 | J10–J18 |