Data show concerning trends and disparities in mortality; rising mental health challenges among women — with gains in some other health measures.

Women of reproductive age and children make up nearly 40% of the nation’s population. Together, they form the cornerstone of healthy communities across the country. In 2021, there were 58.7 million women of reproductive age (18-44) and 73.6 million children under the age of 18 in the United States. These populations have continued to grow and diversify in the past several years; however, while many of the challenges affecting their health and well-being have remained consistent, new challenges have also emerged.

The 2023 Health of Women and Children Report builds on the America’s Health Rankings® platform’s longstanding commitment to better understand the comprehensive health and well-being of these populations by analyzing the latest data on 122 measures from 34 distinct data sources. The report highlights several concerning trends in mortality among women of reproductive age and children, including rising rates of maternal mortality, drug deaths among women and injury deaths among women and children.

Despite negative trends in mortality, the percentage of women who reported their own health was very good or excellent improved, reaching the highest level recorded by America’s Health Rankings. In contrast, several measures of mental health worsened among women, including frequent mental distress and depression, while the number of women’s health providers declined.

The data also highlight several changes that occurred during the COVID-19 pandemic. In some cases, long-term improvements like the reduction in teen births continued; however, other measures shifted. For example, there was an encouraging decrease in the prevalence of electronic vapor product use among high schoolers, while there was a discouraging drop in the percentage of 3- and 4-year-olds enrolled in early childhood education.

Stark disparities by geography and race/ethnicity are shown in the data, with mortality rates, teen births and high health status worst among Black and American Indian/Alaska Native populations.

These findings highlight the need to address the troubling and growing health challenges and inequities — particularly in the rising mortality rates — faced by women and children, populations critical to building healthy, thriving communities.

A note on methodology:
The report analysis is limited by the methodology of the underlying data sources. Many key demographic data are not collected for each measure, or at all. For example, categorization of gender remains binary (female/male) and does not capture the complexities of gender identities; thus, “women” or “females” as used in this report may not accurately reflect the gender identity of all people. For more details, please refer to the America’s Health Rankings Methodology page.
Maternal Mortality and Morbidity Continued to Rise

Trends in maternal mortality and morbidity continued to rise in recent years, with large disparities by race/ethnicity and geography. Maternal mortality — deaths related to or aggravated by pregnancy (excluding accidental or incidental causes) occurring within 42 days of the end of a pregnancy per 100,000 live births — increased 29% between 2014-2018 and 2017-2021, from 17.3 to 22.4.1 The rate more than doubled in Mississippi (15.3 to 38.0 deaths per 100,000 live births) and Nevada (9.5 to 22.4).

Disproportionately high maternal mortality rates in certain states and racial/ethnic groups contribute to the high rate nationwide. For example, maternal mortality was 4.4 times higher in Alabama (41.9 deaths per 100,000 live births) compared with California (9.5). It was also significantly higher among American Indian/Alaska Native women than most other racial/ethnic groups except Black and Hawaiian/Pacific Islander women. The rate among American Indian/Alaska Native women was 4.5 times higher than multiracial, 4.3 times higher than Asian, 3.4 times higher than Hispanic and 3.1 times higher than white women. Notably, the maternal mortality rate was also 2.6 times higher among Black compared with white women.

Additionally, the maternal mortality rate was 2.9 times higher among women who are high school graduates (34.4) compared with college graduates (11.9). However, an article published in the National Library of Medicine suggests that racial/ethnic disparities eclipse other factors, noting that college-educated Black women experienced higher rates of maternal mortality than white and Hispanic women without a high school education.

Centers for Disease Control and Prevention (CDC) data show that the U.S. maternal mortality rate increased in 2021 during the COVID-19 pandemic. However, provisional data for 2022 indicate a decline in this rate, returning closer to pre-pandemic levels. Additionally, the U.S. rate is consistently more than 10 times the estimated rate of other Organization for Economic Co-operation and Development (OECD) countries.

Severe maternal morbidity — significant life-threatening maternal complications during delivery per 10,000 delivery hospitalizations — has increased 22% (72.1 to 88.3) since 2016. The rate increased 9% between 2019 and 2020 (81.0 to 88.3) alone; this was the largest year-over-year change since America’s Health Rankings began monitoring the measure.

Disparities in Maternal Mortality by Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Deaths per 100,000 live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian/Alaska Native</td>
<td>60.6</td>
</tr>
<tr>
<td>Black</td>
<td>51.3</td>
</tr>
<tr>
<td>Hawaiian/Pacific Islander</td>
<td>49.5</td>
</tr>
<tr>
<td>White</td>
<td>19.6</td>
</tr>
<tr>
<td>Hispanic</td>
<td>17.7</td>
</tr>
<tr>
<td>Asian</td>
<td>14.0</td>
</tr>
<tr>
<td>Multiracial</td>
<td>13.6</td>
</tr>
</tbody>
</table>

Source: Federally Available Data, Maternal and Child Health Bureau, Health Resources and Services Administration, 2017-2021.
Note: All racial groups are non-Hispanic. Hispanic ethnicity includes members of all racial groups. The estimates for American Indian/Alaska Native, Black and Hawaiian/Pacific Islander women were not significantly different from each other based on non-overlapping 95% confidence intervals, the same was true for Hispanic, Asian and multiracial women.

“My hope is that we all reflect on and use this data; that we link arms and join together to help transform lives — because healthy families raise healthy children, and that leads to healthier communities for everyone.”

Veronda L. Durden
President & CEO, Any Baby Can

1 This is a comparison of overlapping 5-year estimates. Because of the overlapping data years, the comparison is largely between the non-overlapping years (2014-2016 and 2019-2021).
Drug and Injury Deaths Among Women Continued to Increase; Highest Among American Indian/Alaska Native Women

Drug deaths among women — the number of deaths due to drug injury (unintentional, suicide, homicide or undetermined) per 100,000 females ages 20-44 — increased 27% (20.3 to 25.7) nationwide from 2016-2018 to 2019-2021, an increase of over 9,200 women. This rise is larger than the increase in overall injury deaths among women and is a continuing trend, as highlighted in last year’s Health of Women and Children Report.

The drug death rate increased significantly in 30 states and Washington, D.C., including by 90% in North Dakota, 89% in Mississippi and 82% in the District of Columbia. Large disparities were evident among different racial/ethnic groups. Specifically, in 2019-2021, drug deaths were 18.1 times higher among American Indian/Alaska Native (56.0) compared with Asian (3.1) women, the groups with the highest and lowest rates, respectively.

It’s important to note that this report does not contain specific data on LGBTQ+ teens, a group known to have unique experiences and risks, due to limits in the collection of data by the underlying data sources. Furthermore, categorization of gender remains binary (female/male) and does not capture transgender and non-binary individuals who are known to be at a heightened risk for suicide. For an in-depth understanding of included data sources, please refer to the America’s Health Rankings Methodology page.

Increase in Injury Deaths Among Women and Children

Injury deaths rose among women and children by 17% and 11%, respectively, between 2016-2018 and 2019-2021.

The rise in drug deaths contributed to a 17% increase in injury deaths (41.0 to 48.1) — deaths due to injury per 100,000 females ages 20-44 — between 2016-2018 and 2019-2021. Poisoning, including drug deaths, was the most common means of injury death among women ages 20-44, followed by motor vehicle accidents, firearms and suffocation.

American Indian/Alaska Native women also faced the highest rate of injury deaths. The injury death rate was 12.1 times higher among American Indian/Alaska Native (137.4) compared with Asian (11.4) women.

Increase in Injury Deaths Among Children

Between 2016-2018 and 2019-2021, injury deaths — deaths due to injury per 100,000 children ages 1-19 — increased among children by 11% (15.7 to 17.4), an increase of 3,800 deaths. Among children ages 1-19, the leading method of injury deaths was firearms, followed by motor vehicle traffic, poisoning and suffocation.

Suicide, particularly among teens, is a major contributor to this rate. The teen suicide rate has not improved in...
recent years, and in 2019-2021, the rate was 10.6 deaths per 100,000 adolescents ages 15-19, or nearly 6,800 deaths. The CDC’s 2011-2021 Youth Risk Behavior Survey (YRBS) found significant increases in the percentage of youth who seriously considered suicide, made a suicide plan or attempted suicide, with higher rates among female, LGBTQ+ and Black students.

Injury death rates in children varied by both age and race/ethnicity. In 2019-2021, the injury death rate was 6.7 times higher among teens ages 15-19 (43.7) compared with children ages 5-14 (6.5), and 5.9 times higher among American Indian/Alaska Native children (40.8) compared with Asian children (6.9).

**High Health Status Improved for Women**

Between 2018-2019 and 2020-2021, high health status among women — the percentage of women ages 18-44 who reported that their health is very good or excellent — increased 10% from 53.8% to 59.0% reaching the highest rate reported by America’s Health Rankings. Until 2018-2019, this measure had been decreasing.

Despite this improvement, there were disparities across subpopulations. In 2020-2021, the high health status rate was 2.2 times higher among college graduates (71.7%) compared with those with less than a high school education (32.9%). Additionally, the rate was 1.9 times higher among those with an annual income of $75,000 or more (73.2%) compared with those whose income was less than $25,000 (38.5%) and 1.4 times higher among white (64.7%) compared with American Indian/Alaska Native (47.2%) women.

**Meanwhile, Several Measures of Mental and Preventive Health Worsened**

Although more women reported high health status than any time in America’s Health Rankings’ history, mental health challenges also became more prevalent. The increases in frequent mental distress — the percentage of women ages 18-44 who reported their mental health was not good 14 or more days in the past 30 days — and depression among women continued. Between 2018-2019 and 2020-2021, frequent mental distress increased 16%, from 18.1% to 21.0%, and depression increased 8%, from 25.3% to 27.4% among women ages 18-44. Both measures have been steadily rising in recent years (since 2015-2016 and 2017-2018, respectively).

More than 1 in 8 women with a recent live birth (12.7%) experienced postpartum depression in 2021, a rate that has largely remained consistent since 2014.
As the recent *Mental and Behavioral Health Data Brief* highlighted, women ages 18 and older are disproportionately impacted by growing mental health challenges compared with men. The rate of diagnosed depression was 1.8 times higher for women compared with men (26.4% vs. 14.4%) and women reported a 1.5 times higher rate of frequent mental distress compared with men (17.7% vs. 11.8%).

Similarly, children have faced growing mental health challenges. The CDC’s YRBS highlighted that mental health among school-aged children continues to worsen overall, with disparities by race/ethnicity, gender and sexual orientation. The CDC report highlighted that more than 40% of high school students felt sad or hopeless for at least two weeks during the previous year, consistent with effects of depression. These feelings were more common among female (60%) and LGBQ+ (70%) students.

The number of women’s health providers — obstetricians, gynecologists and midwives per 100,000 women ages 15 and older — declined 7% (49.5 to 46.0) between 2021 and 2022 — the first decline since this measure was added to the report in 2020.

Between 2017 and 2021, fruit and vegetable consumption among women significantly decreased by 20% from 12.2% to 9.8% — meaning that less than 10% of women ages 18-44 reported eating the recommended amount per day in 2021.

### Decline in Teen Births Continued; Disparities Persist

Encouragingly, teen births, which have been declining for over a decade, decreased another 10% from 15.4 to 13.9 births per 1,000 females ages 15-19 between 2020 and 2021 during the pandemic. Despite this, there were disparities by geography and race/ethnicity. Teen births were 4.9 times higher in Arkansas (26.5) compared with New Hampshire (5.4) and 14.1 times higher among American Indian/Alaska Native teens (23.9) compared with Asian teens (1.7).

### Recent Decline in Electronic Vapor Use Among High Schoolers

Meanwhile, the percentage of high school students who reported using an electronic vapor product in the past month dropped 45%\(^2\) between 2019 and 2021 from 32.7% to 18.0%. *America’s Health Rankings* will continue to monitor future data to see if this marked decline continues.

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\(^2\) Note: Minnesota, Oregon, Washington, Wyoming and Washington D.C. did not participate in the 2019 or 2021 YRBS. In addition, data were missing for Alaska, California and Florida in 2021 and Delaware, Florida and Indiana in 2019.
According to the CDC’s YRBS, while substance use among high school students decreased between 2011 and 2021, many students still used substances, including electronic vapor products. From 2019 to 2021, the percentage of students who currently misused prescription opioids did not change significantly (7% to 6%). The percentage of high school students who reported using marijuana decreased overall from 23% to 16% between 2011 and 2021.

The 2023 Mental and Behavioral Health Data Brief found that young adults were more likely than older adults to report substance use disorder and illicit drug use and faced the highest prevalence of behavioral and mental health concerns.

Decline in Early Childhood Education Enrollment

The percentage of children ages 3-4 enrolled in early childhood education dropped dramatically between 2019 and 2021, from 48.9% to 40.2%, a recent shift equivalent to a decrease of roughly 838,000 children enrolled in nursery school, preschool or kindergarten. This issue is uniquely situated at the intersection of women and children’s healthcare. A McKinsey survey found that nearly half of mothers who left the workforce during the pandemic cited childcare as a reason. Additionally, early education has been shown to benefit the child across the lifespan.

2023 Health of Women and Children Report State Rankings

Healthiest and least healthy states for women and children ranked across the following categories: social and economic factors, physical environment, clinical care, behaviors and health outcomes.

Source: America’s Health Rankings composite measure, 2023.

Healthiest States
1. Minnesota
2. Massachusetts
3. Vermont
4. New Hampshire
5. Hawaii

Least Healthy States
50. Mississippi
49. Arkansas
48. Louisiana
47. Oklahoma
46. West Virginia

Advancing the Health of Women and Children by Improving Holistic Health and Well-Being

To help ensure the comprehensive health of women and children across the nation, it is imperative that we address the troubling and growing health challenges and inequities they face — particularly in the rising mortality rates — by prioritizing preventive health and holistic well-being, including clinical, behavioral, physical and social and economic well-being. We encourage policymakers, advocates, community leaders and individuals to use these findings to help develop and tailor public health interventions that address these concerning trends.
UNITED HEALTH FOUNDATION®

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About the United Health Foundation
Through collaboration with community partners, grants and outreach efforts, the United Health Foundation works to improve our health system, build a diverse and dynamic health workforce and enhance the well-being of local communities. The United Health Foundation was established by UnitedHealth Group (NYSE: UNH) in 1999 as a not-for-profit, private foundation dedicated to improving health and health care. To date, the United Health Foundation has committed more than $700 million to programs and communities around the world. To learn more, visit UnitedHealthFoundation.org.