Stillbirths

LOSS OF A BABY BEFORE OR DURING DELIVERY AT 20 WEEKS OR MORE COMPLETED GESTATION

Why It's Important

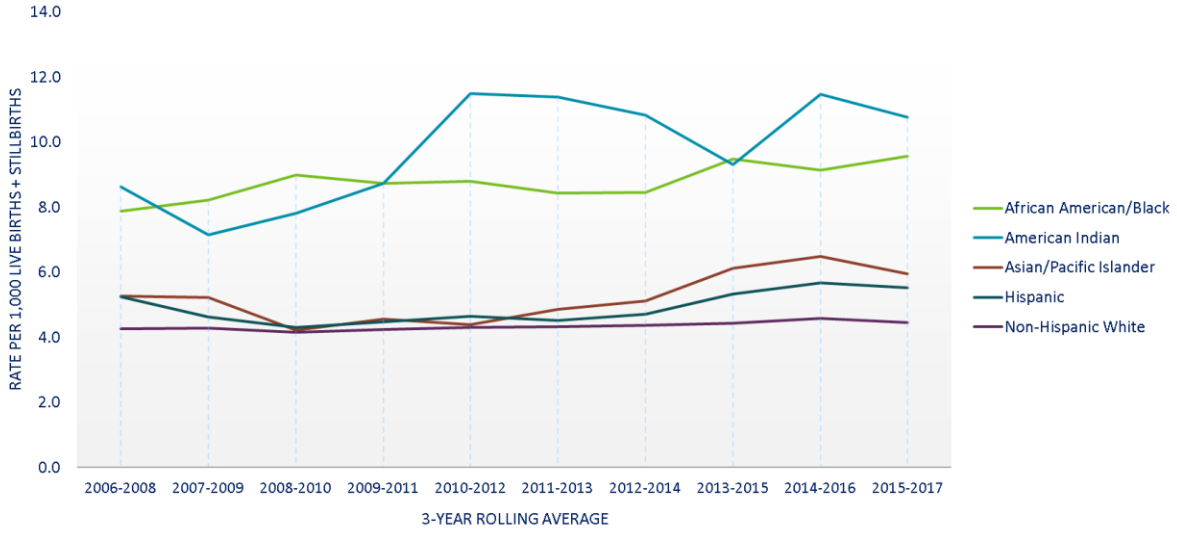
A stillbirth is the death or loss of a baby before or during delivery. Both miscarriage and stillbirth describe pregnancy loss, but they differ according to when the loss occurs. In Minnesota, a miscarriage is defined as loss of a baby before the 20th week of pregnancy, and a stillbirth is loss of a baby during or after 20 weeks of pregnancy.

In 2017, there were 370 stillbirths in Minnesota. Roughly 1 out of every 185 pregnancies in Minnesota ended in a stillbirth.

Stillbirth is a multi-factorial, complex societal and public health problem, and an important indicator of maternal and community health and well-being. The loss of a baby due to stillbirth can be a tragic and traumatic event for families. Unfortunately, stillbirth is often treated as an "invisible death" and not given the same recognition as live-born infant and child deaths.[3] It is important to provide comprehensive, compassionate care and take a multidisciplinary approach when supporting families who have experienced stillbirth.

During the past decade, Minnesota experienced a 12.2 percent increase in its three-year stillbirth rate from 4.9 to 5.5 per 1,000 live births plus stillbirths. Infection, birth defects, and pregnancy complications such as placental abruption or preeclampsia have been associated with stillbirth.[2] Identifying these conditions can be challenging and requires adequate prenatal care. Social determinants of health (low income, housing insecurity, low education, etc.) are also associated with stillbirth. Stillbirths are a major public health concern – approximately one-fourth of these deaths in the United States are preventable.[4]

Figure 1. Trends in Minnesota Stillbirths by Race/Ethnicity, 2006-2017



Source: Minnesota Resident Final Stillbirth File

Focus on Health Equity

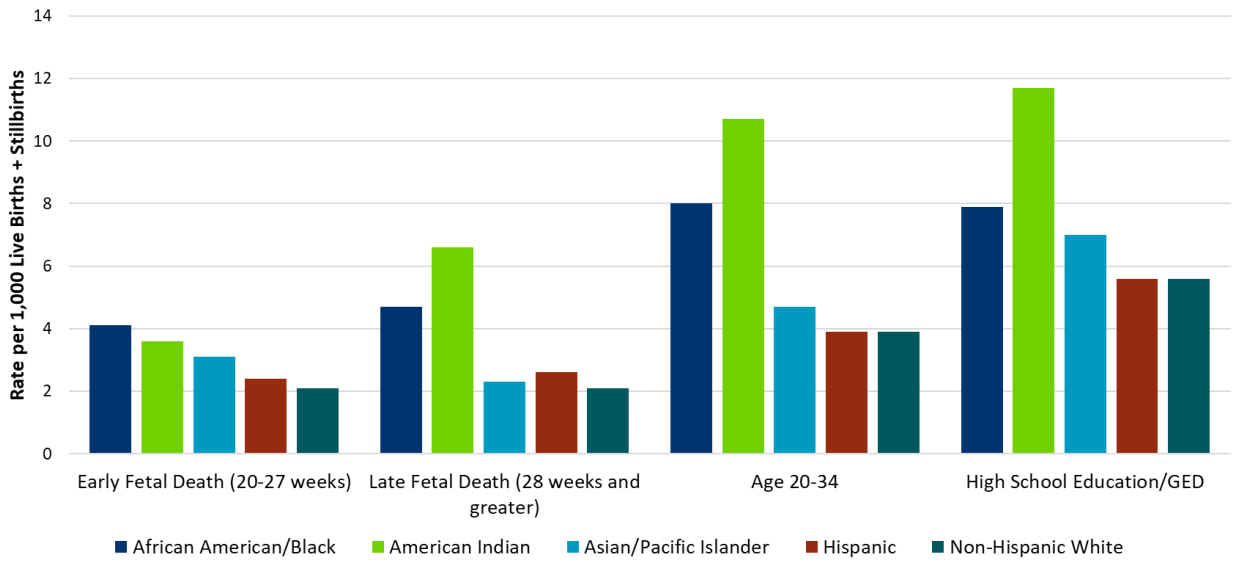
Stillbirth occurs in families of all races, income levels and to women of all ages. However, it disproportionally affects women of color and American Indians. Minnesota's overall stillbirth rate has long masked disparities in rates between black and African American, American Indian, and white women. From 2015 to 2017, American Indian mothers had the highest stillbirth rate in the state with 10.8 per 1,000 live births and stillbirths resulting in stillbirth. Black and African American mothers do not fare much better with a stillbirth rate of 9.6 per 1,000 live births and stillbirths, more than double the rate of 4.4 per 1,000 live births and stillbirths among White mothers.

> *"Women of color and low income families have higher rates of stillbirth. African American moms have stillbirth rates twice as high as any other race and are less likely to receive prenatal care. Also, tend to use bereavement programs far less (for multiple reasons - cultural, financial, geographic, institutional racism, etc.). It's a triple whammy." – Needs Assessment Key Informant Interview*

Beyond disparities seen between mothers of different races, many other factors can increase a woman's risk of experiencing a stillbirth. Fetal Mortality Statistics collected by the Minnesota Department of Health between 2013 and 2017 found that foreign-born women experienced stillbirth at 1.3 times the rate of U.S.-born women with women from Liberia experiencing stillbirth at a rate of 11.2 per 1,000 live births and stillbirths, greater than the high rate seen among American Indian mothers.

Women that give birth when they are under 20 years old or at 35 or older are also at an increased risk of experiencing stillbirth as are women that have not completed high school.

Figure 2. Stillbirths among Women Living in Minnesota, 2013-2017



Source: Minnesota Resident Final Stillbirth File

Women living in the suburbs of the metropolitan area are 1.3 times less likely to experience stillbirth than women in Ramsey and Hennepin County. The counties with the highest overall rate of stillbirths are located in Greater Minnesota. Married women are 1.5 times less likely to experience stillbirth than single, widowed, or divorced women. Women that smoke during pregnancy, regardless of race and

ethnicity, experience a higher rate of stillbirth compared to women that do not smoke during pregnancy.

Additional Considerations

Determining the causes of stillbirths is challenging partly because there isn't agreement on how to determine and classify cause of death. For example, data based on fetal death reports in the U.S. shows that 30 percent of fetal deaths have unknown cause (unspecified) of death.[5] While other research has shown that using extensive information about maternal medical history, autopsy, placental histology exams, and lab tests, medical examiners were able to identify cause of death for all stillbirths studied.[5]

No matter what research you are examining, congenital malformations including chromosomal abnormalities are a well-known cause of stillbirths. The range of contribution of congenital malformations to stillbirths varied from 10 percent to 22 percent of all stillbirths depending on the source of data.[6]

> *"[We need] insurance coverage or state coverage for autopsies for more of these babies. Anywhere from 30-70% of stillbirths are classified as undetermined cause. Mostly because extensive testing is low. About 13% of stillbirths receive an autopsy nationally. About 8% of all stillbirths are associated with genetic/congenital abnormalities so they don't typically get one/aren't necessary. Stillbirth doesn't count as a pathology for mom and they're not born alive so they're not a covered individual on an insurance plan. Often it's the hospital that writes that cost off." – Needs Assessment Key Informant Interview*

Important Note on Equity and Intersectionality

The Minnesota Department of Health's Title V Needs Assessment Team acknowledges that structural (social, economic, political and environmental) inequities can result in poor health outcomes across generations. They have a greater influence on health outcomes than individual choices or a person's ability to access health care, and not all communities are impacted in the same way.

All people living in Minnesota benefit when we reduce health disparities.

We also acknowledge that the topic addressed in this data story does not exist in isolation– which is important to remember as we do needs assessments and as we start thinking about how we approach solutions. In addition to the needs themselves being intersectional, there are also intersecting processes and systems through which power and inequity are produced, reproduced, and actively resisted.

Citations

1. Centers for Disease Control and Prevention. (2019). What is Stillbirth? Retrieved from https://www.cdc.gov/ncbddd/stillbirth/facts.html.
2. March of Dimes. Stillbirth. (2019). Stillbirth. Retrieved from https://www.marchofdimes.org/complications/stillbirth.aspx.
3. Healthy People 2020. (2019). Maternal, Infant, and Child Health. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives.
4. Page JM, Thorsten V, et al. Potentially Preventable Stillbirth in a Diverse U.S. Cohort. Obstet Gynecol. 2018 Feb;131(2):336-343. doi: 10.1097/AOG.0000000000002421.
5. The Stillbirth Collaborative Research Network Writing Group: Causes of death among stillbirths, JAMA 306 (22), 2011.

6. National Vital Statistics Reports: Cause of fetal death: data from the fetal death report, 2014 NVSS 65(7), 2016.

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