Trends in Stillbirth Rates in Utah

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Background

Stillbirth, sometimes called fetal mortality, is a public health issue that spans many of the seven domains of health. However, stillbirth remains relatively undiscussed and unexplored. Even the definition is not widely agreed upon across states and nations.[1] In Utah, stillbirth is defined as a baby of at least 20 weeks gestational age being born without a heartbeat.[1]

Stillbirth is particularly impactful on the emotional, social, and physical domains of health. People who experience stillbirth are at a much higher risk for depression, PTSD, and many other mental health disorders.[2] This decline in mental health can also result in a decrease in social well-being.[2] Many women who experience stillbirth report feeling isolated, as if friends and family are afraid to talk with them because they would need to confront the reality that stillbirths happen and could easily happen to us or someone we know.[3] Women who experience stillbirth are also more at risk for several physical ailments later in life as well, including end-stage renal disease, hypertension, and future stillbirths.[4-6] Stillbirth, while an outcome of pregnancy, is also a gateway to future health problems that span the physical, social, and emotional domains of health.

Worldwide, stillbirths appear to be an issue faced primarily by low-income countries, and, as might be expected, can be explained by many conditions that are prevalent in those areas (malaria, HIV, syphilis, etc.).[7] Prevention for stillbirths includes proper nutrition, vaccination, and proper and attentive prenatal care. However, the US experiences a higher rate of stillbirths than other high-income countries, so there must undoubtedly be causes yet unexplored and unexplained that contribute to this disparity.[7] Possible theories for common causes of stillbirth include umbilical cord abnormalities, fetal malnutrition, and placental abnormalities.[8-10] It is important to note that the definitive cause for about half of all stillbirths continues to go unexplained.[1]

This data snapshot looks at critical statistics and trends affecting stillbirth and how Utah compares with the United States.

Data

One of the most interesting trends in stillbirth is the lack of decline over time. Medicine has improved immensely over the past two decades, and essential advancements continue each year. However, stillbirth rates in the United States and Utah have remained relatively stagnant over the last twenty years, seemingly unaffected by breakthroughs in medical innovation. Figure 1 compares stillbirth rates in Utah and the United States since 2000. Notably, rates in Utah have begun to fluctuate substantially since 2014 – perhaps even starting to increase despite the great variability. Though there have been significant advancements in prenatal care practices, including improved imaging, the invention of the Non-Invasive Pregnancy Test (NIPT) and other blood tests for identifying chromosomal and other genetic anomalies, and improved fetal monitoring techniques, the fact that stillbirth rates continue to plateau around six stillbirths per 1,000 births shows us that there are other more important factors at play that contribute to stillbirth.

Another interesting trend can be seen in the distribution of stillbirths across Utah, as shown in Figure 2. While Salt Lake County and Utah County have comparatively low rates of fetal mortality, the more rural

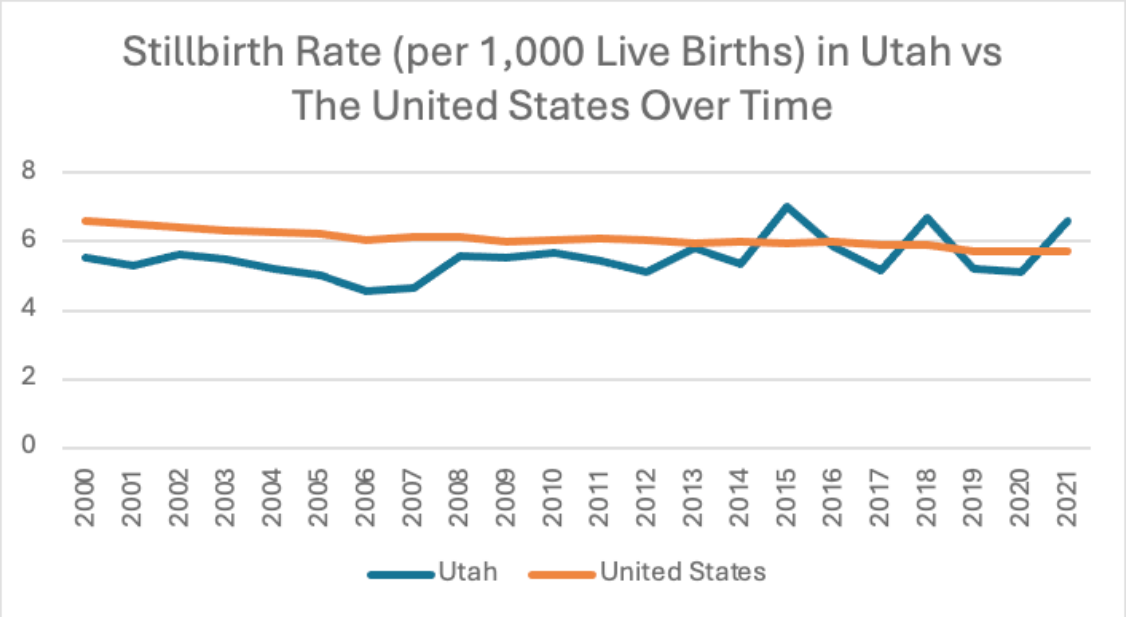

Figure 1. Trend in stillbirth rate over time in Utah (increasing) and the United States (decreasing). Data from IBIS Utah[11] and the CDC.[12]

areas, such as TriCounty, tend to have much higher rates of fetal mortalities. While no study defines the relationship between rurality and stillbirth rates/risk, there is a breadth of research explaining and hypothesizing the health disparities faced in rural communities. Current explanations include access to healthcare and hospitals and a higher general incidence of disease.[13] This trend would certainly help explain disparities in stillbirth in Utah, with many of these health areas not having any OB/GYN providers, hospitals, or birthing centers. One final but critically important trend in stillbirths is the disparity in stillbirth rates

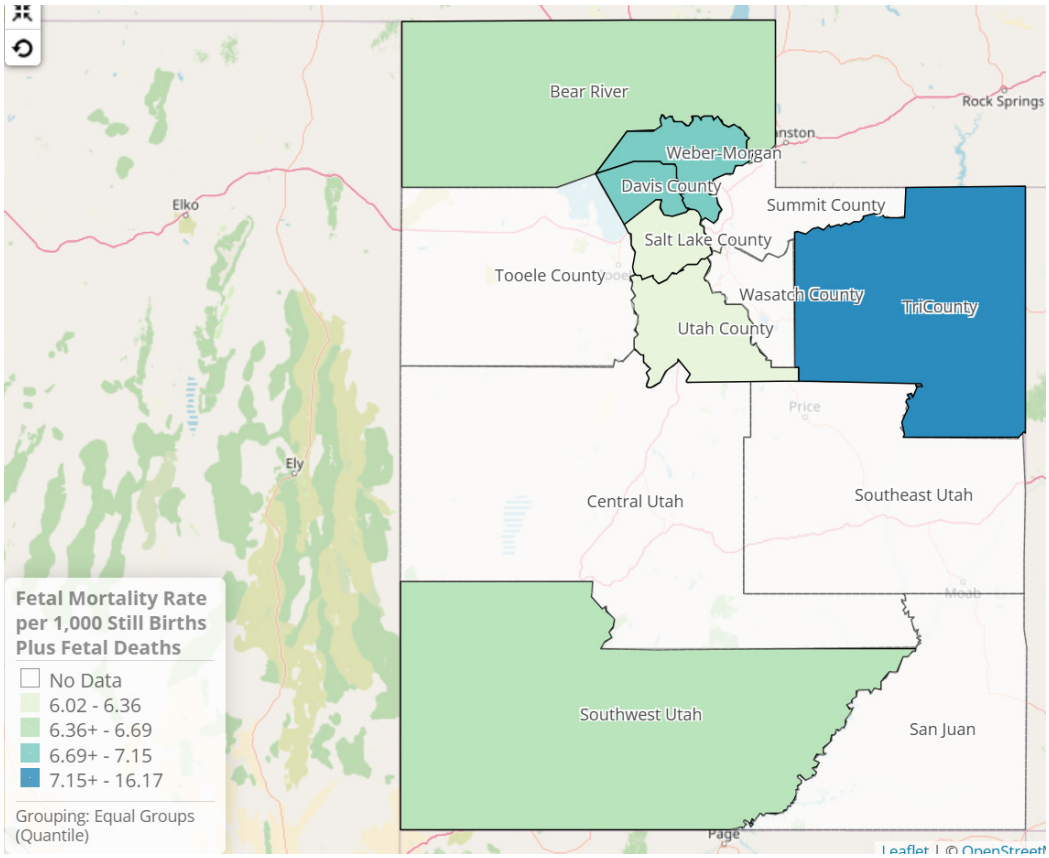

Figure 2. 2023 Fetal mortality rate per 1,000 still births plus fetal deaths in Utah separated by health district.[11] This is the rate of fetal mortalities per 1,000 births of any kind.

between different races. In Utah, black women are nearly three times as likely to have a stillborn baby as white women. This statistic is surprising and alarming, highlighting the effect of social determinants of health on pregnancies for black women. While this disparity has been known by researchers since 2009, to date, no studies have adequately closed this gap.[14]

Table 1. 2022 Stillbirth rates per 1,000 births.

	Utah	United States
Black	14.94	9.94
White	5.41	4.68
American Indian/Alaskan Native*	N/A	6.22
Asian*	N/A	3.96
Native Hawaiian or Other Pacific Islander*	N/A	10.18
>1 Race*	N/A	4.01
Not black or white (AIAN, NHOPI, Asian, or >1 Race)	4.20	4.57
Total	5.48	5.48

* <10 reported stillbirths in Utah. "Not black or white" category created to represent these races with certainty.

Calculated using stillbirth and live birth counts from CDC Wonder.[15]

Conclusion

The existence of disparities in stillbirth rates emphasizes that they do not happen randomly. Thus, there must be a way to prevent stillbirths – although we currently lack the knowledge to do so. Based on the data presented in this snapshot, it is apparent that the issue of stillbirth needs more research and attention.

The most significant gaps in stillbirth research are evident in the data trends presented in this snapshot. The causes of stillbirth must be better understood before evidence-based prevention interventions can be implemented. If recent medical innovations and interventions were improving the care of women at risk for stillbirth, then there would not be a plateau in stillbirth rates over the last twenty years. The underlying causes of demographic disparities in stillbirth rates are also crucial to understand. Identifying care practices and treatments that women in urban areas receive that women in rural areas do not could help refine the care provided for all pregnant women, especially those living in rural areas and with more risk for adverse pregnancy outcomes. We must also understand the cultural, social, and genetic determinants of pregnancy health that explain the higher rates of stillbirth in black and other racial minority women.

In 2024, The University of Utah launched a "Stillbirth Center of Excellence," seeking to advance stillbirth research, advocate for stillbirth-related issues, and attain higher levels of clinical care for women who have experienced or are at high risk for pregnancy loss, especially stillbirth. Research efforts include free-of-charge fetal autopsies, placental exams, and other participation in over twenty active studies seeking to understand and explain stillbirth.1 Brave women like Stacey Fletcher lead advocacy efforts, including open support for policies to prevent and reduce stillbirths, like the SHINE for Autumn Act, and seeking to normalize the discussion around stillbirth by establishing sensitivity training and resources for all that may interact closely with women that have experienced stillbirth.[3,16] The standard for clinical care has also risen, with the key feature of this center being a specialized clinic for "Rainbow Pregnancies" – providing prenatal care for women who are pregnant after experiencing pregnancy loss, especially stillbirth. This clinic is provided by highly trained maternal-fetal medicine physicians and midwives and seeks to provide culturally competent care combined by connecting clinical care with bereavement and mental health support.[1] While the impact of this center is yet to be seen, it is an essential first step in improving prenatal care and reducing stillbirths in Utah.

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