A Utah Health Disparities Profile

Maternal Mortality and Morbidity among Utah Minority Women

A report published by the UDOH Office of Health Disparities

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Executive Summary

Utah's racial and ethnic minority communities bear a disproportionate burden of disease and poor health outcomes, which limits the ability of individuals, families, and communities to reach their highest health potential and impacts their well–being, longevity, and economic and social mobility.[1]

The Utah Department of Health (UDOH) Office of Health Disparities (OHD) compiled this health disparities profile to document and report racial and ethnic disparities in maternal mortality and morbidity among minority women in Utah. Disparities in maternal mortality and morbidity may signal differences in communities' individual and generational health and experience with public health, health care, and social systems.

> The data in the following profiles indicate minority women in Utah experience health disparities in maternal mortality and morbidity and related indicators. Some of Utah's racial and ethnic minority communities may experience a higher pregnancy–associated mortality ratio (PMR) when compared with Utah women overall. Yet, all of Utah's racial and ethnic minority communities face a higher rate of severe maternal morbidity (SMM) when compared with Utah overall (115.0 per 10,000 pregnancy–associated hospitalizations). Women who identify as Black/African American (B/AA) and Native Hawaiian/Pacific Islander (NHPI) face the highest SMM rates (145.7 and 204.5 per 10,000 pregnancy–associated hospitalizations). Minority women in Utah also face disparities in many areas of women's health that are likely to contribute to health disparities in maternal mortality and morbidity. These include, but are not limited to, health care access and utilization, delivery method, preterm birth, obesity in pregnancy, gestational diabetes, postpartum depression, and substance use.

The Utah Department of Health (UDOH) Office of Health Disparities (OHD) is committed to better understand and address these health disparities. With funding from the US Department of Health and Human Services Office of Minority Health, Community Program to Improve Minority Health, the OHD will implement a project study with a collaborative community–based participatory research approach that mobilizes academic, health, and community experts.

Partners will bring together resources and expertise to develop and implement data–informed modifications to a mobile diabetes unit. The University of Utah Wellness Bus (TWB) is a mobile health unit provided through the University of Utah, which addresses chronic illnesses through health screenings, health coaching, nutrition education, and referrals to social services. TWB utilizes medical and allied health professionals to provide education on nutrition, weight loss, physical activity, and diabetes and hypertension disease management.

[1] UDOH Office of Health Disparities Moving Forward in 2016 reports.

Executive Summary (Continued)

The project study will provide services to racial and ethnic minority women of child–bearing age (18–44). Services will be provided across Utah's Wasatch Front region (four urban counties), where maternal mortality and morbidity and related outcomes have been identified and where the majority of racial and ethnic minority families reside. Since Utah ranks fifth among the 10 states with the largest Native Hawaiian/ Pacific Islander (NHPI) populations, the project study will be further modified for this community to consider the severity of these disparities within the NHPI community.[2]

- NHPI women face the highest rates of severe maternal morbidity (SMM) in Utah at a rate of 204.3/10,000 pregnancy–associated hospitalizations, compared with 115.0/10,000 pregnancy–associated hospitalizations in Utah overall.
- NHPI women accounted for 2.8% of maternal deaths, compared with 1.1% of live births. (Note: maternal deaths are rare events and may fluctuate considerably from year to year. This estimate is a small count with n<5 and does not meet the Utah Department of Health statistical standards for reliability and should be interpreted with caution.)
- NHPI women have significantly higher rates of preterm birth when compared with Utah women overall (13.1% vs. 9.4%).
- NHPI women experienced one of the highest rates of gestational diabetes mellitus, which was almost double women in Utah overall (11.6% vs 6.1%).
- NHPI women had the highest rates of obesity, more than 1.5 times higher than women in Utah overall (48.2% vs 28.4%). NHPI communities in general had the highest rates of obesity than Utah overall (49.4% vs 29.0%).
- NHPI women also had the highest rate of maternal obesity, more than double Utah women overall (52.7% vs 22.9%).
- NHPI women had the lowest rate of early prenatal care; fewer than half of NHPI women (44.8%) receive early prenatal care compared with 75% of all Utahn women.
- NHPI communities had uninsurance rates higher than Utah overall (23.1% vs 12.7%) and reported cost as a barrier to healthcare more than Utah overall (29.7% vs 13.5%).

It's critical to identify and understand health disparities in maternal mortality and morbidity among Utah's minority women as Utah has one of the highest birth rates in the US (14.6 live births per 1,000 Utah residents in 2019 vs. 11.4 births per 1,000 nationally).[3] Additionally, 2017–2019 birth rates among Utah racial/ethnic minority populations were significantly higher than the overall population. Effective and strategic interventions to advance maternal health and close disparities gaps can promote the well being of families and communities throughout generations.[4]

Awareness of health disparities in maternal mortality and morbidity will help address and alleviate this disproportionate burden of disease and poor health outcomes on individuals, families, and communities and is fundamental to the pursuit of health equity in Utah.

[2] HHS Office of Minority Health: Minority Population Profiles: Native Hawaiians/Pacific Islanders, 2020.
[3] CDC WONDER; Population Estimates: National Center for Health Statistics (NCHS) through a collaborative agreement with the US Census Bureau, IBIS Version 2019; UDOH Utah Birth Certificate Database, Office of Vital Records and Statistics; CDC National Vital Statistics System, National Center for Health Statistics.
[4] Health People 2020: Maternal, Infant, and Child Health: healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health

Executive Summary (Continued)

Table 1: Health Disparities in Maternal Mortality and Morbidity and Related Indicators among Native Hawaiian/Pacific Islanders (NHPIs) in Utah

Health Indicator*	NHPIs in Utah	Utah Overall
Severe maternal morbidity (SMM) rate, 2013–2015	204.3	115.0
Percentage of preterm births (Total Births <37 Weeks/ Total # of Live Births), 2019	13.2% (10.3–16.7%)	9.7% (9.4–10.0%)
Percentage of women who became pregnant within 18 months of their last birth, 2018–2019	41.5% (36.6–46.5%)	29.8% (29.4–30.3%)
Percentage of women with signs of postpartum depression (# with signs of postpartum depression/# of women with live birth), 2017–2019	35.5%* (29.0–42.1%*)	14.8% (14.4–15.1%)
Obesity (BMI ≥30) among Utah adults, 2018–2019	49.4% (38.5–60.3%)	29.0% (28.3–29.8%)
Obesity (BMI ≥30) among Utah female adults, 2018–2019	48.2% (32.1–63.7%)	28.4% (27.3–29.5%)
Percentage of live births to Utah women with gestational diabetes (GDM), 2019	11.6% (8.5–14.8%)	6.1% (5.9–6.4%)
Percentage of live births to Utah women with BMI ≥30 prior to pregnancy, 2018–2019	52.7% (47.9–57.4%)	22.9% (22.6–23.2%)
Percentage of Utah infants who received 1st trimester prenatal care, 2019	44.8% (40.3–49.4%)	75.9% (75.5–76.3%)
Age–adjusted rate of individuals without health insurance, 2018–2019	23.1% (15.0–33.8%)	12.7% (12.1–13.3%)
Adults reporting cost as a barrier to care in past year, 2017–2019	29.7% (21.9–38.9%)	13.5% (13.0–14.0%)

Data sources and notes detailed by indicator in tables throughout the report
*Use caution in interpretation; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards.

Introduction

Trend analyses of more than 15 years of health data demonstrate not all Utahns are at the same risk to develop diseases or experience health in the same way; Utah's growing racial and ethnic communities bear a disproportionate burden of disease and poor health outcomes.[5] Racial and ethnic health disparities limit the ability of individuals, families, and communities to reach their highest health potential, which impacts their well–being, longevity, and economic and social mobility.

What are health disparities?

> Health disparities are differences in health outcomes closely linked to economic, socio–cultural, environmental, and geographic disadvantage.

The Utah Department of Health (UDOH) Office of Health Disparities (OHD) compiled this health disparities profile to document and report racial and ethnic disparities in maternal mortality and morbidity among Utah minority women. Identification of health disparities through disaggregated population-based data combined with complementary contextual data is fundamental to better understand, address, and eliminate health disparities and advance health equity.

What is health equity?

> Health equity is the principle underlying the commitment to reduce and, ultimately, eliminate health disparities by addressing its determinants. Pursuit of health equity means striving for the highest possible standard of health for all people and with special attention to the needs of those communities at greatest risk for health disparities.

Why focus on health disparities in maternal mortality and morbidity among Utah minority women?

Maternal mortality and morbidity are paramount to understand the health of Utahns. These measures can be indicative of individual and generational health and health behaviors as well as the effectiveness of our public health, healthcare, and social systems. However, disparities in maternal mortality and morbidity signal differences in communities' health and experience and necessitate further investigation to explore its determinants. Effective and strategic interventions to advance maternal health and close disparities gaps can promote the well being of families and communities throughout generations.[6]

[5] UDOH Office of Health Disparities Moving Forward in 2016 reports.
[6] Health People 2020: Maternal, Infant, and Child Health: healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health

Health Equity and Health Disparities Measurement

Health disparities are the metrics used to measure and assess health equity. A health disparity exists when the health status for a given measure in one or more groups who are disadvantaged in opportunity and/or resources is found to be different from other groups.

A key component in health disparities measurement is disaggregating data by group. For the purposes of this report, data is disaggregated by race and ethnicity. The disaggregation of Asian and NHPI population-based data has been key to unveil maternal mortality and morbidity disparities among NHPI women in Utah.

Race and Ethnicity Categories

It is acknowledged that significant diversity exists within each of the race and ethnicity categories used in this report and the use of broad categories will, at times, obfuscate health disparities among smaller subgroups. Whenever possible, five race categories were used (along with Hispanic origin or ethnicity), in accordance with the federal Office of Management and Budget categories utilized by the US Census Bureau.[7] Abbreviations for race and ethnicity in data tables are as follows: Am. Indian (American Indian), AK Native (Alaska Native), African Am. (African American), N. Hawaiian (Native Hawaiian), and Pac. Islander (Pacific Islander). Data from American Indian/Alaska Native populations are included in this report, with acknowledgment that self-identified American Indians/Alaska Natives may or may not be registered members of federally recognized tribal jurisdictions. Additional notes on race and ethnicity analysis are included in individual tables.

Another important consideration in health disparities measurement is the choice of reference group. For the purposes of this report, the reference group is the outcome for the overall population of the state.

As applicable, when comparing a group's health outcome with the overall population's health outcome, the confidence bounds were used to determine whether the group was doing (1) better than, (2) the same as, or (3) worse than Utah overall. The group value was considered statistically significantly different from the state value if the state value was outside the range of the group's confidence interval.

While disaggregating data by group is necessary to detect health disparities, it can be a challenge when working with small populations. Thus, when measuring health disparities in small populations, it is necessary to compile data from a series of years in order to obtain reliable estimates. Even with the compiled data, some samples may not be high enough to yield reliable estimates. In this instance, the data insufficiencies are noted with asterisks and footnotes. Additionally, it is important to give careful consideration to balance relevancy of data; balancing providing the most recent data and providing granular data. Additional information on health equity and health disparities measurements is available in the appendix.

[7] Hixson, L., Hepler, B.B., & Kim, M.O. (2012). 2010 Census Briefs: The Native Hawaiian and Other Pacific Islander Population: 2010. US Census Bureau.

It's important to identify and understand health disparities in maternal mortality and morbidity among Utah's minority women given that Utah has one of the highest birth rates in the US (14.6 live births per 1,000 Utah residents in 2019 vs. 11.4 births per 1,000 nationally).[8] Birth rates in 2017–2019 birth rates among Utah racial/ethnic minority populations were significantly higher than the overall population (see Table 2).[9]

The majority of racial and ethnic minority people reside in Salt Lake, Utah, Weber, and Davis counties (see Table 3), which have a combined population of 2.4 million persons. These areas are home to approximately 371,000 people who identify as Hispanic/Latino (H/L), 73,000 Asian, 29,000 Native Hawaiian/Pacific Islander (NHPI), 27,000 American Indian/Alaska Native (AI/AN), and 39,000 Black/African American (B/AA).[10]

Table 2: A Comparison of Birth Rates of Utah's Racial and Ethnic Populations and Utah Overall, 2017–2019

Race/ethnicity[+]	Birth rate per 1,000 Utah residents	95% confidence interval	Significantly higher
All Utah women with a live birth	10.6	10.5–10.6	
Am. Indian/AK Native	11.0	10.5–11.6	No
Asian	10.5	10.1–10.9	No
Black/African Am.	13.8	13.2–14.4	Yes
N. Hawaiian/Pac. Islander	18.2	17.3–19.0	Yes
White	11.6	11.6–11.7	Yes
Hispanic/Latino	17.8	17.6–18.0	Yes

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
UDOH Utah Birth Certificate Database, Office of Vital Records and Statistics, 2017–2019.

[8] CDC WONDER; Population Estimates: National Center for Health Statistics (NCHS) through a collaborative agreement with the US Census Bureau, IBIS Version 2019; UDOH Utah Birth Certificate Database, Office of Vital Records and Statistics; CDC National Vital Statistics System, National Center for Health Statistics.
[9] UDOH Utah Birth Certificate Database, Office of Vital Records and Statistics, 2017–2019.
[10] Population Estimates by Age, Sex, Race, and Hispanic Origin for Counties in Utah, US Bureau of the Census, IBIS Version 2019

Table 3: Number of Racial and Ethnic Minority Residents in Utah: Salt Lake, Utah, Weber, and Davis Counties, 2018

County	Racial/ethnic minority population* (count)	County (Cont.)	Racial/ethnic minority population* (count)
Salt Lake	335,424	Beaver	1065
Utah	111,163	Juab	993
Weber	61,798	Emery	921
Davis	57,555	Kane	704
Washington	27,209	Morgan	634
Cache	20,581	Garfield	586
Tooele	11,934	Wayne	253
San Juan	8,650	Rich	218
Iron	7,404	Piute	151
Box Elder	7,110	Daggett	74
Uintah	6,597		
Summit	6,567		
Wasatch	5,513		
Sanpete	4,346		
Carbon	3,419		
Duchesne	2,945		
Millard	2,206		
Sevier	1,841		
Grand	1,728		

*The racial/ethnic minority population counts were calculated by summing the population estimates for people who identified as Hispanic and people who identified as non–Hispanic and non–White (including two or more races).
Population Estimates by Age, Sex, Race, and Hispanic Origin for Counties in Utah, US Bureau of the Census, IBIS Version 2019.

These communities tend to have a younger age distribution compared with Utah overall (see Table 4). In fact, in these counties, one in four women of childbearing age (18–44) belong to racial/ethnic minority communities with 76,000 identifying as H/L, 19,500 as Asian, 7,300 as B/AA, 6,400 as NHPI, and 5,700 as AI/AN.[11]

These counties also represent the highest numbers of SMM-associated hospitalizations (151–444) and pregnancy-associated hospitalizations (9,941–406,744) as well as the health districts with the 4th, 5th, 6th, and 8th highest rates of SMM rate per pregnancy-associated hospitalizations (see Table 5).[12] Furthermore, approximately 8 out of 10 pregnancy-associated deaths (79%) occurred among people living in urban counties.[13]

Table 4: Median Age of Utah's Race and Ethnic Minority Communities, 2014–2018

Race/Ethnicity+	Median Age	90% Confidence Interval	Significantly Lower
All Utahns	30.7	30.6–30.8	
Am. Indian/AK Native	28.7	28.1–29.3	Yes
Asian	32.9	32.5–33.3	No
Black/African Am.	25.3	24.6–26.0	Yes
N. Hawaiian/Pac. Islander	26.5	25.7–27.3	Yes
White	32.5	32.4–32.6	No
Hispanic/Latino	24.5	24.4–24.6	Yes

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
US Census, ACS 2014–2018 Race Alone Table DP05 (B01002, B01002C, B1002D, B01002B, B01002E, B01002H, B01002I)

[11] Population Estimates by Age, Sex, Race, and Hispanic Origin for Counties in Utah, US Bureau of the Census, IBIS Version 2018.
[12] UDOH Maternal and Infant Health Program: Utah Severe Maternal Morbidity 2013–2015
[13] UDOH Utah Birth and Death Certificate Databases, Office of Vital Records and Statistics; Utah Perinatal Mortality Review Committee (PMRC) Case Review, 2015–2018.

Table 5: Frequency and Rate of Severe Maternal Morbidity (SMM) in Utah by Local Health District of Maternal Residence*, 2013–2015

Local Health District	# of SMM-associated hospitalizations	# of pregnancy-associated hospitalizations	SMM rate per 10,000 pregnancy-associated hospitalizations
Bear River	61	7,885	77.4
Central	37	2,355	157.1
Davis	169	14,473	116.8
Salt Lake	444	406,744	109.2
Southeast	24	1,285	186.8
Southwest	43	7,623	56.4
Summit	6	877	68.4**
Tooele	43	2,464	174.5
TriCounty	27	2,542	106.2
Utah	235	28,679	81.9
Wasatch	6	991	60.5**
Weber-Morgan	151	9,941	151.9
San Juan	***	***	***

*The statistical method used for analysis is the chi–squared test to determine associations between maternal characteristics and SMM and its indicators. Statistically significant (p–value <0.05).
**Use caution in interpretaton; the estimate has a relative standard error greater than 30% and does not meet UDOH standards for reliability.
*** The estimate has been suppressed because 1) the relative standard error is greater than 50% or cannot be determined, 2) the observed number of events is very small and not appropriate for publication.
Utah Inpatient Hospital Data, 2013–2015.
UDOH Utah Birth Certificate Database, Office of Vital Records and Statistics, 2013–2015.

Very high and high Utah Health Improvement Index (HII) areas are located within these counties and local health districts. The Utah HII is a composite measure of the social determinants of health. Very high and high HII areas are home to populations with lower education attainment, lower median family income, lower homeownership, higher rates of unemployment, higher poverty rates and more single-parent households with children.[14] This is consistent with the socioeconomic status of many of Utah's racial/ethnic minority populations. For example, poverty rates are higher among Utah's racial/ethnic minority populations with more than one in five AI/ANs and B/AA living in poverty.[15] In 2018, high school graduation rates in Utah overall were 87%, but 77% for AI/ANs, 76% for B/AAs, 85% for NHPIs and 78% for H/Ls. Moreover, dropout rates among some of these same communities sometimes doubled that of Utah overall (11%), ranging from 14–21%.[16]

With regard to access to care, uninsurance rates among minority communities are more than double Utah overall., AI/ANs (18%), B/AAs (26%), NHPIs (23%), and H/Ls (36%) face the highest rates (see Table 7).[17] Furthermore, anywhere from 14–31% of these communities identify cost as a barrier to health care.[18]

[14] UDOH Office of Health Disparities: The Utah Health Improvement Index, December 2018.
[15] US Bureau of the Census, American Community Survey, 1–Year Estimates, Table S1701, 2018.
[16] Utah State Board of Education: Utah 2018 Graduation Rates, December 2018
[17] UDOH Behavioral Risk Factor Surveillance System, 2018–2019.
[18] UDOH Behavioral Risk Factor Surveillance System, 2017–2019.

Table 6: Percentage of Racial and Ethnic Minority Communities in Very High and High Health Improvement Index (HII) Neighborhoods, 2013–2017

Local Health District	Utah Small Area	HII Group	Population* (2017)	% Racial/Ethnic Minority**
Utah	99 Small Areas		3,101,989	21.0%
Salt Lake County	Salt Lake City (Rose Park)	Very high	36,676	64.4%
	Magna	High	28,303	36.4%
	Salt Lake City (Glendale) V2	Very high	25,631	65.4%
	West Valley (Center)	Very high	52,999	51,8%
	West Valley (East) V2	Very high	53,253	55.5%
	Salt Lake City (Downtown) V2	High	39,037	28.2%
	South Salt Lake	Very high	27,420	44.3%
	Kearns V2	Very high	41,292	40.4%
	Taylorsville (East)/Murray (West)	High	38,345	30.8%
	Murray	High	35,173	24.5%
	Midvale	Very high	31,669	34.2%
	Sandy (West)	High	27,577	21.6%
Utah County	Orem (North)	High	39,647	29.2%
	Orem (West)	High	35,265	24.7%
	Provo/BYU	Very high	53,657	15.2%
	Provo (West City Center) 3	Very high	34,403	37.6%
	Provo (East City Center)	Very high	34,967	22.7%
	Utah County (South) V2	High	13,900	16.3%
	Payson	High	27,286	13.6%
Weber-Morgan	Ben Lomond	High	62,407	28.9%
	Ogden (Downtown)	Very high	39,706	32.3%
	South Ogden	High	37,963	25.9%

*Utah Department of Health, Center for Health Data and Informatics, IBIS version 2017
**American Community Survey (ACS) 2013–2017. Calculated as the difference of non–Hispanic White population.

These diverse, underrepresented populations face further barriers and challenges in access to care, such as limited English proficiency/language assistance needs, low health literacy levels, and limited familiarity with clinical guidelines and local health systems.

It is crucial to understand and acknowledge health disparities faced by racial and ethnic minority women in Utah are complex and multifaceted, affected by economic, socio–cultural, and environmental conditions and cannot be fully explained or explored by population–based data sets alone.

Table 7: A Comparison of Uninsurance Rates of Utah's Racial and Ethnic Communities and Utah Overall, 2018–2019

Race/Ethnicity[+]	Age–Adjusted Rate of Individuals without Health Insurance*	95% Confidence Interval	Significantly Higher
All Utahns	12.7%	12.1–13.3	
Am. Indian/AK Native	18.3%	14.0–23.5	Yes
Asian	8.1%	4.9–13.0	No
Black/African Am.	26.1%	19.4–34.1	Yes
N. Hawaiian/Pac. Islander	23.1%	15.0–33.8	Yes
White	9.9%	9.4–10.5	No
Hispanic/Latino	36.2%	33.7–38.9	Yes

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
*Age-adjusted rates are based on three age groups: 18–34, 35–49, and 50+ and five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ for ethnicity.
UDOH Behavioral Risk Factor Surveillance System, 2018–2019.

Table 8: Top Five Languages and Number Speaking English Less Than "Very Well" in Salt Lake County, Davis County, Utah County, and Weber–Morgan Local Health Districts, 2009–2013

Local Health District	Top 5 Languages		# of Speakers	# Speaking English Less Than "Very Well"
	#	Language		
Salt Lake County	1	English	778,418	0
	2	Spanish or Spanish Creole	127,200	49,421
	3	Other Pacific Island Languages	8,895	1,851
	4	Chinese	6,920	3,566
	5	Vietnamese	5,645	3,364
Davis County	1	English	261,540	0
	2	Spanish or Spanish Creole	16,409	4,570
	3	Chinese	980	360
	4	Other Pacific Island Languages	929	114
	5	German	895	152
Utah County	1	English	418,915	0
	2	Spanish or Spanish Creole	45,969	17,774
	3	Portuguese or Portuguese Creole	2,316	372
	4	Other Pacific Island Language	1,995	295
	5	Chinese	1,903	725
Weber–Morgan	1	English	195,684	0
	2	Spanish or Spanish Creole	24,388	10,808
	3	German	846	169
	4	Chinese	563	399
	5	Vietnamese	484	247

American Community Survey (ACS) 2009–2013

Maternal mortality generally refers to "the death of a woman during pregnancy or within a year of the end of pregnancy."[19]

Indicator: Pregnancy-Associated Mortality Ratio (PMR)

Definition: The number of pregnancy-associated deaths[20] per 100,000 live births.

Calculation: # of women who died during pregnancy or within one year of pregnancy/Total # of live births per year

Health Disparities

Health Disparities: Some of Utah's racial and ethnic minority communities experience a higher pregnancy-associated mortality ratio (PMR) when compared with Utah women overall. The category of "Other, non-Hispanic" women (which includes women who identify as American Indian/Alaska Native, Asian, Black/African American, Native Hawaiian/Pacific Islander, and women of "Two or More Races") had a pregnancy-associated mortality ratio of 78.8, compared with a PMR of 43.5 among all races and ethnicities in total.

Table 9: Pregnancy-associated Mortality Ratio (PMR) in Utah by Race and Ethnicity, 2015–2019

Race/Ethnicity	# of pregnancy-associated deaths	# of live births	Pregnancy-associated mortality ratio	% maternal deaths	% live births
Total	106	243,883	43.5	100%	100%
Hispanic	13	39,582	32.8	12.3%	16.2%
White, non–Hispanic	79	180,970	43.7	74.5%	74.2%
Other, non–Hispanic	12	15,222	78.8	11.3%	6.2%

UDOH Utah Birth and Death Certificate Databases, Office of Vital Records and Statistics; Utah Perinatal Mortality Review Committee (PMRC) Case Review, 2015–2019

[19] UDOH Public Health Indicator Based Information System (IBIS): Complete Health Indicator Report of Maternal Mortality, January 2021

[20] "A pregnancy-related death is defined as the death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy. A pregnancy-associated, but not related death is the death of a woman during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy." (UDOH Public Health Indicator Based Information System (IBIS): Complete Health Indicator Report of Maternal Mortality, January 2021.)

Table 10: Pregnancy-associated Deaths in Utah by Race and Ethnicity, 2015–2019

Race/Ethnicity	# of pregnancy-associated deaths	% maternal deaths	% live births
Total	106	100%	100%
Race			
American Indian or Alaska Native	6	5.7%	1.1%
Asian	<5*	<4.7%*	2.5%
Black or African American	<5*	<4.7%*	1.6%
Native Hawaiian or Pacific Islander	<5*	<4.7%*	1.1%
White	90	84.9%	91.2%
Other	<5*	<4.7%*	0.6%
Ethnicity			
Hispanic	13	12.3%	16.2%
Non–Hispanic	93	87.7%	80.8%

*Maternal deaths are rare events and may fluctuate considerably from year to year. These estimates do not meet the Utah Department of Health statistical standards for reliability. Interpret with caution. Small counts (n<5) are provided for descriptive purposes only. Rates or proportions calculated from small counts are not stable and may not reflect true trends in maternal mortality.

UDOH Utah Birth and Death Certificate Databases, Office of Vital Records and Statistics; Utah Perinatal Mortality Review Committee (PMRC) Case Review, 2015–2019

Additional information on maternal mortality can be obtained at the resources below:

UDOH Public Health Indicator Based Information System (IBIS): Complete Health Indicator Report of Maternal Mortality

UDOH Maternal Infant Health Program: Perinatal Mortality Review

[21] UDOH Maternal and Infant Health Program: Perinatal Mortality Review Update, July 2018.
[22] CDC PRAMStat, 2009–2011.
[23] UDOH Maternal and Infant Health Program Report: Maternal, Infant & Child Health Indicators in Utah, 2019.
[24] UDOH Office of Health Disparities: Behavioral and Mental Health Provider Assessment Summary including information gathered during focus groups from four minority communities in Utah, February 2016.

Health Disparities

Among racial and ethnic minorities, women who identify as Hispanic have the highest percentage of maternal deaths (12.3%). In addition, groups who may have a higher percentage of maternal deaths compared to the proportion of live births include women who identify as American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Black/African-American, and Other women. However, these data must be interpreted with caution, as the number of observed events is very small and may be unreliable (see Table 10). Under these circumstances, data in the maternal morbidity profile provide additional and more reliable insight and context.

A Closer Look

In an analysis of 2015–2016 maternal deaths, Utah's Perinatal Mortality Review Committee (PMRC) found "a majority of Utah's maternal deaths (75%) were associated with a prior or current mental health condition."[21] When compared nationally, women in Utah report frequent postpartum symptoms at significantly higher rates (15.3% vs. 10.1%) and rank second highest among 26 reporting sites.[22] Minority women have reported higher rates of partner-associated stress, emotional stress, and financial stress.[23] Furthermore, mental health provider assessments and focus groups among racial/ethnic minorities found these communities often face cultural, linguistic, financial, and time barriers and supply gaps in access to mental health services and therefore don't receive or seek help through these services.[24]

Maternal morbidity generally refers to "any health condition attributed to and/or aggravated by pregnancy and childbirth that has a negative impact on the woman's wellbeing."[25] "Severe maternal morbidity (SMM) includes unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a woman's health."[26]

Indicator: Severe Maternal Morbidity (SMM) Rate

Definition: The number of cases of severe maternal morbidity (SMM)[27] per 10,000 pregnancy-associated hospitalizations

Calculation: # of SMM cases/all pregnancy-associated hospitalizations

Health Disparities

All of Utah's racial/ethnic minority communities face a higher rate of severe maternal morbidity (SMM) when compared with Utah overall. B/AA and NHPI women face the highest SMM rates (see Table 11).

[25] Bulletin of the World Health Organization 2013;91:794-796. doi: http://dx.doi.org/10.2471/BLT.13.117564
[26] American College of Obstetricians and Gynecologists and the Society for Maternal–Fetal Medicine, Kilpatrick SK, Ecker JL. Severe maternal morbidity: screening and review external icon. Am J Obstet Gynecol. external icon2016;215(3):B17–B22.
[27] "During labor and delivery, women may suffer from unexpected health outcomes, or severe maternal morbidities, that can have mild to long-lasting effects on their health. These outcomes include hemorrhage, eclampsia, renal failure, acute myocardial infarction, and other severe complications." Refer to the reference report for an in-depth methodology. (UDOH Maternal and Infant Health Program: Utah Severe Maternal Morbidity 2013–2015.)

Table 11: Utah Severe Maternal Morbidity (SMM) Rate by Race and Ethnicity, 2013–2015

Pregnancy-associated hospitalizations by race/ethnicity	SMM Cases/10,000 Pregnancy-Associated Hospitalizations
All pregnancy-associated hospitalizations	115.0
Am. Indian/AK Native, non-Hispanic	121.4
Asian, non-Hispanic	124.5
Black/African Am., non-Hispanic	145.7
N. Hawaiian/Pac. Islander, non-Hispanic	204.3
White, non-Hispanic	99.7
Hispanic/Latino, of any race	119.7

UDOH Utah Birth and Death Certificate Databases, Office of Vital Records and Statistics; UDOH Inpatient Hospital Data, Office of Health Care Statistics; Utah Perinatal Mortality Review Committee (PMRC) Case Review, 2013–2015

Maternal morbidity generally refers to "any health condition attributed to and/or aggravated by pregnancy and childbirth that has a negative impact on the woman's wellbeing."[25] "Severe maternal morbidity (SMM) includes unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a woman's health."[26]

A Closer Look

SMM was associated with outcomes in which racial/ethnic minority women also face disparities. For example, the highest rates of SMM were among women with cesarean section deliveries. Women who identify as Hispanic (24.2%) and non-White, non-Hispanic (28.4%) face higher rates of caesarean section deliveries among all live births when compared with Utah women overall (22.7%). These disparities exist even among low-risk women without a previous cesarean delivery (18.9% and 21.9% vs. 16.8%).[28] Additionally, women who deliver preterm had higher rates of SMM. B/AA women (12.6%), NHPI women (13.1%), and H/L women (11.2%) have significantly higher rates of preterm birth when compared with Utah women overall (9.4%).[29] SMM was also associated with obesity in pregnancy (a pre-pregnancy BMI ≥30), which is significantly higher among women who identify as AI/AN, B/AA, NHPI , and H/L when compared with Utah women overall (35.1%, 27.2%, 52.7%, and 27.6% vs. 22.9 %).[30]

Additional information on maternal morbidity can be found:

UDOH Maternal and Infant Health Program: Utah Severe Maternal Morbidity 2013–2015 report

[28] UDOH Maternal and Infant Health Program Report: Maternal, Infant & Child Health Indicators in Utah, 2019.
[29] UDOH Utah Birth Certificate Database, Office of Vital Records and Statistics, 2018.
[30] Utah Birth Certificate Database, Office of Vital Records and Statistics, Utah Department of Health, 2018-2019.

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 12: Health Disparities in Healthcare Access and Utilization During Pregnancy

Indicator	Utah	White, non-Hispanic	Other[+], non-Hispanic	Hispanic	Data Year
Percentage of women who reported having health insurance prior to pregnancy[a]	86.3%	91.1%	85.3%*	63.5%	2019
Percentage of women who reported not having health insurance to pay for prenatal care[a]	6.2%	2.5%	***	26.2%	2019
Percentage of women who received prenatal care during their first trimester[b]	77.0%	83.2%	73.4%	68.0%	2017
Percentage of women who reported having a postpartum check-up[a]	92.0%	94.7%	86.6%	83.6%	2019

+Other combines American Indian/Alaska Native, Asian, Black/African American, and Native Hawaiian/Pacific Islander races.
*Use caution in interpretation; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards.
*** The estimate has been suppressed because 1) the relative standard error is greater than 50% or cannot be determined, 2) the observed number of events is very small and not appropriate for publication.
a. Utah Pregnancy Risk Assessment Monitoring System (PRAMS).
b. Utah Birth Certificate Database, Office of Vital Records and Statistics, UDOH

Table 13: Percentage of Utah Infants Who Received 1st Trimester Prenatal Care by Race and Ethnicity, 2019

Race/Ethnicity[+]	Percentage of Births with Early Prenatal Care (# with Prenatal Care/ Total # of Live Births)	95% Confidence Interval	Significantly Lower
All Utah infants	75.9%	75.5–76.3%	
Am. Indian/AK Native	64.0%	59.7–68.3%	Yes
Asian	74.9%	72.3–77.4%	No
Black/African Am.	58.4%	55.1–61.6%	Yes
N. Hawaiian/Pac. Islander	44.8%	40.3–49.4%	Yes
White	77.9%	67.2–70.8%	No
Hispanic/Latino	69.0%	68.0–70.0%	Yes

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
Utah Birth Certificate Database, Office of Vital Records and Statistics, 2019.

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 14: Health Disparities in Delivery Method

Indicator	Utah	White, non-Hispanic	Other[+], non-Hispanic	Hispanic	Data Year
Percentage of cesarean section deliveries among all live births[a]	22.7%	21.8%	28.4%	24.2%	2017
Percentage of primary cesarean section deliveries among low–risk women without a previous cesarean delivery[b]	16.8%	15.9%	21.9%	18.9%	2016

+Other combines American Indian/Alaska Native, Asian, Black/African American, and Native Hawaiian/Pacific Islander races.
Utah Birth Certificate Database, Office of Vital Records and Statistics, UDOH
a. Total cesarean section rate: Calculated as the number of births delivered by cesarean section divided by the total number of live births less the not–stated values for delivery method, multiplied by 100.
b. Primary cesarean section rate among low risk females: Calculated as the number of live births to low risk females (full-term, singleton, vertex presentation) having a first cesarean delivery divided by the number of live births to low risk females.

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 15: Health Disparities in Preterm Birth, 2017

Indicator	Utah	White, non-Hispanic	Other[+], non-Hispanic	Hispanic	Data Year
Percentage of very preterm births (< 32 weeks)	1.2%	1.2%	2.1%	1.2%	2017
Percentage of live births that were preterm (< 37 weeks)	9.4%	9.5%	10.9%	10.9%	2017

+Other combines American Indian/Alaska Native, Asian, Black/African American, and Native Hawaiian/Pacific Islander races.
Utah Birth Certificate Database, Office of Vital Records and Statistics, UDOH

Table 15.1: Percentage of Live Born Infants Delivered at Less Than 37 Weeks' Gestation by Race and Ethnicity, 2019

Race/Ethnicity[+]	Percentage of Preterm Births (Total Births <37 Weeks/Total # of Live Births)	95% Confidence Interval	Significantly Higher
All Utah infants	9.7%	9.4–10.0%	
Am. Indian/AK Native	12.1%	9.4–15.5%	No
Asian	10.6%	9.0–12.6%	No
Black/African Am.	13.4%	11.3–15.9%	Yes
N. Hawaiian/Pac. Islander	13.2%	10.3–16.7%	Yes
White	9.4%	9.2–9.7%	No
Hispanic/Latino	10.4%	9.8–11.1%	Yes

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
Utah Birth Certificate Database, Office of Vital Records and Statistics, 2019.

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 16: Health Disparities in Maternal Health Status

Indicator	Utah	White, non-Hispanic	Other[+], non-Hispanic	Hispanic	Data Year
Percentage of women of reproductive age who reported being obese[a]	21.1%	19.7%	12.6%	32.8%	2017
Percentage of women who reported exercise prior to pregnancy[b]	58.9%	61.0%	51.7%	50.3%	2015
Percentage of women with a normal BMI prior to pregnancy[a]	50.6%	53.3%	46.2%	41.3%	2017
Percentage of women with gestational diabetes or pre-existing[c]	7.1%	6.0%	11.2%	10.0%	2017
Percentage of women with adequate weight gain during pregnancy[d]	31.1%	30.9%	28.4%	31.4%	2017

+Other combines American Indian/Alaska Native, Asian, Black/African American, and Native Hawaiian/Pacific Islander races
a. The Behavioral Risk Factor Surveillance System (BRFSS), Reproductive age: Defined women ages 18–44
b. Pregnancy Risk Assessment Monitoring System (PRAMS)
c. Utah Birth Certificate Database, Office of Vital Records and Statistics, UDOH
d. Utah Office of Vital Records and Statistics (OVRS), Adequate weight gain during pregnancy: Defined as gaining the recommended amount of weight during pregnancy, based upon the mother's pre–pregnancy BMI and whether the pregnancy is a single or multiple gestation. http://www.babyyourbaby.org/pregnancy/during-pregnancy/weight-gain.php

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 16.1: Percentage of Live Births to Utah Women with BMI >30 Prior to Pregnancy by Race and Ethnicity, 2018–2019

Race/Ethnicity[+]	Percentage of Women with Maternal Obesity (# Obese Mothers/ Average Annual # Live Births	95% Confidence Interval	Significantly Higher
All Utahn infants	22.9%	22.6–23.2%	
Am. Indian/AK Native	35.1%	31.5–38.7%	Yes
Asian	8.9%	7.7–10.1%	No
Black/African Am.	27.2%	24.7–29.7%	Yes
N. Hawaiian/Pac. Islander	52.7%	47.9–57.4%	Yes
White	22.1%	21.8–22.5%	No
Hispanic/Latino	27.6%	26.7–28.4%	Yes

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
Utah Birth Certificate Database, Office of Vital Records and Statistics, 2018–2019.

Table 16.2: Percentage of Live Births to Utah Women with Gestational Diabetes (GDM) by Race and Ethnicity, 2019

Race/Ethnicity[+]	Percentage of Births with GDM (# Births to GDM Mothers/Total # of Live Births)	95% Confidence Interval	Significantly Higher
All Utahn infants	6.2%	5.9–6.4%	
Am. Indian/AK Native	11.3%	8.3–14.3%	Yes
Asian	13.8%	11.7–16.0%	Yes
Black/African Am.	5.2%	3.7–6.7%	No
N. Hawaiian/Pac. Islander	11.6%	8.5–14.8%	Yes
White	5.7%	5.4–5.9%	No
Hispanic/Latino	7.7%	7.1–8.3%	Yes

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
Utah Birth Certificate Database, Office of Vital Records and Statistics, 2019.

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 17: Health Disparities in Family Planning and Birth Spacing

Indicator	Utah	White, non-Hispanic	Other[+], non-Hispanic	Hispanic	Data Year
Percentage of women who reported not being on birth control prior to pregnancy[a]	48.0%	47.8%	52.1%	62.9%	2015
Percentage of women who reported their pregnancy asunintended[a]	19.6%	16.5%	25.7%	31.3%	2019
Percentage of women who reported having a preconception visit during the 12 months prior to pregnancy[a]	20.7%	20.6%	19.5%	15.3%	2015
Percentage of women who reported using contraception postpartum[a]	86.4%	87.1%	77.6%	89.0%	2019
Percentage of women who became pregnant within 6 months of their last birth[b]	4.1%	3.2%	8.6%	5.5%	2017
Percentage of women who became pregnant within 18 months of their last birth[b,c]	31.0%	32.1%	33.6%	25.1%	2017

+Other combines American Indian/Alaska Native, Asian, Black/African American, and Native Hawaiian/Pacific Islander races.
a. Pregnancy Risk Assessment Monitoring System (PRAMS)
b. Utah Office of Vital Records and Statistics (OVRS)
c. National Survey of Family Growth (NSFG)

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 18: Utah Unintended Pregnancy Rates by Race and Ethnicity, 2017–2019

Race/Ethnicity+	Percentage of Women with Unintended Pregnancy (# Unintended/# of Women with Live Birth)	95% Confidence Interval	Significantly Higher
All Utah live births	21.0%	20.6–21.4%	
Am. Indian/AK Native	22.2%	18.0–26.4%	No
Asian	28.7%	25.3–32.1%	Yes
Black/African Am.	41.4%	36.5–46.2%	Yes
N. Hawaiian/Pac. Islander	***	***	***
White, non-Hispanic	18.4%	18.0–18.9%	No
Hispanic/Latino	29.8%	28.5–31.0%	Yes

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
Pregnancy Risk Assessment Monitoring System (PRAMS), 2017–2019.
*** The estimate has been suppressed because 1) the relative standard error is greater than 50% or cannot be determined, 2) the observed number of events is very small and not appropriate for publication.

Table 19: Utah Birth Spacing Rates by Race and Ethnicity, 2018–2019

Race/Ethnicity	Percentage of women who became pregnant within 18 months of their last birth	95% Confidence Interval	Significantly Higher
All Utahns	29.8%	29.4–30.3%	
Am. Indian/AK Native, non-Hispanic	26.8%	22.4–31.1%	No
Asian, non-Hispanic	22.1%	18.8–25.4%	No
Black/African Am., non-Hispanic	33.0%	28.5–37.4%	No
N. Hawaiian/Pac. Islander, non-Hispanic	41.5%	36.6–46.5%	Yes
White, non-Hispanic	30.7%	30.1–31.2%	No
Hispanic/Latino	25.4%	24.4–26.5%	No

Utah Birth Certificate Database, Office of Vital Records and Statistics, 2018–2019.

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 20: Health Disparities in Stress, Anxiety, and Mental Health Issues

Indicator	Utah	White, non-Hispanic	Other[+], non-Hispanic	Hispanic	Data Year
Percentage of women who reported postpartum depression symptoms	15.0%	14.5%	21.%	16.0%	2019
Percentage of women who reported physical abuse during pregnancy	2.1%	2.0%*	***	3.1%*	2019
Percentage of women who reported partner associated stress during pregnancy	22.8%	20.7%	28.6%	28.5%	2019
Percentage of women who reported emotional stress during pregnancy	29.1%	30.0%	19.4%	27.9%	2019
Percentage of women who reported financial stress during pregnancy	47.6%	45.7%	53.6%	48.6%	2019

+Other combines American Indian/Alaska Native, Asian, Black/African American, and Native Hawaiian/Pacific Islander races.
*Use caution in interpretation; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards.
*** The estimate has been suppressed because 1) the relative standard error is greater than 50% or cannot be determined, 2) the observed number of events is very small and not appropriate for publication.
Pregnancy Risk Assessment Monitoring System (PRAMS)

Table 20.1: Percentage of Women in Utah with Signs of Postpartum Depression by Race and Ethnicity, 2017–2019

Race/Ethnicity[+]	Percentage of Women with Signs of Postpartum Depression (# With Signs of Postpartum Depression/# of Women with Live Birth)	95% Confidence Interval	Significantly Higher
All Utah live births	14.8%	14.4–15.1%	
Am. Indian/AK Native	27.9%	23.2–32.6%	Yes
Asian	14.5%	12.1–16.9%	No
Black/African Am.	21.9%*	18.5–25.4%*	Yes*
N. Hawaiian/Pac. Islander	35.5%*	29.0–42.1%*	Yes*
White, non-Hispanic	14.3%	13.9–14.7%	No
Hispanic/Latino	15.0%	14.1–15.9%	No

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
*Use caution in interpretation; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards.
Pregnancy Risk Assessment Monitoring System (PRAMS), 2017–2019.

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 21: Health Disparities in Substance Use

Indicator	Utah	White, non-Hispanic	Other[+], non-Hispanic	Hispanic	Data Year
Percentage of women who reported drinking alcohol in the three months prior to pregnancy[a]	29.3%	28.1%	35.0%	28.8%	2019
Percentage of women who reported drinking in the last three months of pregnancy[a]	2.6%	2.6%	**	3.5%*	2015
Percentage of women of reproductive age who reported smoking cigarettes[b]	6.6%	6.3%	9.3%*	6.6%	2017
Percentage of women who reported smoking cigarettes in the three months prior to pregnancy[a]	6.7%	6.3%	10.9%*	4.3%	2019
Percentage of women who reported any cigarette smoking postpartum[a]	3.9%	3.9%	4.9%*	2.4%*	2019

+Other combines American Indian/Alaska Native, Asian, Black/African American, and Native Hawaiian/Pacific Islander races.
*Use caution in interpreting; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards.
*** The estimate has been suppressed because 1) the relative standard error is greater than 50% or cannot be determined, 2) the observed number of events is very small and not appropriate for publication.
a. Pregnancy Risk Assessment Monitoring System (PRAMS)
b. The Behavioral Risk Factor Surveillance System (BRFSS); Reproductive age: Defined women ages 18–44

Overall, minority women in Utah face disparities in many areas of women's health which likely to contribute to health disparities in maternal mortality and morbidity. These health disparities are documented below, but are in no way comprehensive, given that often, limited granular health-related data exists on minority women in Utah.

Table 21.1: Percentage of Women in Utah Who Smoked During 3rd Trimester by Race and Ethnicity, 2018–2019

Race/Ethnicity[+]	Percentage of Women Smoking During Pregnancy (# Born to Smoker/ # of Live Births)	95% Confidence Interval	Significantly Higher
All Utah infants	2.1%	1.9–2.2%	
Am. Indian/AK Native	4.2%	2.5–6.0%	Yes
Asian	***	***	***
Black/African Am.	3.3%	2.1–4.6%	Yes
N. Hawaiian/Pac. Islander	1.8%*	0.5–3.0%*	No*
White, non-Hispanic	2.3%	2.1–2.5%	Yes
Hispanic/Latino	1.3%	1.0–1.5%	No

+Race is of any ethnicity unless otherwise noted and Hispanic/Latino is of any race.
Utah Birth Certificate Database, Office of Vital Records and Statistics, 2018–2019.
*Use caution in interpreting; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards.
*** The estimate has been suppressed because 1) the relative standard error is greater than 50% or cannot be determined, 2) the observed number of events is very small and not appropriate for publication.

Moving Forward

The data in these profiles indicate minority women in Utah experience health disparities in maternal mortality and morbidity and related indicators. This disproportionate burden of disease and poor health outcomes has far-reaching impacts on individuals, families, and communities.

The Utah Department of Health (UDOH) Office of Health Disparities (OHD) is committed to better understand and address these health disparities. With funding from the Community Program to Improve Minority Health from the US Department of Health and Human Services Office of Minority Health, the OHD will implement a project study and use a collaborative community-based participatory research approach, mobilizing academic, health, and community experts.

Partners will collaborate to develop and implement data-informed modifications for a mobile diabetes unit. The project study will provide services to racial and ethnic minority women of child-bearing age (18–44) living throughout Utah's Wasatch Front region. Utah ranks five among the ten states with the largest population of people who identify as Native Hawaiian/Pacific Islander (NHPI) and considering the severity of these disparities in the NHPI community, the project study will further be modified for this community.

Appendix

Additional Information on Health Equity and Health Disparity Measurement

Health equity is the principle underlying the commitment to reduce and, ultimately, eliminate health disparities by addressing its determinants. Pursuit of health equity means striving for the highest possible standard of health for all people with special attention to the needs of those communities at greatest risk for health disparities.

Health disparities are the metrics used to measure and assess health equity. A health disparity exists when the health status on a given measure in one or more groups that is disadvantaged in opportunity and/or resources is found to be different from other groups. As such, health equity cannot be achieved as long as health disparities persist.

For that reason, when we report on health disparities, it is important to include not only the health indicator (the one that reflects the health disparity), but also other measures that provide additional information about why the population who experiences the health disparity is "disadvantaged in opportunities and/or resources." These additional measures may include race/ethnicity, socio-economic status, educational status, disability status, access to health care, geographic location, etc.

A key component of health disparities measurement is disaggregating data by group. When disaggregated data is collected and reported, it is possible to identify health disparities. For example, in Utah, data on people who identify as Asian and Native Hawaiian/Pacific Islander were traditionally collected in aggregate. However, when data from these groups were collected separately, many health disparities were detected among Native Hawaiians/Pacific Islanders. This includes the discovery of a previously unknown higher rate of infant mortality in Native Hawaiians/Pacific Islanders when compared with Utah overall.

Another important consideration in health disparities measurement is the choice of reference group. Popular options for reference groups for health disparities measurement include the group with the healthiest outcomes, the group that represents the majority of the population, the total or average outcome for all groups, or standard measures such as those determined by Healthy People 2030.

Appendix

Health Disparities Detection in Small Populations

While disaggregating data by group is necessary to detect health disparities, it can be a challenge when working with small populations. For example, in Utah, when data are disaggregated by race, small sample sizes make it difficult or impossible to reliably detect statistically significant differences. Thus, when measuring health disparities in small populations, it is necessary to compile data from a series of years in order to obtain reliable estimates. Even with the compiled data, some samples may not be high enough to yield reliable estimates. In this instance, the data insufficiencies should be noted with asterisks and footnotes.

Other Limitations

The report utilizes various data sources, all of which have different strengths and weaknesses. For example, the Behavioral Risk Factor Surveillance System (BRFSS) is a telephone survey that does not include data from individuals who do not have a telephone or who were unable to respond to the survey in a non-English or non-Spanish language. The data is self-reported, which can introduce different biases. Small numbers of survey respondents who belong to a minority race lower the reliability of the estimates.