

Utah Health Status Update

KEY FINDINGS

- Prior to pregnancy, women were more likely to use tobacco if they were single, younger than age 20, did not attend college, on Medicaid or without insurance, living at 100% of the federal poverty level or greater, and whose pregnancy was not intended (Figure 2).
- 38.1% of women in Utah quit smoking when pregnant while 25.2% cut back, 19.9% quit before pregnancy, 10.9% quit later in the pregnancy, and 6.0% did not quit smoking during pregnancy (Figure 3).
- Setting a deadline to quit smoking helped 32.7% percent of women quit smoking during pregnancy in 2016-2018 (Figure 4).

Tobacco Smoking Around the Time of Pregnancy, Utah PRAMS 2016–2018

Smoking before pregnancy increases the risk of infertility. Smoking during pregnancy increases the risk of spontaneous abortion, prematurity, low birthweight, and sudden infant death syndrome.¹ Despite known harmful perinatal outcomes from smoking, many women continue to smoke before and during pregnancy.

Studies show women who are most able to quit smoking by themselves during pregnancy quit before their first prenatal visit.² Without intervention, women who continue to smoke after their first prenatal visit are more likely to continue smoking during pregnancy.³ Although quitting early in pregnancy produces the most favorable pregnancy outcomes, quitting at any time can yield benefits.

The Utah Pregnancy Risk Assessment Monitoring System (PRAMS) provides state-specific population data on maternal attitudes and experiences before, during, and after pregnancy. This study highlights the smoking status in women and information collected on quit methods before, during, and after pregnancy during the combined years of 2016–2018.

In the three months before pregnancy, 9% of women smoked tobacco daily, 4% smoked daily during the last trimester, and 5% smoked daily at the time they responded to the survey (2–4 months after delivery) (Figure 1). Disparities in pre-pregnancy smoking rates were identified among some sub-populations of women. When compared to the overall birth population, higher rates of pre-pregnancy of smoking were seen among women who were single, younger than age 20, unmarried, did not attend college, on Medicaid or without insurance, living at 100% of the federal poverty level or greater, and whose pregnancy was not intended (Figure 2).

Women who Smoked Tobacco Around the Time of Pregnancy

Figure 1. 9.0% of women reported smoking three months before their pregnancy vs. 3.6% who reported smoking during the last trimester.

■ In the 3 Months Before Pregnancy ■ At the Time of Survey (2-4 months after pregnancy) ■ During the Last 3 Months of Pregnancy



Source: Utah Pregnancy Risk Assessment Monitoring System, 2016–2018.

Feature article continued

Characteristics of Women Who Smoked within Three Months Before Pregnancy

Figure 2. Disparities in smoking rates were seen among sub populations of women younger than age 20, single, did not attend college, on Medicaid or without insurance, living at 100% of the federal poverty level or greater, and whose pregnancy was not intended.

	Population Estimate*	% of women who smoked	95% confidence interval	p-value
Total Birth Population	141,357	9.0	8.0 – 10.0	
Maternal Age (years)				<.0001
< 20	4,902	22.4	16.3 – 28.5	
20-29	76,343	10.5	9.1 – 11.9	
30-39	56,603	6.4	4.9 – 7.8	
≥ 40	3,506	**		
Maternal Race/Ethnicity				NS
White, not Hispanic	109,047	9.0	7.9 – 10.1	
Other race, not Hispanic	8,442	9.9	5.2 – 14.6	
Any race, Hispanic	21,937	7.9	5.7 – 10.2	
Married				<.0001
Yes	116,399	3.9	3.2 – 4.7	
No	24,957	32.8	29.0 – 36.6	
Maternal Education				<.0001
Less than high school	11,193	23.0	19.4 – 26.7	
High school /GED	27,562	19.2	16.8 – 21.6	
Some college/Associates	47,461	7.5	5.5 – 9.5	
Bachelor/Master/Doctoral	51,782	2.0	0.9 – 3.0	
Insurance before pregnancy				<.0001
No Insurance	18,190	16.6	13.3 – 19.8	
Medicaid	12,695	21.7	17.5 – 25.9	
Private	104,558	6.3	5.3 – 7.4	
Federal Poverty Level				<.0001
≤ 100%	23,143	21.9	18.6 – 25.1	
101-138%	14,406	11.7	8.4 – 15.0	
139-185%	17,438	7.2	4.5 – 10.0	
≥ 186%	80,890	5.4	4.3 – 6.5	
Pregnancy Intention				<.0001
Intended	91,443	4.8	3.9 – 5.7	
Not Intended	29,488	16.3	13.4 – 19.2	
Ambivalent	17,402	18.4	14.9 – 21.9	

Source: Utah Pregnancy Risk Assessment Monitoring System, 2016-2018.

p-values indicate differences within sub-populations

NS = not statistically significant

*The population estimate reflects an estimate of the number of women in each category, percentages for women whose categorical data is not known are excluded from the table. These numbers were weighted to represent the birth population for the years 2016, 2017, and 2018 combined.

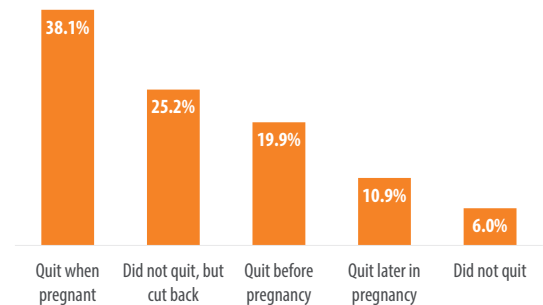
**Insufficient data to report.

Shaded cells show significantly higher percentages of smokers compared with the overall birth population.

The majority (69%) of women who smoked tobacco in the three months before pregnancy, quit smoking before or during their pregnancy. Nearly 40% of women who smoked tobacco in the 3 months before pregnancy said they quit when they became pregnant and another 10% quit later in the pregnancy. Of the women who did not quit, 25% said they cut back on the number of cigarettes smoked (Figure 3).

Quit Status of Women Who Smoked Around the Time of Pregnancy

Figure 3. 38.1% of women quit smoking when they became pregnant, while 6.0% of women did not quit smoking during pregnancy in 2016-2018.

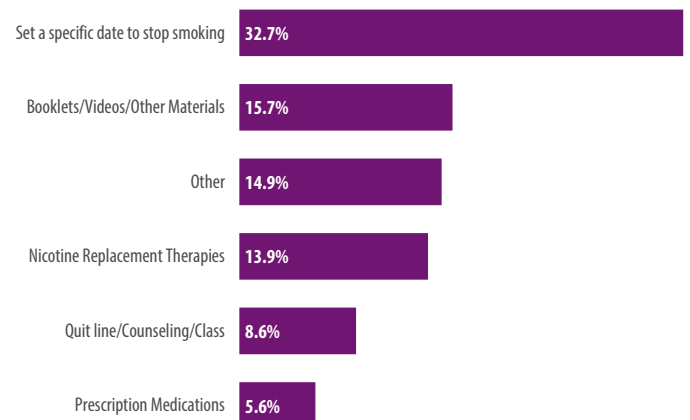


Source: Utah Pregnancy Risk Assessment Monitoring System, 2016-2018.

Most women (79%) who smoked tobacco during pregnancy reported trying to quit cold turkey on their own. Other methods used to quit smoking included setting a quit date, booklets and videos, national quit lines, classes and counseling, nicotine replacement therapies, and prescription medications (Figure 4).

Methods Used by Women to Quit Smoking During Pregnancy

Figure 4. Setting a specific date to quit smoking during pregnancy was the method most used in 2016-2018.



Source: Utah Pregnancy Risk Assessment Monitoring System, 2016-2018.

Feature article continued

The American College of Obstetricians and Gynecologists (ACOG) recommends screening for tobacco use in the pre-pregnancy, pregnancy, and postpartum periods.⁴ Pregnant women who need assistance with smoking cessation can be referred to The Utah Tobacco Quit Line (1-800-Quit-Now) which is a free telephone-coaching program that can help tobacco users end their addiction.

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1. The Health Consequences of Smoking -50 Years of Progress: A Report of the Surgeon General (2014) U.S. Department of Health and Human Services.
 2. DiClemente CC. Dolan-Mullen P. et al. The process of pregnancy smoking cessation: implications for interventions. *Tobac Contr* 2000; 3.
 3. Kondracki A. Prevalence and patterns of cigarette smoking before and during early and late pregnancy according to maternal characteristics: the first national data based on the 2003 birth certificate revision, United States, 2016. *Reproductive Health* (2019) 16:142.
 4. The American College of Obstetrics and Gynecology (ACOG), Tobacco and Nicotine Cessation During Pregnancy, Committee Decision, Number 807, May 2020. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2020/05/tobacco-and-nicotine-cessation-during-pregnancy>

How COVID-19 Disproportionately Affects HII Areas

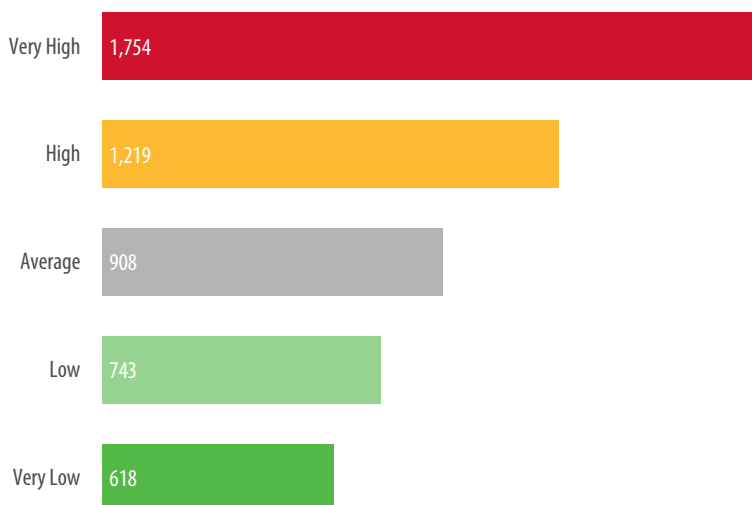
The Utah Health Improvement Index (HII), based on methods used by Singh for the Area Deprivation Index, is a composite index of nine indicators that describes important aspects of demographics, socioeconomic deprivation, economic inequality, and household composition for each of Utah's 99 small areas (Utah Department of Health, 2018).¹ HII is categorized in quintiles (very low, low, average, high, and very high), with very low comprising the most resourced areas and very high comprising the most health deprived areas.

The Utah Department of Health Bureaus of Health Promotion and Epidemiology investigated communities affected by COVID-19 using the Health Improvement Index. Utah reported 31,845 confirmed cases of COVID-19 during March 3, 2020 –July 16, 2020. The rate of COVID-19 cases was nearly three times higher in the very high HII areas (1,754 per 100,000 population) compared with very low HII areas (618 per 100,000). Case rates increased with each ascending level of HII category. Testing rates were similar across HII categories at approximately 14,000 tested per 100,000 population. The percentage of positive tests among all tests administered ranged from 5.3% in the very low HII category to 12.2% in the very high HII category.

HII categories allow us to examine the role of health equity in the different rates of SARS-CoV-2 (COVID-19) infection. COVID-19 has disproportionately affected Utah communities with the greatest need and fewest resources. Infectious disease planning should consider the social determinants of health when allocating COVID-19 prevention resources to protect the state's most vulnerable communities.

Case Rate per 100,000 Population March 1, 2020 – July 16, 2020 by Health Improvement Index

Figure 1. Case rates for COVID-19 increased with the ascending level of the Utah Health Improvement Index.



Source: Utah Health Improvement Index, 2018.

1. Utah Department of Health: <https://health.utah.gov/disparities/data/ohd/UtahHII.pdf>. Retrieved July 2020.

Monthly Health Indicators

Monthly Report of Notifiable Diseases, June 2020	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis (<i>Campylobacter</i>)	35	64	181	255	0.7
COVID-19 (SARS-CoV-2)	Cases updated at https://coronavirus.utah.gov/case-counts/ .				
Shiga toxin-producing <i>Escherichia coli</i> (<i>E. coli</i>)	15	20	83	53	1.6
Hepatitis A (infectious hepatitis)	0	2	7	2	2.9
Hepatitis B, acute infections (serum hepatitis)	1	2	2	8	0.2
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/influenza .				
Meningococcal Disease	0	0	1	0	--
Pertussis (Whooping Cough)	0	38	50	38	1.3
Salmonellosis (<i>Salmonella</i>)	30	38	118	170	0.7
Shigellosis (<i>Shigella</i>)	2	6	21	26	0.8
Varicella (Chickenpox)	2	10	49	114	0.4
West Nile (Human cases)	0	0	0	0	--
Quarterly Report of Notifiable Diseases, 2nd Qtr 2020	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
HIV/AIDS†	17	33	52	61	0.8
Chlamydia	2,171	2,400	4,851	4,943	1.0
Gonorrhea	634	558	1,298	1,113	1.2
Syphilis	18	28	46	54	0.8
Tuberculosis	5	6	14	13	1.1
Medicaid Expenditures (in Millions) for the Month of June 2020	Current Month	Expected/ Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance over (under) Budget
Mental Health Services	\$ 17.8	\$ 17.8	\$ 188.5	\$ 190.0	\$ (1.5)
Inpatient Hospital Services	10.7	10.3	196.0	197.3	(1.3)
Outpatient Hospital Services	2.9	3.1	41.9	43.2	(1.3)
Nursing Home Services	17.8	18.4	306.5	308.0	(1.5)
Pharmacy Services	9.4	9.1	122.5	123.7	(1.2)
Physician/Osteo Services‡	2.3	2.3	61.7	63.1	(1.4)
Medicaid Expansion Services	51.3	51.1	516.7	517.9	(1.2)
TOTAL MEDICAID	268.0	268.3	3,249.0	3,251.1	(2.0)

|| Updates for COVID-19 can be found at <https://coronavirus.utah.gov>. This includes case counts, deaths, number of Utahns tested for disease, and latest information about statewide public health measures to limit the spread of COVID-19 in Utah.

* More information and weekly reports for Influenza can be found at <http://health.utah.gov/epi/diseases/influenza>.

† Diagnosed HIV infections, regardless of AIDS diagnosis.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for West Nile Virus will start in June for the 2020 season.

Monthly Health Indicators

Program Enrollment for the Month of June	Current Month	Previous Month	% Change§ From Previous Month	1 Year Ago	% Change§ From 1 Year Ago
Medicaid	326,851	315,964	+3.4%	287,141	+13.8%
CHIP (Children's Health Ins. Plan)	16,524	16,610	-0.5%	17,528	-5.7%
Commercial Insurance Payments#	Current Data Year	Number of Members	Total Payments	Payments per Member per Month (PMPM)	% Change§ From Previous Year
Medical	2018	10,355,207	\$ 3,146,492,372	\$ 303.86	-0.9%
Pharmacy	2018	8,195,234	543,507,290	66.32	+3.6%
Annual Community Health Measures	Current Data Year	Number Affected	Percent \ Rate	% Change§ From Previous Year	State Rank** (1 is Best)
Obesity (Adults 18+)	2018	618,400	27.8%	+10.1%	13 (2018)
Child Obesity (Grade School Children)	2018	38,100	10.6%	+11.6%	n/a
Cigarette Smoking (Adults 18+)	2018	200,100	9.0%	+0.9%	1 (2018)
Vaping, Current Use (Grades 8, 10, 12)	2019	37,100	12.4%	+11.3%	n/a
Binge Drinking (Adults 18+)	2018	236,700	10.6%	-7.7%	1 (2018)
Influenza Immunization (Adults 65+)	2018	182,300	52.0%	-7.1%	16 (2018)
Health Insurance Coverage (Uninsured)	2018	300,300	9.5%	-3.1%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2018	239	7.6 / 100,000	-16.2%	8 (2018)
Drug Overdose Deaths Involving Opioids	2018	404	12.8 / 100,000	-0.9%	24 (2018)
Suicide Deaths	2018	665	21.0 / 100,000	-1.5%	46 (2018)
Unintentional Fall Deaths	2018	262	8.3 / 100,000	+14.8%	31 (2018)
Traumatic Brain Injury Deaths	2018	604	19.1 / 100,000	-6.5%	28 (2018)
Asthma Prevalence (Adults 18+)	2018	205,500	9.2%	+3.6%	21 (2018)
Diabetes Prevalence (Adults 18+)	2018	185,900	8.3%	+17.5%	12 (2018)
High Blood Pressure (Adults 18+)	2017	532,900	24.5%	+3.8%	3 (2017)
Poor Mental Health (Adults 18+)	2018	418,300	18.8%	+3.1%	20 (2018)
Coronary Heart Disease Deaths	2018	1,624	51.4 / 100,000	-5.8%	4 (2018)
All Cancer Deaths	2018	3,262	103.2 / 100,000	+1.3%	1 (2018)
Stroke Deaths	2018	919	29.1 / 100,000	+1.6%	24 (2018)
Births to Adolescents (Ages 15-17)	2018	363	4.9 / 1,000	-15.3%	10 (2018)
Early Prenatal Care	2018	35,975	76.2%	-1.0%	n/a
Infant Mortality	2018	255	5.4 / 1,000	-7.0%	24 (2017)
Childhood Immunization (4:3:1:3:3:1:4)††	2018	36,400	72.0%	+5.9%	22 (2018)

‡ Medicaid payments reported under Physician/Osteo Services does not include enhanced physician payments.

§ Relative percent change. Percent change could be due to random variation.

Figures subject to revision as new data is processed.

** State rank based on age-adjusted rates where applicable.

†† Data from 2018 NIS for children aged 24 months (birth year 2016).