

Utah Health Status Update

KEY FINDINGS

- Primary care physicians, dentists, and psychiatrists are disproportionately distributed between urban and rural areas in the state (Figure 1).
- Approximately 80% of the population of Utah reside in urban areas, with the remaining 20% in rural areas. Yet, only 10% of primary care physicians, 14% of dentists, and 3% of psychiatrists practice in rural areas.
- Of the 29 rural Utah Small Areas, 79% were fully or partially covered by Primary Care Health Professional Shortage Areas. Comparatively, 61% of the 70 urban Utah Small Areas were fully or partially covered by Primary Care Health Professional Shortage Areas (Figure 2).
- Rural areas (69%) included in quartiles 1 and 2 had the highest burden of primary care needs related to health status and access of all Utah Small Areas compared with 43% of urban Utah Small Areas in the same quartiles (Figure 3).



2020 Utah Primary Care Needs Assessment

Description of Issue and Project

Access to primary medical care, dental, and mental/behavioral health services influences health outcomes.¹ The Utah Department of Health Office of Primary Care and Rural Health (OPCRH) exists to increase access to these services in rural and under-served communities in Utah. The Primary Care Needs Assessment analyzes various indicators of health access, health status, and social determinants of health to understand needs and increase access to healthcare. The uneven distribution of healthcare workforce throughout Utah has contributed to lower access to care resulting in Health Professional Shortage Areas. Health Professional Shortage Areas (HPSAs) are defined as an area with too few healthcare providers to meet the needs of the population.

Methodology

Data was queried from the Behavioral Risk Factor Surveillance System (BRFSS) in Utah's Indicator Based Information System (IBIS) to assess primary health care needs and understand relationships between those needs and the availability of health professionals. These data were averaged and evaluated at the Utah Small Area level ranking from worst to best outcome and averaged for each indicator (Figure 1). The average indicator rankings assigned to each Utah Small Area helped develop an overall primary care needs rank alongside a series of socio-economic status (SES) indicators. Utah Small Areas (SAs) were divided into quartiles, with quartile 1 indicating the highest primary care need with HPSAs, or the worst health outcomes, and quartile 4 indicating the least

Indicators Included in the Primary Care Needs Assessment

Figure 1. Health and socioeconomic indicators used for assessment rankings.

Health Access	Unable to Get Care Due to Cost, Personal Doctor/Health Care Provider, Routine Medical Check (past 12 months), Routine Dental Health Care (past 12 months), Health Care Coverage
Precursors	Overweight/Obese (BMI>25, Diagnosed High Blood Pressure, Diagnosed High Cholesterol
Screenings/ Immunizations	Influenza Vaccination (past 12 months), Tetanus Shot, Clinical Breast Exam (women 40+, past 2 years), Sigmoidoscopy/Colonoscopy (50+), Recommended Colon Cancer Screening, Prostate-Specific Antigen Screening HIV Test, Pap Test (women 18+, past 3 years)
Mental Health	Mental Health (past 30 days), Depressive Disorder Diagnosis, Direct Physical, Emotional, Sexual Abuse, Substance Abuse in Household
Overall Health	General Health Status, Physical Health (past 30 days)
Socioeconomic Status (SES) Rank	Per Capita Median Income, Median Household Income, % of Children in Poverty, % of Persons in Poverty, Educational Attainment (>=bachelor's degree)

Source: Utah Behavioral Risk Factor Surveillance System (BRFSS)

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need and best health outcomes in both urban and rural SAs. For this assessment, a rural area is defined as any SA located in a county with fewer than 100 people per square mile.

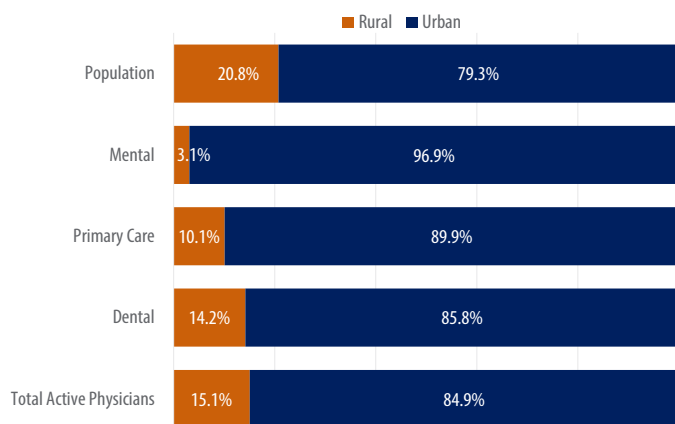
Results

The relationship between primary care needs and HPSA status is evident, especially in rural areas. The areas in the state with the highest primary care need are either fully, or partially covered by a HPSA designation. Of the 29 rural SAs, 79% were fully or partially covered by Primary Care HPSAs. Comparatively, 61% of the 70 urban SAs were fully or partially covered by Primary Care HPSAs.

The provider distribution between rural and urban areas, relative to the percent of the population residing in each area, further illustrates the disproportionate burden of health professional shortages. For example, nearly 21% of the state's population reside in rural areas, however, only 3.1% of psychiatrists and 10.1% of primary care providers are located in rural areas of Utah (Figure 2). For the purpose of this assessment, the following specialties are considered primary care: family practice, internal medicine, obstetrics/gynecology, pediatrics, general dentistry, and psychiatry.

Percentage of Rural and Urban Healthcare Availability Relative to Total Population

Figure 2. Rural areas were most affected by Health Professional Shortage Areas in 2020 with psychiatry and primary care among the most burdened categories.



Source: Shortage Designation Management System, Eligible Provider Report, 2020, Health Resources and Services Administration

Burden of Health Professional Shortage Areas by Utah Small Areas Relative to Primary Care Needs Rank

Figure 3. Areas in quartiles 1 and 2 Primary Care Needs Rank have a higher burden of Health Professional Shortage Areas with 79% of rural Utah Small Areas fully or partially covered by primary care Health Professional Shortage Areas.

	Partially covered by Health Professional Shortage Areas	Fully covered by Health Professional Shortage Areas	No Health Professional Shortage Areas
Q1 Rural	13-57.3 Blanding/Monticello, 13-57.4 San Juan (Other)	1-1 Brigham City, 8-40.1 Tooele County (Other), 9-53.2 Duchesne County, 2-55.1 Richfield/Monroe/Salina, 5.1-56.1 Carbon County, 5.1-56.2 Emery County, 6-59.3 Hurricane/La Verkin, 6-60 Cedar City	
Q1 Urban	12-5 Ben Lomond, 12-7 Ogden (Downtown), 4-20 Magna, 4-25 South Salt Lake, 4-29.1 Kearns V2, 4-30 Taylorsville (East)/Murray (West), 4-30.1 Taylorsville (West), 4-31 Murray	4-17 Salt Lake City (Rose Park), 4-21.1 Salt Lake City (Glendale) V2, 4-23.1 West Valley (East) V2, 10-41.1 Eagle Mountain/Cedar Valley, 10-48.1 Provo (West City Center)	4-32 Midvale, 4-36.1 Sandy (West)
Q2 Rural	2-54.1 Nephi/Mona, 2-54.2 Delta/Fillmore, 2-54.4 Central (Other), 6-61 Southwest LHD (Other)	1-2.1 Box Elder County (Other) V2, 8-40.2 Tooele Valley, 9-53.1 Daggett and Uintah County, 5.1-57.1 Grand County, 6-59.1 Washington County (Other) V2	2-54.3 Sanpete Valley
Q2 Urban	12-8 South Ogden, 12-9 Roy/Hooper, 12-10 Riverdale, 4-22.1 West Valley (Center), 4-22.2 West Valley (West) V2, 4-24.1 Salt Lake City (Downtown) V2	10-44 Orem (North), 10-45 Orem (West), 10-47 Provo/BYU, 10-48.2 Provo (East City Center), 10-49.2 Spanish Fork, 10-49.3 Springville	3-11 Clearfield Area/Hooper, 3-12 Layton/South Weber, 4-34.1 West Jordan (Southeast)
Q3 Rural		1-2.2 Tremonton, 6-58 St. George, 6-59.2 Washington City, 6-59.4 Ivins/Santa Clara	11-52 Wasatch County
Q3 Urban	4-33.2 West Jordan (Northeast) V2	1-3.1 Logan V2, 1-4.2 Hyrum, 1-4.3 Smithfield, 10-41.2 Lehi, 10-43 Pleasant Grove/Lindon, 10-49.1 Salem City, 10-50.1 Utah County (South) V2, 10-50.2 Payson	3-13.2 Syracuse, 3-14.1 Centerville, 3-15.1 North Salt Lake, 3-16 Bountiful, 4-26.1 Salt Lake City (Sugar House), 4-27.1 Holladay V2, 4-34.2 West Jordan (West)/Copper-ton, 4-35.2 Daybreak, 4-36.2 Sandy (Center) V2, 4-39.2 Riverton/Bluffdale, 4-39.3 Herriman
Q4 Rural			1-4.1 Cache County (Other)/Rich County (All) V2, 12-6.2 Morgan County, 7-51.1 Park City, 7-51.2 Summit County (East)
Q4 Urban		4-18 Salt Lake City (Avenues), 4-19.1 Salt Lake City (Foothill/East Bench), 4-24.2 Salt Lake City (Southeast Liberty), 4-28 Cottonwood, 10-41.3 Saratoga Springs, 10-42.1 American Fork, 10-42.2 Alpine, 10-46 Orem (East), 10-49.4 Mapleton	1-3.2 North Logan, 12-6.1 Weber County (East), 3-13.1 Kaysville/Fruit Heights, 3-14.2 Farmington, 3-15.2 Woods Cross/West Bountiful, 4-26.2 Millcreek (South), 4-26.3 Millcreek (East), 4-35.1 South Jordan V2, 4-37 Sandy (Northeast), 4-38 Sandy (Southeast), 4-39.1 Draper

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In this assessment, SAs were divided into quartiles based on primary care needs rank. Quartiles 1 and 2 indicate the greatest primary care need. Rural SAs made up 69% of quartiles 1 and 2. Comparatively, only 43% of urban areas fall within quartiles 1 and 2 (Figure 3) illustrating the increased burden facing rural communities.

Suggested Actions

The OPCRH is taking steps such as recruitment and retention initiatives in rural and underserved areas in the state to address health workforce shortages across Utah. The OPCRH also assembled the Utah Health Care Workforce Coalition to develop strategies and decrease health professional shortages across the state. In addition to addressing workforce shortages, the OPCRH strengthens the rural health care delivery system by supporting rural hospitals and health clinics by helping increase their capacities to provide quality care to communities with the highest needs. This support revolves around quality improvement, hospital/clinic financial and operational improvement, population health management, and rural EMS integration.

The data presented in this article is only a portion of the work completed, or in process, for the Utah Primary Care Needs Assessment. A final report with more comprehensive findings and recommendations will be published by September 2021.

Additional recommendations include: develop a plan to maintain and improve rural health care provider loan repayment, such as the Rural Physicians Loan Repayment Program and the Health Care Workforce Financial Assistance Program; executive branch support for the Utah Health Care Workforce Coalition; and hire and train more community health workers in rural communities that can help reduce the disparities between urban and rural areas. Additionally, the OPCRH collects data and reports, disseminates relevant rural health information to statewide partners and

stakeholders, and serves as a clearinghouse for rural health resources and information.

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1. Macaia D, Lapão LV. The current situation of human resources for health in the province of Cabinda in Angola: is it a limitation to provide universal access to healthcare? Hum Resour Health [Internet]. BioMed Central; 2017 Dec 28 [cited 2018 Mar 26];15(1):88.: <http://www.ncbi.nlm.nih.gov/pubmed/29282067>
 2. Bureau of Health Workforce, Health Resources and Services Administration. "What Is Shortage Designation?" What Is Shortage Designation? | Bureau of Health Workforce, Feb. 2021, bhw.hrsa.gov/workforce-shortage-areas/shortage-designation#hpsas
 3. Retrieved September 2020 from the Utah Department of Health, Indicator-Based Information System for Public Health Web site: <http://ibis.health.utah.gov>

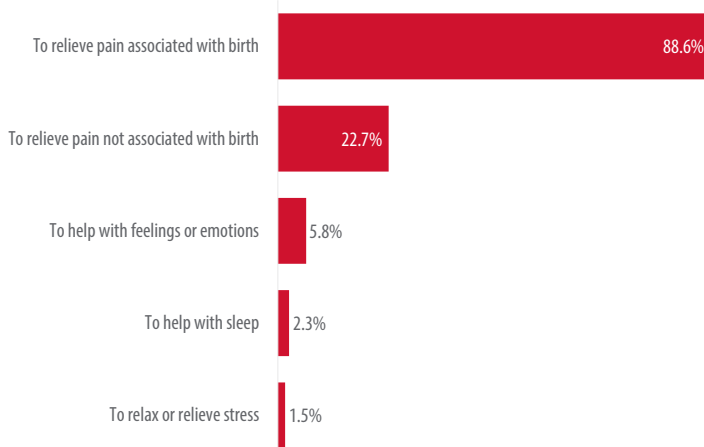
Use of Postpartum Prescription Pain Relievers

On average, 323 people die each year from a prescription drug overdose in Utah.¹ From 2017 to 2018, there was an observed increase in the number of opioid-related deaths in Utah and the number of prescription opioid overdose deaths excluding heroin increased by 1.8%.² Women are commonly exposed to opioids after birth, especially after a cesarean delivery. Studies have repeatedly reported on the association between initial opioid exposure and the risk of chronic opioid use and overdose deaths.³

Data from a recent Pregnancy Risk Assessment Monitoring System (PRAMS) Opioid Call-back Survey* indicate 25.8% of women took prescription pain relievers at some point within nine months postpartum. The most common prescription opioids taken were Hydrocodone (53.3%) and Oxycodone (45.7%). Of the women taking prescription pain relievers, most obtained them in the hospital after delivery (85.9%) and from an obstetrician/gynecologist, midwife, or prenatal care provider (78.2%). Additionally, a portion of women obtained prescription pain relievers from family members and friends without a prescription or used pain relievers left over from an old prescription (7.9%). The most frequently reported reason for taking prescription pain relievers was to relieve pain associated with birth (88.6%).

Reasons for using Prescription Pain Relievers Postpartum

Figure 1. Some women reported using prescription pain relievers postpartum for reasons other than for pain associated with birth.



Source: [Utah Pregnancy Risk Assessment Monitoring System \(PRAMS\)](#)

To address the need to reduce opioid exposure without adversely affecting pain management, the American College of Obstetrics and Gynecologists (ACOG) makes the following recommendation: "Because of the variation in types and intensity of pain women experience during the early postpartum period, as well as the concern that one in 300 opioid-naïve patients exposed to opioids after cesarean birth will become persistent users of opioids, a stepwise approach using a multimodal combination of agents can enable obstetrician–gynecologists and other obstetric care providers to effectively individualize pain management for women in the postpartum period."⁴ For more information about the PRAMS Opioid Call-back survey, please contact Nicole Stone at nstone@utah.gov.

1. CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC: 2018. <https://wonder.cdc.gov/>.

2. Violence and Injury Prevention Program, Utah Department of Health Legislative Report <https://vippp.health.utah.gov/wp-content/uploads/Opiate-Overdose-Outreach-Pilot-Program-Legislatibe-Factsheet19.pdf>

3. Osmundson SS, Min JY, Grijalva CG. Opioid prescribing after childbirth: overprescribing and chronic use. *Curr Opin Obstet Gynecol.* 2019 Apr;31(2):83-89.

4. ACOG Committee Opinion No. 742: Postpartum Pain Management, *Obstetrics & Gynecology*: July 2018 - Volume 132 - Issue 1 - p e35-e43 [doi: 10.1097/AOG.0000000000002683](https://doi.org/10.1097/AOG.0000000000002683)

COVID-19 Rapid Testing Model Demonstrates Reduced Disease Burden

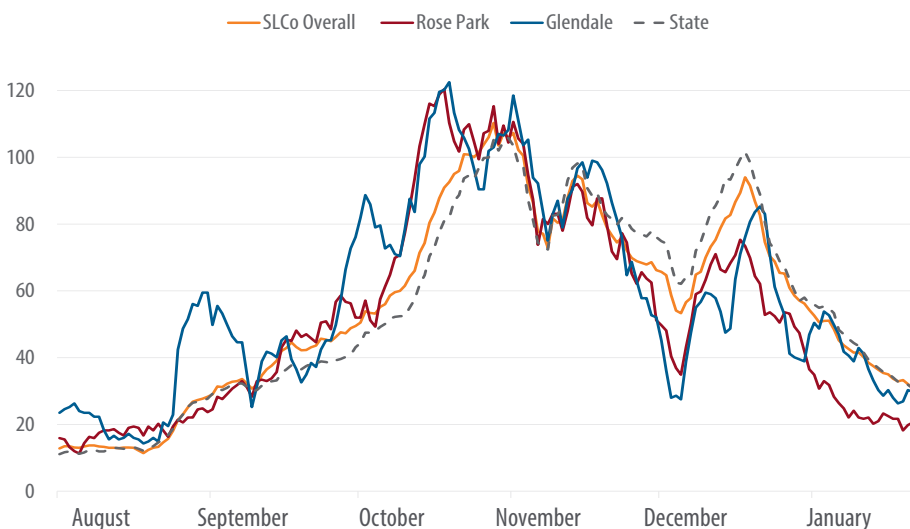
COVID-19 pandemic response efforts have greatly relied on the uptake and adherence to non-pharmaceutical interventions (NPIs) such as social distancing, mask wearing, contact tracing, and isolation or quarantine of people who tested positive for COVID-19 or have been exposed. These interventions reduced the spread of the virus and helped save lives over the past year. The success of these NPIs, specifically isolation and quarantine, are dependent on testing and resource availability, as well as established trust within the communities public health serves.

Rose Park and Glendale, two of Salt Lake County's most underserved communities, have experienced case rates equal to or above those of Salt Lake County's overall case rate and are consistently above the overall state case rate (Figure 1). To reduce the disease burden in these communities, the Utah Department of Health and Salt Lake County Health Department partnered with the Centers for Disease Control and Prevention (CDC) to establish a free community testing center at the fairgrounds in Rose Park beginning December 4, 2020. This testing center is unique because it offers free and rapid antigen testing and conducts on-site case investigation and contact tracing. Individuals who utilize this testing site can receive same-day rapid test results and obtain resource bags which include food, first aid, and hygiene products. This testing model allows public health to immediately provide isolation and quarantine instructions when applicable.

Analysis of this testing site showed case rates in Rose Park and Glendale dropped below Salt Lake County's case rate and the Utah overall case rate approximately two weeks after the site's opening and these communities maintained their lowered rates. These three factors—rapid testing results, access to resources, and prompt delivery of public health guidance— have proven to be highly effective public health interventions. Most notably, this testing model has demonstrated one of the most critical successes—reduced disease burden in these communities. Further analyses are ongoing to assess the broader impact of this testing model. For more information on COVID-19 in Utah, visit <https://coronavirus.utah.gov/>.

7 Day Average Case Rate per 100,000 people, August 2020 to February 2021

Figure 1. The Glendale and Rose Park neighborhoods in Salt Lake County had higher COVID-19 case rates than both overall county and state rates until December 2020 when a new free community testing center opened at the state fairgrounds.



Source: Utah Electronic Disease Surveillance System (EpiTrax)

Monthly Health Indicators

Monthly Report of Notifiable Diseases, February 2021	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>)	26	32	52	68	0.8
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>)	2	11	16	15	1.0
Hepatitis A (infectious hepatitis)	0	1	3	15	0.2
Hepatitis B, acute infections (serum hepatitis)	0	1	1	2	0.5
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/influenza .				
Meningococcal Disease	0	1	0	0	0.0
Pertussis (Whooping Cough)	0	28	2	56	0.0
Salmonellosis (<i>Salmonella</i>)	5	21	17	44	0.4
Shigellosis (<i>Shigella</i>)	5	5	10	9	1.1
Varicella (Chickenpox)	5	20	12	45	0.3
Quarterly Report of Notifiable Diseases, 4th 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†	31	36	81	97	0.8
Chlamydia	2,648	2,558	7,545	7,500	1.0
Gonorrhea	777	660	2,085	1,772	1.2
Syphilis	25	32	76	87	0.9
Tuberculosis	5	6	19	20	1.0
Medicaid Expenditures (in Millions) for the Month of February 2021	Current Month	Expected/ Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance over (under) Budget
Mental Health Services	\$16.8	\$16.3	\$138.8	\$139.6	\$(0.8)
Inpatient Hospital Services	\$16.1	\$16.9	\$123.5	\$124.9	\$(1.4)
Outpatient Hospital Services	\$3.0	\$2.1	\$23.0	\$23.5	\$(0.4)
Nursing Home Services	\$18.8	\$19.4	\$196.6	\$197.5	\$(0.9)
Pharmacy Services	\$10.7	\$9.8	\$83.9	\$84.2	\$(0.3)
Physician/Osteo Services‡	\$3.5	\$3.8	\$33.3	\$34.1	\$(0.8)
Medicaid Expansion Services	\$66.8	\$66.1	\$502.2	\$502.3	\$(0.1)
***TOTAL MEDICAID	\$308.7	\$309.5	\$2,480.2	\$2,481.4	\$(1.3)

|| 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 2021 season.

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

***The Total Medicaid Program costs do not include costs for the PRISM project.

Monthly Health Indicators

Program Enrollment for the Month of February	Current Month	Previous Month	% Change [§] From Previous Month	1 Year Ago	% Change [§] From 1 Year Ago
Medicaid	390,485	388,921	+0.4%	292,952	+33.3%
CHIP (Children's Health Ins. Plan)	15,212	15,797	-3.7%	16,814	-9.5%
Commercial Insurance Payments [#]	Current Data Year	Number of Members	Total Payments	Payments per Member per Month (PMPM)	% Change [§] From Previous Year
Medical	2019	11,881,900	\$ 3,569,847,963	\$ 303.86	-1.1%
Pharmacy	2019	10,423,251	\$ 774,925,995	\$ 66.32	+12.1%
Annual Community Health Measures	Current Data Year	Number Affected	Percent \ Rate	% Change [§] From Previous Year	State Rank ^{**} (1 is Best)
Suicide Deaths	2019	653	20.4 / 100,000	-3.2%	40 (2019)
Asthma Prevalence (Adults 18+)	2019	219,900	9.90%	+6.9%	29 (2019)
Poor Mental Health (Adults 18+)	2019	459,100	20.70%	+10.1%	28 (2019)
Influenza Immunization (Adults 65+)	2019	223,600	63.90%	+22.8%	22 (2019)
Drug Overdose Deaths Involving Opioids	2019	496	15.5 / 100,000	-21.6%	20 (2019)
Unintentional Fall Deaths	2019	345	10.8 / 100,000	+29.0%	17 (2019)
Infant Mortality	2019	250	5.3 / 1,000	-7.0%	17 (2018)
Traumatic Brain Injury Deaths	2019	1,230	19.3 / 100,000	+1.1%	15 (2019)
Obesity (Adults 18+)	2019	605,345	29.9%	+10.1%	15 (2019)
Diabetes Prevalence (Adults 18+)	2019	190,500	8.50%	+1.3%	13 (2019)
Births to Adolescents (Ages 15-17)	2019	289	3.8 / 1,000	-21.8%	10 (2018)
Childhood Immunization (4:3:1:3:3:1:4) ^{††}	2019	49,400	80.00%	0.08	7 (2019)
Motor Vehicle Traffic Crash Injury Deaths	2019	231	7.2 / 100,000	-4.50%	7 (2019)
High Blood Pressure (Adults 18+)	2019	532,900	27.00%	+10.3%	7 (2019)
Cigarette Smoking (Adults 18+)	2019	175,800	8.00%	-12.0%	1 (2019)
Binge Drinking (Adults 18+)	2019	240,000	11.10%	+4.4%	1 (2019)
Coronary Heart Disease Deaths	2019	1,631	50.9 / 100,000	-1.0%	1 (2019)
All Cancer Deaths	2019	3,289	102.6 / 100,000	-0.6%	1 (2019)
Stroke Deaths	2019	912	28.4 / 100,000	+1.6%	1 (2019)
Child Obesity (Grade School Children)	2018	38,100	10.60%	+11.6%	n/a
Vaping, Current Use (Grades 8, 10, 12)	2019	37,100	12.40%	+11.3%	n/a
Health Insurance Coverage (Uninsured)	2019	277,200	9.50%	-3.1%	n/a
Early Prenatal Care	2019	35,560	75.90%	-0.4%	n/a

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

[#] Figures subject to revision as new data is processed.

^{**} State rank in the United States based on age-adjusted rates where applicable.

^{††} Data from 2019 NIS for children aged 24 month (birth year 2017).