

# **Utah Health Status Update:**

# The Hidden Epidemic of Obesity: A Closer Look at Unhealthy Weight

April 2019

Obesity (or a body mass index of 30 kg/m² or higher) increases the risk of serious diseases and health conditions, such as type 2 diabetes, hypertension, heart disease, arthritis, some types of cancers, and disabilities. Recent data from the National Health and Nutrition Examination Survey (NHANES) illustrate the high rates of obesity in the U.S. for both adults and youth, showing nearly 40% (39.8%) of adults as obese, and 20.6% of adolescents aged 12–19 (NHANES 2015–2016).¹

Utah adults have consistently had one of the lowest rates of obesity in the U.S. In 2017, Utah tied with Montana for having the fifth lowest obesity rate in the nation (25.3% of adults).<sup>2</sup> However, this rate is still unacceptably high.

Many studies examine the trends in "unhealthy weight," a condition that includes overweight (body mass index 25–29.9 kg/m<sup>2</sup>) in addition to obesity. In Utah, the percentage of adults who were at unhealthy weight has remained fairly stable over the past decade, at about 58% (Utah BRFSS 1999-2017).3 A closer look at the trends among adults at an unhealthy weight show there has been a substantial shift in the proportion who are obese (see Figure 1). Among Utah adults at an unhealthy weight, the percentage who were obese rose from 32.8% in 1999 to a striking 41.7% in 2017. This represents a nearly 30% increase of adults who moved to a higher risk level of unhealthy weight.

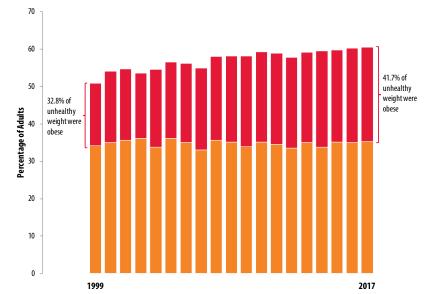
#### **KEY FINDINGS**

- From 1999 to 2017, the proportion of Utah adults at an unhealthy weight who were obese increased from 33% to 42%.
- From 1999 to 2017, the proportion of Utah high school aged youth at an unhealthy weight who were obese increased from 38% to 42%.
- The risk of heart disease or diabetes is dramatically higher among adults who are obese compared to adults who are not obese.

The most recent data from *The State of Obesity* showed that youth aged 10–17 in Utah have the lowest rate of obesity in the U.S., 8.7%. Nevertheless, youth face the same rising proportion of obesity as adults. While the percentage of Utah high school aged youth who were at an unhealthy weight increased

#### **Overweight or Obese Adults**

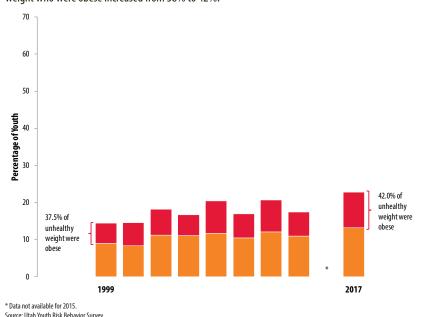
Figure 1. From 1999 to 2017 in Utah, the proportion of adults at an unhealthy weight who were obese increased from 33% to 42%.



Source: Utah Behavioral Risk Factor Surveillance System

### **Overweight or Obese Youth**

*Figure 2*. From 1999 to 2017 in Utah, the proportion of high school aged youth at an unhealthy weight who were obese increased from 38% to 42%.



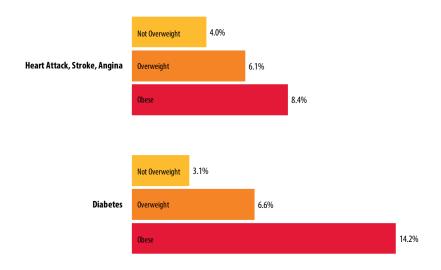
between 1999 and 2017, the increase in the obesity rate alone was much greater (Figure 2). The proportion of youth at an unhealthy weight who were obese rose from 37.5% in 1999 to 42.0% in 2017. This represents a 12% increase of youth who moved to a higher risk level of unhealthy weight.

The greater influence of obesity on the prevalence of certain chronic conditions is illustrated in Figure 3. The prevalence of heart attack, stroke, and/or angina was nearly 40% higher for Utah adults who were obese compared to those who were overweight (8.4% vs. 6.1%). The greater association of obesity with diabetes was even more dramatic. The prevalence of diabetes was more than two times higher for adults who were obese compared to those who were overweight (14.2% vs. 6.6%). While data were not available to show a causal relationship, the greater association between obesity and each of these two conditions is clear.

In addition to individual health concerns, the impact on the rising proportion of obesity has significant economic and social implications.<sup>5</sup> As obesity rates climb, costs for medical care will increase. For example, at least one study showed adults who were obese had medical care costs that were 42% higher than adults at a normal weight.<sup>6</sup> Public health interventions can play an essential role in providing opportunities for individuals to make the lifestyle changes needed to maintain a healthy weight. Staff in the Utah Department of Health Healthy Living through Environment, Policy, and Improved Clinical Care (EPICC) Program work with worksites, schools, childcare centers, healthcare systems, and communities to create environmental changes and develop policies that promote healthy eating and active living. For example, staff conduct trainings and provide resources to encourage physical activity during the school day as well as outside of schools by promoting family and community involvement through Walk and Bike to School days and Safe Routes to School. The EPICC program staff have been instrumental in working with city and county planners to promote the development of multiuse trails that make it easy for local residents to increase their physical activity through walking. Staff even work with the youngest populations in Utah by helping childcare center directors establish policies that increase physical activity and improve nutrition. Efforts such as these can lead to reduced incidence of serious health

## Diabetes and/or Heart Disease by Weight Category

*Figure 3*. During 2016–2017, the prevalence of heart attack, stroke, and/or angina was nearly 40% higher for Utah adults who were obese compared to those who were overweight or not overweight.



Source: Utah Behavioral Risk Factor Surveillance System

problems and ultimately improve the health of the population. For more information, visit <u>choosehealth.utah.gov</u>.

In summary, while the percentages of adults and youth at an unhealthy weight in Utah appear to be fairly steady over time, the proportion with the most unhealthy weight (obese), is increasing. Being at an unhealthy weight, whether overweight or obese, increases the risk for poor health outcomes, but the risk is intensified for people who are obese.

- 1. Hales, CM, Carrroll, MD, Fryar, CD, Ogden, CL. Prevalence of Obesity. Among Adults and Youth: United States, 2015-2016, NCHS Data Brief, No. 288, October 2017 <a href="https://www.cdc.gov/nchs/data/databriefs/db288.pdf">https://www.cdc.gov/nchs/data/databriefs/db288.pdf</a>.
- 2. The State of Obesity in Utah. The State of Obesity. Available at <a href="https://stateofobesity.org/states/ut">https://stateofobesity.org/states/ut</a>.
- 3. Utah Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Utah Department of Health.
- 4. Utah Youth Risk Behavior Survey, Utah State Office of Education.
- 5. Urban Design 4 Health, Inc. Economic Impacts of Active Transportation: Utah Active Transportation Benefits Study, March 2017. Available at <a href="https://www.bikeutah.org/atbenefitsstudy">https://www.bikeutah.org/atbenefitsstudy</a>. 6. Finkelstein EA, Trogdon JG, Cohen JW, Dietz W. Annual Medical Spending Attributable to Obesity: Payer-and Service-Specific Estimates. *Health Affairs*, 28(5): w822-831, 2009.

#### **UDOH ANNOUNCEMENT:**

The Centers for Medicare and Medicaid Services (CMS) authorized the Utah Department of Health (UDOH) to expand its Medicaid program to approximately 70,000–90,000 Utah adults. The newly eligible individuals can apply for coverage at <a href="https://medicaid.utah.gov/apply-medicaid">https://medicaid.utah.gov/apply-medicaid</a>. To be eligible for the new program, individuals must be a Utah resident between the ages of 19 and 64, be a U.S. citizen or legal resident, and meet income requirements. More information can be found at <a href="https://medicaid.utah.gov/expansion">https://medicaid.utah.gov/expansion</a>.

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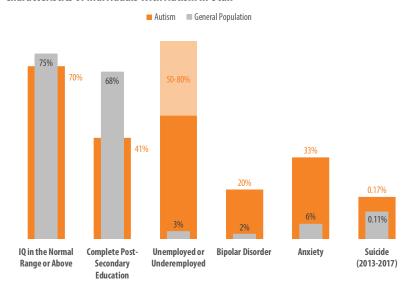
#### **Breaking News, April 2019**

#### **Autism Prevalence**

Autism Spectrum Disorder (ASD) is a developmental disability that can cause significant social, communication, and behavioral challenges. In Utah, the prevalence of ASD among 8-year-old children increased steadily between 2002 through 2010. Since then, the prevalence estimates of ASD have leveled off. Current prevalence estimates suggest that 1 in 60 8-year-old children have ASD, however, recent research suggests that approximately 1 in 3 children with ASD are not identified until after age eight, suggesting that more accurate prevalence rates are closer to 1 in 50 by age 16.

Approximately, 70% of individuals with ASD have an IQ in the normal range or above which is similar to 75% of individuals in the general population. However, only 41% of individuals with ASD completed post-secondary education (compared to 68% of the general population) and an estimated 50–80% of adults with ASD are unemployed or

#### Characteristics of Individuals With Autism in Utah



Sources: Utah Registry of Autism and Developmental Disabilities, University of Utah, Utah Population Database, Utah Office of the Medical Examiner, Intermountain Healthcare, Department of Workforce Services, CDC's Utah Autism and Developmental Disabilities Monitoring Network

underemployed (compared to 3%). Additionally, 33% of individuals with ASD suffer from anxiety (compared to 6%), 20% suffer from bipolar disorder (compared to 2%), and 0.17% (compared to 0.11%) may be at higher risk for suicide.

## Community Health Spotlight, April 2019

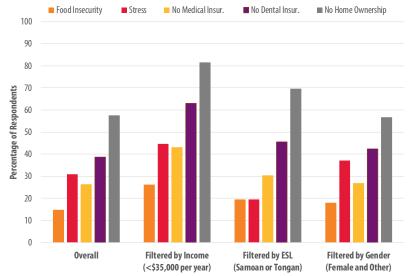
#### Pacific Islanders in Southwestern Utah

Between September 2018 and February 2019, the Utah Department of Health Office of Health Disparities in collaboration with the Southern Utah Pacific Islander Coalition and the University of Utah Physician Assistant Program, conducted a perceptions survey among Pacific Islander (PI) adults living in southwest Utah. The purpose of the survey was to find out how PIs in southwest Utah understand and feel about their health, life, and neighborhood environment. Online and paper surveys were offered. An online survey was available in English; paper surveys were available in English, Samoan, and Tongan. Out of 191 responses initiated, 155 surveys were completed, exceeded the targeted sample size (with a 5% margin of error, 80% confidence,

and 50% expected frequency, the targeted sample size was 149). Because the total adult PI population for Washington County is 1,606<sup>1</sup>, having 155 surveys completed reflects a good participation.

The results from the survey were analyzed from a health equity perspective. Responses were filtered by household income (<\$35,000 per year vs. >\$35,000/year), English as a second language (Samoan or Tongan speakers vs English speakers), and gender (female and other vs male). Then, the responses were compared with the overall response (aggregated of all the respondents). The accompanying figure is a brief snapshot of some of the results obtained. These results will be used to implement future projects with a health equity perspective. The report will be available soon on the Office of Health Disparities website.

# Social Determinants of Health Among Pacific Islanders in Southwest Utah



Source: Pacific Islanders in Southwest Utah survey

 $<sup>1.\,2013-17\</sup> American\ Community\ Survey\ 5-Year\ Estimates\ Race$  Alone or in Combination.

# Monthly Health Indicators Report

(Data Through February 2019)

| Monthly Report of Notifiable Diseases,<br>February 2019   | Current Month<br># Cases               | Current Month # Expected Cases (5-yr average)                   | # Cases YTD                                | # Expected YTD<br>(5-yr average)           | YTD Standard<br>Morbidity Ratio<br>(obs/exp) |  |  |
|---|--|---|--|--|--|--|--|
| Campylobacteriosis (Campylobacter)  | 35                                     | 27  | 72   | 58   | 1.2  |  |  |
| Shiga toxin-producing Escherichia coli (E. coli)  | 6                                      | 3   | 15   | 5  | 3.0  |  |  |
| Hepatitis A (infectious hepatitis)  | 6                                      | 6   | 6  | 13   | 0.5  |  |  |
| Hepatitis B, acute infections (serum hepatitis)   | 1                                      | 1   | 5  | 2  | 2.8  |  |  |
| Influenza*  | Weekly up                              | Weekly updates at http://health.utah.gov/epi/diseases/influenza |  |  |  |  |  |
| Meningococcal Disease   | 0                                      | 0   | 0  | 0  | 0.0  |  |  |
| Pertussis (Whooping Cough)  | 11                                     | 41  | 29   | 86   | 0.3  |  |  |
| Salmonellosis (Salmonella)  | 10                                     | 23  | 29   | 47   | 0.6  |  |  |
| Shigellosis (Shigella)  | 2                                      | 4   | 7  | 8  | 0.9  |  |  |
| Varicella (Chickenpox)  | 6                                      | 23  | 33   | 52   | 0.6  |  |  |
| Quarterly Report of Notifiable Diseases, 4th<br>Qtr 2018  | Current Quarter<br># Cases             | Current Quarter # Expected Cases (5-yr average)                 | # Cases YTD                                | # Expected YTD<br>(5-yr average)           | YTD Standard<br>Morbidity Ratio<br>(obs/exp) |  |  |
| HIV/AIDS <sup>†</sup>   | 15                                     | 30  | 115  | 121  | 0.9  |  |  |
| Chlamydia   | 2,616                                  | 2,135   | 10,534                                     | 8,784                                      | 1.2  |  |  |
| Gonorrhea   | 692                                    | 396   | 2,863                                      | 1,718                                      | 1.7  |  |  |
| Syphilis  | 44                                     | 19  | 161  | 81   | 2.0  |  |  |
| Tuberculosis  | 3                                      | 8   | 18   | 30   | 0.6  |  |  |
|   |  |   |  |  |  |  |  |
| Medicaid Expenditures (in Millions) for the Month of February 2019  | <b>Current</b><br><b>Month</b>         | Expected/<br>Budgeted<br>for Month                              | Fiscal YTD                                 | Budgeted<br>Fiscal YTD                     | Variance -<br>over (under)<br>budget         |  |  |
|   | Current Month \$ 13.6                  | Expected/ Budgeted for Month                                    | \$ 103.1                                   | \$ Budgeted Fiscal YTD                     | Variance - over (under) budget               |  |  |
| Month of February 2019  |  |   |  |  |  |  |  |
| Month of February 2019  Mental Health Services  | \$ 13.6                                | \$ 13.4   | \$ 103.1                                   | \$ 104.4                                   | \$ (1.3)                                     |  |  |
| Month of February 2019  Mental Health Services Inpatient Hospital Services  | \$ 13.6<br>24.2                        | \$ 13.4<br>24.5   | \$ 103.1<br>156.9                          | \$ 104.4<br>158.9                          | \$ (1.3)<br>(2.0)                            |  |  |
| Month of February 2019  Mental Health Services  Inpatient Hospital Services  Outpatient Hospital Services                                       | \$ 13.6<br>24.2<br>4.3                 | \$ 13.4<br>24.5<br>4.6  | \$ 103.1<br>156.9<br>27.8                  | \$ 104.4<br>158.9<br>28.8                  | \$ (1.3)<br>(2.0)<br>(1.0)                   |  |  |
| Month of February 2019  Mental Health Services Inpatient Hospital Services Outpatient Hospital Services Nursing Home Services                   | \$ 13.6<br>24.2<br>4.3<br>44.2         | \$ 13.4<br>24.5<br>4.6<br>44.4                                  | \$ 103.1<br>156.9<br>27.8<br>180.2         | \$ 104.4<br>158.9<br>28.8<br>181.6         | \$ (1.3)<br>(2.0)<br>(1.0)<br>(1.4)          |  |  |
| Month of February 2019  Mental Health Services Inpatient Hospital Services Outpatient Hospital Services Nursing Home Services Pharmacy Services | \$ 13.6<br>24.2<br>4.3<br>44.2<br>11.3 | \$ 13.4<br>24.5<br>4.6<br>44.4<br>10.5                          | \$ 103.1<br>156.9<br>27.8<br>180.2<br>86.4 | \$ 104.4<br>158.9<br>28.8<br>181.6<br>87.4 | \$ (1.3)<br>(2.0)<br>(1.0)<br>(1.4)<br>(1.0) |  |  |

<sup>\*</sup> Influenza activity increased in February 2019 with moderate season severity. 1,225 influenza-associated hospitalizations have been confirmed from September 30, 2018 to February 28, 2019. More information and weekly reports can be found at http://health.utah.gov/epi/diseases/influenza/surveillance/2018-2019/ Utah Weekly Influenza Report.html.

| Program Enrollment for the Month of February 2019   | <b>Current</b><br><b>Month</b>               | Previous<br>Month                                  | % Change <sup>§</sup><br>From<br>Previous<br>Month                                  | 1 Year Ago   | % Change <sup>§</sup><br>From 1<br>Year Ago                             |
|---|--|--|---|--|---|
| Medicaid  | 265,267                                      | 265,830  | -0.2%   | 278,576  | -4.8%   |
| PCN (Primary Care Network)  | 16,800                                       | 17,704   | -5.1%   | 15,475   | +8.6%   |
| CHIP (Children's Health Ins. Plan)  | 17,766                                       | 17,945   | -1.0%   | 19,312   | -8.0%   |
|   |  | Annual Vi  | Annual Charges  |  |   |
| Health Care System Measures# (Year)   | Number<br>of Events                          | Visits per<br>1,000<br>Utahns                      | % Change <sup>§</sup><br>From<br>Previous<br>Year                                   | Total<br>Charges in<br>Millions                    | % Change <sup>§</sup> From Previous Year                                |
| Overall Hospitalizations (2017)   | 288,787                                      | 86.3   | +2.9%   | \$ 9,046.2   | +4.5%   |
| Non-maternity Hospitalizations (2017)   | 190,185                                      | 55.4   | +1.9%   | \$7,809.6  | +5.0%   |
| Emergency Department Encounters** (2017)  | 736,146                                      | 224.0  | +7.4%   | \$ 2,436.0   | +6.5%   |
| Outpatient Surgery (2017)   | 513,707                                      | 156.1  | +5.1%   | \$ 3,595.0   | +12.0%  |
| Annual Community Health Measures  | Current Data<br>Year                         | Number<br>Affected                                 | Percent/Rate  | % Change <sup>§</sup><br>From<br>Previous Year     | State Rank <sup>††</sup><br>(1 is best)                                 |
| Obesity (Adults 18+)  | 2017   | 548,100  | 25.2%   | -0.4%  | 7 (2017)  |
| Cigarette Smoking (Adults 18+)  | 2017   | 193,600  | 8.9%  | +1.1%  | 1 (2017)  |
| Influenza Immunization (Adults 65+)   | 2017   | 187,900  | 56.0%   | +2.0%  | 40 (2017)   |
| Health Insurance Coverage (Uninsured)   | 2017   | 304,000  | 9.8%  | +12.6%   | n/a   |
| Motor Vehicle Traffic Crash Injury Deaths   | 2017   | 280  | 9.0 / 100,000   | +6.9%  | 14 (2017)   |
| Poisoning Deaths  | 2017   | 714  | 23.0 / 100,000  | -0.3%  | 29 (2017)   |
|   |  |  |   |  |   |
| Suicide Deaths  | 2017   | 663  | 21.4 / 100,000  | +6.3%  | 46 (2017)   |
| Suicide Deaths  Diabetes Prevalence (Adults 18+)  | 2017<br>2017                                 | 663<br>154,400                                     | 21.4 / 100,000<br>7.1%  | +6.3%  | 46 (2017)<br>6 (2017)   |
|   |  |  | · ·   |  |   |
| Diabetes Prevalence (Adults 18+)  | 2017   | 154,400  | 7.1%  | -1.4%  | 6 (2017)  |
| Diabetes Prevalence (Adults 18+) Poor Mental Health (Adults 18+)  | 2017<br>2017                                 | 154,400<br>395,900                                 | 7.1%<br>18.2%   | -1.4%<br>+7.1%                                     | 6 (2017)<br>22 (2017)   |
| Diabetes Prevalence (Adults 18+) Poor Mental Health (Adults 18+) Coronary Heart Disease Deaths  | 2017<br>2017<br>2017                         | 154,400<br>395,900<br>1,692                        | 7.1%<br>18.2%<br>54.5 / 100,000   | -1.4%<br>+7.1%<br>+1.8%                            | 6 (2017)<br>22 (2017)<br>5 (2017)                                       |
| Diabetes Prevalence (Adults 18+) Poor Mental Health (Adults 18+) Coronary Heart Disease Deaths All Cancer Deaths  | 2017<br>2017<br>2017<br>2017                 | 154,400<br>395,900<br>1,692<br>3,160               | 7.1%<br>18.2%<br>54.5 / 100,000<br>101.9 / 100,000                                  | -1.4%<br>+7.1%<br>+1.8%<br>-0.4%                   | 6 (2017)<br>22 (2017)<br>5 (2017)<br>1 (2017)                           |
| Diabetes Prevalence (Adults 18+) Poor Mental Health (Adults 18+) Coronary Heart Disease Deaths All Cancer Deaths Stroke Deaths                                    | 2017<br>2017<br>2017<br>2017<br>2017         | 154,400<br>395,900<br>1,692<br>3,160<br>888        | 7.1%<br>18.2%<br>54.5 / 100,000<br>101.9 / 100,000<br>28.6 / 100,000                | -1.4%<br>+7.1%<br>+1.8%<br>-0.4%<br>-6.0%          | 6 (2017)<br>22 (2017)<br>5 (2017)<br>1 (2017)<br>21 (2017)              |
| Diabetes Prevalence (Adults 18+) Poor Mental Health (Adults 18+) Coronary Heart Disease Deaths All Cancer Deaths Stroke Deaths Births to Adolescents (Ages 15-17) | 2017<br>2017<br>2017<br>2017<br>2017<br>2017 | 154,400<br>395,900<br>1,692<br>3,160<br>888<br>420 | 7.1%<br>18.2%<br>54.5 / 100,000<br>101.9 / 100,000<br>28.6 / 100,000<br>5.8 / 1,000 | -1.4%<br>+7.1%<br>+1.8%<br>-0.4%<br>-6.0%<br>-7.6% | 6 (2017)<br>22 (2017)<br>5 (2017)<br>1 (2017)<br>21 (2017)<br>13 (2017) |

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

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 2019 season.

<sup>†</sup> Diagnosed HIV infections, regardless of AIDS diagnosis.

<sup>§</sup> Relative percent change. Percent change could be due to random variation.

<sup>#</sup> Health Care System Measures should not be compared to previous years; a different method was used to determine year of service.
\*\* Treat and release only.

 $<sup>^{\</sup>dagger\dagger}$  State rank based on age-adjusted rates where applicable.