

# 2012 Utah Statewide Health Status Report

January 2013

## **Description of the Utah Statewide Health Status Report**

The *Utah Statewide Health Status Report* was developed to inform the Statewide Health Improvement Plan (SHIP). The State of Utah has a decentralized public health system that consists of the 12 independent local health departments (LHDs) and one state health department, the Utah Department of Health (UDOH). In recent years, the 13 health departments have undertaken a strategic planning effort with the goal of achieving a seamless statewide public health system. Guided by the strategic map from that initiative, the 13 health departments are currently working together to develop a Statewide Health Improvement Plan (SHIP). The vision for the Utah Public Health System is a place where all people can enjoy the best health possible, where all can live, grow and prosper in healthy, clean and safe communities. The SHIP will chart the course for the state and local health departments, working together, to realize that vision.

This report includes priority areas and indicators within them. It provides a summary of priority public health measures that are considered to be good indicators of the health status of Utah residents statewide and within Utah's 12 local health districts. This information is vital to identifying health outcome measures and public health system issues that all 13 health departments can agree to address in the SHIP. Local Health Officers and the Director of the UDOH were surveyed in July 2010 to identify statewide priorities. Other priorities were selected by the State Health Assessment Workgroup as part of a UDOH strategic planning initiative and were included in the *2011 Utah State Health Profile:* <a href="http://health.utah.gov/opha/publications/2011StateHealthProfile FINAL.pdf">http://health.utah.gov/opha/publications/2011StateHealthProfile FINAL.pdf</a>.

The bulk of the information for this report was drawn from the Indicator Reports on Utah's Indicator-Based Information System for Public Health (IBIS-PH) website and include LHD data and graphs where available. Healthy People 2020 (HP2020) objectives are included in the indicators but only for those that exactly match the HP2020 objective. For some indicators, the sidebar mentions 'At-risk Populations'. This does not necessarily mean that there is a statistically significant difference in the measure between populations for the Utah data reported here, but that the literature and other analyses in Utah support this finding. In addition, for the first time, we were able to include LHD 'Community Snapshots' from IBIS-PH in this report. The 'Snapshots' provide a summary table of Indicators for each LHD and were enhanced to easily show where LHD measures differ from the overall state measure. (APPENDIX A)

Readers need to be aware that many of the indicators in this report utilize Behavioral Risk Factor Surveillance System (BRFSS) data. The BRFSS underwent a major methodology change over the last few years. For 2011, the BRFSS data include cell phones and use a new weighting methodology exclusively. In Utah, for years 2009 and 2010, there are 'developmental' BRFSS datasets with the new methodology. The trend graphs of BRFSS utilize the old methodology. The LHD views use the new methodology, usually with just 2011 data, but some LHD data include combined data for years 2009–2011. We have noted this in each of the indicators. The change in methodology affected some measures (insurance coverage and adult cigarette smoking) more than others (adult obesity).

#### **Limitations of this report:**

This is not a full statewide community health assessment. In an ideal world, the Statewide Health Improvement Plan would be informed by an assessment that goes beyond the health status indicators that are summarized here and also include a variety of inputs from statewide and local community members and stakeholders. This report is a first step in creating such a comprehensive statewide public health assessment.

#### **Acknowledgements:**

Thanks to the members of the Statewide Health Improvement Plan Steering Committee who guided the development of this report: Dr. Robert Rolfs, chair; Robyn Atkinson, Lloyd Berentsen; Bruce Costa, Kathy Froerer, Paula Julander; Brad Neiger; and Nan Streeter, and the SHIP staff: Laverne Snow, Anna Dillingham, Deborah Turner, and Kathryn Marti. We are indebted to all the public health program staff who create and maintain the Indicator Reports on IBIS-PH, and to Kim Neerings, IBIS-PH Indicator Report Administration System Manager, for her expertise and dedication to maintaining and improving IBIS-PH so that it can best support initiatives such as this. We acknowledge the CDC National Public Health Improvement Initiative and the Affordable Care Act of 2010 for contributing partial financial support of these activities. And, finally, we owe special thanks to Whitney Wadman, our Southwest Regional Public Health Training Center (SRPHTC) summer intern and Master of Public Health student from the University of California in Los Angeles, Fielding School of Public Health, who in ten short weeks was able to create the first draft of this document. We acknowledge the U.S. Health Services and Resources Administration for their support of the SRPHTC.

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## **Executive Summary**

This report utilizes information from 71 of over 180 Indicator Reports on the Utah Department of Health (UDOH) Indicator-Based Information System for Public Health (IBIS-PH) Website. These measures were designated as current priority public health issues for Utah. They are grouped into sections and topic areas in the report. There is an introduction to each section, and the topic areas included. The indicator pages provide graphical and textual information, along with some key points and mention of at-risk populations. In order to promote local public health assessment, most of the indicator pages include local health district-level graphical views that show how Utah's local health departments (LHDs) compare to each other and often to the state and nation, too.

The IBIS-PH website serves as Utah's online public health data and information reporting system. The 'heart' of IBIS-PH is the Indicator Reports section. The Indicator Reports provide easily accessible and continually updated data, graphics, and textual information about important public health measures, or indicators. Many of the Indicator Reports include not only Utah and U.S. data, but also data for Utah's 12 local health districts.

The primary purpose of this report is to inform the development of a Statewide Health Improvement Plan (SHIP) in Utah. In order to plan for health improvement, participants in this process must understand the current health status of Utah residents, along with health-related measures such an environmental quality, healthcare accessibility, and health-related behaviors. The UDOH and Utah's 12 LHDs share responsibility for public health assessment and delivery of public health services in Utah. We made it a priority to provide data for LHD community assessment and hope that the information will inform LHDs and their community members to make informed decisions for themselves as they plan local efforts. The LHD 'Snapshots' provide a summary table of indicators for each LHD and were enhanced to easily show where LHD measures differ from the overall state measure. (APPENDIX A)

#### How Utah Compares to the U.S. (by report section)

#### Compared to the U.S., Utah is characterized by:

#### Socio-Demographic Context

- the highest birth rate in the U.S.
- the youngest population in the nation
- a longer life expectancy at birth
- a higher percentage of households with married adults and with children
- a lower percentage of households with children headed by a single female
- a higher high school graduation rate
- a higher median annual household income
- a lower percentage of all persons in poverty that has increased dramatically since 2008 and is approaching the U.S.
- a lower percentage of children in poverty that has increased substantially since 2008 and appears to be approaching the U.S. rate
- a lower percentage of people in racial and ethnic minorities groups

#### **Environmental Determinants**

• a lower rate of Salmonella infections.

#### **Healthy Beginnings**

- a lower percentage of pregnant women who receive prenatal care in the first trimester
- a lower infant mortality rate
- a higher maternal mortality rate
- a lower percentage of low birth weight infants
- a lower rate of adolescent births
- a higher percentage of infants who were ever breastfed and who are still breastfeeding at 1 year

#### Healthy Behaviors and Risk Factors

- the lowest adult smoking rate in the country
- a lower adolescent smoking rate that has declined by 50% since 1999
- a lower adult binge drinking rate
- lower rates of alcohol and marijuana use by adolescents
- a higher rate of recommended physical activity among adults
- a similar rate of recommended physical activity among adolescents
- lower adult and adolescent obesity rates, but similar upward trends

- a slightly lower percentage of adults diagnosed with high cholesterol or high blood pressure
- a similar percentage of adults aged 50+ reporting recommended colorectal cancer screening, which is an improvement in recent years
- a lower percentage of women aged 40+ reporting a mammography in the past 2 years

#### Chronic Disease and Conditions

- a similar adult asthma prevalence and similar upward trend
- a lower adult diabetes prevalence and similar upward trend
- a lower coronary heart disease death rate and similar downward trend
- a similar stroke death rate with the same downward trend
- a lower Alzheimer's disease death rate, but the second highest prevalence growth rate of U.S. states
- a similar breast cancer death rate in recent years though it historically had been lower
- a lower colorectal cancer death rate with a similar downward trend
- a much lower lung cancer death rate that has decreased since 2005
- a higher melanoma of the skin death rate that has increased in recent years unlike the U.S. rate that has stayed steady
- a similar prostate cancer death rate with decreasing trend
- a similar percentage of adults who reported 7+ days of poor mental health in the past 30 days

#### Injury

- a lower motor vehicle traffic crash death rate with a similar downward trend
- a higher poisoning death rate for many years but with a recent downward trend
- a higher suicide rate that has increased since 2008

#### Communicable Disease

- a similar percentage of adults aged 65+ with an annual flu immunization
- a similar percentage of adults aged 65+ who ever received a pneumonia vaccine
- no measles in Utah and U.S. since 2001 but there was an outbreak of measles in 2011 with 15 cases reported in Utah
- a higher rate of pertussis in some years, and recently increasing since 2008
- a lower rate of chlamydia but a similar upward trend
- a lower rate of gonorrhea
- a lower rate of primary and secondary syphilis but with a substantial increase since 2007

#### Access to and Utilization of Care

- a lower percentage of adults reporting cost as a barrier to care but increasing trend since 2008
- a similar percentage of persons without health insurance coverage according to a nationally comparable survey
- fewer physicians per 10,000 civilian population
- a higher percentage of adults who report a routine checkup in the past year
- a similar percentage of adults who report a routine dental visit in the past year

#### How Utah's Local Health Districts Compare to the State

(Please note that while these comparisons generally characterize the local health district population as a whole when compared to the state, there are areas within local health districts that may differ.)

#### **Bear River Health District**

Compared to the rest of the state, Bear River Health District is characterized by:

- a greater life expectancy at birth
- a median household income that is lower in Cache County, and similar to the state in Box Elder and Rich counties.
- a higher percentage of all people living in poverty and a similar percentage of children in poverty
- a higher percentage of mothers who received prenatal care in the first trimester
- a lower percentage of live born infants with low birth weight
- a higher birth rate for females aged 15–19
- a lower percentage of adults who reported current cigarette smoking
- a lower percentage of adolescents who reported current cigarette smoking
- a lower percentage of students in grades 8, 10 and 12 (combined) who reported using alcohol in the past 30 days
- a lower percentage of students in grades 8, 10 and 12 (combined) who reported using marijuana in the past 30 days
- a higher percentage of adolescents who reported recommended physical activity
- a higher rate of coronary heart disease deaths
- a higher rate of stroke deaths
- a higher rate of Alzheimer's disease deaths
- a lower rate of fall hospitalizations

- a lower rate of poisoning deaths
- a lower rate of suicide deaths
- a higher percentage of adults reporting a routine dental visit in the past year
- a lower rate of asthma-related emergency department visits

#### Central Utah Health District

Compared to the rest of the state, Central Utah Health District is characterized by:

- a lower life expectancy at birth
- lower median household incomes in Millard, Piute, Sanpete, Sevier and Wayne counties, and similar in Juab County
- a higher percentage of all persons in poverty
- a higher percentage of children in poverty
- a lower percentage of students grades 8, 10 and 12 (combined) who reported using alcohol in the past 30 days
- a lower percentage of students grades 8, 10 and 12 (combined) who reported using marijuana in the past 30 days
- a higher percentage of adolescents who reported getting recommended levels of physical activity
- a lower percentage of adults aged 50+ who reported recommended colorectal cancer screening
- a lower percentage of women aged 40+ who reported a mammogram in the past 2 years
- a higher rate of coronary heart disease deaths
- a higher rate of stroke deaths
- a higher rate of Alzheimer's disease deaths
- a higher rate of colorectal cancer deaths
- a higher rate of fall hospitalizations
- a higher motor vehicle crash death rate
- a higher rate of suicide deaths
- a lower percentage of adults aged 65+ who reported ever receiving a pneumonia vaccine
- a higher percentage of people without health insurance coverage
- a higher rate of asthma-related emergency department visits

#### **Davis County Health District**

Compared to the rest of the state, Davis County Health District is characterized by:

- a higher median household income
- a lower percentage of all people and children living in poverty
- a higher percentage of mothers who received prenatal care in the first trimester
- a lower birth rate for women aged 15–19
- a lower percentage of adults who reported current cigarette smoking
- a lower percentage of adolescents who were obese
- a lower rate of stroke deaths
- a lower rate of lung cancer deaths
- a lower motor vehicle crash death rate
- a lower percentage of adults who reported cost as a barrier to care in the past year
- a lower percentage of people without health insurance coverage
- · a higher percentage of adults who reported a routine dental visit in the past year
- a lower rate of asthma-related emergency department visits

#### Salt Lake Valley Health District

Compared to the rest of the state, Salt Lake Valley Health District is characterized by:

- a lower life expectancy at birth
- a slightly higher median household income
- a slightly lower percentage of all people living in poverty, and a similar percentage of children in poverty
- · a lower percentage of mothers who received prenatal care in the first trimester
- a higher percentage of live born infants with low birth weight
- a higher birth rate for females aged 15-19
- a higher percentage of adults who reported current cigarette smoking
- a higher percentage of high school students who reported current cigarette smoking
- a higher percentage of adults who reported binge drinking in the past 30 days
- a higher percentage of students in grades 8, 10 and 12 (combined) who used alcohol in the past 30 days
- a higher percentage of students in grades 8, 10 and 12 (combined) who used marijuana in the past 30 days
- a lower percentage of adolescents who reported getting recommended levels of physical activity
- a higher percentage of adults who reported doctor-diagnosed high blood cholesterol
- a higher percentage of adults 50+ who reported recommended colorectal cancer screening
- a lower rate of coronary heart disease deaths

- a lower rate of Alzheimer's disease deaths
- a higher lung cancer death rate
- a higher rate of fall hospitalizations
- a lower rate of motor vehicle traffic crash deaths
- a higher poisoning death rate
- a lower percentage of adults who reported a routine dental visit in the past year
- a higher rate of asthma-related emergency department visits

#### **Southeastern Utah Health District**

Compared to the rest of the state, Southeastern Utah Health District is characterized by:

- a lower life expectancy at birth
- lower household median incomes in Carbon, Grand and San Juan counties, and similar in Emery County
- a higher percentage of all people and children living in poverty
- a lower percentage of mothers who received prenatal care in the first trimester
- a lower infant mortality rate
- a higher birth rate for females aged 15-19
- a higher percentage of adults who reported current cigarette smoking
- a higher percentage of high school students who reported current cigarette smoking
- a higher percentage of adolescents who reported getting recommended levels of physical activity
- a lower percentage of adults who reported doctor-diagnosed high blood cholesterol
- a higher percentage of adults who reported doctor-diagnosed hypertension
- a lower percentage of adults 50+ who reported recommended colorectal cancer screening
- a higher rate of coronary heart disease deaths
- a lower rate of fall hospitalizations
- a higher rate of motor vehicle traffic crash deaths
- a higher poisoning death rate
- a higher suicide death rate
- a lower percentage of adults aged 65+ who reported ever receiving a pneumonia vaccine
- a higher percentage of adults who reported cost as a barrier to care in the past year
- a higher rate of asthma-related emergency department visits

#### **Southwest Utah Health District**

Compared to the rest of the state, Southwest Utah Health District is characterized by:

- a greater life expectancy at birth
- lower median household incomes in all member counties
- a higher percentage of all people and children living in poverty
- a lower percentage of mothers who received prenatal care in the first trimester
- a lower percentage of live born infants with low birth weight
- a lower percentage of students in grades 8, 10 and 12 (combined) who used alcohol in the past 30 days
- a lower percentage of adults who reported doctor-diagnosed diabetes
- a lower rate of coronary heart disease deaths
- a lower rate of stroke deaths
- a lower rate of colorectal cancer deaths
- a lower rate of fall hospitalizations
- a higher percentage of people without health insurance coverage
- a lower rate of asthma-related emergency department visits

#### **Summit County Health District**

Compared to the rest of the state, Summit County Health District is characterized by:

- a greater life expectancy at birth
- a higher median household income
- a lower percentage of all people and children living in poverty
- a lower percentage of mothers who received prenatal care in the first trimester
- a higher percentage of live born infants with low birth weight
- a lower birth rate for females aged 15–19
- a lower percentage of adults who reported current cigarette smoking
- a higher percentage of adults who reported binge drinking in the past 30 days
- a higher percentage of students in grades 8, 10 and 12 (combined) who used alcohol in the past 30 days
- a higher percentage of adults who reported recommended physical activity
- a lower percentage of adults who were obese

- a lower percentage of adolescents who were obese
- a higher percentage of women aged 40+ who reported a mammogram in the past 2 years
- a higher percentage of adults who reported sun safety practice
- a lower percentage of adults who reported doctor-diagnosed diabetes
- a lower rate of coronary heart disease deaths
- a lower lung cancer death rate
- a lower percentage of adults who reported 7+ days of poor mental health in the past 30 days
- a lower poisoning death rate
- a lower suicide death rate
- a higher percentage of adults aged 65+ who reported ever receiving a pneumonia vaccine
- a lower percentage of adults who reported cost as a barrier to care in the past year
- a lower rate of asthma-related emergency department visits

#### **Tooele County Health District**

Compared to the rest of the state, Tooele County Health District is characterized by:

- a lower life expectancy at birth
- a higher median household income
- a lower percentage of all people and children living in poverty
- a higher percentage of live born infants with low birth weight
- a higher birth rate for females aged 15–19
- a higher percentage of adults who reported current cigarette smoking
- a higher percentage of high school students who reported current cigarette smoking
- a higher percentage of adults who reported binge drinking in the past 30 days
- a higher percentage of students in grades 8, 10 and 12 (combined) who used alcohol in the past 30 days
- a higher percentage of students in grades 8, 10 and 12 (combined) who used marijuana in the past 30 days
- a higher percentage of adults who were obese
- a higher percentage of adolescents who were obese
- a higher percentage of adults who reported doctor-diagnosed high blood cholesterol
- a higher percentage of adults who reported doctor-diagnosed hypertension
- a lower percentage of women aged 40+ who reported a mammogram in the past 2 years
- a higher percentage of adults who reported doctor-diagnosed diabetes
- a lower rate of stroke deaths
- a higher rate of lung cancer deaths
- a higher percentage of adults who reported a routine checkup in the past year
- a higher rate of asthma-related emergency department visits
- a lower percentage of adults with diabetes who reported at least two hemoglobin A1C tests in the past 12 months

#### **TriCounty Health District**

Compared to the rest of the state, TriCounty Health District is characterized by:

- a lower life expectancy at birth
- lower median household income in Daggett County with similar ones in Duchesne and Uintah counties
- a lower percentage of mothers who received prenatal care in the first trimester
- a higher percentage of live born infants with low birth weight
- a higher birth rate for females aged 15–19
- a higher percentage of adults who reported current cigarette smoking
- a lower percentage of students in grades 8, 10 and 12 (combined) who used marijuana in the past 30 days
- a higher percentage of adults who were obese
- a lower percentage of adults who reported doctor-diagnosed high blood cholesterol
- a lower percentage of adults 50+ who reported recommended colorectal cancer screening
- a lower percentage of women aged 40+ who reported a mammogram in the past 2 years
- a higher rate of coronary heart disease deaths
- a higher rate of lung cancer deaths
- a lower rate of fall hospitalizations
- a higher rate of motor vehicle traffic crash deaths
- a higher suicide death rate
- a lower percentage of adults aged 65+ who reported ever receiving a pneumonia vaccine
- a lower percentage of adults who reported a routine dental visit in the past year
- · a higher rate of asthma-related emergency department visits

#### **Utah County Health District**

Compared to the rest of the state, Utah County Health District is characterized by:

- a greater life expectancy at birth
- a higher percentage of all persons living in poverty, but a lower percentage of children in poverty
- a higher percentage of mothers who received prenatal care in the first trimester
- a lower infant mortality rate
- a lower percentage of live born infants with low birth weight
- a lower birth rate for females aged 15–19
- a lower percentage of adults who reported current cigarette smoking
- a lower percentage of adolescents who reported current cigarette smoking
- a lower percentage of adults who reported binge drinking in the past 30 days
- a lower percentage of students in grades 8, 10 and 12 (combined) who used alcohol in the past 30 days
- a lower percentage of students in grades 8, 10 and 12 (combined) who used marijuana in the past 30 days
- a lower percentage of adults who reported doctor-diagnosed high blood cholesterol
- a lower percentage of adults who reported sun safety practice
- a lower rate of coronary heart disease deaths
- a lower rate of lung cancer deaths
- a lower rate of poisoning deaths
- a lower rate of suicide deaths
- a lower rate of asthma-related emergency department visits

#### **Wasatch County Health District**

Compared to the rest of the state, Wasatch County Health District is characterized by:

- a greater life expectancy at birth
- a higher median household income
- a lower percentage of all people and children living in poverty
- a lower percentage of mothers who received prenatal care in the first trimester
- a higher percentage of adults who reported recommended physical activity
- a lower percentage of adults who reported doctor-diagnosed high blood cholesterol
- a lower percentage of adults who reported doctor-diagnosed diabetes
- a higher rate of motor vehicle traffic crash deaths
- a lower rate of asthma-related emergency department visits

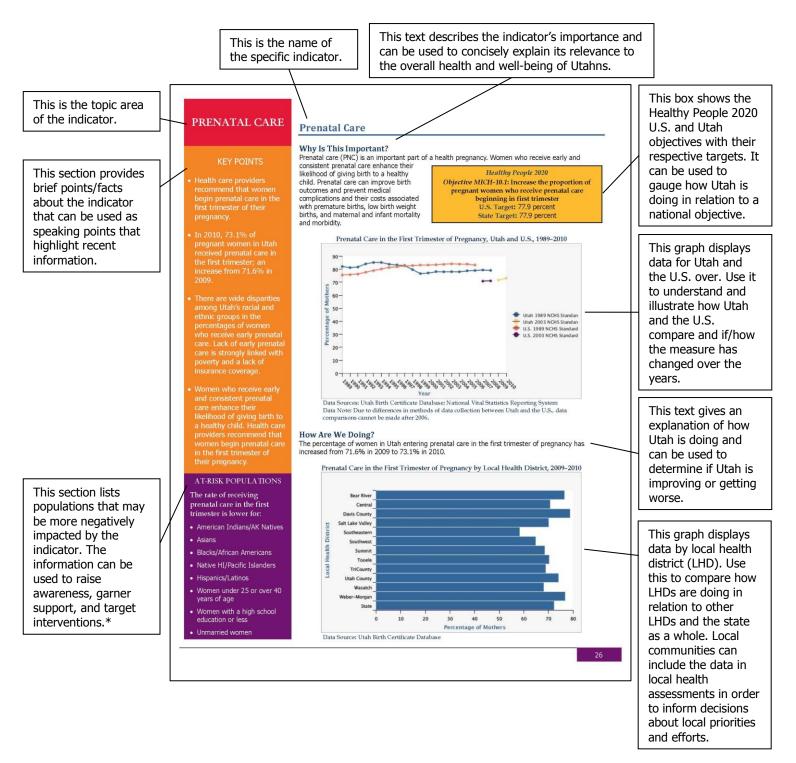
#### Weber-Morgan Health District

Compared to the rest of the state, Weber-Morgan Health District is characterized by:

- a lower life expectancy at birth
- a higher median household income in Morgan County, and a similar one in Weber County
- a higher percentage of children living in poverty
- a higher percentage of mothers who received prenatal care in the first trimester
- a higher percentage of live born infants with low birth weight
- a higher birth rate for females aged 15-19
- a higher percentage of adults who reported current cigarette smoking
- a higher percentage of adolescents who reported current cigarette smoking
- a higher percentage of students in grades 8, 10 and 12 (combined) who used marijuana in the past 30 days
- a higher percentage of adults who were obese
- a higher percentage of adults who reported doctor-diagnosed diabetes
- a higher rate of coronary heart disease deaths
- a higher rate of stroke deaths
- a higher rate of colorectal cancer deaths
- a higher lung cancer death rate
- a lower rate of fall hospitalizations
- a higher poisoning death rate
- a higher suicide death rate
- a higher percentage of adults who reported a routine checkup in the past year
- a higher rate of asthma-related emergency department visits

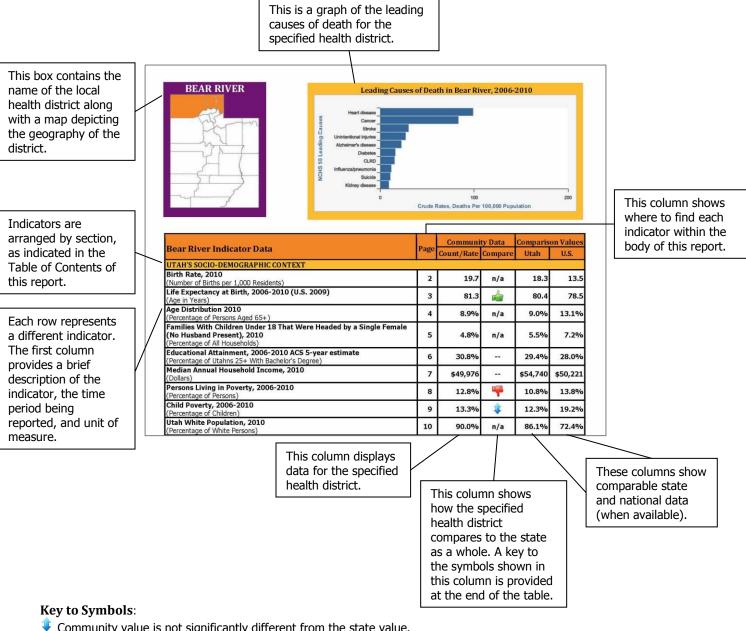
## **Guide to This Report**

Each indicator in this report portrays several pieces of information. This guide describes each element.



<sup>\*</sup>Being included in the at-risk populations list does not necessarily mean that there is a statistically significant difference in the measure between populations, but rather that the literature and other analyses in Utah support this finding.

Appendix A of this report contains 'Community Snapshots'. This page outlines the elements contained in those 'Snapshots'.



Community value is not significantly different from the state value.

Excellent: The community is performing BETTER than the state, and the difference IS statistically significant.

 $\P$  Reason for Concern: The community is performing WORSE than the state, and the difference IS statistically significant.

-- Either the comparison value or confidence interval data are not available.

**n/a** Not Applicable: This indicator has no target direction.

The community value is considered statistically significantly different from the state value if the state value is outside the range of the community's 95% confidence interval. If the community's data or 95% confidence interval information is not available, "--" will be displayed.

NOTE: In this report, the assessment of whether a community is better or worse is based solely on the statistical difference between the community and state values. When selecting priority health issues to work on, a community should take into account additional factors such as how much improvement could be made, the U.S. value, the statistical stability of the community number, the severity of the health condition, and whether the difference is clinically significant.

## **Utah's Socio-Demographic Context**

The characteristics of Utah's population, such as age distribution, cultures, racial and ethnic composition, educational achievement, income levels, and living and working conditions, affect population health in important ways. For example, children and the elderly have an increased susceptibility to certain kinds of diseases. We refer to these measures collectively as the demographic context of the Utah population or social determinants of health. Utah's population was 2,763,885 in the 2010 Census, a 23.8% increase from 2000. We summarize a number of these population characteristics here.

#### In This Section:

#### **Birth Rates**

The birth rate is an important determinant of population growth, and also indicates a population's need for preconceptional, prenatal, neonatal, and postpartum care.

#### Life Expectancy at Birth

Life expectancy is often used to broadly describe the current health status of a population. Life expectancy is also important when forecasting the number of elderly and the amount of resources and support needed for old-age programs.

#### **Age Distribution of the Population**

The age distribution of a population has many implications. It suggests future patterns of population growth and indicates the size of each age group, which is an important gauge of the amount and type of health care services demanded.

#### **Household Structure**

The number of parents living with a child has serious implications for both the child's and the adult's health outcomes. Adults and children in a single parent household are at higher risk for adverse health outcomes and unhealthy behaviors.<sup>1</sup>

#### **Education Level of the Population**

Though the exact correlation is uncertain, there is a clear relationship between education and health outcomes. For the most part, higher educational attainment is associated with improved health outcomes.

#### **Income**

Health status is strongly linked to income; low-income individuals are more likely to have poor health outcomes. Poverty is associated with negative health effects at all ages, however children face the greatest risks; poverty in the early years of life have a serious impact on healthy development.<sup>3</sup>

#### Racial and Ethnic Composition of the Population

Health disparities between different ethnic and racial populations exist nationally and in Utah. The health status of one or more ethnic or racial groups is often poorer than statewide rate for given health indicators.

#### **BIRTH RATES**

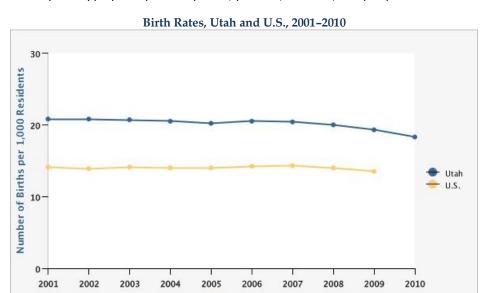
#### **KEY POINTS**

- In 2010, there were 52,164 live births to Utah residents, a rate of 18.3 per 1,000 Utahns.
- Utah continues to report the highest birth rate in the U.S., with 19.2 live births per 1,000 total population in 2009, compared to the preliminary U.S. birth rate in 2009 of 13.5 per 1,000 population.
- According to the 2010 **American Community** Survey, Utah women aged 15-50 have the most children in the nation (78/1,000 versus the national average of 55/1,000).

#### **Birth Rate**

#### Why Is This Important?

Birth rate is the number of live births in a given year per 1,000 persons in the total population. Tracking birth rate patterns among Utah and U.S. women as a whole is critical to understanding population growth and change in this country and in Utah. Birth rates directly relate to a population's need for timely and appropriate preconceptional, prenatal, neonatal, and postpartum care.

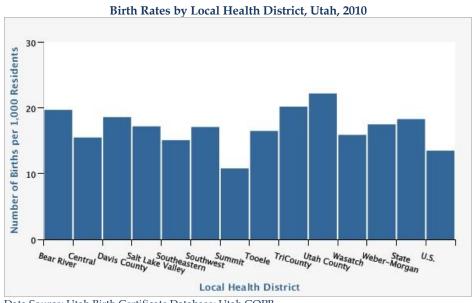


Data Sources: Utah Birth Certificate Database; National Vital Statistics Reporting System; Utah GOPB

Year

#### **How Are We Doing?**

In 2010, there were 52,164 live births to Utah residents, a rate of 18.3 per 1,000 Utahns. This represents a decrease from the 2009 birth rate of 19.2.



Data Source: Utah Birth Certificate Database; Utah GOPB

## LIFE **EXPECTANCY**

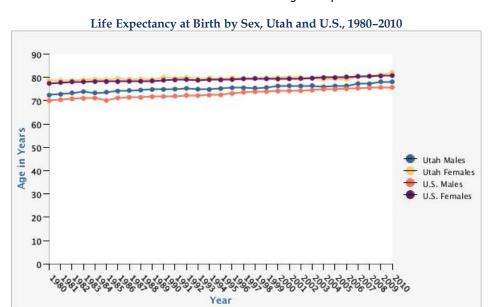
#### **KEY POINTS**

- In Utah, life expectancy at birth for males increased from 72.4 years in 1980 to 78.1 years in 2010, and for females from 78.6 to 82.2 years.
- In comparison, life expectancy at birth in the U.S. rose from 70.0 to 75.7 years for males, and 77.4 to 80.8 years for females.
- As life expectancy increases, the proportion of older individuals living in society increases, too. It is important to look at ways that those added years can be lived in good health.

### Life Expectancy at Birth

#### Why Is This Important?

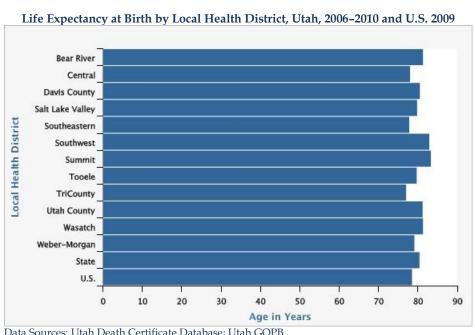
Shifts in life expectancy are often used to describe trends in mortality. Being able to predict how populations will age has enormous implications for the planning and provision of services and support. Small increases in life expectancy translate into large increases in the population. As the life expectancy of a population lengthens, the number of people living with chronic illnesses tends to increase because chronic illnesses are more common among older persons.



Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### How Are We Doing?

Prevention and control of infectious diseases had a profound impact on life expectancy during the 20th century, and improvements in nutrition, hygiene, and medical care contributed to decreases in death rates at all ages. Utah continues to experience a higher life expectancy than the nation. In Utah, life expectancy at birth for males increased from 72.4 years in 1980 to 78.1 years in 2010, and for females from 78.6 to 82.2 years. In comparison, life expectancy at birth in the U.S. rose from 70.0 to 75.7 years for males, and 77.4 to 80.8 years for females.



Data Sources: Utah Death Certificate Database; Utah GOPB

## AGE DISTRIBUTION

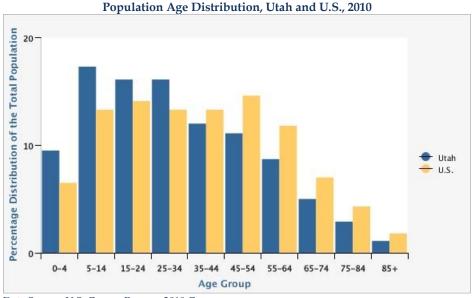
#### **KEY POINTS**

- The Utah population is the youngest in the nation (median age 29.2 years versus 37.2 nationally in 2010).
- Childhood is the age group during which health interventions, such as immunizations, result in the best long term health benefit. Because Utah's population has a higher proportion of young people, Utah will need to expend more resources per capita for these critical interventions for children, compared to older population states.
- Because many diseases, such as cancer and heart disease, are less common among younger persons, Utah's population is healthier than the U.S. population. In order to remove the "age effect" so that Utah can be compared to the entire U.S. population or to other states, health data are often age adjusted for presentation in reports such as this one.

## Age Distribution of the Population

#### Why Is This Important?

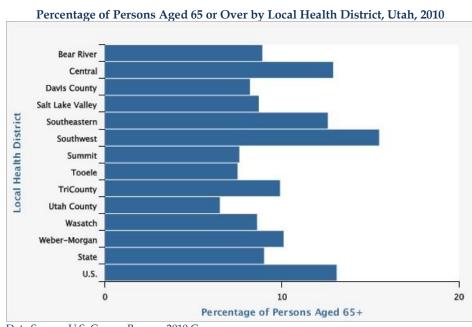
People's age, sex, culture, and living and working conditions affect their health in important ways that must be considered in planning for the public health of the population. Having a large percentage of the population made up of young children emphasizes the importance of making available key preventive health measures (e.g. immunizations) and age-appropriate screenings to identify developmental delays at a time when treatment is most effective. Age is one of the most important risk factors for many diseases, including Utah's leading causes of death, heart disease, and cancer. The relative youth of Utah's population is one important factor in our relative good health.



Data Source: U.S. Census Bureau, 2010 Census

#### How Are We Doing?

Utahns, on a percentage basis, are on average younger than the rest of the U.S. According to the Census Bureau's 2010 American Community Survey (ACS), Utah had the youngest state population in the U.S. with a median age of 29.2 years versus 37.2 years nationally.



Data Source: U.S. Census Bureau, 2010 Census

## HOUSEHOLD STRUCTURE

#### **KEY POINTS**

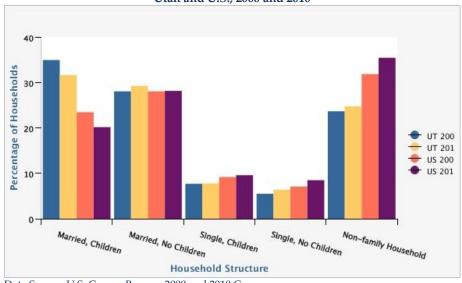
- The proportion of households in Utah that were single individuals with children was 7.8% in 2010, virtually no change from 2000 when the proportion was 7.7%.
- Utah's proportion of single householders with children was lower than the national percentage (9.6%) in 2010. However the percentage of single households in general was lower than the nation.
- The percentage of families with children under 18 years of age that were headed by a single female in 2010 varied greatly in Utah's local health districts, from 4.4% in Utah County to 6.5% in Weber-Morgan.

#### **Household Structure**

#### Why Is This Important?

The number of parents living with a child helps determine the human and economic resources available to that child. Children who live with one parent are more likely to live in poverty than children who grow up in households with two adults. Single parents also face challenges including lack of leisure time, increased need for child care, and stressed financial resources.

#### Percentage of Households by Family Type and Presence of Children, Utah and U.S., 2000 and 2010

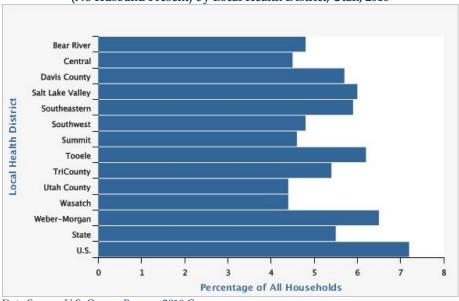


Data Source: U.S. Census Bureau, 2000 and 2010 Censuses

#### How Are We Doing?

Non-family households (either a householder living alone or with other, unrelated, persons) constituted less than a quarter (23.7%) of Utah households in the 2000 decennial census. The 2010 census now estimates this at 24.8%. In 2000 the proportion of single householders with children was 7.7%; the 2010 Census estimate is essentially unchanged at 7.8%. The likelihood that the household was headed by a female declined slightly, owing to a small increase in the proportion of male single householders with children.

## Percentage of Households With Children Under 18 That Were Headed by a Single Female (No Husband Present) by Local Health District, Utah, 2010



Data Source: U.S. Census Bureau, 2010 Census

#### **EDUCATION**

#### **KEY POINTS**

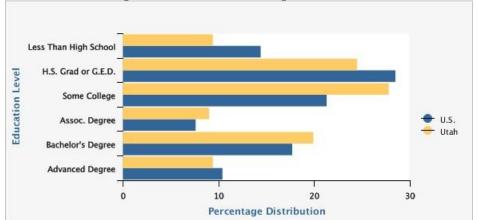
- Over the last decade, education levels have improved in Utah and the U.S. Among Utah adults aged 25 and over in 2010, 90.6% were high school graduates or higher and 29.3% had a bachelor's or advanced degree. This finding compares with 87.7% and 26.1% in 2000. A larger percentage of Utahns had at least a high school education when compared to the U.S. (90.6% versus 85.6% respectively in 2010).
- Education level is strongly related to health status. Persons with a better education are more likely to understand the consequences of life choices, are more capable to make good life choices, and are more able to deal with stress and other environmental factors that influence health. In addition, education strongly correlates with income and work benefits.

## **Education Level of the Population**

#### Why Is This Important?

Education level is strongly related to health status. It is too simplistic to say that better education causes better health; however, higher levels of education often result in higher family income, greater self-determination and understanding of health and illness factors, improved mental health, and a higher level of social and family support. All of those factors can result in better health.

#### Educational Attainment: Highest Level of Attainment, Aged 25 Years or Over, Utah and U.S., 2010

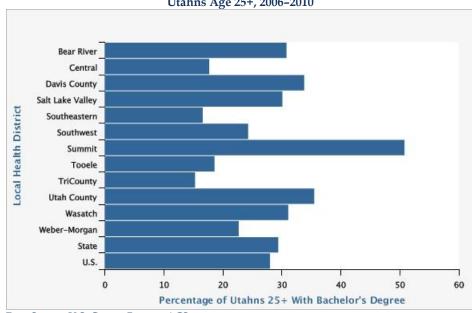


Data Source: U.S. Census Bureau, ACS

#### How Are We Doing?

Among Utah adults aged 25 and over in 2010, 90.6% were high school graduates or higher and 29.3% had a bachelor's or advanced degree. This compares with 87.7% and 26.1% in 2000.

#### Educational Attainment: Bachelor's Degree or Higher by Local Health District, Utahns Age 25+, 2006–2010



Data Source: U.S. Census Bureau, ACS

#### **INCOME**

#### **KEY POINTS**

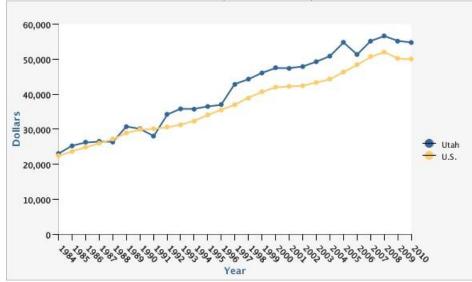
- Utah's median household income increased steadily from 1984 to 2008 and has been higher than the U.S. since 1992.
- Reflecting the recent economic downturn, this figure decreased in Utah between 2008 and 2009 (from \$56,633 to \$55,117) and remained lower in 2010 (\$54,740), though still higher than the U.S. figure (\$50,046). However, due to Utah's larger families, per capita income was lower in the state (\$22,059) compared with the U.S. (\$26,059).
- Households with higher incomes have better health care coverage and access to health care services.
   Persons with higher incomes are more likely to be able to have healthier diets, participate in recreational and personal fitness activities, and deal with stress.

#### **Household Income**

#### Why Is This Important?

Income is strongly related to health status. Low-income persons tend to have poorer health status, in part because they cannot always afford good health care. However, some people have low income levels because chronic mental or physical illness limits their ability to complete educational goals and earn a good income.

#### Median Annual Household Income (Current Dollars), Utah and U.S., 1984-2010

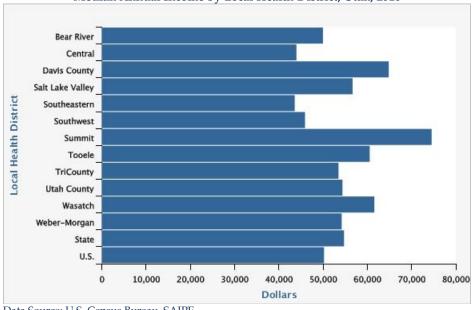


Data Source: U.S. Census Bureau, CPS (1984-2007), ACS (2008-2010)

#### How Are We Doing?

Utah's median household income has increased since 1984, even after adjusting for inflation. However, during the recent recession, income levels dropped off.

#### Median Annual Income by Local Health District, Utah, 2010



Data Source: U.S. Census Bureau, SAIPE

#### **INCOME**

#### **KEY POINTS**

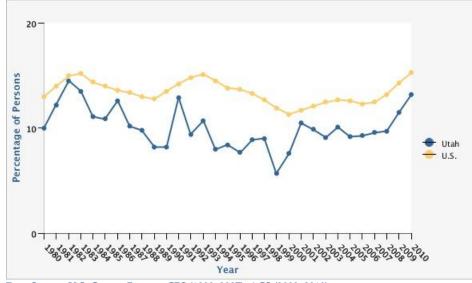
- From 2008 to 2010, the overall percentage of Utahns living in poverty increased from 9.7% to 13.2%, an increase of 36%.
- In 2010, approximately 360,400 Utahns were living in poverty.
- Persons living in poverty often have worse health measures than persons in more affluent households.

## **Poverty: All Persons**

#### Why Is This Important?

Poverty takes into account both income and family size, and has both immediate and long-lasting effects on health. Income provides an assessment of the financial resources available to individual persons or families for basic necessities (e.g., food, clothing, and health care) to maintain or improve their well-being. Persons living in poverty are worse off than persons in more affluent households for many of the indicators tracked by the Utah Department of Health.



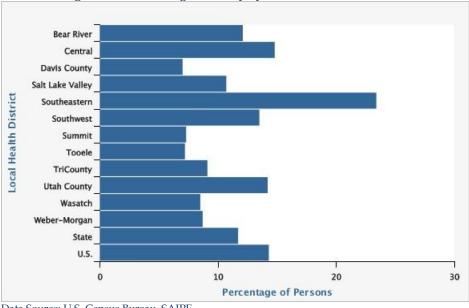


Data Source: U.S. Census Bureau, CPS (1980-2007), ACS (2008-2010)

#### **How Are We Doing?**

In 2010, the most recent year for which we have data, approximately 360,400 Utahns were living in poverty, 135,400 of whom were children age 17 or under. From 2008 to 2010, the overall percentage of Utahns living in poverty increased from 9.7% to 13.2%, an increase of 36%.

#### Percentage of Persons Living in Poverty by Local Health District, Utah, 2009



Data Source: U.S. Census Bureau, SAIPE

#### **INCOME**

#### **KEY POINTS**

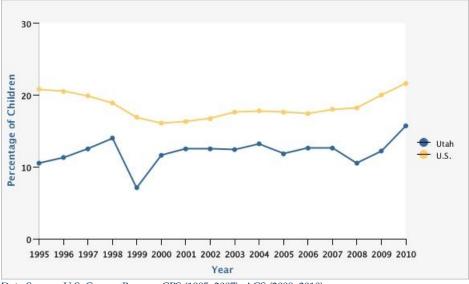
- From 2008 to 2010, there was a 50% increase in the percentage of Utah children aged birth–17 living in poverty, from 10.5% to 15.7%. The percentage in Utah remains lower than the U.S. (21.6% in 2010).
- Before the country's recent economic woes, the Utah childhood poverty rate had been relatively stable for many years, hovering between 10% and 12% from 2000–2008.
- In 2010, approximately 135,400 children age 17 and under were living in poverty.
- Poverty in the early years of a child's life can have especially harmful effects on health and development.

## **Childhood Poverty**

#### Why Is This Important?

Poverty in the early years of a child's life, more than at any other time, has especially harmful effects on continuing healthy development and well-being, including developmental delays and infant mortality. Well-being in later childhood, such as teen pregnancy, substance abuse, and educational attainment, are also influenced by early childhood poverty.<sup>4</sup>



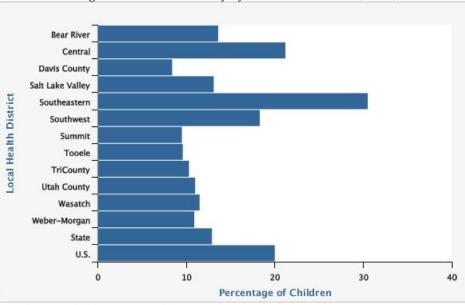


Data Source: U.S. Census Bureau, CPS (1995-2007), ACS (2008-2010)

#### How Are We Doing?

In 2010, the most recent year for which we have data at the state level, an estimated 15.7% of Utah children aged 17 or under (approximately 135,400 Utah children) were living in poverty as defined as less than 100 percent of the poverty level. From 2008 to 2010, there was a 50% increase in the percentage of Utah children aged birth–17 living in poverty, from 10.5% to 15.7%.

Percentage of Children in Poverty by Local Health District, Utah, 2009



Data Source: U.S. Census Bureau, SAIPE

# RACE AND ETHNICITY

#### **KEY POINTS**

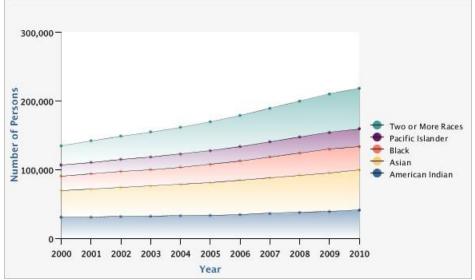
- The White, non-Hispanic population continues to be the largest in Utah.
   However, the minority Black, Asian, Pacific Islander, and Hispanic/ Latino populations in Utah are growing at faster rates than the state population as a whole.
- The proportion of non-White race groups is still relatively small, though, making comparisons across racial and ethnic groups problematic at times. But we do know that health disparities exist and they affect the overall health status of the state.
- According to the 2010
   American Community
   Survey, when Utah is compared to the entire
   U.S. population:
  - A larger percentage of the Utah population is White and non-Hispanic (80.3% vs. 63.7%)
  - A smaller percentage is Hispanic/Latino (13% vs. 16.3%)
  - A smaller percentage is Black (1.0% vs. 4.8%)
  - A larger percentage is American Indian/Alaska Native (1.2% vs. 0.8%)
  - A larger percentage is Native Hawaiian/Pacific Islander (0.9% vs. 0.2%)
- Some racial groups have a genetic predisposition for certain kinds of diseases.
   As our racial distribution changes, we can expect to see changing trends in those diseases.

## **Racial and Ethnic Composition of the Population**

#### Why Is This Important?

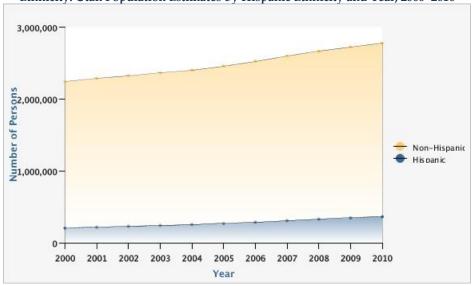
Our current health system was developed based on the needs and perspectives of the White/Anglo-American Utah culture. As a result, Utahns of other cultures often experience barriers to receiving culturally sensitive and appropriate health care. Because of this and other social factors (e.g., proportion of workers in "blue collar" jobs without health benefits, lack of trust in the health care system, greater burden of poverty among many racial and ethnic groups), the health status of non-Anglo ethnic groups is often poorer than that of the mainstream population. Reducing racial and ethnically-based health disparities is an overarching goal of the U.S. Public Health Service's Healthy People 2010 and 2020 initiatives and the Utah Department of Health's Office of Health Disparities.

#### Race Distribution: Utah Population Estimates by Race, Non-White Population, 2000-2010



Data Sources: U.S. Census Bureau, 2000 and 2010 Censuses and Population Estimates Program (2001–2009)

#### Ethnicity: Utah Population Estimates by Hispanic Ethnicity and Year, 2000-2010



Data Sources: U.S. Census Bureau, 2000 and 2010 Censuses and Population Estimates Program (2001–2009)

## **Racial and Ethnic Composition of the Population**

#### How Are We Doing?

The Black, Asian, Pacific Islander, and Hispanic/Latino populations are growing at faster rates than the state population as a whole. At the time of the 2000 U.S. Census 85% of Utah's population was White only and non-Hispanic. It is now at approximately 80% according to the 2010 American Community Survey 1-year estimates from the U.S. Census. Almost 4 out of every 20 Utahns belong to an ethnic or racial minority group, including Hispanic, Asian, Pacific Islander, American Indian, and Black.

Utah can improve the health of all its citizens, Anglo or otherwise, through promotion of healthy lifestyles and improving access to timely health care that includes routine screening and effective treatment of physical and mental health problems when indicated.

Bear River Central **Davis County** Salt Lake Valley Local Health District Southeastern Southwest Summit Tooele TriCounty **Utah County** Wasatch Weber-Morgan U.S. 0 10 20 30 40 50 60 70 80 90 100 Percentage of White Persons

Data Source: U.S. Census Bureau, 2010 Census

## **Environmental Determinants**

There is a strong link between human health and the environment. From the food we eat, to the air we breathe, to the water we drink, we are exposed to contaminants, toxins, and disease through our surrounding environment. Environmental factors often have a major impact as they affect large numbers of people. Many parts of our environment have an impact on health, including our built environment; however this report can only touch on a few topics and will focus on food safety, and air and water quality.

#### **In This Section:**

#### **Foodborne Illness and Food Safety**

Every year, 1 in 6 Americans become ill from the food they eat, and another 3,000 die of foodborne diseases. As common as they are, many foodborne illnesses are preventable through proper food safety.

#### **Air Quality**

Air pollution contributes to a number of health problems for many Utahns. How air pollution affects an individual's health depends on the particular pollutants that individual is exposed to, the length of time and concentration of the exposure, and that individual's tolerance level and other health risks. Air pollution can indirectly affect health through deposition into drinking water sources or by entering the food chain. Poor air quality is thought to exacerbate asthma and heart disease and increase the risk of developing respiratory infections. Poor air quality may also impact fetal development. The rate of adverse birth outcomes in newborns has increased in Utah over the last 10 years. Approximately 7.0% of births will be low birth weight and 9.8% will be pre-term.

#### **Drinking Water Quality**

People drink and use water every day. The majority of Americans are provided with high quality drinking water. About 90% of people in the U.S. (262 million in 2006) get their water from a community water system versus a smaller water supply such as a household well. The U.S. Environmental Protection Agency (EPA) sets regulations for treating and monitoring drinking water delivered by community water systems. Currently, there are water quality standards and monitoring requirements for over 90 contaminants. Drinking water protection programs play a critical role in ensuring high quality drinking water and in protecting the public's health.

Because people drink and use water every day, contaminants in drinking water have the potential to affect many people. The number of people served by a community water system varies from as low as 25 to hundreds of thousands. Community water systems in the U.S. provide among the highest quality drinking water in the world. However, some contaminants are present at low levels, and it is still possible that drinking water can become contaminated at higher levels. If a person is exposed to a high enough level of a contaminant, they may become ill.

#### **Recreational Water Health**

Water activities can be a great source of physical activity and entertainment. Recreational water, however, can also spread germs and disease. The number of recreational water outbreaks has been on the rise in the past 20 years. Recreational water sources may include, but are not limited to the following: swimming pools, hot tubs, spas, water parks, water play areas, interactive fountains, lakes, rivers, and oceans.

# FOODBORNE ILLNESS AND FOOD SAFETY

#### **KEY POINTS**

- In 2010 there were 2 reported cases of *E. coli* per 100,000 population in Utah, a 10 year low.
- The number of reported cases fluctuates year to year largely due to outbreaks.
- The number of annually reported E. coli cases has increased significantly since 1990, however this is likely due to improved reporting and laboratory detection methods.
- In 2010 Utah did not meet the national or state Healthy People 2010 goal of less than one *E. coli* case per 100,000 population.

#### E. coli Infections

#### Why Is This Important?

Escherichia coli (E. coli) are very common bacteria that can cause diarrheal illness in humans. Non-

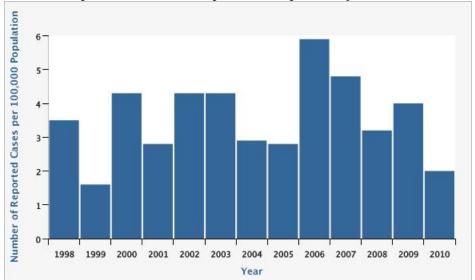
pathogenic strains are also found in stool; these strains of *E.coli* are a normal part of the flora in the bowels. The Utah Department of Health tracks one category of *E. coli*, known as Shiga toxin-producing *E. coli* or STEC. The most common strain of STEC is O157:H7, but there are many other strains of *E. coli* that produce Shiga toxin.

Healthy People 2020
Objective FS-1.2: Reduce infections caused by key pathogens transmitted commonly through food:
STEC 0157:H7

U.S. Target: 0.6 cases per 100,000 population State Target: 0.6 cases per 100,000 population

All age groups can be infected with Shiga toxin-producing *E. coli*, but young children, the elderly, and those with unhealthy or compromised immune systems are the most severely affected. Eating ground beef that has been inadequately cooked is a common way of getting the infection. Other sources of infection may include unpasteurized (raw) milk or juice; drinking or swimming in water that is contaminated with sewage; eating contaminated fruits or vegetables; or contact with animals that are infected. Severe manifestations of STEC infection require a prolonged hospital stay, and may result in renal failure and death. Effective prevention is the best treatment for STEC.

#### Number of Reported STEC Infections per 100,000 Population by Year, Utah, 1998-2010



Data Sources: UDOH, Bureau of Epidemiology; Utah GOPB

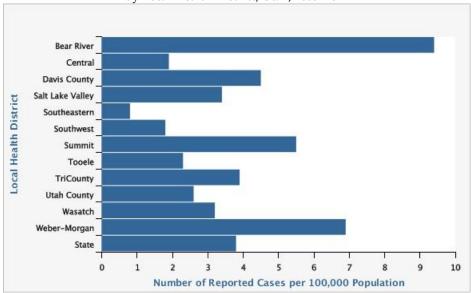
#### How Are We Doing?

*E. coli* O157:H7 infections became reportable in Utah in 1990, during which time six cases were reported. The increase in number of cases reported annually since 1990 may be due to improved reporting and better laboratory detection methods. In 2006, the number of STEC infections per 100,000 Utah population per year (5.89) was more than double the 2005 rate due to a multi-state outbreak of *E. coli* O157:H7 associated with spinach. Since 2006, the Utah rate of STEC has decreased. In 2009 an outbreak of *E. coli* O157:H7 occurred in Utah, there were 14 laboratory-confirmed cases identified, yet the source of the illness was not determined.

In 2010, incidence in Utah was double the Healthy People 2010 goal at 2.0 cases per 100,000 person-years. However this does not necessarily indicate higher disease rates in the state compared to the nation as a whole.

(See next page for LHD graph view)

#### Number of Reported STEC Infections per 100,000 Population by Local Health District, Utah, 2005–2011



Data Sources: UDOH, Bureau of Epidemiology; Utah GOPB

# FOODBORNE ILLNESS AND FOOD SAFETY

#### **KEY POINTS**

- In 2010 there were 12.3 cases of *Salmonella* per 100,000 population reported in Utah.
- Though the rate of reported cases has remained below the national average since 2001, Utah does not meet the state and national Healthy People 2020 goal of 11.4 cases per 100,000 population.

### Salmonella Infections

#### Why Is This Important?

Salmonellosis is an infectious disease caused by Salmonella bacteria. Most persons infected with

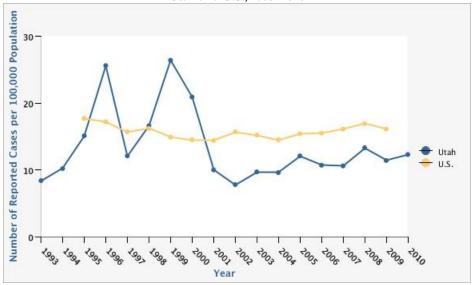
Salmonella develop diarrhea, fever, and abdominal cramps 12 to 72 hours after exposure. The illness usually lasts 4 to 7 days, and most persons recover without treatment. In some patients, the Salmonella infection may spread from the intestines to the blood stream and can lead to hospitalization or death unless the person is treated promptly.

Healthy People 2020
Objective FS-1.4: Reduce infections caused by key pathogens transmitted commonly through food:
Salmonella species

U.S. Target: 11.4 cases per 100,000 population State Target: 11.4 cases per 100,000 population

The elderly, infants, and those with impaired immune systems are more likely to have a severe illness. The infection is acquired by eating or drinking food contaminated with *Salmonella* bacteria. Illness may also be spread by direct contact with an infected person or animal. *Salmonella* bacteria are commonly found in food products such as eggs, egg products, meats, poultry, unpasteurized dairy products, and contaminated produce. Domestic animals including poultry (especially baby ducks and chicks), reptiles (e.g., lizards and snakes), amphibians (especially turtles), and farm animals (e.g., cattle and pigs) may carry the bacteria.

#### Number of Reported *Salmonella* Infections per 100,000 Population, Utah and U.S., 1993–2010



Data Sources: UDOH, Bureau of Epidemiology; CDC; Utah GOPB

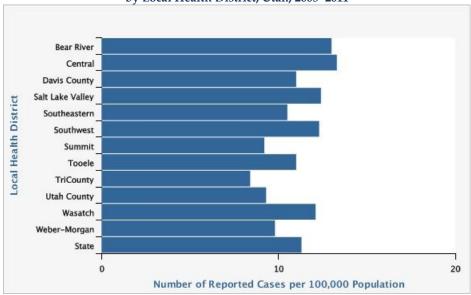
#### How Are We Doing?

The number of reported *Salmonella* infections in Utah decreased from 26.4 cases per 100,000 person-years in 1999 to 12.3 per 100,000 person-years in 2010. The Healthy People 2020 target is 11.4 cases per 100,000 person-years, so there is still work to be done for Utah to reach this target goal.

Recent national investigations have identified outbreaks of Salmonella linked to contaminated tomatoes eaten raw (2004 and 2008), dry dog food (2006 and 2007), ground beef (2004), pet rodents (2004), raw almonds (2003–2004), cantaloupe (2000–2002), peanut butter (2008), African Dwarf Frogs (2009), and alfalfa sprouts (2010).

(See next page for LHD graph view)

# Number of Reported *Salmonella* Infections per 100,000 Population by Local Health District, Utah, 2005–2011



Data Sources: Utah Department of Health, Bureau of Epidemiology; Utah GOPB

## FOODBORNE ILLNESS AND FOOD SAFETY

#### **KEY POINTS**

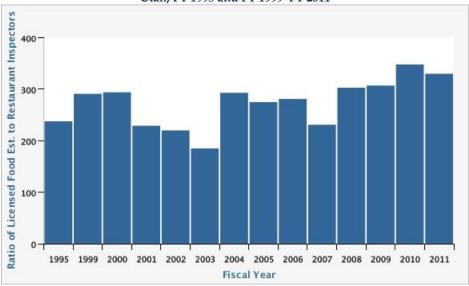
- The Food and Drug Administration recommends a minimum staffing ratio of 1 restaurant inspector (fulltime equivalent, or FTE) for every 150 food establishments.
- Local health departments had 43.85 FTEs committed to inspecting 9,777 permanent food service establishments and 4,694 temporary food establishments in FY 2011. To meet minimum staffing ratios, local health departments would need approximately 56.15 additional FTEs.
- The Utah Department of Health has only one FTE available to provide training, standardization, data collection, and other support for the statewide food protection program.

#### Safe Restaurant Food

#### Why Is This Important?

Foodborne disease outbreaks sometimes result from failures in protective systems, but are more often the result of improper food handling. Children, the very old, and people with weakened immune systems are at increased risk of infection and death resulting from food contamination.

#### Ratio of Licensed Food Establishments to Restaurant Inspectors, Utah, FY 1995 and FY 1999-FY 2011



Data Source: UDOH, Bureau of Epidemiology, Environmental Sanitation Program

#### **How Are We Doing?**

The number of licensed permanent food establishments increased 1.6% from 9,627 in FY 2010 to 9,777 in FY 2011. The number of temporary food establishments decreased .85% from 4,734 in FY 2010 to 4,694 in FY 2011.

The Food and Drug Administration recommends a minimum staffing ratio of 1 restaurant inspector (full-time equivalent, or FTE) for every 150 food establishments. If the ratio is based on permanent establishments, only four local health departments met this standard in FY 2011. However, if temporary establishments are included, only one local health department met this standard in FY 2011.

Local health departments had 43.85 FTEs committed to inspecting 9,777 permanent food service establishments and 4,694 temporary food establishments in FY 2011. To meet minimum staffing ratios, local health departments would need approximately 56.15 additional FTEs.

The Utah Department of Health has only one FTE available to provide training, standardization, data collection, and other support for the statewide food protection program.

## **AIR QUALITY**

#### **KEY POINTS**

- During the last 10 years
   Utah experienced an
   average of 25 days
   annually where the levels
   of ozone exceeded the
   National Ambient Air
   Quality (NAAQS).
- These days of poor air quality are geographically confined to the more urbanized counties in the state. Not all residents experience all days of poor air quality.

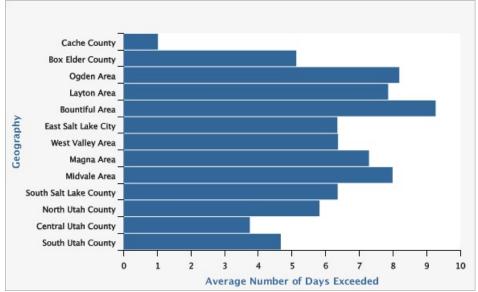
#### **Ozone**

#### Why Is This Important?

Ozone can cause several adverse health effects in anyone, but especially in sensitive populations such as children, older adults, people with preexisting lung diseases such as asthma, and people who are physically active outdoors. Some of these health problems include painful breathing, chest tightness, headache, coughing, increased asthma symptoms, lung inflammation, temporary reduction in lung capacity, and over time ozone is associated with chronic lung problems and respiratory infections. Adverse health effects from ozone are more likely to occur when ozone levels exceed the Environmental Protection Agency's standard, but are possible when ozone levels are below the standard, especially in sensitive populations.

Ground-level ozone, not to be confused with the atmosphere's protective ozone layer, is created by reactions between environmental pollutants and light and heat. Ozone is the main component of smog and is dangerous to our health and environment. The creation of ozone is facilitated by warm weather and sunshine, therefore, ozone levels are usually higher in the summer and in the midafternoon.

Maximum 8-hour Average Ozone Concentrations Over the National Ambient Air Quality Standard: Average Number of Days by Geography, Utah, 2000–2010



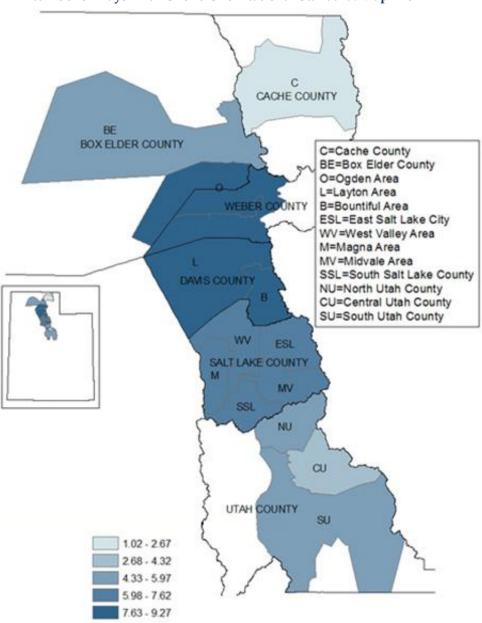
Data Source: U.S. EPA, Air Quality System

Data Note: Data on ozone levels is only available where air monitors exist. Currently, Cache County, Box Elder County, and counties along the Wasatch Front are the only areas that are considered to need air monitoring.

#### **How Are We Doing?**

Several of the most urban counties in Utah have days that do not comply with the new ozone standard of 0.075 ppm. Utah's Department of Environmental Quality (DEQ) is working to decrease the number of days over the ozone standard.

(See next page for select geography map view)



Number of Days With Ozone Over National Standard: Map View

Data Source: U.S. EPA, Air Quality System

Data Note: Data on ozone levels is only available where air monitors exist. Currently, Cache County, Box Elder County, and counties along the Wasatch Front are the only areas that are considered to need air monitoring.

## **AIR QUALITY**

#### **KEY POINTS**

- Adverse health effects from PM<sub>2.5</sub> are more likely to occur when PM<sub>2.5</sub> levels exceed the Environmental Protection Agency's standard, but are possible when PM<sub>2.5</sub> levels are below the standard, especially in sensitive populations.
- Several of the most urban counties in Utah have days that do not comply with the PM<sub>2.5</sub> standard.
- The majority of particulate matter is caused by automobile emissions.

### PM<sub>2.5</sub>

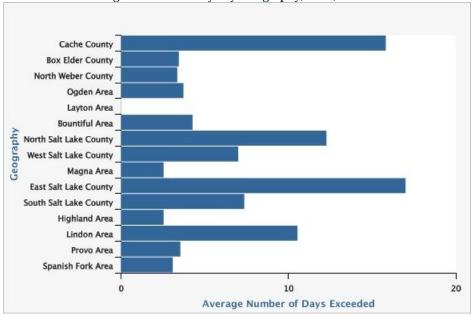
#### Why Is This Important?

Fine particulate matter ( $PM_{2.5}$ ) is very small and can get deep inside the lungs and cause a variety of health problems. These health problems can affect anyone, but especially sensitive populations such as children, older adults, people with preexisting heart and lung problems, and those who are physically active outdoors. Some of these health problems include painful breathing, chest tightness, headache, coughing, increased asthma symptoms, temporary reduction in lung capacity, abnormal heart beat, nonfatal heart attacks, and over time  $PM_{2.5}$  is associated with chronic lung problems and respiratory infections.

Adverse health effects from  $PM_{2.5}$  are more likely to occur when  $PM_{2.5}$  levels exceed the Environmental Protection Agency's standard, but are possible when  $PM_{2.5}$  levels are below the standard, especially in sensitive populations.

In addition to these adverse outcomes,  $PM_{2.5}$  can influence the environment in ways that will eventually affect human health. Fine particles cause haze which reduces visibility. The long-term effects of  $PM_{2.5}$ , which settles in the soil, natural water sources, forests, and agricultural areas, are still to be determined.

PM<sub>2.5</sub> Levels Over the National Ambient Air Quality Standard: Average Number of Days by Geography, Utah, 2000–2010



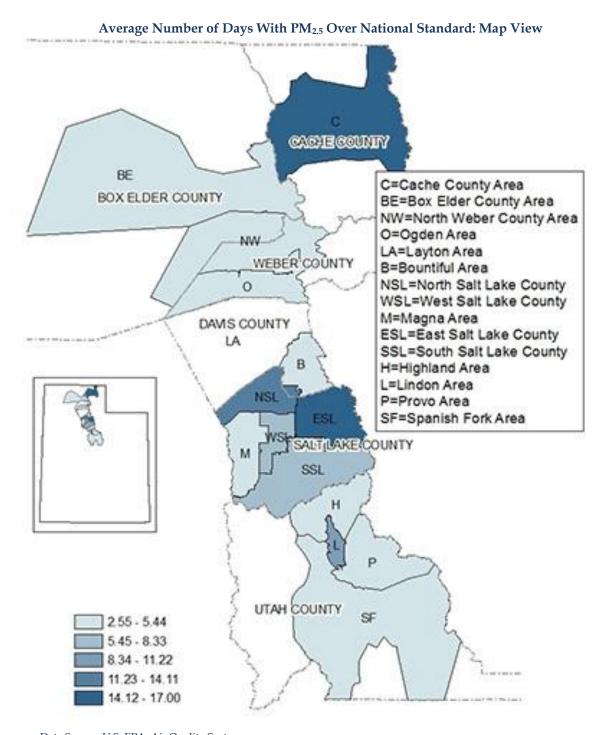
Data Source: U.S. EPA, Air Quality System

Data Note: Data on ozone levels is only available where air monitors exist. Currently, Cache County, Box Elder County, and counties along the Wasatch Front are the only areas that are considered to need air monitoring.

#### **How Are We Doing?**

Several of the most urban counties in Utah have days that do not comply with the  $PM_{2.5}$  standard. This may, in part, be due to Utah's unique geography and seasonal conditions.  $PM_{2.5}$  levels increase seasonally in the winter and often due to inversions. Utah's Department of Environmental Quality (DEQ) is working to decrease the number of days over the  $PM_{2.5}$  standard.

(See next page for select geography map view)



Data Source: U.S. EPA, Air Quality System

Data Note: Data on ozone levels is only available where air monitors exist. Currently, Cache County, Box Elder County, and counties along the Wasatch Front are the only areas that are considered to need air monitoring.

## DRINKING WATER QUALITY

#### **KEY POINTS**

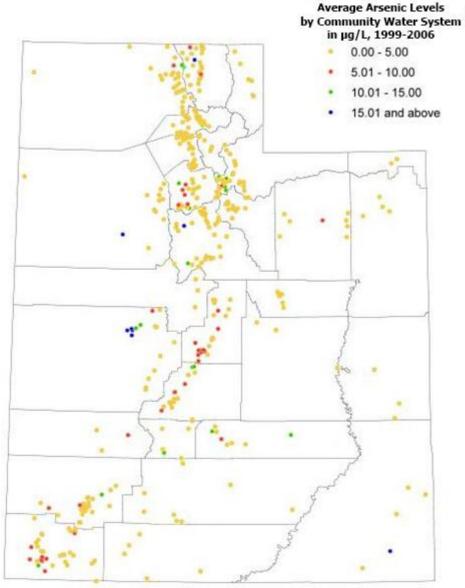
- National standards state community water systems are not supposed to exceed 10 micrograms of arsenic per liter. Many Utah communities exceed the national standards.
- The majority of health risks of arsenic exposure are due to long-term exposure over time.

#### **Arsenic**

#### Why Is This Important?

Arsenic is a toxic chemical element that is naturally found in the Earth's crust in soil, rocks, and minerals. There is a wide variation in the levels of arsenic found in drinking water systems and private water supplies across the Nation. The majority of health risks of arsenic exposure over time are long-term, although some short-term exposures at high doses can also cause adverse health effects. People who drink water containing arsenic in excess of regulatory standards over many years could experience a variety of health problems that include thickening and discoloration of the skin, stomach pain, nausea, vomiting, diarrhea, liver problems, cardiovascular, pulmonary, immunological, neurological, reproductive and endocrine problems, and cancer of the bladder, skin, kidney, liver, and lung.

Before 2006 community water systems were not supposed to exceed 50 micrograms of arsenic per liter. In 2006 this standard changed and currently community water systems are not supposed to exceed 10 micrograms of arsenic per liter in order to reduce adverse health effects from arsenic exposures.



Data Source: Utah DEQ, Division of Drinking Water, Safe Drinking Water Information System

### DRINKING WATER QUALITY

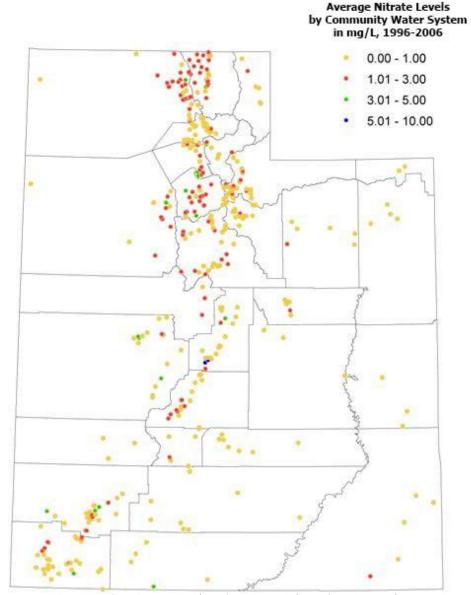
### **KEY POINTS**

- Exposure to nitrates has been shown to have shortterm health effects as well as long-term effects, primarily cancer.
- Short-term health effects from drinking water with nitrates are most harmful to infants under six months of age.
- Drinking water with high levels of nitrates is often found in areas where nitrogen-based fertilizers are used.
- Nitrate levels are not supposed to exceed 10 mg/L. Since the first quarter of 2006, no Utah community water systems have exceeded this standard.

### **Nitrates**

### Why Is This Important?

Nitrate and nitrite are nitrogen-oxygen molecules which can combine with various organic and inorganic compounds. Nitrate is the form commonly found in water, often in areas where nitrogen-based fertilizers are used. Short-term health effects from drinking water with nitrate are most harmful to infants under six months of age. This can cause serious illness and sometimes death in this vulnerable population. Long-term exposures to nitrates in the general population may be associated with adverse reproductive problems and some cancers, primarily stomach. Currently nitrate levels are not supposed to exceed 10 milligrams of nitrates per liter of water in order to prevent any nitrate related adverse health effects.



# RECREATIONAL WATER HEALTH

### **KEY POINTS**

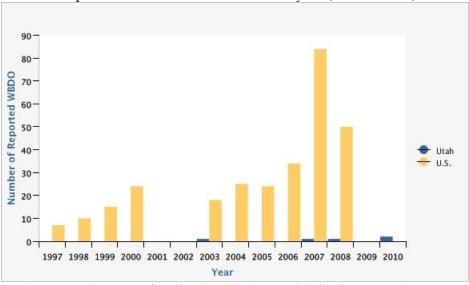
- Waterborne disease outbreaks are a reportable condition in Utah. Local health departments investigate outbreaks to determine source of outbreaks, risks to the public, and to implement control measures.
- Several waterborne disease outbreaks have occurred in the last 5 years, including a *Cryptosporidium* outbreak in 2007.
- There were 2 waterborne disease outbreaks in 2010.

### **Waterborne Disease Outbreaks**

### Why Is This Important?

These data are useful for expanding our understanding of the scope of waterborne disease, identifying important factors associated with unsafe or unhealthy recreational water, supporting public health recommendations, and encouraging improved water-quality policies and regulations.

### Number of Reported Waterborne Disease Outbreaks by Year, Utah and U.S., 1997-2010



Data Sources: UDOH, Bureau of Epidemiology; CDC, National Outbreak Reporting System

### **How Are We Doing?**

In response to the 2007 statewide *Cryptosporidium* outbreak, local and state public health implemented restrictions on swimming for persons in diapers, persons who had been ill and persons who were still ill. It appears these restrictions helped stop the outbreak.

A proactive education campaign and other prevention measures were implemented immediately following the end of the 2007 outbreak and continue to be implemented each year during the swim season (May through September).

# **Healthy Beginnings**

A healthy pregnancy and birth are vital to the well-being of women and infants particularly, but also families and communities. Preconception and prenatal care can reduce birth defects, low birth weight, and other preventable problems. Adolescents have a higher risk of a number of adverse pregnancy outcomes. The time following a child's birth is also critical to a healthy childhood. Breastfeeding in the early postpartum period and immunization are two important factors in a child's early health.

### In This Section:

### **Prenatal Care**

The use of prenatal care services has been shown to improve birth outcomes. Inadequate prenatal care has been associated with increased risks of low birth weight babies, premature births, neonatal mortality and infant mortality.<sup>7</sup>

### **Mortality**

Infant mortality is defined as the number of infants who died before their first birthday (under 365 days), after being born alive, per 1,000 live births. Infant mortality is an important indicator for both child and maternal health and is commonly used to compare the health and well-being of populations across and within countries. Maternal mortality for the State of Utah is defined as the number of women who have died within 12 months of completion of a pregnancy whose cause of death is due to pregnancy or pregnancy-related causes per 100,000 live births. It is a good indicator of both maternal and infant health and care.

### **Low Birth Weight**

Live births under 2,500 grams (5 pounds, 8 ounces) are considered low birth weight infants. Many factors can affect birth weight; genetics, improper prenatal care, poor nutrition, smoking, and even air quality have all been linked to low birth weight.

### **Teen Pregnancy**

Live births to females 15–19 years of age are considered adolescent births. Adolescent births can pose risks for both mother and child. Children born to adolescent mothers are at a higher risk of low birth weight and infant mortality. They are also more likely to have lower academic achievement, have more health problems, be unemployed, and be teens parents themselves. Girls who give birth as adolescents are significantly more likely to drop out of high school affecting their future employment and earning potential.<sup>8</sup>

### **Breastfeeding**

Breast feeding has been strongly associated with greatly improved health outcomes for both infants and mothers. However many infants are still sub-optimally breastfed. Exclusive breastfeeding (meaning not be given any foods or liquids other than breast milk) for 6 months is recommended by an Expert Committee of 15 different professional organizations. The American Academy of Pediatrics, American Academy of Family Physicians, American College of Obstetricians and Gynecologists, American College of Nurse-Midwives, American Dietetic Association, and American Public Health Association, among others, further officially recommend infants breastfeed for at least 12 months.

### **Childhood Immunizations**

Young children are usually at a higher risk for adverse health effect from communicable diseases, however many diseases are now vaccine-preventable. Immunizing children reduces both their risk and other's risk of contracting potentially dangerous, transmissible diseases. Many children are under-immunized, leaving the potential for disease outbreaks.

### PRENATAL CARE

### **KEY POINTS**

- Health care providers recommend that women begin prenatal care in the first trimester of their pregnancy.
- In 2010, 73.1% of pregnant women in Utah received prenatal care in the first trimester; an increase from 71.6% in 2009.
- There are wide disparities among Utah's racial and ethnic groups in the percentages of women who receive early prenatal care. Lack of early prenatal care is strongly linked with poverty and a lack of insurance coverage.
- Women who receive early and consistent prenatal care enhance their likelihood of giving birth to a healthy child. Health care providers recommend that women begin prenatal care in the first trimester of their pregnancy.

### AT-RISK POPULATIONS

The rate of receiving prenatal care in the first trimester is lower for:

- American Indians/AK Natives
- Asians
- Blacks/African Americans
- Native HI/Pacific Islanders
- Hispanics/Latinos
- Women under 25 or over 40 years of age
- Women with a high school education or less
- Unmarried women

### **Prenatal Care**

### Why Is This Important?

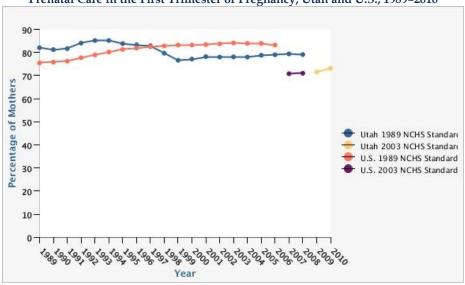
Prenatal care (PNC) is an important part of a health pregnancy. Women who receive early and

consistent prenatal care enhance their likelihood of giving birth to a healthy child. Prenatal care can improve birth outcomes and prevent medical complications and their costs associated with premature births, low birth weight births, and maternal and infant mortality and morbidity.

### Healthy People 2020

Objective MICH-10.1: Increase the proportion of pregnant women who receive prenatal care beginning in first trimester
U.S. Target: 77.9 percent
State Target: 77.9 percent

Prenatal Care in the First Trimester of Pregnancy, Utah and U.S., 1989-2010

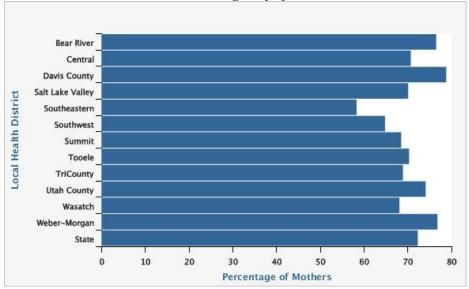


Data Sources: Utah Birth Certificate Database; National Vital Statistics Reporting System Data Note: Due to differences in methods of data collection between Utah and the U.S., data comparisons cannot be made after 2006.

### **How Are We Doing?**

The percentage of women in Utah entering prenatal care in the first trimester of pregnancy has increased from 71.6% in 2009 to 73.1% in 2010.

Prenatal Care in the First Trimester of Pregnancy by Local Health District, 2009-2010



Data Source: Utah Birth Certificate Database

### **MORTALITY**

### **KEY POINTS**

- In 2010, 251 Utah infants died during their first year of life reflecting an infant mortality rate of 4.8 infant deaths per 1,000 live births. Utah's infant mortality rate has declined since 1980 when it was 10.5.
- While Utah's overall rate is lower than in the U.S. as a whole, there are disparities by racial groups. For Utah's Asian and Pacific Islander populations, the rate of infant mortality is nearly twice that of Whites.
   Among Black women, the rate is more than double that of Whites.
- Three causes account for more than half of all infant deaths in Utah: conditions in the perinatal period, birth defects, and other medical conditions.

### AT-RISK POPULATIONS

The rate of infant mortality is higher for:

- Blacks/African Americans
- Native HI/Pacific Islanders
- Hispanics/Latinos
- Mothers in younger age groups

### **Infant Mortality**

### Why Is This Important?

The infant death rate is an important measure of a nation's health and a worldwide indicator of

health status and social well-being. It is a critical indicator of the health of a population. Three causes account for more than half of all infant deaths in Utah: birth defects (1.40 per 1,000 live births); conditions in the perinatal period (includes disorders related to short

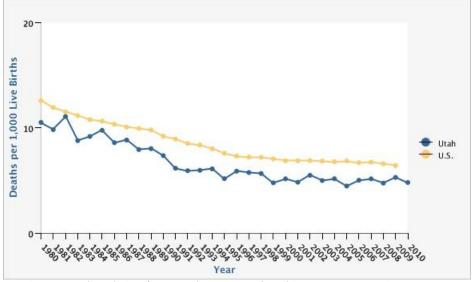
Healthy People 2020

Objective MICH-1.3: Reduce the rate of all infant deaths (within 1 year of life)

U.S. Target: 6.0 infant deaths per 1,000 live births State Target: 4.6 infant deaths per 1,000 live births

gestation or preterm birth and can reflect the overall state of maternal health, as well as the quality and accessibility of primary health care for pregnant women) (2.09 per 1,000); and other medical conditions (0.52 per 1,000).

### Infant Mortality: Death at Under 1 Year of Age, Utah and U.S., 1980-2010



Data Sources: Utah Birth Certificate Database; National Vital Statistics Reporting System

### **Risk Factors**

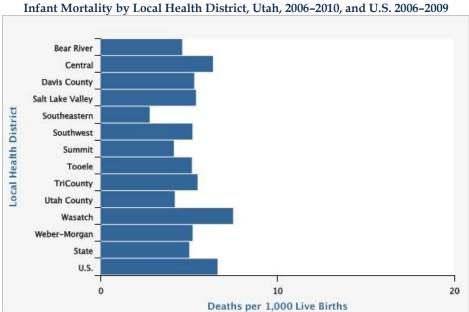
Some of the mother's behaviors during the perinatal period are associated with an increased risk of infant mortality including:

- poor nutrition
- inadequate or excessive weight gain
- lack of prenatal care
- use of tobacco products and alcohol

### **How Are We Doing?**

The infant mortality rate has been declining throughout the past 20 years both locally and nationally. Despite this decline, the problem of infant mortality remains substantial. During 2010, 251 Utah infants died during their first year of life, each death representing a tragedy for parents, siblings, and other family members.

In Utah, although the infant mortality rate is lower than the nation's, the rate of preterm birth has remained between 9.5–10% of all live births in the state for the past ten years. And nationwide, the percent of preterm live births has risen 36% since 1984.



Data Source: Utah Birth Certificate Database

### **MORTALITY**

### **KEY POINTS**

- Pregnancy-related mortality in Utah increased in 2009 to 16.7 maternal deaths per 100,000 live births after two years of declines from a high of 20.6 in 2006. Some of the fluctuation in this rate in Utah may be attributable to the small numbers
- The maternal mortality rate has also increased in the U.S. recently. In 2007, the most recent year with comparable data, Utah's rate was 16.3 versus the U.S. rate of 12.7 deaths per 100,000 live births.
- The health of mothers prior to conception is a significant contributor to a healthy pregnancy. For many of Utah's healthy birth indicators, improving maternal preconception health is a way to improve outcomes

### AT-RISK POPULATIONS

The rate of maternal mortality is higher for:

- Mothers under 18 years of age
- Mothers over 40 years of age
- Mothers who did not receive adequate prenatal care
- African American/Black women

### **Maternal Mortality**

### Why Is This Important?

Each year in the United States, one woman dies from a pregnancy complication for every 10,000

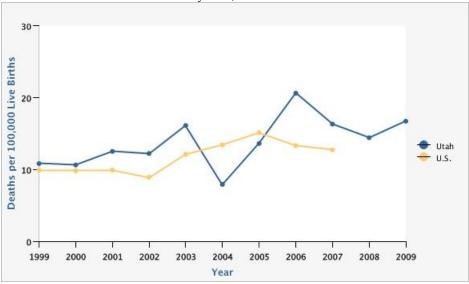
births. Every death prevented is meaningful. Surveillance of maternal mortality identifies ways to improve the health, health behaviors, and health care of women before and during pregnancy. Surveillance also

### Healthy People 2020

Objective MICH-5: Reduce the rate of maternal mortality U.S. Target: 11.4 maternal deaths per 100,000 live births State Target: 11.4 maternal deaths per 100,000 live births

identifies gaps in the health care system and social services, health care access, and the quality of prenatal and perinatal care.

### Maternal Mortality Rate, Utah and U.S. 1999-2009



Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System

### How Are We Doing?

Utah's maternal mortality has decreased from 36 deaths per year in 1940 to a range of 2–11 deaths per year between 1999 and 2009. However, Utah's rate of maternal mortality has now nearly doubled from what it was in 2004. Utah's maternal mortality rate is higher than the U.S. rate.

# LOW BIRTH WEIGHT

### **KEY POINTS**

- Utah's rate of low birth weight was 7.0% in 2010.
   Low birth weight is defined as less than 2,500 grams or about 5 pounds, 8 ounces.
- Rates of low birth weight continue to rise in Utah and in the U.S. The percentage of Utah babies born at a low birth weight increased from 6.0% in 1991 to 7.0% in 2010.
- Women who receive early and consistent prenatal care enhance their likelihood of giving birth to a healthy child. Health care providers recommend that women begin prenatal care in the first trimester of their pregnancy.

### AT-RISK POPULATIONS

The rate of low birth weight births is higher for:

- Asians
- Blacks/African Americans
- Hispanics/Latinos
- Mothers under 25 or over 39 years of age
- Women with lower educational attainment
- Women with lower income
- Unmarried women

### **Low Birth Weight**

### Why Is This Important?

Low birth weight increases the risk for infant mortality and morbidity. As birth weight decreases, the

risk for death increases. Low birth weight infants who survive often require intensive care at birth, may develop chronic illnesses, and later may require special education services. Health care costs and length of hospital stay are

Healthy People 2020
Objective MICH-8.1: Reduce low birth weight (LBW)
U.S. Target: 7.8 percent of live births
State Target: 6.7 percent of live births

higher for low birth weight infants. Utah inpatient hospital discharge data (2010) indicate that the average hospital charge for a low birth weight infant was \$44,472 compared to \$2,218 for a normal birth weight infant.



Data Sources: Utah Birth Certificate Database; National Vital Statistics Reporting System

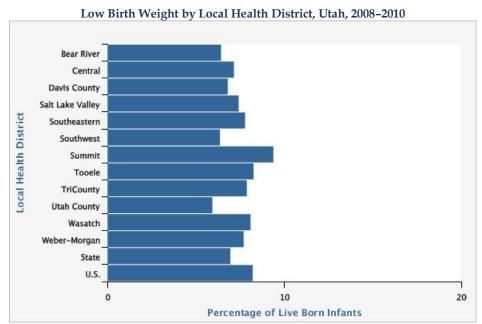
### **Risk Factors**

Risk factors for low birth weight include:

- Preterm births
- Maternal chronic disease, such as hypertension
- Maternal obstetric family history, such as having been born low birth weight themselves
- Multiple gestation (e.g. twins)
- Low pre-pregnancy weight
- Tobacco or alcohol use during pregnancy
- Lack of or inadequate prenatal care
- Short intervals between pregnancies
- Previous pregnancy resulting in a low birth weight infant

### How Are We Doing?

Utah's low birth weight percentage increased from 6.0% in 1991 to 7.0% in 2010. While this is below the Healthy People 2020 Objective target (7.8%), the increasing trend is of concern.



Data Source: Utah Birth Certificate Database

### TEEN PREGNANCY

### **KEY POINTS**

- Utah's adolescent birth rate was 27.6 births per 1,000 females aged 15–19 in 2010.
- Utah's adolescent birth rate has declined steadily since 2007 and continues to be below the U.S. rate.
- Birth rates for women aged 15–19 vary substantially by race and ethnicity.
- Bearing a child during adolescence is associated with long-term difficulties for the mother, her child, and society.

### AT-RISK POPULATIONS

The rate of receiving prenatal care in the first trimester is lower for:

- American Indians/AK Natives
- Native HI/Pacific Islanders
- Hispanics/Latinos

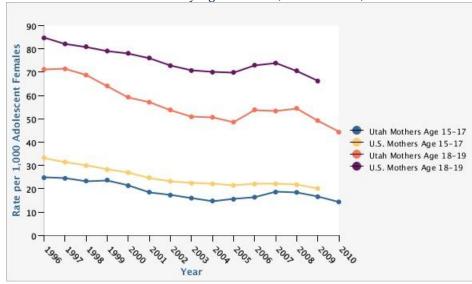
### **Adolescent Births**

### Why Is This Important?

Research indicates that bearing a child during adolescence is associated with long-term difficulties for the mother, her child, and society. These consequences are often attributable to poverty and other adverse socioeconomic circumstances that frequently accompany early childbearing.

Compared to babies born to older mothers, babies born to adolescent mothers, particularly young adolescent mothers, are at higher risk of low birth weight and infant mortality. These babies are more likely to grow up in homes that offer lower levels of emotional support and cognitive stimulation, and they are less likely to earn a high school diploma. For the mothers, experiencing birth during adolescence can increase a teen's risk of acquiring a sexually-transmitted infection. Giving birth during adolescence is also associated with limited educational attainment, which in turn can reduce future employment prospects and earning potential.

### Adolescent Birth Rate by Age of Mother, Utah and U.S., 1996-2010



Data Sources: Utah Birth Certificate Database; Utah GOPB; National Vital Statistics Reporting System Data Note: U.S. 2009 data is preliminary.

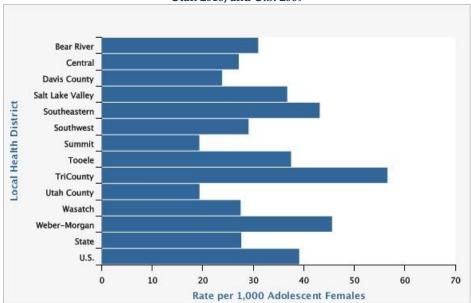
### **How Are We Doing?**

The teen birth rates per 1,000 females aged 15–19 in Utah, for the past five years were:

2006: 32.7 2007: 34.7 2008: 34.4 2009: 31.0 2010: 27.6

A high proportion, 77.4% of Utah females aged 15–17 and 72.1% of Utah females aged 18–19, reported their pregnancy as unintended in the 2009 Pregnancy Risk Assessment and Monitoring Survey (PRAMS).

Birth Rate for Females Aged 15–19 by Local Health District, 2008–2010, Utah 2010, and U.S. 2009



Data Sources: Utah Birth Certificate Database; Utah GOPB; National Vital Statistics Reporting System

### BREASTFEEDING

### **KEY POINTS**

- The percentage of infants who were ever breastfed in Utah was 74.6% in 2008.
- The percentage of infants who were ever breastfed in Utah has consistently been higher than the national average, though the Utah rate has declined slightly in recent years.
- There are significant differences in the percentage of infants breastfed at discharge between birthing facilities in Utah.

### AT-RISK POPULATIONS

The rate of ever breastfeeding is lower for:

- American Indians/AK Natives
- Women under 20 or over 44 years of age
- Women with lower educational attainment
- Unmarried women

### **Breastfeeding: Ever**

### Why Is This Important?

Suboptimal breastfeeding practices are unequivocally associated with a greater risk of infant

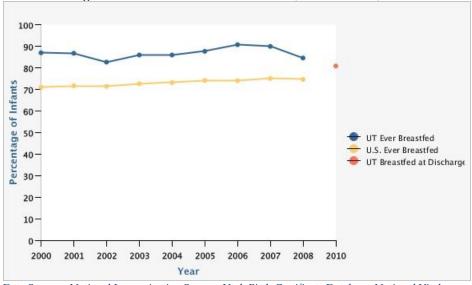
morbidity and mortality and poorer developmental outcomes, particularly in premature infants. Increasing breastfeeding rates is one of the most important behaviors that can decrease infant death and illness worldwide. When

Healthy People 2020
Objective MICH-21.1: Increase the proportion of infants who are breastfed: ever
U.S. Target: 81.9 percent

breastfeeding does not occur, the important benefits are not enjoyed by infants, mothers, families, society, and the environment. It is the normal, preferred feeding for infants, including premature and sick babies; there are only rare exceptions.

Human milk provides species-specific and age-specific nutrients for the infant, milk composition continues to change to match infant nutritional needs. Human milk contains multiple substances with antimicrobial properties, which protect against infection. For women that have not breastfed, they have increased postpartum blood loss and a slower involution of the uterus. Breast milk benefits the newborn infant by providing the ideal balance of nutrients, enzymes, immunoglobulin, anti-infective and anti-inflammatory substances, hormones, and growth factors. Breastfeeding helps the mother return to the physiologic pre-pregnant state. It benefits both mother and child by providing a time of intense, nurturing, maternal-infant interaction and bonding. In the immediate postpartum period, the release of oxytocin results in increased uterine contractions aiding with uterine involution and a decrease in maternal blood loss. Mothers experience shorter birth intervals with the negative health sequelae for the woman and her infant of short birth spacing. Immediately after birth, and in the early weeks, "Skin to Skin Contact" between the infant and mother provide an environment for regulation of the infant's body temperature, blood glucose, and oxygen saturation levels.

### Percentage of Infants Who Were Ever Breastfed, Utah and U.S., 2000-2008

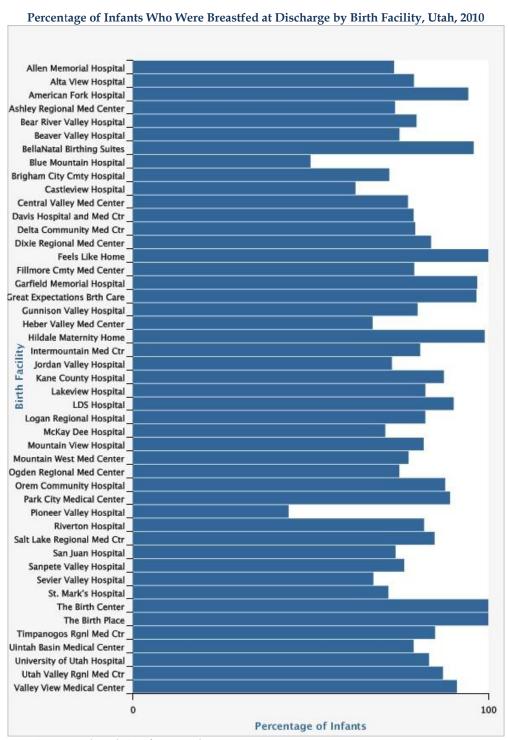


Data Sources: National Immunization Survey; Utah Birth Certificate Database; National Vital Statistics Reporting System

### **How Are We Doing?**

Utah rates are higher than the U.S. rates for ever breastfeeding during 2000–2008. The percentage of infants who were ever breastfed declined between 2006 (90.7%) and 2008 (84.5%), the lowest rate since 2002. 2010 data indicate significant differences in the percentage of infants breastfed at discharge between birth facilities in Utah.

(See next page for by birth facility graph view)



Data Source: Utah Birth Certificate Database

Data Note: Data for breastfeeding at discharge is collected by birth facility. Because the catchment areas of birth facilities do not necessarily coincide with a single local health district, data could not be shown by district.

### **BREASTFEEDING**

### **KEY POINTS**

- The American Academy of Pediatricians and the American Public Health Association, among others, officially recommend infants be breastfed for at least 12 months.
- In 2008 29.3% of Utah mothers reported breastfeeding their infants for at least 12 months, an increase from 2000 (22.2%) but a decrease from the year before (35.4%).
- For further information about exclusive breastfeeding rates at 3 and 6 months, please see the IBIS website at: http://ibis.health.utah.gov/ indicator/view/ BrstFeed6mos.UT\_US.html.

### **Breastfeeding: At 1 Year**

### Why Is This Important?

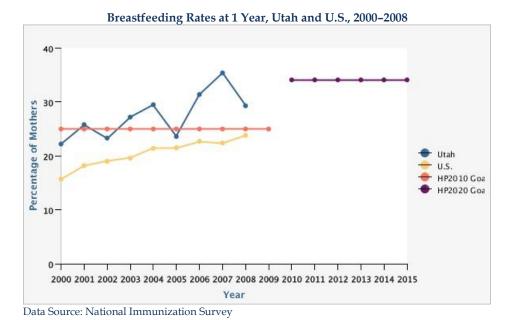
The duration of breastfeeding has a significant impact on a child's health outcomes. Research indicates that women that do not exclusively breastfeed their infants (that is, provide infant formula or anything other than breast milk) during the first six months of life, have infants that result in greater infections and allergies, poorer health outcomes for gastrointestinal disease, otitis media,

respiratory illnesses, and atopic disease as well as differences in maternal outcomes of delayed menses and postpartum weight loss. Compared with infants who never breastfed, infants who were exclusively breastfed for 4 months

Healthy People 2020
Objective MICH-21.3: Increase the proportion of infants who are breastfed: at 1 year
U.S. Target: 34.1 percent

had significantly greater incidence of lower respiratory tract illnesses, otitis media, and diarrheal disease than infants exclusively breastfed for 6 months or longer. When compared with infants who exclusively breastfed for longer than 6 months, those exclusively breastfed for 4 to 6 months had a fourfold increase in the risk of pneumonia. Based on this research, recommendations include that women should be encouraged to give only breast milk to their infants for the first six months of life.

The World Health Organization recommends breastfeeding for a minimum of two years of age. Research indicates that the duration of human lactation worldwide is two or more years, and that both mothers and their older children benefit from prolonged breastfeeding. Other breastfeeding duration recommendations include breastfeeding should be maintained during critical physiological, neurological, immunological development of the infant and child (i.e. immune system, GI system, brain, etc.). The American Academy of Pediatrics, American Academy of Family Physicians, American College of Obstetricians and Gynecologists, American College of Nurse-Midwives, American Dietetic Association, and American Public Health Association, among others, officially recommend infants breastfeed for at least 12 months.



### **How Are We Doing?**

From 2000 through 2008, Utah has steadily increased its breastfeeding rates at one year and exceeds the U.S. rates. For years 2006–2008, Utah has exceeded the Healthy People 2010 Objective for one year breastfeeding duration rates. In 2007, Utah also exceeded the Healthy People 2020 Objective for one year breastfeeding duration rates.

### CHILDHOOD IMMUNIZATIONS

### **KEY POINTS**

- In 2010, an estimated 70.6% of 2-year-old children in Utah had received all recommended immunizations. This percentage decreased from 76.6% in 2008 and slightly increased from 70.3% in 2009. This means that in 2010, 29.4% of 2-year-old children in Utah were not being protected against at least some preventable serious childhood illnesses.
- Immunizations are the most cost-effective health prevention measures and are seen as one of public health's great success stories in the 20<sup>th</sup> century.

### AT-RISK POPULATIONS

The rate of complete immunization is lower for:

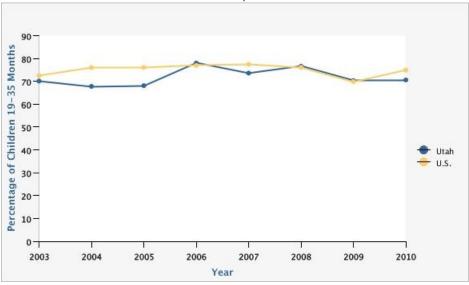
- Children whose mothers are under 20 years of age
- Third or subsequent children

### **Immunizations 4:3:1:3:3:1**

### Why Is This Important?

Immunizations are the most cost-effective health prevention measures. Development of vaccinations had been cited by the U.S. Public Health Service as one of the Ten Great Public Health Achievements in the 20<sup>th</sup> Century. Vaccines play an essential role in reducing and eliminating disease. By two years of age, it is recommended that all children should have received 4 doses of diphtheria-tetanus-pertussis (DTP), 3 doses of polio, 1 dose of measles-mumps-rubella (MMR), 3 doses of Hepatitis B, 3 doses of Haemophilus Influenzae, type B (Hib), and 1 dose of Varicella vaccine. This recommendation is referred to in shorthand as "4:3:1:3:3:1."

# Estimated Vaccination Coverage With 4:3:1:3:3:1 Among Children 19–35 Months, Utah and U.S., 2003–2010



Data Source: National Immunization Survey

### How Are We Doing?

Utah's coverage levels decreased from having 76.6% of 2-year-old children fully immunized in 2008 to having 70.3% of 2-year-old children fully immunized in 2009 to having 70.6% in 2010. These data also typically fluctuate from year to year and it is useful to look at 5-10 year trends to gain a clear understanding of how well Utah is immunizing its children.

### **Health Behaviors and Risk Factors**

Many health outcomes are directly linked to certain health behaviors and risk factors. Practicing healthy behaviors, like exercising, or refraining from unhealthy behaviors, like smoking, can markedly reduce an individual's risk for many chronic conditions and adverse health outcomes. In addition to practicing healthy behaviors, monitoring and addressing certain risk factors, like obesity and high blood pressure, can greatly reduce the risk of many negative health outcomes. Often one health behavior can have a marked effect on an individual's risk for more than one condition or disease.

### In This Section:

### **Tobacco Use**

Tobacco use continues to be the single most preventable cause of death and disease in the United States. Many Americans die from tobacco-related illnesses each year, and many more tobacco users have a serious tobacco-related illness. Tobacco costs the U.S. nearly \$2 billion annually in medical expenses and lost productivity.

### **Substance Abuse**

Binge drinking is defined as a pattern of drinking that brings a person's blood alcohol concentration (BAC) to 0.08 grams percent or above. Binge drinking is considered 5 or more drinks for men, or 4 or more drinks for women, in an occasion. Binge drinking is associated with numerous poor health outcomes including, but not limited to, liver disease, cardiovascular disease, neurological damage and injury. Most individuals who partake in binge drinking are not alcohol dependent.

### **Physical Activity**

Physical activity has been strongly linked to improved general physical and mental health. It has been shown to reduce the risk of many weight related diseases such as hypertension, high low-density-lipoprotein cholesterol, type 2 diabetes, coronary heart disease, stroke, some cancers and osteoarthritis.

### **Obesity**

Obese individuals are at increased risk for many chronic diseases and conditions such as type 2 diabetes, coronary heart disease, stroke, and osteoarthritis. The health consequences of obesity are not limited to adults, children who are obese are more likely to have cardiovascular disease, asthma, type 2 diabetes, social and psychological problems, and are more likely to become obese as adults. In addition to health consequences, obesity has serious economic implications; medical costs associated with obesity in the United States totaled about \$147 billion by 2008.

### **High Cholesterol**

Having a high level of blood cholesterol is strongly associated with an increased risk of heart disease, the leading cause of death in the United States, as well as stroke.

### **High Blood Pressure**

High blood pressure leads to stroke and heart attack, and is also a major risk factor for kidney disease, congestive heart failure, and other diseases.

### **Cancer Screening and Prevention**

Cancer survivorship is often greatly improved by earlier diagnosis and treatment. Screening for cancers, like breast and colon cancer, can lead to earlier detection and more timely treatment. Some behaviors, such as practicing sun safety, can reduce the risk for or prevent cancer entirely.

### **Seat Belt Use**

Motor vehicle crash-related deaths and injuries in the United States cost \$70 billion in 2005. The use of seat-belts reduces the risk of being killed or seriously injured in a crash by approximately 50%. Seat belt use by vehicle occupants is an important preventive behavior.

### TOBACCO USE

### **KEY POINTS**

- In 2010, an estimated 8.8% of Utah adults smoked cigarettes every day or some days.
- The age-adjusted rate of cigarette smoking among Utah adults declined by 35% from 13.5% in 1999.
- These percentages are based on a telephone survey of households with land-line telephones only and underestimate adult smoking prevalence for recent years.
- In 2011, using the new BRFSS methodology that includes cell phones, an estimated 11.8% of Utah adults smoked (crude rate).

### AT-RISK POPULATIONS

The rate of smoking is higher among:

- Individuals with lower levels of formal education
- Individuals with lower household income
- American Indians/AK Natives
- Blacks/African Americans
- Hispanics/Latinos

### **Smoking Among Adults**

### Why Is This Important?

Tobacco use remains the leading preventable cause of death and disease in the United States. In

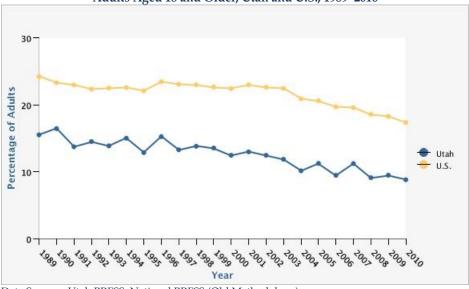
Utah, smoking claims more than 1,150 lives each year. It exacerbates or causes nearly every chronic condition and contributes to Utah's primary causes of death including heart disease, respiratory disease, and cancer. Smoking increases the risk for cancer of the lungs, larynx,

Healthy People 2020
Objective TU-1.1: Reduce tobacco use by adults:
cigarette smoking

U.S. Target: 12.0 percent State Target: 9.0 percent

esophagus, mouth, and bladder and contributes to cancer of the cervix, pancreas, and kidneys. Exposure to secondhand smoke increases the risk for heart disease and lung cancer among nonsmokers.

### Age-adjusted Percentage of Adults Who Reported Current Cigarette Smoking, Adults Aged 18 and Older, Utah and U.S., 1989–2010



Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

### **How Are We Doing?**

Utah's adult smoking rate has decreased by one-third since the UDOH Tobacco Prevention and Control Program started receiving Master Settlement Agreement funds in 2000. Declines in smoking before 2000 had not been statistically significant.

Recent surveys show that approximately 80% of Utah smokers want to quit. Comprehensive and free tobacco cessation services are essential to help Utah smokers quit and ensure a decline in tobacco use rates among all population groups.

Local Health District

# Utah Adults Aged 18 and Older, 2009–2011 Bear River Central Davis County Salt Lake Valley Southeastern Southwest

Current Cigarette Smoking by Local Health District,

Data Source: Utah BRFSS (New Methodology)

0

TriCounty
Utah County
Wasatch
Weber-Morgan

Data Source: Other BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and include landline phones only. For more information please see this report's introduction.

Age-adjusted Percentage of Adults

10

20

30

### TOBACCO USE

### **KEY POINTS**

- The rate of cigarette smoking among Utah high school students was 5.9% in 2011. Adolescent cigarette smoking has declined by 50% since 1999 when 11.9% of high school students reported that they had smoked cigarettes in the past 30 days.
- For students who reported having tried cigarette smoking in their lifetime, the average age of cigarette smoking initiation for Utah students in grades 6, 8, 10, and 12 was 12.9 years in 2011.
- The youth smoking rates and other health risk behaviors are assessed through paper and pencil surveys administered in public schools in Utah.

### **Smoking Among Adolescents**

### Why Is This Important?

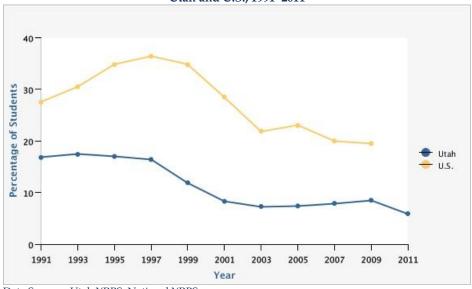
Children and adolescents who smoke cigarettes are at increased risk for developing respiratory illnesses, impaired lung growth, cancer, heart disease, and weakened immune systems. One third of

adolescents who continue to use tobacco will die from tobacco-related diseases. In addition, youth smokers are less physically fit and less likely to be committed to their education than their nonsmoking peers. Since nearly all adult smokers begin smoking during

# Healthy People 2020 Objective TU-2.2: Reduce tobacco use by adolescents: cigarettes (past month) U.S. Target: 16.0 percent State Target: 5.0 percent

adolescence, preventing youth from starting to use tobacco products is expected to result in substantial declines in tobacco-related disease and death.

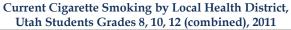
### Current Cigarette Smoking by Year, High School Students Grades 9-12, Utah and U.S., 1991-2011

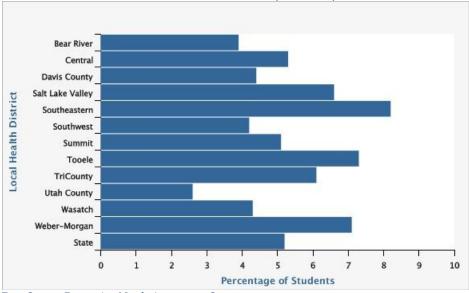


Data Sources: Utah YRBS; National YRBS

### **How Are We Doing?**

Utah teen smoking almost doubled from the mid-80s to the mid-90s (Bahr Survey, 1984–1997). Since the mid-90s, Utah's high school smoking rate declined from 17% to 6% (YRBS 1995–2011).





Data Source: Prevention Needs Assessment Survey

### SUBSTANCE ABUSE

### **KEY POINTS**

- 11.2% of Utah adults reported binge drinking in the past 30 days in 2011 (age-adjusted rate).
- The percentage of adults who reported binge drinking was substantially lower in Utah than in the U.S.
- Binge drinking rates vary widely between local health districts in Utah.

### AT-RISK POPULATIONS

The rate of binge drinking is higher for:

- Males
- Younger adults
- Individuals experiencing poor mental health
- American Indians/AK Natives
- Hispanics/Latinos

### **Adults Alcohol Consumption: Binge Drinking**

### Why Is This Important?

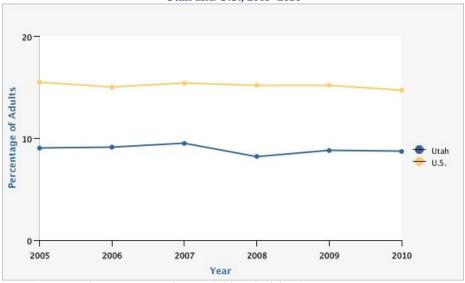
Binge drinking is an indicator of potentially serious alcohol abuse, and is related to driving under the

influence of alcohol. It is a problem nationally, especially among males and young adults. Alcohol abuse is associated with injuries and violence, chronic liver disease, fetal alcohol syndrome, and risk of other acute and chronic health conditions. Binge drinking among women

Healthy People 2020
Objective SA-14.3: Reduce the proportion of persons engaging in binge drinking during the past month - Adults aged 18 years and older U.S. Target: 24.3 percent

of childbearing age is a problem because of the risk for prenatal alcohol exposure. Birth defects associated with prenatal alcohol exposure can occur during the first 6 to 8 weeks of pregnancy before a woman knows she is pregnant.

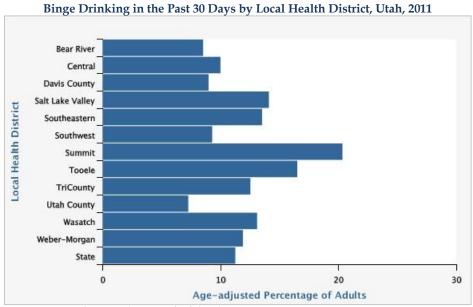
# Percentage of Adults Who Reported Binge Drinking in the Past 30 Days, Utah and U.S., 2005–2010



Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

### How Are We Doing?

In Utah, the percentage of adults who reported binge drinking in the past 30 days fluctuated between highs of 12% in 1989 and 1993 to a low of 7.7% in 1997. In 2009, 8.7% (crude rate) of Utah adults reported recent binge drinking. Utah is below the Healthy People 2020 objective of 24.3% for this measure.



Data Source: Utah BRFSS (New Methodology)
Data Note: The, BRFSS data for this graph inclu

Data Note: The, BRFSS data for this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and only includes landline phones. For more information please see this report's introduction.

### SUBSTANCE ABUSE

### **KEY POINTS**

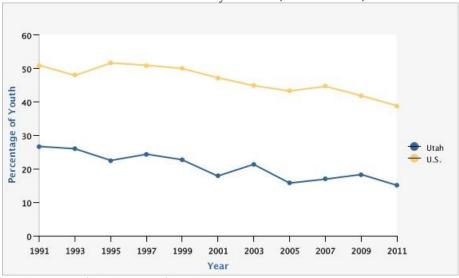
- 15.1% of Utah high school students reported having had at least one drink of alcohol in the past 30 days in 2011.
- Alcohol is the substance most commonly abused by Utah high school students.
- The state as a whole is well below the national average, however there is great variation in drinking rates between local health districts.

### **Substance Abuse in Adolescents: Alcohol**

### Why Is This Important?

According to the U.S. Public Health Service, "Health risk behaviors (including alcohol consumption) that contribute to the leading causes of illness, death, and social problems among youth and adults often are established during youth, extend into adulthood, and are interrelated."<sup>10</sup>

Percentage of High School Students, Grades 9-12, Who Used an Illegal Substance on One or More of the Past 30 Days: Alcohol, Utah and U.S., 1991-2011

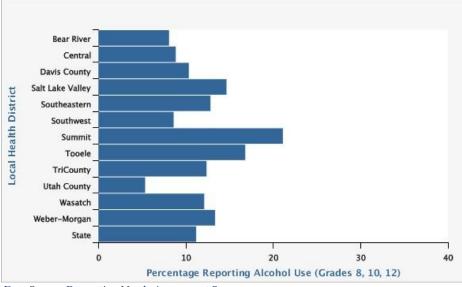


### Data Sources: Utah YRBS; National YRBS

### **How Are We Doing?**

The most commonly-abused substance among Utah high school students during the spring of 2011 was alcohol (15.1%). Utah has the lowest reported rate of high school binge drinking among all 42 reporting states.

Percentage of Students Who Used an Illegal Substance on One or More of the Past 30 Days: Alcohol, Grades 8, 10, and 12 by Local Health District, 2011



Data Source: Prevention Needs Assessment Survey

### **SUBSTANCE ABUSE**

### **KEY POINTS**

- 9.6% of Utah high school students reported having used marijuana at least once in the past 30 days in 2011.
- Marijuana is the second most commonly abused substance by Utah high school students.
- The state as a whole is well below the national average, however marijuana use among high school students in Utah has increased since 2005.

### Substance Abuse in Adolescents: Marijuana Use

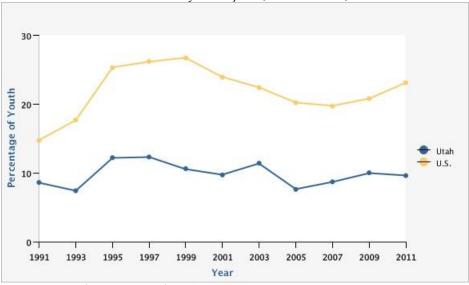
### Why Is This Important?

According to the U.S. Public Health Service, "Health risk behaviors that contribute to the leading causes of illness, death, and social problems among youth and adults often are established during youth, extend into adulthood, and are interrelated."10

### Healthy People 2020

Objective SA-13.2: Reduce the proportion of adolescents reporting use of marijuana during the past 30 days U.S. Target: 6.0 percent

Percentage of Students, Grades 9-12, Who Used an Illegal Substance on One or More of the Past 30 Days: Marijuana, Utah and U.S., 1991-2011

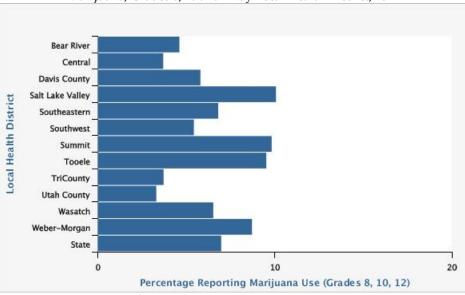


Data Sources: Utah YRBS; National YRBS

### How Are We Doing?

Marijuana was the second most commonly-abused substance among high school students during the spring of 2001 (9.6%). The percentage of Utah high school students reporting marijuana use in the past 30 days is well below the national average, but is above the Healthy People 2020 national goal.

Percentage of Students Who Used an Illegal Substance on One or More of the Past 30 Days: Marijuana, Grades 8, 10 and 12 by Local Health District, 2011



Data Source: Prevention Needs Assessment Survey

# PHYSICAL ACTIVITY

### **KEY POINTS**

- The types of physical activities that can help to moderate weight have become less a part of modern life in recent years with the increase in sedentary work environments and the lure of computers and television.
- In 2011, 56.1% of Utahns reported getting the recommended amount of physical activity.

### AT-RISK POPULATIONS

The rate of getting the recommended amount of physical activity is lower among:

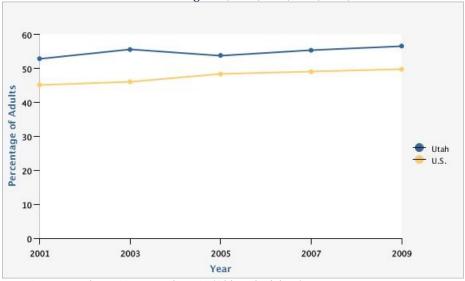
- Individuals with lower levels of formal education
- Individuals with lower household income
- Hispanics/Latinos

### **Physical Activity: Recommended Levels Among Adults**

### Why Is This Important?

Physical activity has been shown to reduce the risk of some cancers, type 2 diabetes, stroke, and heart disease; and improve general physical and mental health. Weight-bearing activity can improve bone density, reducing the risk of hip fractures in elderly persons. Regular activity helps to relieve pain from osteoarthritis. Regular physical activity is also known to improve affective disorders such as depression and anxiety, and increase quality of life and independent living among the elderly. 13

Age-adjusted Percentage of Adults Who Reported Getting Recommended Physical Activity, Utah and U.S. Adults Age 18+, 2001, 2003, 2005, 2007, and 2009

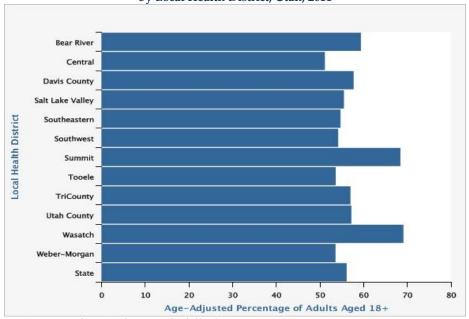


Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

### **How Are We Doing?**

In 2011, 56.1% of Utahns reported getting the recommended amount of physical activity.

Adults Who Reported Getting the Recommended Amount of Physical Activity by Local Health District, Utah, 2011



Data Source: Utah BRFSS (New Methodology)

Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

# PHYSICAL ACTIVITY

### **KEY POINTS**

- In 2011, 48.3% of students in grades 9–12 reported getting the recommended amount of physical activity.
- In 2011, 40.7% of girls and 55.7% of boys in Utah high schools reported getting at least 60 minutes of physical activity at least 5 days per week, which is one measure of an adequate amount of physical activity for this age group.

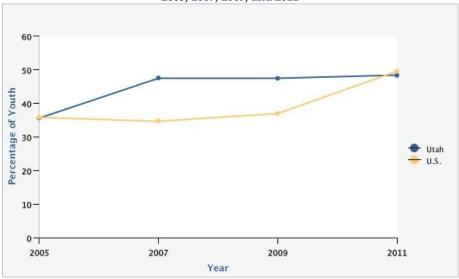
### **Physical Activity Among Adolescents**

### Why Is This Important?

According to the 2011 Youth Risk Behavior Survey (YRBS), 12.2 percent of all Utah public high school students were overweight and 8.6 percent were obese. Since diet and physical activity have been shown to help reduce weight and also to maintain weight, monitoring physical activity levels in adolescents is important.

The recommendation based on the most current (as of Oct. 7, 2008) HHS Physical Activity Guidelines for Americans is: Children and adolescents should participate in one hour or more of physical activity per day; and most of the activity should be moderate or vigorous aerobic physical activity. They should participate in vigorous physical activity at least three days a week. They should participate in muscle-strengthening activities, such as push-ups and sit-ups and playing tug-of-war, three days a week. They should incorporate bone-strengthening activities, such as jumping rope, hopping, or running, at least three days a week.

# Recommended Physical Activity, Utah and U.S. Youth Grades 9-12, 2005, 2007, 2009, and 2011

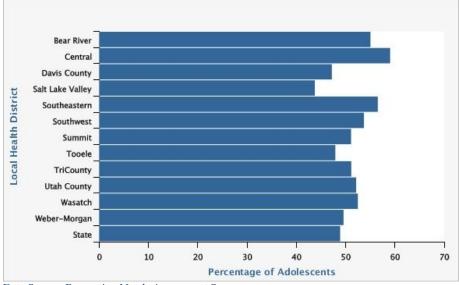


Data Sources: Utah YRBS; National YRBS

### **How Are We Doing?**

In 2011, 40.7% of girls and 55.7% of boys in Utah high schools reported getting at least 60 minutes of physical activity at least 5 days per week. These percentages are similar to the 2007 and 2009 estimates, possibly indicating a leveling-off of the Utah adolescent physical activity rate.

### Recommended Physical Activity by Local Health District, Utah Youth Grades 8, 10, and 12 (Combined), 2011



Data Source: Prevention Needs Assessment Survey

### **OBESITY**

### **KEY POINTS**

- Over the past 20 years, obesity rates have increased dramatically in Utah, the nation and the world. This obesity epidemic affects all age groups.
- In 2010, nearly one in four Utah adults were obese (24.0%) and about twothirds (59.7%) were at an unhealthy weight. These rates increased from 10.5% and 39.3%, respectively, in 1989.
- In 2011, using the new BRFSS methodology that includes cell phones, an estimated 24.4% (crude rate) of Utah adults were obese.

### AT-RISK POPULATIONS

The rate of being obese is higher among:

- Individuals without less formal education
- Individuals with lower household income
- American Indians/AK Natives
- Blacks/African Americans
- Native HIs/Pacific Islanders
- Hispanic/Latinos

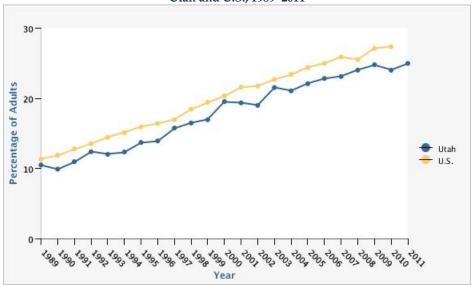
### **Obesity Among Adults**

### Why Is This Important?

Adults who are obese are at increased risk of morbidity from hypertension, high LDL cholesterol, type 2 diabetes, coronary heart disease, stroke, and osteoarthritis. Obesity is the second leading cause of preventable death in the United States. Only smoking may exceed obesity in contributing to total U.S. mortality rates.

Healthy People 2020 Objective NWS-9: Reduce the proportion of adults who are obese U.S. Target: 30.6 percent State Target: 24.0 percent

### Age-adjusted Percentage of Adults Aged 18+ Who Were Obese, Utah and U.S., 1989-2011

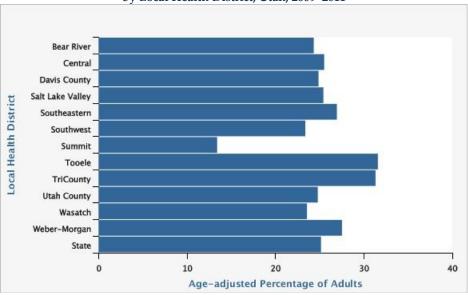


Data Sources: Utah BRFSS (Old and New Methodologies); National BRFSS (Old Methodology) Data Note: The BRFSS data for 2011 include both landline and cell phone respondent data along with a new weighting methodology. Data prior to 2010 presented in this graph is weighted using the old methodology and includes landline phones only. For more information please see this report's introduction.

### **How Are We Doing?**

In just 11 years, the age-adjusted proportion of obese Utah adults increased from 15.8% in 1997 to 25.0% in 2011. Males 35–49 (31.8%) and 50–64 (32.3%) had the highest rates of obesity by age and sex. American Indians (37.5%) and Pacific Islanders (50.5%) had higher rates than the state, while Asians (11.3%) had lower rates than the state.

### Percentage of Adults Aged 18+ Who Were Obese by Local Health District, Utah, 2009–2011



Data Source: Utah BRFSS (New Methodology)

Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and includes landline phone only through 2010. For more information please see this report's introduction.

### **OBESITY**

### **KEY POINTS**

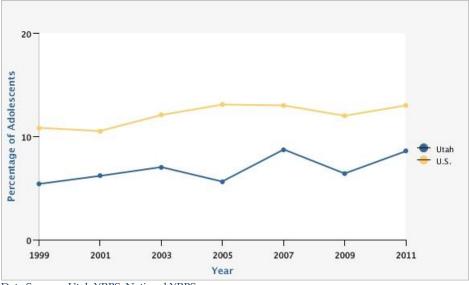
- The percentage of obese elementary school students in Utah has increased dramatically over the past 16 years. Overall, 9.7% of elementary school students were obese and 20.4% were at an unhealthy weight in 2010.
- Data from a 2011 high school survey show that approximately 8.6% of Utah high school students are obese and 20.1% are at an unhealthy weight. The high school obesity rate rose from 5.4% in 1999.
- In all age groups, males have a higher obesity rate compared to females. In elementary school, the overall obesity rate increases with grade, primarily due to increases in the male obesity rate.
- With this increase in child and adolescent obesity, diseases previously thought to be diseases of adults, such as type 2 diabetes, high blood pressure, and high cholesterol, are now being diagnosed in children and adolescents.

### **Obesity Among Children and Adolescents**

### Why Is This Important?

The number of overweight or obese children and adolescents is increasing and diseases previously thought to be diseases of adults, such as type 2 diabetes, high blood pressure, and high cholesterol, are now being diagnosed in children and adolescents. The social and psychological impacts of childhood obesity include social isolation, increased rate of suicidal thoughts, low self-esteem, increased rate of anxiety disorders and depression, and increased likelihood of being bullied.

# Percentage of Adolescents Who Were Obese, Grades 9-12, Utah and U.S., 1999, 2001, 2003, 2005, 2007, 2009, and 2011



Data Sources: Utah YRBS; National YRBS

### **How Are We Doing?**

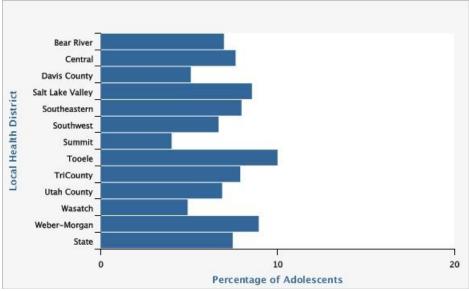
The percentage of obese children in Utah has increased dramatically over the past decade. From 1994 to 2012 the number of obese third grade boys increased by 105%, from 6.0% in 1994 to 12.3% in 2012. The percentage of obese third grade girls increased by 40% over the same time period. In 2012, 8.4% of third grade girls were obese compared to 6.0% in 1994.

Among adolescents, in 2011 8.6% of public high school students were obese; boys were almost three times as likely as girls to be obese (12.2% compared to 4.8%).

Obesity rates among adolescents in grades 8, 10 and 12 were higher in Tooele (10.0%), Weber-Morgan (8.9%), and Salt Lake Valley (8.6%) than the state (7.5%). Summit (4.0%), Wasatch (4.9%), Davis (5.1%), and Southwest (6.7%) had adolescent obesity rates lower than the state rate.

It is likely that these data, based on self-reported height and weight, under represent the prevalence of overweight or obesity among high school students.

### Percentage of Adolescents Who Were Obese by Local Health District, Grades 8, 10, and 12 (Combined), Utah, 2011



Data Source: Prevention Needs Assessment Survey

### **CHOLESTEROL**

### **KEY POINTS**

- The crude percentage of Utah adults who were ever told they had high cholesterol was 23.5% in 2009.
- The age-adjusted percentage was lower in Utah at 25.9% compared to 28.9% nationally.
- Both the U.S. and Utah have seen an increase in the age-adjusted percentage since 1991 when it was 19.6% in the U.S. and 16.4% in Utah.
- prevalence increases with age. Among Utahns aged 65 and over, 48.7% of men and 46.4% of women reported high cholesterol in 2009.

### AT-RISK POPULATIONS

The rate of high blood cholesterol is higher among:

- Older individuals
- Asians
- Whites

### **Doctor-diagnosed High Cholesterol**

### Why Is This Important?

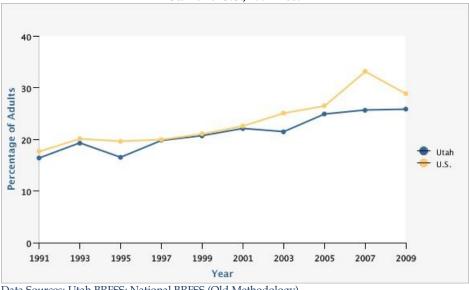
High blood cholesterol is a major risk factor for heart disease and stroke. It is preventable. If

identified early, it can be controlled with medication and lifestyle changes, such as eating a diet low in saturated fat and cholesterol, increasing physical activity, and reducing excess weight.

Healthy People 2020 Objective HDS-7: Reduce the proportion of adults with high total blood cholesterol levels U.S. Target: 13.5 percent

Because high blood cholesterol does not produce obvious symptoms, experts recommend that all adults aged 20 years and older have their cholesterol levels checked at least once every five years to help them take action to prevent or lower their risk of cardiovascular disease.

### Age-adjusted Doctor-diagnosed Hypercholesterolemia (High Blood Cholesterol) by Year, Utah and U.S., 1991-2009



Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

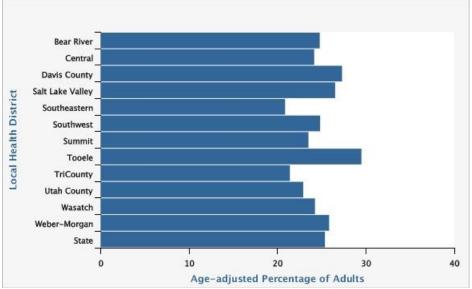
### How Are We Doing?

In 2009, the age-adjusted percentage of Utah adults who reported being told they had high cholesterol was 25.9 percent. However, this is expected to underestimate the actual prevalence because Utah has the lowest rate of 5-year cholesterol screens among the 50 states.

Dr.-diagnosed high cholesterol was more prevalent among males than females in the two youngest age categories and similar among genders in the two oldest age categories. Generally, high cholesterol prevalence increases with age. Among Utahns aged 65 and over, 48.7 percent of men and 46.4 percent of women reported high cholesterol.

A higher percentage of non-Hispanic White Utahns reported doctor-diagnosed high cholesterol than Hispanics of all races and non-Hispanic non-Whites. Among racial groups, White Utahns reported the highest percentage of doctor-diagnosed high cholesterol, 24.9%. Black Utahns reported the lowest percentage, 13.9%. Black persons also reported the lowest rates of cholesterol screening, which may contribute to a low diagnosis rate. The age-adjusted prevalence of high cholesterol varies geographically.

# Doctor-diagnosed Hypercholesterolemia (High Blood Cholesterol) by Local Health District, Utah, 2009 and 2011



Data Source: Utah BRFSS (New Methodology)

Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and includes landline phone only. For more information please see this report's introduction.

### BLOOD PRESSURE

### **KEY POINTS**

- The crude percentage of Utah adults who reported ever being told they had high blood pressure was 23.1% in 2009. The ageadjusted percentage was lower in Utah at 25.4% compared to 28.1% nationally. Utah's ageadjusted percentage has remained relatively constant over the past decade.
- The 2009 data also show that the percentage of adults who reported being told they had high blood pressure was similar for males and females across age groups.
- The prevalence of high blood pressure increases with age. Among Utahns aged 65 and over, 54.6% of men and 60.4% of women reported ever being told they had high blood pressure in 2009.

### AT-RISK POPULATIONS

The rate of high blood pressure is higher among:

Older individuals

### **Doctor-diagnosed Hypertension**

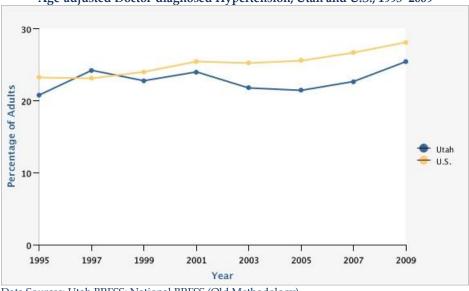
### Why Is This Important?

High blood pressure (hypertension) is an important risk factor for heart disease and stroke. It is

preventable, and in most cases it can be treated with medication and lifestyle changes, such as diet, exercise, and tobacco cessation. Treatment works best when high blood pressure is identified early. Because high blood pressure does not produce symptoms, regular screening is recommended.

Healthy People 2020
Objective HDS-5.1: Reduce the proportion of adults with hypertension
U.S. Target: 26.9 percent
State Target: 22.8 percent

Age-adjusted Doctor-diagnosed Hypertension, Utah and U.S., 1995-2009



Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

### How Are We Doing?

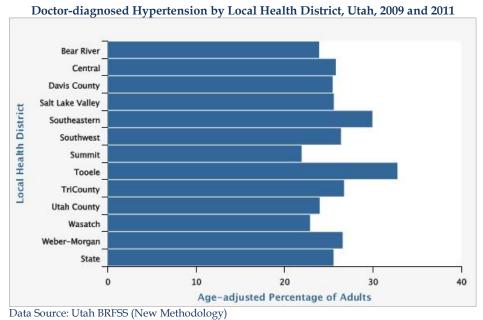
The proportion of Utah adults who reported being told they had high blood pressure has remained relatively constant over the past decade. In 2009, 25.4% of Utah adults reported being told they had high blood pressure (age-adjusted using 8 age groups). This is slightly below the U.S. Healthy People 2020 target of 26.9%. Utah's state 2020 target is 22.8%.

The percentage of adults who reported being told they had high blood pressure was similar for males and females across age groups.

Prevalence of high blood pressure increases with age. In 2009, more than half of adults age 65+ (54.6 percent of men and 60.4 percent of women) reported being told they had high blood pressure.

High blood pressure prevalence is similar among ethnic groups but varies by race. During combined years 2005, 2007, and 2009, non-Hispanic non-White Utahns (27.7%) reported a higher proportion of doctor-diagnosed high blood pressure than Hispanics of all races (22.2%) and non-Hispanic Whites (22.4%). Among race categories, Black Utahns had the highest rate (34.6%) and Whites had the lowest rate (22.3%).

High blood pressure prevalence varies geographically. During the combined years 2005, 2007, and 2009, the Provo/BYU area had the lowest proportion of doctor-diagnosed high blood pressure (14.7%), and Carbon/Emery Counties had the highest (30.5%).



Data Source. Other BRFSS data in this graph included both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend grap

along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

### CANCER SCREENING AND PREVENTION

### **KEY POINTS**

- With routine screening exams, colorectal cancer may be found at an early or precancerous stage when it is easier to treat and before causing symptoms.
- In 2010, the crude percentage of Utah adults aged 50 or older who had ever had a sigmoidoscopy or colonoscopy in the past 10 years or a fecal occult blood test (FOBT) in the past year was 68%.
- In 2010, the age-adjusted rate was 68.7% compared to 66.5% nationally. This percentage increased significantly in Utah from 48.0% in 2001.
- In Utah, the two most frequently reported reasons for not having a colonoscopy or sigmoidoscopy were cost and the belief that it was not needed.

### AT-RISK POPULATIONS

The rate of colorectal cancer screening is lower for:

- Individuals with lower levels of formal education
- Hispanics/Latinos

### **Colorectal Cancer Screening**

### Why Is This Important?

Colorectal cancer is the second leading cause of cancer-related deaths in the U.S. and Utah.

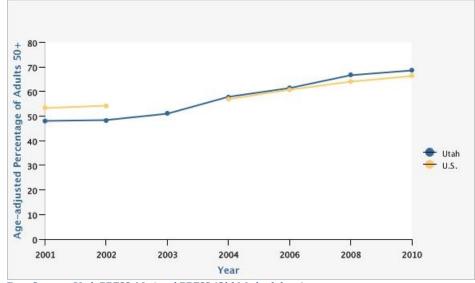
Screening for this cancer is important as deaths can be substantially reduced when precancerous polyps are detected early and removed. The chance of surviving colorectal cancer exceeds 90% when the cancer is diagnosed before it has extended beyond the intestinal wall (www.cancer.org).

### Healthy People 2020

Objective C-16: Increase the proportion of adults who receive a colorectal cancer screening based on most recent guidelines

U.S. Target: 70.5 percent State Target: 70.0 percent

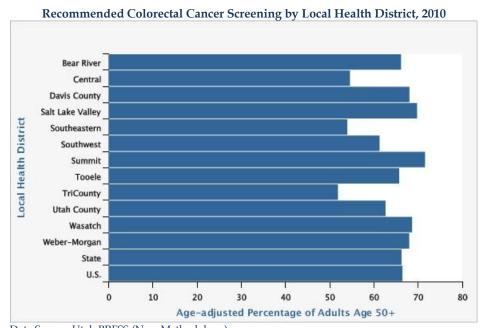
Age-adjusted Percentage of Persons Age 50+ Reporting a Sigmoidoscopy or Colonoscopy in the Past 10 Years or an FOBT in the Last Year, Utah and U.S., 2001–2004, 2006, 2008, and 2010



Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

### **How Are We Doing?**

Utah rates of sigmoidoscopies, colonoscopies, and FOBTs have increased from 48.0 percent in 2001 to 68.7 percent in 2010. Between 2008 and 2010 Hispanic/Latino adults aged 50 and older were significantly less likely than non-Hispanic/Latino adults to report having a sigmoidoscopy or colonoscopy within the past 10 years or an FOBT in the last year (56.1 percent compared with 66.4 percent). Among Utah Small Areas, West Jordan Northeast had the highest rates of adults aged 50 and older having had a colonoscopy or sigmoidoscopy in the past 10 years or an FOBT in the past year (81.2 percent) and South Salt Lake had the lowest at 39.3 percent.



Data Source: Utah BRFSS (New Methodology)
Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

## CANCER SCREENING AND PREVENTION

#### **KEY POINTS**

- With routine screening exams, breast cancer may be found at an early stage when it is easiest to treat and before the tumor is big enough to feel or cause symptoms. Mammograms are the best method to detect breast cancer.
- In 2010, the crude percentage of Utah women aged 40 or older who had a mammogram in the last two years was 67%.
- In 2010, Utah had one of the lowest age-adjusted mammogram screening rates in the nation, with only 66.4% of women aged 40 or older who reported having had a mammogram in the last two years, compared to 74.9% in the U.S.
- In Utah, the two most frequently reported reasons for not having a mammogram were a lack of time and the belief that it was not needed.

#### AT-RISK POPULATIONS

The rate of mammography screening is lower for:

- Individuals with less than a high school education
- Individuals with lower levels of income
- American Indians/AK Natives

## **Mammography**

#### Why Is This Important?

Breast cancer is the most commonly occurring cancer in U.S. women (excluding basal and squamous

cell skin cancers) and the leading cause of female cancer death in Utah. Deaths from breast cancer can be substantially reduced if the tumor is discovered at an early stage. Mammography is currently the best method for detecting cancer early. Clinical trials have demonstrated that routine screening with

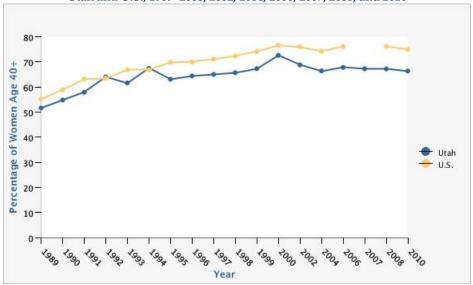
Healthy People 2020
Objective C-17: Increase the proportion of women

who receive a breast cancer screening based on most recent guidelines
U.S. Target: 81.1 percent
State Target: 74.14 percent

mammography can reduce breast cancer deaths by 20% to 30% in women aged 50 to 69 years, <sup>14–19</sup> and by about 17% in women aged 40 to 49 years, <sup>20,21</sup>

There is consensus that women aged 40 or older should undergo routine screening with mammography at least every two years. The American Cancer Society recommends that women aged 40 or older have an annual mammogram, while the National Cancer Institute, the U.S. Preventive Services Task Force, and the U.S. Department of Health and Human Services recommend that women 40 years or older undergo mammography every one to two years.<sup>22,23,24</sup> Women who are at higher than average risk of breast cancer should seek expert medical advice about whether they should begin screening before age 40 and the frequency of that screening.<sup>23</sup>

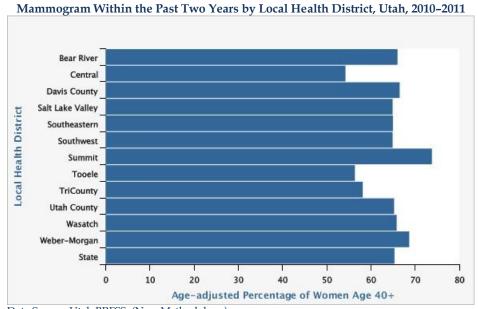
Age-adjusted Percentage of Women Aged 40+ Reporting a Mammogram in the Past Two Years, Utah and U.S., 1989-2000, 2002, 2004, 2006, 2007, 2008, and 2010



Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

#### How Are We Doing?

Between 1989 and 2010, the percentage of Utah women aged 40 or older who reported receiving a mammogram within the last two years increased from 51.6 percent to 66.4 percent. There was no statistically significant difference in mammography screening rates among the different racial and ethnic groups, though the point estimates did vary considerably. The state average remains below the national average.



Data Source: Utah BRFSS. (New Methodology)
Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and landlines phones only. For more information please see this report's introduction.

## CANCER SCREENING AND PREVENTION

#### **KEY POINTS**

- In 2010, 64.9% of Utahns aged 18 years and older reported practicing sun safety.
- The current rate of sun safety practice in Utah is below both the state and national Healthy People 2020 goals.

## **Sun Safety Measures**

#### Why Is This Important?

Sun safety is defined as doing at least one thing to protect yourself from the sun: wearing sunblock,

wearing a hat, avoiding the sun, or wearing a long-sleeve shirt.

Melanoma is the most serious of three types of skin cancer (basal cell carcinoma, squamous cell carcinoma, and melanoma). It is estimated that 90 percent of non-melanoma skin cancers and 65 percent of

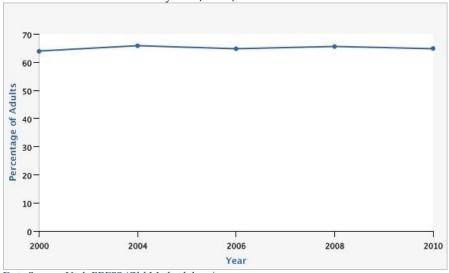
Healthy People 2020

Objective C-20.6: Increase the proportion of adults aged 18 years and older who follow protective measures that may reduce the risk of skin cancer U.S. Target: 80.1 percent

State Target: 72.0 percent

melanoma skin cancers are associated with exposure to ultraviolet (UV) radiation from the sun.

# Age-adjusted Percentage of Adults Aged 18+ Who Reported Practicing Sun Safety by Year, Utah, 2000–2010

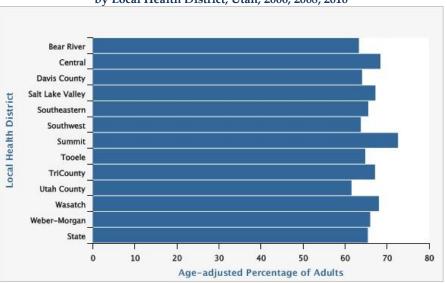


Data Source: Utah BRFSS (Old Methodology)

#### **How Are We Doing?**

Between 2004 and 2008, Utah's age-adjusted percentage of sun safety among Utah adults was 65.3%. Although this percentage has decreased in recent years, the decrease is not statistically significant.

Proportion of Adults Aged 18+ Who Reported Practicing Sun Safety by Local Health District, Utah, 2006, 2008, 2010



Data Source: Utah BRFSS (Old Methodology)

#### AT-RISK POPULATIONS

The rate of practicing sun safety measures is lower among:

Younger adults

#### SEAT BELT USE

#### **KEY POINTS**

- In 2011, 89.2% of Utah drivers and front seat passengers were observed wearing a seat belt or safety restraint.
- Individuals who live in small-population counties are less likely to be observed wearing a seat belt than drivers and front seat passengers in largepopulation counties.

#### AT-RISK POPULATIONS

The rate of safety restraint use is lower among:

- Males
- Individuals with lower levels of formal education
- Individuals who live in rural counties

## **Seat Belts: Safety Restraint Use**

#### Why Is This Important?

Motor vehicle crashes (MVCs) are one of the leading causes of injury death and hospitalization in

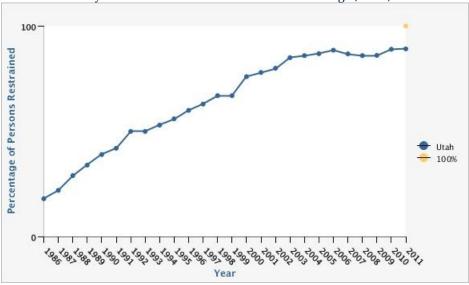
Utah. Seat belts are the single most effective safety device for preventing serious injuries and reducing fatalities in MVCs, according to the National Highway Traffic Safety Administration (NHTSA).

Healthy People 2020
Objective IVP-15: Increase use of safety belts
U.S. Target: 92.4 percent
State Target: 92.4 percent

NHTSA has found that deaths and serious injuries caused by MVCs could be reduced by approximately 50% with proper and consistent use of safety belts. NHTSA also found that if all 50 states achieved 90% seat belt usage, it would result in an overall total cost savings of \$5.5 billion.<sup>25</sup>

In Utah, unbelted crash occupants were 32 times more likely to die in a crash than crash occupants wearing seat belts. Ejection from the vehicle is one of the most injurious events that can happen to a person in a crash. Seat belts are effective in preventing total ejections.

#### Overall Safety Belt Use Rate: Adult and Front Seat Passenger, Utah, 1986-2011



Data Source: Utah Safety Belt Observational Survey

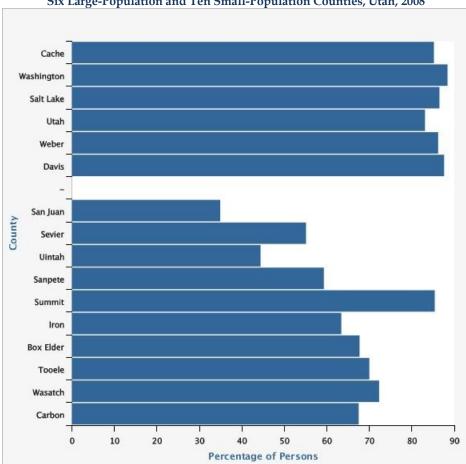
#### How Are We Doing?

Utah conducts a yearly observational study in its six most populated counties to determine overall state seat belt use. Although Utah's 2010 six-large-county data indicate that the more urban areas in the state have achieved 89% seat belt use, 2008 comparison data strongly suggest that the 85% HP2010 goal had not been achieved evenly throughout the state. Rural areas observed had only 63.8% adult seat belt use.

As of 2011, the six-county study found that 89.2% of drivers and front seat passengers buckled up (with a margin of error of +/- 0.24%). This is an increase of .16% from the previous year and the highest recorded usage for Utah. In the 2011 six-county study, it was found that a higher percentage of adult females, at 91.9%, than adult males, at 86.5%, used seat belts.

Child restraint observational data were collected in 2006 and 2008. Safety restraint use for children ages 10 and younger decreased from 92.9% (2006) to 91.9% (2008). Child restraint was more frequent for children ages birth to 4 (93.1%) than for children ages 5 to 10 (88.0%). Utah has not met the Healthy People 2010's target of 100% for child restraint use for children ages 4 and younger. No HP2010 target was established for the use of child restraints for older children.

(See next page for select county graph view)



Percentage of Drivers and Front Seat Passengers Restrained: Six Large-Population and Ten Small-Population Counties, Utah, 2008

Data Source: Utah Safety Belt Observational Survey

# **Chronic Disease and Conditions**

Over the last century there has been a shift from infectious diseases to chronic diseases as the leading causes of death in the United States. The current three leading causes of death for Americans, diseases of the heart, cancer, and chronic lower respiratory disease, are all chronic conditions. Furthermore, chronic diseases cause limitations in daily living for millions of Americans. For as costly and common as chronic diseases are, they are also some of the most preventable health problems in the U.S.<sup>28</sup>

#### **In This Section:**

#### **Asthma**

Asthma is a lifelong lung disease that affects 1 in 12 Americans. The rate of asthma is on the rise in Utah and the U.S. Asthma associated costs reached almost \$56 billion in 2007 in the U.S. and greater access to care will be needed as the number of people with asthma continues to grow.<sup>29</sup>

#### **Diabetes Prevalence**

Diabetes is a serious chronic illness that affects an increasing number of people. It is the leading cause of blindness among individuals under age 75, non-traumatic lower-extremity amputations, and renal failure. Diabetes is costly and burdens the health care system, with at least \$116 billion in direct medical costs every year. Ohildren born in the year 2000 have a one in three chance of developing diabetes during their lifetime.

#### **Heart Disease**

Heart disease is a generic term that describes many different problems affecting the heart. It can affect your coronary arteries, heart valves, and heart muscle and can also affect your heart rate and rhythm. Heart disease is the number one killer of Americans. Modifiable risk factors for heart disease include high blood pressure, high blood cholesterol, smoking, and obesity. Coronary artery disease occurs when the arteries that supply blood to the heart muscle become hardened and narrowed.

#### Stroke

Over 800,000 Americans die from cardiovascular disease and stroke every year. In addition to death, strokes can cause speech difficulty, paralysis and other disabilities. Certain behaviors and conditions can increase the risk of stroke; however positive lifestyle changes can greatly reduce this risk.<sup>31</sup>

#### Alzheimer's Disease

Alzheimer's is a devastating form of dementia that affects millions of Americans. Alzheimer's usually manifests as individuals age, and it is expected that the number of cases in the U.S. may triple as the population ages.

#### **Cancer Deaths**

Cancer is the second leading cause of death in the U.S. and in Utah. Cancer generally develops over several years and has many causes. Several factors both inside and outside the body contribute to the development of cancer. Some of these factors include genetics, tobacco use, diet, weight, physical inactivity, and excessive sunlight exposure. Other factors include exposure to ionizing radiation and environmental chemicals that may be present in the workplace, food, air, or water such as asbestos, benzene, and arsenic.

#### **Mental Health**

Mental illnesses are medical conditions that disrupt a person's thinking, feeling, mood, ability to relate to others, and daily functioning. Mental health and mental disorders can be influenced by numerous conditions including biologic and genetic vulnerabilities, acute or chronic physical illnesses, and environmental conditions and stresses. A history of mental illness is a risk factor for suicide.

## **ASTHMA**

#### **KEY POINTS**

- 8.7% of Utahns reported (or had a parent report for them) having asthma in 2011 (crude rate).
- Utah's adult asthma prevalence has risen since 2001 and passed the national average in 2010 (9.0% compared to 8.7%).

#### AT-RISK POPULATIONS

The rate of adult asthma prevalence is higher among:

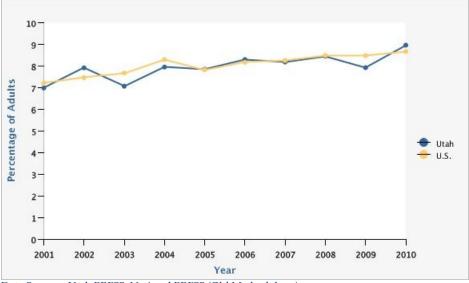
- American Indians/AK Natives
- Non-Hispanic Whites

#### **Asthma Prevalence**

#### Why Is This Important?

Asthma is a serious personal and public health issue that has far reaching medical, economic, and psychosocial implications. The burden of asthma can be seen in the number of asthma related medical events, including emergency department visits, hospitalizations, and deaths.

Age-adjusted Asthma Prevalence Among Adults Aged 18 and Over, Utah and U.S., 2001-2010



Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

#### **How Are We Doing?**

Adult and child asthma rates show no sign of declining in Utah or in the U.S. In Utah and the U.S., adult asthma prevalence is higher for women than men at every age category. Child asthma point prevalence is higher for males compared to females at every age category (2007–2010 BRFSS combined). The highest prevalence for males is in the 15–17 age category (10.0%) and the 18–34 age category for females (11.8%).

Age-adjusted Asthma Prevalence by Local Health District, All Ages, Utah, 2011

Bear River
Central
Davis County
Salt Lake Valley
Southeastern
Southwest
Summit
Tooele
TriCounty
Utah County
Wasatch
Weber-Morgan
State

Data Source: Utah BRFSS (New Methodology)

Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which only includes adults and is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

10

Percentage of Persons (All Ages)

20

#### DIABETES

#### **KEY POINTS**

- The prevalence of diabetes continues to increase, both nationally and in Utah.
   Several factors contribute to this increase, including rising rates of obesity and sedentary lifestyles, aging population, increasing numbers of racial and ethnic minorities, and improvements in clinical diagnoses of diabetes.
- In 2010, approximately 6.5% of Utah adults aged 18 years and older had been diagnosed with diabetes, more than double the 1989 prevalence (3.1%). This means roughly 128,000 Utah adults had been diagnosed at some time in their lives, while studies show that an additional 45,000 Utah adults may have diabetes but don't yet know it.
- The age-adjusted percentage of adults with diabetes in Utah is lower than that for the U.S. (7.2% versus 8.5% in 2010).

#### AT-RISK POPULATIONS

The rate diabetes in adults is higher among:

- Older Individuals
- American Indians/AK Natives
- Blacks/African Americans

#### **Diabetes Prevalence: Adults**

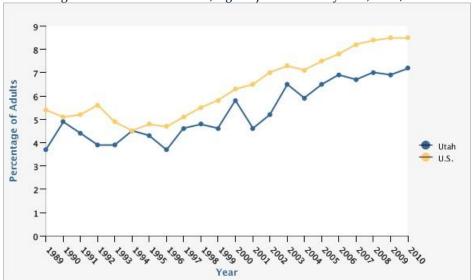
#### Why Is This Important?

Diabetes is a disease that can have devastating consequences. It is the leading cause of non-traumatic lower-extremity amputation and renal failure. It is also the leading cause of blindness among adults younger than 75. It is one of the leading causes of heart disease.

Diabetes has reached epidemic proportions in the U.S. About 25.8 million Americans (8.3% of the U.S. population) have been diagnosed with diabetes. However, data from the National Health and Nutrition Survey indicate that about one-fourth to one-third of people with diabetes (over 7 million Americans) have diabetes but don't know they have it and are not yet diagnosed. Another 79 million have pre-diabetes, a condition that puts them at high risk for developing diabetes unless steps are taken to prevent it. In Utah, approximately 45,000 adults have diabetes but are not yet diagnosed.

Diabetes places an enormous burden on health care resources, approximately \$174 billion annually (\$116 billion in direct medical costs and \$58 billion in indirect costs such as disability, work loss, and premature mortality). (See American Diabetes Association). In Utah, more than a billion dollars each year are spent on direct and indirect costs of diabetes.





Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

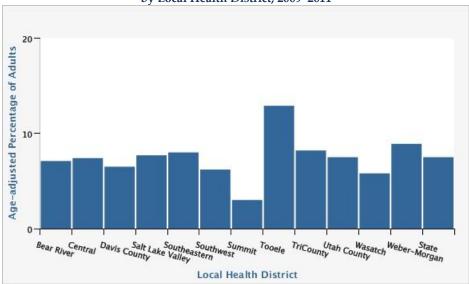
#### **Related Risk Factors**

Being overweight or obese is a major risk factor for developing diabetes. The risk of developing diabetes can be substantially reduced through weight loss and regular physical activity. Some risk factors cannot be modified, such as older age or membership in a minority racial or ethnic group. Nevertheless, risk can be substantially reduced through adhering to a nutritious diet and participating in regular physical activity.

#### **How Are We Doing?**

The prevalence of diabetes has risen steadily, both nationally and in Utah. Several factors contribute to the continual climb in diabetes prevalence. Increasing rates of obesity and sedentary lifestyles add to the number of people at risk for developing diabetes, while improvements in medical care mean people with diabetes are living longer. The 1997 change in the key diagnostic criterion (fasting blood glucose >=126 mg/dL) contributed to the increased number of people who were clinically diagnosed. Finally, the proportion of undiagnosed diabetes cases has declined substantially in the past decade. However, the number of undiagnosed individuals is still estimated to be 7 million, nearly 30% of the total diabetes population.





Data Source: Utah BRFSS (New Methodology)

Data Note: BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and includes landline phones only. For more information please see this report's introduction.

## **HEART DISEASE**

#### **KEY POINTS**

- Utah's crude death rate due to coronary heart disease was 49.4 deaths per 100,000 people in 2010.
- Utah's age-adjusted death rate from coronary heart disease of 83.8/100,000 was lower than the U.S. rate of 126.0/100,000 in 2007, the most recent year with comparable data.
- The U.S. age-adjusted death rate from coronary heart disease has declined significantly over the past 30 years. Utah has experienced a similar decline from 290.1/100,000 in 1980 to 67.5/100,000 in 2010.

#### AT-RISK POPULATIONS

The rate of coronary heart disease deaths is higher among:

- Older Individuals
- Non-Hispanic Whites\*\*
- \*\*Non-Hispanic Whites have a higher rate of coronary heart disease deaths, however racial and ethnic minorities die from coronary heart disease at younger average ages.

## **Coronary Heart Disease Deaths**

#### Why Is This Important?

Coronary heart disease (CHD) is a condition in which blood flow to the heart is reduced. When the

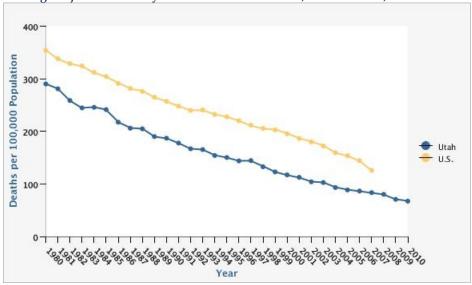
coronary arteries become narrowed or clogged, an inadequate amount of blood oxygen reaches the heart tissue. The part of the heart not receiving oxygen begins to die, and some of the heart muscle may be permanently

Healthy People 2020

Objective HDS-2: Reduce coronary heart disease deaths U.S. Target: 100.8 deaths per 100,000 population State Target: 54.0 deaths per 100,000 population

damaged. Prevention of CHD is key to reducing mortality from heart disease.

Age-adjusted Coronary Heart Disease Death Rate, Utah and U.S., 1980-2010

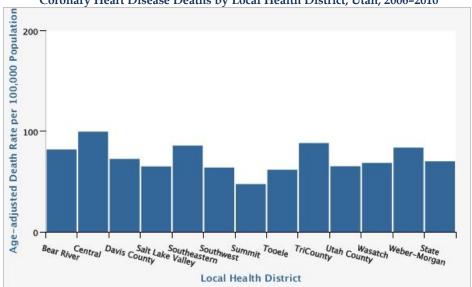


Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### How Are We Doing?

The U.S. death rate from coronary heart disease has declined significantly over the past 30 years. Utah has experienced a similar decline. The 2010 Utah crude rate was 49.4 deaths per 100,000 people.

Coronary Heart Disease Deaths by Local Health District, Utah, 2006-2010



#### **STROKE**

#### **KEY POINTS**

- In Utah there were 35.2 stroke deaths per 100,000 population in 2010.
- The stroke death rate has declined in the last 30 years for both the U.S. and Utah.
- Many of the risk factors for stroke can be modified successfully by adopting lifestyle changes.

#### AT-RISK POPULATIONS

The rate of cerebrovascular disease deaths is higher among:

Older Individuals

## Stroke (Cerebrovascular Disease) Death Rate

#### Why Is This Important?

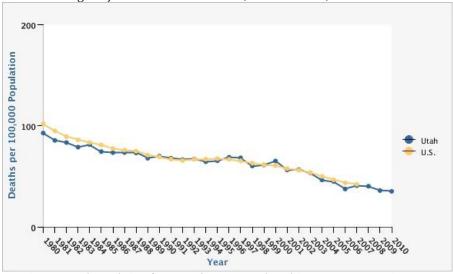
Stroke, the death of brain tissue usually resulting from artery blockage, is the third leading cause of

death in Utah. About 700,000 new or first-time strokes occur in the U.S. each year. Stroke is a leading cause of long-term disability. Although strokes occur in all age groups, those 65 and older are most likely to experience stroke.

# Healthy People 2020 Objective HDS-3: Reduce stroke deaths

U.S. Target: 33.8 deaths per 100,000 State Target: 28.2 deaths per 100,000

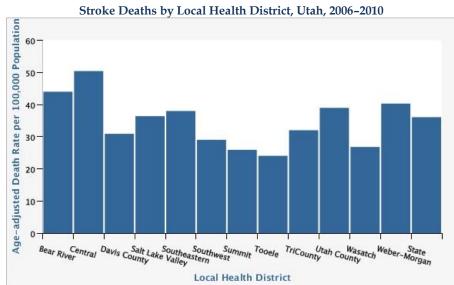
#### Age-adjusted Stroke Death Rate, Utah and U.S., 1980-2010



Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### **Related Risk Factors**

Risk factors for stroke include high blood pressure, increasing age, family or personal history of stroke, cigarette smoking, diabetes, heart disease, carotid artery disease, transient ischemic attacks, and a high red blood cell count<sup>33</sup> as well as high cholesterol, obesity, and lack of physical activity.



Data Sources: Utah Death Certificate Database; Utah GOPB

#### **How Are We Doing?**

Death rates for stroke have generally declined in recent decades. This trend likely relates to improvements in acute stroke care and in improved detection and treatment of hypertension.

## ALZHEIMER'S DISEASE

#### **KEY POINTS**

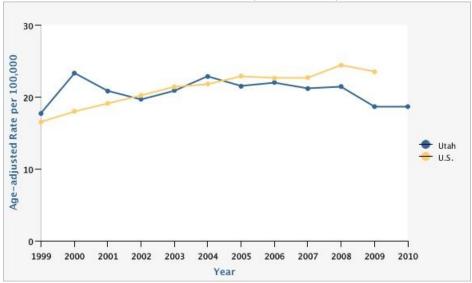
- In Utah there were 18.7 deaths per 100,000 population from Alzheimer's disease in 2010.
- Utah has the second highest growth rate of Alzheimer's disease in the country.

#### **Alzheimer's Disease Death Rate**

#### Why Is This Important?

Alzheimer's disease is the most common form of dementia in older adults and is one of the top ten leading causes of death in the United States. Alzheimer's is a devastating disease that impacts the part of the brain that controls memory, thought, behavior, and language. The causes of the disease are not well understood and there is currently no cure. Symptoms usually develop slowly and worsen over time, eventually becoming severe enough that carrying out daily activities is difficult. An estimated 5.4 million Americans currently have the disease and the mortality rate for Alzheimer's is on the rise. Alzheimer's also has serious financial implications with estimated direct costs of the disease totaling \$200 billion in 2012.<sup>34,35</sup>



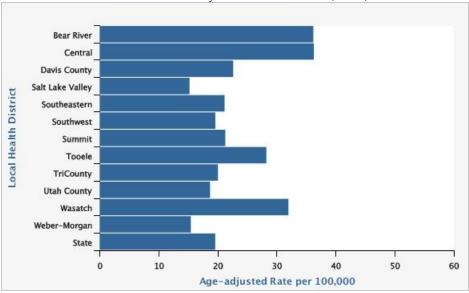


Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### **How Are We Doing?**

Utah's annual mortality rate due to Alzheimer's is lower than the national rate, however Utah has the second highest growth rate of Alzheimer's in the nation, and is expected to have the highest prevalence growth rate by 2025.<sup>34</sup>

Alzheimer's Disease Deaths by Local Health District, Utah, 2008-2010



## CANCER DEATHS

#### **KEY POINTS**

- In 2010, 255 Utah women died from breast cancer, for a crude death rate of 17.8 per 100,000 Utah women.
- On average, Utah has consistently had a lower age-adjusted breast cancer mortality rate than the U.S. (19.9 per 100,000 versus 22.8 per 100,000 in 2007, the most recent year with comparable data).
- The age-adjusted death rate for Utah was 21.5/100,000 women in 2010 which is an increase from compared the preceding 3 years.

#### AT-RISK POPULATIONS

The rate of breast cancer deaths is higher among:

- Older Women
- Native HIs/Pacific Islanders
- Non-Hispanic Whites

#### **Breast Cancer Deaths**

#### Why Is This Important?

Breast cancer is the most commonly occurring cancer in U.S. women (excluding basal and squamous cell skin cancers) and a leading cause of female cancer deaths in both Utah and the U.S. Nationally,

deaths from lung cancer surpass deaths from breast cancer; however, breast cancer is the leading cause of cancer death among Utah women. Deaths from breast cancer can be substantially reduced if the tumor is discovered at an early stage. Mammography is currently

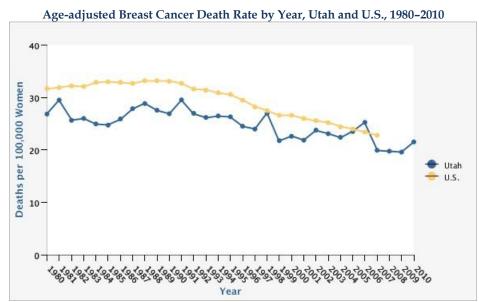
## Healthy People 2020

Objective C-3: Reduce the female breast cancer death rate

U.S. Target: 20.6 deaths per 100,000 females State Target: 20.6 deaths per 100,000 females

the best method for detecting cancer early. Clinical trials have demonstrated that routine screening with mammography can reduce breast cancer deaths by 20% to 30% in women aged 50 to 69 years. <sup>14–19</sup>, and by about 17% in women aged 40 to 49 years. <sup>20,21</sup>

We do not yet know exactly what causes breast cancer, but we do know that certain risk factors are linked to the disease. Some of these risk factors include age, socio-economic status, exposure to ionizing radiation, family history, alcohol, and hormonal influence. Some studies indicate that environmental contaminants such as benzene and organic solvents can cause mammary tumors, but clear links have not been established.



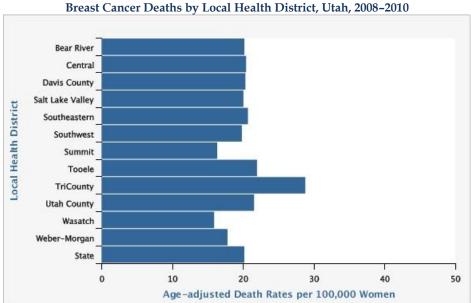
Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### **Related Risk Factors**

The most important risk factor for breast cancer is increasing age. Other established risk factors include personal or family history of breast cancer, history of abnormal breast biopsy, genetic alterations, early age at onset of menses, late age at onset of menopause, never having children or having a first live birth at age 30 or older, and history of exposure to high dose radiation. Associations have also been suggested between breast cancer and oral contraceptives, long-term use of hormone replacement therapy, obesity (in post-menopausal women), alcohol, and a diet high in fat. Some studies suggest that exercise in youth might give life-long protection against breast cancer and that even moderate physical activity as an adult could lower breast cancer risk. More research is needed to confirm these findings.

#### How Are We Doing?

Utah's age-adjusted breast cancer mortality rate did not change appreciably from 1980 to 1998 (26.8 per 100,000 females and 27.0 per 100,000 females, respectively). The mortality rate decreased to 21.8 per 100,000 females in 1999, and in 2010 the rate was 21.5 per 100,000 females. Breast cancer mortality rates increased significantly with age.



## **CANCER DEATHS**

#### **KEY POINTS**

- Colorectal cancer is the second leading cancer killer in the United States, but it doesn't have to be. If men and women aged 50 or older had regular screening tests, as many as 60% of deaths from colorectal cancer could be prevented.
- In 2010, 250 Utahns died from colon cancer (a crude death rate of 8.8 deaths per 100,000 population).
- Since 1980, Utah's ageadjusted colorectal cancer mortality rate has been consistently lower than the U.S. rate (12.1 per 100,000 versus 16.7 per 100,000 in 2007).

#### AT-RISK POPULATIONS

The rate of colorectal cancer deaths is higher among:

Older individuals

## **Colorectal Cancer Deaths**

#### Why Is This Important?

Colorectal cancer is the second leading cause of cancer-related deaths in Utah and the U.S. When

national cancer-related deaths are estimated separately for males and females, colorectal cancer is the third leading cause of cancer death behind lung and breast cancer for females and behind lung and prostate cancer for

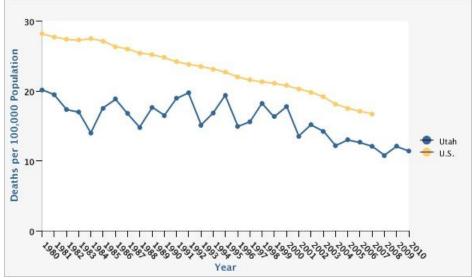
Healthy People 2020

Objective C-5: Reduce the colorectal cancer death rate U.S. Target: 14.5 deaths per 100,000 population State Target: 11 deaths per 100,000 population

males. Deaths from colorectal cancer can be substantially reduced when precancerous polyps are detected early and removed. When colorectal cancer is diagnosed early, 90% of patients survive at least five years.<sup>36</sup>

Several scientific organizations recommend that routine screening for colorectal cancer begin at age 50 for adults at average risk. Persons at high risk may need to begin screening at a younger age. Routine screening can include either annual fecal occult blood test (FOBT), and/or flexible sigmoidoscopy every five years or colonoscopy every 10 years or double-contrast barium enema every 5 to 10 years. A randomized clinical trial has demonstrated that annual screening with FOBT can reduce colorectal cancer deaths by 33 percent in individuals over age 50.<sup>37</sup> The National Cancer Institute advises each individual to discuss risk factors and screening options with his or her health care provider. Medicare and many insurance plans now help to pay for colorectal cancer screening.

# Age-adjusted Colorectal Cancer Death Rate by Year, Utah and U.S., 1980-2010



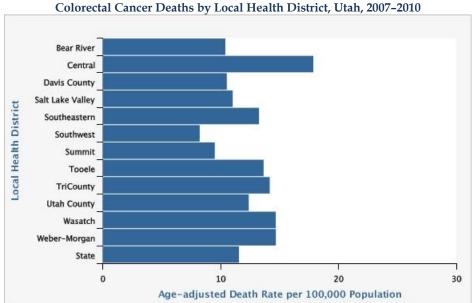
Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### **Related Risk Factors**

Risk factors for colorectal cancer include increasing age, inflammatory bowel disease, a family history of polyps or colorectal cancer, a personal history of polyps or colorectal cancer, and certain hereditary syndromes. Physical inactivity, a low fiber/high fat diet, obesity, excessive alcohol consumption, and tobacco use may all increase risk. A diet high in fruits and vegetables, hormone replacement therapy in post-menopausal women, and aspirin use may reduce colorectal cancer risk.

#### How Are We Doing?

Utah's age-adjusted colorectal cancer mortality rate ranged from a high of 20.1 per 100,000 population in 1980 to a low of 10.8 per 100,000 population in 2008. Colorectal cancer mortality rates increased with age, and women aged 65 to 84 had significantly lower mortality rates than Utah men in this age group. Among health districts, the age-adjusted colorectal cancer mortality rate ranged from a high of 17.9 per 100,000 population in Central Utah Health District to a low of 8.2 per 100,000 population in Southwest Health District. Southwest Health District had significantly lower colorectal cancer mortality rates than Central Utah and Weber-Morgan Health Districts. Looking at Utah Small Areas (excluding those without complete data), Other Southwest and Other Washington County had the lowest colorectal cancer mortality rates (both 7.1 per 100,000 population) and Roy/Hooper had the highest (22.0 per 100,000 population).



## **CANCER DEATHS**

#### **KEY POINTS**

- In 2010, 453 people in Utah died of lung cancer (a crude rate of 15.9 per 100,000 population).
- Utah's age-adjusted lung cancer mortality rate has been significantly lower than the U.S. for all years shown in the trend graph.
- Utah's age-adjusted lung cancer mortality rate significantly decreased from 23.4 per 100,000 population in 2005 to 20.85 per 100,000 population in 2010.

#### AT-RISK POPULATIONS

The rate of lung cancer deaths is higher among:

- Older individuals
- Black/African Americans

## **Lung Cancer Deaths**

#### Why Is This Important?

Lung cancer is the leading cause of cancer-related death in Utah and the U.S. In 2011 it is estimated that 156,940 U.S. deaths will be due to lung cancer. Because symptoms often do not appear until the disease is advanced, early detection of

this cancer is difficult.

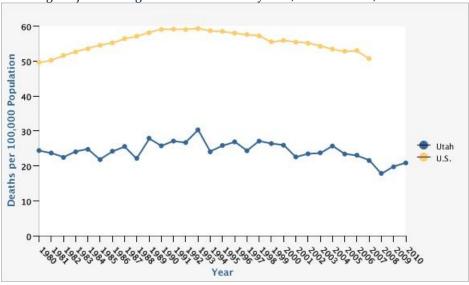
Cigarette smoking is the single most important risk factor for lung cancer. There are more than 80 carcinogens in cigarette smoke. Other risk factors include

Healthy People 2020

Objective C-2: Reduce the lung cancer death rate U.S. Target: 45.5 deaths per 100,000 population State Target: 19 deaths per 100,000 population

occupational or environmental exposure to secondhand smoke, radon, asbestos (particularly among smokers), certain metals (chromium, cadmium, arsenic), some organic chemicals, radiation, air pollution, and probably a medical history of tuberculosis. Genetic susceptibility plays a contributing role in the development of lung cancer, especially in those who develop the disease at a younger age.

#### Age-adjusted Lung Cancer Death Rate by Year, Utah and U.S., 1980-2010



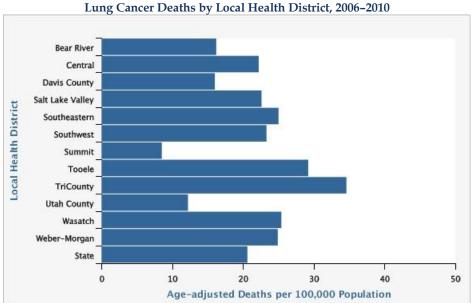
Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### **Related Risk Factors**

Cigarette smoking is the most important risk factor for lung cancer. Other risk factors include occupational exposures such as radon and asbestos and indoor and outdoor pollution, including environmental tobacco smoke.

#### **How Are We Doing?**

Utah's age-adjusted lung cancer mortality rate significantly decreased from 23.4 per 100,000 population in 2005 to 20.85 per 100,000 population in 2010. The age-adjusted lung cancer mortality rate in Utah is significantly less than the U.S. rate.



#### **CANCER DEATHS**

#### **KEY POINTS**

- Melanoma is the most serious of three types of skin cancer (basal cell carcinoma, squamous cell carcinoma, and melanoma).
- From 2003–2007, Utah had faster growing incidence and mortality rates for melanoma when compared to the U.S.
- In 2010, 84 Utah residents died from melanoma, for a crude death rate of 2.4 per 100,000.
- In 2008, the age-adjusted death rate from melanoma in 2007 was 3.0 per 100,000 in Utah vs. 2.7 per 100,000 in the U.S.

#### AT-RISK POPULATIONS

The rate melanoma of the skin deaths is higher among:

Males

#### Melanoma of the Skin Deaths

#### Why Is This Important?

According to the American Cancer Society, melanoma is much less common than other skin cancers such as basal cell and squamous cell, but it is far more dangerous.

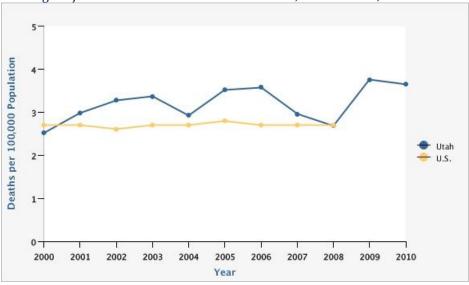
Risk for melanoma is greatly increased by tanning, both outside with oils and by using sunlamps and tanning booths. Even people who tan well without burning are at risk for melanoma. Tan

#### Healthy People 2020

Objective C-8: Reduce the melanoma cancer death rate U.S. Target: 2.4 deaths per 100,000 population State Target: 3.4 deaths per 100,000 population

skin is evidence of skin damaged by UV radiation. Health care providers strongly encourage people, especially young people, to avoid tanning beds, booths, and sunlamps. The risk of melanoma is greatly increased by using these artificial sources of UV radiation before age 30.

#### Age-adjusted Melanoma of the Skin Death Rate, Utah and U.S., 2000-2010



Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

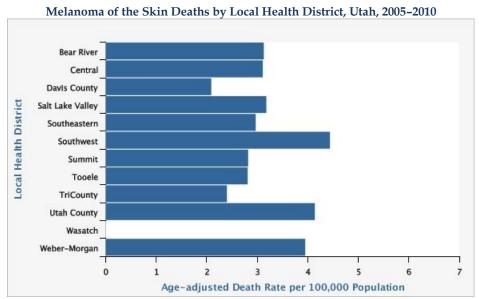
#### **Related Risk Factors**

Risk factors that can be controlled are exposure to sunlight and UV radiation during work and play. A history of sunburns early in life increases one's risk for melanoma. Risk for melanoma also increases with the severity of the sunburn or blisters. Lifetime sun exposure, even if sunburn does not occur, is another risk factor for melanoma. An estimated 90 percent of non-melanoma skin cancers and 65 percent of melanoma skin cancers are associated with overexposure to ultraviolet (UV) radiation from the sun.

Another modifiable risk factor is location. People who live of certain areas in the U.S. experience higher rates of melanoma. These are areas with a high elevation, warmer climate, and where sunlight can be reflected by sand, water, snow, and ice.

#### How Are We Doing?

Utah had a significant increase in melanoma deaths over the past few years, going from an ageadjusted rate of 2.7 per 100,000 in 2008 to 3.7 per 100,000 in 2010.



## **CANCER DEATHS**

#### **KEY POINTS**

- Prostate cancer is the second most commonly occurring form of cancer for men, after skin cancer, and is the second leading cause of cancer death for men in both Utah and the U.S.
- In 2010, 222 Utah men died from prostate cancer (a crude death rate of 15.5 per 100.000 Utah males).
- The age-adjusted prostate cancer mortality rate has been decreasing, at 24.9 per 100,000 males in Utah and 23.5 per 100,000 males in the U.S. in 2007.

#### AT-RISK POPULATIONS

The rate of prostate cancer deaths is higher among:

• Non-Hispanic Whites

#### **Prostate Cancer Deaths**

#### Why Is This Important?

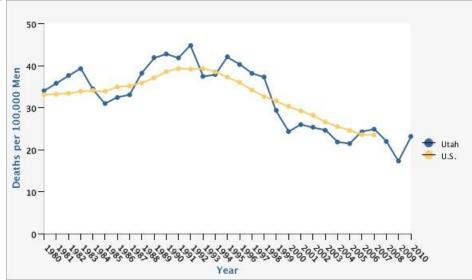
Prostate cancer is the second most commonly diagnosed cancer in men, and second only to lung

cancer in the number of cancer deaths. Although screening can detect prostate cancer early and, when found early, treatment may be more effective, there is no agreement among medical experts that prostate cancer screening saves lives.

#### Healthy People 2020

Objective C-7: Reduce the prostate cancer death rate U.S. Target: 21.2 deaths per 100,000 males State Target: 21.2 deaths per 100,000 males

Age-adjusted Prostate Cancer Death Rate per 100,000 Men by Year, Utah and U.S., 1980-2010

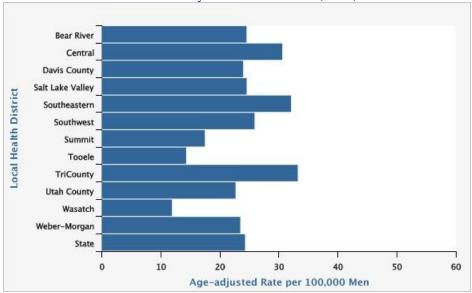


Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### **How Are We Doing?**

From 1988 to 1992 there was an increase prostate cancer death rate. Since then prostate cancer mortality rates have declined. Utah reached its 2010 goal of less than 28.2 deaths per 100,000 males and now works toward the Healthy People 2020 goal of 21.2 deaths per 100,000 males. There was no significant difference in prostate cancer mortality among Utah's ethnic or racial groups.

Prostate Cancer Deaths by Local Health District, Utah, 2006-2010



#### MENTAL HEALTH

#### **KEY POINTS**

- In 2010, approximately 15% (crude rate) of Utah adults reported seven or more days when their mental health was not good in the past 30 days.
- Looking at age-adjusted rates for 2010, significantly fewer Utah adults (14.5%) reported seven or more days when their mental health was not good in the past 30 days when compared to adults in the U.S. as a whole (15.8%).

#### AT-RISK POPULATIONS

The reporting of seven or more days when mental health is not good is higher among:

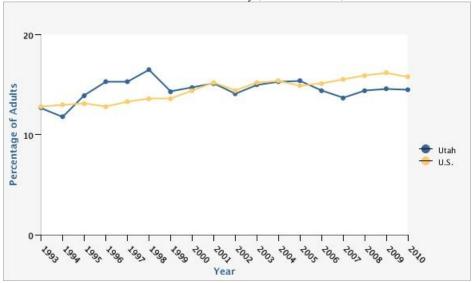
- Younger individuals
- Individuals with less formal education
- Individuals with lower household income
- Females
- Whites
- American Indians/AK Natives
- Native HIs/Pacific Islanders

## **Health Status: Mental Health in Past 30 Days**

#### Why Is This Important?

Mental health is one of the 12 Healthy People 2020 Leading Health Indicators. Mental health refers to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioral incapacity. Mental health and mental disorders can be influenced by numerous conditions including biologic and genetic vulnerabilities, acute or chronic physical dysfunction, and environmental conditions and stresses. Approximately 32% of the U.S. population is affected by mental illness in any given year. The BRFSS mental health question is an attempt to obtain a global measure of recent mental and emotional distress.

Age-adjusted Percentage of Adults Who Reported Seven or More Days When Their Mental Health Was Not Good in the Past 30 Days, Utah and U.S., 1993-2010



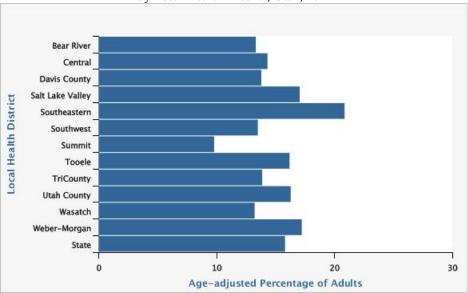
Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

#### How Are We Doing?

In 2010, approximately 15% (crude rate) of Utah adults reported seven or more days when their mental health was not good in the past 30 days. This percentage was higher for adults with lower education and income levels, and lower for older adults.

In order to analyze the BRFSS data by Utah's racial and ethnic populations, we combined years 2006–2010. According to this analysis using age-adjusted rates, Utah's Pacific Islander and American Indian/Alaska Native (19.2%) populations reported the highest percentages of seven or more days when their mental health was not good in the past 30 days. And Utah Asian adults reported the lowest percentage at 7.2%.





Data Source: Utah BRFSS (New Methodology)

Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

# **Injury**

One person dies every three minutes from injury in the U.S. In 2009, more than 1,500 Utahns - or 30 people every week - died from injuries. Each year, treating injuries costs Utahns an average of \$486 million in hospitalization and emergency department charges. Injuries are the leading cause of death for Americans and Utahns ages 1–44, with poisonings, firearms, and motor vehicle crashes the leading methods.

#### In This Section:

#### **Fall Injuries**

Utah hospitalization and ED charges are greater for injuries sustained from falls than from any other injury. Fall-related inpatient hospital charges totaled over \$135 million in 2010. Falls can cause serious injury and are especially a problem for older adults.

#### **Motor Vehicle Traffic Crashes**

In an average day, there are 135 motor vehicle crashes, and one motor vehicle crash death in Utah.<sup>39</sup> Utah hospitalization and ED charges are greater for injuries sustained from motor vehicle crashes (MVC) than from any other injury causes except falls. The use of seat belts has been shown to greatly reduce the risk of serious injury or death in a motor vehicle crash, and policies enforcing safety restraint use have shown to be effective in increasing usage.<sup>40</sup> In addition to seat belt use, encouraging safe driving, reducing intoxicated and drowsy driving, and reducing distracted driving can help reduce motor vehicle crashes.

#### **Drug Overdoses and Poisonings**

Poisoning is the leading cause of injury death in Utah. Drug and poison ingestion includes unintentional poisonings, intentional poisonings, and poisonings of undetermined intent. The rate of poisoning has been increasing for both Utah and the U.S. as a whole.

#### Suicide

456 Utahns committed suicide in 2010. A further 2,657 Utahns were seen in emergency departments (in 2009) and 1,446 Utahns were hospitalized for self-inflicted injuries (in 2010). Suicide is a complex public health issue where victims may be blamed and family members stigmatized. Consequently, suicide is not always openly discussed making it difficult to collect meaningful data that is vital to suicide prevention efforts.

## **FALL INJURIES**

#### **KEY POINTS**

- Between 2008–2010 there were 496 fall-related deaths and 14,520 hospitalizations in Utah.
- A significant majority of fall hospitalizations and deaths occur in the 85+ age group.
- The rate of fall hospitalizations is higher for women, however men have a higher fall death rate.

#### AT-RISK POPULATIONS

The rate of fall injuries and death is higher for:

- Older Individuals
- Urban county residents

## **Fall Injury Hospitalizations and Deaths**

#### Why Is This Important?

Falls are a leading cause of injury death for Utahns aged 65 and older. In Utah fall-related inpatient hospital charges totaled over \$135 million in 2010.

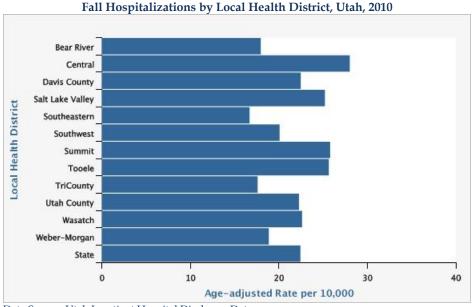


Data Source: Utah Inpatient Hospital Discharge Data

#### How Are We Doing?

From 2008–2010 there were 496 fall-related deaths and 14,520 hospitalizations in Utah. Utah's overall age-adjusted rate for unintentional fall injury hospitalization during 2008–2010 was 22.0 per 10,000 population. More than 70% (368) of the deaths and more than 60% (8,884) of the hospitalizations were among Utahns aged 65 and older. Elderly females aged 65 and older had a significantly higher rate of hospitalizations due to falls (148.7 per 10,000 population) than males aged 65 and older (80.5 per 10,000 population).

Between 1992–2010, urban counties have consistently had higher rates of fall hospitalizations than rural and frontier counties.



Data Source: Utah Inpatient Hospital Discharge Data

# MOTOR VEHICLE INJURY

#### **KEY POINTS**

- Motor vehicle crash deaths are the second leading cause of unintentional injury death in Utah.
- Use of a safety belt or child safety restraint can greatly reduce the chance of being injured or killed in a crash.
- There has been a significant decrease in the motor vehicle crash death rate in Utah over the past 20 years.

#### AT-RISK POPULATIONS

The rate of motor vehicle crash deaths is higher among:

- Males
- Rural area residents
- Individuals over 65 years of age
- American Indians/AK natives

## **Motor Vehicle Traffic Crash Deaths**

#### Why Is This Important?

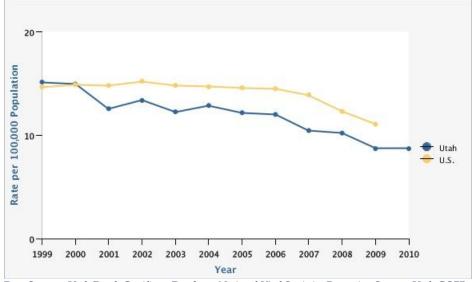
Motor vehicle crashes (MVCs) are the second leading cause of unintentional injury death in Utah, after poisoning. In 2010, MVCs accounted for 231 deaths.

#### Healthy People 2020

Objective IVP-13.1: Reduce motor vehicle crashrelated deaths

**U.S. Target:** 12.4 deaths per 100,000 population **State Target:** 8.7 deaths per 100,000 population

Age-adjusted Motor Vehicle Traffic Crash Death Rates, Utah, 1999-2010 and U.S., 1999-2009



Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### **Related Risk Factors**

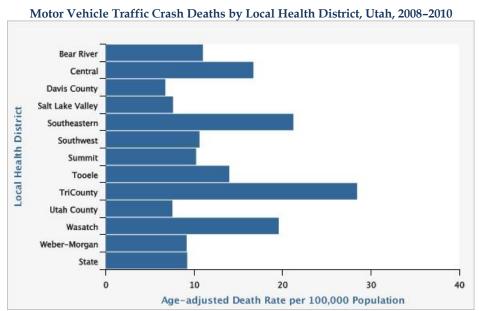
The five most important factors contributing to motor vehicle crash injuries are not wearing a seat belt, drowsy driving, impaired driving (alcohol or drugs), aggressive driving, and distracted driving.

#### How Are We Doing?

The MVC death rate has been decreasing in Utah over the past two decades. For male age groups 15–19, 20–24, 25–44, and 45–64, there have been statistically significant decreases in motor vehicle death rates from 1999 through 2010. For female age groups 15–19, 20–24, and 45–64, there have been statistically significant decreases in motor vehicle death rates from 1999 through 2010.

Residents who live in rural areas tend to have higher MVC death rates than those residing in urban areas. Age-adjusted MVC death rates were significantly higher for males (10.7 per 100,000 population) than for females (6.8 per 100,000 population) in Utah in 2010.

Utah males aged 65 and older had the highest MVC death rates (21.1 per 100,000 population) in 2010, followed by males aged 45–64 (14.6 per 100,000 population) and males aged 15-19 (11.9 per 100,000 population). Among females, the highest MVC death rate was among Utahns aged 65 and older (13.6 per 100,000 population). Note: there were too few cases in the 0-14 age groups to include in yearly analysis.



# OVERDOSES AND POISONINGS

#### **KEY POINTS**

- Utah saw a 97.4% increase in age-adjusted poisoning death rates from 2001 to 2007. There has been a 40.0% decline in the ageadjusted poisoning death rates from 2007 to 2010.
- In 2010, 26.6% of Utah poisoning deaths were of undetermined intent, 19.3% were suicides, and 54.1% were unintentional.
- Prescription pain medications underlie many Utah poisoning deaths.
- In 2007, the latest year with comparable data, Utah's age-adjusted poisoning death rate of 21.4 per 100,000 population exceeded the U.S. poisoning death rate of 13.2 per 100,000.
- From 2006 to 2010, poisoning deaths were highest among Utahns between the ages of 45– 54. In addition, males had a significantly higher ageadjusted poisoning death rate compared to females (21.8 and 15.8 per 100,000 population, respectively).

#### AT-RISK POPULATIONS

The rate of poisoning hospitalizations is higher among:

Young children

The rate of drug overdose and poisoning deaths is higher among:

- Males
- Adults

## **Drug Overdose and Poisoning Incidents**

#### Why Is This Important?

In 2002 the age-adjusted rate of poisoning deaths (15.2 per 100,000 population) surpassed the rate of motor vehicle crash (MVC) deaths (13.4 per 100,000 population) in Utah. Until this time, motor

vehicle crashes had been responsible for more lives lost than any other cause of injury. By 2009, the age-adjusted death rate from poisonings (21.0 per 100,000 population) was almost three times as high as it was from MVC deaths (8.7 per 100,000 population). Although still higher

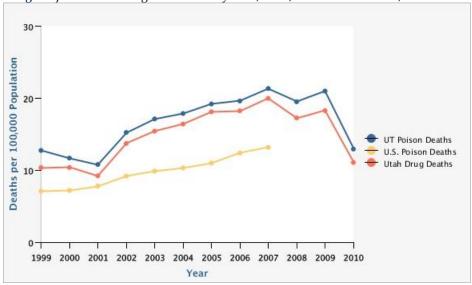
## Healthy People 2020

Objective IVP-9.1: Prevent an increase in the rate of poisoning deaths: All persons

U.S. Target: 13.1 deaths per 100,000 population State Target: 12.9 deaths per 100,000 population

than the MVC death rate, a significant decrease in the poisoning death rate was seen in 2010 (12.9 per 100,000 population). Drugs, and in particular prescription pain medications, are responsible for many of the poisoning deaths in Utah.

#### Age-adjusted Poisoning Death Rate by Year, Utah, 1999-2010 and U.S., 1999-2007



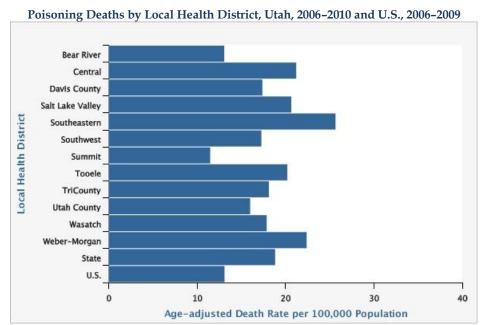
Data Sources: Utah Death Certificate Database; WISQARS; Utah GOPB

#### How Are We Doing?

Utah has seen a 97.4% increase in age-adjusted poisoning death rates from 2001 to 2007, an average increase of over 16% per year. However, there was a 40.0% decline in the age-adjusted poisoning death rates from 2007 to 2010. Prescription pain medications underlie many Utah poisoning deaths. In 2010, 26.6% of Utah poisoning deaths were of undetermined intent, 19.3% were suicides, and 54.1% were unintentional.

From 2006 to 2010, poisoning deaths were highest among Utahns between the ages of 45–54, with a rate of 39.4 per 100,000 population. In addition, males had a significantly higher age-adjusted poisoning death rate compared to females (21.8 and 15.8 per 100,000 population, respectively). Children infrequently require hospitalization for the ingestion of poison, but 1 to 4 year-olds had significantly higher poisoning emergency department (ED) visits rates than any other age group in 2009. For adults (ages 18 and over) as age increases, ED visits declined.

Age-adjusted ED treat-and-release visit rates due to poisoning have not changed significantly from 1999 to 2009, however, median treat-and-release charges have increased 280% (from \$456 in 1999 to \$1,734 in 2009). Age-adjusted hospitalization rates due to poisoning have increased steadily from 1998 (4.5 admissions per 10,000 population) to 2010 (9.0 admissions per 10,000 population). Median hospitalization charges for admissions due to poisonings increased 173% in this time period from \$3,689.27 in 1998 to \$10,079.50 in 2010.



#### **SUICIDE**

#### **KEY POINTS**

- From 2006 to 2010, Utah's age-adjusted suicide rate was 15.8 per 100,000 persons. This is an average of 402 suicides per year. The 2010 Utah age-adjusted suicide rate was 17.0 per 100,000 population.
- Utah's suicide rate has been consistently higher than the national rate.
   From 2004 to 2008, according to the National Center for Health Statistics, Utah's rate was 15.2 per 100,000 population compared to the U.S. rate of 11.2 per 100,000 population.
- In Utah from 2006 to 2010, males had higher suicide rates than females in every age group. Males 50–54 years of age (42.4 per 100,000 population) had the highest suicide rates among males, and females ages 40–44 years old (14.2 per 100,000 population) had the highest suicide rates among females.

#### AT-RISK POPULATIONS

The rate of suicide is higher among:

- Males
- Non-Hispanic Whites
- American Indians/AK Natives

#### **Suicides**

#### Why Is This Important?

From 2006 to 2010, Utah's age-adjusted suicide rate was 15.8 per 100,000 persons. This is an average of 402 suicides per year. Utah has one of the highest age-adjusted suicide rates in the U.S.

It is the second leading cause of death for Utahns ages 15 to 44 years old.

Completed suicides are only part of the problem. More people are hospitalized or treated in an emergency room for suicide

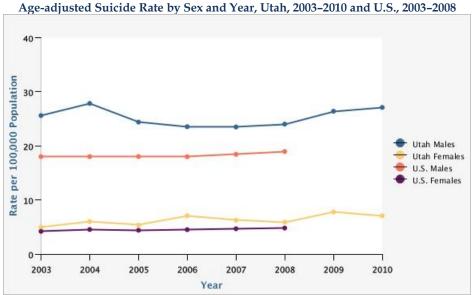
Healthy People 2020

Objective MHMD-1: Reduce the suicide rate U.S. Target: 10.2 deaths per 100,000 State Target: 13.3 deaths per 100,000

attempts than are fatally injured. According to the 2011 Youth Risk Behavior Survey, during the past 12 months before the survey, 7.2% of Utah high school students attempted suicide one or more times and 3.1% of these students suffered an injury, poisoning, or an overdose that had to be treated by a doctor or nurse. The most recent data show that 2,657 Utahns were seen in emergency departments (2009) and 1,446 Utahns were hospitalized for self-inflicted injuries (2010).

Data from the 2005–2007 Behavioral Risk Factor Surveillance System showed that 4.6% of Utahns 18 years and older reported thoughts of hurting themselves or that they would be better off dead. Males and females 85 years and older had the highest prevalence (8.0% and 12.4%), followed by males and females 18–24 years of age (7.1% and 9.1%). All suicide attempts should be taken seriously. Those who survive suicide attempts are often seriously injured and many have depression and other mental health problems.

Suicide is a complex public health issue where victims may be blamed and family members stigmatized. Consequently, suicide is not openly discussed making it difficult to collect meaningful data that is vital to suicide prevention efforts.



Data Sources: Utah Death Certificate Database; National Vital Statistics Reporting System; Utah GOPB

#### **Related Risk Factors**

Many conditions and stressors may be related to suicide including, previous suicide attempt(s), history of depression or other mental illness, alcohol or drug abuse, family history of suicide or violence, physical illness, and local epidemics of suicide.

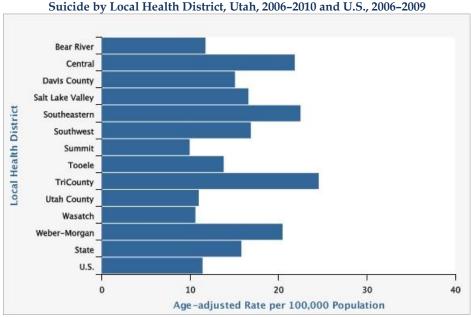
#### **How Are We Doing?**

The 2010 Utah age-adjusted suicide rate was 17.0 per 100,000 population. In the last five years, males (27.1 per 100,000 population) had a significantly higher suicide rate than females (7.1 per 100,000 population).

## **Suicides**

According to 2005–2009 data from the Utah Violent Death Reporting System, non-Hispanic/Latino persons had a significantly higher age-adjusted suicide rate than Hispanic and Latino persons (15.9 and 8.1 per 100,000 population respectively). African-American/Black persons and Hispanic and Latino persons had significantly lower age-adjusted suicide rates than the state rate.

In Utah from 2006 to 2010, males had higher suicide rates than females in every age group. Males 45–54 years of age (39.6 per 100,000 population) had the highest suicide rates among males, and females ages 35–44 years old (14.0 per 100,000 population) had the highest suicide rates among females.



## Communicable Disease

Though previously the leading cause of death, huge public health advancements in the control of communicable diseases have reduced the burden of many of these diseases. From improved sanitation to vaccines, many previously common diseases have been nearly eradicated. Many communicable diseases remain a threat to public health, however, and continued efforts are necessary to continue to control, and possibly further decrease, disease rates.

#### In This Section:

#### **Adult Vaccinations**

Vaccinations play a critical part in the prevention of many diseases, however many adults are underimmunized against vaccine preventable diseases like influenza and pneumococcal disease. Barriers to adult immunization include, but are not limited to, costs, lack of knowledge and misconceptions about needed immunizations, and lack of recommendations from health care providers.<sup>41</sup>

#### **Vaccine Preventable Disease Cases**

Due to the development of vaccines, many diseases are at or near record lows in the United States. Vaccines can prevent outbreaks and cases of infectious diseases and in doing so can reduce costs and prevent unnecessary illness and premature deaths.<sup>42</sup>

Measles, or rubeola, is a highly contagious and often fatal respiratory disease. The development of a vaccine for measles has made the disease very rare in the United States, however infrequent cases still occur, primarily due to international travel by unvaccinated individuals. Because measles is highly contagious, every case has the potential to start an outbreak, especially in under-vaccinated groups.

Also known as whooping cough, pertussis is a highly contagious and potentially life-threatening respiratory disease. Pertussis outbreaks are frequent in the United States, with the majority of reported cases occurring in children under 1 year of age. In the last few years, the number of reported pertussis cases has been on the rise in the United States. A vaccine for pertussis is available for people of all ages and it greatly reduces the transmission rate and the likelihood that the disease will be severe.

#### **Sexually Transmitted Infections**

Many infections are easily spread, and primarily transmitted, through sexual contact; these are collectively referred to as sexually transmitted infections (STIs) or diseases (STDs). Anyone can contract an STI, however nearly half of new cases of STIs occur in young adults aged 15–24 years. STIs can cause serious health complications in those who contract them, especially for adolescent girls and young women. STIs have been linked to infertility, cancer, and adverse pregnancy outcomes. STIs often present with no outward symptoms and go undiagnosed or unreported; meaning the reported number of STIs is likely a small fraction of the true number of cases. Though easily transmitted, STIs are also largely preventable.

# ADULT VACCINATIONS

#### **KEY POINTS**

- In 2011, 56.9% of Utah adults aged 65+ years reported having received an influenza vaccination in the past 12 months (New BRFSS methodology, crude rate).
- The percentage of adults aged 65+ years reporting having had an influenza vaccination in the past 12 months has declined slightly over the past five years.

#### AT-RISK POPULATIONS

The rate of pneumonia immunization for adults aged 18+ years is lower among:

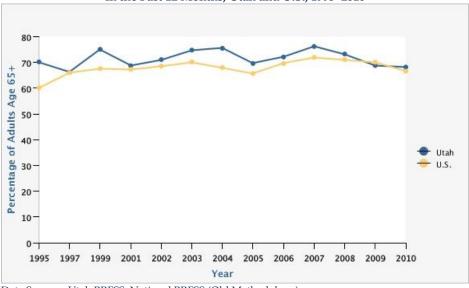
• Hispanics/Latinos

## Immunizations: Influenza, Adults

#### Why Is This Important?

Influenza, or flu, is an acute viral infection involving the respiratory tract that can occur in epidemics or pandemics. Influenza can cause a person, especially older persons, to be more susceptible to bacterial pneumonia.

# Percentage of Persons Aged 65+ Who Reported Receiving an Influenza Vaccination in the Past 12 Months, Utah and U.S., 1995–2010

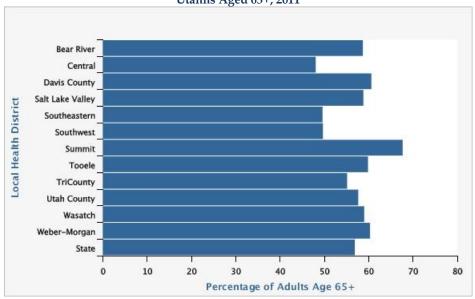


Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

#### **How Are We Doing?**

The percentage of Utahns aged 65+ who received a flu vaccine is measured by the Behavioral Risk Factor Surveillance System (BRFSS) survey, and was found to be 68.2% in 2010. This represents and slight and statistically insignificant decrease from 68.8% in 2009.

#### Influenza Vaccination in the Past 12 Months by Local Health District, Utahns Aged 65+, 2011



Data Source: Utah BRFSS (New Methodology)

Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

## **ADULT** VACCINATIONS

#### **KEY POINTS**

- In 2011 70.4% of Utahns aged 65 years and older reported having received a pneumococcal vaccination at any point in their lifetime (new BRFSS methodology).
- The rate of pneumococcal vaccination among Utahns aged 65 years and older has remained relatively steady over the past decade.
- The Utah rate of pneumococcal vaccination for adults aged 65 years and older is below the Healthy People 2020 national goal of 90%.

#### AT-RISK POPULATIONS

The rate of pneumonia immunization for adults aged 65+ years is lower among:

• Hispanics/Latinos

## **Immunizations: Pneumonia, Adults**

#### Why Is This Important?

Pneumococcal disease is a serious infection of the lungs, blood, or outer lining of the brain. Each year

it kills more people in the United States than all other vaccine preventable diseases combined. The most common form of serious pneumococcal disease among adults is pneumonia.45 The clinical results of pneumonia and influenza are often indistinguishable and

#### Healthy People 2020

Objective IID-13.1: Increase the percentage of adults who are vaccinated against pneumococcal disease: Noninstitutionalized adults aged 65 years and older U.S. Target: 90 percent

are grouped together as the 9th leading cause of death in Utah. They accounted for 312 deaths in 2007, 341 in 2008, 328 in 2009 and 346 in 2010.

Approximately 5,877 Utahns were hospitalized with pneumonia and influenza in 2010. Children less than 1 year of age and adults 65 and older are most often affected. The total cost for those hospitalizations during the 5-year period was over \$495 million. The average annual cost was approximately \$2.45 million for children less than 1 year old and over \$46.2 million for adults 65 and older.

The vaccine is recommended for:

- all adults age 65 years and older
- people with chronic illnesses (e.g., diabetes, heart, lung or kidney disease)
- people with compromised immune systems (including people with HIV)<sup>45</sup>

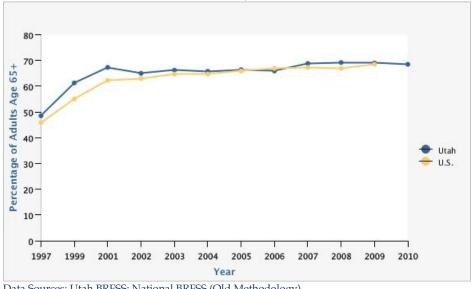
Those who should get a booster include:

- people age 65 and older who received the vaccine before age 65 if more than five years
- have passed
- people who have received a transplant
- people with chronic kidney disease
- people with compromised immune systems

The booster should be given at least five years after the first dose. 45

A study published in the medical journal Clinical Infectious Diseases found that hospital patients who received the pneumococcal vaccine were 40 to 70 percent less likely to die than unvaccinated patients. In the study, vaccinated patients had a lower risk of respiratory failure, kidney failure, heart attack, and other complications. Vaccinated patients in the study also spent an average of two fewer days in the hospital.46

#### Age-adjusted Percentage of Adults 65+ Reporting Pneumococcal Vaccination Ever. Utah and U.S., 1997-2010



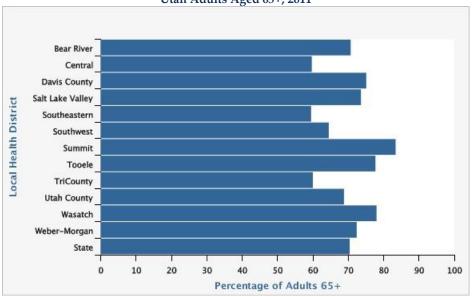
Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

## Immunizations: Pneumonia, Adults

#### How Are We Doing?

Lifetime pneumococcal vaccination rates for adults 65+ have significantly improved since 1997 when data were first collected on the BRFSS. The 1997 rate was 48.5% (95% confidence interval, 42.2%–54.8%) and by 2011 it had increased to 70.4% (68.2%–72.5%), an increase from 68.5% in 2010. However, due to a change in the BRFSS methodology in 2011, it is not possible to know if this is a significant change from 2010. Essentially, lifetime pneumococcal vaccination rates have not changed much since 2001 when the rate was 67.3% (62.3%–70.6%).

Age-adjusted Percentage Who Ever Received Pneumococcal Vaccination by Local Health District, Utah Adults Aged 65+, 2011



Data Source: Utah BRFSS (New Methodology)

Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

## VACCINE PREVENTABLE DISEASE CASES

#### **KEY POINTS**

- The recent low rates of measles infection in Utah can be attributed both to improved immunization rates, as well as the natural cycle of the disease.
- From 2005 through 2010,
   Utah has had lower
   measles rates than the
   U.S., with only one
   confirmed case being
   reported during that period
   of time.
- In the spring and early summer of 2011, Utah experienced an outbreak of measles with 15 confirmed cases reported. There have been other measles outbreaks reported in the U.S. in 2011 as well.

#### **Measles Infections**

#### Why Is This Important?

Measles is a highly contagious viral disease that can be particularly serious in infants and adults. Although measles usually lasts only one to two weeks, it can cause serious complications such as

pneumonia, ear infections, and encephalitis (inflammation of the brain). In very young or malnourished patients, blindness can occur.

Before the measles vaccine was introduced in 1963, more than a half million cases of measles were reported

Healthy People 2020

Objective IID-1.4: Reduce, eliminate, or maintain elimination of cases of vaccine-preventable diseases: Measles (U.S.-acquired cases)

U.S. Target: 30 cases

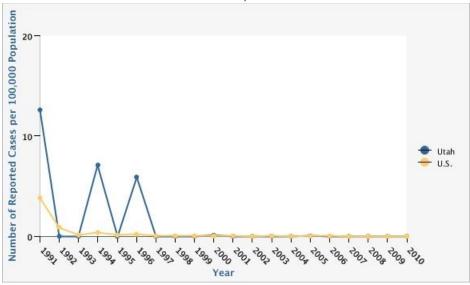
State Target: 0 cases per year

annually in the United States. Due to intensive efforts to vaccinate pre-school aged children, reported cases of measles has declined rapidly over time.

The United States has established the goal of eliminating the transmission of endemic measles strains. Surveillance data indicates this goal was reached in 2002.

Utah experienced an outbreak of measles in 2011 with 15 cases reported. Measles was introduced into Utah through foreign travel by an unvaccinated adolescent. Two of the 15 cases were known to be vaccinated, and the remaining 13 were either unvaccinated, partially vaccinated, or documentation was not found.

#### Number of Reported Measles Cases per 100,000 Population per Year, Utah and U.S., 1991–2010



Data Sources: UDOH, Bureau of Epidemiology; CDC; Utah GOPB

#### **How Are We Doing?**

In 1996, Utah's childhood immunization rate was the lowest in the country. Since that time, Utah's immunization rate has improved. The recent low rates of measles infection in Utah can be attributed both to improved immunization rates, as well as the natural cycle of the disease. Utah's immunization rates are now above the national average.

## VACCINE PREVENTABLE DISEASE CASES

#### **KEY POINTS**

- In 2010 there were 10.3 reported cases per 100,000 population of pertussis in Utah.
- Pertussis rates have been increasing in Utah since 2008.
- The majority of pertussis cases occurred in people aged 15 years and older, however incidence of the disease was highest in children under 1 year of age. These children are also at the highest risk for serious complications from pertussis.

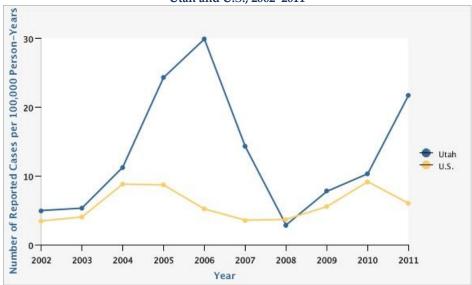
#### **Pertussis Cases**

#### Why Is This Important?

Pertussis is a contagious, bacterial, respiratory disease. Although pertussis may be a mild disease in older children and adults, these infected people may transmit the disease to other susceptible persons, including unimmunized or incompletely immunized infants. Young infants are at highest risk for acquiring pertussis and pertussis-associated complications, such as pneumonia and inflammation of the brain.

Although not common, pertussis can cause death, especially in children under one year of age. Most children are protected against pertussis by vaccination during childhood; however immunity wanes over time and leaves adolescents and adults unprotected. National figures from 2011 indicate that infants aged <1 year, who are at greatest risk for severe disease and death, continue to have the highest reported rate of pertussis. Adolescents (aged 11–19 years) and adults (aged >20 years) accounted for approximately 47% of reported cases in 2011, with persons aged 7–10 years contributing a significant proportion of cases (18%).

#### Number of Reported Pertussis Cases per 100,000 Person-Years, Utah and U.S., 2002-2011



Data Sources: UDOH, Bureau of Epidemiology; CDC; Utah GOPB; U.S. Census Bureau for 2011

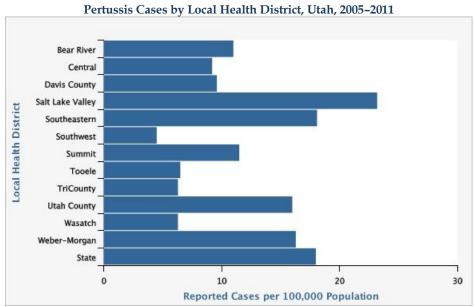
#### **How Are We Doing?**

Pertussis has been on the rise in Utah steadily since 2009. Preliminary 2012 data indicate that pertussis activity has reached pre-vaccine era rates (>40 cases per 100,000). There are several contributors to the increase of pertussis rates in recent years, including: actual increases in disease occurrence, better laboratory tests, increased recognition by clinicians, the cyclical nature of pertussis peaking every 5–6 years, waning immunity of the adult booster Tdap 2 years after the vaccine is given, and the higher risk of infection with pertussis in individuals who are not vaccinated (they have an eightfold greater risk if exposed).

In 2005, Tdap, a new pertussis vaccine licensed for people aged 11–64 years, was approved by the FDA. Tdap is effective at preventing pertussis, but how long it protects is not as long as it was originally thought. Current evidence indicates immunity for a minimum of 2 years after receiving the Tdap vaccine. Recommendations for Tdap are currently that adults and children between the ages of 7–64 should receive one lifetime dose.

The age breakdown of cases of pertussis in Utah for 2012 shows that 58% of cases are in children aged 14 years and younger. Incidence rates are highest in infants less than 1 year of age and children between the ages of 5-14.

(See next page for LHD graph view)



#### **KEY POINTS**

- In Utah there were 234.9 reported cases per 100,000 population of chlamydia in 2010.
- The rate of chlamydia in Utah has consistently been below the national rate, however both rates are on the rise.
- Chlamydia is the most frequently reported notifiable disease in Utah.

#### AT-RISK POPULATIONS

The rate of reported Chlamydia cases is higher among:

- Females
- Adolescents and young adults
- American Indians/ AK Natives
- Blacks/African Americans
- Native HIs/Pacific Islanders
- Hispanics/Latinos

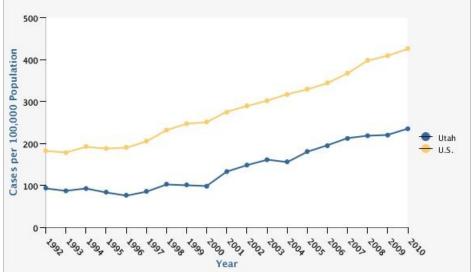
### **Chlamydia Cases**

#### Why Is This Important?

Infections caused by the bacterium *Chlamydia trachomatis* are the most frequently reported notifiable disease in Utah, with 6,690 cases reported in 2010. Two-thirds of the reported cases were among persons between 15 and 24 years of age. Chlamydia infections in both men and women are commonly asymptomatic, yet screenings occurring mostly among females produce higher rates of reported infections. The overall rate for chlamydia in the Utah in 2010 was 234.9 cases per 100,000 persons.

Females with chlamydia infection are at risk for developing pelvic inflammatory disease (PID), and both men and women may become infertile as a result of untreated chlamydia infections. Untreated chlamydia infections can damage the reproductive systems of both males and females. Susceptibility to more serious infections such as HIV also increases when an individual is infected with chlamydia. In addition, pregnant women with chlamydia can pass the infection to their infant during delivery, potentially resulting in pneumonia or neonatal ophthalmia.





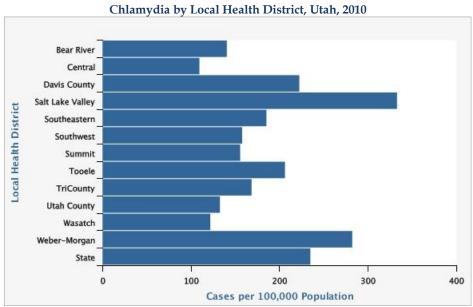
Data Sources: UDOH, Bureau of Epidemiology; CDC; Utah GOPB

#### How Are We Doing?

Chlamydia rates in Utah have increased since 2000. This can be attributed to increased screening efforts, use of increasingly sensitive diagnostic testing, efforts to increase reporting by providers and laboratories, and improved information systems for reporting. Such increased rates can be interpreted as an advancement in chlamydia infection control as more infections are identified and treated, providing opportunity to intervene in the spread of infection.

Chlamydia infections in both men and women are commonly asymptomatic, yet screenings occurring mostly among females produce higher rates of reported infections. However, with the increased availability of urine testing, men are increasingly being tested for chlamydial infection. From 2004 through 2010 in Utah, the chlamydia rate in men increased by 70% as compared with a 42% increase in women over this period.

(See next page for LHD graph view)



#### **KEY POINTS**

- In Utah there were 10.9 reported cases per 100,000 population of gonorrhea in 2010.
- The rate of gonorrhea in Utah has consistently been below the national rate.
- Gonorrhea may be reported more frequently in men than women because most infections in men produce symptoms that cause them to seek testing and treatment, while infections in women may not produce significant symptoms until complications develop (e.g. PID).

#### AT-RISK POPULATIONS

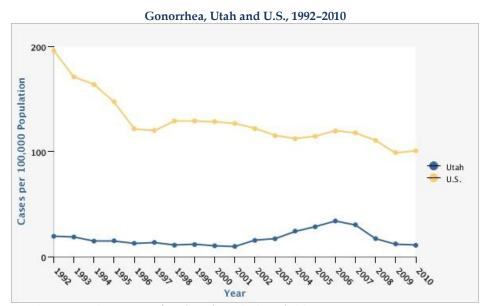
The rate of reported Gonorrhea cases is higher among:

- Males
- Young adults
- Blacks/African Americans
- Hispanics/Latinos

#### **Gonorrhea Cases**

#### Why Is This Important?

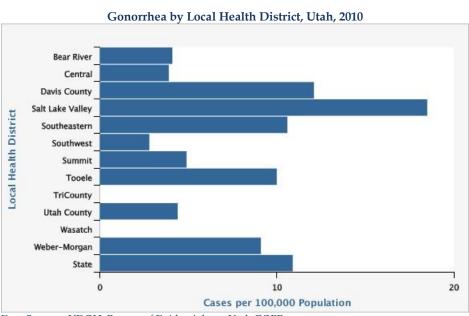
Although much less common than chlamydia infections, gonorrhea, caused by *Neisseria gonorrhoeae*, is a priority public health concern in Utah. Untreated gonorrhea infections can damage the reproductive systems of both males and females. Females with gonorrhea infection are at risk for developing pelvic inflammatory disease (PID), and both men and women may become infertile as a result of untreated gonorrhea infections. Also, susceptibility to more serious infections such as HIV also increases when an individual is infected with gonorrhea. Furthermore, pregnant women with gonorrhea can pass the infection to their infant during delivery, potentially resulting in ophthalmia neonatorum. Gonorrhea can spread to joints and become systemic (disseminated gonorrhea). In addition to the cervix and urethra, the rectum and pharynx are also important sites of gonococcal infection.



Data Sources: UDOH, Bureau of Epidemiology; CDC; Utah GOPB

#### How Are We Doing?

Since 2006, Utah has seen a 68% decrease in the gonorrhea case rate: 10.9 cases per 100,000 persons reported in 2010 as compared to 34.0 per 100,000 in 2006. From 2001 to 2006, however, the rate had increased 242% from 9.9 cases per 100,000 in 2001 to 34.0 cases per 100,000 in 2006.



Data Sources: UDOH, Bureau of Epidemiology; Utah GOPB

#### **KEY POINTS**

- In Utah there were 2.3 reported cases per 100,000 population of syphilis in 2010, an increase from 2009 (1.2 cases per 100,000).
- The rate of syphilis in Utah has consistently been below the national rate; however the Utah rate has been on the rise since 2007.

#### AT-RISK POPULATIONS

The rate of reported cases of primary and secondary syphilis is higher among:

Males

## **Syphilis Cases: Primary and Secondary**

#### Why Is This Important?

Syphilis is a complex sexually transmitted disease (STD) caused by the bacterium *Treponema* pallidum (spp. pallidum). The initial stage (primary syphilis) is characterized by a highly infectious

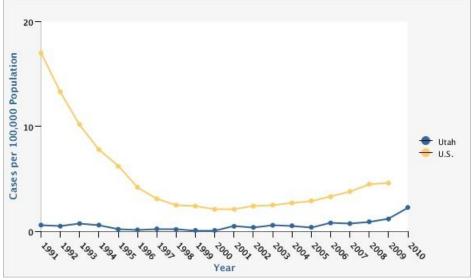
painless open sore, called a chancre, at the site of infection. Chancres occur mainly on the external genitals, vagina, anus, or in the rectum. Syphilis is passed from person to person through direct contact with the chancre. Sexual transmission can also occur during the

## Healthy People 2020 Objective STD-7: Reduce sustained domestic

transmission of primary and secondary syphilis
U.S. Target: 1.4 new cases per 100,000 females and
6.8 new cases per 100,000 males

secondary stage of syphilis. An infant can acquire syphilis through the placenta if the mother is infected. In later stages of the disease, the bacteria move throughout the body, damaging many organs over time. The open nature of the syphilitic sores makes it easier to acquire HIV, if exposed, or to transmit the virus, if infected. Public health intervention and education measures are crucial in eliminating syphilis.

#### Primary and Secondary Syphilis Rates per 100,000, Utah and U.S., 1991-2010



Data Sources: UDOH, Bureau of Epidemiology; CDC; Utah GOPB

#### How Are We Doing?

In 2010, 65 cases of primary and secondary (P&S) syphilis were diagnosed and reported. Twenty five of the cases were primary syphilis and 40 cases were secondary syphilis. The rate for P&S syphilis in 2010 was 2.3 per 100,000 persons, a 93% increase from the rate of 1.2 per 100,000 persons documented in 2009. P&S syphilis rates have consistently increased since 2007, which had a documented rate of 0.7 per 100,000 persons.

During 2010, 95% of P&S syphilis cases were diagnosed among residents within the Wasatch Front (Salt Lake, Davis, Utah, and Weber Counties). Salt Lake Valley Health District had the highest rate of P&S syphilis at 5.1 per 100,000 persons.

P&S syphilis cases were more common among men during 2010 at a rate of 4.4 per 100,000 male persons. Males between the ages of 35–44 years were mostly affected with a rate of 11.3 per 100,000 male persons followed by males aged 20–29 years with a rate of 8.9 per 100,000 male persons.

Females diagnosed with P&S syphilis in 2010 were at a rate of 0.1 per 100,000 female persons. Females aged 15–24 years were primarily affected at a rate of 0.9 per 100,000 female persons.

During 2010, the P&S syphilis cases were diagnosed primarily among White, non-Hispanic individuals followed by individuals of Hispanic origin and Black, non-Hispanics.

#### **KEY POINTS**

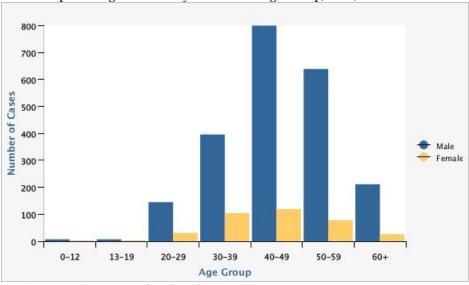
- As of October 2011, a total of 2,569 individuals diagnosed with HIV (regardless of AIDS diagnosis) were currently known to be living in Utah.
- There has been an increase in the number of people living with HIV disease in Utah because AIDS-related deaths have been decreasing.
- The majority of people living with HIV in Utah are male and aged 40–59 years.

#### **HIV and AIDS**

#### Why Is This Important?

HIV is a blood-borne virus. Transmission occurs primarily through sexual contact with an infected person, sharing needles for the injection of drugs, or before, during, or after the birth of children of HIV-infected mothers. The Bureau of Epidemiology has the responsibility of tracking cases of HIV/AIDS in order to monitor trends in the disease and whenever possible to interrupt the transmission of HIV. This is done by collecting pertinent demographic information on reported HIV-positive individuals and by conducting follow-up on newly diagnosed individuals and their partners. No treatment is available to cure HIV, although antimicrobial and antiretroviral treatments are available to extend survival among those who are infected with human immunodeficiency virus (HIV).





Data Source: UDOH, Bureau of Epidemiology

#### How Are We Doing?

As of October 2011, a total of 2,569 individuals diagnosed with HIV (regardless of AIDS diagnosis) were currently known to be living in Utah.

AIDS-related deaths have been decreasing, primarily because of improved efficacy of combination antiretroviral therapies. This trend has led to an increased number of people living with HIV disease in Utah, thus impacting the health care systems and increasing the need for HIV/AIDS Prevention and HIV/AIDS Treatment and Care programs.

Of those HIV-positive individuals known to be living in Utah as of October 2011, the majority (35.8%) are between 40–49 years of age. Those HIV-positive individuals known to be living aged 50–59 years make up 27.9% and 30–39 year olds make up 19.5%. Of the total 2,569 individuals known to be living with HIV, 2,205 (85.8%) are male, and 364 (14.2%) are female.

Male-to-male sexual contact (MSM) is the most common means of HIV exposure (64.9%) reported among men of all races followed by male-to-male sexual contact and injection drug-use (MSM+IDU) at 15.6%. The racial breakdown of men living with HIV shows 72.4% are White (non-Hispanic), 17.8% are Hispanic, 6.9% are Black, 1.2% are American Indian/Alaskan Native, 1.1% are Asian/Pacific Islander, and 0.6% are of Multiple Races.

Heterosexual contact is the most common means of HIV exposure (47.8%) reported among women followed by injection drug use (IDU) at 26.7%. The racial breakdown of women living with HIV shows 51.1% are White (non-Hispanic), 22.5% are Hispanic, 21.2% are Black, 2.5% are Asian/Pacific Islander, 1.9% are American Indian/Alaskan Native, and 0.8% are of Multiple Races.

## Access to and Utilization of Care

Access to health care is an issue for many Utah residents, whether it is due to financial barriers (poverty and/or lack of insurance), geographic barriers (distance to needed services), cultural barriers (including language/translation issues), or when needed services are not available. Delaying needed health care for whatever reason can lead to worsening health problems that are more difficult and expensive to treat than those avoided completely or treated earlier. Disparities in the ability to access care exist in Utah; American Indian/Alaska Native, Black/African American and Hispanic/Latino Utahns were significantly more likely to report problems with accessing health care. Individuals with lower household incomes and individuals with less formal education were also more likely to report difficulties in accessing care.<sup>47</sup>

#### In This Section:

#### Cost as a Barrier to Health

High cost is the most commonly reported barrier to health care. Over the past few years, a higher and higher percentage of Utahns have reported being unable to receive needed medical care due to cost.

#### **Health Insurance Coverage**

Individuals without health care insurance are much more likely to forgo needed medical care than those with insurance. Lacking health insurance can greatly increase the cost of medical care for an individual. Overall the uninsured have worse health outcomes than insured individuals. It is estimated that more than 10% of Utahns and 7% of Utah children lack health insurance.

#### **Physicians Supply**

Cost is not the only barrier to timely and effective care, individuals must also have access to providers. Physician supply has been associated with greater access to care and improved health outcomes. Having sufficient availability of physicians is critical for appropriate access to care. Access to care requires both financial coverage and access to providers, physicians per 100,000 population is a good indicator of the availability of providers.

#### **Routine Care**

Regular health care visits are important for individuals of all ages in the prevention, early detection, and treatment of many diseases and conditions.

#### **Chronic Disease Management**

The proper management of many chronic diseases can delay or stop their progression, and the risk for serious complications can be greatly reduced. Poor rates of chronic disease management can be indicative of inadequate access to care.

## COST AS A BARRIER TO CARE

#### **KEY POINTS**

- In 2010, the crude percentage of Utah adults who reported being unable to see a doctor in the past 12 months due to cost was 14.2%. This is the highest the measure has been since being tracked starting in 2003.
- This percentage was the highest for adults aged 18– 24 (20.5%) and lowest for Utah adults aged 65 and older (3.8%).
- Utah adults with low incomes had a higher rate of reporting cost as a barrier to health care than those with higher incomes as did those without health insurance versus the insured.

#### AT-RISK POPULATIONS

The rate of reporting cost as a barrier to health care is higher among:

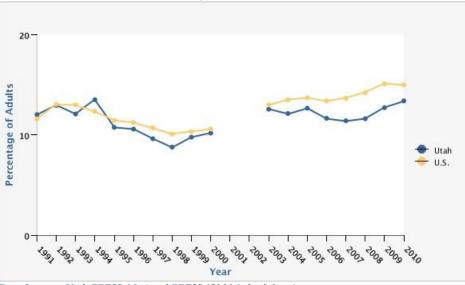
- Individuals with lower household income
- Individuals with lower levels of formal education
- Young adults
- · Uninsured Individuals

#### Cost as a Barrier to Health Care

#### Why Is This Important?

Access to health care is still a problem for many Utahns. Individuals who cannot obtain needed health care tend to have higher rates of death and disability from chronic disease. Cost is the most commonly reported barrier to getting needed health care.

Age-adjusted Percentage of Adults Reporting Cost as a Barrier to Care in Past Year, Utah and U.S., 1991–2000 and 2003–2010

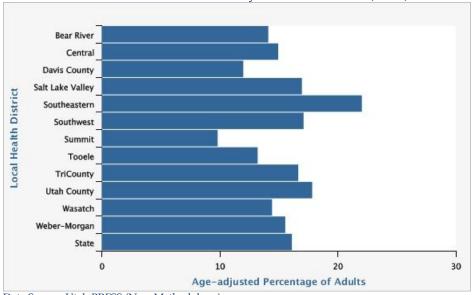


Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

#### **How Are We Doing?**

The crude percentage of Utah adults who reported being unable to see a doctor in the past 12 months due to cost was 14.2% in 2010. This percentage was the highest for adults aged 18–24 (20.5%) and lowest for Utah adults aged 65 and older (3.8%). Utah adults with low incomes had a higher rate of reporting cost as a barrier to health care than those with higher incomes as did those without health insurance versus the insured.

Cost as a Barrier to Care in Past Year by Local Health District, Utah, 2011



Data Source: Utah BRFSS (New Methodology)

Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

## HEALTH **INSURANCE**

#### KEY POINTS

- An estimated 13.3% of all Utah residents did not have health insurance coverage in 2011.
- The estimate may actually be as high as 15.3%, or 421,900 Utah residents, according to a Census Bureau survey that is mailed and includes followup phone calls and face-toface interviews when needed. By either measure, the uninsured rate in Utah has increased in recent years.

### AT-RISK POPULATIONS

The rate of health insurance coverage is lower for:

- · Individuals with lower household income
- Young adult males
- Unemployed individuals
- American Indians/AK Natives
- Asians
- Blacks/African Americans
- Hispanics/Latinos

## **Health Insurance Coverage**

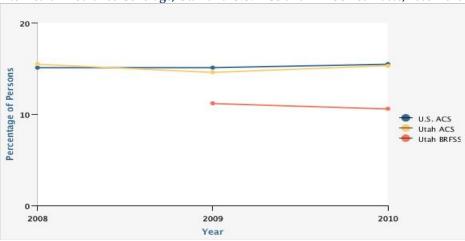
#### Why Is This Important?

Persons with health insurance were more likely than persons without health insurance to have a regular source of primary health care, and were more likely to have routine preventive care. Persons without coverage have often delayed seeking needed care and found services difficult to afford.

Healthy People 2020

Objective AHS-1.1: Increase the proportion of persons with health insurance: Medical insurance U.S. Target: 100 percent

No Health Insurance Coverage, Utah and U.S. ACS and BRFSS Estimates, 2008-2010

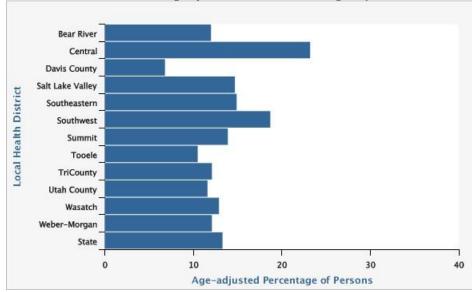


Data Sources: U.S. Census Bureau, ACS; Utah BRFSS (Old Methodology)

#### **How Are We Doing?**

An estimated 301,700 Utahns (10.6%) were without health insurance coverage in 2010. However, the estimate may actually be as high as 15.3%, or 421,900 Utah residents, according to a Census Bureau survey that is mailed and includes follow-up phone calls and face-to-face interviews when needed. Unlike the BRFSS, the Census survey does reach people with cell phones only and people without phones at all. By either measure, the uninsured rate in Utah has increased in recent years.

No Health Insurance Coverage by Local Health District, Age-adjusted, Utah, 2011



Data Source: Utah BRFSS (New Methodology)

Data Note: The data in this graph use both landline and cell phone interview and a new weighting methodology. This data is not comparable to the trend graph that is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

## HEALTH INSURANCE

#### **KEY POINTS**

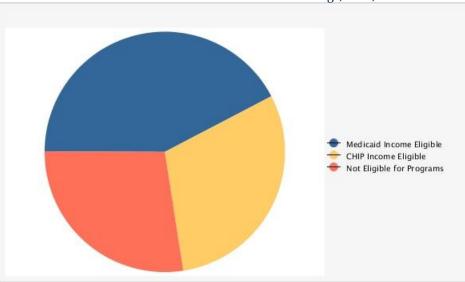
- In 2011, approximately 8.1% of Utah children aged 0–18 years had no health insurance coverage. This represents an increase from 7.0% in 2010, but this increase may be partly due to the change in BRFSS methodology.
- The 2011 Behavioral Risk Factor Surveillance System (BRFSS) estimated that approximately 70% of uninsured children in Utah were income eligible for health care services through Children's Health Insurance Program (CHIP) or Medicaid programs. It must be kept in mind, though, that eligibility determination requires a review of circumstances in addition to income.

#### **Medicaid and CHIP Penetration**

#### Why Is This Important?

Children who are not insured by private or employer-provided plans have an opportunity to be covered by Medicaid or the Children's Health Insurance Program (CHIP) if they are age 0–18 and live in households with incomes below 200% of poverty. This element is very important given the relationship between having insurance and accessing health care.

CHIP and Medicaid Program Eligibility, Children 0-18 Without Health Insurance Coverage, Utah, 2011



Data Source: Utah BRFSS (New Methodology)

#### **How Are We Doing?**

In 2011, approximately 8.1% of Utah children aged 0 to 18 years had no health insurance coverage. This represents a slight increase from the previous year (7.0%), though this change was not statistically significant.

The 2011 Behavioral Risk Factor Surveillance System (BRFSS) estimated that approximately 70% of uninsured children in Utah were income eligible for health care services through CHIP or Medicaid programs. Eligibility determination requires a review of circumstances in addition to income.

## PHYSICIAN SUPPLY

#### **KEY POINTS**

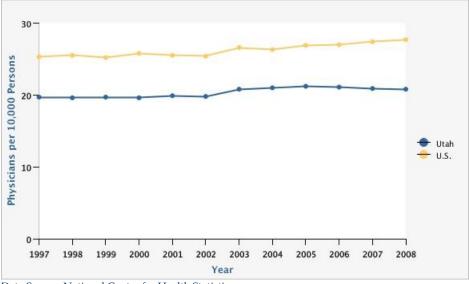
- The ratio of physicians to persons in a population is an indication of the capacity of the health system and the access to care for persons in that population.
- The physician supply in Utah has kept up with population growth but is lower than in the U.S. as a whole, with the gap widening over time.
- From 1997 to 2008, there have been between 19.6 and 21.2 active physicians per 10,000 civilian population, with 20.8 in 2008 compared to 27.7 per 10,000 civilian population in the U.S.

## Physicians per 10,000 Civilian Population

#### Why Is This Important?

The ratio of physicians to persons in a population is an indication of the capacity of the health system and the access to care for persons in that population.

#### Active Physicians per 10,000 Civilian Population, Utah and U.S., 1997-2008



Data Source: National Center for Health Statistics

#### **How Are We Doing?**

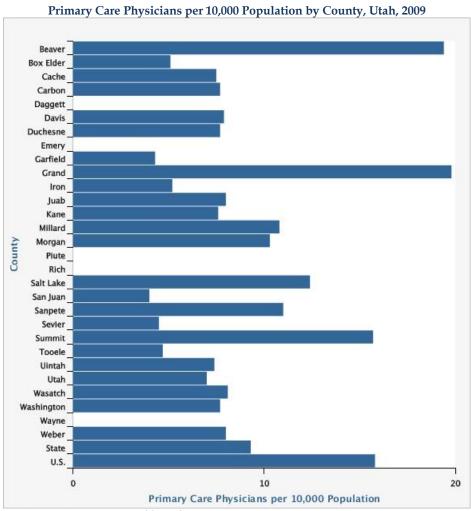
The physician supply has more than kept up with growth in the population; however, access is also influenced by the availability of doctors by specialty area and by geographic area. The number of active physicians per 10,000 civilian population in Utah is lower the than the U.S. as a whole.

The optimal ratio of physicians to population depends on many factors, including population density and the health status and health care utilization patterns of the population. Utah predicts that about 1,100 physicians will retire in the next ten years, which may cause shortages in provision of specialty care.

#### **Data Note:**

All data in indicator and the" Utah and U.S." trend-graph include active doctors of medicine and active doctors of osteopathy. Starting with 2003 data, federal and nonfederal physicians are included. Data prior to 2003 included nonfederal physicians only. The county comparison graph however is based on different data provided by the County Health Rankings, whose data measures primary care physicians which include practicing physicians specializing in general practice medicine, family medicine, internal medicine, pediatrics, and obstetrics/gynecology. The data has been converted from the population per one provider form.

(See next page for by county graph view)



Data Source: Community Health Rankings

Data Note: Includes primary care physicians (general practice medicine, family medicine, internal medicine, pediatrics, and obstetrics/gynecology). The data has been converted from the population per one provider form.

#### **ROUTINE CARE**

#### **KEY POINTS**

- In 2010 the percentage of individuals who reported having a routine check-up in the past year in Utah is below the national average, 59.9% compared to 66.9% (age-adjusted rate).
- Among Utah adults, women had a higher rate (62.0%) of having a routine check-up in the past year than men (55.2%).

#### AT-RISK POPULATIONS

The rate of reporting having had a routine medical checkup in the past year was lower for:

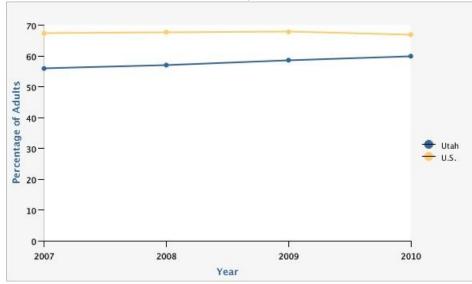
Uninsured individuals

#### **Routine Medical Care Visits**

#### Why Is This Important?

Clinical preventive services are important for maintaining good health. Early detection and treatment of disease improves the chances of full recovery. Physician counseling can influence health behaviors and prevent disease entirely in many cases. It is especially important for persons in poor health to have a primary physician who understands their medical history and problems and can give them appropriate care that fits their medical and social context.

#### Age-adjusted Percentage of Adults Reporting a Routine Check-up in the Past Year, Utah and U.S., 2007–2010

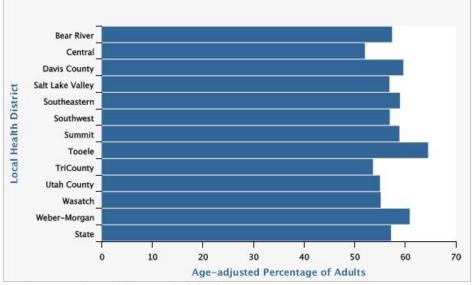


Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

#### How Are We Doing?

In 2010, 58.6% of Utah adults reported having a routine check-up within the past 12 months.

## Routine Medical Check-up in the Past 12 Months by Local Health District, Utah, 2011



Data Source: Utah BRFSS (New Methodology)

Data Note: The BRFSS data in this graph include both landline and cell phone respondent data along with a new weighting methodology. This data is not directly comparable to the trend graph which is weighted using the old methodology and landline phones only. For more information please see this report's introduction.

#### **ROUTINE CARE**

#### **KEY POINTS**

- In 2010, 72.7% of Utahns aged 18 years and older reported a dental visit in the past year (68.7% using new BRFSS methodology).
- In state surveys, Utahns have reported problems with access to dental care. The cost of dental care is the most commonly cited reason for problems with access. Utah adults with dental insurance were more likely to report a dental visit in the past year than those without dental insurance.

#### AT-RISK POPULATIONS

The rate of reporting a dental visit in the past year was lower for:

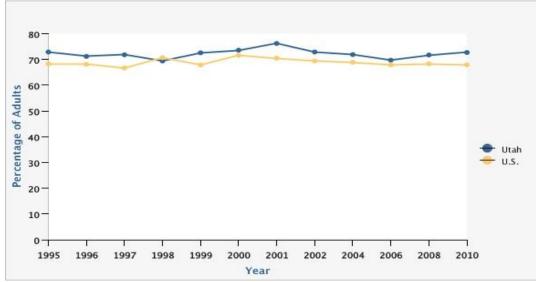
- Individuals with lower household income
- Individuals with lower levels of formal education
- Uninsured individuals

#### **Routine Dental Visits**

#### Why Is This Important?

Regular dental visits are important in the prevention, early detection, and treatment of oral and craniofacial diseases and conditions for all ages. Adults need regular professional care to avoid tooth loss, the need for complex restorative treatment, and even systemic health problems. Even people without teeth need to be monitored regularly for oral health which may be affected by systemic conditions, medications, prosthetic devices, and exposure to tobacco. Infrequent use of dental services has been associated with poor oral health among adults.

#### Age-adjusted Percentage of Adults Who Reported a Dental Visit in the Past Year, Utah and U.S., 1995–2002, 2004, 2006, 2008, and 2010

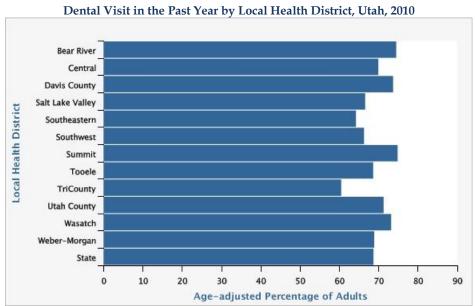


Data Sources: Utah BRFSS; National BRFSS (Old Methodology)

#### **How Are We Doing?**

In 2010, 72.6% of Utah adults reported a visiting a dentist or dental clinic in the past year. This percentage has varied little since 1995 when the question was first asked. Utah adults with higher incomes and more education are more likely to report a dental visit in the past year than those with lower incomes and less education. There is little difference in this percentage amongst age groups in Utah. According to 2001 data, Utah adults with dental insurance were more likely to report a dental visit in the past year than those without this type of insurance (83.3% vs. 63.7%). NOTE: The dental insurance question has not been asked again since 2001.

(See next page for LHD graph view)



## MANAGEMENT **OF CHRONIC** CONDITIONS

#### **KEY POINTS**

- Tracking rates of emergency department visits for asthma can aid in identifying populations or areas with inadequate access to routine medical care.
- Utah's rate of ED visits for asthma is well below the Health People 2020 objectives for ages 0-4 and 5-64.
- The ED visit rate in Utah for adults aged 65+ (17.2 per 10,000) exceeds the HP2020 objective.

#### AT-RISK POPULATIONS

The rate of asthma ED visits is higher among:

- Male children
- Adolescents
- People 65+
- Adult females

## **Asthma-related Emergency Department Visits**

#### Why Is This Important?

Asthma can usually be managed in an outpatient setting, reducing the need for emergency department visits. Tracking rates of emergency department visits can aid in identifying populations or

areas with inadequate access to routine

medical care.

An asthma attack can necessitate an emergency department visit and can be initiated by a variety of triggers. Some of these include exposures to environmental tobacco smoke, dust mites, cockroach allergen, mold, pets, strenuous physical exercise, and air pollution. Two key air pollutants that

Healthy People 2020

Objective RD-3: Reduce hospital emergency department visits for asthma

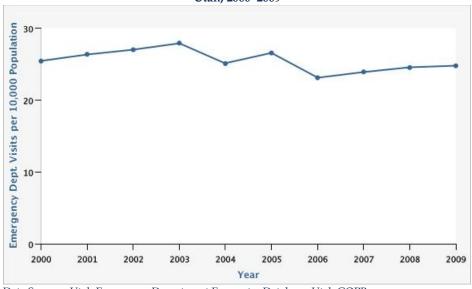
U.S. Targets: 95.5 ED visits per 10,000 children <5 years 49.1 ED visits per children and adults aged 5 to 64 13.2 ED visits per adults aged 65 years and older State Targets: 46.7 ED visits per 10,000 children <5 years

21.2 D visits per children and adults aged 5 to 64 16.3 ED visits per adults aged 65 years and older

can affect asthma are ozone (found in smog) and PM or particulate matter (found in haze, smoke, and dust).

The majority of problems associated with asthma, including emergency department visits, are preventable if asthma is managed according to established guidelines. Effective management includes control of exposures to factors that trigger exacerbations, adequate pharmacological management, continual monitoring of the disease, and patient education in asthma care.

#### Age-adjusted Emergency Department Visits Rate due to Asthma by Year, Utah, 2000-2009



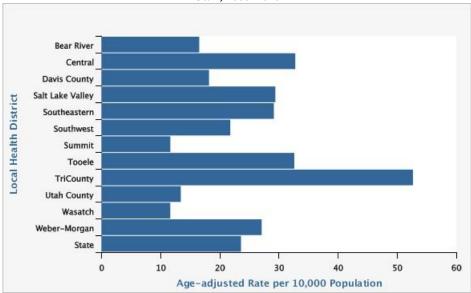
Data Sources: Utah Emergency Department Encounter Database; Utah GOPB

#### How Are We Doing?

Utah is well below the Healthy People 2020 objectives for ages 0-4 and 5-64. The emergency department visit rate among the elderly ages 65+ (17.2 per 10,000 population) currently exceeds the HP2020 objective (13.2 per 10,000 population). In 2009 Utah's overall emergency department visit rate due to asthma was 25.9 per 10,000 population. Asthma emergency department visits are higher among male children and adolescents. However, among adults, females have higher rates.

(See next page for LHD graph view)

## Asthma-related Emergency Department Visits by Local Health District, Utah, 2008–2010



Data Sources: Utah Emergency Department Encounter Database; Utah GOPB

## MANAGEMENT **OF CHRONIC CONDITIONS**

#### **KEY POINTS**

- From 2009–2011 an average of 66.0% of Utah adults with diabetes reported having had at least two hemoglobin A1C tests in the past year (ageadjusted rate).
- Tight control of A1C levels (i.e., maintaining a level of shown to be associated with substantial reductions in kidney disease and blindness among people with diabetes. Regular A1C exams can lead to early detection and treatment for poor blood sugar control and help prevent

### **Diabetes Hemoglobin A1C Tests**

#### Why Is This Important?

Proper diabetes management requires regular monitoring of blood sugar levels. Glucometers provide immediate feedback on blood sugar levels. An A1C test, however, tells a person what his or her

average blood sugar level has been over the past two or three months and is a more reliable indicator of blood sugar control. An A1C level indicates the amount of sugar that is attached to red blood cells (hemoglobin cells). Red blood cells are replaced every two or three

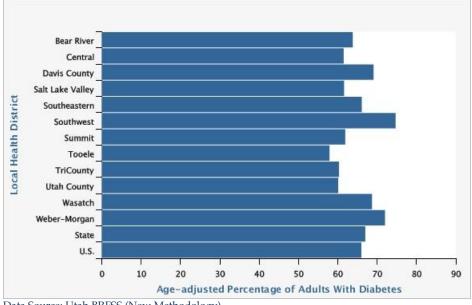
#### Healthy People 2020

Objective D-11: Increase the proportion of adults with diabetes who have a glycosylated hemoglobin measurement at least twice a year U.S. Target: 71.1 percent

months and sugar stays attached to the cells until they die. When levels of blood sugar are high, more sugar is available to attach to red blood cells. For most people with diabetes, the target A1C level is less than 7 percent. Higher levels suggest that a change in therapy may be needed. Therefore, obtaining regular A1C tests plays an important role in diabetes management.

The American Diabetes Association recommends that people with diabetes have an A1C test at least two times a year. However, the test should be conducted more often for individuals who are not meeting target blood sugar goals, or who have had a recent change in therapy. (See http://care.diabetesjournals.org/cgi/content/full/27/suppl 1/s15#T7)

Adults With Diabetes Who Had at Least Two Hemoglobin A1C Tests in the Past 12 Months (Age-adjusted) by Local Health District, Utah, 2009-2011



Data Source: Utah BRFSS (New Methodology)

Data Note: The data in this graph include both landline and cell phone respondent data along with a new weighting methodology. For more information please see this report's introduction.

#### **How Are We Doing?**

The percentage of people with diabetes who had at least two A1C tests a year is approximately 70% in Utah and in the U.S. Because of the change in methodology that began in 2009, information for this indicator is limited to 2009 and later.

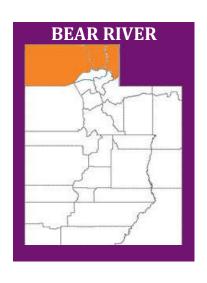
## **Appendix A: Community Snapshots**

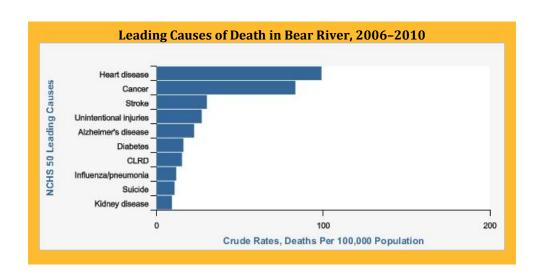
#### **Community Snapshots**

The Community Snapshots included here provide a summary table of the indicators in this report for each of Utah's 12 local health districts (LHDs). As with each indicator in the report, the Community Snapshots are drawn from the Indicator-Based Information System for Public Health (IBIS-PH) Website. The new IBIS-PH Community Snapshots are available on the Indicator Reports tab (with instructions). They allow a user to choose a community (only LHDs currently) and a set of indicators that have data for the community. They provide comparisons to Utah and the U.S. where data are available.

For the first time, we were able to include LHD Community Snapshots from IBIS-PH in a report such as this. However, the Community Snapshots in this report don't look exactly like the ones that can be created in IBIS-PH right now, but were enhanced to easily show where LHD measures differ significantly from the overall state measure.

These summary tables compare the LHD population as a whole to Utah and the U.S. Readers should keep in mind that there may be areas with LHDs that differ. In fact, we look forward to including Utah Small Areas in the Community Snapshots tool on IBIS-PH in the future.





		Communi	tv Data	Comparis	on Values
Bear River Indicator Data	Page	Count/Rate		Utah	U.S.
HTARE COCIO DEMOCDADING CONTEXT		count/ Rate	Comparc	Otan	0.5.
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT	ı				
Birth Rate, 2010	2	19.7	n/a	18.3	13.5
(Number of Births per 1,000 Residents)					
Life Expectancy at Birth, 2006–2010 (U.S. 2009) (Age in Years)	3	81.3		80.4	78.5
Age Distribution 2010	-	1			
(Percentage of Persons Aged 65+)	4	8.9%	n/a	9.0%	13.1%
Families With Children Under 18 That Were Headed by a Single Female					
(No Husband Present), 2010	5	4.8%	n/a	5.5%	7.2%
(Percentage of All Households)	3	4.6 70	II/ a	3.3 70	7.270
Educational Attainment, 2006–2010 ACS 5-year estimate		1			
(Percentage of Utahns 25+ With Bachelor's Degree)	6	30.8%		29.4%	28.0%
Median Annual Household Income, 2010					
(Dollars)	7	\$49,976		\$54,740	\$50,221
Persons Living in Poverty, 2006–2010		40.00/	ME.	40.00/	40.004
(Percentage of Persons)	8	12.8%	-	10.8%	13.8%
Child Poverty, 2006–2010		42.20/	<b>1</b>	42.20/	10.20/
(Percentage of Children)	9	13.3%	-	12.3%	19.2%
Utah White Population, 2010	10	90.0%	- /-	86.1%	72.4%
(Percentage of White Persons)	10	90.0%	n/a	00.1%	72.4%
ENVIRONMENTAL DETERMINANTS					
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	13	0.4		2.0	
(Reported Cases per 100,000 population)	13	9.4		3.8	
Reported Salmonella Infections, 2005–2011	45	12.0		44.2	
(Reported cases per 100,000 population)	15	13.0		11.3	•
HEALTHY BEGINNINGS					
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	26	76 50/	)_	70.00/	
(Percentage of Mothers)	26	76.5%		72.3%	
Infant Mortality, 2006–2010 (U.S. 2006–2009)	27	4.6	<b>1</b>	F 0	
(Deaths per 1,000 Live Births)	27	4.6	•	5.0	6.6
Low Birth Weight, 2008–2010	30	6.4%	_{	6.9%	8.2%
(Percentage of Live Born Infants)	30	6.4%		0.9%	8.2%
Birth Rate for Females Aged 15-19, 2008-2010 (Utah, 2010; U.S., 2009)	32	31.0		27.6	39.1
(Rate per 1,000 Adolescent Females)	32	31.0	1	27.0	33.1
HEALTH BEHAVIORS AND RISK FACTORS					
Current Cigarette Smoking, Adults, 2009–2011	39	7.0%	~	11.3%	
(Age-adjusted Percentage of Adults)	39	7.0%		11.5%	-
Current Cigarette Smoking, Students Grades 9-12, 2011	41	3.9%	7	5.2%	
(Percentage of Students)	71	3.970		J.Z-70	
Binge Drinking in the Past 30 Days, Adults, 2011	43	8.5%	1	11.2%	
(Age-adjusted Percentage of Adults)	73	6.5%	*	11.470	- <b>-</b>
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011	45	8.1%		11.2%	
(Percentage of Students reporting Alcohol Use)	7.5	0.1 70	D.	11.2 /0	

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011		4.6%	4	7.0%	
(Percentage of Students reporting Marijuana Use)					
Recommended Physical Activity, Adults, 2011 (Age-adjusted Percentage of Adults)	47	59.4%	*	56.1%	
Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011	48	55.0%		48.9%	
(Percentage of Adolescents)  Percentage of Adults Aged 18+ Who Were Obese, 2009–2011					
(Age-adjusted Percentage of Adults Aged 18+)	50	24.3%	•	25.1%	
Percentage of Adults Aged 18+ Who Were Obese, 2011 (Percentage of Adolescents)	52	7.0%	<b></b>	7.5%	
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011	54	24.8%	<b></b>	25.4%	
(Age-adjusted Percentage of Adults)  Doctor-diagnosed Hypertension, 2009 and 2011	56	23.9%	<b>1</b>	25.6%	
(Age-adjusted Percentage of Adults)	30	23.9 70	· ·	23.0 70	
Recommended Colorectal Cancer Screening, 2010 (Age-adjusted Percentage of Adults Age 50+)	58	66.1%	1	66.2%	
Mammogram Within the Past Two Years, 2010-2011	60	66.0%	<b></b>	65.3%	
(Age-adjusted Percentage of Women Age 40+)  Reported Sun Safety Practice, 2006, 2008, 2010	62	63.3%	<u></u>	65.4%	
(Age-adjusted Percentage of Adults 18+)	<u> </u>	05.5 70		051170	
CHRONIC DISEASES AND CONDITIONS					
Percentage of Utah Adults With Diabetes, 2009–2011 (Age-adjusted Percentage of Adults)	67	7.1%	<b>*</b>	7.5%	
Coronary Heart Disease Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Population)	69	81.9	-	70.1	
Stroke Deaths, 2006–2010	70	44.0	4	36.1	
(Age-adjusted Death Rate per 100,000 Population)  Alzheimer's Disease Deaths, 2008–2010	71	36.2	4	19.6	
(Age-adjusted Rate per 100,000 Population)	/1	30.2	<b>T</b>	19.0	
Breast Cancer Deaths, 2008–2010	72	20.2	<b>1</b>	20.2	
(Age-adjusted Death Rate per 100,000 Women)  Colorectal Cancer Deaths, 2007–2010					
(Age-adjusted Death Rate per 100,000 Population)	74	10.4	*	11.6	
Lung Cancer Deaths, 2006–2010	76	16.2	<b></b>	20.6	
(Age-adjusted Death Rate per 100,000 Population)	/0	10.2	•	20.0	
Melanoma of the Skin Deaths, 2005–2010	78	3.1			
(Age-adjusted Death Rate per 100,000 Population)  Prostate Cancer Deaths, 2006–2010			_		
(Age-adjusted Death Rate per 100,000 Men)	80	24.5	1	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011	81	13.3%	<b>1</b>	15.8%	
(Age-adjusted Percentage of Adults)  INJURY	<u></u>		•		
Fall Hospitalizations, 2010	Ι		n		
(Age-adjusted Rate per 10,000 Population)	84	18.0		22.4	
Motor Vehicle Traffic Crash Deaths, 2008–2010 (Age-adjusted Death Rate per 100,000 Population)	85	11.0	<b></b>	9.2	
Poisoning, 2006–2010 and U.S. 2006–2009	87	13.1		18.8	13.1
(Age-adjusted Death Rate per 100,000 Population)	<u> </u>	15:1			
Suicide, 2006–2010 and U.S. 2006–2009 (Age-adjusted Death Rate per 100,000 Population)	89	11.7		15.8	11.4
COMMUNICABLE DISEASE					
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months (Percentage of Adults Aged 65+)	92	58.7%	•	56.9%	
Adults Ever Receiving Pneumococcal Vaccination, 2011	93	70.7%	<b>1</b>	70.4%	70.0%
(Percentage of Adults Aged 65+)  Pertussis Cases, 2005–2011			▼		
(Reported Cases per 100,000 Population)	96	11.0		18.0	
Chlamydia, 2010 (Cases per 100,000 Population)	98	140.4		234.9	
Gonorrhea, 2010 (Cases per 100,000 Population)	100	4.1		10.9	
(Cases per 100,000 ropulation)					

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	14.1%	•	16.1%	-
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	12.0%	•	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	57.4%	•	57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	74.4%	d	68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	16.5	4	23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	63.8%	•	67.0%	66.0%

For information on confidence intervals, see: <a href="http://health.utah.gov/opha/IBIShelp/ConfInts.pdf">http://health.utah.gov/opha/IBIShelp/ConfInts.pdf</a>.

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Community value is not significantly different from the state value.



Excellent: The community is performing BETTER than the state, and the difference IS statistically significant.



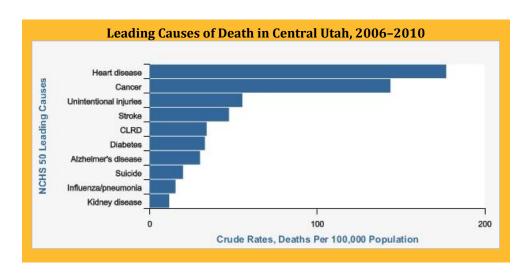
Reason for Concern: The community is performing WORSE than the state, and the difference IS statistically significant.

-- Either the comparison value or confidence interval data are not available.

**n/a** Not Applicable: This indicator has no target direction.

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		Community Data		Comparis	son Values	
Central Utah Indicator Data	Page	Count/Rate	Compare		U.S.	
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT	<u> </u>		P			
Birth Rate, 2010	_	4	,	40.0	40.5	
(Number of Births per 1,000 Residents)	2	15.5	n/a	18.3	13.5	
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	78.0	4	80.4	78.5	
(Age in Years)	٠	78.0	1	0U. <del>4</del>	76.5	
Age Distribution 2010	4	12.9%	n/a	9.0%	13.1%	
(Percentage of Persons Aged 65+)	•	1213 70	, u	310 70	1511 70	
Families With Children Under 18 That Were Headed by a Single Female	l _	4 =0/	,		<b>=</b> 50/	
(No Husband Present), 2010	5	4.5%	n/a	5.5%	7.2%	
(Percentage of All Households)						
Educational Attainment, 2006–2010 ACS 5-year estimate (Percentage of Utahns 25+ With Bachelor's Degree)	6	17.7%		29.4%	28.0%	
Median Annual Household Income, 2010						
(Dollars)	7	\$43,982		\$54,740	\$50,046	
Persons Living in Poverty, 2006–2010			D/TH			
(Percentage of Persons)	8	13.8%	4	10.8%	13.8%	
Child Poverty, 2006–2010			n/E			
(Percentage of Children)	9	15.0%	4	12.3%	19.2%	
Utah White Population, 2010	40	00.00/	,	06.40/	<b>30</b> 40/	
(Percentage of White Persons)	10	92.2%	n/a	86.1%	72.4%	
ENVIRONMENTAL DETERMINANTS						
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	40			2.0		
(Reported Cases per 100,000 population)	13	1.9		3.8		
Reported Salmonella Infections, 2005–2011	15	12.2		11.2		
(Reported cases per 100,000 population)	12	13.3		11.3		
HEALTHY BEGINNINGS						
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	26	70 70/	<b></b>	70.00/		
(Percentage of Mothers)	26	70.7%	-	72.3%		
Infant Mortality, 2006–2010 (U.S. 2006–2009)	27	6.4	<b></b>	5.0	6.6	
(Deaths per 1,000 Live Births)	21	0.4	*	5.0	0.0	
Low Birth Weight, 2008–2010	30	7.1%	<b></b>	6.9%	8.2%	
(Percentage of Live Born Infants)	30	7.170	*	0.970	0.270	
Birth Rate for Females Aged 15–19, 2008–2010 (Utah, 2010; U.S., 2009)	32	27.1	<b></b>	27.6	39.1	
(Rate per 1,000 Adolescent Females)	32	27.1	*	27.0	39.1	
HEALTH BEHAVIORS AND RISK FACTORS						
Current Cigarette Smoking, Adults, 2009–2011	39	12.7%	<b>1</b>	11.3%		
(Age-adjusted Percentage of Adults)	39	12.7 70	*	11.570		
Current Cigarette Smoking, Students Grades 9-12, 2011	41	5.3%	<b>1</b>	5.2%		
(Percentage of Students)	7.	5.5 70	~	J.2 /0		
Binge Drinking in the Past 30 Days, Adults, 2011	43	10.0%	<b>1</b>	11.2%		
(Age-adjusted Percentage of Adults)		20.0 70	~			
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011	45	8.8%		11.2%		
(Percentage of Students reporting Alcohol Use)						

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011		3.7%	è	7.0%	
(Percentage of Students reporting Marijuana Use)	70	3.7 70		7.0 70	
Recommended Physical Activity, Adults, 2011	47	51.1%	1	56.1%	
(Age-adjusted Percentage of Adults)  Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011					
(Percentage of Adolescents)	48	59.0%		48.9%	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011			_		
(Age-adjusted Percentage of Adults Aged 18+)	50	25.5%	<b>*</b>	25.1%	
Percentage of Adolescents Who Were Obese, 2011	52	7.6%	<b>1</b>	7.5%	
(Percentage of Adolescents)	32	7.0%	*	7.5%	
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011	54	24.2%	<b>1</b>	25.4%	
(Age-adjusted Percentage of Adults)					
Doctor-diagnosed Hypertension, 2009 and 2011 (Age-adjusted Percentage of Adults)	56	25.8%	1	25.6%	
Recommended Colorectal Cancer Screening, 2010			D/TE		
(Age-adjusted Percentage of Adults Age 50+)	58	54.6%	4	66.2%	
Mammogram Within the Past Two Years, 2010–2011		-4-50/	143	4= 50/	
(Age-adjusted Percentage of Women Age 40+)	60	54.2%	4	65.3%	
Reported Sun Safety Practice, 2006, 2008, 2010	62	68.4%	<b>î</b>	65.4%	
(Age-adjusted Percentage of Adults 18+)	02	08.470	*	03.470	
CHRONIC DISEASES AND CONDITIONS					
Percentage of Utah Adults With Diabetes, 2009–2011	67	7.4%	<b>1</b>	7.5%	
(Age-adjusted Percentage of Adults)		70			
Coronary Heart Disease Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Population)	69	99.6		70.1	
Stroke Deaths, 2006–2010			D/E		
(Age-adjusted Death Rate per 100,000 Population)	70	50.4	4	36.1	
Alzheimer's Disease Deaths, 2008–2010	74	26.2	n=	10.6	
(Age-adjusted Rate per 100,000 Population)	71	36.3	4	19.6	
Breast Cancer Deaths, 2008–2010	72	20.4	<b></b>	20.2	
(Age-adjusted Death Rate per 100,000 Women)	72	20.4	-	20.2	
Colorectal Cancer Deaths, 2007–2010	74	17.0	4	11.6	
(Age-adjusted Death Rate per 100,000 Population)	/4	17.9		11.6	
Lung Cancer Deaths, 2006–2010	76	22.2	<b>1</b>	20.6	
(Age-adjusted Death Rate per 100,000 Population)	76	22.2	-	20.6	
Melanoma of the Skin Deaths, 2005–2010					
(Age-adjusted Death Rate per 100,000 Population)	78	3.1			
Prostate Cancer Deaths, 2006–2010					
(Age-adjusted Death Rate per 100,000 Men)	80	30.6	#	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011	04	1.1.20/	<u> </u>	45.00/	
(Age-adjusted Percentage of Adults)	81	14.3%	#	15.8%	
INJURY					
Fall Hospitalizations, 2010	84	28.0	4	22.4	
(Age-adjusted Rate per 10,000 Population)	04	28.0	1	22.4	
Motor Vehicle Traffic Crash Deaths, 2008–2010	85	16.7		9.2	
(Age-adjusted Death Rate per 100,000 Population)		_			
Poisoning, 2006–2010 and U.S. 2006–2009 (Age-adjusted Death Rate per 100,000 Population)	87	21.2	•	18.8	13.1
Suicide, 2006–2010 and U.S. 2006–2009	<del>                                     </del>		p/3		
(Age-adjusted Death Rate per 100,000 Population)	89	21.8	4	15.8	11.4
COMMUNICABLE DISEASE					
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months	00	40.00	<b></b>	FC 00/	
(Percentage of Adults Aged 65+)	92	48.0%	#	56.9%	
Adults Ever Receiving Pneumococcal Vaccination, 2011	93	59.7%	4	70.4%	70.0%
(Percentage of Adults Aged 65+)	93	39.7 70	T	, U. <del>1</del> 70	70.070
Pertussis Cases, 2005–2011	96	9.2		18.0	
(Reported Cases per 100,000 Population)	<u> </u>				
Chlamydia, 2010 (Cases per 100,000 Population)	98	109.4		234.9	
Gonorrhea, 2010					
(Cases per 100,000 Population)	100	3.9		10.9	
(Cases per 100/000 i opulation)	<u> </u>				

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	15.0%	•	16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	23.2%	-	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	52.0%	•	57.2%	-
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	69.9%	•	68.7%	67.9%
<b>Asthma-related Emergency Department Visits, 2008–2010</b> (Age-adjusted Rate per 10,000 Population)	113	32.8	-	23.6	1
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	61.5%	•	67.0%	66.0%

For information on confidence intervals, see: <a href="http://health.utah.gov/opha/IBIShelp/ConfInts.pdf">http://health.utah.gov/opha/IBIShelp/ConfInts.pdf</a>.

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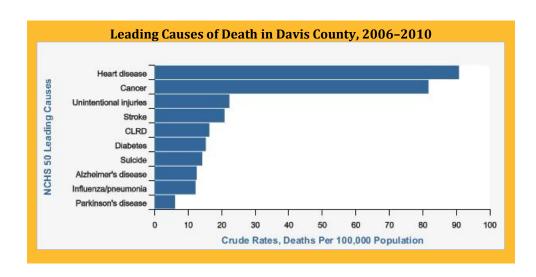
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	D	Community Data		Comparis	on Values
Davis County Indicator Data	Page	Count/Rate	Compare	Utah	U.S.
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT					
Birth Rate, 2010	2	18.6	n/a	18.3	13.5
(Number of Births per 1,000 Residents)		16.0	II/a	16.5	13.5
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	80.5	<b>1</b>	80.4	78.5
(Age in Years)		00.5		0011	7015
Age Distribution 2010	4	8.2%	n/a	9.0%	13.1%
(Percentage of Persons Aged 65+)			•		
Families With Children Under 18 That Were Headed by a Single Female (No Husband Present), 2010	5	5.7%	n/a	5.5%	7.2%
(Percentage of All Households)	3	5.7%	II/a	5.5%	7.2%
Educational Attainment, 2006–2010 ACS 5-year estimate					
(Percentage of Utahns 25+ With Bachelor's Degree)	6	33.8%		29.4%	28.0%
Median Annual Household Income, 2010					
(Dollars)	7	\$64,840		\$54,740	\$50,046
Persons Living in Poverty, 2006–2010		6 50/	)_	10.00/	45.00/
(Percentage of Persons)	8	6.5%		10.8%	13.8%
Child Poverty, 2006–2010		0.00/	L	12.20/	10.20/
(Percentage of Children)	9	8.0%		12.3%	19.2%
Utah White Population, 2010	10	90.0%	n/a	86.1%	72.4%
(Percentage of White Persons)	10	90.0%	II/a	80.170	/2.4%
ENVIRONMENTAL DETERMINANTS					
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	13	4.5		3.8	
(Reported Cases per 100,000 population)	13	4.5		5.0	
Reported Salmonella Infections, 2005–2011	15	11.0		11.3	
(Reported cases per 100,000 population)		11.0		11.5	
HEALTHY BEGINNINGS					
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	26	78.8%		72.3%	
(Percentage of Mothers)		7010 70	D/3	7215 70	
Infant Mortality, 2006–2010 (U.S. 2006–2009)	27	5.3	<b>1</b>	5.0	6.6
(Deaths per 1,000 Live Births)				0.0	
Low Birth Weight, 2008–2010	30	6.8%	1	6.9%	8.2%
(Percentage of Live Born Infants)			•		
Birth Rate for Females Aged 15–19, 2008–2010 (Utah, 2010; U.S., 2009) (Rate per 1,000 Adolescent Females)	32	23.8		27.6	39.1
HEALTH BEHAVIORS AND RISK FACTORS					
	l		0		
Current Cigarette Smoking, Adults, 2009–2011 (Age-adjusted Percentage of Adults)	39	7.9%		11.3%	
Current Cigarette Smoking, Students Grades 9–12, 2011					
(Percentage of Students)	41	4.4%		5.2%	
Binge Drinking in the Past 30 Days, Adults, 2011			_		
(Age-adjusted Percentage of Adults)	43	9.0%	*	11.2%	
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011					
(Percentage of Students reporting Alcohol Use)	45	10.3%	#	11.2%	
· · · /	•				

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011	46	5.8%	<b>1</b>	7.0%	
(Percentage of Students reporting Marijuana Use)	40	5.8%	*	7.0%	
Recommended Physical Activity, Adults, 2011	47	57.7%	<b>1</b>	56.1%	
(Age-adjusted Percentage of Adults)	7/	37.770	*	30.1 /0	
Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011	48	47.2%	<b>1</b>	48.9%	
(Percentage of Adolescents)		171270	•	10.5 70	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011	50	24.9%	<b>1</b>	25.1%	
(Age-adjusted Percentage of Adults Aged 18+)			•		
Percentage of Adolescents Who Were Obese, 2011 (Percentage of Adolescents)	52	5.1%		7.5%	
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011					
(Age-adjusted Percentage of Adults)	54	27.3%	•	25.4%	
Doctor-diagnosed Hypertension, 2009 and 2011		27.424	<b></b>		
(Age-adjusted Percentage of Adults)	56	25.4%	-	25.6%	
Recommended Colorectal Cancer Screening, 2010	58	68.0%	<b></b>	66.2%	
(Age-adjusted Percentage of Adults Age 50+)	50	68.0%	*	00.2%	
Mammogram Within the Past Two Years, 2010–2011	60	66.5%	<b>1</b>	65.3%	
(Age-adjusted Percentage of Women Age 40+)		00.5 70		05.5 70	
Reported Sun Safety Practice, 2006, 2008, 2010	62	64.1%	<b>1</b>	65.4%	
(Age-adjusted Percentage of Adults 18+)					
CHRONIC DISEASES AND CONDITIONS					
Percentage of Utah Adults With Diabetes, 2009–2011 (Age-adjusted Percentage of Adults)	67	6.5%	1	7.5%	
Coronary Heart Disease Deaths, 2006–2010			<u>*</u>		
(Age-adjusted Death Rate per 100,000 Population)	69	72.5	•	70.1	
Stroke Deaths, 2006–2010			,		
(Age-adjusted Death Rate per 100,000 Population)	70	30.9		36.1	
Alzheimer's Disease Deaths, 2008–2010	71	22.6	<b></b>	19.6	
(Age-adjusted Rate per 100,000 Population)	/1	22.6	*	19.0	
Breast Cancer Deaths, 2008–2010	72	20.3	<b></b>	20.2	
(Age-adjusted Death Rate per 100,000 Women)	12	20.5	*	20.2	
Colorectal Cancer Deaths, 2007–2010	74	10.5	<b></b>	11.6	
(Age-adjusted Death Rate per 100,000 Population)	/4	10.5	**	11.0	
Lung Cancer Deaths, 2006–2010	76	16.0	L	20.6	
(Age-adjusted Death Rate per 100,000 Population)	76	16.0		20.6	
Melanoma of the Skin Deaths, 2005–2010		9.4			
(Age-adjusted Death Rate per 100,000 Population)	78	2.1			
Prostate Cancer Deaths, 2006–2010					
(Age-adjusted Death Rate per 100,000 Men)	80	24.0	1	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011	-	12.00/	<u> </u>	45.00/	
(Age-adjusted Percentage of Adults)	81	13.8%	1	15.8%	
INJURY					
Fall Hospitalizations, 2010	84	22.5	<b>1</b>	22.4	
(Age-adjusted Rate per 10,000 Population)	04	22.5	*	22.4	
Motor Vehicle Traffic Crash Deaths, 2008–2010	85	6.8		9.2	
(Age-adjusted Death Rate per 100,000 Population)					
Poisoning, 2006–2010 and U.S. 2006–2009	87	17.4	1	18.8	13.1
(Age-adjusted Death Rate per 100,000 Population) <b>Suicide, 2006–2010 and U.S. 2006–2009</b>			•		
(Age-adjusted Death Rate per 100,000 Population)	89	15.1	•	15.8	11.4
COMMUNICABLE DISEASE					
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months			_		
(Percentage of Adults Aged 65+)	92	60.6%	1	56.9%	
Adults Ever Receiving Pneumococcal Vaccination, 2011		75.40/	<u> </u>	70.40/	70.00/
(Percentage of Adults Aged 65+)	93	75.1%	1	70.4%	70.0%
Pertussis Cases, 2005–2011	96	9.6		18.0	
(Reported Cases per 100,000 Population)	90	9.0		10.0	==
Chlamydia, 2010	98	222.4		234.9	
(Cases per 100,000 Population)				==2	
Gonorrhea, 2010	100	12.1		10.9	
(Cases per 100,000 Population)					

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	12.0%		16.1%	-
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	6.8%		13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	59.6%	•	57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	73.7%		68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	18.2		23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	69.1%	•	67.0%	66.0%

For information on confidence intervals, see: <a href="http://health.utah.gov/opha/IBIShelp/ConfInts.pdf">http://health.utah.gov/opha/IBIShelp/ConfInts.pdf</a>.

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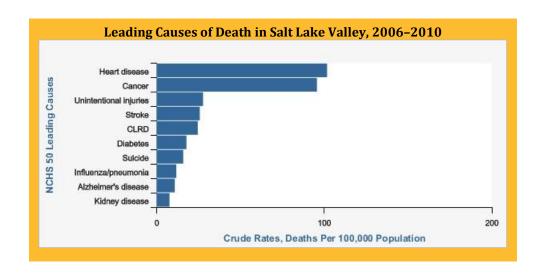
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Salt Laka Vallay Indicator Data	Dogo	Community Data		Comparis	son Values	
Salt Lake Valley Indicator Data	Page	Count/Rate	Compare	Utah	U.S.	
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT						
Birth Rate, 2010 (Number of Births per 1,000 Residents)	2	17.2	n/a	18.3	13.5	
Life Expectancy at Birth, 2006–2010 (U.S. 2009) (Age in Years)	3	79.8	<b>F</b>	80.4	78.5	
Age Distribution 2010 (Percentage of Persons Aged 65+)	4	8.7%	n/a	9.0%	13.1%	
Families With Children Under 18 That Were Headed by a Single Female (No Husband Present), 2010 (Percentage of All Households)	5	6.0%	n/a	5.5%	7.2%	
Educational Attainment, 2006–2010 ACS 5-year estimate (Percentage of Utahns 25+ With Bachelor's Degree)	6	30.1%		29.4%	28.0%	
Median Annual Household Income, 2010 (Dollars)	7	\$56,664		\$54,740	\$50,046	
Persons Living in Poverty, 2006–2010 (Percentage of Persons)	8	10.3%		10.8%	13.8%	
Child Poverty, 2006–2010 (Percentage of Children)	9	12.9%	<b>\$</b>	12.3%	19.2%	
Utah White Population, 2010 (Percentage of White Persons)	10	81.2%	n/a	86.1%	72.4%	
ENVIRONMENTAL DETERMINANTS	<u> </u>					
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011 (Reported Cases per 100,000 population)	13	3.4		3.8		
Reported Salmonella Infections, 2005–2011 (Reported cases per 100,000 population)	15	12.4		11.3		
HEALTHY BEGINNINGS						
Prenatal Care in the First Trimester of Pregnancy, 2009–2010 (Percentage of Mothers)	26	70.1%	-	72.3%		
<b>Infant Mortality, 2006–2010 (U.S. 2006–2009)</b> (Deaths per 1,000 Live Births)	27	5.4	•	5.0	6.0	
Low Birth Weight, 2008–2010 (Percentage of Live Born Infants)	30	7.4%	-	6.9%	8.2%	
Birth Rate for Females Aged 15–19, 2008–2010 (Utah, 2010; U.S., 2009) (Rate per 1,000 Adolescent Females)	32	36.7	-	27.6	39.	
HEALTH BEHAVIORS AND RISK FACTORS		-				
Current Cigarette Smoking, Adults, 2009–2011 (Age-adjusted Percentage of Adults)	39	13.1%		11.3%		
Current Cigarette Smoking, Students Grades 9–12, 2011 (Percentage of Students)	41	6.6%	-	5.2%		
Binge Drinking in the Past 30 Days, Adults, 2011 (Age-adjusted Percentage of Adults)	43	14.1%	-	11.2%		
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011 (Percentage of Students reporting Alcohol Use)	45	14.6%	•	11.2%	1	
It Lake Valley Community Spanshot					125	

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011	46	10.1%	4	7.0%	
(Percentage of Students reporting Marijuana Use)	40	10.1%	<b>T</b>	7.0%	
Recommended Physical Activity, Adults, 2011	47	55.5%	<b>1</b>	56.1%	
(Age-adjusted Percentage of Adults)			•	001270	
Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011	48	43.8%	4	48.9%	
(Percentage of Adolescents)  Percentage of Adults Aged 18+ Who Were Obese, 2009–2011					
(Age-adjusted Percentage of Adults Aged 18+)	50	25.4%	<b>*</b>	25.1%	
Percentage of Adolescents Who Were Obese, 2011			_		
(Percentage of Adolescents)	52	8.6%	1	7.5%	
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011					
(Age-adjusted Percentage of Adults)	54	26.5%	4	25.4%	
Doctor-diagnosed Hypertension, 2009 and 2011	56	25.6%	<b>1</b>	25.6%	
(Age-adjusted Percentage of Adults)	30	25.0%	*	25.0%	
Recommended Colorectal Cancer Screening, 2010	58	69.8%		66.2%	
(Age-adjusted Percentage of Adults Age 50+)		05.070	IV.3	00.2 /0	
Mammogram Within the Past Two Years, 2010–2011	60	64.9%	<b>1</b>	65.3%	
(Age-adjusted Percentage of Women Age 40+)			•		
Reported Sun Safety Practice, 2006, 2008, 2010	62	67.2%	1	65.4%	
(Age-adjusted Percentage of Adults 18+)		<u> </u>	•		
CHRONIC DISEASES AND CONDITIONS  Page 1 the had to be 1 the beautiful of t	Ι	1	^		
Percentage of Utah Adults With Diabetes, 2009–2011 (Age-adjusted Percentage of Adults)	67	7.7%	1	7.5%	
Coronary Heart Disease Deaths, 2006–2010			n		
(Age-adjusted Death Rate per 100,000 Population)	69	65.0		70.1	
Stroke Deaths, 2006–2010					
(Age-adjusted Death Rate per 100,000 Population)	70	36.4	*	36.1	
Alzheimer's Disease Deaths, 2008–2010	71	15.2		10.6	
(Age-adjusted Rate per 100,000 Population)	71	15.2		19.6	
Breast Cancer Deaths, 2008–2010	73	20.0	<u></u>	20.2	
(Age-adjusted Death Rate per 100,000 Women)	72	20.0	-	20.2	
Colorectal Cancer Deaths, 2007–2010	74	11.0	<b></b>	11.6	
(Age-adjusted Death Rate per 100,000 Population)	74	11.0	-	11.6	
Lung Cancer Deaths, 2006–2010		22.6		20.6	
(Age-adjusted Death Rate per 100,000 Population)	76	22.6	4	20.6	
Melanoma of the Skin Deaths, 2005–2010					
(Age-adjusted Death Rate per 100,000 Population)	78	3.2			
Prostate Cancer Deaths, 2006–2010			_		
(Age-adjusted Death Rate per 100,000 Men)	80	24.6	1	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011			<u> </u>		
(Age-adjusted Percentage of Adults)	81	17.0%	#	15.8%	
INJURY	<u> </u>	<u> </u>			
Fall Hospitalizations, 2010	Ι		n/CB.		
(Age-adjusted Rate per 10,000 Population)	84	25.2	4	22.4	
Motor Vehicle Traffic Crash Deaths, 2008–2010			L		
(Age-adjusted Death Rate per 100,000 Population)	85	7.6		9.2	
Poisoning, 2006-2010 and U.S. 2006-2009	87	20.7	4	18.8	13.1
(Age-adjusted Death Rate per 100,000 Population)	67	20.7	<b>T</b>	10.0	13.1
Suicide, 2006–2010 and U.S. 2006–2009	89	16.6	<b>1</b>	15.8	11.4
(Age-adjusted Death Rate per 100,000 Population)		10.0	_	15.0	
COMMUNICABLE DISEASE	•	1			
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months	92	58.8%	<b>1</b>	56.9%	
(Percentage of Adults Aged 65+)			•		
Adults Ever Receiving Pneumococcal Vaccination, 2011	93	73.6%	1	70.4%	70.0%
(Percentage of Adults Aged 65+)	-		•		
Pertussis Cases, 2005–2011 (Reported Cases per 100,000 Population)	96	23.2		18.0	
Chlamydia, 2010					
(Cases per 100,000 Population)	98	332.9		234.9	
Gonorrhea, 2010	<u> </u>	ĺ			
(Cases per 100,000 Population)	100	18.5		10.9	
A CONTRACT OF THE CONTRACT OF					

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	17.0%	•	16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	14.7%	•	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	56.9%	•	57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	66.6%	-	68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	29.4	-	23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	61.6%	*	67.0%	66.0%

For information on confidence intervals, see: http://health.utah.gov/opha/IBIShelp/ConfInts.pdf.

- \*\* The estimate has been suppressed because:
- (1) the relative standard error is greater than 50% or can't be determined or
- (2) the observed number of events is very small and not appropriate for publication



Community value is not significantly different from the state value.



 $\stackrel{\longleftarrow}{=}$  Excellent: The community is performing BETTER than the state, and the difference IS statistically significant.



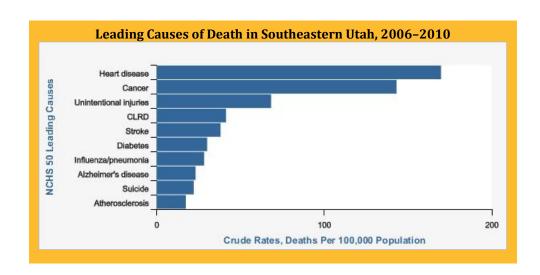
Reason for Concern: The community is performing WORSE than the state, and the difference IS statistically significant.

-- Either the comparison value or confidence interval data are not available.

**n/a** Not Applicable: This indicator has no target direction.

The community value is considered statistically significantly different from the state value if the state value is outside the range of the community's 95% confidence interval. If the community's data or 95% confidence interval information is not available, "--" will be displayed.





Southeastern Utah Indicator Data	Page	Community Data		<b>Comparison Values</b>		
		Count/Rate	Compare	Utah	U.S.	
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT						
Birth Rate, 2010	2	15.1	n/a	18.3	13.5	
(Number of Births per 1,000 Residents)	_	1511	, u	10.0	10.0	
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	77.8	4	80.4	78.5	
(Age in Years)  Age Distribution 2010			•			
(Percentage of Persons Aged 65+)	4	12.6%	n/a	9.0%	13.1%	
Families With Children Under 18 That Were Headed by a Single Female						
(No Husband Present), 2010	5	5.9%	n/a	5.5%	7.2%	
(Percentage of All Households)						
Educational Attainment:, 2006–2010 ACS 5-year estimate	6	16.6%		29.4%	28.0%	
(Percentage of Utahns 25+ With Bachelor's Degree)	Ľ	2010 70		231170	2010 70	
Median Annual Household Income, 2010	7	\$43,598		\$54,740	\$50,046	
(Dollars)		, ,			• •	
Persons Living in Poverty, 2006–2010 (Percentage of Persons)	8	15.6%	4	10.8%	13.8%	
Child Poverty, 2006–2010			n/TB			
(Percentage of Children)	9	20.0%	-	12.3%	19.2%	
Utah White Population, 2010	10	70.00/	/	06.10/	72.40/	
(Percentage of White Persons)	10	79.9%	n/a	86.1%	72.4%	
ENVIRONMENTAL DETERMINANTS		-				
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	13	0.8		3.8		
(Reported Cases per 100,000 population)	13	0.8		3.0		
Reported Salmonella Infections, 2005–2011	15	10.5		11.3		
(Reported cases per 100,000 population)						
HEALTHY BEGINNINGS						
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	26	58.3%	4	72.3%		
(Percentage of Mothers)  Infant Mortality, 2006–2010 (U.S. 2006–2009)			•			
(Deaths per 1,000 Live Births)	27	2.8		5.0	6.6	
Low Birth Weight, 2008–2010			_			
(Percentage of Live Born Infants)	30	7.8%	#	6.9%	8.2%	
Birth Rate for Females Aged 15–19, 2008–2010 (Utah, 2010; U.S., 2009)	22	42.2	4	27.6	20.1	
(Rate per 1,000 Adolescent Females)	32	43.2	۲	27.6	39.1	
HEALTH BEHAVIORS AND RISK FACTORS						
Current Cigarette Smoking, Adults, 2009-2011	39	18.2%		11.3%		
(Age-adjusted Percentage of Adults)	39	18.2%	1	11.570		
Current Cigarette Smoking, Students Grades 9–12, 2011	41	8.2%		5.2%		
(Percentage of Students)			,			
Binge Drinking in the Past 30 Days, Adults, 2011	43	13.5%	1	11.2%		
(Age-adjusted Percentage of Adults)  Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011		<u> </u>	<b>*</b>			
(Percentage of Students reporting Alcohol Use)	45	12.8%	1	11.2%		
The recinage of ocudents reporting Alcohol Ose)			·			

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011		6.8%	<b>1</b>	7.0%	
(Percentage of Students reporting Marijuana Use)	70	0.8 70	*	7.0 70	
Recommended Physical Activity, Adults, 2011	47	54.7%	<b>1</b>	56.1%	
(Age-adjusted Percentage of Adults)  Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011					
(Percentage of Adolescents)	48	56.5%		48.9%	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011		26.00/	<b>1</b>	25.40/	
(Age-adjusted Percentage of Adults Aged 18+)	50	26.9%	-	25.1%	
Percentage of Adolescents Who Were Obese, 2011	52	8.0%	<b>1</b>	7.5%	
(Percentage of Adolescents)				7 10 70	
<b>Doctor-diagnosed High Blood Cholesterol, 2009 and 2011</b> (Age-adjusted Percentage of Adults)	54	20.9%		25.4%	
Doctor-diagnosed Hypertension, 2009 and 2011					
(Age-adjusted Percentage of Adults)	56	29.9%	4	25.6%	
Recommended Colorectal Cancer Screening, 2010	58	54.0%	4	66.2%	
(Age-adjusted Percentage of Adults Age 50+)	30	34.0 70	1	00.2 /0	
Mammogram Within the Past Two Years, 2010–2011	60	65.0%	<b>1</b>	65.3%	
(Age-adjusted Percentage of Women Age 40+)  Reported Sun Safety Practice, 2006, 2008, 2010			•		
(Age-adjusted Percentage of Adults 18+)	62	65.5%	#	65.4%	
CHRONIC DISEASES AND CONDITIONS					
Percentage of Utah Adults With Diabetes, 2009–2011	<b>67</b>	0.00/	1	7.50/	
(Age-adjusted Percentage of Adults)	67	8.0%	-	7.5%	
Coronary Heart Disease Deaths, 2006–2010	69	85.7	4	70.1	
(Age-adjusted Death Rate per 100,000 Population)					
Stroke Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Population)	70	38.0	1	36.1	
Alzheimer's Disease Deaths , 2008–2010			_		
(Age-adjusted Rate per 100,000 Population)	71	21.2	<b>*</b>	19.6	
Breast Cancer Deaths, 2008–2010	72	20.7	1	20.2	
(Age-adjusted Death Rate per 100,000 Women)	72	20.7	-	20.2	
Colorectal Cancer Deaths, 2007–2010	74	13.3	<b></b>	11.6	
(Age-adjusted Death Rate per 100,000 Population)	/4	13.3	*	11.0	
Lung Cancer Deaths, 2006–2010	76	25.0	<b></b>	20.6	
(Age-adjusted Death Rate per 100,000 Population)	76	25.0	*	20.0	
Melanoma of the Skin Deaths, 2005–2010	78	3.0			
(Age-adjusted Death Rate per 100,000 Population)	76	3.0			
Prostate Cancer Deaths, 2006–2010	80	32.1	<b>1</b>	24.3	
(Age-adjusted Death Rate per 100,000 Men)	00	52.1	•	24.5	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011	81	20.9%	<b>1</b>	15.8%	
(Age-adjusted Percentage of Adults)			•		
INJURY Fall Hospitalizations, 2010	1				
(Age-adjusted Rate per 10,000 Population)	84	16.7		22.4	
Motor Vehicle Traffic Crash Deaths, 2008–2010			143		
(Age-adjusted Death Rate per 100,000 Population)	85	21.2	-	9.2	
Poisoning, 2006–2010 and U.S. 2006–2009	87	25.7	4	18.8	13.1
(Age-adjusted Death Rate per 100,000 Population)	"	25.7		10.0	13.1
Suicide, 2006–2010 and U.S. 2006–2009	89	22.5		15.8	11.4
(Age-adjusted Death Rate per 100,000 Population)  COMMUNICABLE DISEASE					
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months			<u> </u>		
(Percentage of Adults Aged 65+)	92	49.6%	#	49.7%	
Adults Ever Receiving Pneumococcal Vaccination, 2011	02	E0 E0/	4	70 40/	70.0%
(Percentage of Adults Aged 65+)	93	59.5%	7	70.4%	70.0%
Pertussis Cases, 2005–2011	96	18.1		18.0	
(Reported Cases per 100,000 Population)	<u> </u>				
Chlamydia, 2010 (Cases per 100,000 Population)	98	185.2		234.9	
Gonorrhea, 2010	<del>                                     </del>				
(Cases per 100,000 Population)	100	10.6		10.9	

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	22.0%	-	16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	14.9%	•	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	59.0%	•	57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	64.2%	•	68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	29.2	-	23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	66.1%	•	67.0%	66.0%

For information on confidence intervals, see: <a href="http://health.utah.gov/opha/IBIShelp/ConfInts.pdf">http://health.utah.gov/opha/IBIShelp/ConfInts.pdf</a>.

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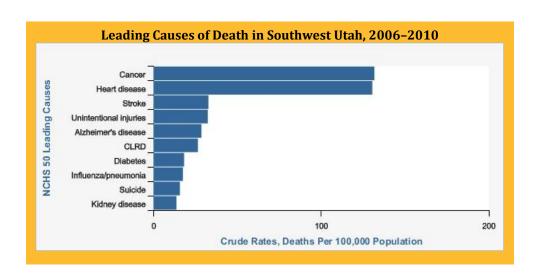
Reason for Concern: The community is performing WORSE than the state, and the difference IS statistically significant.

-- Either the comparison value or confidence interval data are not available.

**n/a** Not Applicable: This indicator has no target direction.

The community value is considered statistically significantly different from the state value if the state value is outside the range of the community's 95% confidence interval. If the community's data or 95% confidence interval information is not available, "--" will be displayed.





Continue at Harb In Boat on Date	Da	Communi	ty Data	Comparis	on Values
Southwest Utah Indicator Data	Page	Count/Rate	Compare	Utah	U.S.
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT					
Birth Rate, 2010	2	17.1	n/a	18.3	13.5
(Number of Births per 1,000 Residents)		17.11	11/4	10.5	15.5
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	82.9		80.4	78.5
(Age in Years)					
<b>Age Distribution 2010</b> (Percentage of Persons Aged 65+)	4	15.5%	n/a	9.0%	13.1%
Families With Children Under 18 That Were Headed by a Single Female					
(No Husband Present), 2010	5	4.8%	n/a	5.5%	7.2%
(Percentage of All Households)			, ~	0.0 /0	<b>7.1</b>
Educational Attainment, 2006–2010 ACS 5-year estimate		24.20/		20.40/	20.00/
(Percentage of Utahns 25+ With Bachelor's Degree)	6	24.3%		29.4%	28.0%
Median Annual Household Income, 2010	7	\$45,919		\$54,740	\$50,046
(Dollars)		\$45,919		\$34,74U	\$30,04C
Persons Living in Poverty, 2006–2010	8	13.6%		10.8%	13.8%
(Percentage of Persons)		20.0 70		20.0 /0	20.0 /
Child Poverty, 2006–2010	9	17.9%		12.3%	19.2%
(Percentage of Children)			•		
<b>Utah White Population, 2010</b> (Percentage of White Persons)	10	90.2%	n/a	86.1%	72.4%
ENVIRONMENTAL DETERMINANTS		<u></u>	<u></u>		
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	l				
(Reported Cases per 100,000 population)	13	1.8		3.8	
Reported Salmonella Infections, 2005–2011					
(Reported cases per 100,000 population)	15	12.3		11.3	
HEALTHY BEGINNINGS	<u> </u>	•	<u> </u>	<u> </u>	
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	26	64.00/	4	72.20/	
(Percentage of Mothers)	26	64.8%	1	72.3%	
Infant Mortality, 2006–2010 (U.S. 2006–2009)	27	5.2	<b></b>	5.0	6.6
(Deaths per 1,000 Live Births)	2/	5.2	*	5.0	0.0
Low Birth Weight, 2008–2010	30	6.4%		6.9%	8.2%
(Percentage of Live Born Infants)		01170	L_3	0.5 /0	0.2 /
Birth Rate for Females Aged 15–19, 2008–2010 (Utah, 2010; U.S., 2009)	32	29.1	1	27.6	39.1
(Rate per 1,000 Adolescent Females)		<u> </u>			
HEALTH BEHAVIORS AND RISK FACTORS	ı	1		<u> </u>	
Current Cigarette Smoking, Adults, 2009–2011 (Age-adjusted Percentage of Adults)	39	12.3%	1	11.3%	
Current Cigarette Smoking, Students Grades 9–12, 2011			_		
(Percentage of Students)	41	4.2%	1	5.2%	
Binge Drinking in the Past 30 Days, Adults, 2011			_		
(Age-adjusted Percentage of Adults)	43	9.3%	1	11.2%	
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011	45	8.6%			
Students, drades 0,10,12, who osed Alcohol in the rast so bays, 2011				11.2%	

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011		5.4%	<b>1</b>	7.0%	
(Percentage of Students reporting Marijuana Use)	0	5.470	*	7.070	
Recommended Physical Activity, Adults, 2011	47	54.2%	<b>1</b>	56.1%	
(Age-adjusted Percentage of Adults)  Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011			•		
(Percentage of Adolescents)	48	53.7%	*	48.9%	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011		20 121	<b>1</b>	3= 464	
(Age-adjusted Percentage of Adults Aged 18+)	50	23.4%	-	25.1%	<b></b>
Percentage of Adolescents Who Were Obese, 2011	52	6.7%	<b>1</b>	7.5%	
(Percentage of Adolescents)	-	0.7 70	•	7.5 70	
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011	54	24.8%	<b>1</b>	25.4%	
(Age-adjusted Percentage of Adults)  Doctor-diagnosed Hypertension, 2009 and 2011			•		
(Age-adjusted Percentage of Adults)	56	26.4%	*	25.6%	
Recommended Colorectal Cancer Screening, 2010		61.20/	<b>1</b>	66.20/	
(Age-adjusted Percentage of Adults Age 50+)	58	61.3%	-	66.2%	
Mammogram Within the Past Two Years, 2010–2011	60	64.9%	<b>1</b>	65.3%	
(Age-adjusted Percentage of Women Age 40+)	_ <b></b>	0.15 /0	•	-5.5 /5	
Reported Sun Safety Practice, 2006, 2008, 2010 (Age-adjusted Percentage of Adults 18+)	62	63.8%	1	65.4%	
CHRONIC DISEASES AND CONDITIONS			Ť		
Percentage of Utah Adults With Diabetes, 2009–2011			n		
(Age-adjusted Percentage of Adults)	67	6.2%		7.5%	
Coronary Heart Disease Deaths, 2006–2010	69	63.9		70.1	
(Age-adjusted Death Rate per 100,000 Population)	29	03.9		/0.1	
Stroke Deaths, 2006–2010	70	29.0		36.1	
(Age-adjusted Death Rate per 100,000 Population)					
Alzheimer's Disease Deaths , 2008–2010 (Age-adjusted Rate per 100,000 Population)	71	19.6	•	19.6	
Breast Cancer Deaths, 2008–2010			· 		
(Age-adjusted Death Rate per 100,000 Women)	72	19.8	1	20.2	
Colorectal Cancer Deaths, 2007–2010			n		
(Age-adjusted Death Rate per 100,000 Population)	74	8.2		11.6	
Lung Cancer Deaths, 2006–2010			_		
(Age-adjusted Death Rate per 100,000 Population)	76	23.3	*	20.6	
Melanoma of the Skin Deaths, 2005–2010					
(Age-adjusted Death Rate per 100,000 Population)	78	4.4			
Prostate Cancer Deaths, 2006–2010			_	_	
(Age-adjusted Death Rate per 100,000 Men)	80	25.9	1	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011	- 1	13.50	<u> </u>	15.00/	
(Age-adjusted Percentage of Adults)	81	13.5%	#	15.8%	
INJURY					
Fall Hospitalizations, 2010	84	20.1		22.4	
(Age-adjusted Rate per 10,000 Population)		20.1		22.7	
Motor Vehicle Traffic Crash Deaths, 2008–2010	85	10.6	<b>1</b>	9.2	
(Age-adjusted Death Rate per 100,000 Population)  Poisoning, 2006–2010 and U.S. 2006–2009			<b>▼</b>		
(Age-adjusted Death Rate per 100,000 Population)	87	17.3	1	18.8	13.1
Suicide, 2006–2010 and U.S. 2006–2009		44.5	<b></b>	4= 6	
(Age-adjusted Death Rate per 100,000 Population)	89	16.9	₩	15.8	11.4
COMMUNICABLE DISEASE					
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months	92	49.7%	<u></u>	56.9%	
(Percentage of Adults Aged 65+)		1517 70	•	20.5 /0	
Adults Ever Receiving Pneumococcal Vaccination, 2011	93	64.5%	<b>1</b>	70.4%	70.0%
(Percentage of Adults Aged 65+)  Pertussis Cases, 2005–2011			*		
(Reported Cases per 100,000 Population)	96	4.5		18.0	
Chlamydia, 2010		4		2246	
(Cases per 100,000 Population)	98	157.7		234.9	
Gonorrhea, 2010	100	2.8		10.9	
(Cases per 100,000 Population)	-00	2.0		10.3	

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	17.1%	•	16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	18.7%	-	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	57.0%	•	57.2%	-
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	66.3%	•	68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	21.8		23.6	-
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	74.7%	*	67.0%	66.0%

For information on confidence intervals, see: http://health.utah.gov/opha/IBIShelp/ConfInts.pdf.

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- (1) the relative standard error is greater than 50% or can't be determined or
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Community value is not significantly different from the state value.



 $\stackrel{\longleftarrow}{=}$  Excellent: The community is performing BETTER than the state, and the difference IS statistically significant.



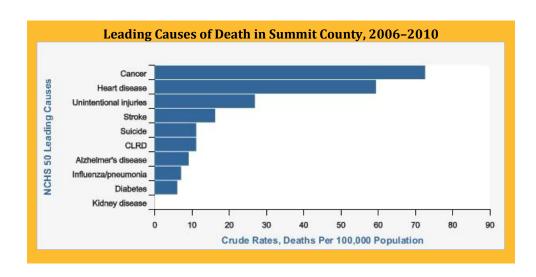
Reason for Concern: The community is performing WORSE than the state, and the difference IS statistically significant.

-- Either the comparison value or confidence interval data are not available.

**n/a** Not Applicable: This indicator has no target direction.

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	<u></u>	Communi	ty Data	Comparis	on Values	
Summit County Indicator Data	Page	Count/Rate	Compare		U.S.	
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT						
Birth Rate, 2010	2	10.8	n/a	18.3	13.5	
(Number of Births per 1,000 Residents)		10.8	II/a	10.5	13.3	
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	83.3		80.4	78.5	
(Age in Years)		00.0	IV.		7 0.0	
Age Distribution 2010	4	7.6%	n/a	9.0%	13.1%	
(Percentage of Persons Aged 65+)  Families With Children Under 18 That Were Headed by a Single Female			-			
(No Husband Present), 2010	5	4.6%	n/a	5.5%	7.2%	
(Percentage of All Households)		4.0 %	II/ a	3.3 70	7.270	
Educational Attainment, 2006–2010 ACS 5-year estimate						
(Percentage of Utahns 25+ With Bachelor's Degree)	6	50.8%		29.4%	28.0%	
Median Annual Household Income, 2010	_	474 525		¢54.740	<b>AFO 046</b>	
(Dollars)	7	\$74,535		\$54,740	\$50,046	
Persons Living in Poverty, 2006–2010	8	7.0%		10.8%	13.8%	
(Percentage of Persons)	·	7.0%		10.670	13.070	
Child Poverty, 2006–2010	9	7.4%		12.3%	19.2%	
(Percentage of Children)		71170		11.0 /0		
Utah White Population, 2010	10	90.5%	n/a	86.1%	72.4%	
(Percentage of White Persons)		<u></u>				
ENVIRONMENTAL DETERMINANTS	ı	I				
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	13	5.5		3.8		
(Reported Cases per 100,000 population)  Reported Salmonella Infections, 2005–2011						
(Reported cases per 100,000 population)	15	9.2		11.3		
HEALTHY BEGINNINGS		L				
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	Π	1	D/TE			
(Percentage of Mothers)	26	68.5%	-	72.3%		
Infant Mortality, 2006–2010 (U.S. 2006–2009)			<u>î</u>			
(Deaths per 1,000 Live Births)	27	4.1	-	5.0	6.6	
Low Birth Weight, 2008–2010	30	9.4%	<b>—</b>	6.9%	8.2%	
(Percentage of Live Born Infants)	30	9.4%	1	0.9%	8.2%	
Birth Rate for Females Aged 15-19, 2008-2010 (Utah, 2010; U.S., 2009)	32	19.3		27.6	39.1	
(Rate per 1,000 Adolescent Females)	<u> </u>	15.5		27.0	33.1	
HEALTH BEHAVIORS AND RISK FACTORS						
Current Cigarette Smoking, Adults, 2009–2011	39	7.6%		11.3%		
(Age-adjusted Percentage of Adults)		71070		11.0 /0		
Current Cigarette Smoking, Students Grades 9–12, 2011	41	5.1%	1	5.2%		
(Percentage of Students)			•			
Binge Drinking in the Past 30 Days, Adults, 2011 (Age-adjusted Percentage of Adults)	43	20.3%	4	11.2%		
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011						
(Percentage of Students reporting Alcohol Use)	45	21.1%	-	11.2%		
Tr. Greenlage or occurrence reporting riconor ode/						

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011		·			0.01
(Percentage of Students reporting Marijuana Use)	46	9.8%	1	7.0%	
Recommended Physical Activity, Adults, 2011	47	68.4%		56.1%	
(Age-adjusted Percentage of Adults)	47	00.4%		50.1%	
Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011	48	51.1%	<b>1</b>	48.9%	
(Percentage of Adolescents)		02:12 / 0	_	10.5 70	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011	50	13.4%		25.1%	
(Age-adjusted Percentage of Adults Aged 18+)  Percentage of Adolescents Who Were Obese, 2011					
(Percentage of Adolescents who were obese, 2011	52	4.0%		7.5%	
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011			_		
(Age-adjusted Percentage of Adults)	54	23.5%	<b>*</b>	25.4%	
Doctor-diagnosed Hypertension, 2009 and 2011	F.C.	24.00/	<b>1</b>	25 60/	
(Age-adjusted Percentage of Adults)	56	21.9%	-	25.6%	
Recommended Colorectal Cancer Screening, 2010	58	71.6%	<b>*</b>	66.2%	
(Age-adjusted Percentage of Adults Age 50+)	30	71.070	*	00.2 /0	
Mammogram Within the Past Two Years, 2010–2011	60	73.8%		65.3%	
(Age-adjusted Percentage of Women Age 40+)					
Reported Sun Safety Practice, 2006, 2008, 2010 (Age-adjusted Percentage of Adults 18+)	62	72.6%		65.4%	
CHRONIC DISEASES AND CONDITIONS					
Percentage of Utah Adults With Diabetes, 2009–2011	l		0		
(Age-adjusted Percentage of Adults)	67	3.0%		7.5%	
Coronary Heart Disease Deaths, 2006–2010			,		
(Age-adjusted Death Rate per 100,000 Population)	69	47.5		70.1	
Stroke Deaths, 2006–2010	70	25.9	<b></b>	36.1	
(Age-adjusted Death Rate per 100,000 Population)	70	25.9	*	30.1	
Alzheimer's Disease Deaths, 2008–2010	71	21.3	<b>1</b>	19.6	
(Age-adjusted Rate per 100,000 Population)	/ -	21.0		13.0	
Breast Cancer Deaths, 2008–2010	72	16.3	<b>1</b>	20.2	
(Age-adjusted Death Rate per 100,000 Women)			•		
Colorectal Cancer Deaths, 2007–2010	74	9.5	<b>1</b>	11.6	
(Age-adjusted Death Rate per 100,000 Population)		5.5		11.0	
Lung Cancer Deaths, 2006–2010	76	8.5		20.6	
(Age-adjusted Death Rate per 100,000 Population)	/ 0	0.5		20.0	
Melanoma of the Skin Deaths, 2005–2010	78	2.8			
(Age-adjusted Death Rate per 100,000 Population)	76	2.6			
Prostate Cancer Deaths, 2006–2010	80	17.5	<b>1</b>	24.3	
(Age-adjusted Death Rate per 100,000 Men)	80	17.5	*	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011	81	9.8%	4	15.8%	
(Age-adjusted Percentage of Adults)	01	9.6 %		15.6 70	
INJURY					
Fall Hospitalizations, 2010	84	25.8	<b>1</b>	22.4	
(Age-adjusted Rate per 10,000 Population)	<u> </u>		•		
Motor Vehicle Traffic Crash Deaths, 2008–2010	85	10.2	1	9.2	
(Age-adjusted Death Rate per 100,000 Population)  Poisoning, 2006–2010 and U.S. 2006–2009			0		
(Age-adjusted Death Rate per 100,000 Population)	87	11.5		18.8	13.1
Suicide, 2006–2010 and U.S. 2006–2009			,		
(Age-adjusted Death Rate per 100,000 Population)	89	10.0		15.8	11.4
COMMUNICABLE DISEASE					
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months	02	67.70/	<b>1</b>	F6 00/	
(Percentage of Adults Aged 65+)	92	67.7%	₩	56.9%	
Adults Ever Receiving Pneumococcal Vaccination, 2011	93	83.4%		70.4%	70.0%
(Percentage of Adults Aged 65+)		03.770	n/3	, UI-T /U	7 0.0 70
Pertussis Cases, 2005–2011	96	11.5		18.0	
(Reported Cases per 100,000 Population)					
Chlamydia, 2010 (Cases per 100,000 Population)	98	155.5		234.9	
Gonorrhea, 2010					
(Cases per 100,000 Population)	100	4.9		10.9	
( career p.s. 100/000 : opaidation/					

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	9.8%		16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	13.9%	•	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	58.8%	•	57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	74.8%	•	68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	11.6		23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	61.9%	•	67.0%	66.0%

For information on confidence intervals, see: http://health.utah.gov/opha/IBIShelp/ConfInts.pdf.

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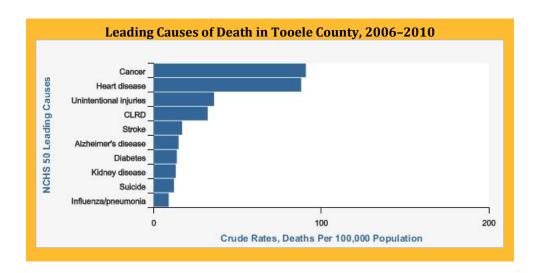
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	<b>D</b>	Communi	ty Data	Comparis	on Values
Tooele County Indicator Data	Page	Count/Rate	Compare	Utah	U.S.
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT					
Birth Rate, 2010	2	16.5	n/a	18.3	13.
(Number of Births per 1,000 Residents)		10.5	II/a	10.5	13.
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	79.7		80.4	78.
(Age in Years)		75.7	1	00.4	70.
Age Distribution 2010	4	7.5%	n/a	9.0%	13.19
(Percentage of Persons Aged 65+)		7.0 70	, "	510 70	
Families With Children Under 18 That Were Headed by a Single Female	_	6.00/	,	0/	
(No Husband Present), 2010	5	6.2%	n/a	5.5%	7.29
(Percentage of All Households)					
Educational Attainment, 2006–2010 ACS 5-year estimate	6	18.6%		29.4%	28.09
(Percentage of Utahns 25+ With Bachelor's Degree)					
Median Annual Household Income, 2010	7	\$60,541		\$54,740	\$50,04
(Dollars)					
Persons Living in Poverty, 2006–2010 (Percentage of Persons)	8	6.5%		10.8%	13.89
Child Poverty, 2006–2010					
(Percentage of Children)	9	7.3%		12.3%	19.29
Utah White Population, 2010					
(Percentage of White Persons)	10	90.7%	n/a	86.1%	72.49
ENVIRONMENTAL DETERMINANTS			<u> </u>	<u> </u>	
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011		Ι			
(Reported Cases per 100,000 population)	13	2.3		3.8	
Reported Salmonella Infections, 2005–2011					
(Reported cases per 100,000 population)	15	11.0		11.3	
HEALTHY BEGINNINGS		<u> </u>			
Prenatal Care in the First Trimester of Pregnancy, 2009–2010			_		
(Percentage of Mothers)	26	70.3%	1	72.3%	
Infant Mortality, 2006–2010 (U.S. 2006–2009)			_		
(Deaths per 1,000 Live Births)	27	5.2	-	5.0	6.
Low Birth Weight, 2008–2010		0.00/		6.00/	0.00
(Percentage of Live Born Infants)	30	8.2%	7	6.9%	8.29
Birth Rate for Females Aged 15–19, 2008–2010 (Utah, 2010; U.S., 2009)	22	27.5	4	27.6	20
(Rate per 1,000 Adolescent Females)	32	37.5	7	27.6	39.
HEALTH BEHAVIORS AND RISK FACTORS		-	-		
Current Cigarette Smoking, Adults, 2009–2011	20	16.20/		44.20/	
(Age-adjusted Percentage of Adults)	39	16.3%	7	11.3%	
Current Cigarette Smoking, Students Grades 9-12, 2011	41	7.3%	-	5.2%	
(Percentage of Students)	41	7.3%		5.2%	
Binge Drinking in the Past 30 Days, Adults, 2011	43	16.5%	-	11 20/	
	45	10.5%	<b>T</b>	11.2%	
(Age-adjusted Percentage of Adults)					
(Age-adjusted Percentage of Adults)  Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011 (Percentage of Students reporting Alcohol Use)	45	16.8%	4	11.2%	

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011	Ĭ	,			0.5.
(Percentage of Students reporting Marijuana Use)	46	9.5%	-	7.0%	
Recommended Physical Activity, Adults, 2011	47	53.6%	<b>1</b>	56.1%	
(Age-adjusted Percentage of Adults)	7/	33.0%	*	30.170	
Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011	48	47.9%	<b>1</b>	48.9%	
(Percentage of Adolescents)		171570	•	10.5 70	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011	50	31.6%	4	25.1%	
(Age-adjusted Percentage of Adults Aged 18+)					
Percentage of Adolescents Who Were Obese, 2011 (Percentage of Adolescents)	52	10.0%	4	7.5%	
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011					
(Age-adjusted Percentage of Adults)	54	29.5%	4	25.4%	
Doctor-diagnosed Hypertension, 2009 and 2011			n/3		
(Age-adjusted Percentage of Adults)	56	32.8%	4	25.6%	
Recommended Colorectal Cancer Screening, 2010		65.50	1	66.50/	
(Age-adjusted Percentage of Adults Age 50+)	58	65.7%	-	66.2%	
Mammogram Within the Past Two Years, 2010-2011	60	56.4%	-	65.3%	
(Age-adjusted Percentage of Women Age 40+)	00	30.4%	~	05.5%	
Reported Sun Safety Practice, 2006, 2008, 2010	62	64.8%	<b>1</b>	65.4%	
(Age-adjusted Percentage of Adults 18+)		0 110 70		051170	
CHRONIC DISEASES AND CONDITIONS		T			
Percentage of Utah Adults With Diabetes, 2009–2011	67	12.9%	4	7.5%	
(Age-adjusted Percentage of Adults)			-		
Coronary Heart Disease Deaths, 2006–2010	69	61.8	1	70.1	
(Age-adjusted Death Rate per 100,000 Population)  Stroke Deaths, 2006–2010	1				
(Age-adjusted Death Rate per 100,000 Population)	70	24.0		36.1	
Alzheimer's Disease Deaths , 2008–2010			_		
(Age-adjusted Rate per 100,000 Population)	71	28.2	*	19.6	
Breast Cancer Deaths, 2008–2010			_		
(Age-adjusted Death Rate per 100,000 Women)	72	22.0	<b>*</b>	20.2	
Colorectal Cancer Deaths, 2007–2010			_		
(Age-adjusted Death Rate per 100,000 Population)	74	13.6	<b>*</b>	11.6	
Lung Cancer Deaths, 2006–2010			n/B		
(Age-adjusted Death Rate per 100,000 Population)	76	29.2	4	20.6	
Melanoma of the Skin Deaths, 2005–2010					
(Age-adjusted Death Rate per 100,000 Population)	78	2.8			
Prostate Cancer Deaths, 2006–2010			^		
(Age-adjusted Death Rate per 100,000 Men)	80	14.3	1	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011					
(Age-adjusted Percentage of Adults)	81	16.2%	1	15.8%	
INJURY		<u> </u>			
Fall Hospitalizations, 2010	_		_	_	
(Age-adjusted Rate per 10,000 Population)	84	25.6	#	22.4	
Motor Vehicle Traffic Crash Deaths, 2008–2010	0.5	110	<b>1</b>	0.0	
(Age-adjusted Death Rate per 100,000 Population)	85	14.0	-	9.2	
Poisoning, 2006–2010 and U.S. 2006–2009	87	20.2	<b>1</b>	18.8	13.1
(Age-adjusted Death Rate per 100,000 Population)	67	20.2	*	10.0	13.1
Suicide, 2006–2010 and U.S. 2006–2009	89	13.8	<b>1</b>	15.8	11.4
(Age-adjusted Death Rate per 100,000 Population)				_5.5	
COMMUNICABLE DISEASE				1	
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months	92	59.8%	<b>1</b>	56.9%	
(Percentage of Adults Aged 65+)  Adults Ever Receiving Pneumococcal Vaccination, 2011			<b>▼</b>		
(Percentage of Adults Aged 65+)	93	77.7%	*	70.4%	70.0%
Pertussis Cases, 2005–2011		<u> </u>	•		
(Reported Cases per 100,000 Population)	96	6.5		18.0	
Chlamydia, 2010					
(Cases per 100,000 Population)	98	206.2		234.9	
Gonorrhea, 2010	100	10.0		10.9	
(Cases per 100,000 Population)	100	10.0		10.9	

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	13.2%	•	16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	10.5%	•	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	64.5%		57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	68.6%	•	68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	32.6	-	23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	57.9%	-	67.0%	66.0%

For information on confidence intervals, see: http://health.utah.gov/opha/IBIShelp/ConfInts.pdf.

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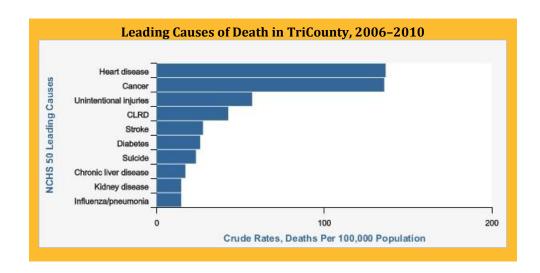
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Today to the base Date	Page	Communi	ty Data	Comparis	on Values
TriCounty Indicator Data		Count/Rate	Compare	Utah	U.S.
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT					
Birth Rate, 2010	2	20.2	n/a	18.3	13.5
(Number of Births per 1,000 Residents)		20.2	11/4	10.5	13.5
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	77.0		80.4	78.5
(Age in Years)	Ľ	77.0	•		
Age Distribution 2010	4	9.9%	n/a	9.0%	13.1%
(Percentage of Persons Aged 65+)  Families With Children Under 18 That Were Headed by a Single Female					
(No Husband Present), 2010	5	5.4%	n/a	5.5%	7.2%
(Percentage of All Households)	3	3.4%	II/a	3.370	7.27
Educational Attainment, 2006–2010 ACS 5-year estimate					
(Percentage of Utahns 25+ With Bachelor's Degree)	6	15.3%		29.4%	28.0%
Median Annual Household Income, 2010		÷== 400		÷= 4 = 40	±=0.044
(Dollars)	7	\$53,493		\$54,740	\$50,046
Persons Living in Poverty, 2006–2010	8	11.3%	<b>1</b>	10.8%	13.8%
(Percentage of Persons)	0	11.5%	*	10.6%	13.6%
Child Poverty, 2006–2010	9	13.5%	<b>1</b>	12.3%	19.2%
(Percentage of Children)		13.5 70	~	12.5 /0	13.2 /
Utah White Population, 2010	10	87.7%	n/a	86.1%	72.4%
(Percentage of White Persons)			,		
ENVIRONMENTAL DETERMINANTS		ı	ı		
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	13	3.9		3.8	
(Reported Cases per 100,000 population)  Reported Salmonella Infections, 2005–2011					
(Reported cases per 100,000 population)	15	8.4		11.3	
HEALTHY BEGINNINGS		<u> </u>			
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	1		D/T3		
(Percentage of Mothers)	26	68.9%	-	72.3%	
Infant Mortality, 2006–2010 (U.S. 2006–2009)					
(Deaths per 1,000 Live Births)	27	5.5		5.0	6.6
Low Birth Weight, 2008–2010	20	7.00/	-	6.00/	0.20/
(Percentage of Live Born Infants)	30	7.9%	7	6.9%	8.2%
Birth Rate for Females Aged 15-19, 2008-2010 (Utah, 2010; U.S., 2009)	32	56.6		27.6	39.1
(Rate per 1,000 Adolescent Females)	32	50.0	1	27.0	39.1
HEALTH BEHAVIORS AND RISK FACTORS					
Current Cigarette Smoking, Adults, 2009–2011	39	19.0%		11.3%	
(Age-adjusted Percentage of Adults)	33	13.0 /0	1	11.5 /0	
Current Cigarette Smoking, Students Grades 9-12, 2011	41	6.1%	<b>1</b>	5.2%	
(Percentage of Students)			•		
Binge Drinking in the Past 30 Days, Adults, 2011	43	12.5%	1	11.2%	
(Age-adjusted Percentage of Adults)			^		
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011 (Percentage of Students reporting Alcohol Use)	45	12.4%	1	11.2%	
(referrage of students reporting Alcohol Ose)	<u> </u>	<u> </u>	ĺ		

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011		,	n		
(Percentage of Students reporting Marijuana Use)	46	3.7%		7.0%	
Recommended Physical Activity, Adults, 2011	47	57.0%	<u></u>	56.1%	
(Age-adjusted Percentage of Adults)	47	57.0%	*	30.170	
Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011	48	51.1%	<b>1</b>	48.9%	
(Percentage of Adolescents)		3212 70	•	10.5 70	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011	50	31.3%		25.1%	
(Age-adjusted Percentage of Adults Aged 18+)					
Percentage of Adolescents Who Were Obese, 2011 (Percentage of Adolescents)	52	7.9%	<b>*</b>	7.5%	
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011			0		
(Age-adjusted Percentage of Adults)	54	21.4%		25.4%	
Doctor-diagnosed Hypertension, 2009 and 2011			_		
(Age-adjusted Percentage of Adults)	56	26.7%	1	25.6%	
Recommended Colorectal Cancer Screening, 2010		<b>-</b> 4.00/		66.50/	
(Age-adjusted Percentage of Adults Age 50+)	58	51.9%	4	66.2%	
Mammogram Within the Past Two Years, 2010-2011	60	58.2%	4	65.3%	
(Age-adjusted Percentage of Women Age 40+)	00	56.2%	~	03.370	
Reported Sun Safety Practice, 2006, 2008, 2010	62	67.1%	<u> </u>	65.4%	
(Age-adjusted Percentage of Adults 18+)		071270		05.1.70	
CHRONIC DISEASES AND CONDITIONS	•				
Percentage of Utah Adults With Diabetes, 2009–2011	67	8.2%	<b>1</b>	7.5%	
(Age-adjusted Percentage of Adults)					
Coronary Heart Disease Deaths, 2006–2010	69	88.2		70.1	
(Age-adjusted Death Rate per 100,000 Population)  Stroke Deaths, 2006–2010			^		
(Age-adjusted Death Rate per 100,000 Population)	70	32.0	1	36.1	
Alzheimer's Disease Deaths, 2008–2010			_		
(Age-adjusted Rate per 100,000 Population)	71	20.0	*	19.6	
Breast Cancer Deaths, 2008–2010			_		
(Age-adjusted Death Rate per 100,000 Women)	72	28.8	#	20.2	
Colorectal Cancer Deaths, 2007–2010			_		
(Age-adjusted Death Rate per 100,000 Population)	74	14.2	#	11.6	
Lung Cancer Deaths, 2006–2010			n/3		
(Age-adjusted Death Rate per 100,000 Population)	76	34.6	-	20.6	
Melanoma of the Skin Deaths, 2005–2010					
(Age-adjusted Death Rate per 100,000 Population)	78	2.4			
Prostate Cancer Deaths, 2006–2010			^		
(Age-adjusted Death Rate per 100,000 Men)	80	33.2	1	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011			_		
(Age-adjusted Percentage of Adults)	81	13.9%	1	15.8%	
INJURY	<u></u>	•			
Fall Hospitalizations, 2010			D.		
(Age-adjusted Rate per 10,000 Population)	84	17.6		22.4	
Motor Vehicle Traffic Crash Deaths, 2008–2010	0.5	20.4	4	0.2	
(Age-adjusted Death Rate per 100,000 Population)	85	28.4	-	9.2	
Poisoning, 2006-2010 and U.S. 2006-2009	87	18.1	<b></b>	18.8	13.1
(Age-adjusted Death Rate per 100,000 Population)	٠,	10.1	*	10.0	15.1
Suicide, 2006–2010 and U.S. 2006–2009	89	24.6		15.8	11.4
(Age-adjusted Death Rate per 100,000 Population)			,		
COMMUNICABLE DISEASE	Γ	ı			
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months	92	55.1%	1	56.9%	
(Percentage of Adults Aged 65+)  Adults Ever Receiving Pneumococcal Vaccination, 2011					
(Percentage of Adults Aged 65+)	93	60.0%	4	70.4%	70.0%
Pertussis Cases, 2005–2011					
(Reported Cases per 100,000 Population)	96	6.3		18.0	
Chlamydia, 2010		450 -		2246	
(Cases per 100,000 Population)	98	168.4		234.9	
Gonorrhea, 2010	100	0.0		10.9	
(Cases per 100,000 Population)	-00	0.0		10.9	

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	16.6%	•	16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	12.1%	•	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	53.6%	•	57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	60.4%	-	68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	52.7	-	23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	60.3%	•	67.0%	66.0%

For information on confidence intervals, see: http://health.utah.gov/opha/IBIShelp/ConfInts.pdf.

- \*\* The estimate has been suppressed because:
- (1) the relative standard error is greater than 50% or can't be determined or
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Community value is not significantly different from the state value.



 $\stackrel{\longleftarrow}{=}$  Excellent: The community is performing BETTER than the state, and the difference IS statistically significant.



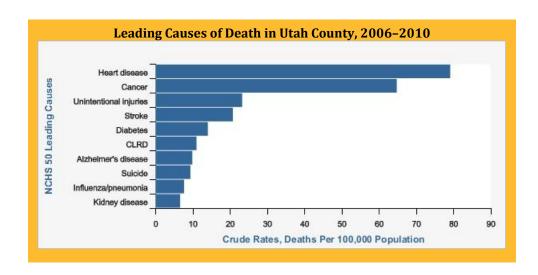
Reason for Concern: The community is performing WORSE than the state, and the difference IS statistically significant.

-- Either the comparison value or confidence interval data are not available.

**n/a** Not Applicable: This indicator has no target direction.

The community value is considered statistically significantly different from the state value if the state value is outside the range of the community's 95% confidence interval. If the community's data or 95% confidence interval information is not available, "--" will be displayed.





W. I. C	D	Community Data		Comparison Valu		
Utah County Indicator Data	Page	Count/Rate	Compare	Utah	U.S.	
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT						
Birth Rate, 2010	2	22.2	n/a	18.3	13.5	
(Number of Births per 1,000 Residents)		22.2	II/a	10.5	13.5	
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	81.2		80.4	78.5	
(Age in Years)		<u> </u>				
Age Distribution 2010	4	6.5%	n/a	9.0%	13.1%	
(Percentage of Persons Aged 65+)  Families With Children Under 18 That Were Headed by a Single Female						
(No Husband Present), 2010	5	4.4%	n/a	5.5%	7.2%	
(Percentage of All Households)		4.470	II/a	3.3 70	7.270	
Educational Attainment, 2006–2010 ACS 5-year estimate	_					
(Percentage of Utahns 25+ With Bachelor's Degree)	6	35.5%		29.4%	28.0%	
Median Annual Household Income, 2010	_	AE4 20E		¢54.740	<b>450.046</b>	
(Dollars)	7	\$54,385		\$54,740	\$50,046	
Persons Living in Poverty, 2006–2010	8	12.8%	-	10.8%	13.8%	
(Percentage of Persons)	٥	12.6%	7	10.6%	13.670	
Child Poverty, 2006–2010	9	10.3%		12.3%	19.2%	
(Percentage of Children)		1010 70		1210 70	1312 /0	
Utah White Population, 2010	10	89.4%	n/a	86.1%	72.4%	
(Percentage of White Persons)			, ,			
ENVIRONMENTAL DETERMINANTS	1	ı	ı			
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	13	2.6		3.8		
(Reported Cases per 100,000 population)  Reported Salmonella Infections, 2005–2011						
(Reported cases per 100,000 population)	15	9.3		11.3		
HEALTHY BEGINNINGS	<u> </u>	<u> </u>				
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	1	Ī	n			
(Percentage of Mothers)	26	74.1%		72.3%		
Infant Mortality, 2006–2010 (U.S. 2006–2009)			,			
(Deaths per 1,000 Live Births)	27	4.2		5.0	6.6	
Low Birth Weight, 2008–2010	20	F 00/	L	C 00/	0.20/	
(Percentage of Live Born Infants)	30	5.9%		6.9%	8.2%	
Birth Rate for Females Aged 15-19, 2008-2010 (Utah, 2010; U.S., 2009)	32	19.4		27.6	39.1	
(Rate per 1,000 Adolescent Females)	32	13.7		27.0	33.1	
HEALTH BEHAVIORS AND RISK FACTORS						
Current Cigarette Smoking, Adults, 2009-2011	39	7.2%		11.3%		
(Age-adjusted Percentage of Adults)	"	71270		1115 70		
Current Cigarette Smoking, Students Grades 9-12, 2011	41	2.6%		5.2%		
(Percentage of Students)						
Binge Drinking in the Past 30 Days, Adults, 2011	43	7.3%		11.2%		
(Age-adjusted Percentage of Adults)  Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011		<u> </u>				
(Percentage of Students reporting Alcohol Use)	45	5.3%		11.2%		
Transfer of Stadents reporting Aiconol Ose)	1					

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011 (Percentage of Students reporting Marijuana Use)		3.3%		7.0%	
Recommended Physical Activity, Adults, 2011			^		
(Age-adjusted Percentage of Adults)	47	57.2%	1	56.1%	
Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011 (Percentage of Adolescents)	48	52.1%	<b></b>	48.9%	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011 (Age-adjusted Percentage of Adults Aged 18+)	50	24.8%	<b></b>	25.1%	
Percentage of Adolescents Who Were Obese, 2011	52	6.9%	<b>1</b>	7.5%	
(Percentage of Adolescents)  Doctor-diagnosed High Blood Cholesterol, 2009 and 2011	54	22.9%		25.4%	
(Age-adjusted Percentage of Adults)  Doctor-diagnosed Hypertension, 2009 and 2011	56	24.0%	î	25.6%	
(Age-adjusted Percentage of Adults)  Recommended Colorectal Cancer Screening, 2010			<u> </u>		
(Age-adjusted Percentage of Adults Age 50+)	58	62.6%	*	66.2%	
Mammogram Within the Past Two Years, 2010–2011 (Age-adjusted Percentage of Women Age 40+)	60	65.2%	<b>*</b>	65.3%	
Reported Sun Safety Practice, 2006, 2008, 2010 (Age-adjusted Percentage of Adults 18+)	62	61.6%	4	65.4%	
CHRONIC DISEASES AND CONDITIONS				•	
Percentage of Utah Adults With Diabetes, 2009–2011 (Age-adjusted Percentage of Adults)	67	7.5%	•	7.5%	1
Coronary Heart Disease Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Population)	69	65.2		70.1	-
Stroke Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Population)	70	39.0	<b></b>	36.1	
Alzheimer's Disease Deaths, 2008–2010	71	18.7	<b>1</b>	19.6	
(Age-adjusted Rate per 100,000 Population)  Breast Cancer Deaths, 2008–2010			•		
(Age-adjusted Death Rate per 100,000 Women)	72	21.6	1	20.2	
Colorectal Cancer Deaths, 2007–2010	74	12.4	<u>î</u>	11.6	
(Age-adjusted Death Rate per 100,000 Population)	/4	12.4	*	11.6	
Lung Cancer Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Population)	76	12.2		20.6	-
Melanoma of the Skin Deaths, 2005–2010					
(Age-adjusted Death Rate per 100,000 Population)	78	4.1			
Prostate Cancer Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Men)	80	22.7	<b></b>	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011	01	16 20/	<u> </u>	15.00/	
(Age-adjusted Percentage of Adults)	81	16.3%	<b>‡</b>	15.8%	
INJURY		ı			
Fall Hospitalizations, 2010 (Age-adjusted Rate per 10,000 Population)	84	22.3	<b>1</b>	22.4	
Motor Vehicle Traffic Crash Deaths, 2008–2010	85	7.6	<b>1</b>	9.2	
(Age-adjusted Death Rate per 100,000 Population)  Poisoning, 2006–2010 and U.S. 2006–2009	65	7.0	0	9.2	
(Age-adjusted Death Rate per 100,000 Population)	87	16.0		18.8	13.1
Suicide, 2006–2010 and U.S. 2006–2009 (Age-adjusted Death Rate per 100,000 Population)	89	11.0		15.8	11.4
COMMUNICABLE DISEASE					
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months (Percentage of Adults Aged 65+)	92	57.6%	•	56.9%	
Adults Ever Receiving Pneumococcal Vaccination, 2011 (Percentage of Adults Aged 65+)	93	68.8%	•	70.4%	70.0%
Pertussis Cases, 2005–2011 (Reported Cases per 100,000 Population)	96	16.0		18.0	
Chlamydia, 2010	98	132.6		234.9	
(Cases per 100,000 Population)  Gonorrhea, 2010					
(Cases per 100,000 Population)	100	4.4		10.9	

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	17.8%	•	16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	11.6%	•	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	55.0%	•	57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	71.2%	•	68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	13.4		23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	60.1%	•	67.0%	66.0%

For information on confidence intervals, see: http://health.utah.gov/opha/IBIShelp/ConfInts.pdf.

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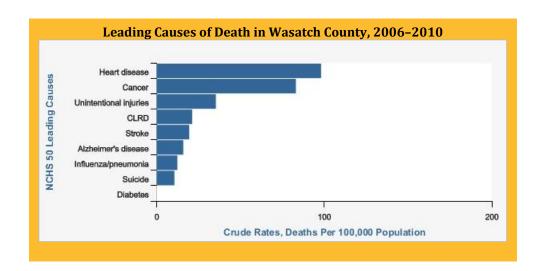
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W . I C	D	Community Data		Comparison Valu	
Wasatch County Indicator Data	Page	Count/Rate	Compare	Utah	U.S.
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT					
Birth Rate, 2010	2	15.9	n/a	18.3	13.5
(Number of Births per 1,000 Residents)		15.9	II/a	10.5	13.5
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	81.3		80.4	78.5
(Age in Years)		01.5		0011	70.5
Age Distribution 2010	4	8.6%	n/a	9.0%	13.1%
(Percentage of Persons Aged 65+)			,		
Families With Children Under 18 That Were Headed by a Single Female (No Husband Present), 2010	5	4.4%	n/a	5.5%	7.2%
(Percentage of All Households)	3	4.4%	n/a	5.5%	7.2%
Educational Attainment, 2006–2010 ACS 5-year estimate					
(Percentage of Utahns 25+ With Bachelor's Degree)	6	31.1%		29.4%	28.0%
Median Annual Household Income, 2010		_			
(Dollars)	7	\$61,593		\$54,740	\$50,046
Persons Living in Poverty, 2006–2010	_		,		
(Percentage of Persons)	8	6.1%		10.8%	13.8%
Child Poverty, 2006–2010		6 70/	)_	42.20/	10.20/
(Percentage of Children)	9	6.7%		12.3%	19.2%
Utah White Population, 2010	10	90.4%	- /-	86.1%	72.4%
(Percentage of White Persons)	10	90.4%	n/a	00.1%	72.4%
ENVIRONMENTAL DETERMINANTS					
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	13	3.2		3.8	
(Reported Cases per 100,000 population)	13	3.2		3.0	
Reported Salmonella Infections, 2005–2011	15	12.1		11.3	
(Reported cases per 100,000 population)	13	12.1		11.5	
HEALTHY BEGINNINGS					
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	26	68.1%		72.3%	
(Percentage of Mothers)		00.1 70	1	72.5 70	
Infant Mortality, 2006–2010 (U.S. 2006–2009)	27	7.5	<b>1</b>	5.0	6.6
(Deaths per 1,000 Live Births)		7.15		5.0	0.0
Low Birth Weight, 2008–2010	30	8.1%	<b>1</b>	6.9%	8.2%
(Percentage of Live Born Infants)			•		
Birth Rate for Females Aged 15–19, 2008–2010 (Utah, 2010; U.S., 2009)	32	27.5	<b>1</b>	27.6	39.1
(Rate per 1,000 Adolescent Females)  HEALTH BEHAVIORS AND RISK FACTORS	<u> </u>		·		
	1		^		
Current Cigarette Smoking, Adults, 2009–2011 (Age-adjusted Percentage of Adults)	39	9.4%	1	11.3%	
Current Cigarette Smoking, Students Grades 9–12, 2011			·		
(Percentage of Students)	41	4.3%	1	5.2%	
Binge Drinking in the Past 30 Days, Adults, 2011					
(Age-adjusted Percentage of Adults)	43	13.1%	1	11.2%	
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011			_		
(Percentage of Students reporting Alcohol Use)	45	12.1%	#	11.2%	
. J					

Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011   46   6.5%   7.0%	HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
(Percentage of Students reporting Marijuana Use)  Recommended Physical Activity, Adults, 2011 (Age-adulated Percentage of Adults) (Percentage of Adults) (Age-adulated Percentage of Adults) (Percentage of Adults) (Age-adulated Percentage of Adults) (Percentage of Adults) (Pe	` ,		,	^		0.01
Age adulysted Percentage of Adults		46	6.5%	-	7.0%	
ABS-1996		47	60 10/2	~	E6 10/a	
(Percentage of Adulescents)  48		47	09.170		30.1%	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011   50   23.6%   25.1%		48	52.5%	<u> </u>	48.9%	
Age-adjusted Percentage of Adults Aged 18+)   SU   23.0%			32.3 / 0		10.5 70	
Age-adjusted   Percentage of Adolescents   Age-adjusted   Percentage of Adolescents   Age-adjusted   Age-adju		50	23.6%	<b>1</b>	25.1%	
Percentage of Adolescents				•		
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011   54   24.2%   25.4%		52	4.9%	1	7.5%	
Age-adjusted Percentage of Adults    25.4%   25.6%				•		
Comparing the Comparing		54	24.2%		25.4%	
Age_adjusted Percentage of Adults    Age_adjusted Percentage of Adults   Age_adjusted Percentage of Adults Age_50+)     Age_adjusted Percentage of Adults Ba+)     Age_adjusted Death Rate per 100,000 Population)     Age_adjusted Death Rate per 100,000 Population)     Age_adjusted Death Rate per 100,000 Population)     Alzheimer's Disease Deaths, 2008-2010     Age_adjusted Death Rate per 100,000 Population)     Breast Cancer Deaths, 2008-2010     Age_adjusted Death Rate per 100,000 Population)     Age_adjusted Death Rate						
Recommended Colorectal Cancer Screening, 2010   58   68.6%   66.2%		56	22.9%	<b>1</b>	25.6%	
Age-adjusted Percentage of Adults Age 50+   58   68.9%   65.2%						
Mammogram Within the Past Two Years, 2010-2011   60   65.8%   65.3%		58	68.6%	1	66.2%	
Age_adjusted Percentage of Women Age 40+   60   65.5%   65.4%		-	65.00/	<u> </u>	CE 20/	
Reported Sun Safety Practice, 2006, 2008, 2010   (Age-adjusted Percentage of Adults 18+)   62   68.1%   65.4%		60	65.8%	-	65.3%	
(Age-adjusted Percentage of Adults 18+)   62   68.17%   63.47%		62	60 10/	<b></b>	6E 40/	
Percentage of Utah Adults With Diabetes, 2009–2011		02	00.1%	₩	05.4%	
Age-adjusted Percentage of Adults   57.5%   7.5%	CHRONIC DISEASES AND CONDITIONS					
Coronary Heart Disease Deaths, 2006–2010   Gage-adjusted Death Rate per 100,000 Population)   70   26.8   36.1		67	E 90/a	~	7 50/2	
(Age-adjusted Death Rate per 100,000 Population)		07	5.6%		7.5%	
Age-adjusted Death Rate per 100,000 Population   70   26.8   36.1	•	69	68.5	<b>1</b>	70.1	
Age-adjusted Death Rate per 100,000 Population   70		0,5	00.5	~	70.1	
Age-adjusted Death Rate per 100,000 Population   71   32.0   19.6		70	26.8	<b>1</b>	36.1	
Age-adjusted Rate per 100,000 Population   71   32.0   19.6   1					00.1	
Breast Cancer Deaths, 2008–2010   (Age-adjusted Death Rate per 100,000 Women)   72   15.9   20.2		71	32.0	<b>1</b>	19.6	
(Age-adjusted Death Rate per 100,000 Women)       72       15.9       20.2          Colorectal Cancer Deaths, 2007–2010       74       14.7       11.6          (Age-adjusted Death Rate per 100,000 Population)       76       25.4       20.6          Melanoma of the Skin Deaths, 2005–2010       78       **            (Age-adjusted Death Rate per 100,000 Population)       80       11.9       24.3           Prostate Cancer Deaths, 2006–2010       80       11.9       24.3           (Age-adjusted Death Rate per 100,000 Mon)       80       11.9       24.3          Seven or More Days of Poor Mental Health in the Past 30 Days, 2011       81       13.2%       15.8%          (Age-adjusted Percentage of Adults)       84       22.6       22.4           NIJURY       84       22.6       22.4           Fall Hospitalizations, 2010       84       22.6       22.4          (Age-adjusted Rate per 10,000 Population)       85       19.6       9.2          Poisoning, 2006–2010 and U.S. 2006–2009       87       17.9       18.8       13.				•		
Cage-adjusted Death Rate per 100,000 Women)	·	72	15.9	<b>1</b>	20.2	
Age-adjusted Death Rate per 100,000 Population   74						
Cage-adjusted Death Rate per 100,000 Population   To   Cage-adjusted Death Rate per 100,000 Men   To   Cage-adjusted Percentage of Adults   To   Cage-adjusted Death Rate per 100,000 Population   To   Cage-adjusted Rate per 100,000 Population   To   Cage-adjusted Death Rate per 100,000 Population   To   C	,	74	14.7	<b>1</b>	11.6	
Age-adjusted Death Rate per 100,000 Population   76				•		
Age-adjusted Death Rate per 100,000 Population   78	· · · · · · · · · · · · · · · · · · ·	76	25.4	<b>1</b>	20.6	
Age-adjusted Death Rate per 100,000 Population   Representation   Repres		70	25.4	•	20.0	
Age-adjusted Death Rate per 100,000 Population   80	Melanoma of the Skin Deaths, 2005–2010	70	**			
Age-adjusted Death Rate per 100,000 Men   80   11.9   24.3	(Age-adjusted Death Rate per 100,000 Population)	/0				
Age-adjusted Death Rate per 100,000 Men   Seven or More Days of Poor Mental Health in the Past 30 Days, 2011   81   13.2%   15.8%	Prostate Cancer Deaths, 2006–2010					
Age-adjusted Percentage of Adults   S1   S3.2%   S13.8%   S13.8%	(Age-adjusted Death Rate per 100,000 Men)	80	11.9	-	24.3	
Age-adjusted Percentage of Adults   S1   S3.2%   S13.8%   S13.8%	Seven or More Days of Poor Mental Health in the Past 30 Days, 2011	-	40.00/	<u> </u>	45.00/	
Fall Hospitalizations, 2010 (Age-adjusted Rate per 10,000 Population)  Motor Vehicle Traffic Crash Deaths, 2008−2010 (Age-adjusted Death Rate per 100,000 Population)  Poisoning, 2006−2010 and U.S. 2006−2009 (Age-adjusted Death Rate per 100,000 Population)  Suicide, 2006−2010 and U.S. 2006−2009 (Age-adjusted Death Rate per 100,000 Population)  Suicide, 2006−2010 and U.S. 2006−2009 (Age-adjusted Death Rate per 100,000 Population)  COMMUNICABLE DISEASE  Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months (Percentage of Adults Aged 65+)  Adults Ever Receiving Pneumococcal Vaccination, 2011 (Percentage of Adults Aged 65+)  Pertussis Cases, 2005−2011 (Reported Cases per 100,000 Population)  Chlamydia, 2010 (Cases per 100,000 Population)  Gonorrhea, 2010		81	13.2%	-	15.8%	
Age-adjusted Rate per 10,000 Population   84   22.6   22.4	INJURY	-			•	
Age-adjusted Rate per 10,000 Population   84   22.6   22.4	•	0.4	22.6	<u> </u>	22.4	
Age-adjusted Death Rate per 100,000 Population   S5   19.6   9.2		84	22.6	-	22.4	
Poisoning, 2006–2010 and U.S. 2006–2009 (Age-adjusted Death Rate per 100,000 Population)  Suicide, 2006–2010 and U.S. 2006–2009 (Age-adjusted Death Rate per 100,000 Population)  COMMUNICABLE DISEASE  Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months (Percentage of Adults Aged 65+)  Adults Ever Receiving Pneumococcal Vaccination, 2011 (Percentage of Adults Aged 65+)  Pertussis Cases, 2005–2011 (Reported Cases per 100,000 Population)  Chlamydia, 2010 (Cases per 100,000 Population)  Pool	Motor Vehicle Traffic Crash Deaths, 2008–2010	OE.	10.6		0.2	
Adults   Success   Community   Community		05	19.6	1	9.2	
Age-adjusted Death Rate per 100,000 Population)   Suicide, 2006–2010 and U.S. 2006–2009   (Age-adjusted Death Rate per 100,000 Population)   Suicide, 2006–2010 and U.S. 2006–2009   Segment 100,000 Population)   Suicide, 2006–2010   Segment 100,000 Population)   Suicide, 2006–2010   Segment 100,000 Population   Segment 100,000 Popul		87	17.9	<b>1</b>	18.8	13.1
(Age-adjusted Death Rate per 100,000 Population)       89       10.6       ↓       15.8       11.4         COMMUNICABLE DISEASE         Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months (Percentage of Adults Aged 65+)       92       59.0%       ↓       56.9%          Adults Ever Receiving Pneumococcal Vaccination, 2011 (Percentage of Adults Aged 65+)       93       78.0%       ↓       70.4%       70.0%         Pertussis Cases, 2005−2011 (Reported Cases per 100,000 Population)       96       6.3        18.0          Chlamydia, 2010 (Cases per 100,000 Population)       98       121.7        234.9          Gonorrhea, 2010       100       0.0        10.9		<u> </u>	17.9	~	10.0	15.1
COMMUNICABLE DISEASE		89	10.6	<b>1</b>	15.8	11.4
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months (Percentage of Adults Aged 65+)       92       59.0%       ↓       56.9%          Adults Ever Receiving Pneumococcal Vaccination, 2011 (Percentage of Adults Aged 65+)       93       78.0%       ↓       70.4%       70.0%         Pertussis Cases, 2005−2011 (Reported Cases per 100,000 Population)       96       6.3        18.0          Chlamydia, 2010 (Cases per 100,000 Population)       98       121.7        234.9          Gonorrhea, 2010       100       0.0        10.9						
(Percentage of Adults Aged 65+)       92       59.0%        56.9%          Adults Ever Receiving Pneumococcal Vaccination, 2011 (Percentage of Adults Aged 65+)       93       78.0%       +       70.4%       70.0%         Pertussis Cases, 2005–2011 (Reported Cases per 100,000 Population)       96       6.3        18.0          Chlamydia, 2010 (Cases per 100,000 Population)       98       121.7        234.9          Gonorrhea, 2010       100       0.0        10.9			<u> </u>		1	
Adults Ever Receiving Pneumococcal Vaccination, 2011       93       78.0%       70.4%       70.0%         (Percentage of Adults Aged 65+)       96       6.3        18.0          (Reported Cases per 100,000 Population)       98       121.7        234.9          Chlamydia, 2010 (Cases per 100,000 Population)       100       0.0        10.9          Gonorrhea, 2010       100       0.0        10.9		92	59.0%	1	56.9%	
(Percentage of Adults Aged 65+)       93       78.0%       70.4%       70.4%       70.0%         Pertussis Cases, 2005–2011 (Reported Cases per 100,000 Population)       96       6.3        18.0          Chlamydia, 2010 (Cases per 100,000 Population)       98       121.7        234.9          Gonorrhea, 2010       100       0.0        10.9				<b>▼</b>		
Pertussis Cases, 2005–2011 (Reported Cases per 100,000 Population)       96       6.3        18.0          Chlamydia, 2010 (Cases per 100,000 Population)       98       121.7        234.9          Gonorrhea, 2010       100       0.0        10.9		93	78.0%	1	70.4%	70.0%
(Reported Cases per 100,000 Population)       96       6.3        18.0          Chlamydia, 2010 (Cases per 100,000 Population)       98       121.7        234.9          Gonorrhea, 2010       100       0.0        10.9			<u> </u>	•		
Chlamydia, 2010 (Cases per 100,000 Population)       98       121.7        234.9          Gonorrhea, 2010       100       0.0        10.9		96	6.3		18.0	
(Cases per 100,000 Population)  Gonorrhea, 2010  100  100  100  100  100			<u> </u>			
Gonorrhea, 2010		98	121.7		234.9	
		100	2.2		40.0	
		100	0.0		10.9	

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	14.4%	•	16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	12.9%	•	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	55.1%	•	57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	73.2%	•	68.7%	67.9%
<b>Asthma-related Emergency Department Visits, 2008–2010</b> (Age-adjusted Rate per 10,000 Population)	113	11.6		23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	68.7%	•	67.0%	66.0%

For information on confidence intervals, see: http://health.utah.gov/opha/IBIShelp/ConfInts.pdf.

- \*\* The estimate has been suppressed because:
- (1) the relative standard error is greater than 50% or can't be determined or
- (2) the observed number of events is very small and not appropriate for publication



Community value is not significantly different from the state value.



is performing BETTER than the state, and the difference IS statistically significant.



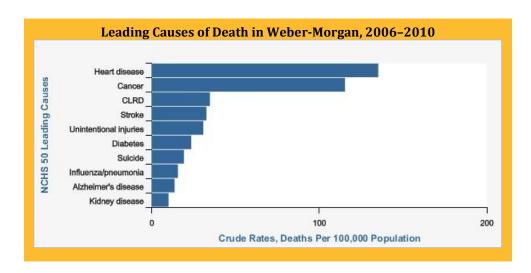
Reason for Concern: The community is performing WORSE than the state, and the difference IS statistically significant.

-- Either the comparison value or confidence interval data are not available.

**n/a** Not Applicable: This indicator has no target direction.

The community value is considered statistically significantly different from the state value if the state value is outside the range of the community's 95% confidence interval. If the community's data or 95% confidence interval information is not available, "--" will be displayed.





Weber-Morgan Indicator Data	Page	Community Data		Comparis	on Values
Weber Morgan mateator Data	1 age	Count/Rate	Compare	Utah	U.S.
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT					
Birth Rate, 2010	2	17.5	n/a	18.3	13.5
(Number of Births per 1,000 Residents)		17.5	II/a	10.5	13.3
Life Expectancy at Birth, 2006–2010 (U.S. 2009)	3	79.1		80.4	78.5
(Age in Years)		, , , , ,	1	•	7 0.0
Age Distribution 2010	4	10.1%	n/a	9.0%	13.1%
(Percentage of Persons Aged 65+)					
Families With Children Under 18 That Were Headed by a Single Female	_	C F0/	/	E E0/	7.20/
(No Husband Present), 2010	5	6.5%	n/a	5.5%	7.2%
(Percentage of All Households)  Educational Attainment, 2006–2010 ACS 5-year estimate					
(Percentage of Utahns 25+ With Bachelor's Degree)	6	22.7%		29.4%	28.0%
Median Annual Household Income, 2010					
(Dollars)	7	\$54,216		\$54,740	\$50,046
Persons Living in Poverty, 2006–2010			_		
(Percentage of Persons)	8	11.1%	1	10.8%	13.8%
Child Poverty, 2006–2010		44-04	143	40.00/	40.00/
(Percentage of Children)	9	14.7%	4	12.3%	19.2%
Utah White Population, 2010	10	05.70/	/-	06.10/	72.4%
(Percentage of White Persons)	10	85.7%	n/a	86.1%	72.4%
ENVIRONMENTAL DETERMINANTS					
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011	13	6.0		2.0	
(Reported Cases per 100,000 population)	13	6.9		3.8	-
Reported Salmonella Infections, 2005–2011	15	9.8		11.3	
(Reported cases per 100,000 population)	15	9.8		11.5	
HEALTHY BEGINNINGS					
Prenatal Care in the First Trimester of Pregnancy, 2009–2010	26	76.8%		72.3%	
(Percentage of Mothers)	20	70.8%		72.3%	
Infant Mortality, 2006–2010 (U.S. 2006–2009)	27	5.2	<b>1</b>	5.0	6.6
(Deaths per 1,000 Live Births)	2/	5.2	*	5.0	0.0
Low Birth Weight, 2008–2010	30	7.7%	4	6.9%	8.2%
(Percentage of Live Born Infants)	30	7.770	1	0.5 /0	0.2 /0
Birth Rate for Females Aged 15–19, 2008–2010 (Utah, 2010; U.S., 2009)	32	45.6		27.6	39.1
(Age-adjusted Percentage of Adults Aged 18+)		15.5	,		33.1
HEALTH BEHAVIORS AND RISK FACTORS					
Current Cigarette Smoking, Adults, 2009–2011	39	14.2%		11.3%	
(Age-adjusted Percentage of Adults)		22 /0	1	11.5 /0	
Current Cigarette Smoking, Students Grades 9–12, 2011	41	7.1%		5.2%	
(Percentage of Students)		71270	ı	J.= 70	
Binge Drinking in the Past 30 Days, Adults, 2011	43	11.9%	<b>1</b>	11.2%	
(Age-adjusted Percentage of Adults)			▼		
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011	45	13.3%	<b>1</b>	11.2%	
(Percentage of Students reporting Alcohol Use)			▼		

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011		·			0.01
(Percentage of Students reporting Marijuana Use)	46	8.7%	-	7.0%	
Recommended Physical Activity, Adults, 2011	47	53.6%	<b>1</b>	56.1%	
(Age-adjusted Percentage of Adults)	4/	55.0%	*	30.1%	
Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011	48	49.6%	<b>1</b>	48.9%	
(Percentage of Adolescents)		45.0 70		10.5 70	
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011	50	27.5%		25.1%	
(Age-adjusted Percentage of Adults Aged 18+)					
Percentage of Adolescents Who Were Obese, 2011	52	8.9%	1	7.5%	
(Percentage of Adolescents)  Doctor-diagnosed High Blood Cholesterol, 2009 and 2011			·	-	
(Age-adjusted Percentage of Adults)	54	25.8%	•	25.4%	
Doctor-diagnosed Hypertension, 2009 and 2011			_		
(Age-adjusted Percentage of Adults)	56	26.6%	*	25.6%	
Recommended Colorectal Cancer Screening, 2010		50.00/	1	66.20/	
(Age-adjusted Percentage of Adults Age 50+)	58	68.0%	-	66.2%	
Mammogram Within the Past Two Years, 2010-2011	60	68.7%	<b>1</b>	65.3%	
(Age-adjusted Percentage of Women Age 40+)	00	08.7 70	*	03.370	
Reported Sun Safety Practice, 2006, 2008, 2010	62	66.0%	<b>1</b>	65.4%	
(Age-adjusted Percentage of Adults 18+)	L	0010 70		03.1.70	
CHRONIC DISEASES AND CONDITIONS	1				
Percentage of Utah Adults With Diabetes, 2009–2011	67	8.9%		7.5%	
(Age-adjusted Percentage of Adults)					
Coronary Heart Disease Deaths, 2006–2010	69	83.7	4	70.1	
(Age-adjusted Death Rate per 100,000 Population)  Stroke Deaths, 2006–2010					
(Age-adjusted Death Rate per 100,000 Population)	70	40.3	4	36.1	
Alzheimer's Disease Deaths, 2008–2010			n		
(Age-adjusted Rate per 100,000 Population)	71	15.4		19.6	
Breast Cancer Deaths, 2008–2010					
(Age-adjusted Death Rate per 100,000 Women)	72	17.8	1	20.2	
Colorectal Cancer Deaths, 2007–2010			n/B		
(Age-adjusted Death Rate per 100,000 Population)	74	14.7	4	11.6	
Lung Cancer Deaths, 2006–2010			D/TE		
(Age-adjusted Death Rate per 100,000 Population)	76	24.9	-	20.6	
Melanoma of the Skin Deaths, 2005–2010					
(Age-adjusted Death Rate per 100,000 Population)	78	4.0			
Prostate Cancer Deaths, 2006–2010					
(Age-adjusted Death Rate per 100,000 Men)	80	23.5	1	24.3	
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011					
(Age-adjusted Percentage of Adults)	81	17.2%	1	15.8%	
INJURY					
Fall Hospitalizations, 2010			n		
(Age-adjusted Rate per 10,000 Population)	84	18.9		22.4	
Motor Vehicle Traffic Crash Deaths, 2008–2010			<u> </u>		
(Age-adjusted Death Rate per 100,000 Population)	85	9.2	•	9.2	
Poisoning, 2006–2010 and U.S. 2006–2009	87	22.4	4	18.8	13.1
(Age-adjusted Death Rate per 100,000 Population)	0/	22.4	~	10.0	13.1
Suicide, 2006–2010 and U.S. 2006–2009	89	20.5	4	15.8	11.4
(Age-adjusted Death Rate per 100,000 Population)	0,5	20.5	1	15.0	11.7
COMMUNICABLE DISEASE					
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months	92	60.3%	<b>1</b>	56.9%	
(Percentage of Adults Aged 65+)			•		
Adults Ever Receiving Pneumococcal Vaccination, 2011 (Percentage of Adults Aged 65+)	93	72.4%	1	70.4%	70.0%
Pertussis Cases, 2005–2011			*		
(Reported Cases per 100,000 Population)	96	16.3		18.0	
Chlamydia, 2010		_			
(Cases per 100,000 Population)	98	282.3		234.9	
Gonorrhea, 2010	100	0.1		10.0	
(Cases per 100,000 Population)	100	9.1		10.9	

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	15.6%	•	16.1%	
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	12.1%	•	13.3%	
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	60.9%		57.2%	
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	68.8%	•	68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	27.1	-	23.6	
At Least Two Hemoglobin AIC Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	72.0%	•	67.0%	66.0%

For information on confidence intervals, see: http://health.utah.gov/opha/IBIShelp/ConfInts.pdf.

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- (2) the observed number of events is very small and not appropriate for publication



Community value is not significantly different from the state value.



 $\stackrel{\longleftarrow}{=}$  Excellent: The community is performing BETTER than the state, and the difference IS statistically significant.



Reason for Concern: The community is performing WORSE than the state, and the difference IS statistically significant.

-- Either the comparison value or confidence interval data are not available.

**n/a** Not Applicable: This indicator has no target direction.

The community value is considered statistically significantly different from the state value if the state value is outside the range of the community's 95% confidence interval. If the community's data or 95% confidence interval information is not available, "--" will be displayed.

# **Appendix B: Data Sources**

#### **Data Sources**

Be aware that many of the indicators in this report utilize Behavioral Risk Factor Surveillance System (BRFSS) data. The BRFSS underwent a major methodology change over the last few years. For 2011, the BRFSS data include cell phones and use a new weighting methodology exclusively. In Utah, for years 2009 and 2010, there are 'developmental' BRFSS datasets with the new methodology. The trend graphs of BRFSS utilize the old methodology. The LHD views use the new methodology, usually with just 2011 data, but some LHD data include combined data for years 2009–2011. We have noted this in each of the indicators. The change in methodology affected some measures (insurance coverage and adult cigarette smoking) more than others (adult obesity).

## Data Sources (in alphabetical order as cited in the report)

CDC: U.S. Centers for Disease Control and Prevention. http://www.cdc.gov/

**CDC, National Outbreak Reporting System**: CDC collects reports of foodborne outbreaks due to enteric bacterial, viral, parasitic, and chemical agents. State, local, and territorial public health agencies report these outbreaks to Foodborne Disease Outbreak Surveillance System through the National Outbreak Reporting System (NORS). <a href="http://www.cdc.gov/outbreaknet/nors/">http://www.cdc.gov/outbreaknet/nors/</a>

**Community Health Rankings**: Published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, the *Rankings* help counties understand what influences how healthy residents are and how long they will live. Counties are ranked within states only. <a href="http://www.countyhealthrankings.org/about-project">http://www.countyhealthrankings.org/about-project</a>

**National BRFSS (New Methodology)**: The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, ongoing telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984. Currently, data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. U.S. percentage estimates in this report include the states and D.C. only, and are the averages. Starting in 2011, the U.S. averages are only available using the new BRFSS methodology. <a href="http://www.cdc.gov/brfss/">http://www.cdc.gov/brfss/</a>

**National BRFSS (Old Methodology):** The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, ongoing telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984. Currently, data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. Behavioral Risk Factor Surveillance System U.S. percentage estimates in this report include the states and D.C. only, and are the averages. Through 2010, the U.S. averages are only available using the old BRFSS methodology. <a href="http://www.cdc.gov/brfss/">http://www.cdc.gov/brfss/</a>

**National Center for Health Statistics:** The mission of the National Center for Health Statistics (NCHS) is to provide statistical information that will guide actions and policies to improve the health of the American people. There are numerable data resources available at NCHS. <a href="http://www.cdc.gov/nchs/index.htm">http://www.cdc.gov/nchs/index.htm</a>

**National Immunization Survey:** The National Immunization Survey (NIS) is sponsored by the National Center for Immunizations and Respiratory Diseases (NCIRD) and conducted jointly by NCIRD and the National Center for Health Statistics (NCHS). The NIS is a list-assisted random-digit-dialing telephone survey followed by a mailed survey to children's immunization providers that began data collection in April 1994 to monitor childhood immunization coverage. <a href="http://www.cdc.gov/nchs/nis.htm">http://www.cdc.gov/nchs/nis.htm</a>

**National YRBS:** The Youth Risk Behavior Surveillance System (YRBSS) monitors six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and adults. YRBSS includes a national school-based survey conducted by CDC and state, territorial, tribal, and local surveys, and known as the Youth Risk Behavior Survey or YRBS. <a href="http://www.cdc.gov/HealthyYouth/yrbs/index.htm">http://www.cdc.gov/HealthyYouth/yrbs/index.htm</a>

**Prevention Needs Assessment Survey:** The Utah Prevention Needs Assessment Survey is conducted as part of the Student Health and Risk Prevention (SHARP) Statewide Survey. The survey was last administered to students in grades 6, 8, 10, and 12 in 38 school districts across Utah. The survey was designed to assess adolescent substance use, anti-social behavior, and the risk and protective factors that predict these adolescent problem behaviors. http://www.dsamh.utah.gov/sharp.htm

- U.S. Census Bureau, 2000 Census: http://www.census.gov/main/www/cen2000.html
- U.S. Census Bureau, 2010 Census: http://2010.census.gov/2010census/
- **U.S. Census Bureau, ACS:** The American Community Survey (ACS) is an ongoing statistical survey that samples a small percentage of the population every year -- giving communities the information they need to plan investments and services. The American Community Survey (ACS) is a relatively new survey conducted by the U.S. Census Bureau. It uses a series of monthly samples to produce annually updated data for the same small areas (census tracts and block groups) formerly surveyed via the decennial census long-form. http://www.census.gov/acs/www/
- **U.S. Census Bureau, CPS:** The Current Population Survey (CPS), sponsored jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS), is the primary source of labor force statistics for the population of the United States. For this report, the CPS was used to provide historical estimates of median household income, poverty, health insurance coverage. Most recently, the UDOH has moved to using the ACS (see above). <a href="http://www.census.gov/cps/">http://www.census.gov/cps/</a>
- **U.S. Census Bureau, Population Estimates Program:** The Census Bureau's Population Estimates Program (PEP) produces estimates of the population for the United States, its states, counties, cities, and towns. Demographic components of population change (births, deaths, and migration) are produced at the national, state, and county levels of geography. These estimates are used as survey controls and as denominators for vital rates. <a href="http://www.census.gov/popest/">http://www.census.gov/popest/</a>
- **U.S. Census Bureau, SAIPE:** The U.S. Census Bureau, with support from other Federal agencies, created the Small Area Income and Poverty Estimates (SAIPE) program to provide more current estimates of selected income and poverty statistics than those from the most recent decennial census. The main objective of this program is to provide updated estimates of income and poverty statistics for the administration of federal programs and the allocation of federal funds to local jurisdictions. These estimates combine data from administrative records, intercensal population estimates, and the decennial census with direct estimates from the American Community Survey to provide consistent and reliable single-year estimates. These model-based single-year estimates are more reflective of current conditions than multi-year survey estimates. http://www.census.gov//did/www/saipe/
- **U.S. EPA, Air Quality System:** The Air Quality System (AQS) is EPA's repository of ambient air quality data. AQS stores data from over 10,000 monitors, 5,000 of which are currently active. As discussed in more detail elsewhere, state, local and tribal agencies collect the data and submit it to AQS on a periodic basis. <a href="http://www.epa.gov/ttn/airs/airsags/">http://www.epa.gov/ttn/airs/airsags/</a>

**Utah BRFSS (New Methodology):** The Utah Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing effort by the Utah Department of Health in conjunction with the U.S. Centers for Disease Control and Prevention (CDC) to assess the prevalence of and trend in health-related behaviors in the non-institutionalized Utah adult population aged 18 years and older. The BRFSS Survey is conducted by the Survey Center in the Office of Public Health Assessment. The Utah BRFSS includes developmental datasets for years 2009 and 2010 that can be analyzed using both the old and the new methodology. Starting

in 2011, the Utah BRFSS dataset can only be analyzed using the new methodology. For trend graphs in this report, only the old methodology was used. For the graphs with data by Utah's Local Health Districts, even if they included 2009 and 2010 data, the rates were calculated using the new methodology. <a href="http://health.utah.gov/opha/OPHA">http://health.utah.gov/opha/OPHA</a> BRFSS.htm

**Utah BRFSS (Old Methodology):** The Utah Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing effort by the Utah Department of Health in conjunction with the U.S. Centers for Disease Control and Prevention (CDC) to assess the prevalence of and trend in health-related behaviors in the non-institutionalized Utah adult population aged 18 years and older. The BRFSS Survey is conducted by the Survey Center in the Office of Public Health Assessment. The Utah BRFSS can be analyzed using the old methodology up through survey year 2010. Starting in 2011, the Utah BRFSS dataset can only be analyzed using the new methodology. <a href="http://health.utah.gov/opha/OPHA\_BRFSS.htm">http://health.utah.gov/opha/OPHA\_BRFSS.htm</a>

**Utah Birth Certificate Database:** The UDOH Office of Vital Records and Statistics (OVRS) administers the statewide system of Vital Records and Statistics by documenting and certifying the facts of births. OVRS participates in the National Vital Statistics Systems and responds to the needs of health programs, health care providers, businesses, researchers, educational institutions, and the Utah public for data and statistical information. <a href="http://health.utah.gov/vitalrecords/">http://health.utah.gov/vitalrecords/</a>

**Utah Death Certificate Database:** The UDOH Office of Vital Records and Statistics (OVRS) administers the statewide system of Vital Records and Statistics by documenting and certifying the facts of deaths. OVRS participates in the National Vital Statistics Systems and responds to the needs of health programs, health care providers, businesses, researchers, educational institutions, and the Utah public for data and statistical information. <a href="http://health.utah.gov/vitalrecords/">http://health.utah.gov/vitalrecords/</a>

**Utah DEQ, Division of Drinking Water, Safe Drinking Water Information System:** The Utah Department of Environmental Quality (DEQ), Division of Drinking Water maintains and manages the drinking water quality data and the State Drinking Water Information System (SDWIS) for Utah. The Safe Drinking Water Information System (SDWIS) contains information about public water systems and their violations of the U. S. Environmental Protection Agency's (EPA) drinking water regulations, as reported to EPA by the states. EPA regulations establish maximum contaminant levels, treatment techniques, and monitoring and reporting requirements to ensure that water systems throughout the country provide safe water to their customers. <a href="http://www.epa.gov/enviro/facts/sdwis/">http://www.epa.gov/enviro/facts/sdwis/</a>

**UDOH, Bureau of Epidemiology:** The Bureau of Epidemiology works to prevent sickness and death from infectious diseases or environmental hazards. The Bureau monitors diseases and works to keep them from spreading. The Bureau is also responsible for watching out for and responding to bioterrorism or an influenza pandemic. http://health.utah.gov/epi/index.html

**UDOH, Bureau of Epidemiology, Environmental Sanitation Program:** The Environmental Sanitation program (ESP) at the Utah Department of Health is responsible to set the sanitation standards for a clean and sanitary environment for food service facilities, public pools, public lodgings as well as other public facilities. <a href="http://health.utah.gov/envsvc/index.html">http://health.utah.gov/envsvc/index.html</a>

**Utah Emergency Department Encounter Database:** Starting in 1996, administrative Rule R426-1-7 (I) mandates all Utah licensed hospitals to report information on emergency department patient encounters to the UDOH Bureau of Emergency Medical Services specifically for the purpose of constructing a statewide Emergency Department Encounter Database. The rule defines the data elements which 43 eligible hospitals are required to submit. <a href="http://health.utah.gov/ems/data/">http://health.utah.gov/ems/data/</a>

**Utah GOPB:** The Utah Governor's Office of Planning and Budget provides leadership for the initiatives of the Governor by providing accurate and timely data, impartial analyses, and objective recommendations. The Demographic and Economic Analysis (DEA) section has historically provided Utah population estimates that are used in the IBIS-PH Query System and in Indicator Reports to provide population denominators for public health rate measures such as death rates. http://www.governor.state.ut.us/dea/popestimates.html

**Utah Inpatient Hospital Discharge Data:** Utah Administrative Rule R428-10 became effective December 1991, and mandated that all Utah licensed hospitals report information on inpatient discharges. Since 1992, the UDOH Office of Health Care Statistics has collected a wealth of information from the 63 Utah hospitals that have submitted data. <a href="http://health.utah.gov/hda/">http://health.utah.gov/hda/</a>

**Utah Safety Belt Observational Survey:** To determine the effectiveness of legislative and preventive efforts to promote safety belt usage in Utah, a survey has been conducted each year since 1986 to measure safety restraint usage rates. http://publicsafety.utah.gov/highwaysafety/documents/2010\_Report.pdf

**Utah YRBS:** The Youth Risk Behavior Surveillance System (YRBSS) monitors six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and adults. YRBSS includes a national school-based survey conducted by CDC and state, territorial, tribal, and local surveys, and known as the Youth Risk Behavior Survey or YRBS. Utah YRBS data are available on IBIS-PH in some of the Indicator Reports, and in the Query System under 'Health Surveys'. It is also on the CDC Website at <a href="http://www.cdc.gov/HealthyYouth/yrbs/index.htm">http://www.cdc.gov/HealthyYouth/yrbs/index.htm</a>

**WISQARS:** The Web-based Injury Statistics Query and Reporting System (WISQARS) is an interactive database system that provides customized reports of injury-related data. It is sponsored by the National Center for Injury Prevention and Control at the U.S. Centers for Disease Control and Prevention. <a href="http://health.utah.gov/vitalrecords/">http://health.utah.gov/vitalrecords/</a>

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