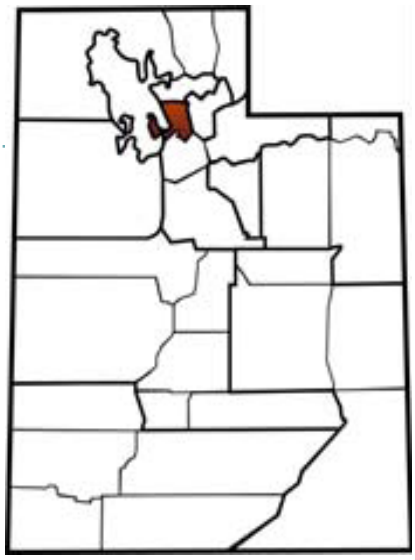
# Davis County Asthma Report

Davis County Health District is a single-county health district located along the Wasatch Front.

This report is intended to provide residents of Davis County with district-specific information on asthma. Additional publications are available on the Utah Department of Health website at http://www.health.utah.gov/asthma/



## Prevalence

Asthma prevalence is one of the foremost indicators used to measure and track the burden of disease among population groups. Since 2001, asthma prevalence has been increasing in Utah, similar to increasing trends nationwide. Lifetime asthma is defined as having ever been diagnosed with asthma by a doctor or other health professional. Current asthma is defined as those who have ever been diagnosed with asthma by a doctor or other health professional and who report that they still have asthma.

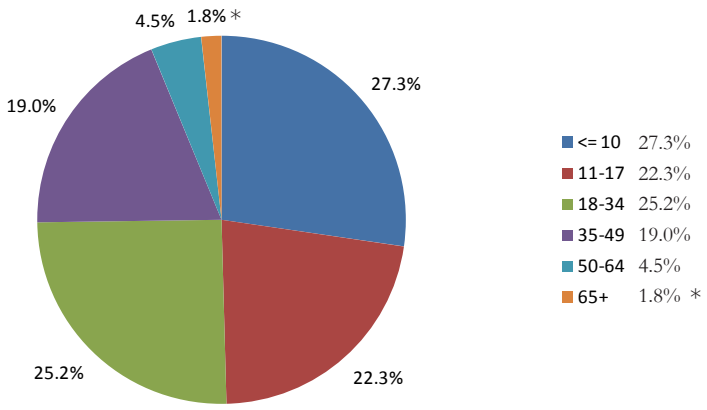
### Table 1. Current Asthma Prevalence, 2007-2009

| | Age Group | Davis County percent (95% CI) | State of Utah percent (95% CI) |
|---|---|---|---|
| **Children** | 0-17 | 6.9 (5.1-9.3) | 7.0 (6.2-7.8) |
| **Adults** | 18-34 | 5.5 (3.4-8.8) | 7.9 (6.9-9.1) |
| | 35-49 | 9.8 (7.3-13.1) | 8.2 (7.3-9.1) |
| | 50-64 | 9.1 (6.3-12.8) | 8.6 (7.7-9.6) |
| | 65+ | 8.8 (5.9-13.0) | 8.3 (7.4-9.4) |

Data source: Behavioral Risk Factor Surveillance System 2007-2009. Crude prevalence.

## Age at Diagnosis

### Figure 1. Age at First Diagnosis Among Adults with Lifetime Asthma, Davis County, 2004-2009



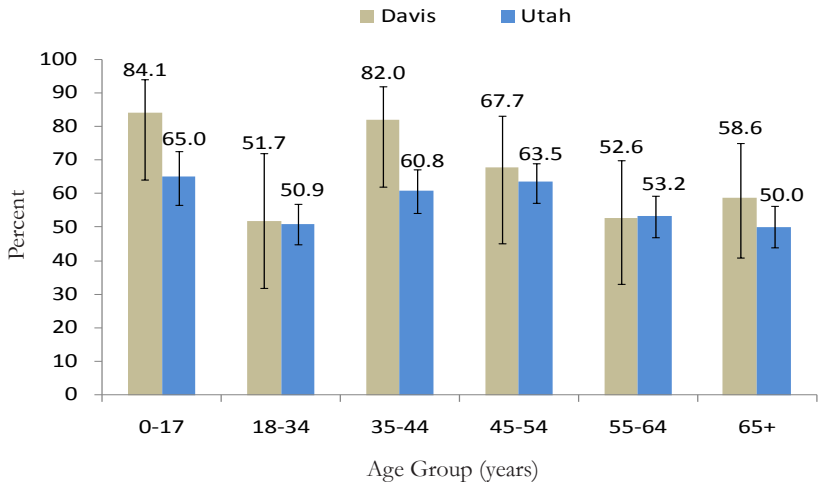

Data source: Behavioral Risk Factor Surveillance System 2004-2009. Crude prevalence.
* Estimate has a coefficient of variation greater than 30% and does not meet Utah Department of Health standards for reliability.

About half (49.6%) of adults who have ever been diagnosed with asthma were diagnosed by age 17.

## Asthma Management and Quality of Life

Frequency and severity of asthma symptoms along with quality of life are indicators of asthma self-management.

### Figure 2. Asthma Attack Among Adults and Children with Current Asthma During Past 12 months, Davis County, 2004-2009

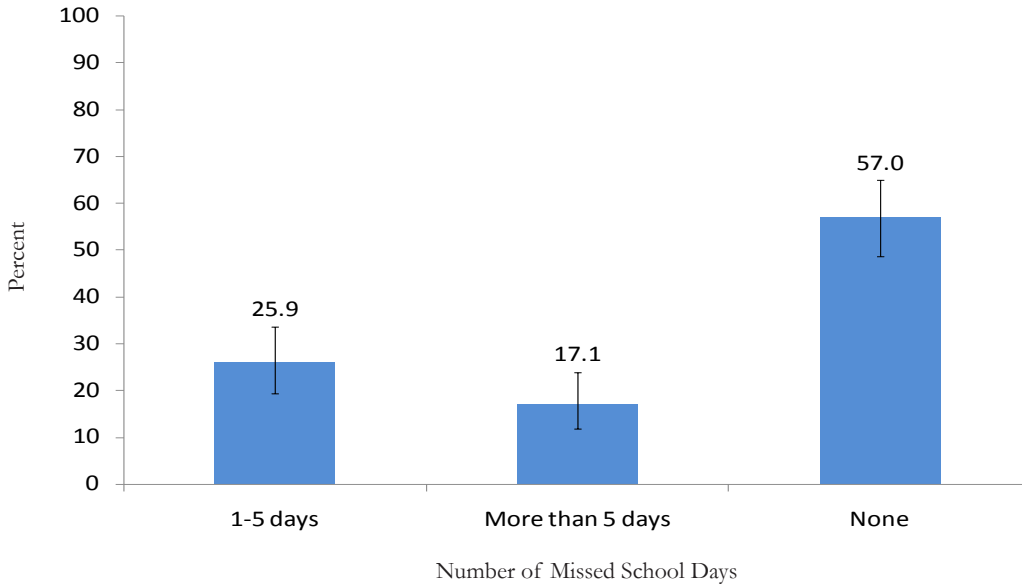



Data source: Behavioral Risk Factor Surveillance System Call-back Survey 2004-2009. Crude prevalence.

In each age group, the number of people who had experienced an asthma attack in the past 12 months was similar for Davis County Health Department and the state of Utah.

## Missed School Days

### Figure 3. Number of School Days Missed Due to Asthma During the Past 12 Months, School-aged Children with Current Asthma, Utah, 2007-2009



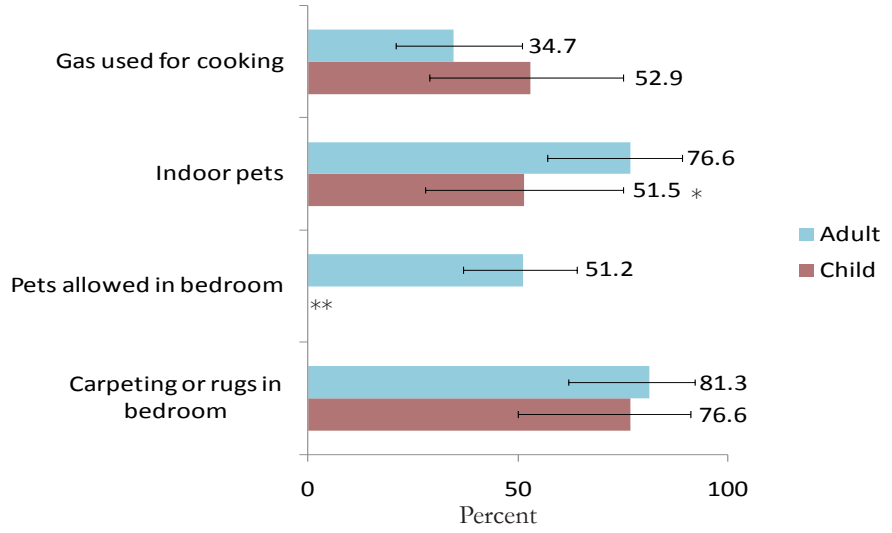

Data source: Behavioral Risk Factor Surveillance System, Call-back Survey 2007-2009. Crude prevalence.

Nationally, asthma is a leading cause of school absenteeism.[1] Davis County Heath Department data could not be reported in Figure 3 due to the unreliability of available data. In Utah, among parents of school-aged children with asthma, 25.9% reported that their child missed 1-5 days of school because of asthma during the past 12 months and 17.1% said their child missed more than five days of school due to asthma.

## Indoor Environmental Exposures

Because people generally spend the majority of their time indoors, environmental factors in the home can play a significant role in triggering asthma attacks. Environmental modifications can be made in the home to reduce exposure to these triggers and reduce asthma symptoms.

Figure 4. Environmental Triggers in the Homes of Adults and Children with Current Asthma, Davis County, 2007-2009




Data source: Behavioral Risk Factor Surveillance System, Call-back Survey 2007-2009. Crude prevalence.
* Estimate has a coefficient of variation greater than 30% and does not meet Utah Department of Health standards for reliability.
** Estimate has a coefficient of variation >50% and is not considered appropriate for publication.

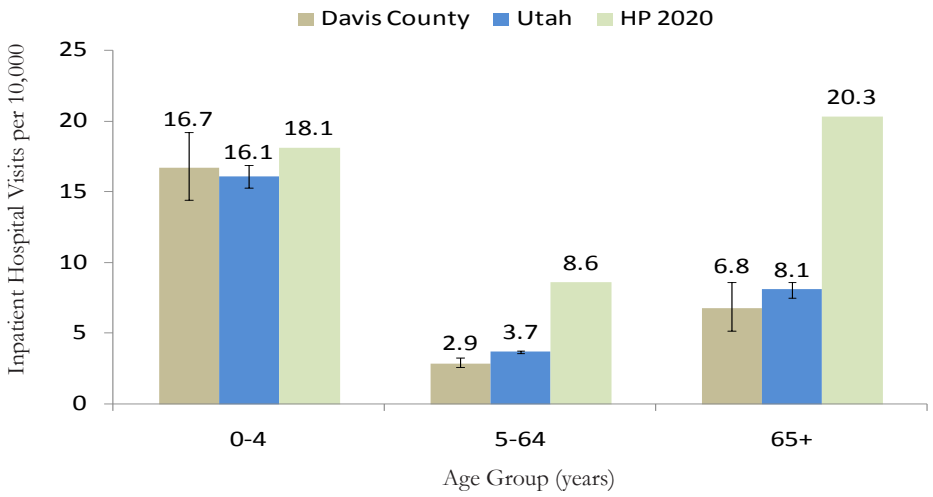
Having carpeting in the bedroom (76.6%) and gas used for cooking (52.9%) were the two most prevalent environmental exposures for children. Similarly, having carpeting in the bedroom (81.3%) was the most common for adults, but pets allowed inside the house (76.6%) was the second most prevalent environmental exposure for adults.

## Health Care Utilization

Emergency department (ED) and hospitalization data are taken from the Utah Inpatient Hospital Discharge Database and the Utah Emergency Department Encounter Database. Emergency Department encounters include all treat-and-release and all inpatient admissions through the ED. In several of these figures, Healthy People 2020 Objectives are shown along with Davis County and state data. Healthy People 2020 (HP2020) is a comprehensive set of disease prevention and health promotion objectives for the nation.

## Hospitalizations

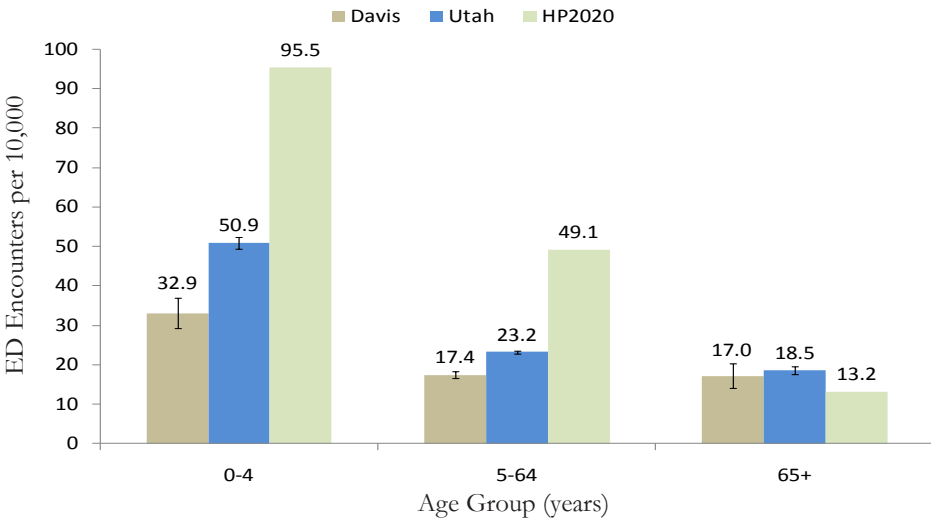
### Figure 5. Asthma Hospitalizations by Age Group, 2006-2009




Source: Utah Hospital Discharge Database, 2006-2009. Crude rates.
Note: Primary diagnosis code ICD 493 was used to identify hospitalizations due to asthma.

## Emergency Department Visits

### Figure 6. All Asthma-related Emergency Department Visits, 2007-2009



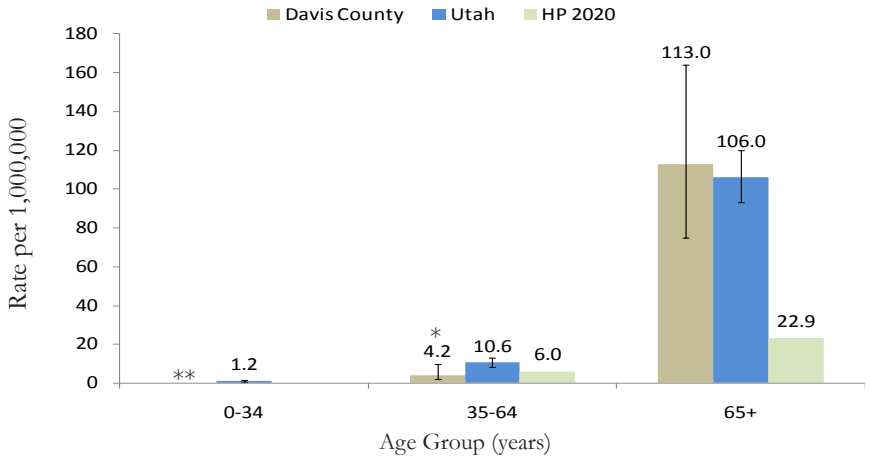

Source: Utah Emergency Department Encounter Database, 2007-2009. Crude rates.
Note: Primary diagnosis code ICD 493 was used to identify emergency department visits due to asthma.

Davis County had a significantly lower ED encounter rate than the state rate and HP2020 Objective for the 0-4 and 5-64 age groups.

## Asthma Mortality

Asthma-related deaths are rare and most commonly occur among the elderly population. The 65-and-older age group data should be interpreted with caution because similarities exist between chronic obstructive pulmonary disease and asthma, which can lead to misdiagnoses. Also, due to the small number of asthma deaths among some age groups, data were not reportable for the youngest age groups.

### Figure 7. Asthma Mortality Rate by Age, 1999-2009




Source: Utah Death Certificate Database, 1999-2009 combined. Crude rates.
Note: ICD-10 codes J45 and J46 were used to identify asthma as the primary cause of death.
* Estimate has a coefficient of variation greater than 30% and does not meet Utah Department of Health standards for reliability.
** Estimate has a coefficient of variation >50% and is not considered appropriate for publication.

For the 0-34 age group, HP2020 is currently collecting data to set a mortality rate objective in the future. The asthma mortality rates for Davis County are similar to state rates for all age groups shown.

## References

1. United States Environmental Protection Agency. IAQ tools for schools. Available at http://www.epa.gov/iaq/schools/pdfs/publications/managing_asthma.pdf

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