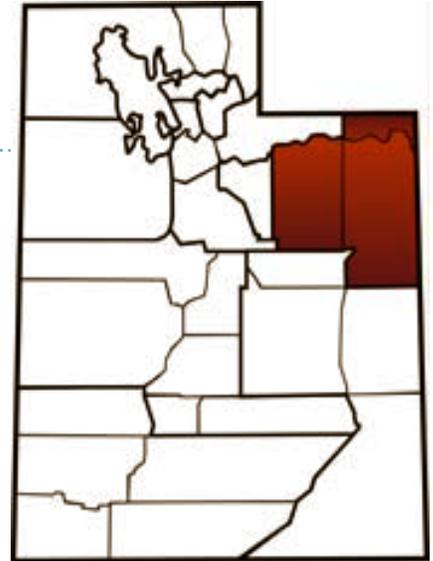


# TriCounty District Asthma Report

TriCounty Health District is comprised of three counties: Daggett, Duchesne, and Uintah. TriCounty has fewer than 50,000 residents. The district health department is headquartered in Vernal.

This report is intended to provide residents of TriCounty Health District 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.

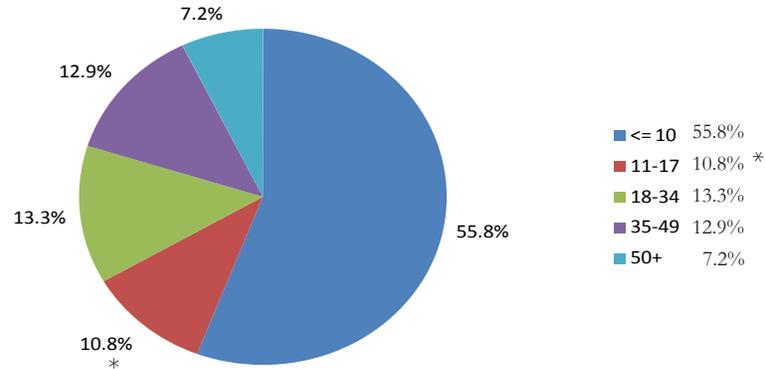
Table 1. Current Asthma Prevalence 2007-2009

	Age Group	TriCounty LHD percent (95% CI)	State of Utah percent (95% CI)
<b>Children</b>	0-17	6.2 (3.9-9.8)	7.2 (6.5-8.0)
<b>Adults</b>	18-34	10.4 (6.5-16.2)	7.9 (6.9-9.1)
	35-49	7.7 (4.8-12.0)	8.2 (7.3-9.1)
	50-64	8.4 (5.0-14.0)	8.6 (7.7-9.6)
	65+	7.9 (4.3-13.9)	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, TriCounty LHD, 2004-2009



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

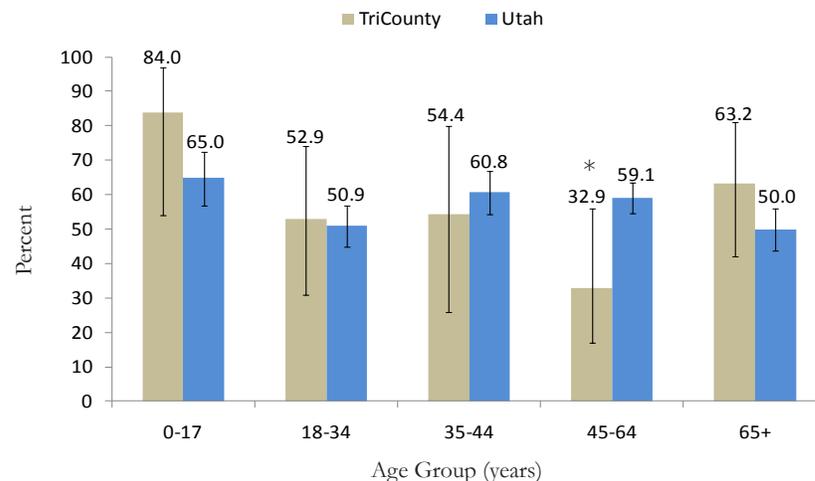
\* Estimate has a coefficient of variation greater than 30% and does not meet Utah Department of Health standards for reliability.

More than half (56%) of adults who have ever been diagnosed with asthma were diagnosed by age 10 and two-thirds by age 17.

## Asthma Management and Quality of Life

Frequency and severity of asthma symptoms and quality of life are indicators of one's management of asthma.

Figure 2. Asthma Attack Among Adults and Children with Current Asthma During Past 12 months, TriCounty LHD, 2004-2009



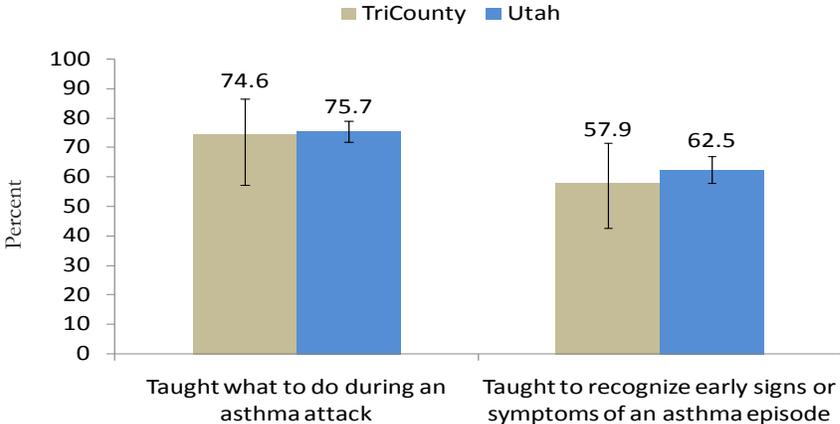
Data source: Ages 18 and older: Behavioral Risk Factor Surveillance System, 2004-2006 Adult Asthma History Module and Call-back Survey 2007-2009. Ages 0-17: Call-back Survey 2007-2009. Crude prevalence.

\* Estimate has a coefficient of variation greater than 30% and does not meet Utah Department of Health standards for reliability.

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

# Asthma Report

Figure 3. Asthma Self-management Knowledge, Adults with Current Asthma, TriCounty LHD, 2007-2009

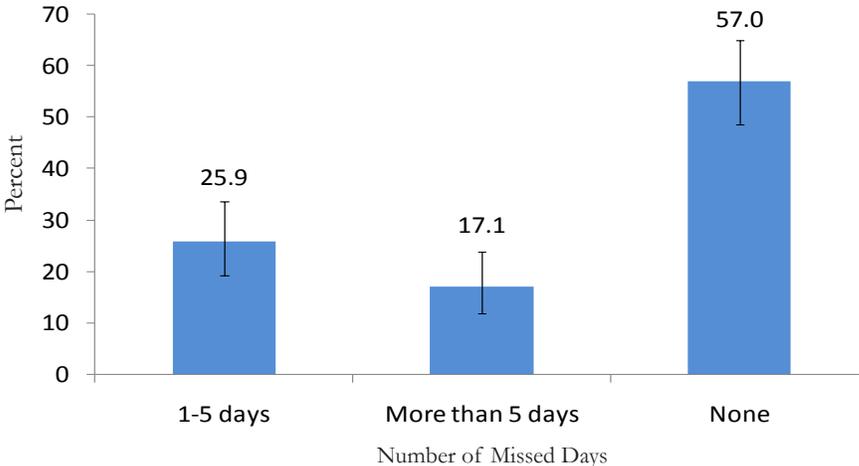


Data source: Behavioral Risk Factor Surveillance System, Call-back Survey 2007-2009. Crude prevalence.

About 75% of adults in TriCounty reported that a health professional had ever taught them what to do during an asthma attack.

## Missed School Days

Figure 4. Number of School Days Missed Due to Asthma During the Past 12 Months, Utah, School-aged Children with Current Asthma, Utah, 2007-2009



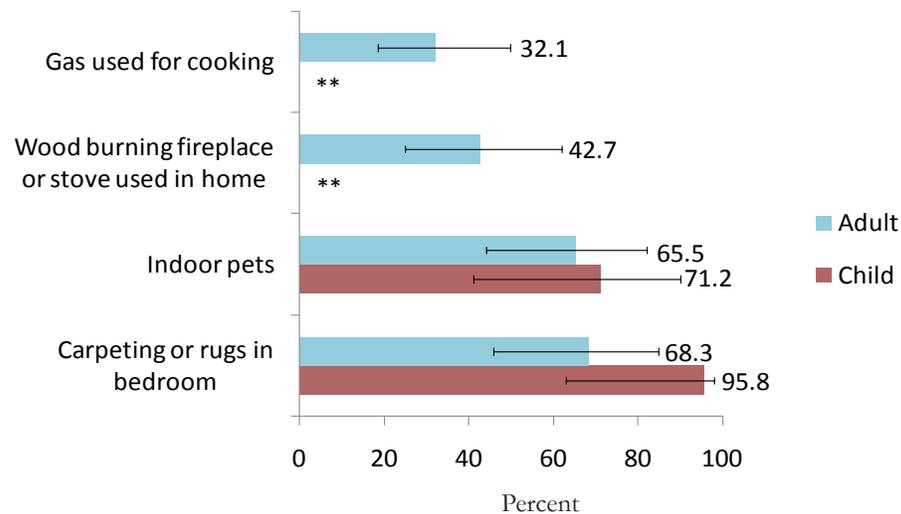
Data source: Behavioral Risk Factor Surveillance System, Call-back Survey 2007-2009. Crude prevalence.

Nationally, asthma is a leading cause of school absenteeism.<sup>1</sup> TriCounty LHD 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 5. Environmental Triggers in the Homes of Adults and Children with Current Asthma, TriCounty LHD, 2007-2009



Data source: Behavioral Risk Factor Surveillance System, Call-back Survey 2007-2009. Crude prevalence.  
 \*\* Estimate has a coefficient of variation >50% and is not considered appropriate for publication.

Having carpeting or rugs in the bedroom and pets in the home were the two most prevalent environmental exposures for adults and children.

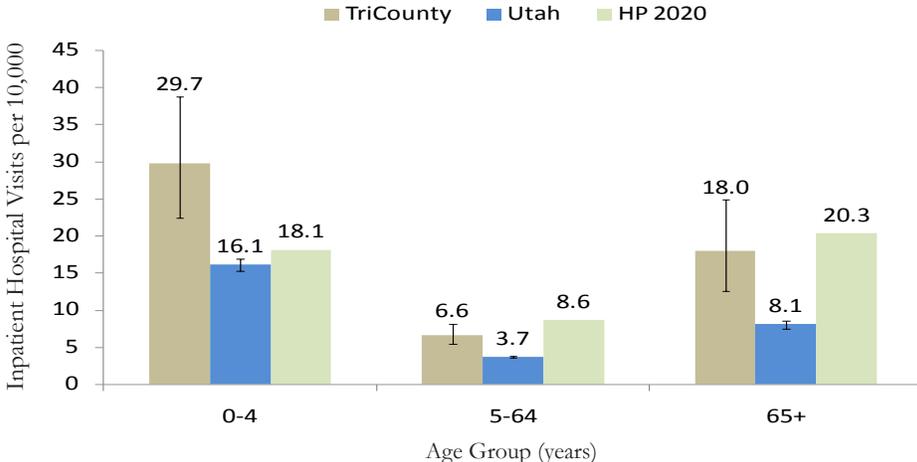
## Health Care Utilization

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 TriCounty LHD and state data. Healthy People 2020 (HP2020) is a comprehensive set of disease prevention and health promotion objectives for the nation.

# Asthma Report

## Hospitalizations

Figure 6. Asthma Hospitalizations by Age Group, TriCounty, 2006-2009

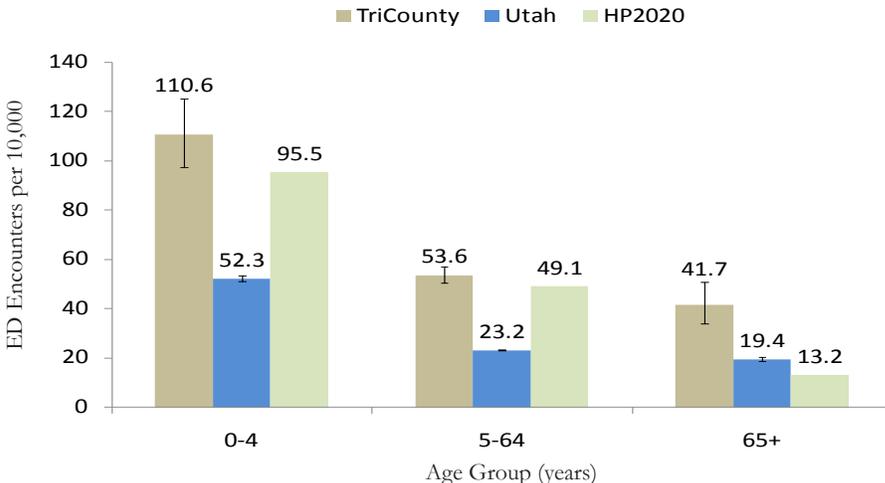


Source: Utah Hospital Discharge Database, 2006-2009. Crude rates.  
Note: Primary diagnosis code ICD 493 was used to identify hospitalizations due to asthma.

The rate of hospitalizations for asthma is significantly higher in TriCounty for all age groups than rates for the state of Utah.

## Emergency Department Visits

Figure 7. All Asthma-related Emergency Department Visits, TriCounty, 2005-2009



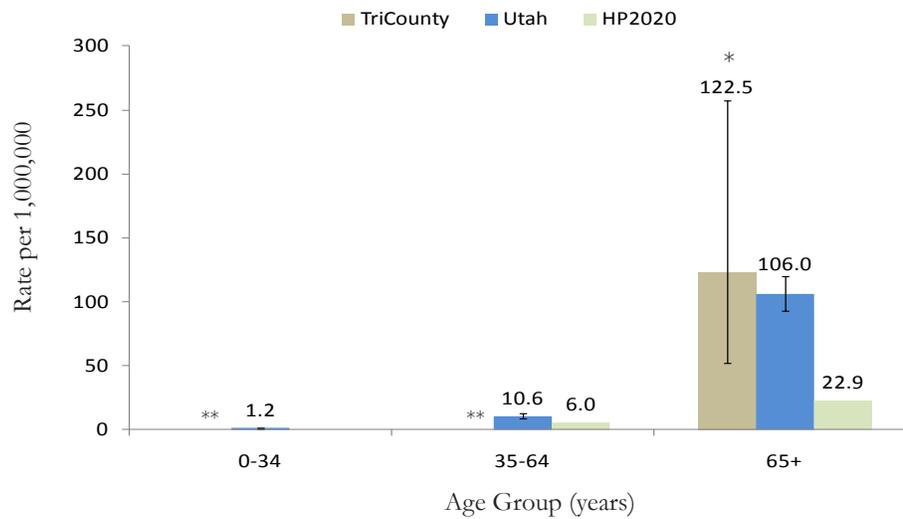
Source: Utah Emergency Department Encounter Database, 2005-2009. Crude rates.  
Note: Primary diagnosis code ICD 493 was used to identify emergency department visits due to asthma. Data include only those who were treated and released but not admitted as inpatients.

The rate of ED visits in TriCounty is slightly more than double the state rate for all age groups.

## Asthma Mortality

Asthma-related deaths are rare and most commonly occur among the elderly population. The sixty-five and older age group 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 numbers of asthma deaths among some age groups, data were not reportable for some of the younger age groups.

Figure 8. 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. In the first two age groups, the data are not reportable because there were fewer than five deaths related to asthma in those age groups in TriCounty LHD over the last 10 years.

## References

1. United States Environmental Protection Agency. IAQ tools for schools. Available at [http://www.epa.gov/iaq/schools/pdfs/publications/managing\\_asthma.pdf](http://www.epa.gov/iaq/schools/pdfs/publications/managing_asthma.pdf)
2. U.S. Department of Health and Human Services. HP2020 Objectives.



### Utah Asthma Task Force

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