Colorado Asthma Program Quarterly Data Brief

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http://www.cdphe.state. co.us/ps/asthma/ asthmahom.asp

Hospitalizations for Asthma



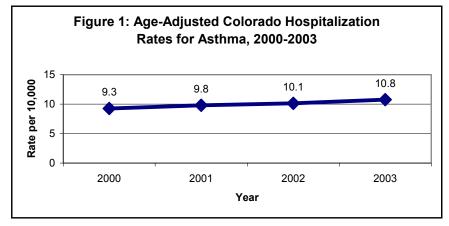
Colorado Department of Public Health and Environment

Asthma Hospitalizations Can Be Prevented

Asthma is a chronic respiratory disease characterized by episodes of swelling of the bronchial tubes (inflammation) and tightening of the muscles around the airways. Asthma is one of the most common chronic diseases in Colorado, affecting over 280,000 adults in Colorado in 2003.¹ Asthma can range from a relatively mild disease to quite severe enough to cause death. Although very little is known about how to prevent asthma, effective asthma management by patients and their health care providers can minimize or prevent morbidity and mortality associated with the disease. Asthma hospitalizations are considered preventable because patients with well-managed disease should be able to both stay out of the hospital and lead active lives.

Hospital Discharge Data

Hospital discharge data collected by the Colorado Health and Hospital Association was utilized for this report. This analysis includes all inpatient (overnight) hospital stays in Colorado from 2000-2003 where asthma was listed as the primary discharge diagnosis coded to the International Classification of Diseases (ICD-9-CM, codes 493.XX.) The data reflects the number of inpatient hospitalizations for asthma, as opposed to the number of individuals hospitalized. Rates have been age-adjusted to the 2000 standard U.S. population using the direct method applied to the following age groupings: \leq 4, 5-14, 15-34, 35-64, \geq 65. Rates are calculated per 10,000 population.

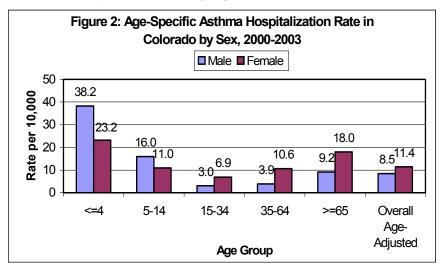


Source: Colorado Health and Hospital Association

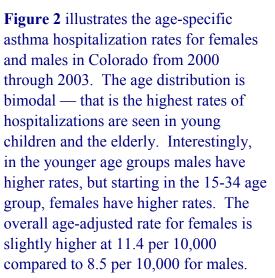
References: ¹Behavioral Risk Factor Surveillance System, 2003.

Hospitalization Trends

Figure 1 shows the age-adjusted rate of hospital discharge for asthma as the principal diagnosis from 2000 through 2003. There were 3921 asthma hospitalizations in 2000, 4256 in 2001, 4504 in 2002, and 4821 in 2003. The rate remained relatively stable through this period, with a very subtle climb from 9.3 hospitalizations per 10,000 in 2000 to 10.8 per 10,000 in 2003.



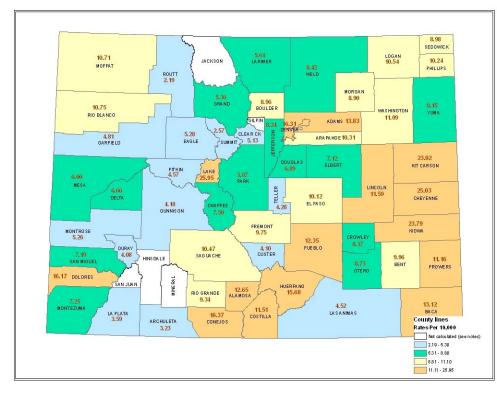
Asthma Hospitalizations by Age and Sex



Source: Colorado Health and Hospital Association

Asthma Hospitalizations by County

Map 1: Age-Adjusted Asthma Hospitalization Rates of Colorado Counties, 2000-2003



Notes:

1) Rates not calculated where county population less than 5000 or fewer than 5 occurrences because estimates are statistically unstable and to protect confidentiality.

2) Where county of residence is unknown, zip code and USPS local postal office are used to assign a county.

Map 1 presents countyspecific annual ageadjusted hospitalization rates for the period 2000-2003. The rate is calculated by the county in which the individual lived, rather than the county in which they visited the hospital. The average hospitalization rate for Colorado during this period was 10.6 per 10,000. The county specific rates range from 26.0 per 10,000 in Lake County to a low of 2.2 per 10,000 in Routt County. The highest hospitalization rates appear in the southeast and eastern areas of the state, which tend to be less populated and more agricultural. Additionally, two urban counties, Denver and Adams, had higher rates during this time period compared to the state as a whole