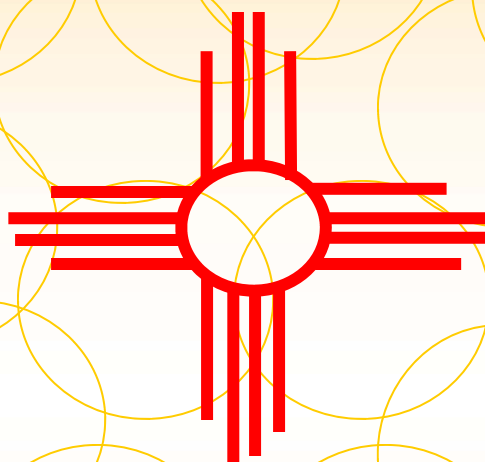


The Burden of Asthma in New Mexico
April 2009



New Mexico Asthma Program
Environmental Health Epidemiology Bureau

NEW MEXICO
DEPARTMENT OF
HEALTH

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New Mexico Hospital Emergency Departments

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Executive Summary

Asthma, a chronic inflammatory disease of the airways that impacts children and adults is one of the major illnesses affecting New Mexicans. While New Mexico's overall asthma rate is similar to the national rate, there are significant regional, racial/ethnic, gender, and age group variations within the state, including a profound regional disparity. In response, the State Asthma Plan outlines five goals: 1) Conduct asthma surveillance; 2) Increase asthma education of health care professionals; 3) Educate patients, families, schools, and communities about asthma; 4) Improve access to and delivery of asthma care, and 5) Mobilize to reduce environmental exposure to asthma triggers. The Asthma Program has initiated a broad set of activities and interventions to implement these goals.

This report provides detailed information about the nature of asthma in New Mexico. Measures of asthma prevalence, management, hospitalization, emergency room visitation, and death are contained in this report.

Key Findings:

Prevalence of Asthma in New Mexico (2007 BRFSS data):

- 13.9% of New Mexico adults have been diagnosed with asthma during their lifetime. 8.7% of adults currently have asthma.
- 7.4% of adult males and 9.9% of adult females currently have asthma.
- Native American current adult asthma prevalence (9.9%) was significantly higher than White current prevalence (5.3%).
- The current child prevalence rate was 8.6%.

Asthma Control Indicators (2006 BRFSS data):

- Hispanics were more likely to visit the emergency room for their asthma (25.1%) compared to Whites (9.4%).
- More than one in five (23.7%) reported experiencing limitations which made it difficult to work or carry out usual activities during the past 12 months.

Executive Summary



School Age Asthma Prevalence (2007 YRSS data):

- 18.8% of middle school students and 24.9% of high school students reported they currently had asthma.

Asthma Hospitalizations (2004-2006 data):

- The 2004-2006 age-adjusted first-listed asthma hospitalization rate was 10.2 per 10,000 standard population.
- The rate in the southeast region (21.0) was more than double the state rate. All other geographic regions had rates ranging from 7.7 to 9.2).
- Among youth under age 15, Lea County had an asthma hospitalization rate (118.2) which was more than five times higher the state rate (21.7).
- Males have the higher rates in the Under 5 and the 5 - 14 age groups, whereas females have the higher rates in all other age groups.

Asthma Emergency Department Visits (2001-2003 data):

- The southeastern region had an asthma emergency department discharge rate of 56.1 compared to the state rate of 30.6.
- Emergency department rates for those under age 15 were 89.1 in southeastern New Mexico. The state rate was 45.4.

Asthma Deaths (2002-2006 data):

- The contributing cause asthma death rate in southeastern New Mexico was significantly higher than the state rate (4.8 and 3.2 deaths per 100,000 standard population, respectively).



Behavioral Risk Factor Surveillance System

Methodology

The Behavioral Risk Factor Surveillance System (BRFSS) is a statewide random-digit dialing telephone survey of the non-institutionalized adult population aged 18 years and older. The BRFSS began asking asthma prevalence questions in New Mexico in 2000 following procedures established by the Centers for Disease Control and Prevention (CDC). Data are collected from a representative sample of about 5,000 adults each year, and then weighted to adjust for the selection probabilities and estimates of the age-sex-region distribution of adults in New Mexico for each calendar year. This survey provides information on behaviors and risk factors for chronic diseases, infectious diseases, and other health conditions.

Questions pertaining to the prevalence of asthma among the adult population are based on two questions from the survey: “Have you ever been told by a doctor, nurse, or other health professional that you had asthma?” and if the response is “Yes,” “Do you still have asthma?” An affirmative answer to the first question indicates “lifetime prevalence” while an affirmative answer to the second answer indicates “current prevalence.”

Weighted prevalence estimates for both lifetime and current asthma were determined for the survey years contained in this report. The 95% confidence intervals (CIs) for these estimates are provided. Estimates are considered “significantly different” from each other when they do not have overlapping CIs.

Behavioral Risk Factor Surveillance System



In addition to the core adult module questions in this survey, in 2005, the Random Child Selection, Child Asthma Prevalence, and Work Related Asthma modules were administered. In 2006, the Adult Asthma History module was administered as were state-added work-related asthma questions. In 2007, questions from the Random Child Selection and Child Prevalence modules were administered. Data collected in 2007 from the Adult Asthma Call-Back and the Child Asthma Call-Back surveys were also administered; and the Call-Back survey data will be presented in a future report.

In 2007, the survey had 5,280 adult respondents and the state weighted response rate was 82.39%; in 2006 the survey had 5,228 adult respondents with a weighted response rate of 82.05%.

Limitations of the BRFSS data include the following: Information about asthma diagnosis was obtained by self-report, households that did not have a land line telephone were not represented in this survey, and data were not available at the county level (with the exception of Bernalillo County).

BRFSS SURVEYS & MODULES	2005	2006	2007
Core Module	X	X	X
Work Related Asthma	X	X	*
Adult History		X	*
Random Child Selection	X		X
Child Prevalence	X		X
State added WRA		X	
Adult Asthma Call-Back Survey			X
Child Asthma Call-Back Survey			X

* Questions from these modules are asked in the Adult Asthma Call-Back Survey.

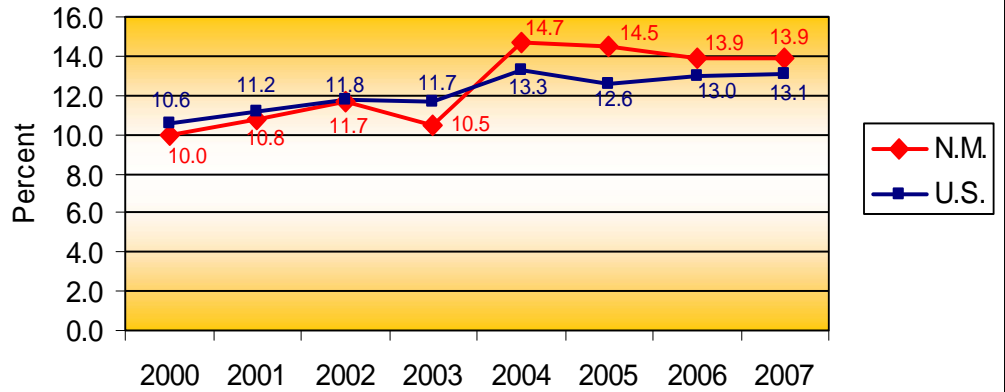


Adult Asthma Prevalence

Key Findings– Adults

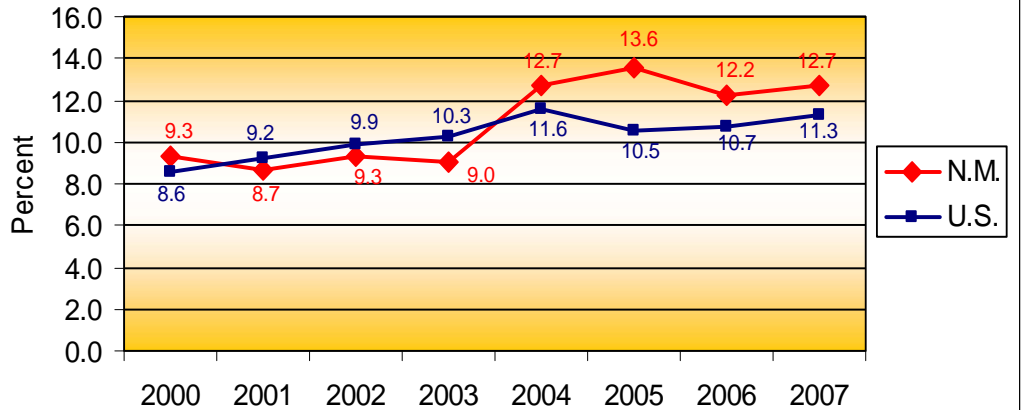
- Lifetime adult prevalence was measured by the BRFSS survey question: “Have you ever been told by a doctor, nurse, or other health professional that you had asthma?”
- In 2007, lifetime adult asthma prevalence was 13.9%.
- Approximately 204,292 New Mexico adults have or have had asthma.
- Lifetime adult asthma prevalence has increased significantly since 2000.
- In 2007, male lifetime asthma prevalence in the state was 12.7%.
- In 2007, female lifetime asthma prevalence in the state was 15.2%.

Figure 1: Lifetime Adult Asthma Prevalence, New Mexico & United States



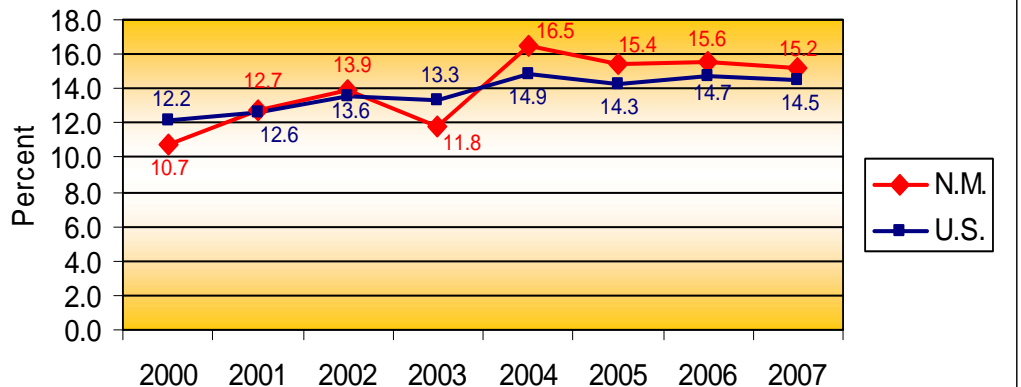
SOURCE: New Mexico and U.S. BRFSS, 2000-2007.

Figure 2: Lifetime Adult Male Asthma Prevalence, New Mexico & United States



SOURCE: New Mexico and U.S. BRFSS, 2000-2007.

Figure 3: Lifetime Adult Female Asthma Prevalence, New Mexico & United States

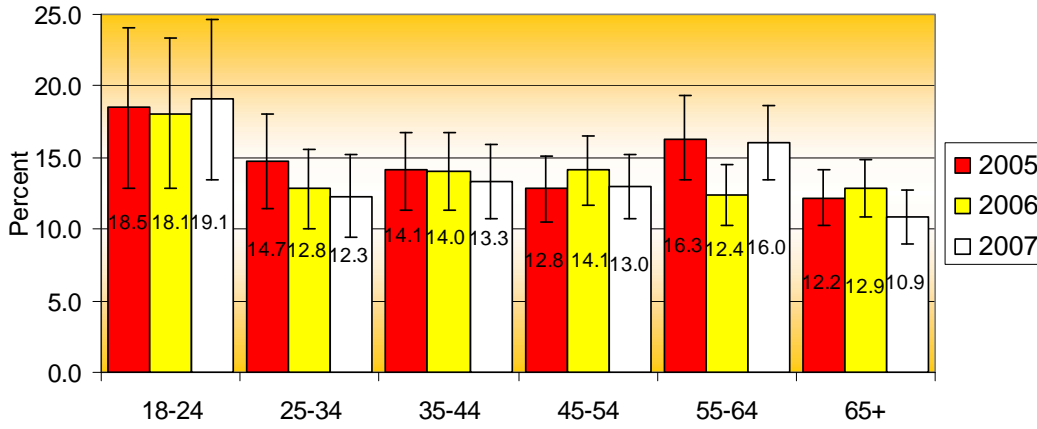


SOURCE: New Mexico and U.S. BRFSS, 2000-2007.

Adult Asthma Prevalence

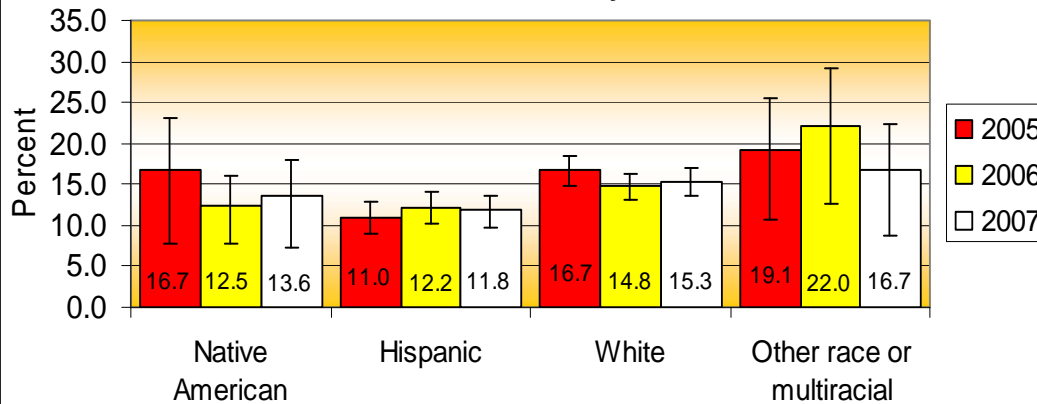


Figure 4: Lifetime Adult Asthma Prevalence by Age Group



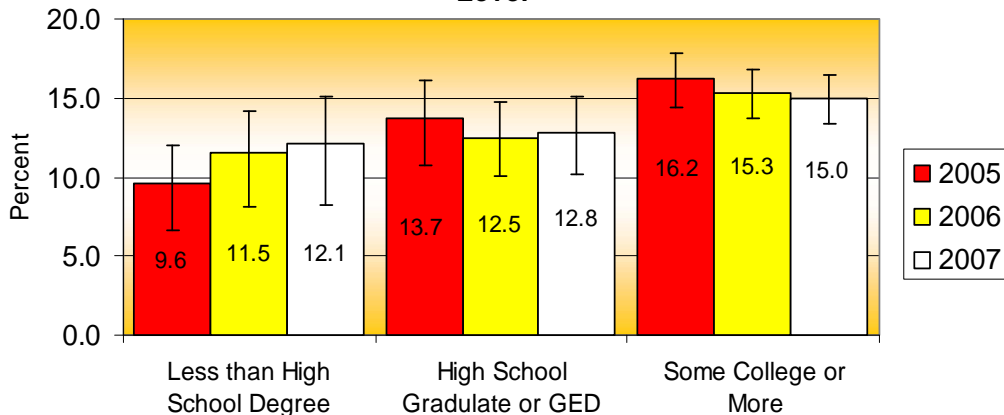
SOURCE: New Mexico BRFSS, 2005-2007.

Figure 5: Lifetime Adult Asthma Prevalence by Race/Ethnicity



SOURCE: New Mexico BRFSS, 2005-2007.

Figure 6: Lifetime Adult Asthma Prevalence by Education Level



SOURCE: New Mexico BRFSS, 2005-2007.

Key Findings- Adults

- In 2007, lifetime adult asthma prevalence was significantly higher in the 18 to 24 age group compared to the 65 and older age group.
- In 2005, the White lifetime adult asthma prevalence was significantly higher than the Hispanic lifetime adult asthma prevalence, but by 2007 differences between the two groups were no longer significant.
- In 2005, those without a high school degree had a significantly lower lifetime adult asthma prevalence; however, by 2007 there were no significant differences by education level.

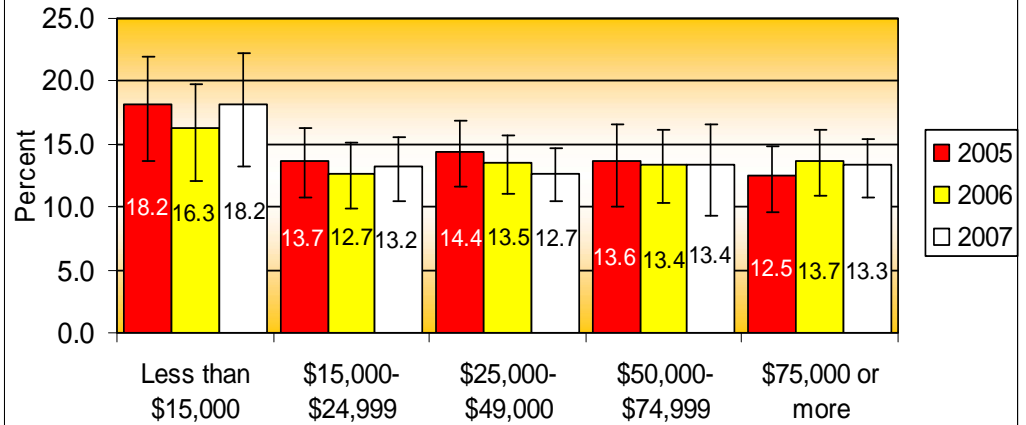


Adult Asthma Prevalence

Key Findings- Adults

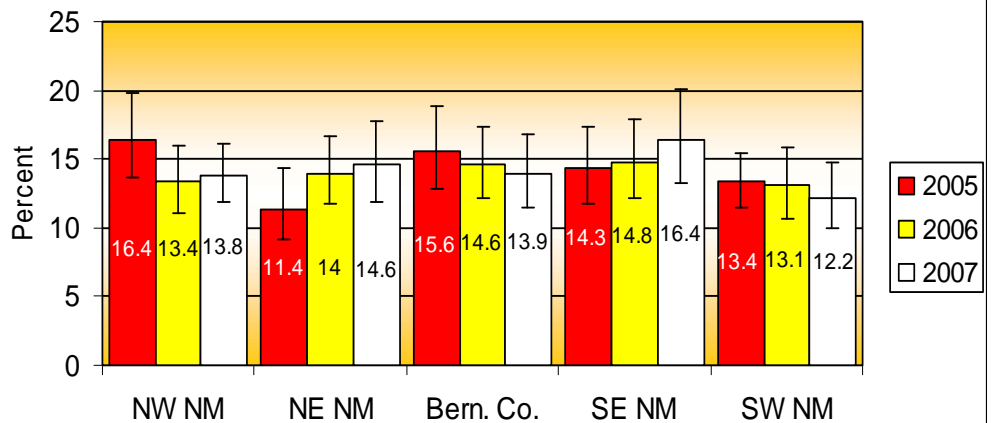
- Between 2005 and 2007, lifetime adult asthma prevalence did not vary significantly by income level.
- In 2007, lifetime adult asthma prevalence was 13.9% in Bernalillo County, which is home to Albuquerque, the state's largest city.
- Lifetime adult asthma prevalence did not differ significantly by geographical region.
- In 2007, lifetime adult asthma prevalence did not differ significantly by population density.

Figure 7: Lifetime Adult Asthma Prevalence by Annual Household Income



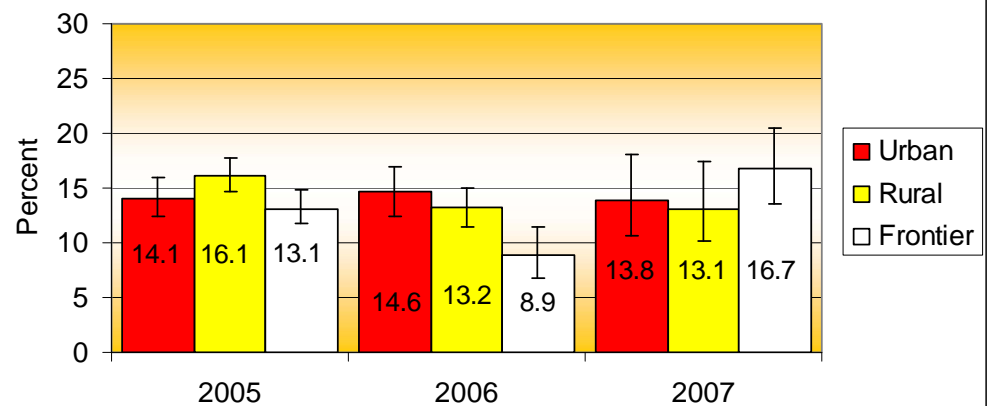
Source: New Mexico BRFSS, 2005-2007.

Figure 8: Lifetime Adult Asthma Prevalence by State Region



SOURCE: New Mexico BRFSS, 2005-2007.

Figure 9: Lifetime Adult Asthma Prevalence by Geographic Area

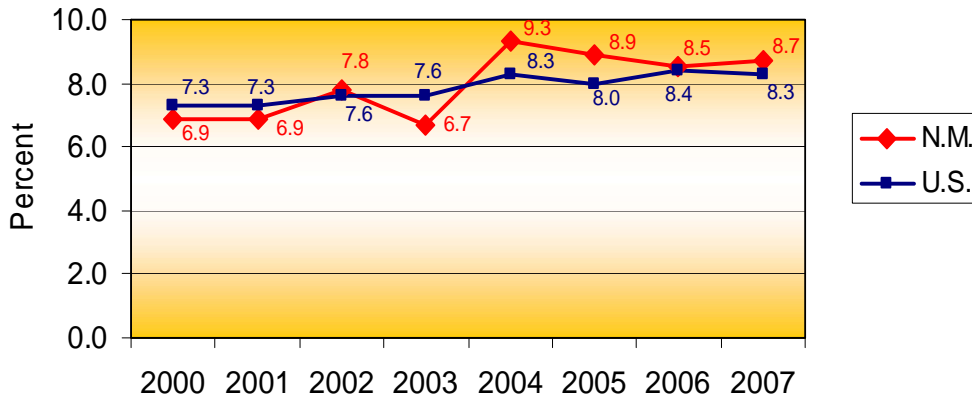


SOURCE: New Mexico BRFSS, 2005-2007.

Adult Asthma Prevalence

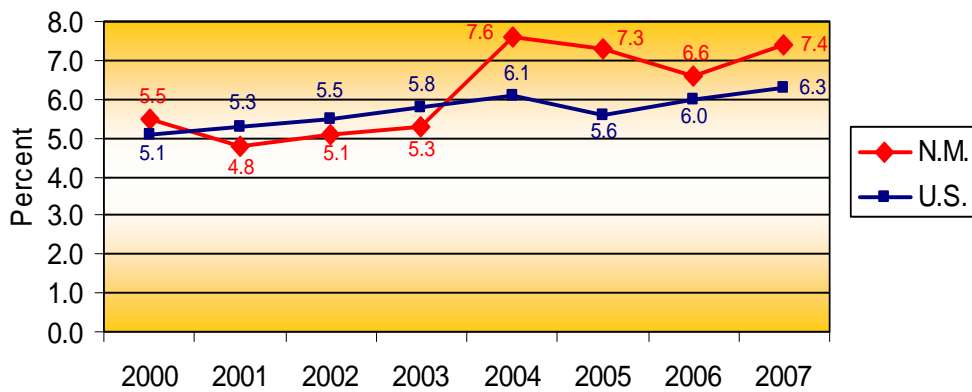


Figure 10: Current Adult Asthma Prevalence, New Mexico & United States



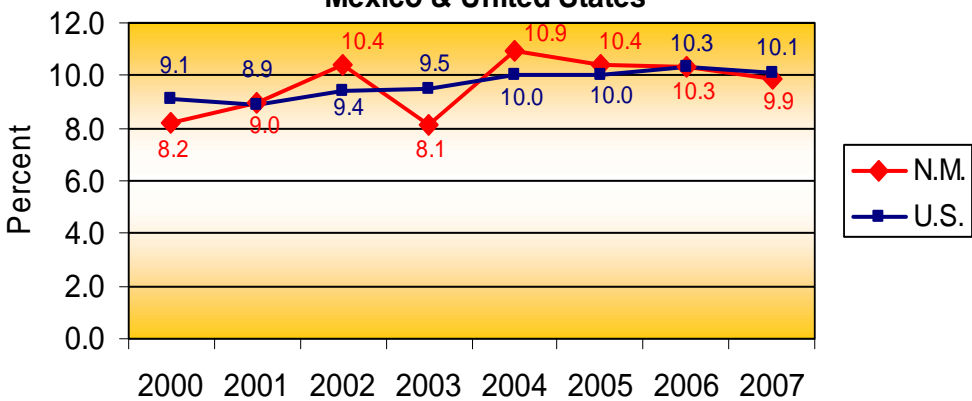
SOURCE: New Mexico and U.S. BRFSS 2000-2007.

Figure 11: Current Adult Male Asthma Prevalence, New Mexico & United States



SOURCE: New Mexico and U.S. BRFSS, 2000-2007.

Figure 12: Current Adult Female Asthma Prevalence, New Mexico & United States



SOURCE: New Mexico and U.S. BRFSS, 2000-2007.

Key Findings- Adults

- Current adult asthma prevalence was measured by the BRFSS survey question: “Do you still have asthma?”
- Current adult asthma prevalence was 6.9% in 2000, reached its highest level in 2004 (9.3%), and was 8.7% in 2007.
- Current adult asthma prevalence was 7.4% for males in 2007.
- Since 2004, current adult asthma prevalence for males in New Mexico has been higher than for the United States.
- In 2007, current adult asthma prevalence for females was 9.9%

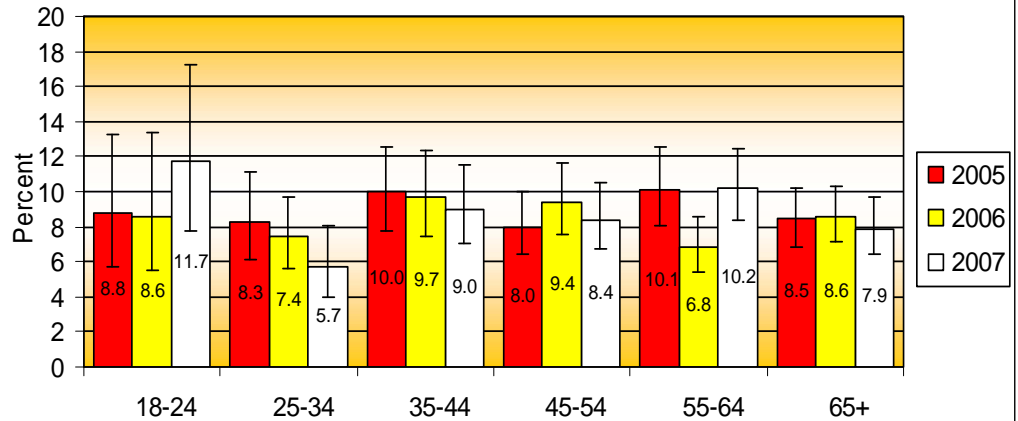


Adult Asthma Prevalence

Key Findings- Adults

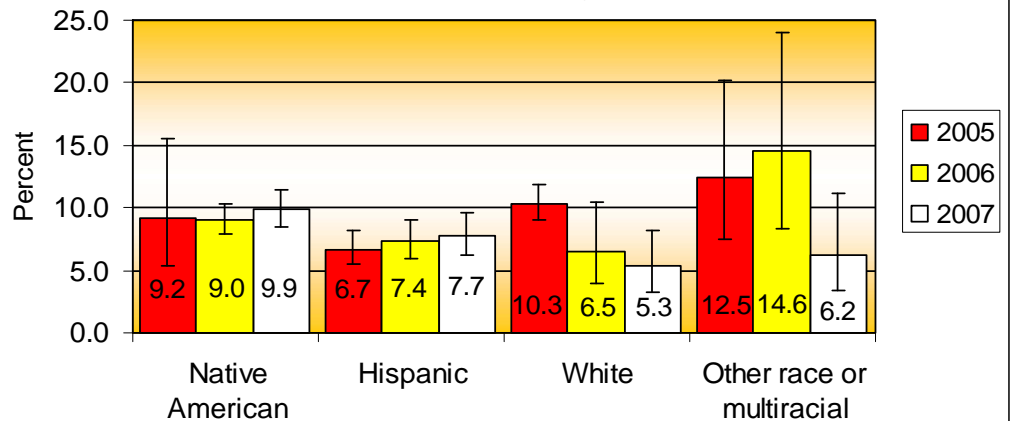
- In 2007, the 25-34 age group current adult asthma prevalence (5.7%) was significantly lower than the 55-64 age group.
- In 2007, approximately 11.7% of 18-24 year olds in New Mexico reported that they currently had asthma.
- In 2007, 9.9% of Native Americans, 7.7% of Hispanics, and 5.3% of non-Hispanic Whites reported that they had asthma.
- The 2007 White current adult asthma prevalence (5.3%) was significantly lower than reported in 2005 (10.3%).
- In 2007, 9.4% of adults that reported having had at least some college education had asthma.

Figure 13: Current Adult Asthma Prevalence by Age Group



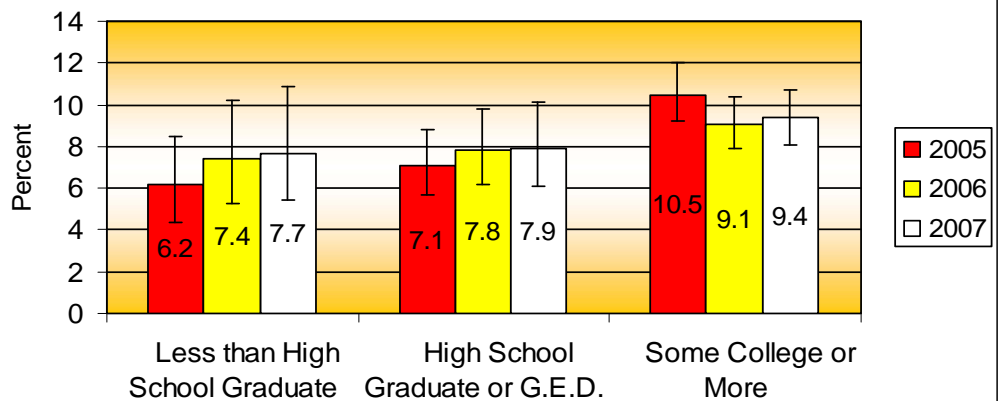
SOURCE: New Mexico BRFSS, 2005-2007.

Figure 14: Current Adult Asthma Prevalence by Race/Ethnicity



SOURCE: New Mexico BRFSS, 2005-2007.

Figure 15: Current Adult Asthma Prevalence by Education Level

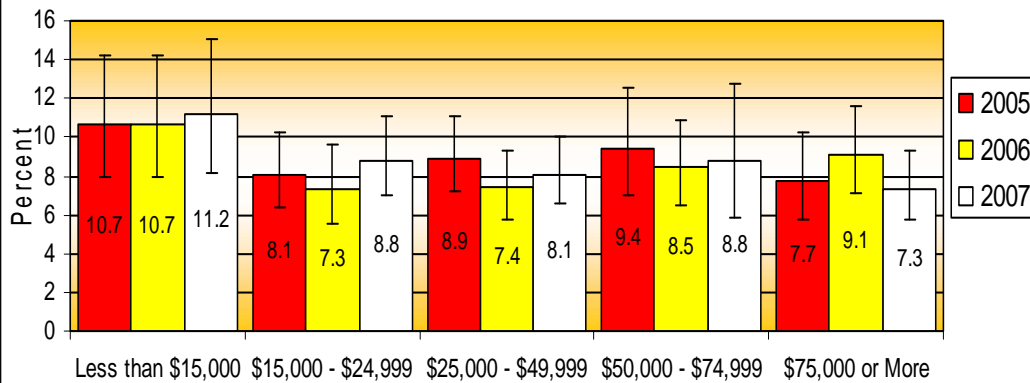


SOURCE: New Mexico BRFSS, 2005-2007.

Adult Asthma Prevalence

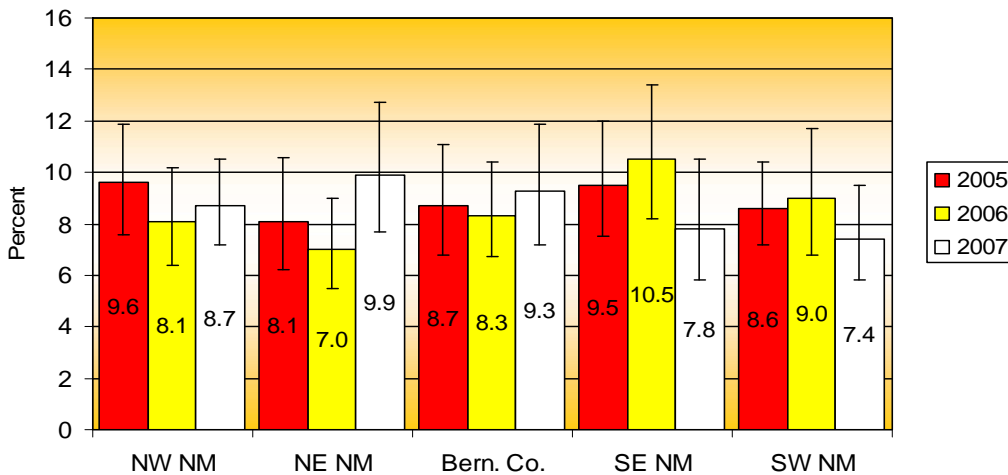


Figure 16: Current Adult Asthma Prevalence by Annual Household Income



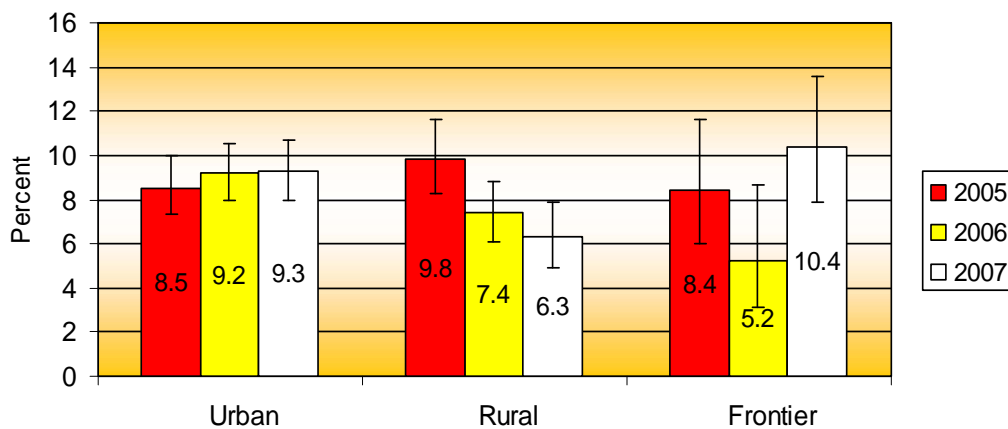
SOURCE: New Mexico BRFSS, 2005-2007.

Figure 17: Current Adult Asthma Prevalence by State Region



SOURCE: New Mexico BRFSS, 2005-2007.

Figure 18: Current Adult Asthma Prevalence by State Region



SOURCE: New Mexico BRFSS, 2005-2007.

Key Findings– Adults

- In 2007, 11.2% of adults with a household income of less than \$15,000 reported that they currently had asthma.
- In 2007, 9.9% of residents of the northeastern region (which includes Santa Fe and Taos) reported that they currently had asthma.
- Current adult asthma prevalence did not differ significantly from 2005 to 2007 by geographic region.
- In 2007, 9.3% of residents of Bernalillo County reported that they currently had asthma.
- 9.3% of residents living in counties classified as “urban” reported that they currently had asthma.

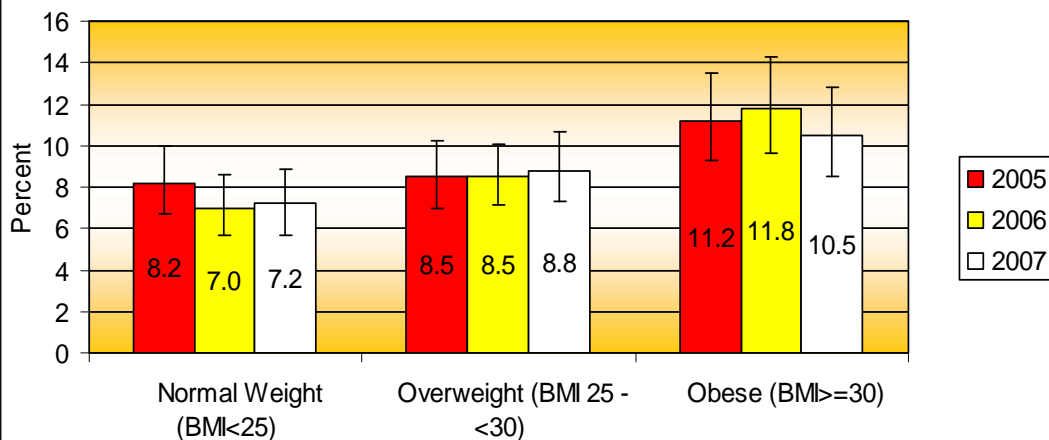


Adult Asthma Prevalence

Key Findings– Adults

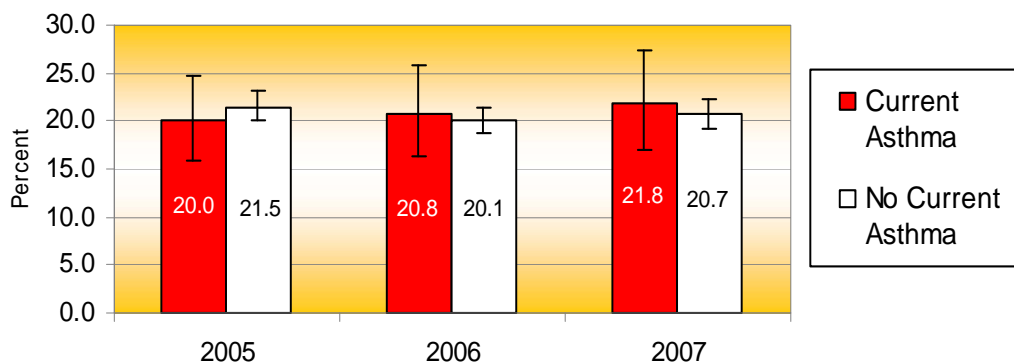
- In 2007, 10.5% of obese residents reported they currently had asthma.
- In 2007, 21.8% of adults with current asthma reported that they smoked compared to 20.7% of those who did not have current asthma.
- Adult smoking status remained virtually unchanged between 2005 and 2007.
- 27.1% of adults with current asthma reported that they had not participated in any recent physical activity.
- The percent of adults who reported they did not participate in any recent physical activity remained virtually unchanged between 2005 and 2007.

Figure 19: Current Adult Asthma Prevalence by BMI



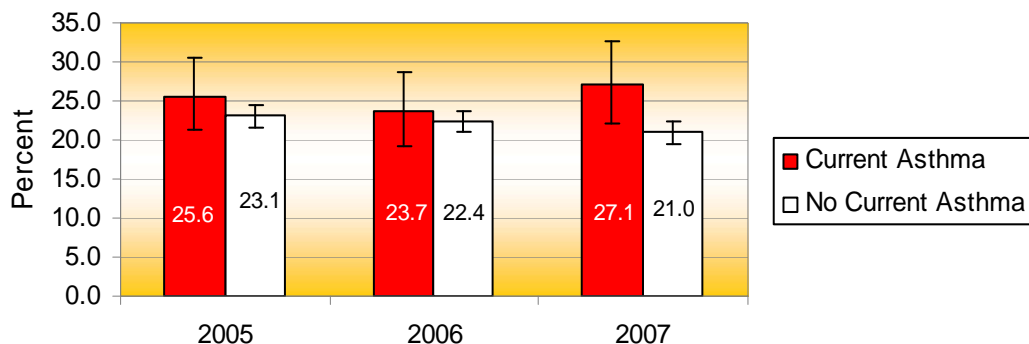
SOURCE: New Mexico BRFSS, 2005-2007.

Figure 20: Percent of Adults who Smoke by Asthma Status



Source: New Mexico BRFSS, 2005-2007.

Figure 21: Percent of Adults who Have not Participated in Recent Physical Activity

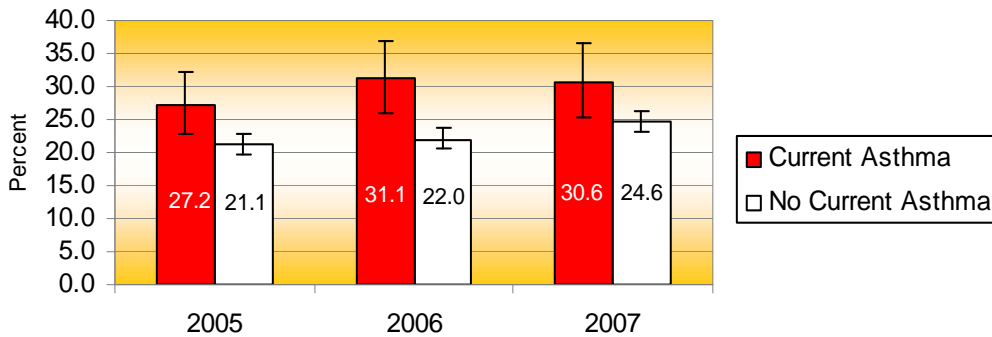


Source: New Mexico BRFSS, 2005-2007.

Adult Risk Factors

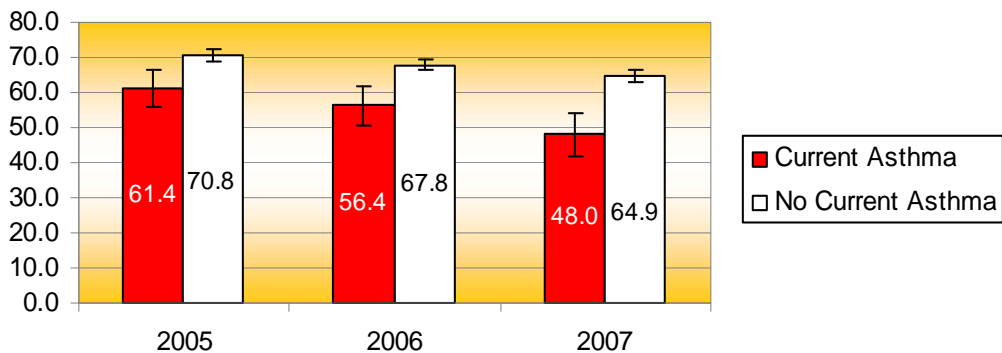


Figure 22: Percent of Adults who are Obese by Asthma Status



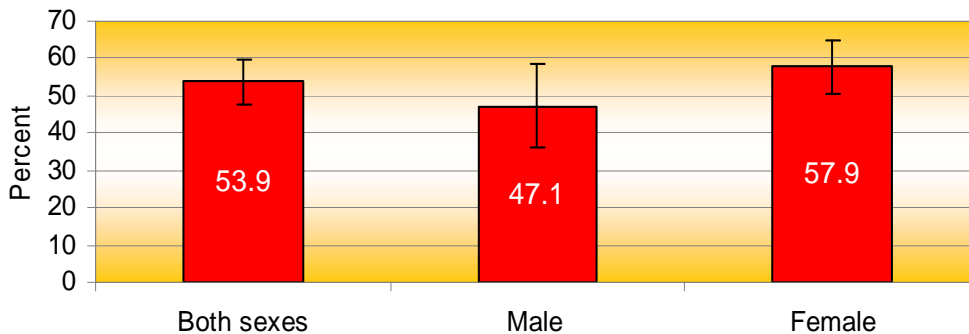
Source: New Mexico BRFSS, 2005-2007.

Figure 23: Percent of Adults who Did Not Get a Flu Shot by Asthma Status



Source: New Mexico BRFSS, 2005-2007.

Figure 24: Percent of Adults who had an Asthma Attack during past 12 months by Gender



Source: New Mexico BRFSS, 2006

Key Findings- Adults

- In 2007, 30.6% of obese adults reported that they currently had asthma compared with 24.6% of those who did not have asthma.
- In 2005 and 2006, the percent of obese adults with asthma was significantly higher than the percent of obese adults who did not have asthma.
- In 2005 through 2007, a significantly higher percent of adults with asthma received a flu shot as compared to adults who did not have asthma.
- More than one-half of all adults with asthma reported that they had an asthma attack during the previous 12 months.

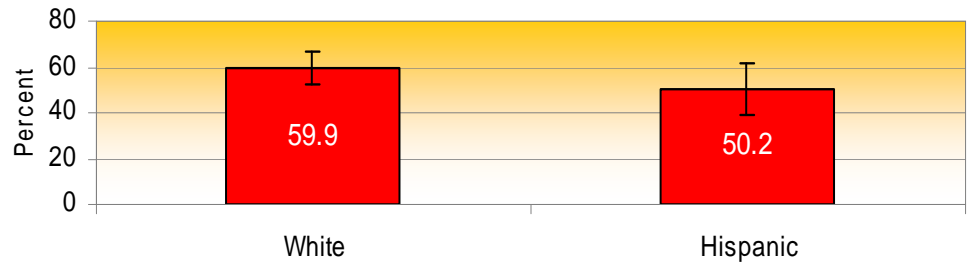


2006 Adult Asthma Management

Key Findings – Adult Asthma Management

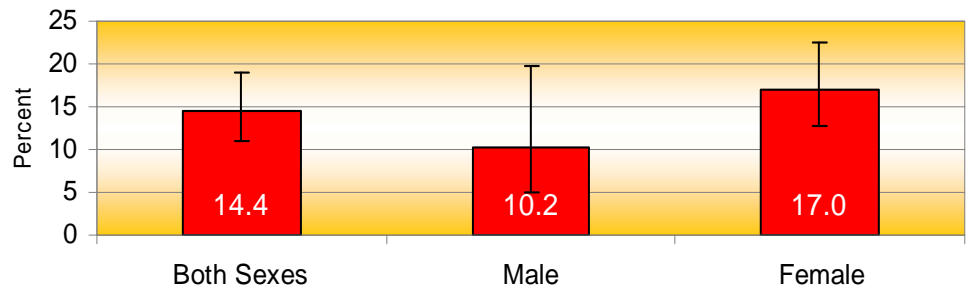
- Just over one-half of Hispanics with current asthma reported that they had an attack during the past 12 months.
- Nearly six in ten Whites with current asthma reported that they had an attack during the past 12 months.
- 14.4% of adults reported that they visited the emergency room for asthma during the past 12 months.
- Hispanics were significantly more likely to have visited the emergency room for asthma (25.1%) compared to Whites (9.4%) during the past 12 months.

Figure 25: Percent of Adults with Current Asthma who had an Asthma Attack during the past 12 months by Race/Ethnicity



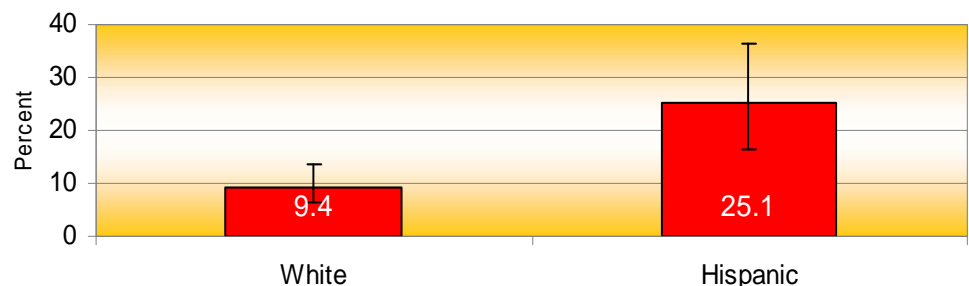
Source : New Mexico BRFSS, 2006

Figure 26: Percent of Adults with Current Asthma who visited the Emergency Room for Asthma during past 12 months



Source: New Mexico BRFSS, 2006

Figure 27: Percent of Adults with Current Asthma who visited the Emergency Room for Asthma during past 12 months by Race/Ethnicity



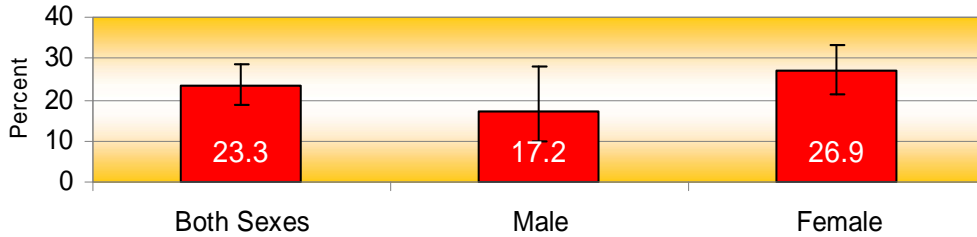
Source: New Mexico BRFSS, 2006

2006 Adult Asthma Management



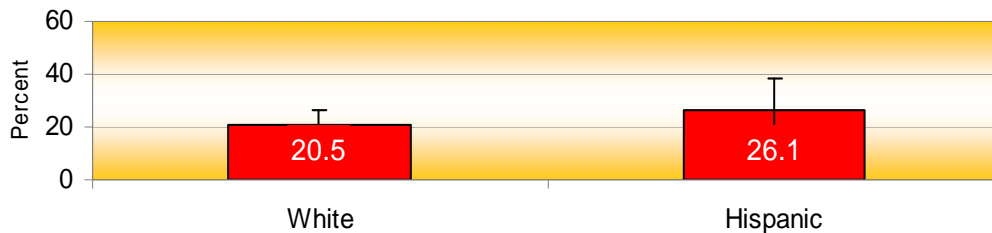
Key Findings – Adult Asthma Management

Figure 28: Percent of Adults with Current Asthma who saw a Health Care Provider for Urgent Treatment for Worsening Asthma during the past 12 months by Gender



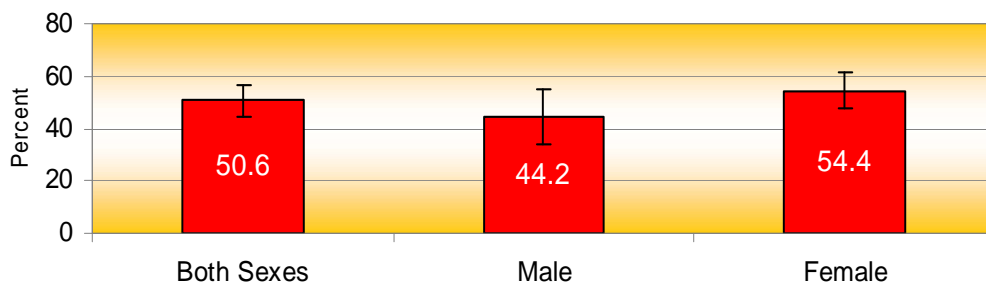
Source: New Mexico BRFSS, 2006

Figure 29: Percent of Adults with Current Asthma who saw a Health Care Provider for Urgent Treatment for Worsening Asthma during the past 12 months by Race/Ethnicity



Source: New Mexico BRFSS, 2006

Figure 30: Percent of Adults with Current Asthma who had a Routine Asthma Checkup during the past 12 months by Gender



Source: New Mexico BRFSS, 2006

- Nearly one in four adults with current asthma (23.3%) saw their health care provider due to worsening asthma.

- More than one in four Hispanics with current asthma (26.1%) saw their health care provider due to worsening asthma during the past 12 months.

- Just over one in five Whites with current asthma (20.5%) saw their health care provider due to worsening asthma during the past 12 months.

- Over one-half of females with current asthma (54.4%) reported that they had a routine asthma checkup during the past 12 months.

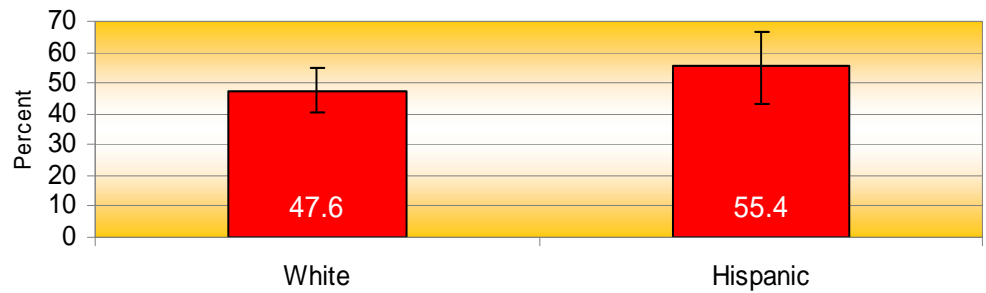


2006 Adult Asthma Management

Key Findings – Adult Asthma Management

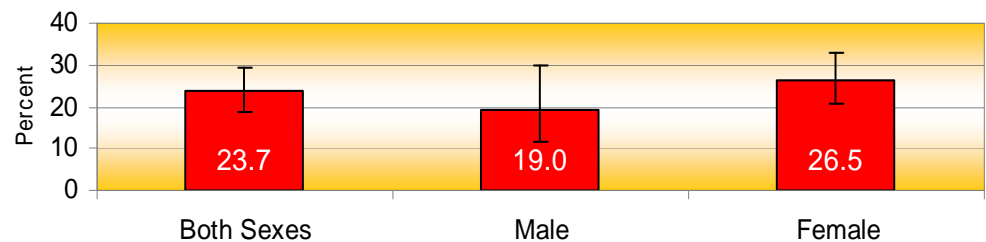
- Over one-half of Hispanics with current asthma (55.4%) reported that they had a routine asthma checkup during the past 12 months compared to only 47.6% of Whites.
- Over one in four females with current asthma (26.5%) reported having experienced important limitations during the past 12 months due to their asthma.
- 28.0% of Hispanics and 20.6% of Whites reported experiencing important limitations during the past 12 months due to their asthma.

Figure 31: Percent of Adults with Current Asthma who had a Routine Asthma Checkup during the past 12 months by Race/Ethnicity



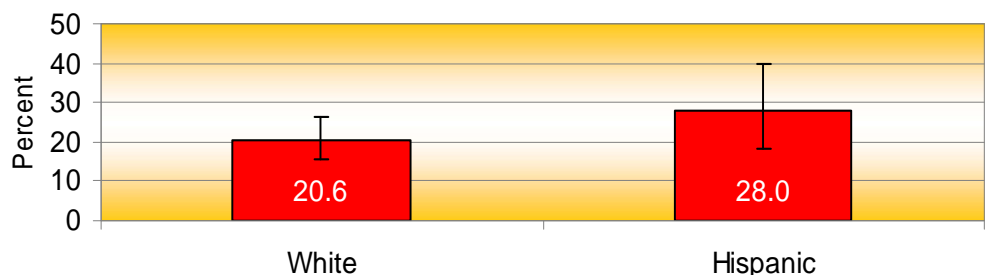
Source: New Mexico BRFSS, 2006

Figure 32: Percent of Adults with current Asthma who were Unable to Work or Carry Out Usual Activities at least one day during past 12 months because of Asthma by Gender



Source: New Mexico BRFSS, 2006

Figure 33: Percent of Adults who were Unable to Work or Carry Out Usual Activities for at least 12 months because of Asthma by Race/Ethnicity

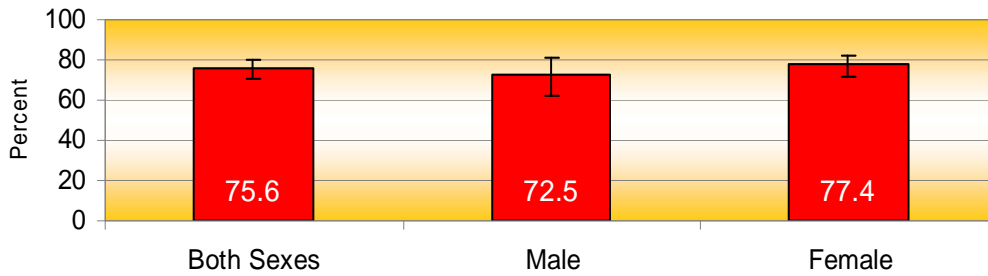


Source: New Mexico BRFSS, 2006

2006 Adult Asthma Management

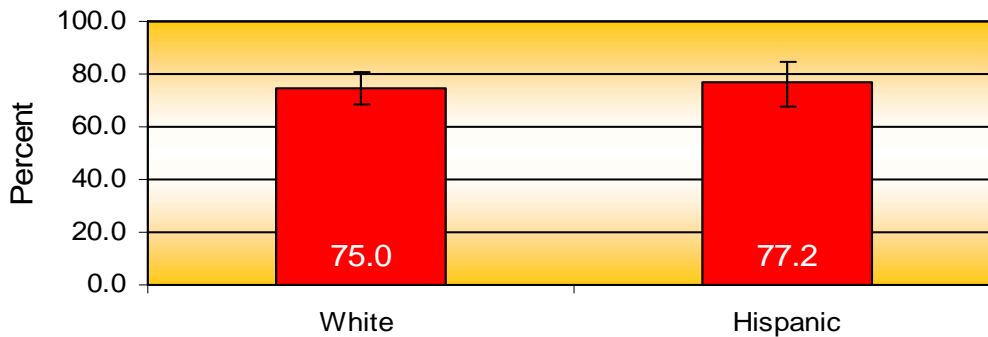


Figure 34: Percent of Adults with Current Asthma who had Asthma Symptoms during the past 30 days by Gender



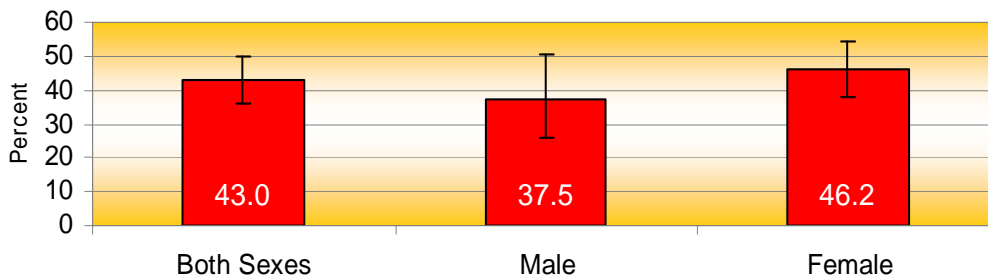
Source: New Mexico BRFSS, 2006

Figure 35: Percent of Adults with Current Asthma who had Asthma Symptoms during the past 30 days by Race/Ethnicity



SOURCE: New Mexico BRFSS, 2006

Figure 36: Percent of Adults with Current Asthma whose Asthma Symptoms made it Difficult to Sleep during the past 30 days by Gender



Source: New Mexico BRFSS, 2006

Key Findings – Adult Asthma Management

- Over three-quarters of adults with current asthma reported having had asthma symptoms during the past 30 days.
- The percent of those with current asthma that experienced symptoms within the past 30 days did not significantly differ by race/ethnicity.
- 43.0% of adults with current asthma reported that they had symptoms that made it difficult to sleep sometime during the past 30 days.

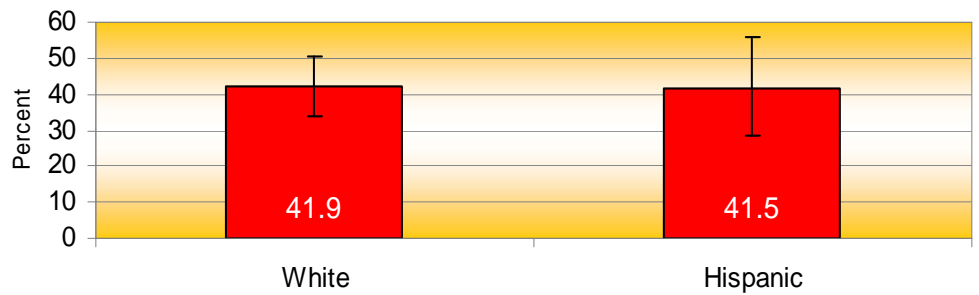


2006 Adult Asthma Management

Key Findings – Adult Asthma Management

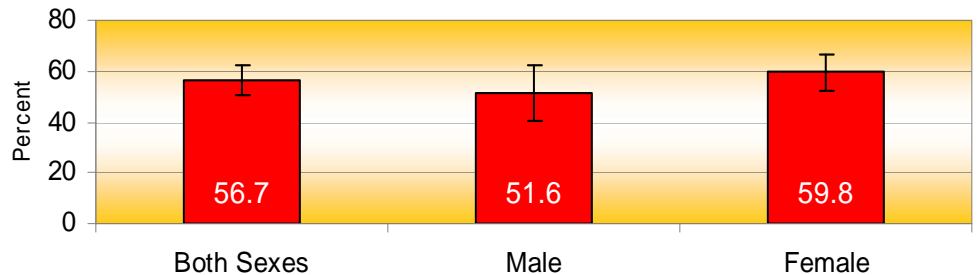
- Nearly the same percent of White adults with current asthma (41.9%) as Hispanic adults with current asthma (41.5%) reported that their asthma symptoms made sleep difficult sometime during the past 30 days.
- Between five in ten and six in ten adults (56.7%) reported using preventative asthma medication during the past 30 days.
- 51.4% of Hispanic adults with current asthma used preventative asthma medication during the past 30 days.

Figure 37: Percent of Adults with Current Asthma whose Asthma Symptoms made it Difficult to Sleep during the past 30 days by Ethnicity



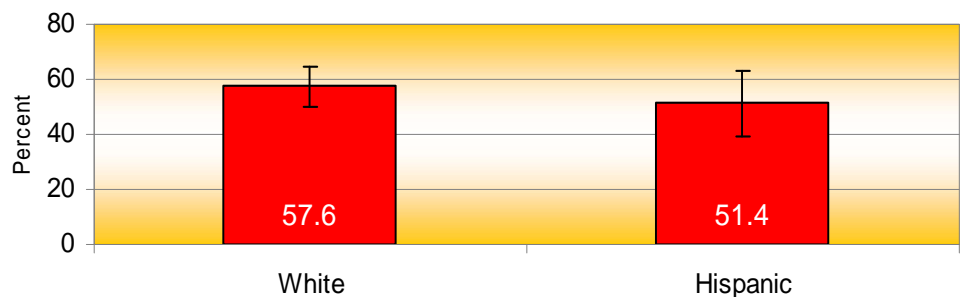
Source: New Mexico BRFSS, 2006

Figure 38: Percent of Adults with Current Asthma who took Preventative Medication during the past 30 days by Gender



Source: New Mexico BRFSS, 2006

Figure 39: Percent of Adults with Current Asthma who took Preventative Medication during the past 30 days by Race/Ethnicity



Source: New Mexico BRFSS, 2006

2006 Adult Asthma Management

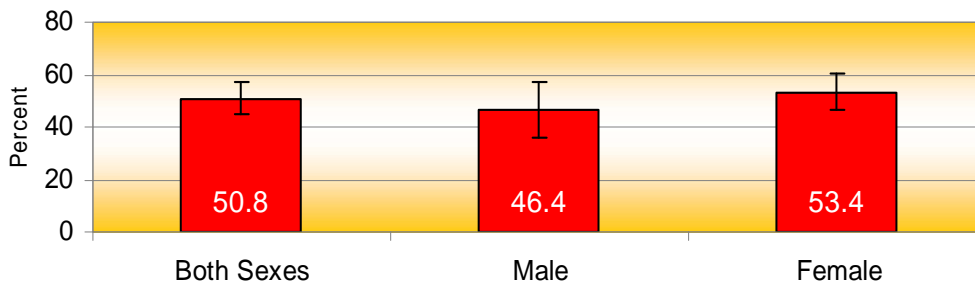


Key Findings – Adult Asthma Management

- Differences in inhaler use by gender (53.4% for females and 46.4% for males) were not statistically significant.

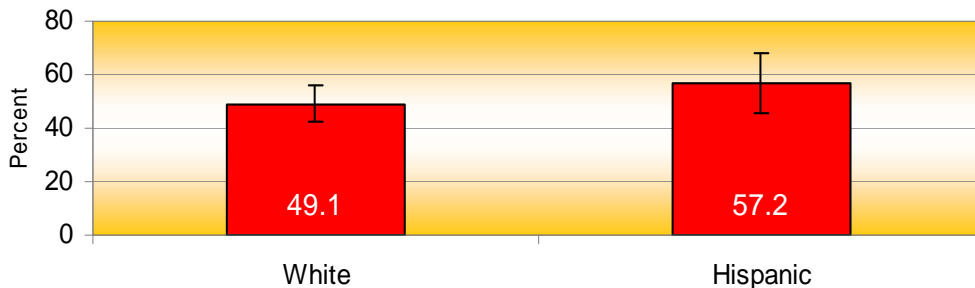
- Less than one-half of White adults with current asthma reported using an inhaler during the past 30 days compared to 57.2% of Hispanic adults.

Figure 40: Percent of Adults with Current Asthma who used an Inhaler for Asthma during the past 30 days by Gender



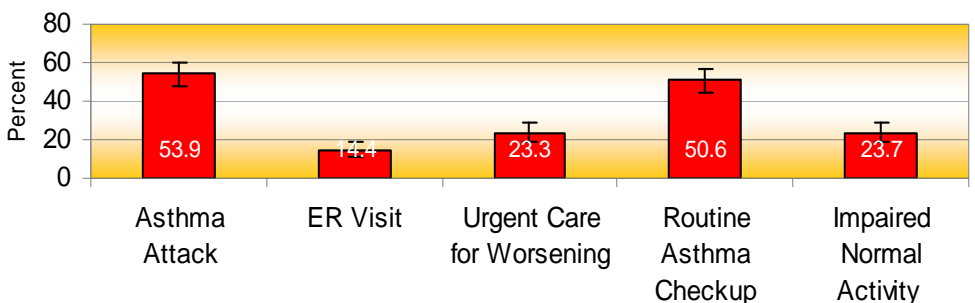
Source: New Mexico BRFSS, 2006

Figure 41: Percent of Adults with Current Asthma who used an Inhaler for Asthma during the past 30 days by Race/Ethnicity



Source: New Mexico BRFSS, 2006

Figure 42: Percent of Adults with Current Asthma by Asthma Control Indicators during the past 12 months



Source: New Mexico BRFSS, 2006

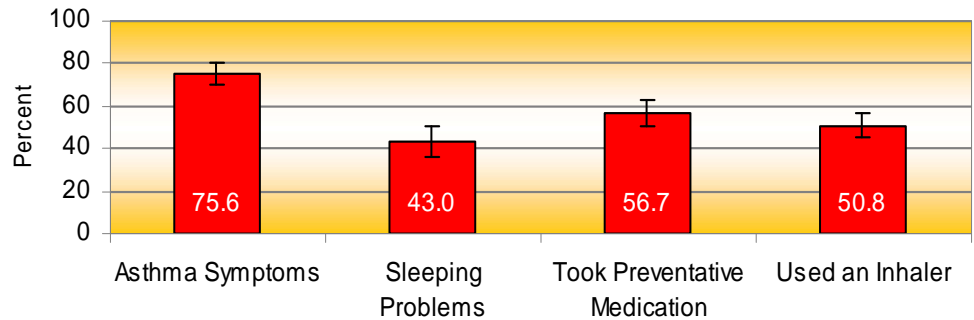


2006 Adult Asthma Management

Key Findings – Child Asthma Prevalence

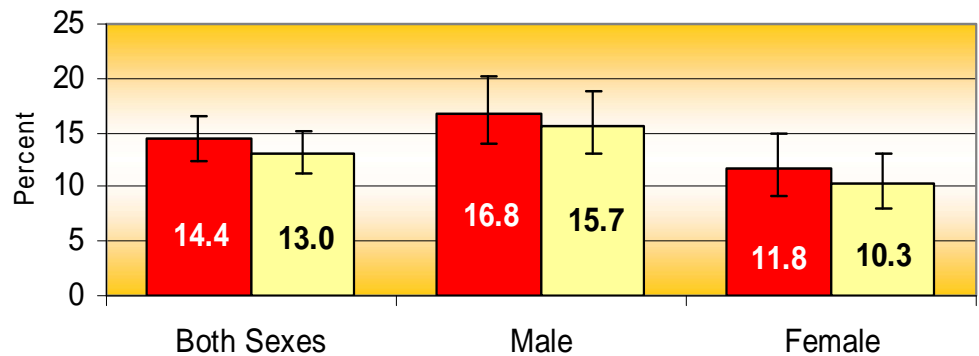
- In 2007, 13.0% of children had at one time in their life been told by a health care provider that they had asthma.
- In 2007, approximately 63,854 children in the state had been diagnosed as having had asthma sometime in their lives.
- In 2007, lifetime asthma prevalence was 15.75 for male children and 10.3% for female children.
- Between 2005 and 2007 there were no significant differences in lifetime child asthma prevalence.
- Lifetime asthma prevalence was 14.3% for Hispanic children, 11.8% for White children, and 11.1% for Native American children.

Figure 43: Percent of Adults with Current Asthma by Asthma Control Indicators during the past 30 days



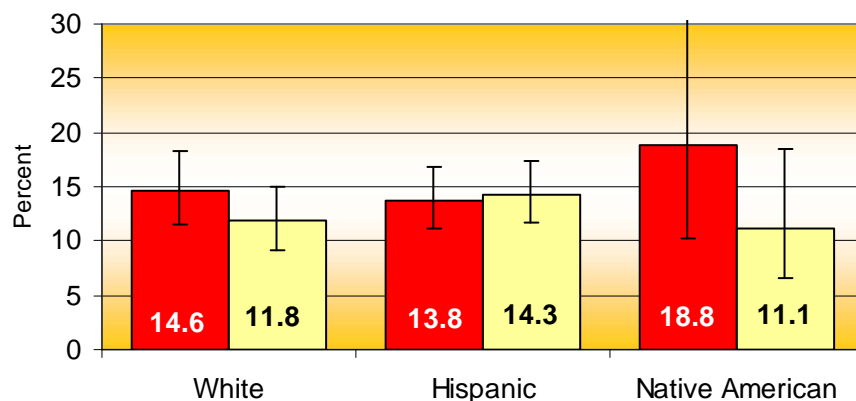
Source: New Mexico BRFSS, 2006

Figure 44: Lifetime Child Asthma Prevalence by Gender, 2005 & 2007



Source: NMHPC.

Figure 45: Lifetime Child Asthma Prevalence by Race/Ethnicity, 2005 & 2007



Source: NMHPC.

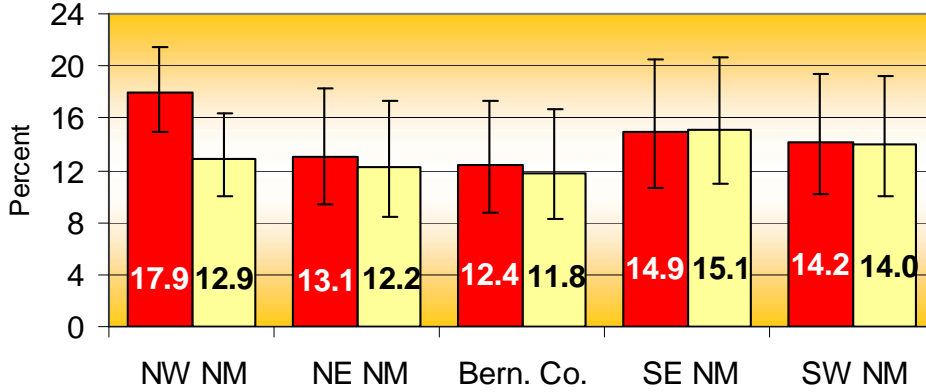
Child Asthma Prevalence



Key Findings – Child Asthma Prevalence

- Lifetime child asthma prevalence was 15.1% in southeastern New Mexico and 11.8% in Bernalillo County.
- In 2007, approximately 42,012 children currently had asthma.
- The 2007 current asthma prevalence was 10.2% of New Mexico boys.
- Approximately 6.9% of New Mexico girls had asthma in 2007.
- In 2007, current child asthma prevalence ranged from 7.1% for Whites to 9.5% for Hispanics.

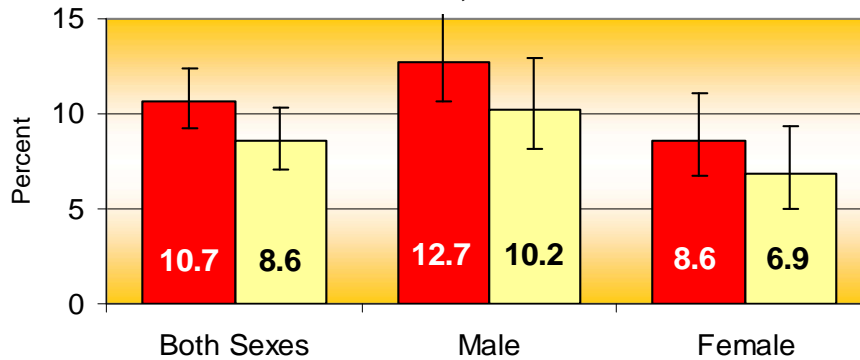
Figure 46: Lifetime Child Asthma Prevalence by Region, 2005 & 2007



Source: NMHPC.

■ 2005 □ 2007

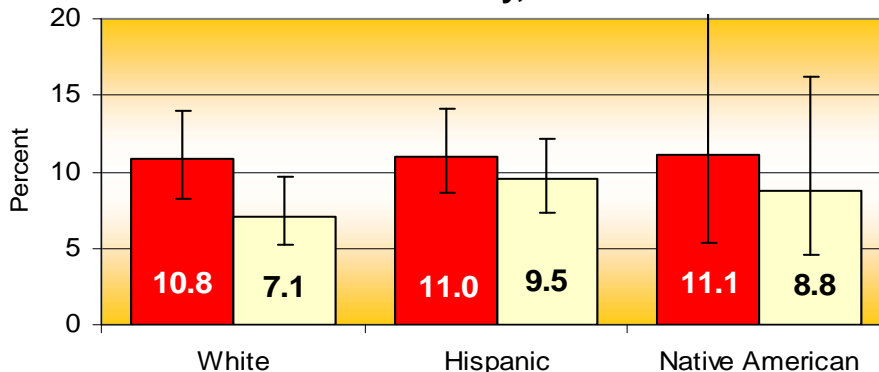
Figure 47: Current Child Asthma Prevalence by Gender, 2005 & 2007



Source: NMHPC.

■ 2005 □ 2007

Figure 48: Current Child Asthma Prevalence by Race/Ethnicity, 2005 & 2007



Source: NMHPC.

■ 2005 □ 2007

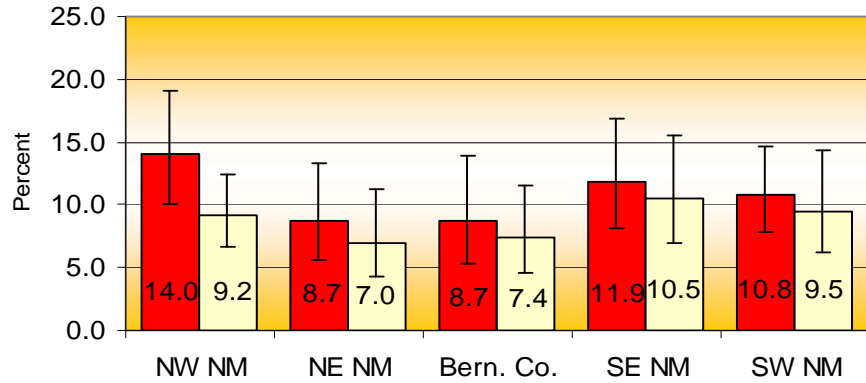


Child Asthma Prevalence

Key Findings – Child Asthma Prevalence

- Current child asthma prevalence ranged from 7.0% in northeastern New Mexico to 10.5% in southeastern New Mexico.

Figure 49: Current Child Asthma Prevalence by Region, 2005 & 2007



Source: NMHPC.

■ 2005 □ 2007

Youth Risk and Resiliency Survey



Methodology

The New Mexico Youth Risk and Resiliency Survey (YRRS) is survey of public high school students (grades 9 – 12) and middle school students (grades 6 – 8). Topic areas include risk behaviors related to injury, violence, suicidal ideation and attempts, tobacco use, alcohol use, drug use, sexual activity, physical activity and nutrition; resiliency (protective) factors such as relationships in the family, school, community, and with peers; and health status issues such as body weight and asthma.

The high school YRRS has been conducted in the fall semesters of odd numbered years since 2001. Asthma indicators have been included in the survey since 2005. The middle school YRRS was conducted for the first time in 2007. The next survey will be conducted in 2009 in both high schools and middle schools.

The most recent response rate (2007) was 60% for the high school YRRS and 51% for the middle school YRRS.

The sampling frame for the high school YRRS is all public schools in New Mexico with any of grades 9, 10, 11, or 12. The middle school sampling frame is all public schools in New Mexico with any grades 6, 7, or 8. Special schools that are held in Juvenal Detention Centers and health care facilities are excluded.

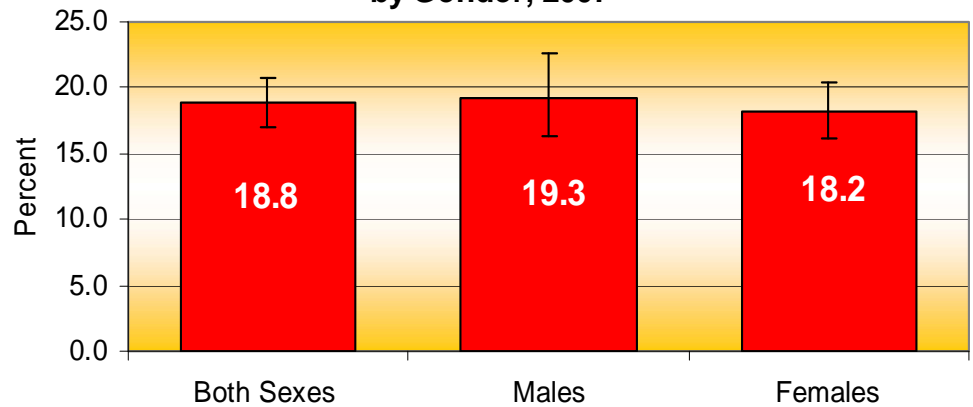


Middle School Prevalence

Key Findings – Middle School Asthma Prevalence

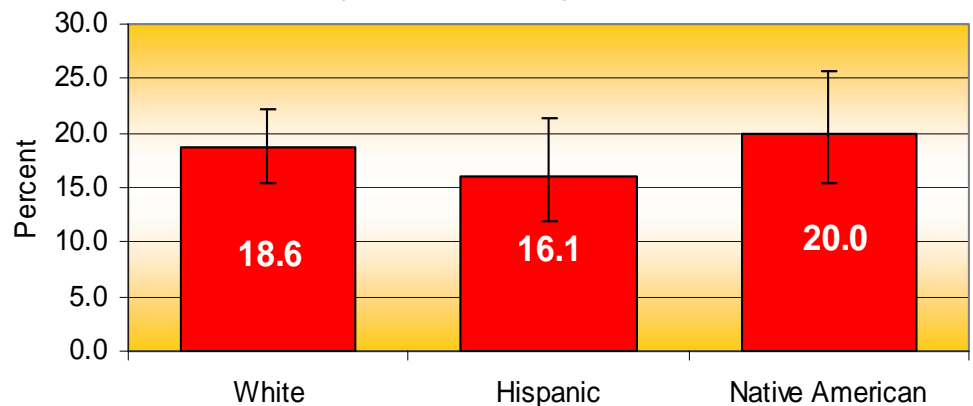
- In 2007, 18.8% of state middle school students reported that a doctor or another health professional had sometime in their life told them they had asthma.
- In 2007, lifetime asthma prevalence did not differ significantly between boys (19.3%) and girls (18.2%) in New Mexico middle schools.
- 20.0% of Native American middle school students reported in 2007 that a doctor or other health professional had told them they had asthma.
- In 2007, lifetime asthma middle school prevalence did not differ significantly by grade.

Figure 1: Lifetime Asthma Middle School Prevalence by Gender, 2007



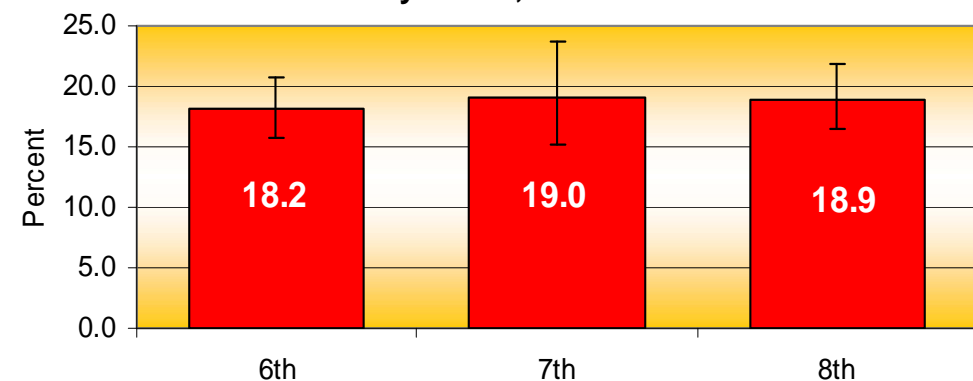
Source: YRRS, 2007.

Figure 2: Lifetime Asthma Middle School Prevalence by Race/Ethnicity, 2007



Source: YRRS, 2007.

Figure 3: Lifetime Asthma Middle School Prevalence by Grade, 2007

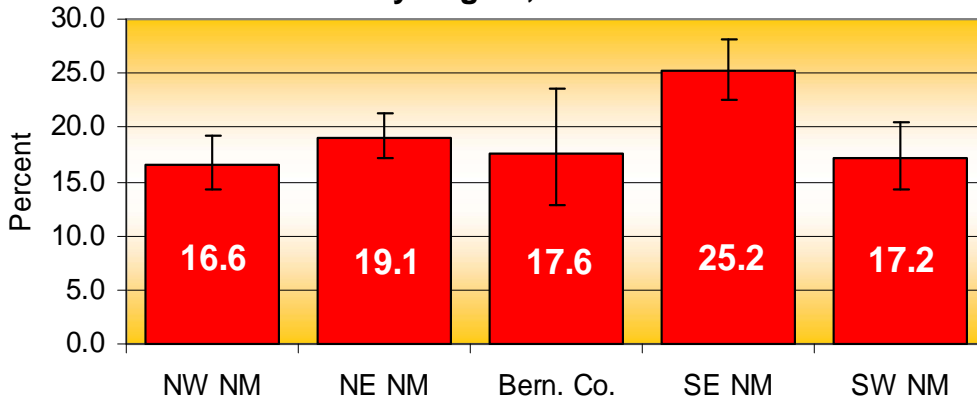


Source: YRRS, 2007.

Middle School Prevalence

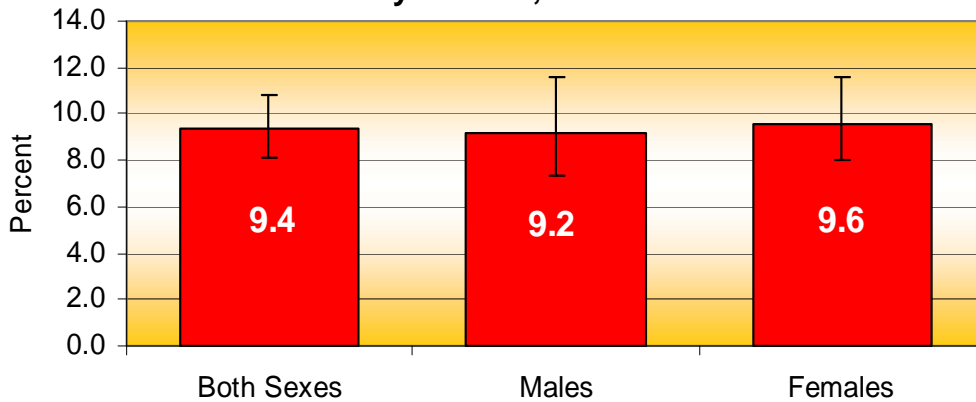


Figure 4: Lifetime Asthma Middle School Prevalence by Region, 2007



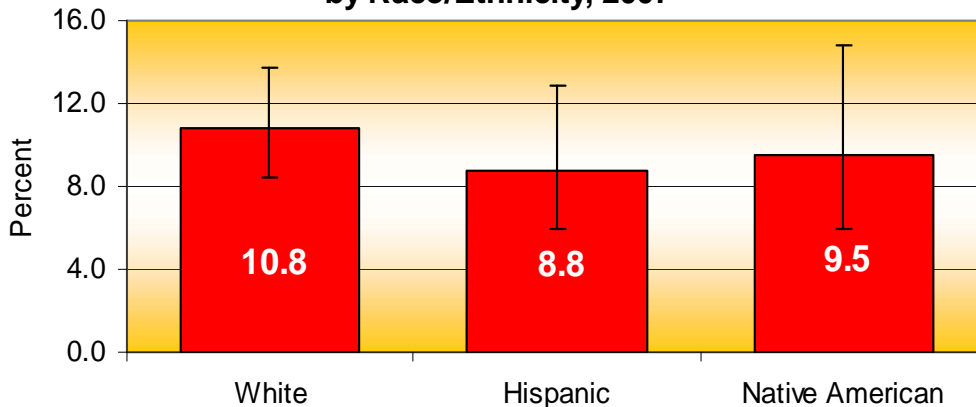
Source: YRRS, 2007.

Figure 5: Current Asthma Middle School Prevalence by Gender, 2007



Source: YRRS, 2007.

Figure 6: Current Asthma Middle School Prevalence by Race/Ethnicity, 2007



Source: YRRS, 2007.

Key Findings – Middle School Asthma Prevalence

- In 2007, lifetime asthma middle school prevalence was significantly higher in southeastern New Mexico (25.2%) than the state prevalence (18.8%).
- In 2007, the lowest lifetime asthma middle school prevalence was in northwestern New Mexico (16.6%).
- In 2007, current asthma middle school prevalence (9.4%) was half the rate of lifetime asthma middle school prevalence (18.8%).
- There were no significant differences in current asthma prevalence by race/ethnicity among New Mexico middle school students in 2007.

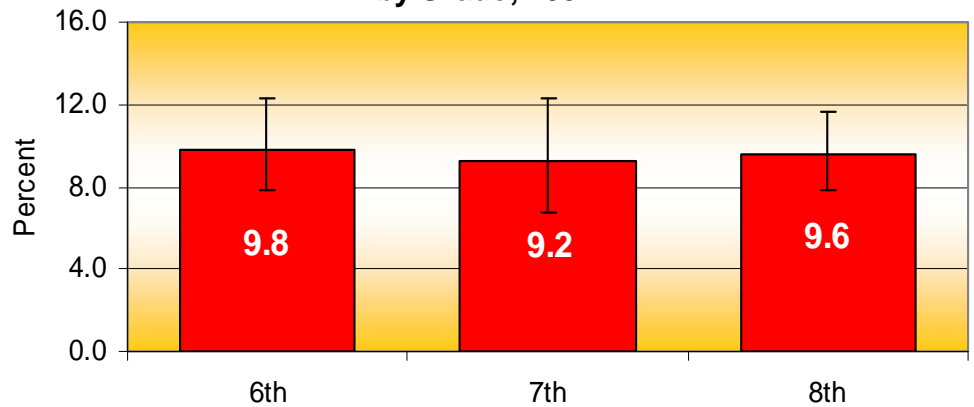


Middle School Prevalence

Key Findings – Middle School Asthma Prevalence

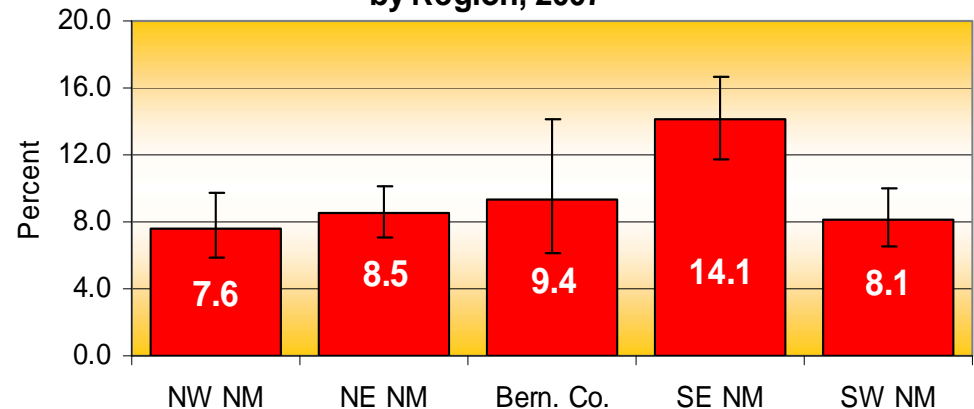
- 9.8% of state 6th graders reported that they currently had asthma in 2007.
- In 2007, current asthma prevalence among middle school students was significantly higher in southeastern New Mexico (14.1%) than the for the state (9.4%).
- Middle school students in northwestern New Mexico had both the lowest current asthma prevalence (7.6%) and the lifetime asthma prevalence (16.6%) in 2007.
- In 2007, 10.4% of overweight middle school students reported that they had asthma.

Figure 7: Current Asthma Middle School Prevalence by Grade, 2007



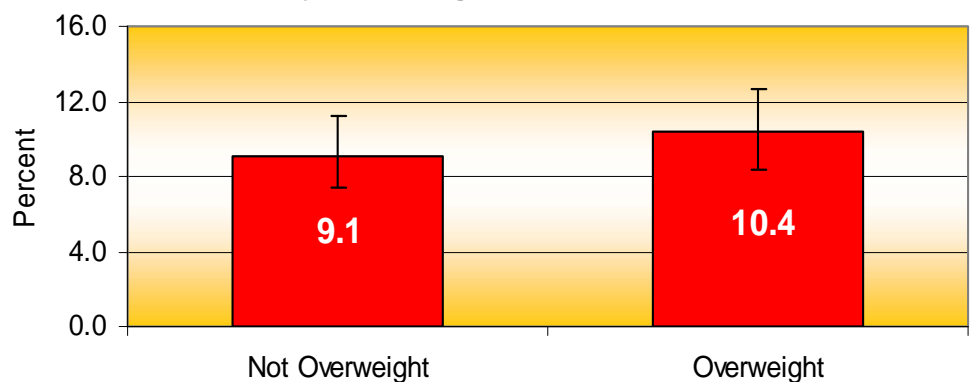
Source: YRRS, 2007.

Figure 8: Current Asthma Middle School Prevalence by Region, 2007



Source: YRRS, 2007.

Figure 9: Current Asthma Middle School Prevalence by Overweight Status, 2007

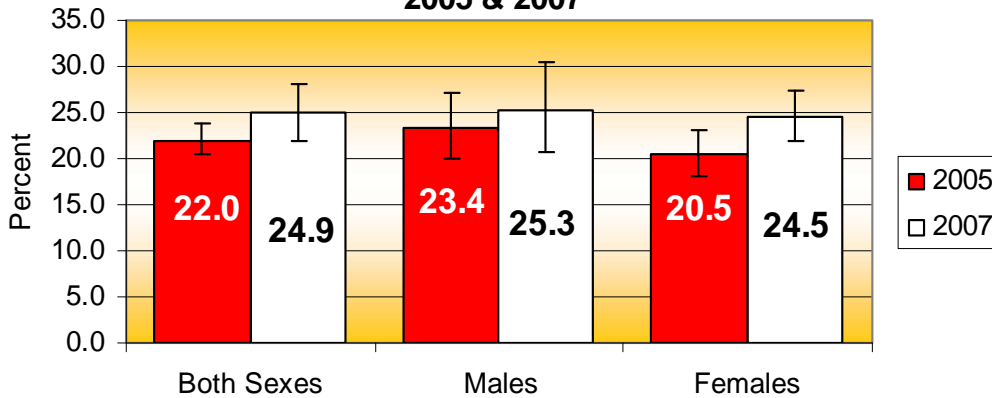


Source: YRRS, 2007.

High School Prevalence

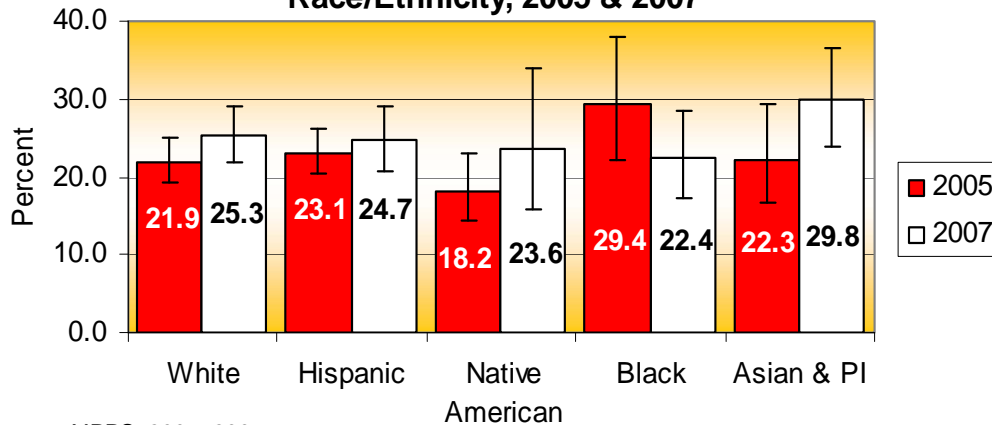


Figure 10: Lifetime Asthma High School Prevalence, 2005 & 2007



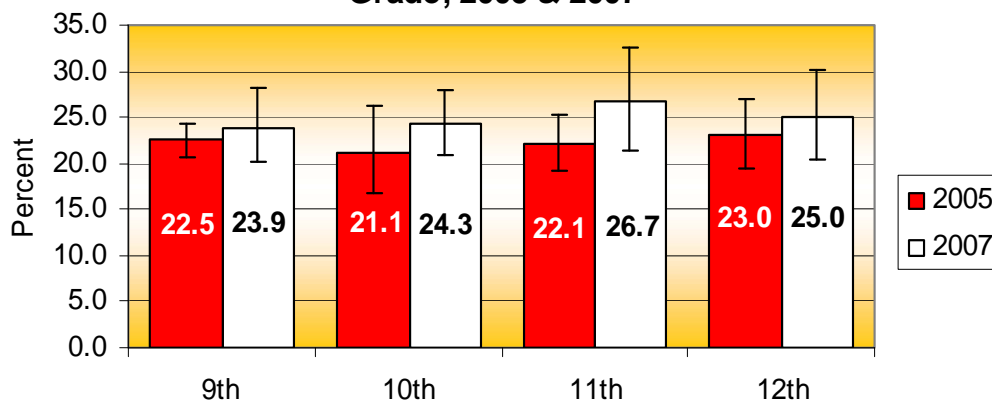
Source: YRRS, 2005, 2007.

Figure 11: Lifetime Asthma High School Prevalence by Race/Ethnicity, 2005 & 2007



Source: YRRS, 2005, 2007.

Figure 12: Lifetime Asthma High School Prevalence by Grade, 2005 & 2007



Source: YRRS, 2005, 2007.

Key Findings – High School Asthma Prevalence

- Lifetime asthma high school prevalence was 24.9% in 2007.
- Approximately 29.8% of Asian and Pacific Islander high school students reported in 2007 that they had at some point in their life been diagnosed as having asthma.
- Lifetime asthma prevalence was 25.0% for 12th graders in the state in 2007.
- Lifetime asthma high school prevalence did not differ significantly among gender, race/ethnicity, or grade in 2007.

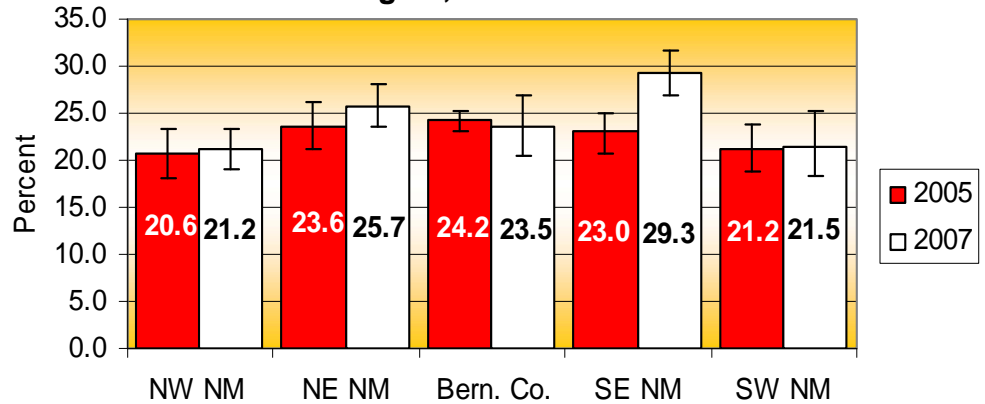


High School Prevalence

Key Findings – High School Asthma Prevalence

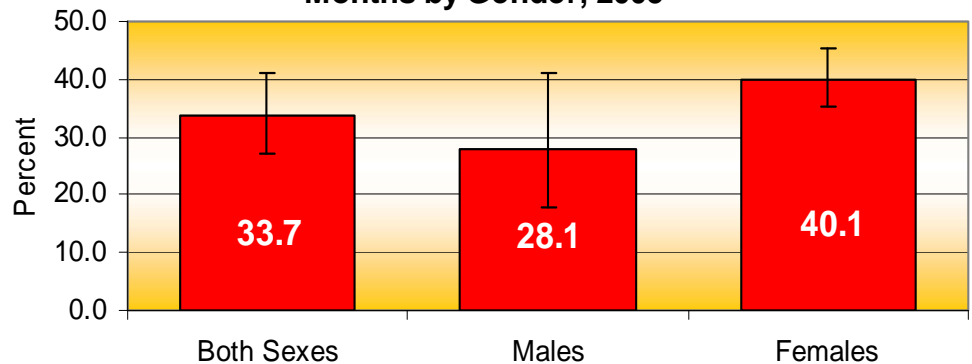
- In 2007 lifetime asthma high school prevalence in southeastern New Mexico was significantly higher (29.3%) than all other regions, except for north-eastern New Mexico.
- In 2005, 40.1% of high school females with asthma reported they had an asthma attack during the past 12 months.
- 36.9% of Hispanic high school students with asthma reported in 2005 that they had an asthma attack in the past 12 months.

Figure 13: Lifetime Asthma High School Prevalence by Region, 2005 & 2007



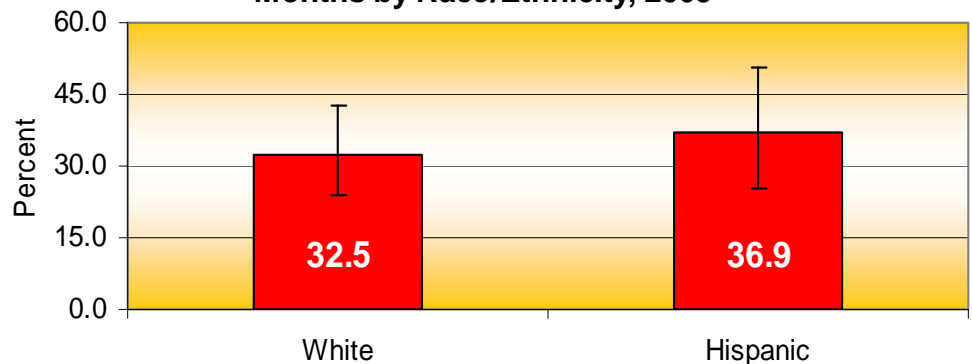
Source: YRRS, 2005, 2007.

Figure 14: Percent of High School Students with Asthma that had an Asthma Attack during Past 12 Months by Gender, 2005



Source: YRRS, 2005.

Figure 15: Percent of High School Students with Asthma that had an Asthma Attack During Past 12 Months by Race/Ethnicity, 2005

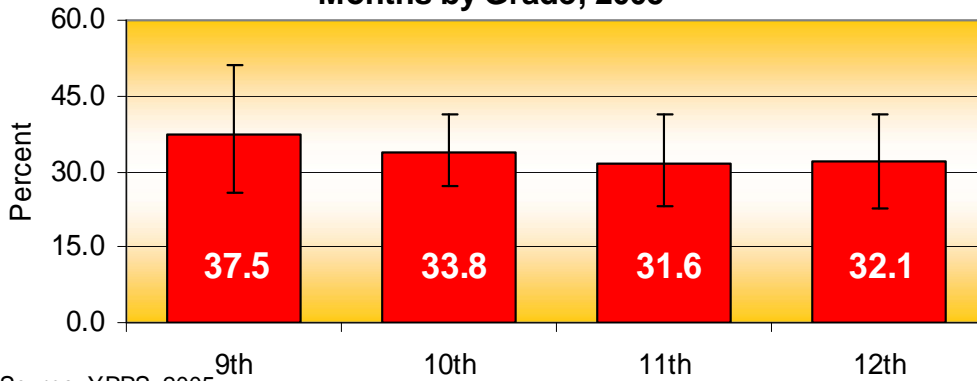


Source: YRRS, 2005.

High School Prevalence

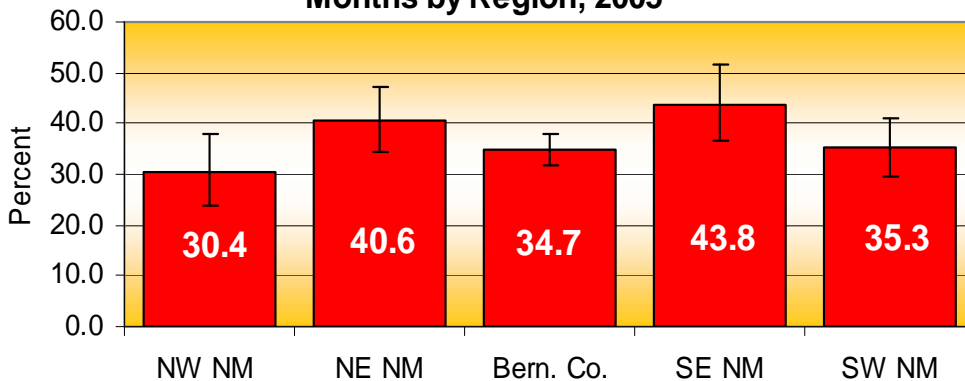


Figure 16: Percent of High School Students with Asthma that had an Asthma Attack During Past 12 Months by Grade, 2005



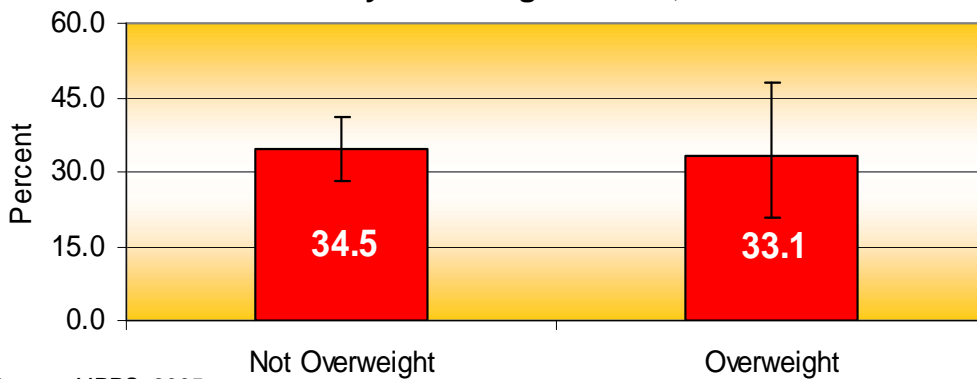
Source: YRRS, 2005.

Figure 17: Percent of High School Students with Asthma that Had an Asthma Attack During Past 12 Months by Region, 2005



Source: YRRS, 2005.

Figure 18: Percent of High School Students with Asthma that Had an Asthma Attack During Past 12 Months by Overweight Status, 2005



Source: YRRS, 2005.

Key Findings – High School Asthma Prevalence

- The percent of those with asthma that reported they had an asthma attack during the past 12 months did not differ significantly by grade in 2005.
- In 2005, three-in-ten high school students with asthma in northwestern New Mexico reported they had an asthma attack during the past 12 months.
- Asthma attack reports among high school students did not differ significantly by reported weight in 2005.

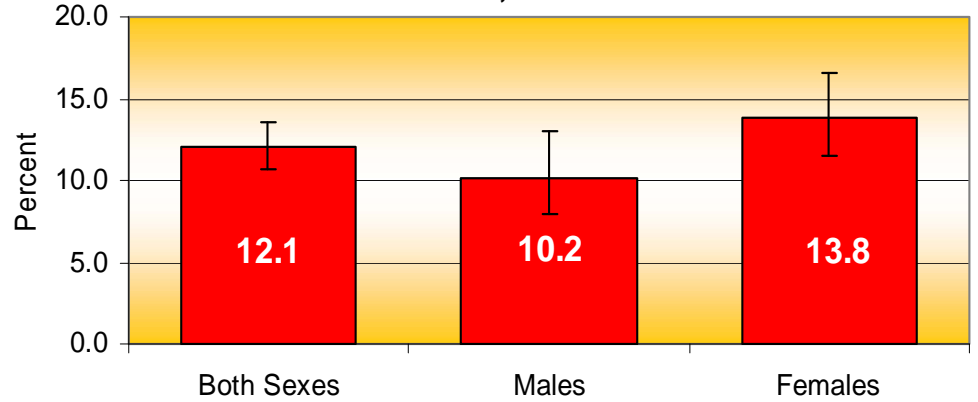


High School Prevalence

Key Findings – High School Asthma Prevalence

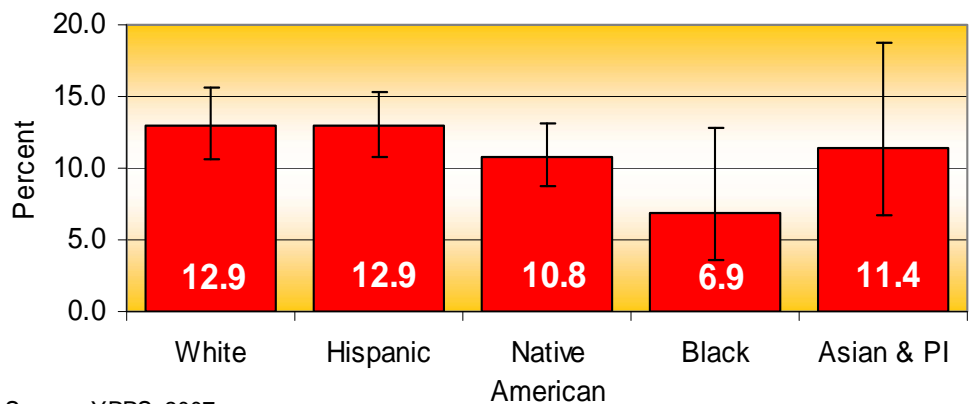
- 13.8% of high school girls reported that they had asthma in 2007.
- Differences in current asthma prevalence did not differ significantly by race/ethnicity in 2007.
- 12.9% of 9th graders had asthma in 2007.

Figure 19: Current Asthma High School Prevalence by Gender, 2007



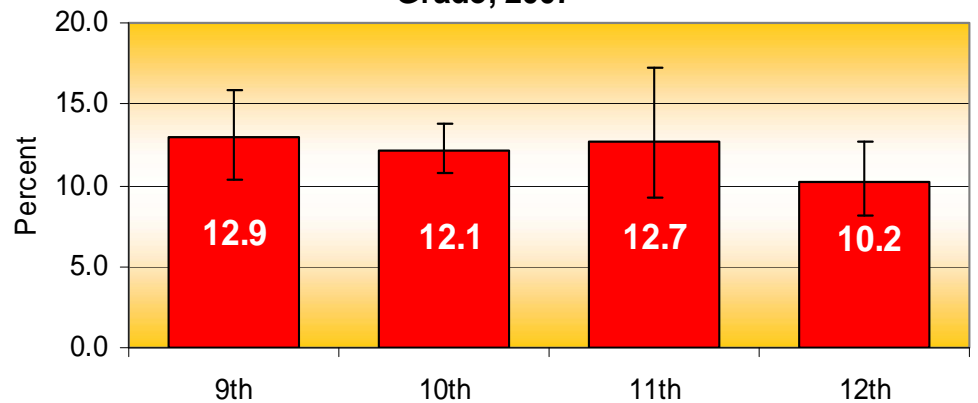
Source: YRRS, 2007.

Figure 20: Current Asthma High School Prevalence by Race/Ethnicity, 2007



Source: YRRS, 2007.

Figure 21: Current Asthma High School Prevalence by Grade, 2007

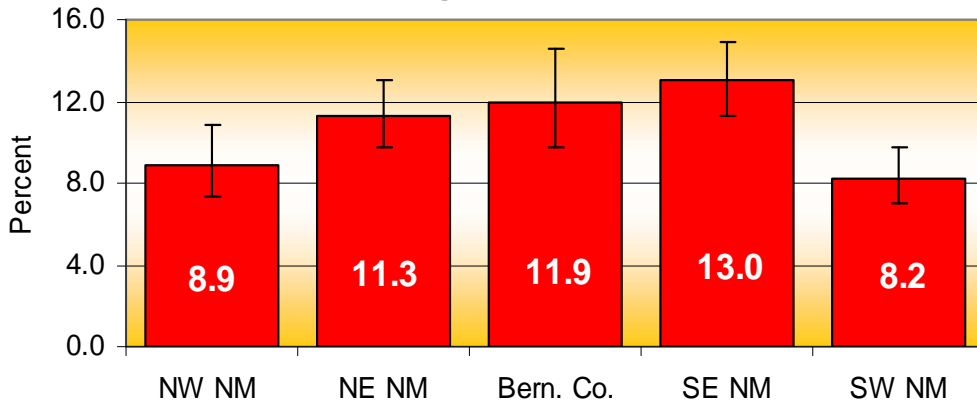


Source: YRRS, 2007.

High School Prevalence

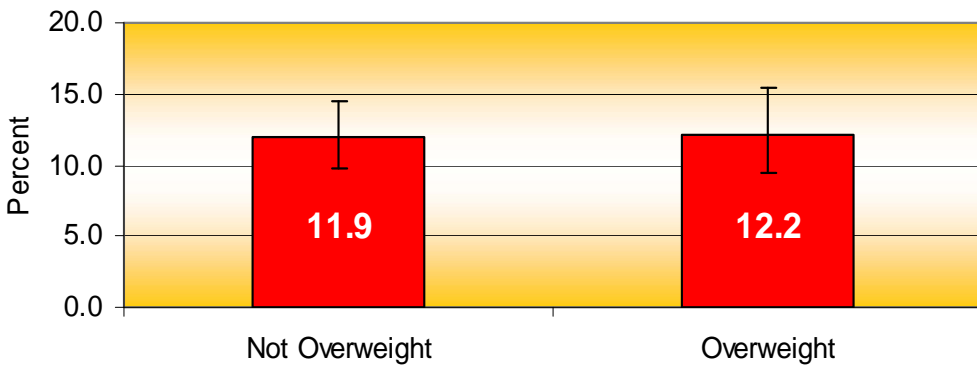


Figure 22: Current Asthma High School Prevalence by Region, 2007



Source: YRRS, 2007.

Figure 23: Current Asthma High School Prevalence by Overweight Status, 2007



Source: YRRS, 2007.

Key Findings – High School Asthma Prevalence

- Current high school asthma prevalence was 58.5% higher in the southeastern part of the state than in the southwestern region.
- 13.0% of high school students in southeastern New Mexico reported in 2007 that they had asthma.
- 12.2% of overweight high school students had asthma in 2007.



Hospital Inpatient Discharge Data

Methodology

Hospital Inpatient Discharge (HID) data is administered by the New Mexico Health Policy Commission pursuant to the Health Information Systems Act.. Although HID data has been collected since 1990, there have been several revisions and refinements since this inception. The current report presents comparable HID data since 2000.

General and specialty hospitals are required to annually report their discharges to the Health Policy Commission. In 2007, there were 36 general and 14 specialty hospitals reporting HID data. Data from federal facilities are not included in the HID dataset.

An inpatient discharge occurs when a patient is admitted overnight to a hospital and leaves that hospital. Individuals that are transferred from one hospital to another are included both times in the dataset.

In 2007, there were a total of 218,083 discharges, of which 170,434 (excluding newborns) were New Mexico residents in the master dataset.

The analysis dataset used in this report includes any record with ICD-9 codes 493.0 - 493.92 for any of the multiple diagnoses fields. Unless otherwise indicated, most data used in this report are for a primary, or first-listed, diagnosis of asthma.

Hospital Inpatient Discharge Data



HID data are received with a unique personal identifier number so that the number of discharges per person can be ascertained. When the data are received from the New Mexico Health Policy Commission, additional cleaning occurs in an attempt to resolve inconsistencies with such demographic variables as race, sex, and age where an individual has more than one discharge.

New Mexico HID data suffers from two limitations. First, discharges from Indian Health Service (IHS) hospitals as well as those from military and veterans hospitals are not included in the dataset. Since most Native Americans are discharged from IHS hospitals, they are excluded from the analysis. Second, the data do not include state resident discharges that occurred out of state.

This last limitation does not have a significant impact on state asthma discharge rates. The Asthma Program acquired 2004 Texas HID data and found that the inclusion of New Mexico residents that were discharged from non-federal Texas hospitals did not have a significant increase on state asthma rates. Dona Ana County (located just north of El Paso, Texas) was the only county in the state whose rates changed significantly with the inclusion of Texas discharges.

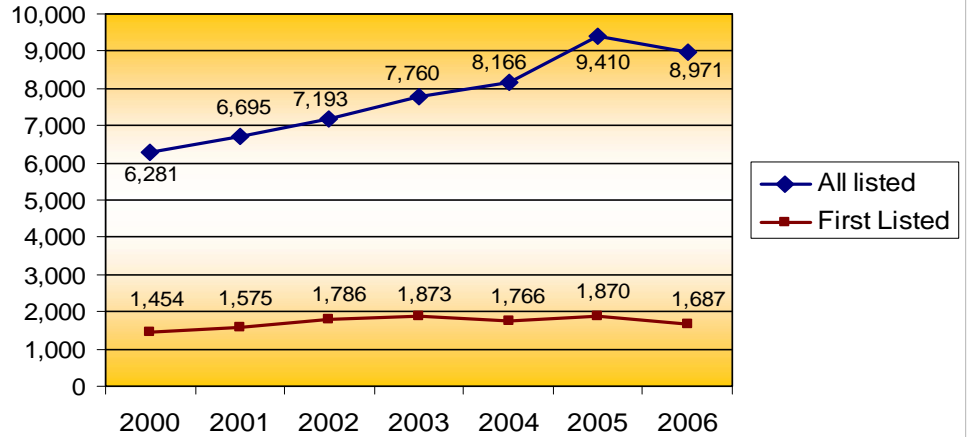


Asthma Hospitalization

Key Findings– Asthma Hospital Discharges

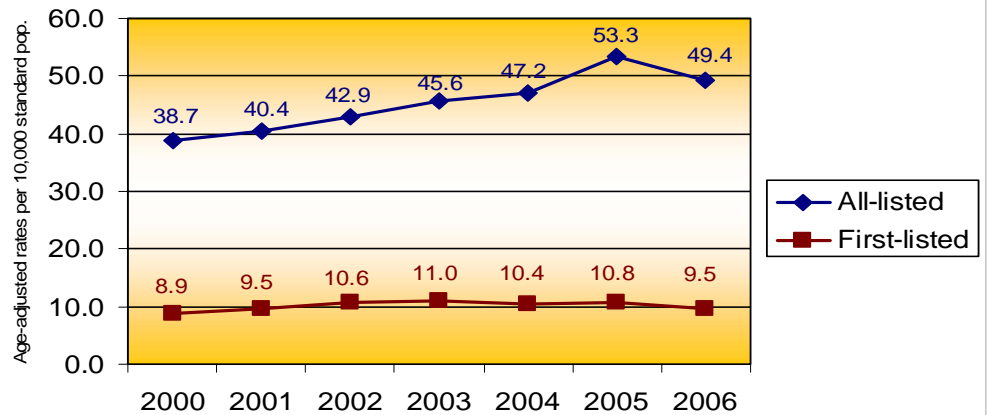
- In 2006, there were 1,687 primary, or first-listed, asthma discharges from non-federal in-state hospitals.
- Whereas there has been a 16.0% increase in the number of first-listed asthma discharges between 2000 and 2006, there has been a 42.8% increase in all-listed asthma discharges.
- Since many Native Americans are discharged from federal Indian Health Service hospitals, they are not included in these statistics.
- In 2007, the first-listed age-adjusted asthma discharge rate was 9.5 discharges per 10,000 standard population.

Figure 1: Number of Asthma Hospitalizations



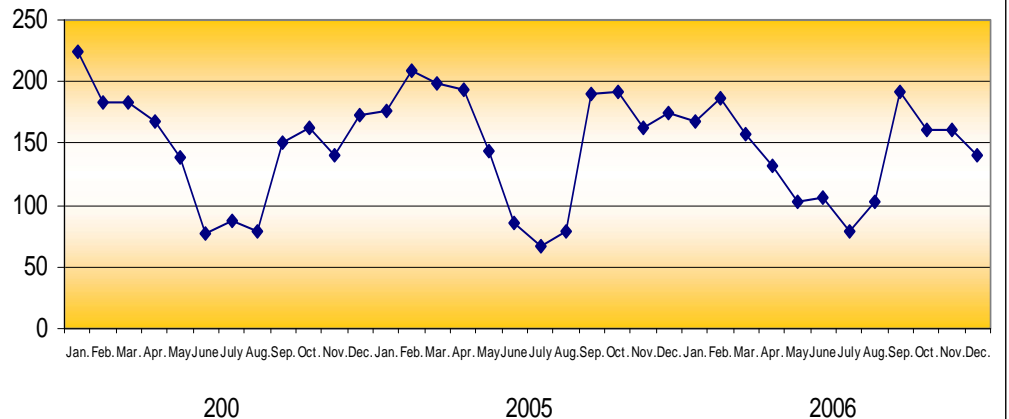
Source: New Mexico Health Policy Commission.

Figure 2: Asthma Hospitalization Rates, 2000-2006



Source: New Mexico Health Policy Commission.

Figure 3: Asthma Hospitalizations per Month

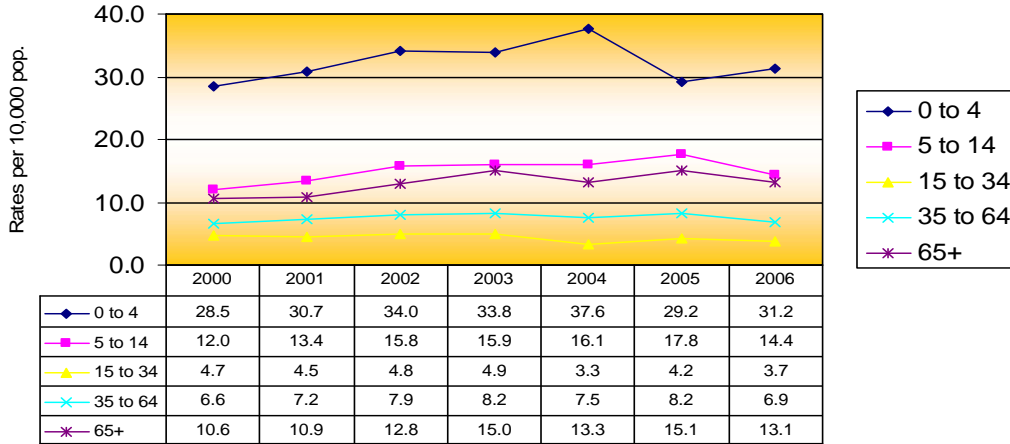


SOURCE: New Mexico Health Policy Commission.

Asthma Hospitalization

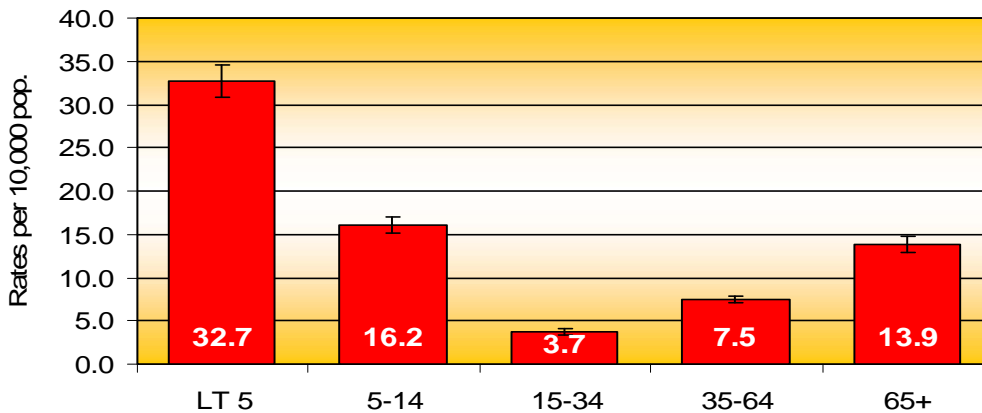


Figure 4: Asthma Hospitalization Rates by Age Group, 2000-2006



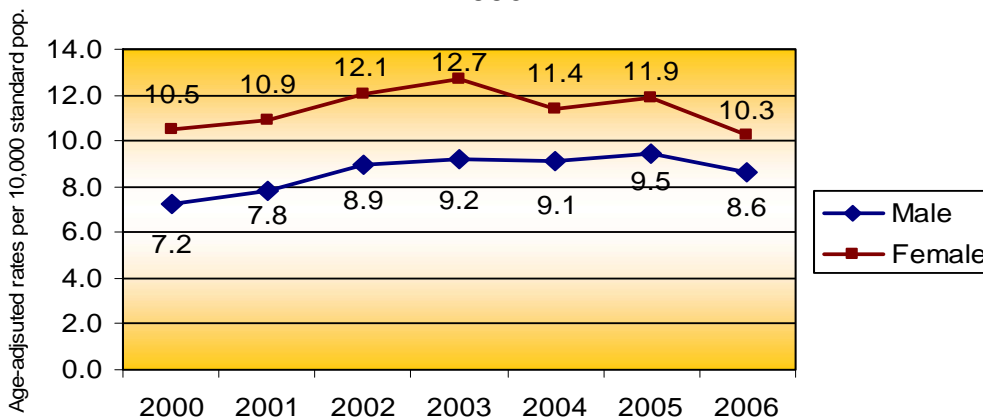
Source: New Mexico Health Policy Commission.

Figure 5: Asthma Hospitalization Rates, 2004-2006 Average



Source: New Mexico Health Policy Commission

Figure 6: Asthma Hospitalizations by Gender, 2000-2006



Source: New Mexico Health Policy Commission.

Key Findings- Asthma Hospital Discharges

- From 2000 to 2006, the less than 5 age group has consistently had the highest asthma hospital discharge rates; whereas the 15-34 age group consistently had the lowest rates.
- The age distribution of primary asthma discharge rates resembled a backward J-curve with the highest rates in the two lowest age groups (less than 5 and 5-14), the lowest rates were in the 15-34 age group, and moderate rates in the oldest age groups (35-64 and 65 and older).
- The less than 5 age group had a 2004-2006 average rate of 32.7 discharges per 10,000 population.
- Females consistently had the highest asthma discharge rates for the period 2000 to 2006.

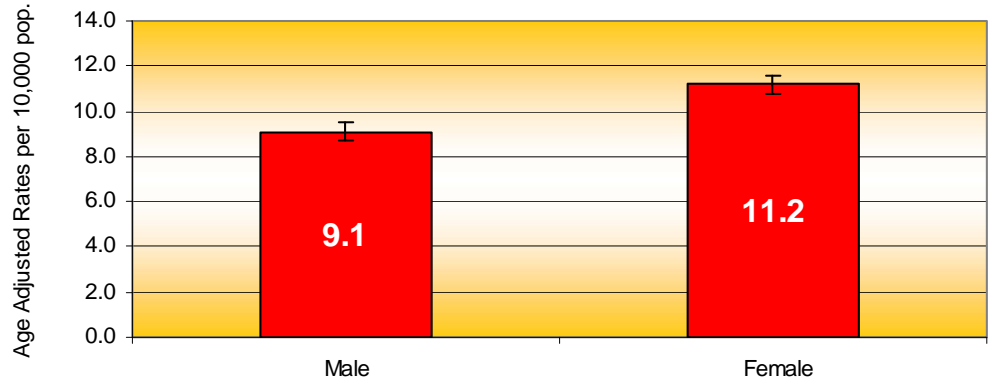


Asthma Hospitalization

Key Findings– Asthma Hospital Discharges

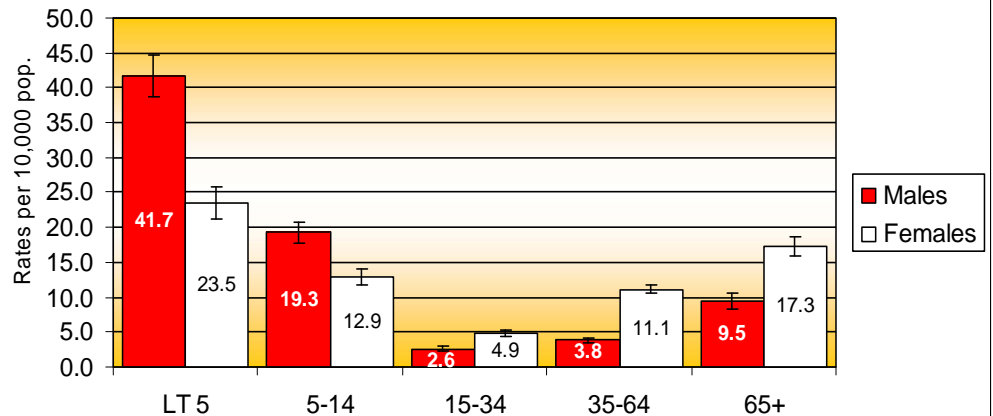
- The 2004-2006 female asthma discharge rate (11.2) was significantly higher than the male rate (9.1).
- Males have higher asthma discharge rates than females in the two youngest age groups (less than 5 and 5-14); whereas females have the highest rates in all the other age groups.
- In the less than 5 age group, the male asthma discharge rate (41.7) was almost double the female rate (23.5) during 2004-2006.
- In 2006, the Black or African American hospitalization rate (16.0) was more than double the White rate (7.3) and almost double the Hispanic rate (8.7).

Figure 7: Asthma Hospitalizations Rates, 2004-2006 Average



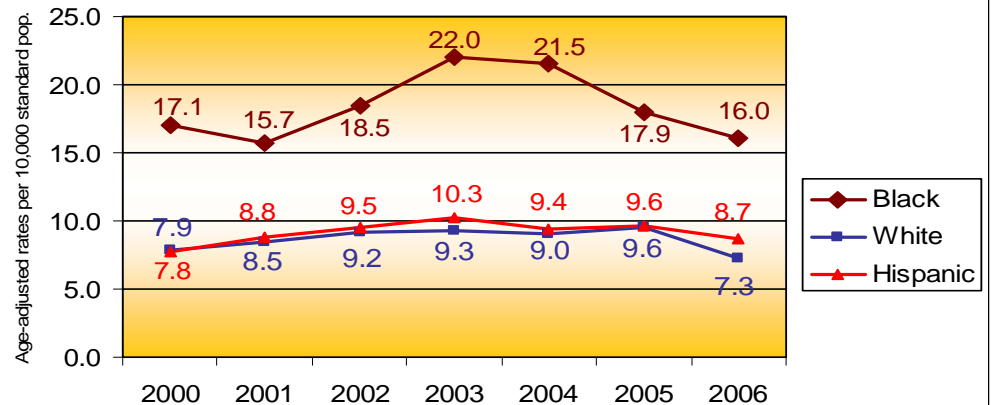
Source: New Mexico Health Policy Commission

Figure 8: Asthma Hospitalization Rates by Age Group and Gender, 2004-2006 Average



Source: New Mexico Health Policy Commission

Figure 9: Asthma Hospitalization Rates by Race/Ethnicity, 2000-2006

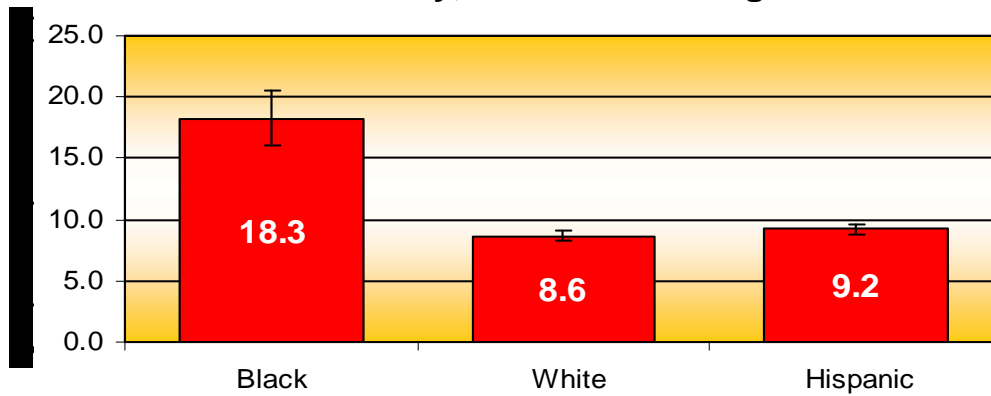


Source: New Mexico Health Policy Commission

Asthma Hospitalization

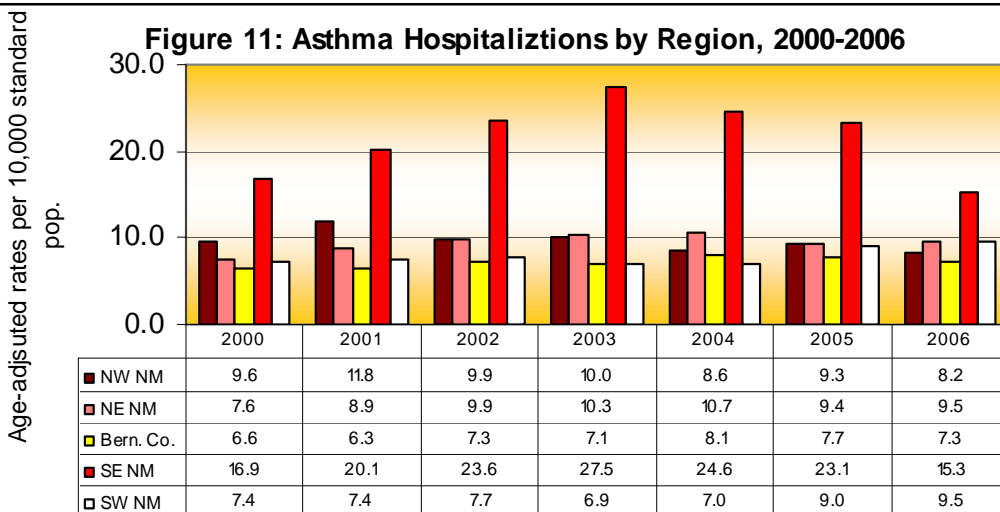


Figure 10: Asthma Hospitalization Rates by Race/Ethnicity, 2004-2006 Average



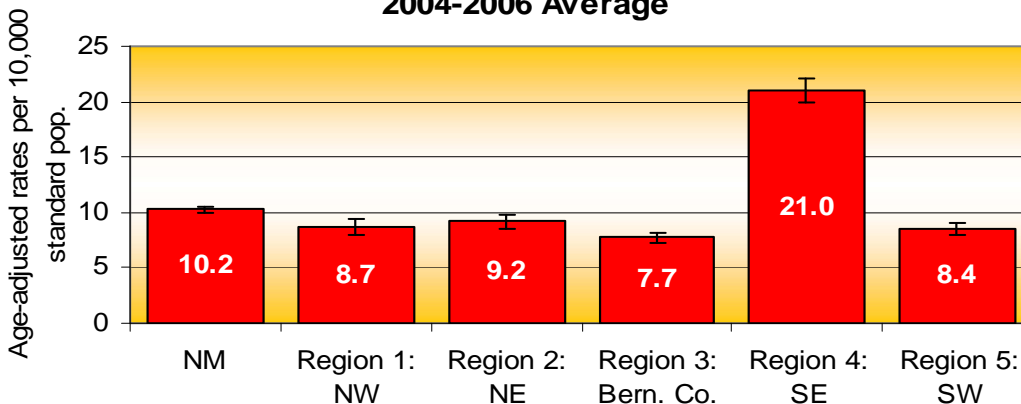
Source: New Mexico Health Policy Commission.

Figure 11: Asthma Hospitalizations by Region, 2000-2006



Source: New Mexico Health Policy Commission.

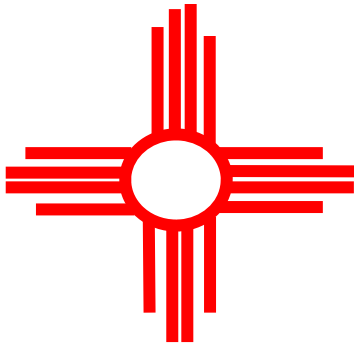
Figure 12: Asthma Hospitalization Rates by Region, 2004-2006 Average



SOURCE: New Mexico Health Policy Commission.

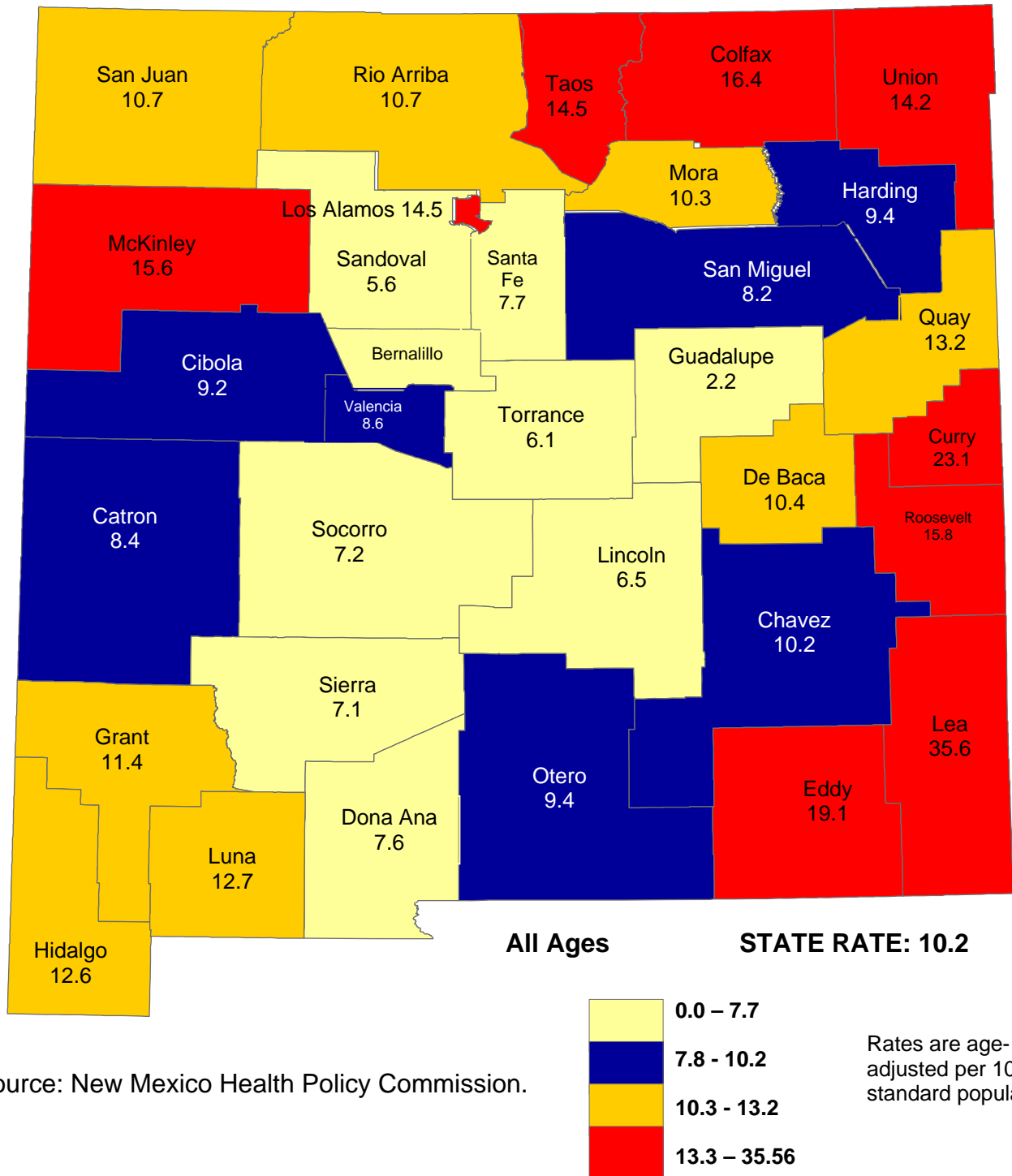
Key Findings- Asthma Hospital Discharges

- From 2000 to 2006, southeastern New Mexico consistently had the highest asthma discharge rates of any region in the state.
- In 2006, the asthma discharge rate in southeastern New Mexico (15.3) was more than double the rate for Bernalillo County (7.3).
- The state 2004-2006 asthma discharge rate was 10.2 per 10,000 standard population.
- Southeastern New Mexico's 2004-2006 average asthma discharge rate (21.0) was more double the state rate (10.2).
- With the exception of southeastern New Mexico, all other regions had 2004-2006 average asthma discharge rates ranging from 7.7 to 9.2.



Asthma Hospitalization

Figure 13: Asthma Hospitalization Rates, 2004-2006 Average



Source: New Mexico Health Policy Commission.

Asthma Hospitalization



Figure 14: Average Number of Discharges per person (All Ages), 2000-2006

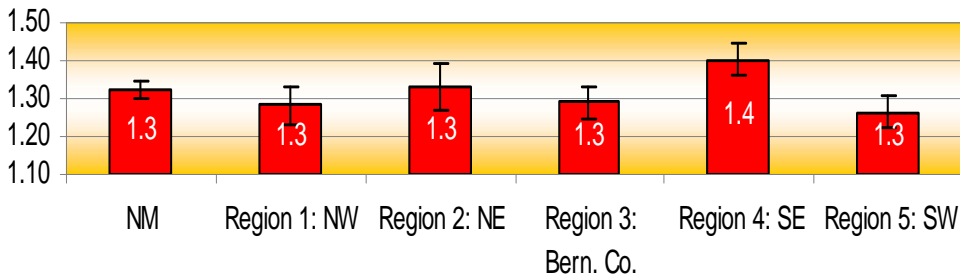


Figure 15: Average Length of Stay (All Ages), 2000-2006

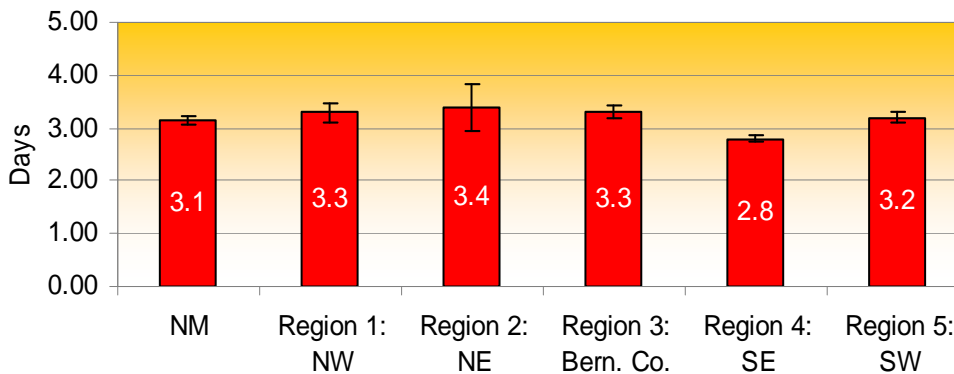
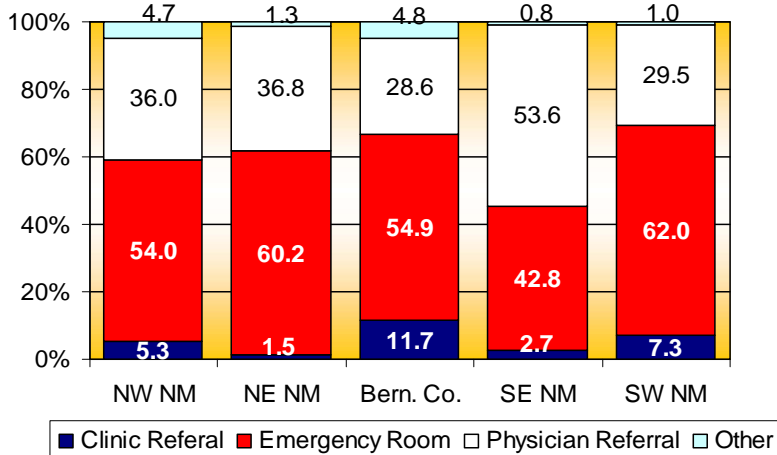


Figure 16: Source of Admission for Asthma Hospitalizations, 2000-2006



Key Findings– Asthma Hospital Discharges

- Lea County had the highest asthma hospital discharge rate (35.6) of any county in the state.
- Lea County’s asthma hospital discharge rate was over three times higher than the state rate of 10.2 per 10,000 standard population.
- Southeastern New Mexico residents had significantly more discharges per person (1.4) compared to the state (1.3).
- Southeastern New Mexico residents had significantly shorter hospital stays (2.8 days) compared to the state (3.1 days).
- Unlike all other regions, “physician referral” constituted the majority of all sources of asthma hospital admissions (53.6%) in southeastern New Mexico.

Source: New Mexico Health Policy Commission

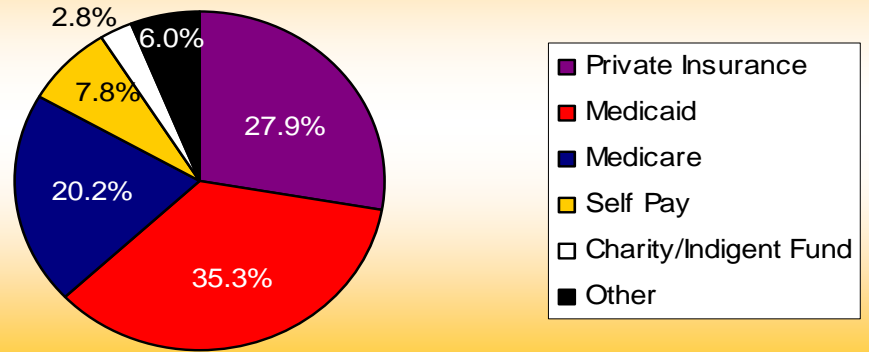


Asthma Hospitalization

Key Findings– Youth Asthma Hospital Discharges

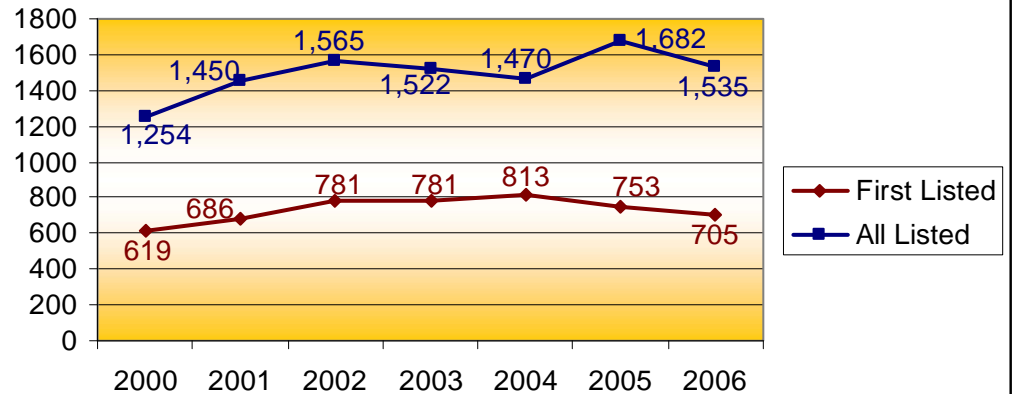
- In 2006, there were 705 primary, or first-listed, asthma hospital discharges of youth less than 15 years of age.
- In 2006, there were 48 fewer first-listed asthma hospital discharges compared with 2005.
- In 2006, the less than 15 first-listed asthma discharge rate was 20.1 per 10,000 population.
- In 2006, the less than 15 year old all-listed asthma discharge rate was 43.8 per 10,000 population.

Figure 17: Asthma Hospitalizations by Principal Payer, 2000-2006



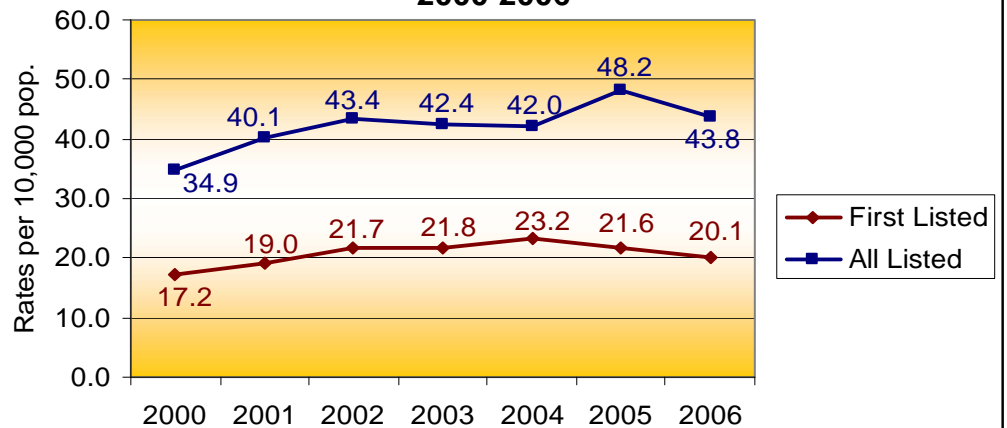
SOURCE: NMHPC.

Figure 18: Number of Asthma Hospitalizations (<15yrs), 2000-2006



Source: New Mexico Health Policy Commission.

Figure 19: Asthma Hospitalization Rates (<15yrs), 2000-2006



Source: New Mexico Health Policy Commission.

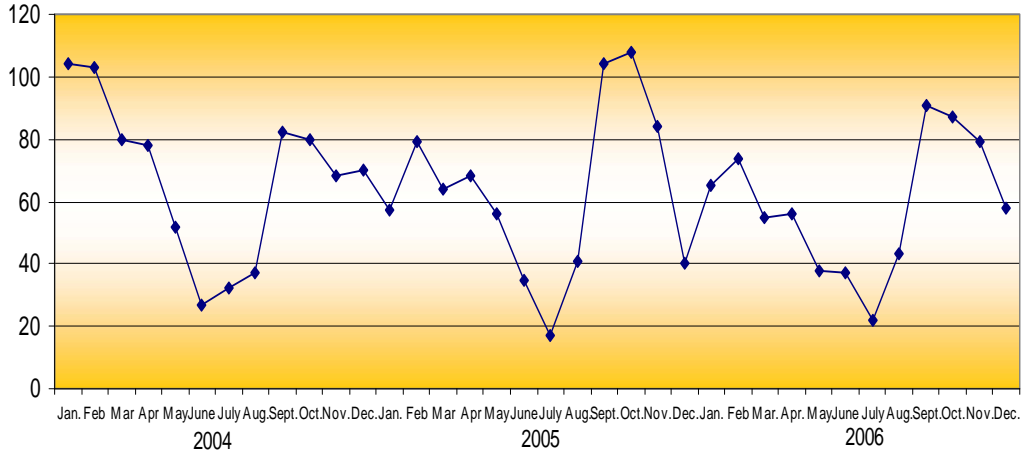
Asthma Youth Hospitalization



Key Findings – Youth Asthma Hospital Discharges

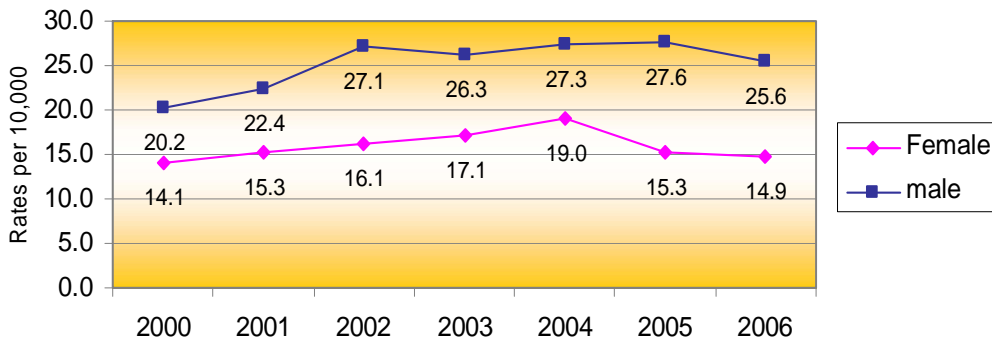
- Youth had the lowest number of asthma hospital discharges during the summer and the highest number during autumn.
- From 2000 to 2006, males consistently had higher asthma discharge rates than females.
- During the last two years (2005 and 2006), female asthma discharge rates have fallen.
- Male youth had a 2004-2006 average asthma discharge rate of 26.8 which was significantly higher than the female rate of 16.5.

Figure 20: Asthma Hospitalizations per Month (Age <15), 2004-2006



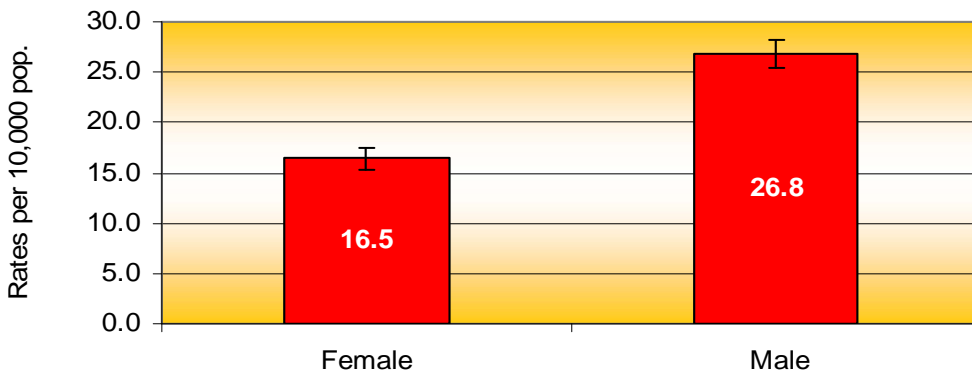
Source: New Mexico Health Policy Commission

Figure 21: Asthma Hospitalization Rates by Gender, 2000-2006 (<15 yrs. old)



Source: New Mexico Health Policy Commission

Figure 22: Asthma Hospitalization Rates by Gender (<15yrs), 2004-2006 Average



Source: New Mexico Health Policy Commission

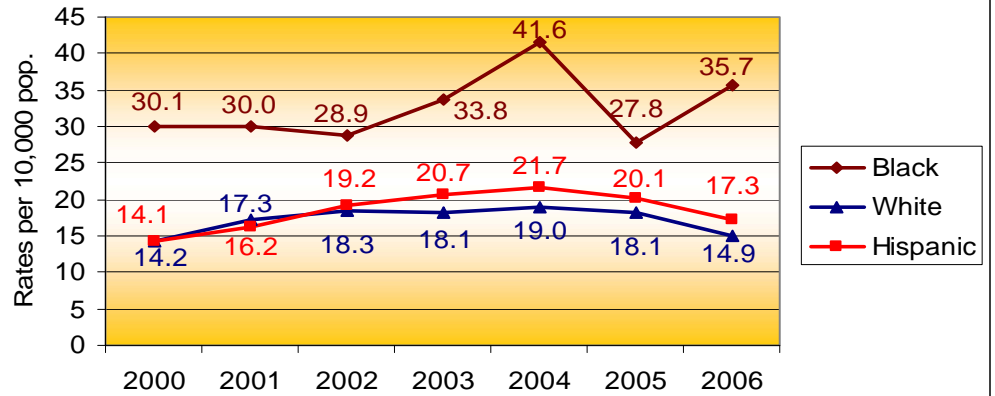


Asthma Youth Hospitalization

Key Findings – Youth Asthma Hospital Discharges

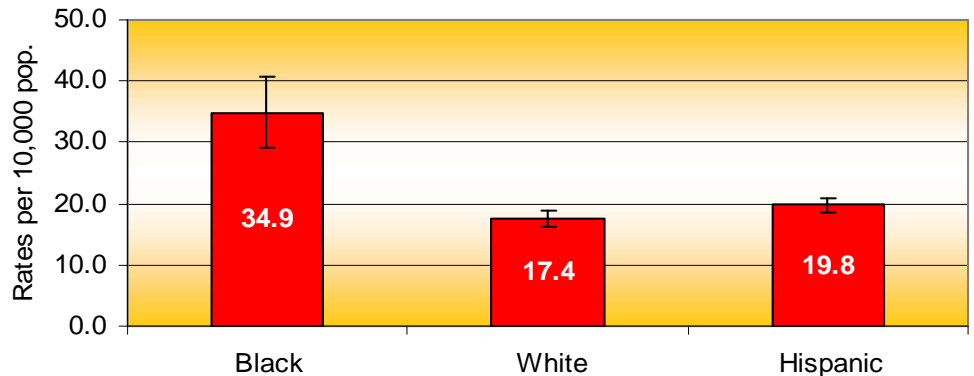
- Among youth, Blacks had consistently higher rates than Whites or Hispanics during the seven year period 2000-2006.
- The Black or African American youth asthma hospital discharge rate was 34.9 (2004-2006 average).
- Among youth, southeastern New Mexico consistently had the highest asthma hospital discharge rates compared to all other regions in the state.
- With the exception of southeastern New Mexico, youth asthma hospital discharge rates ranged from 14.2 to 20.9 in 2006.

Figure 23: Asthma Hospitalization Rates by Race/Ethnicity (<15yrs), 2000-2006



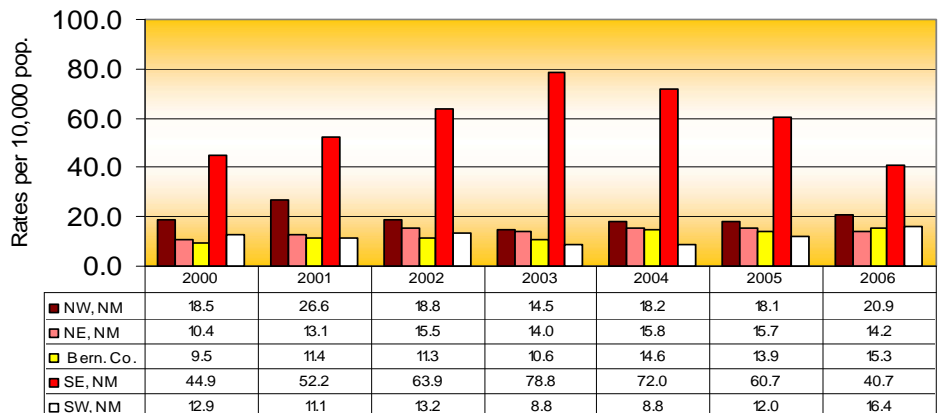
Source: New Mexico Health Policy Commission

Figure 24: Asthma Hospitalization Rates by Race/Ethnicity (<15yrs), 2004-2006



Source: New Mexico Health Policy Commission.

Figure 25: Asthma Hospitalization Rates by Region (<15yrs), 2000-2006

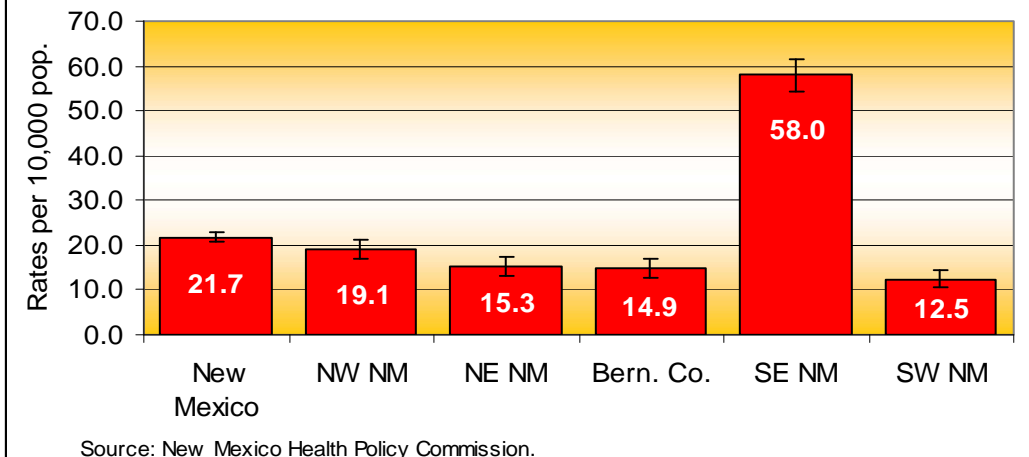


Source: NM Health Policy Commission

Asthma Youth Hospitalization



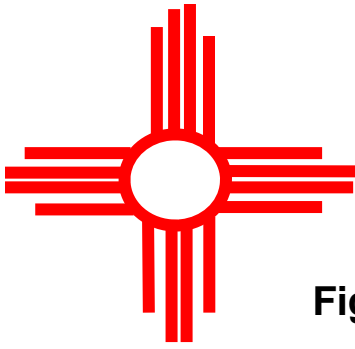
Figure 26: Asthma Hospitalization Rates (<15yrs), 2004-2006



Source: New Mexico Health Policy Commission.

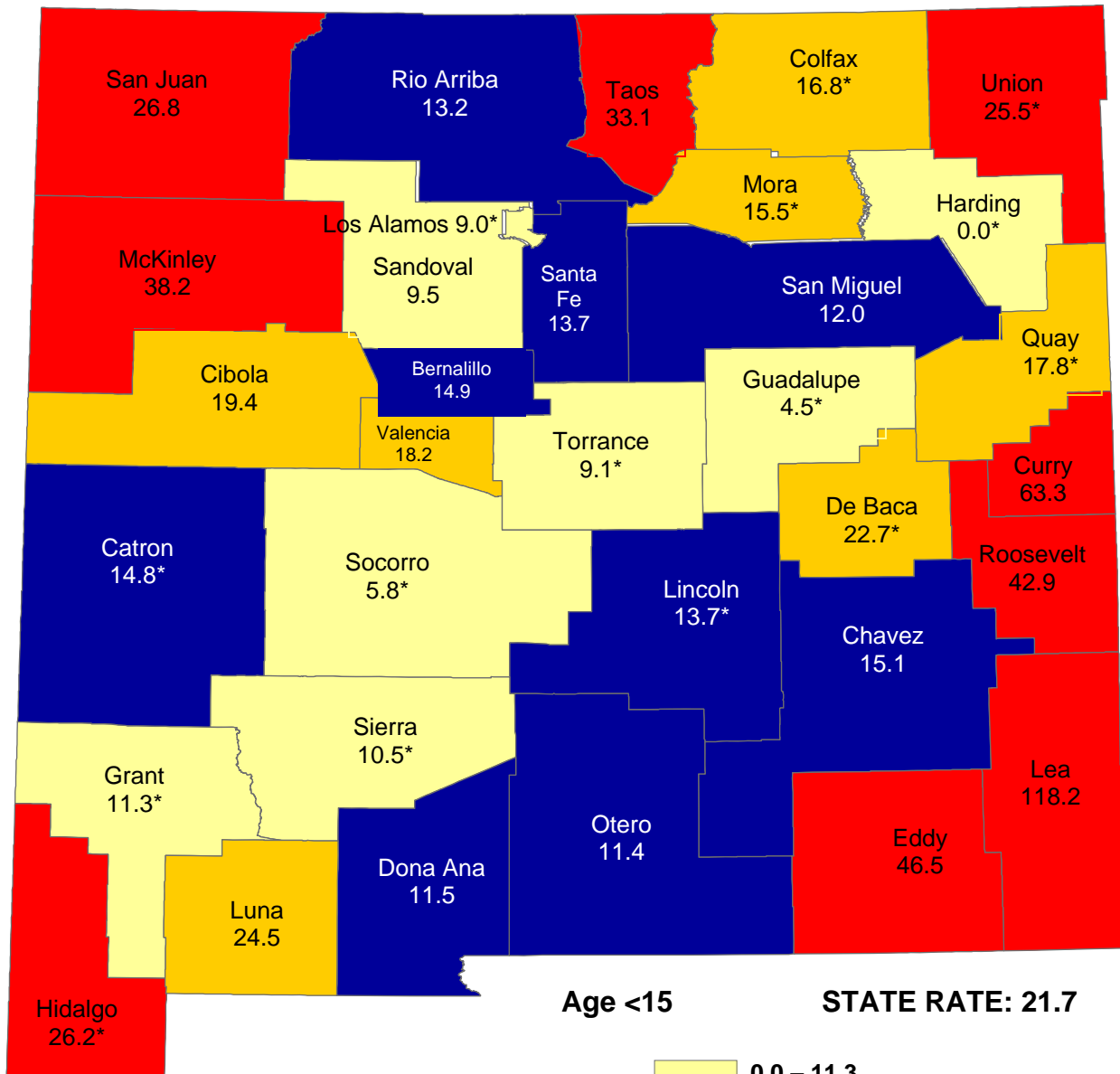
Key Findings – Youth Asthma Hospital Discharges

- Among youth, southeastern New Mexico's 2004-2006 average asthma hospital discharge rate (58.0) was almost three times higher than the state rate of 21.7.
- Southwestern New Mexico had the lowest youth asthma hospital discharge rate (12.5) of any region in the state.



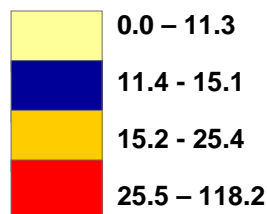
Youth Hospitalization

Figure 27: Asthma Hospitalization Rates (<15yrs), 2004-2006 Average



* Rates based on fewer than 20 cases should be interpreted with caution.

Source: New Mexico Health Policy Commission.



Rates are per 10,000 population

Youth Hospitalization



Key Findings – Youth Asthma Hospital Discharges

- Among youth, Lea County had the highest 2004-2006 average asthma hospital discharge rate in the state at 118.2.
- Lea County's youth asthma hospital discharge rate (118.2) was more than 5 times higher than the state rate (21.7).
- The four highest county youth asthma hospital discharge rates (Lea, Curry, Eddy, and Roosevelt counties) all occurred in the southeastern region of the state.
- Taos County had a youth asthma hospital discharge rate of 33.1 (2004-2006 average).



Emergency Department Discharge Data

Methodology

The emergency department (ED) data in this report was collected by the Asthma Program's Asthma Epidemiologist. Unlike Hospital Inpatient Discharge (HID) data, there is no central data steward responsible for collecting data from non-federal hospital emergency departments. Data for the years 2000-2003 were requested and collected and compiled into a single analysis dataset. 2004-2008 data has also been requested but there are still outstanding emergency departments that have not responded.

ED data include those cases where an individual was admitted to the emergency department and discharged. They do not include cases that were admitted to the hospital from the emergency department or those individuals that died in the ED.

The ED data used in this report includes any record with a first-listed diagnosis of asthma (ICD-9 codes 493.0 - 493.92). From 2001 and 2003, there was an average of over 5,700 asthma ED discharges per year.

Medical records capacity among the various emergency departments in the state vary significantly and there are many different data query systems, both of which create challenges for the collection and compilation of state ED data. The New Mexico Department of Health is exploring the possibility of creating an E-Reporting system for collecting ED data, but this project is in its early stages.

Emergency Department Discharge Data



Occasionally, due to information systems changes or the changing of hospital ownership, previous years data may not be available. Data collection are hampered by all of these factors. These data have the same limitations as the HID data: the unavailability of comparable data from non-federal EDs and the non-inclusion of out of state resident ED discharges. In addition, due to an information systems change at a large hospital in southwestern New Mexico, state or regional data for 2000 is incomplete; that is why this report only uses 2001-2003 data.

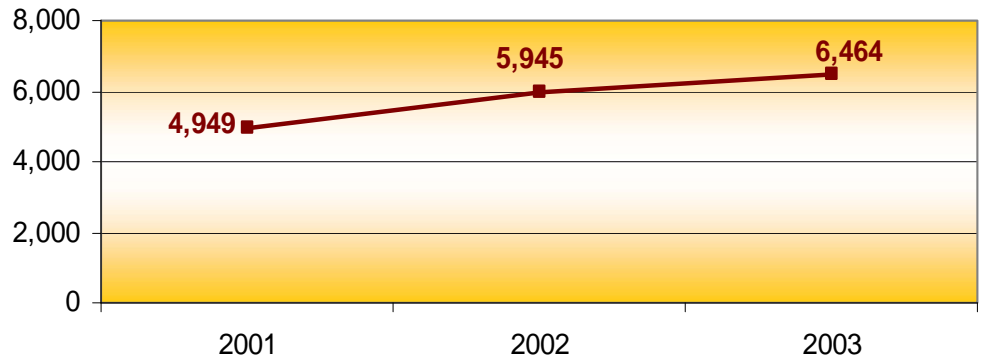


Emergency Department Discharges

Key Findings – Emergency Department discharges

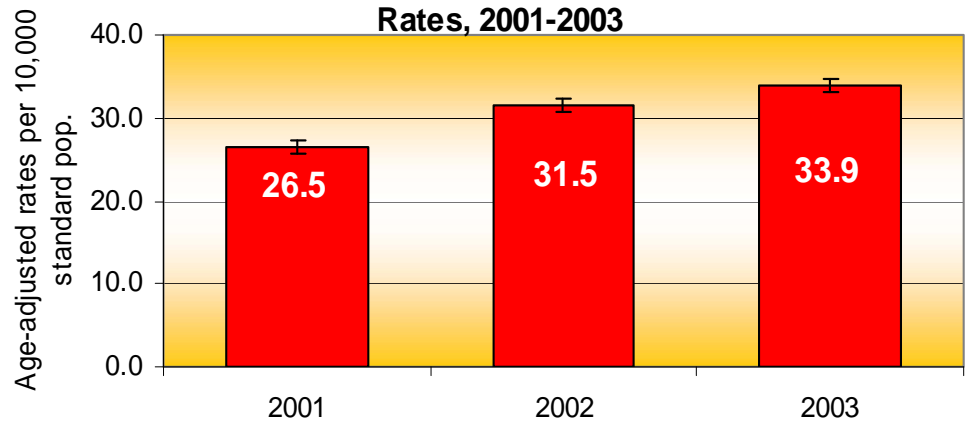
- From 2001 to 2003 the average number of asthma emergency department discharges per year was 5,786.
- Asthma emergency department discharge rates increased 27.9% from 2001 to 2003.
- In 2003, the age-adjusted asthma emergency department discharge rate was 33.9 discharges per 10,000 standard population.
- The months with the lowest number of asthma emergency department discharges are June, July, and August.

Figure 1: Number of Asthma Emergency Department Discharges, 2001-2003



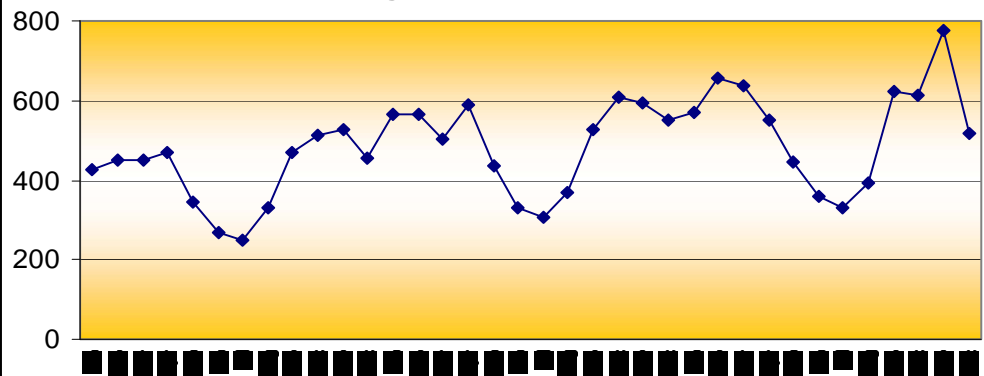
Source: Environmental Health Epidemiology Bureau.

Figure 2: Asthma Emergency Department Discharge Rates, 2001-2003



Source: Environmental Health Epidemiology Bureau.

Figure 3: Number of Asthma Emergency Department Discharges per Month, 2001-2003

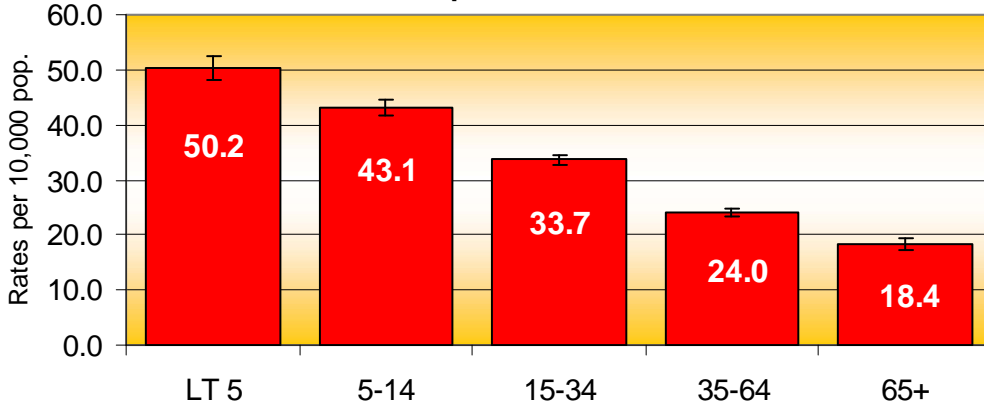


Source: Environmental Health Epidemiology Bureau.

Emergency Department Discharges

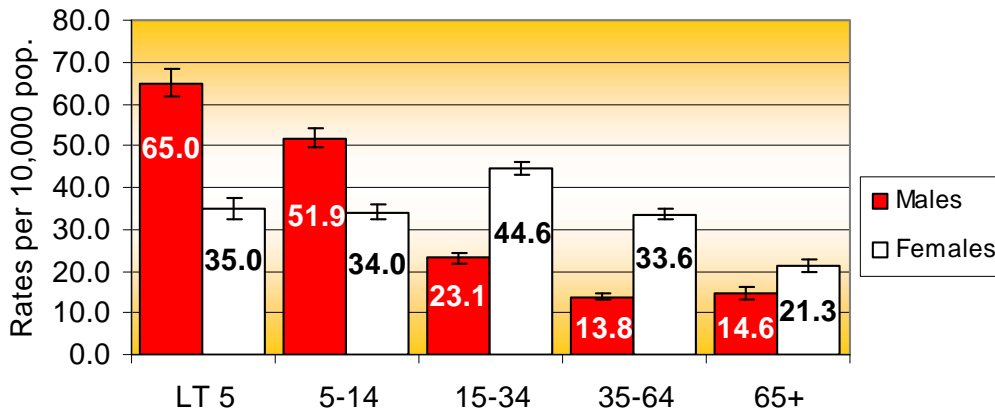


Figure 4: Asthma Emergency Department Rates by Age Group, 2001-2003



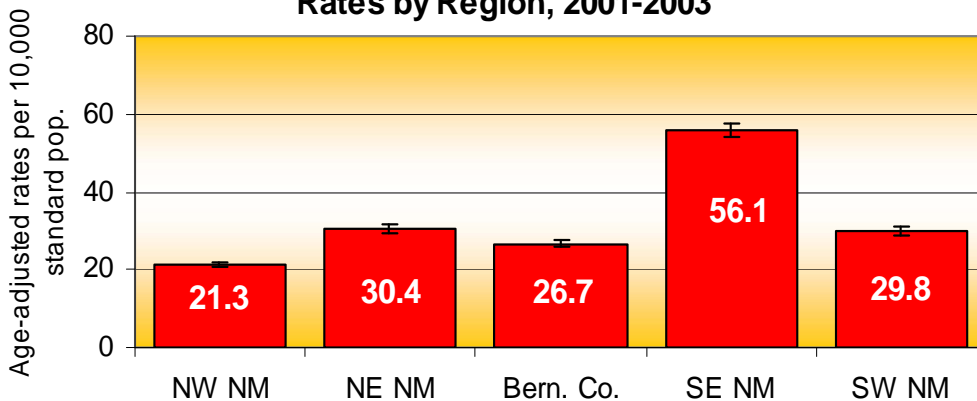
Source: Environmental Health Epidemiology Bureau.

Figure 5: Asthma Emergency Department Discharge Rates by Gender and Age Group, 2001-2003



Source: Environmental Health Epidemiology Bureau.

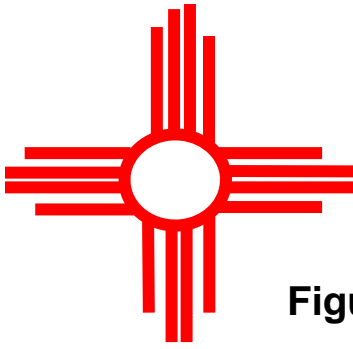
Figure 6: Asthma Emergency Department Discharge Rates by Region, 2001-2003



Source: Environmental Health Epidemiology Bureau.

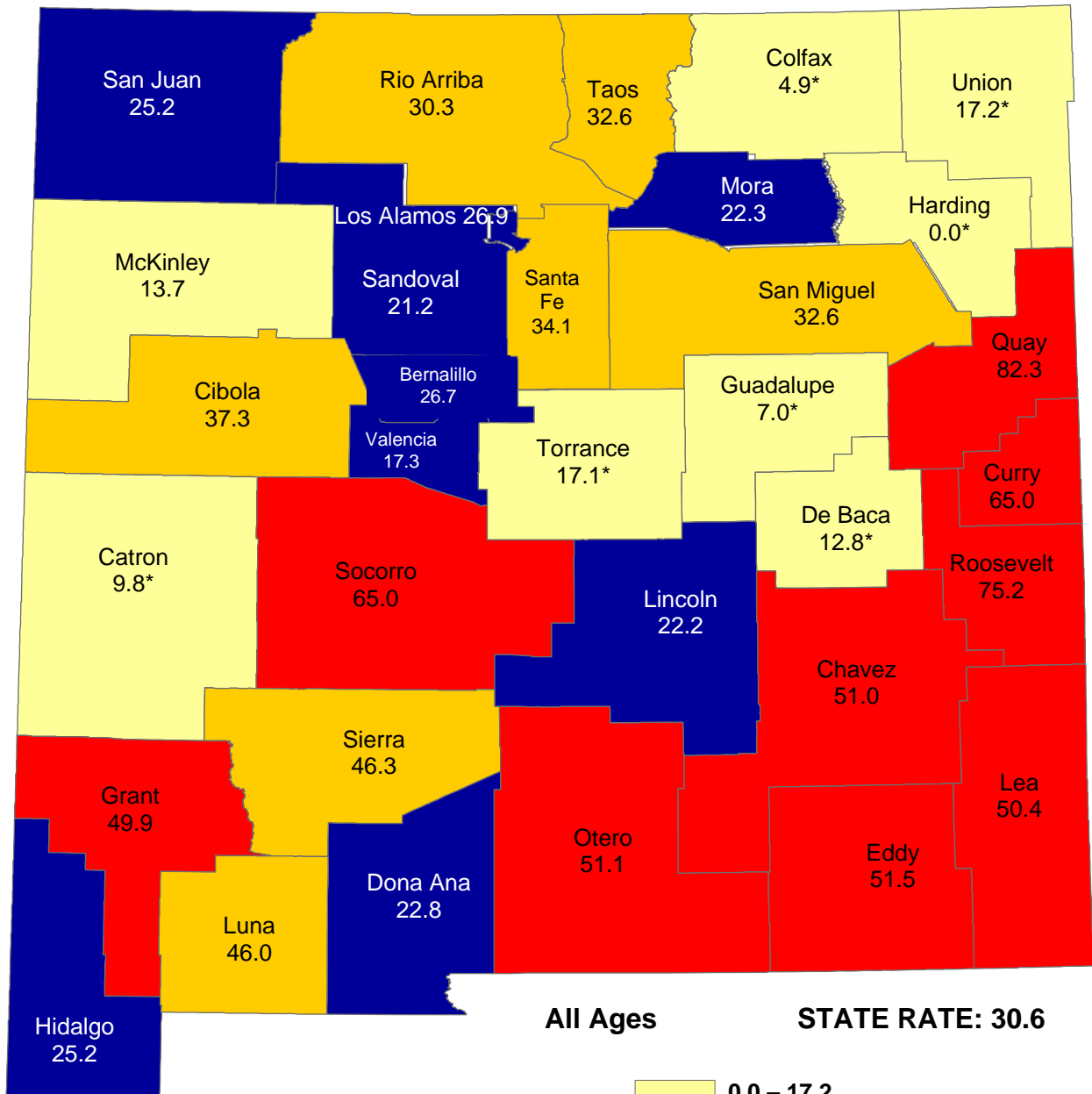
Key Findings – Emergency Department Discharges

- Asthma ED discharge rates steadily decrease with age.
- The under 5 age group asthma ED discharge rate was 2.7 times higher than the over 65 rate.
- Male asthma ED discharge rates are significantly higher than female rates for the youngest two age groups—less than 5 and 5 to 14.
- The over 65 female asthma ED rate is 1.4 times higher than the male rate for that age group.
- Southeastern New Mexico’s asthma ED rate (56.1) is more than double Bernalillo County’s rate (26.7).

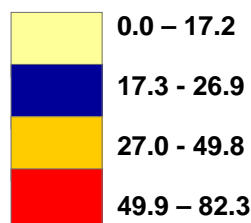


Emergency Department Discharges

Figure 7: Asthma Emergency Department Discharge Rates, 2001-2003 Average



* Rates based on fewer than 20 cases should be interpreted with caution.



Rates are per 10,000 population

Source: New Mexico Health Policy Commission.

Emergency Department Discharges



Key Findings – Asthma Hospital Discharges

- From 2001 to 2003, the state experienced an average of 30.6 asthma ED discharges per 10,000 standard population.
- The vast majority of the counties in the highest quartile are in southeastern New Mexico.
- Quay County had the highest 2001-2003 average asthma ED rate (82.3), followed by Roosevelt County (75.2).
- Luna County had a 2001-2003 average asthma ED rate of 46.0.

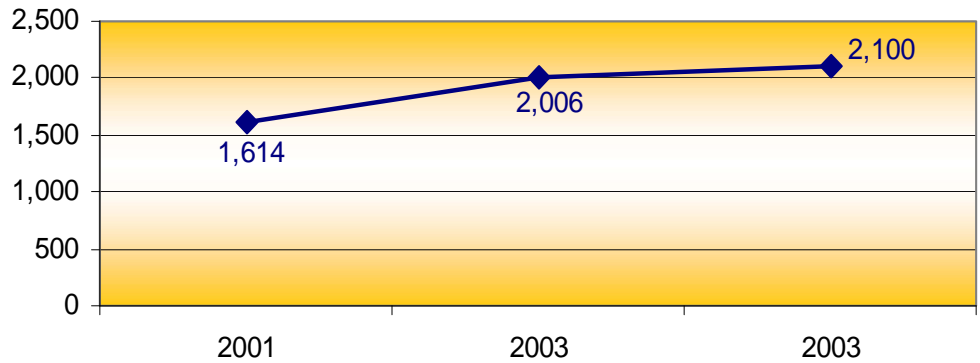


Youth Emergency Department Discharges

Key Findings – Youth Emergency Department Discharges

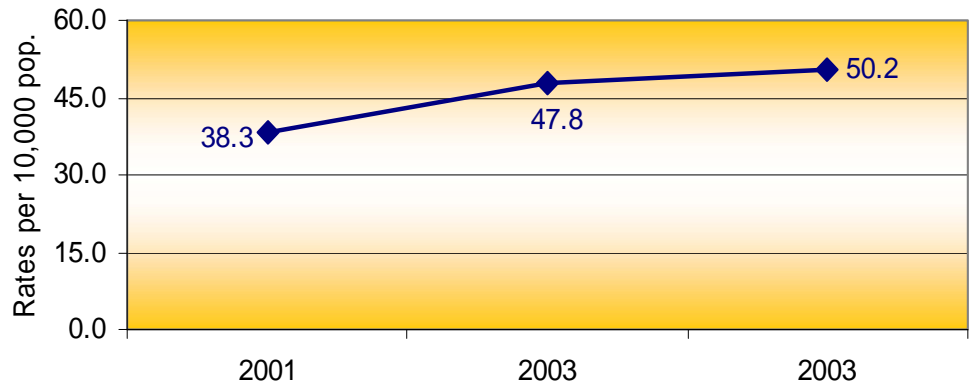
- From 2001 to 2003 the number of asthma youth emergency department discharges increased 30.1%.
- In 2003, the asthma youth emergency department discharge rate was 50.2 per 10,000 population.
- The pattern of monthly youth emergency department discharges for asthma is similar to that of youth hospitalizations.
- The summer months had the fewest number of youth asthma emergency department discharges.

Figure 8: Number of Asthma Emergency Department Discharges (<15yrs), 2001-2003



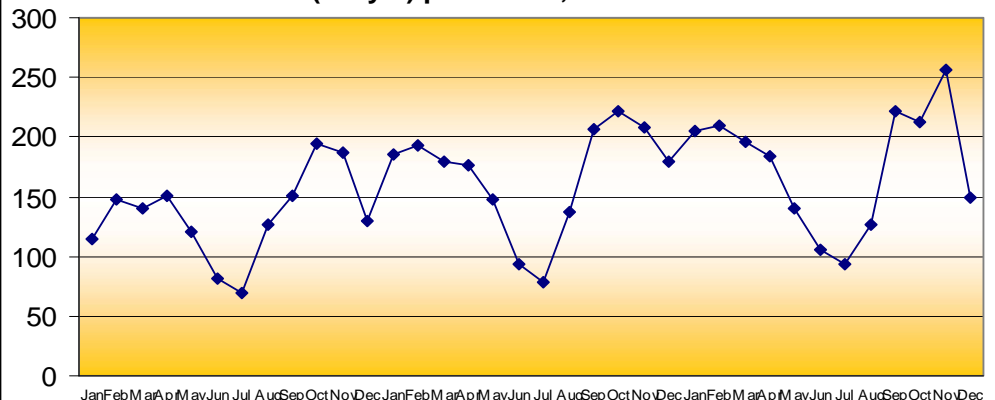
Source: Environmental Health Epidemiology Bureau.

Figure 9: Asthma Emergency Department Discharge Rates (<15yrs), 2001-2003



Source: Environmental Health Epidemiology Bureau.

Figure 10: Asthma Emergency Department Discharges (<15yrs) per Month, 2001-2003

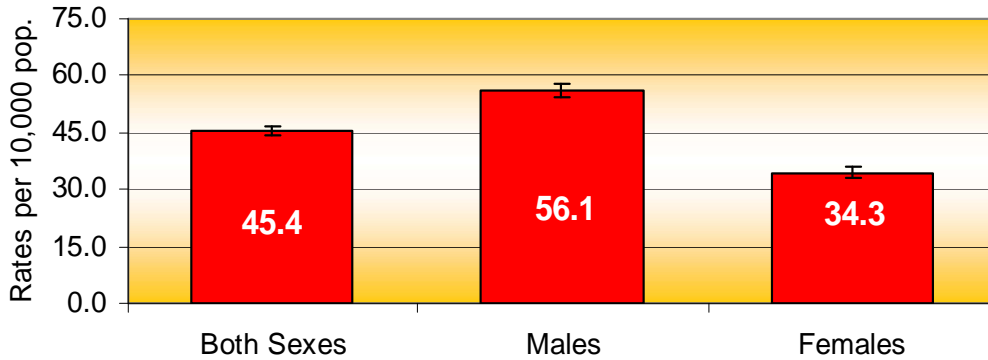


Source: Environmental Health Epidemiology Bureau.

Youth Emergency Department Discharges

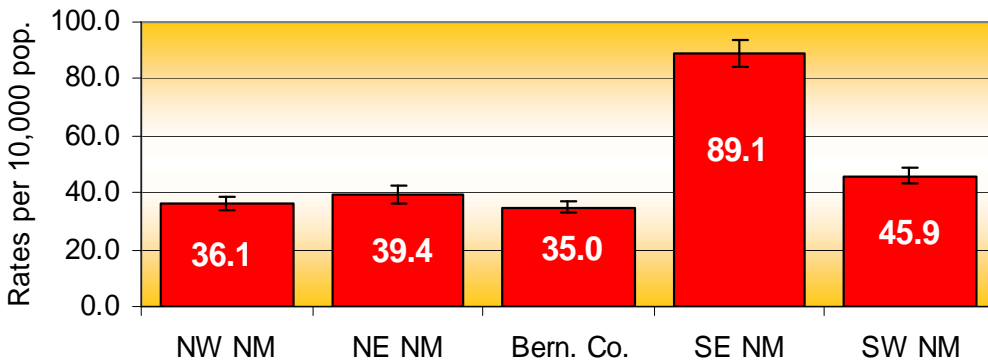


Figure 11: Asthma Emergency Department Discharge Rates by Gender (<15yrs), 2001-2003



Source: Environmental Health Epidemiology Bureau.

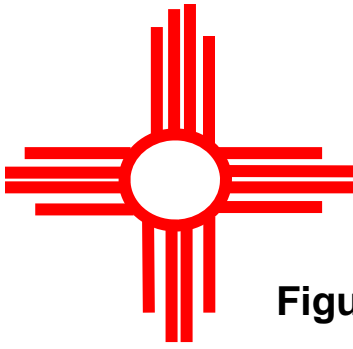
Figure 12: Asthma Emergency Department Discharge Rates by Region (<15yrs), 2001-2003



Source: Environmental Health Epidemiology Bureau.

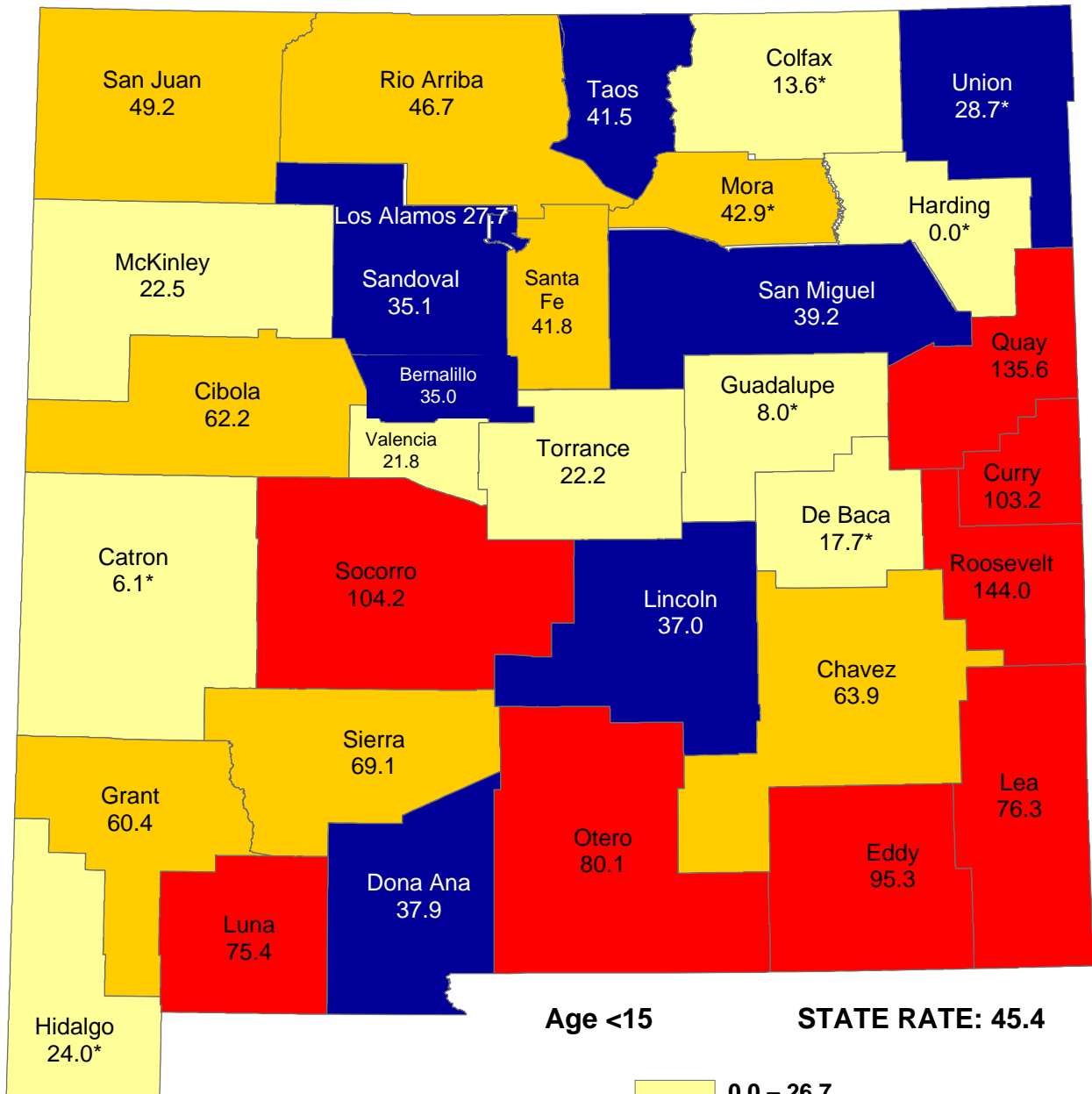
Key Findings – Youth Emergency Department Discharges

- Males had a significantly higher rate of youth asthma emergency department discharges compared with females.
- Southeastern New Mexico's youth asthma ED rate (89.1) was almost double the state rate (45.4) for the 2001-2003 period.
- Southeastern New Mexico's youth asthma ED rate (89.1) was more than two and one-half times higher than Bernalillo County's rate (35.0).

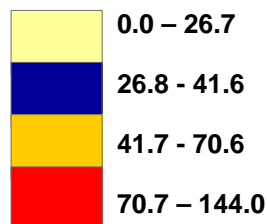


Youth Emergency Department Discharges

Figure 13: Asthma Emergency Department Discharge Rates (<15yrs), 2001-2003 Average



* Rates based on fewer than 20 cases should be interpreted with caution.



Rates are per 10,000 population

Source: New Mexico Health Policy Commission.

Youth Emergency Department Discharges



Findings – Youth Asthma Hospital Discharges

- Roosevelt County, home of Portales and Eastern New Mexico University, had the highest youth asthma ED rate in the state (144.0) for the 2001-2003 period.
- Most of the counties with the highest youth asthma ED rates were clustered in the southeastern corner of the state.
- Socorro had a youth asthma ED rate of 104.2 for the 2001-2003 period.
- Valencia County had one of the lowest youth asthma ED rates (21.8) in the state during the 2001-2003 period.



Vital Statistics Asthma Death Data

Methodology

The Bureau of Vital Records and Health Statistics maintains death records for deaths that occur to New Mexico residents (regardless of occurrence) and to out-of-state residents who died in the state. Of the nearly 15,000 deaths to state residents that occur each year, less than 60 are attributable to asthma.

Asthma data has been collected and analyzed since 1980 and since 1999 have been coded with the International Classification of Disease, 10th revision code (ICD-10) of J45-J46. Before 1999, asthma deaths were coded according to the 9th revision code (ICD-9) of 493.0-493.9. Comparability ratios have been applied to data presented before 1999. The data presented in this report only include New Mexico residents.

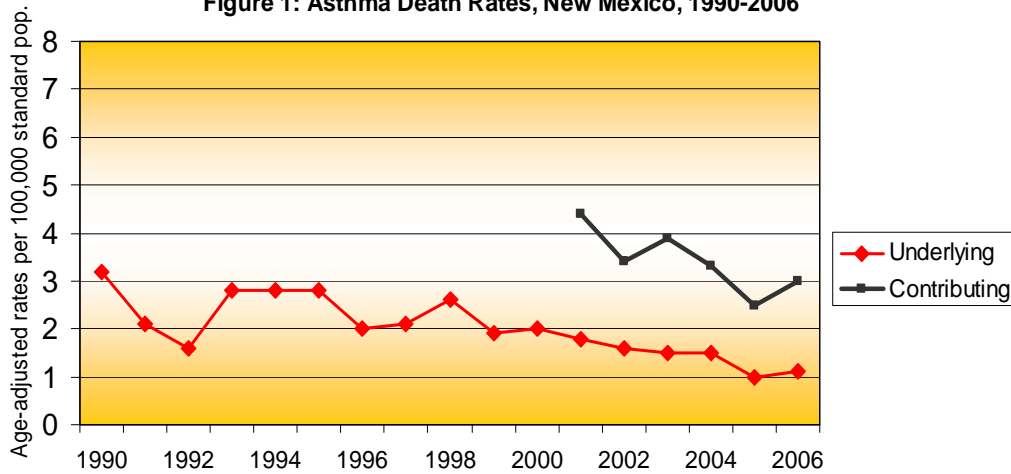
Two data files were used to calculate asthma death rates: the contributing cause of death data file (which has been available since 2001) and the underlying cause of death data file, which has been analyzed since 1980. If “asthma” appears anywhere on the death certificate along with other diseases, the death is counted as a contributing cause death. Of all the diseases listed on the death certificate, if the nosologist at the Bureau of Vital Records and Health Statistics determines that “asthma” was the single principal cause that lead to the decedent's demise, then it is counted as the underlying cause of death.

Because of the small number of asthma deaths each year, average rates spanning five years have been calculated to increase statistical reliability and to make comparisons among regions, race/ethnicities, and age groups possible.

Asthma Deaths

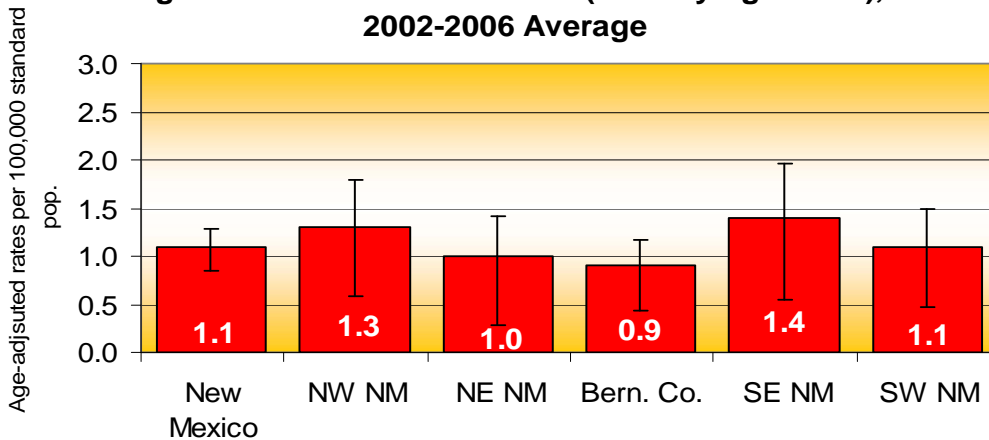


Figure 1: Asthma Death Rates, New Mexico, 1990-2006



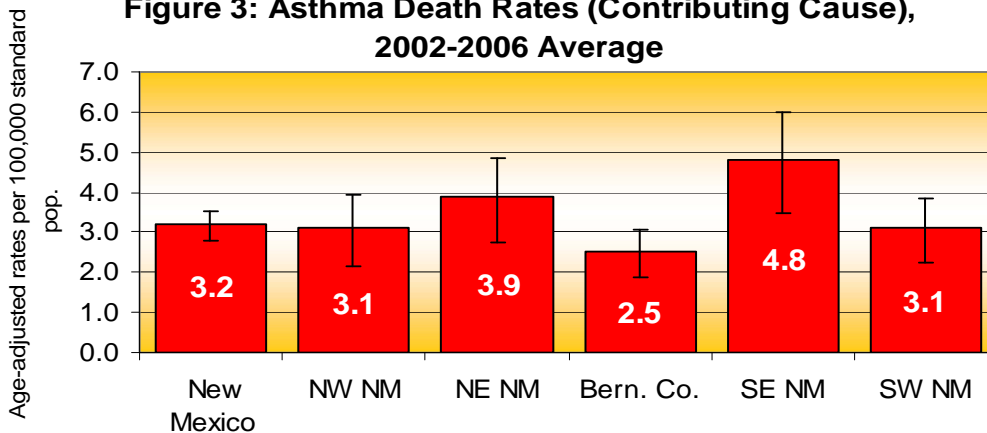
Source: Bureau of Vital Records and Health Statistics.

Figure 2: Asthma Death Rates (Underlying Cause), 2002-2006 Average



Source: Bureau of Vital Records and Health Statistics.

Figure 3: Asthma Death Rates (Contributing Cause), 2002-2006 Average



Source: Bureau of Vital Records and Health Statistics.

Key Findings – Asthma Deaths

- Since 1990, there has been a general downward trend in asthma death rates.
- The 2002-2006 average underlying cause asthma death rate for the state was 1.1 deaths per 100,000 standard population.
- Southeastern New Mexico had a significantly higher contributing cause 2002-2006 average death rate (4.8) than the state (3.2).
- For 2002-2006, Bernalillo County had the lowest death rate (2.5) of all regions of the state.

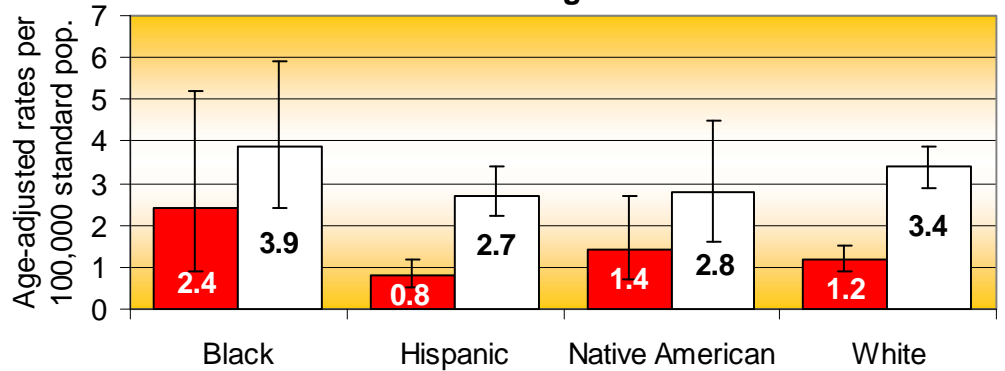


Asthma Deaths

Key Findings – Asthma Deaths

- The Native American contributing cause asthma death rate for 2002-2006 was 2.8 deaths per 100,000 standard population.
- The female underlying cause asthma death rate was 1.2 and the female contributing cause asthma death rate was 3.5 for 2002-2006.
- The 2002-2006 average 65 and older age group's contributing cause death rate was significantly higher than all other age groups.

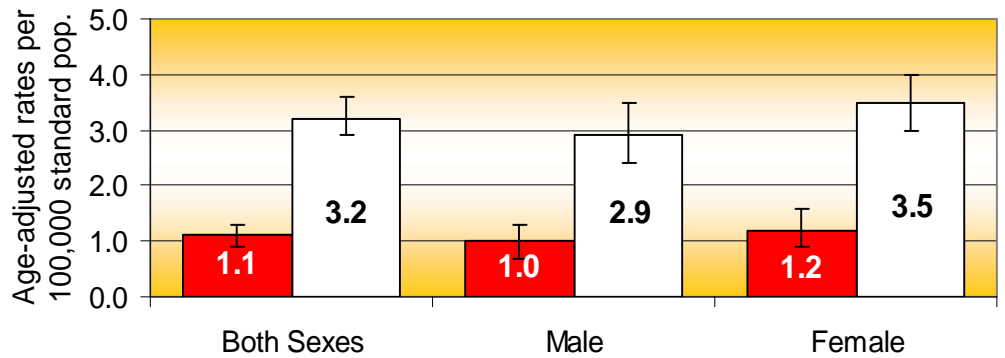
Figure 4: Asthma Death Rates by Race/Ethnicity, 2002-2006 Average



Source: Bureau of Vital Records & Health Statistics.

■ Underlying Cause □ Contributing Cause

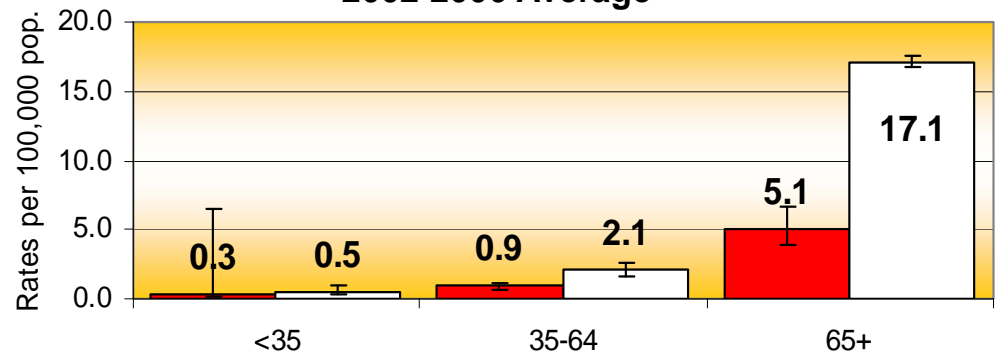
Figure 5: Asthma Death Rates by Gender, 2002-2006 Average



Source: Bureau of Vital Records & Health Statistics.

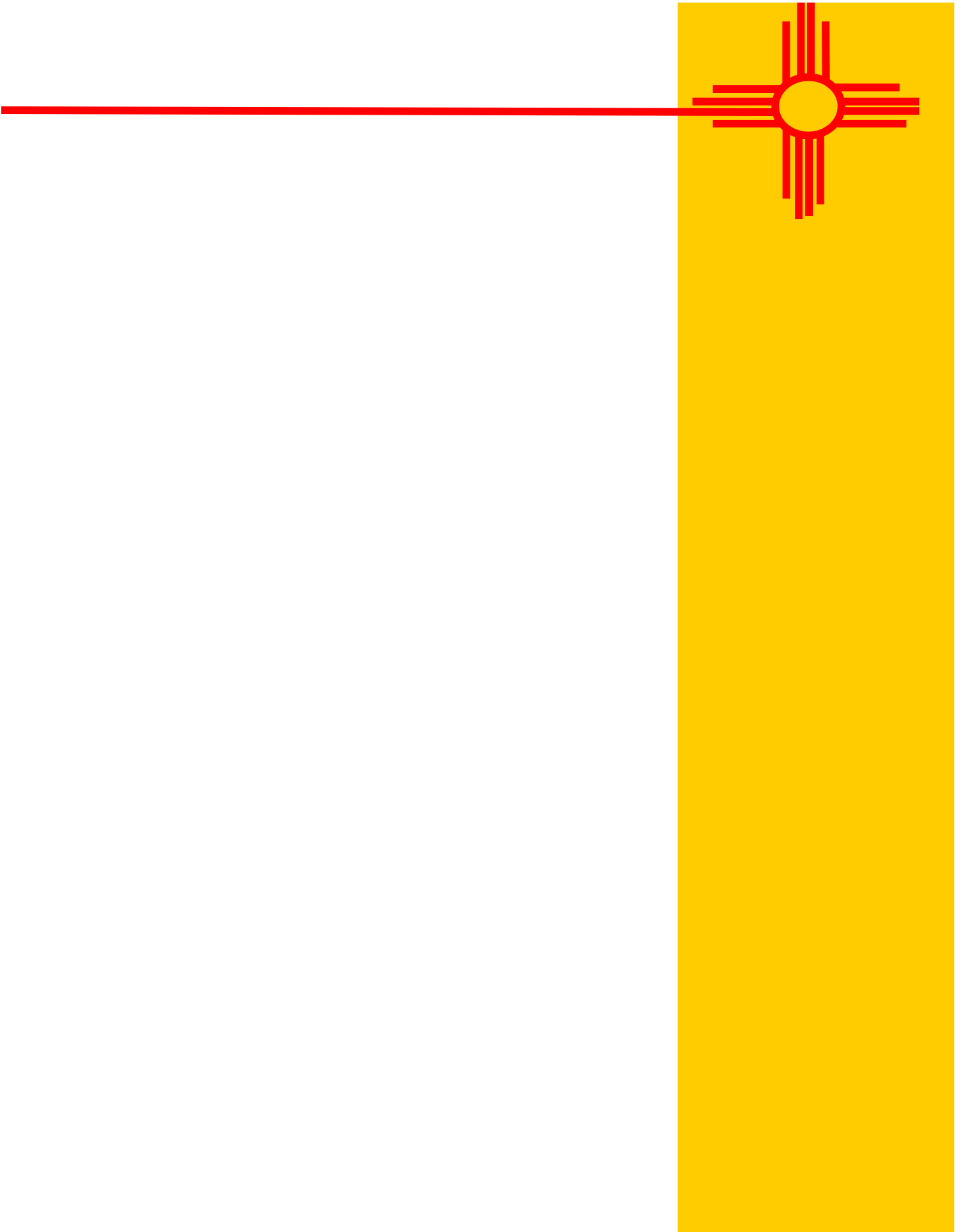
■ Underlying Cause □ Contributing Cause

Figure 6: Asthma Death Rates by Age Group, 2002-2006 Average



Source: Bureau of Vital Records & Health Statistics.

■ Underlying Cause □ Contributing Cause



Asthma Program

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