

NATIONAL INSTITUTES OF HEALTH
National Heart, Lung, and Blood Institute

Data Fact Sheet

Asthma Statistics



Introduction

Asthma ranks among the most common chronic conditions in the United States, affecting an estimated 14.9 million persons in 1995 and causing over 1.5 million emergency department visits, about 500,000 hospitalizations, and over 5,500 deaths. The estimated direct and indirect monetary costs for this disease totaled \$11.3 billion in 1998. Asthma disproportionately affects children and blacks.

Within the general population, asthma affects females more than males; however, among children, it affects males more. The burden of asthma has been increasing over the past 20 years, especially among children.

The National Heart, Lung, and Blood Institute (NHLBI) initiated the National Asthma Education and Prevention Program (NAEPP) to educate asthma patients, health care professionals, and the public about asthma and its treatment. To assist in planning and evaluation, and to encourage program planners, health administrators, and

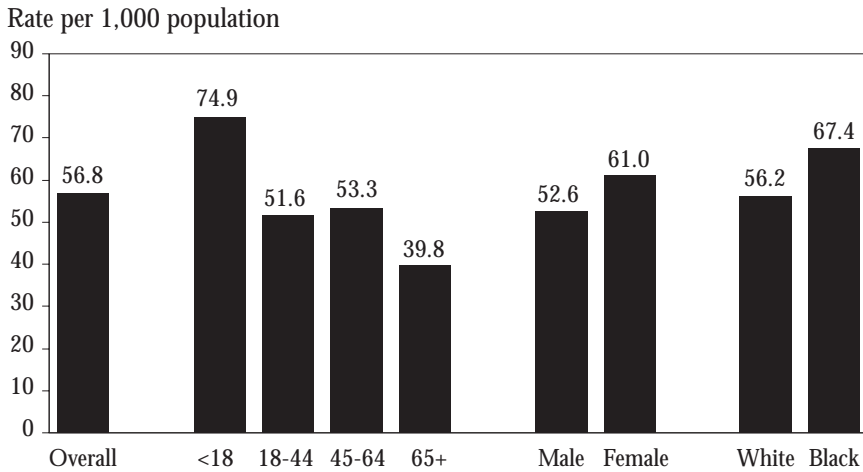
others to become more involved in asthma education, the NAEPP has developed this *Data Fact Sheet on Asthma Statistics* to indicate the magnitude of the problem.

Prevalence

In 1995, the prevalence of self-reported asthma was 56.8 per 1,000 persons. The prevalence was higher among children than adults and higher among blacks than whites. Among the general population, the prevalence of asthma was higher among females than males (Figure 1); however, among children, the prevalence was higher among males.

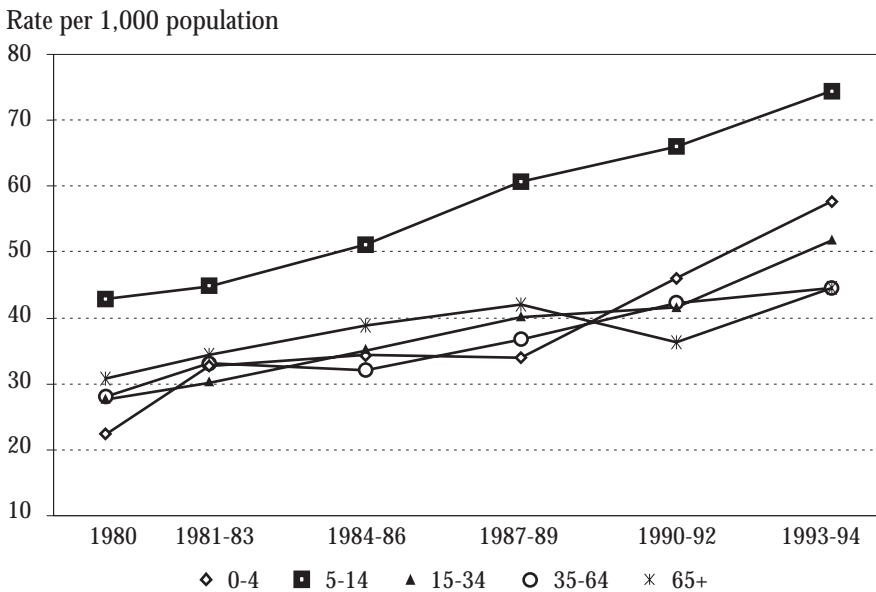
The prevalence of asthma has been increasing since the early 1980s for all age, sex, and racial groups. The overall age-adjusted prevalence of asthma rose from 30.7 per 1,000 population in 1980 to a 2-year average of 53.8 per 1,000 in 1993-94. This represents an increase of 75 percent. The prevalence among children ages 5 to 14 increased 74 percent, from 42.8 per 1,000 in 1980 to an average of 74.4 per

Figure 1
Prevalence of Asthma, 1995



Source: National Health Interview Survey, National Center for Health Statistics

Figure 2
Trends in Asthma Prevalence by Age



Source: National Health Interview Survey, National Center for Health Statistics

1,000 in 1993-94. Among children up to 4 years of age, asthma prevalence increased 160 percent, from 22.2 per 1,000, the lowest prevalence among any age group, to a 2-year average of 57.8 per 1,000 in 1993-94, the second highest prevalence behind children ages 5 to 14 (Figure 2).

Emergency Department Visits

The overall age-adjusted rate of emergency room visits for asthma increased between 1992 (58.8 per 10,000) and 1995 (70.7 per 10,000) with a slight drop between 1993 and 1994. The age-adjusted rate among males increased from 55.5 per 10,000 in 1992 to 57.8 per 10,000 in 1995; among females, the rate increased from 61.4 to 82.3 per 10,000. Differences in the rates between males and females have been increasing in more recent years (Figure 3).

Hospitalizations

In 1995, the overall hospitalization rate for asthma was 19.5 discharges per 10,000 population, with an average length of stay of 3.7 days. Females had a higher hospitalization rate than did males (22.4 versus 16.5 per 10,000, respectively) and a longer length of stay (4.1 versus 3.2 days). The rate among blacks was three and a half times that among whites (42.7 versus 11.8 per 10,000, respectively) (Figure 4), but the lengths of stay were about the same (6.4 and 6.5 per 10,000, respectively).

Among the general population, age-adjusted rates of asthma hospitalizations have declined in recent years. The decline started about 10 years earlier for whites (1981-83) than it did for blacks (1990-92) (Figure 4). Among children, the rate of asthma hospitalizations has continued to increase.

Mortality

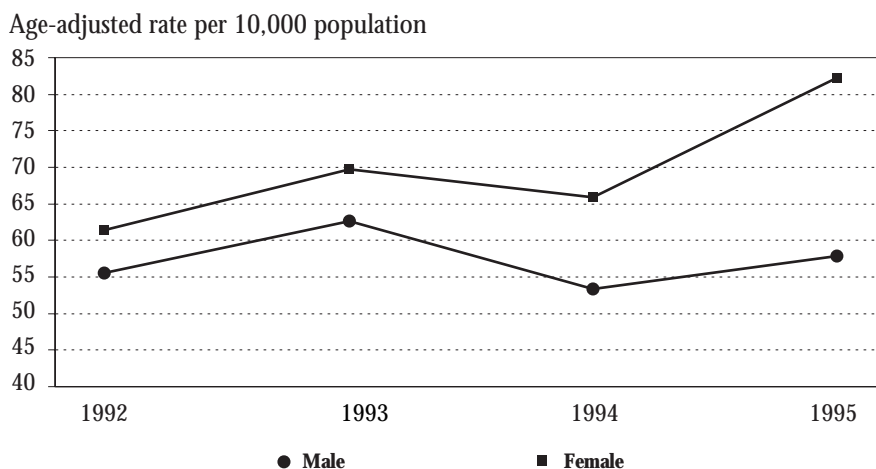
In 1995, 5,637 people, or 2.1 persons per 100,000 population, died from asthma. The age-adjusted mortality rate among females was higher than that among males (2.5 versus 1.9 per 100,000); the rate among blacks was higher than that among whites (3.8 versus 1.3 per 100,000).

The rate of age-adjusted mortality for asthma increased fairly steadily over the past 20 years. The average age-adjusted rate increased from 0.93 per 100,000 in 1979-80 to 1.49 per 100,000 in 1993-95. The age-adjusted rate has been higher and has increased faster among blacks than it has among whites (Figure 5).

Costs of Asthma

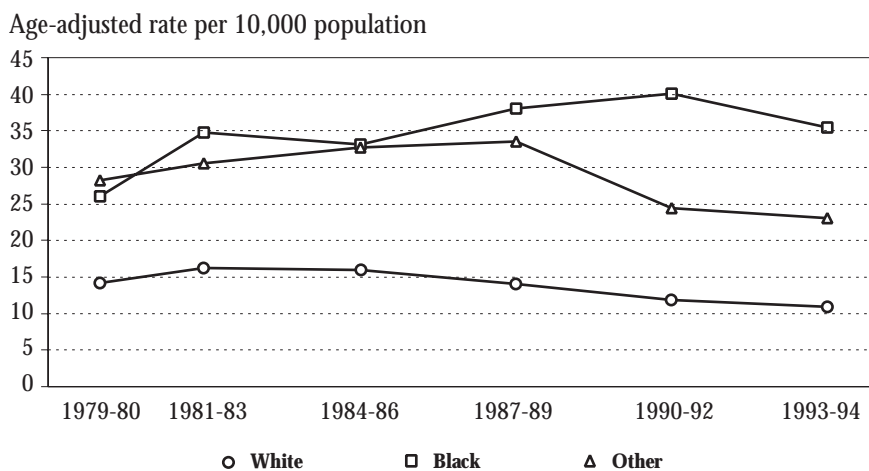
The cost of asthma in 1998 was estimated to be \$11.3 billion. Direct costs accounted for \$7.5 billion and indirect costs were \$3.8 billion. Hospitalizations accounted for the single largest portion of the cost (Figure 6).

Figure 3
Trends in Emergency Department Visits by Sex



Source: National Hospital Ambulatory Medical Care Survey, National Center for Health Statistics
Note: Age adjusted to 1970 U.S. resident population.

Figure 4
Trends in Asthma Hospitalizations by Race



Source: National Hospital Discharge Survey, National Center for Health Statistics
Note: Age adjusted to 1970 U.S. resident population.

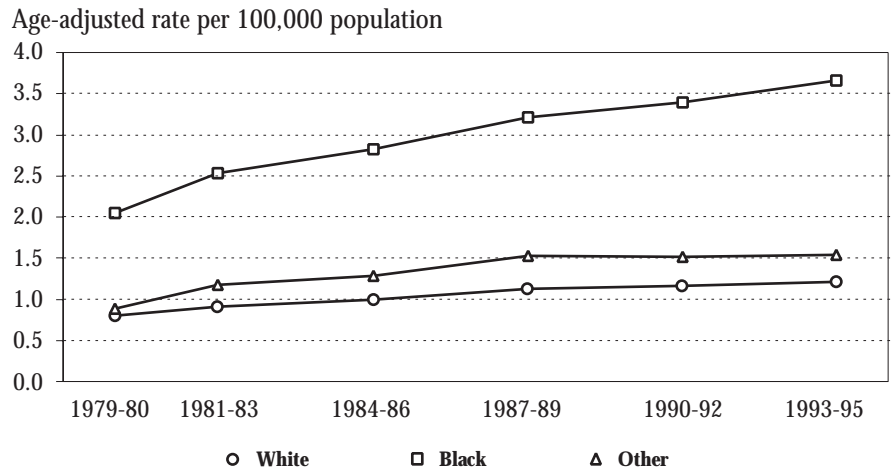
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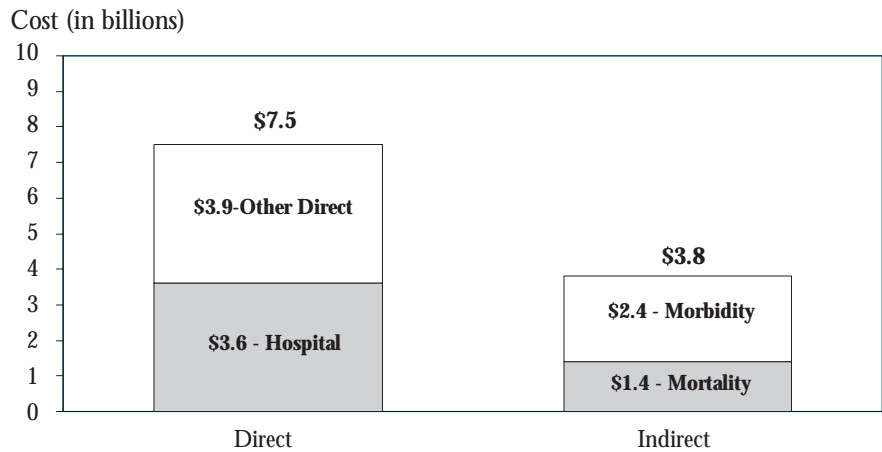
<http://www.nhlbi.nih.gov>

Figure 5
Trends in Asthma Mortality by Race



Source: Vital Statistics of the United States, National Center for Health Statistics
Note: Age adjusted to 1940 U.S. standard population.

Figure 6
Estimated Cost of Asthma, 1998



Source: NHLBI Chartbook

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