# Medical Care for Asthma Increasing and Changing

A sthma prevalence, morbidity, and mortality are increasing in the United States, as are physicians' and patients' awareness of the condition. More Americans are seeking medical care for asthma, with visits to doctors' offices up 50% in the past decade. In recent years, treatment of asthma has changed in line with National Institutes of Health (NIH) guidelines for asthma management. Today's patients are more likely to receive anti-inflammatory drugs for long-term control, with treatment focusing more on prevention of acute attacks.

Ambulatory Care Visits for Asthma: United States, 1993-94<sup>1</sup> describes the 14 million visits made for asthma each year. The report profiles medical care for asthma in physicians' offices, hospital emergency departments (EDs), and outpatient departments (OPDs). This is the first analysis to use data across three types of ambulatory settings to provide a comprehensive perspective on the impact of asthma on the health care system. The report documents differences in use of OPD and ED facilities by age and race and differences in care provided in each type of facility. The report is based on data from a nationally representative sample of visits to providers participating in the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey.

Highlights of the report:

- About 80% (11 million) of the 14 million ambulatory visits for asthma were made to officebased physicians; one million visits were made to OPDs and 1.6 million to EDs.
- Asthma was the sixth most frequent diagnosis (for illness or injury) in office-based and OPD visits and 11th in EDs.

- Most asthma patients are instructed to return for a repeat visit. Only hypertension, diabetes, and otitis media have more repeat visits than asthma.
- Children were more likely than teens and adults to receive asthma care in the OPD; adolescents and young adults were more likely than other age groups to visit the ED for treatment. Choice of ambulatory care setting also differed by ethnicity, with higher visit rates by black patients than by white patients to both OPDs and EDs. Health care coverage and access to care may account for these differences.
- Patients who visited office-based physicians were more likely to receive medication for asthma treatment and control and more likely to return for a repeat visit than those who visit the OPD. Medication therapy was prescribed in 95% of visits to officebased physicians; visits in which medication therapy was not prescribed were three times more frequent in OPDs than in doctors' offices.
- Doctors who saw patients in all settings were about equally likely to recommend that a patient return for continued care, however, OPD visits were more likely than office-based visits to be by new rather than returning patients.
- Changes in treatment reflected guidelines for diagnosis and management from the NIH National Asthma Education and Prevention Program, with a greater emphasis on prevention and long-term management. Between 1980–1981 and 1993– 1994, the use of corticosteroids rose substantially; they were prescribed in 41% of all visits to office-based physicians in 1993– 1994, compared to 21% in 1980–

1981. The use of bronchodilators continued but changed from those utilizing methylxanthines to those with beta<sub>2</sub>-adrenergic agonists.

- Patients in the Northeast had the highest visit rate for asthma. This may reflect the general pattern of higher physician visit rates for all causes in that region or more localized factors such as extreme weather changes that may exacerbate the asthmatic condition.
- One-quarter of all office visits for asthma were to general and family practice physicians, more than to any specialty. However, about one-third of all visits to allergists and immunologists were for asthma.

## Life Expectancy Up, Infant Mortality Down in Final 1994 Mortality Report

In 1994, life expectancy at birth was 75.7 years, an increase over the previous year (75.5) but lower than the all-time record high of 75.8 in 1992. The increase in life expectancy in 1994 suggests a resumption of the longterm downward trend in U.S. mortality, which was briefly interrupted in 1993 by an increase in mortality associated with the influenza epidemics.

The infant mortality rate for under-1-year-olds of 8.0 deaths per 1000 live births reached a record low in 1994, continuing a long decline. Contributing to the drop in the infant mortality rate were drops in mortality from sudden infant death syndrome and respiratory distress syndrome.

In 1994, a record 2,278,994 deaths were registered in the United States, but both the crude death rate and the age-adjusted death rate were lower than the rates recorded in 1993. The death rate declined substantially for those under 15 years of age and those

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over 55. The death rate increased for those ages 35-44, primarily due to increases in the death rate for HIV infection and viral hepatitis.

Age-adjusted death rates are used to eliminate the distorting effects of the aging of the population. The ageadjusted rates for eight of the leading causes of death declined between 1993 and 1994, including those for the leading causes of death—heart disease, cancer, and stroke. Age-adjusted death rates increased for HIV infection, diabetes, and Alzheimer's disease. Alzheimer's moved up the ranking of leading causes of death from 15th to 14th, and homicide dropped from 10th to 11th place, changing places with chronic liver disease and cirrhosis.

Mortality from drug-induced and alcohol-induced causes increased significantly between 1993 and 1994. The age-adjusted death rate for firearm injuries decreased by 3% between 1993 and 1994.

The report presents detailed data on deaths and death rates according to a number of social, demographic, and medical characteristics.<sup>2</sup> These data provide information on mortality patterns among Americans by such variables as age, sex, race, Hispanic origin, marital status, educational attainment, state of residence, autopsy status, and cause of death. Information on these mortality patterns is critical to understanding shifts in the health and social status of the population. Data in the report are based on information from all death certificates filed in the 50 states and the District of Columbia and reported to NCHS through the National Vital Statistics System.

# Current Hospitalization Patterns

**1**994 Summary: National Hospital Discharge Survey presents national estimates of the use of non-Federal short-stay hospitals in the United States.<sup>3</sup> It continues a long series of annual reports on hospital utilization. The 1994 report tracks the more than 30 million hospital discharges, analyzing the patterns by patient age, sex, and geographic region of the hospital. It includes numbers and rates of discharges, diagnoses, and procedures.

In 1994 there were an estimated 30.8 million discharges of inpatients, excluding newborns, for a discharge rate of 119 per 1000 population. The average length of stay was 5.7 days. The discharge rate per 1000 ranged from 98 for males to 139 for females. Women had a shorter average length of stay, 5.4 days compared to 6.2 for men. The discharge rate for both sexes ranged from 139 in the Northeast to 93 in the West. The Northeast also reported an average length of stay (6.7) almost two days longer than that in the West.

The five most frequent diagnoses were: heart disease (4.1 million), delivery of a baby (3.9 million), malignant neoplasms (1.4 million), psychoses (1.2 million), and pneumonia (1.2 million). During 1994, 40.7 million procedures were performed. Among the most frequent were arteriography and angiocardiography (697 per 100,000 population); episiotomy (584 per 100,000) and diagnostic ultrasound (506 per 100,000). Arteriography and angiography, cardiac catheterization, respiratory therapy, diagnostic ultrasound, and computerized axial tomography were among the most frequent procedures for men; for women they were episiotomy, fetal EKG and fetal monitoring, repair of current obstetric laceration, and cesarean section.

The National Hospital Discharge Survey collects data from a sample of inpatient records acquired from a national sample of hospitals.

## 1994 Home Health Care Survey Results Show Increase

The use of home health services in the United States rose from 1.2 million clients served in 1992 to 1.8 million in 1994—an increase of 53% in two years. The rise reflects several continuing factors—an increase in the elderly population, advances in medical technology that allow for provision of care at home at a lower cost than in institutional settings, and availability of reimbursement for certain services.

A new report analyzes the use of home health care by elderly patients and shows that patterns observed in earlier surveys continue to be present in the current data.<sup>4</sup> In 1994, patients were predominantly women, 75 to 84 years old, white, non-Hispanic, widowed, and living in a private residence with their family. The report presents the demographic characteristics of elderly home health care patients and discharges, their use of services, and their primary diagnosis at admission.

For copies of the reports described in this column or information about NCHS's other publications or electronic data products, contact the Data Dissemination Branch at 6525 Belcrest Road, Hyatttsville MD 20782; tel. 301-436-8500. NCHS publications and other information on the data and programs of NCHS are also available from the NCHS home page at www.cdc.gov.nchswww/ nchshome.htm.

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