

NCHS Data: Answering the Nation's Health Questions

Guiding National Policy

Health Insurance Coverage - NCHS provides the most current and complete national and state-specific (for 43 states) data available to track health insurance coverage, including coverage under both traditional and consumer-directed insurance arrangements. Measures are obtained on persons: currently uninsured; uninsured at any time in the previous year; and uninsured for more than a year. In the first 6 months of 2013, 20.4 percent of adults 18-64 years of age currently lacked health insurance coverage, while 7.1 percent of children under 18 were uninsured. Among adults aged 19-25 - a group targeted in the Affordable Care Act - the percentage of uninsured decreased from 35.6 percent in the third quarter of 2010 to 26.2 percent in the second quarter of 2013.

Monitoring the Affordable Care Act - Enhancements to ongoing data collections will track the effects of the Affordable Care Act on health insurance status, access to care, affordability of care, usual source of care, use of emergency care, and use of preventive services, including care to prevent heart disease and stroke. Expanded state-level estimates for some health indicators will be available to support state monitoring activities. Insurance coverage data for 43 states in 2012 show differences in coverage among these states.

Disparities in Health - NCHS data have long documented disparities in a wide range of health indicators including life expectancy, infant mortality, a variety of risk factors, health insurance coverage, access to care, and use of health care services - leading HHS to identify health disparities as a major public health problem and to develop national goals to eliminate disparities and improve the health of all populations.

Nutrition - Data on Americans' nutritional status and dietary intake and behaviors contribute to nutrition policy development and inform nutrition programs. NCHS data are used to recommend and evaluate food fortification decisions, develop and revise the Dietary Guidelines for Americans, and help set recommended intake levels for vitamins, minerals, and other nutrients. Dietary intake (food and beverages) data document that nearly the entire U.S. population 2 years and above does not meet federal dietary recommendations. Data also show that about half of adults use dietary supplements and most adults consume more sodium than recommended.

Immunizations - NCHS data are used to monitor compliance with recommended practices such as the timing of childhood and adolescent immunizations and recommendations for influenza, pneumococcal, shingles, and other vaccinations. Data collection also includes testing for immunity to vaccine-preventable diseases such as hepatitis B, HPV, and chicken pox, and the resulting data contribute to improvements in immunization policies that protect society as a whole and target groups at special risk.

Biomonitoring - NCHS data are used to assess the exposure of the U.S. population to a wide range of environmental chemicals. The data have been used to track exposure to lead and secondhand smoke - both of which continue to decline - for many years. Data are also available on exposure to mercury and some forms of arsenic, environmental phenols such as Bisphenol A (BPA), and pesticides.

Monitoring Health Status and Behaviors

Birth Data - NCHS data provide a wealth of information on health and demographic trends related to childbirth including trends in nonmarital births and births to teens. The 2012 data show a continuing decline in total births from the all-time high in 2007. The fertility rate declined in 2012 to the lowest rate ever reported for the U.S. The teen birth rate fell 6 percent - also to a record low. The percentage of births to unmarried women

declined slightly in 2012 and remained essentially stable for the 3rd consecutive year at 40.7 percent. Data are also available to monitor higher risk births. In 2012, the preterm birth rate fell for the 6th straight year to 11.5 percent; the low birthweight rate was 8.0 percent, down slightly from 2011.

Teen Pregnancy - NCHS compiles teen pregnancy rates. The latest estimates show a decline of 43 percent from the 1990 peak, to 66 pregnancies per 1,000 teens aged 15-19 in 2009. This reflects reductions in both births and abortions. U.S. teenage pregnancy rates are still among the highest among industrialized nations.

Growth Charts - NCHS data are used to create the pediatric growth charts used by pediatricians and parents to monitor children's growth. These charts are available in electronic form directly from the CDC website, and are also repackaged by private sector entities and distributed widely to physicians' offices.

Children's Behavioral Health - NCHS data are used to monitor children's emotional and behavioral health. In 2012, about 10 percent of children 4-17 years of age had ADHD and about 5 percent had definite or severe difficulties in emotions, concentration, behavior, or being able to get along with others. Parents reported that 9 percent of school-aged children (6-17 year-olds) were receiving special education services, 35 percent of whom received these services because of an emotional or behavioral problem. Special NCHS surveys on children with autism or ADHD document challenges in obtaining care and the impact of this condition on the family.

Physical Activity - NCHS data are used to examine physical activity levels and compliance with national guidelines. About a quarter of youth 12-15 years of age engaged in 60 minutes of daily moderate to vigorous physical activity in 2012, meeting the guidelines. Among those reporting physical activity of any intensity in a week, 48 percent of boys played basketball and about 35 percent of girls ran.

Obesity - Measured height and weight data illustrate that the percentage of obese Americans - who are at elevated risk of a variety of health problems - has risen since the 1970s. Between 1980 and 2000 the percent of adults classified as obese doubled - from 15 percent to 31 percent. In 2011-12, 34.9 percent of adults and 16.9 percent of 2 to 19 year-olds were obese.

Hypertension and Cholesterol - NCHS data called attention to these health problems decades ago, leading to prevention efforts. But hypertension remains common. In 2011-12, 29.1 percent of adults aged 18 and over had hypertension – a level that has not changed significantly in the last decade. The data show increases since 1999-2000, however, in the awareness, treatment, and control of high blood pressure. In 2011-12, more than half of adults with hypertension had their condition under control. Data are also used to monitor blood cholesterol, documenting declines in the population with high cholesterol from the 1960s through 2009-10 when about 13 percent of adults had high cholesterol. This level remained the same in 2011-12.

Diabetes - Diabetes - both diagnosed and undiagnosed - affects many Americans and is a leading chronic disease among adults in our country. In 2007-10, 11.9 percent of adults aged 20 and older had diabetes; approximately 1 in 4 people with diabetes are unaware they have the disease.

Smoking - NCHS has chronicled cigarette smoking levels since 1964 - the year the first Surgeon General's report on smoking was released. The data show steady declines from 1965, when over 40 percent of adults smoked, until 1990 when about 25 percent of adults smoked. Smoking rates remained near that level through much of the 1990s, but have fallen since 2000. In the first half of 2013, 17.4 percent of adults smoked cigarettes.

Oral Health - Oral health has improved significantly for most Americans since the 1990s. The prevalence of tooth decay in permanent teeth is down for all ages. There's more use of protective dental sealants and less gum disease, and more seniors are retaining their natural teeth. But disparities persist. In 2009-10, about 1 in 4 children aged 3-9 living in poverty had untreated dental caries compared to less than 1 in 7 children living above the federal poverty level. And the prevalence of complete tooth loss was much higher for adults aged 65-74 living at or below the poverty level (34 percent) than for those living above it (13 percent).

Injuries - Injuries inflict a heavy toll on Americans. NCHS data document that unintentional injuries were the leading cause of death in 2011 for those 1-44 years of age and the 5th leading cause of death for all ages. In 2011, 68 percent of injury deaths were unintentional, while 21 percent were suicides, and 9 percent were homicides. In the past decade, poisonings have increased at a greater pace than other causes of injury death.

Disabilities and Functional Status - International efforts are underway to improve our understanding of disabilities and the impact of activity limitations on participation in society. NCHS obtains data to assess basic actions functioning (for example, functioning in movement, sensory, or cognitive functioning) and complex activity functioning (limits in self-care, social activities, or work). In 2011, 33 percent of adults reported at least one basic actions difficulty or complex activity limitation.

Assessing the Health Care System

Health Care Delivery System - Our health care delivery system is changing. Key changes in recent years include: increased use of prescription medications, declining rates of inpatient hospitalization for heart disease and stroke, increased inpatient hospitalizations for knee replacements, increased crowding in emergency departments, decreased length of service among the oldest-old home health care patients, and increased use of hospice care by persons with primary diagnoses other than cancer.

Health Information Technology - NCHS data track changes in the use of electronic health records, which have the potential to enhance the efficiency and safety of health care encounters. Data show use of electronic health records increasing among office-based physicians, with 78 percent of physicians reporting use of a system in 2013. About three quarters of physicians were using a system meeting federal "meaningful use" standards. Technology is also changing the way we communicate about health issues, with increasing numbers of adults using the internet to fill prescriptions, schedule appointments, and communicate with providers.

Quality and Patient Safety - NCHS data systems offer a wealth of opportunities to examine quality and patient safety issues, including over-, under-, or misuse of procedures, complications of care, preventable hospitalizations, pain management, and deaths due to medical error. Concern about antimicrobial resistance and over-prescribing of antibiotics to children led to educational efforts regarding appropriate use of antibiotics in the mid-1990s. For children under 15 years of age, there was a 24 percent decline in the rate of antibiotics prescribed per physician office visit between 1997 and 2010, suggesting that physicians have responded to these initiatives.

Emergency Care - NCHS data are used to monitor the emergency care system, including assessing the Nation's ability both to provide basic emergency care and to respond to natural disasters and other public health emergencies. Demand for emergency care is increasing - ED visits increased from about 108 million in 2000 to 136 million in 2011. During the same period the number of hospital EDs decreased. In 2012, about 18 percent of children and 19.4 percent of adults visited the emergency room at least once in the previous 12 months.

Use of Medications - Prescription drug use is on the rise. NCHS data demonstrate the extent to which prescription drugs have become a vital component in our health care delivery system. In 2007–2010, 24 percent of children and adolescents in the U.S. used at least one prescription drug in the past 30 days. Prescription drug use increases with age; among adults 65 years and older, 90 percent took at least one prescription drug and over two-thirds took three or more prescription drugs in the past 30 days.

Shaping Research Priorities

Older Americans - The aging of the population, particularly increases in those 85 and older, will lead to an increase in the number of people who need health care. NCHS data show that older adults use a disproportionate share of both hospital and ambulatory care. Data on long term care services show that in 2012, about 58,500 paid, regulated services providers – home health agencies, nursing homes, hospices, adult day services centers, and assisted living and similar residential care communities - served about 8 million people. NCHS provides data to

examine resource use such as staffing and charges, care management, and use of technology, all increasingly important research, policy, and provider issues.

Women's Health - NCHS data are used to monitor the health of American women in all stages of their lives, with a particular focus on the childbearing years. Data are obtained to monitor fertility and factors that affect fertility, including use of contraception, infertility, and other reproductive health conditions. Data on cesareans are also monitored, revealing that almost one-third of all U.S. births were cesareans in 2012. Data on preventive services such as mammograms show that in 2010 about 72 percent of women aged 50-74 years reported having had a mammogram in the last two years.

Infant Mortality - After decades of decline, the U.S. infant mortality rate did not decrease from 2000 to 2005, but it has declined since then. In 2011, the preliminary U.S. infant mortality rate was 6.05 infant deaths per 1,000 live births - a decline of 12 percent since 2005. Preterm birth and low birthweight are both important risk factors linked to infant mortality. In addition to monitoring trends, NCHS data are used to describe differentials in rates. For example, infants born to black mothers are at much higher risk of infant mortality.

Life Expectancy and Causes of Death - NCHS monitors trends in life expectancy, death rates, and causes of death, documenting the dramatic improvements in life expectancy in the past century. Americans experienced the longest life expectancy in U.S. history - 78.7 years (76.3 years for men and 81.1 years for women) in 2011. The 5 leading causes of death accounted for about 62 percent of deaths in the U.S. in 2011. Heart disease, cancer, chronic lower respiratory diseases, stroke, and accidents were the leading causes of death, although this general profile differs markedly based on age.

Who Uses NCHS Data?

Congress and other policymakers - to track major policy initiatives including implementation of the Affordable Care Act, set priorities for research and prevention programs, and evaluate outcomes.

Epidemiologists, biomedical and health

services researchers - to understand trends in multiple aspects of health and health care, the relationship of observed risk factors to health outcomes, and the use of health services.

Businesses - to support health-related activities of pharmaceutical and food manufacturers, market research firms, consulting firms, and trade associations.

Public health professionals - to track

preventable illnesses and functional limitations and evaluate the impact of intervention programs.

Individual physicians - to evaluate health and risk factors of their patients (for example, reference standards and norms for indicators such as cholesterol, body weight, and blood pressure, and reference growth charts for children). **Media and advocacy groups** - to obtain background information and raise awareness of issues such as heart disease, cancer, diabetes, child nutrition, Alzheimer's disease, and health disparities.

Actuaries - to gauge the health of the Social Security and Medicare trust funds and set premiums for health and life insurance.

Access to NCHS Data

- Published reports in print and on website.
- Public use data files for analysis by researchers.
- FastStats A-Z quick access to key health data.
- Interactive data resources, including VitalStats, Health Data Interactive, and Health, United States, Interactive, where users can create customized tables and charts containing national and state data on a wide range of health topics.
- The Health Indicators Warehouse, with over 1,200 population health indicators from NCHS and other health agencies.
- Web-based tutorials to assist data users.
- Research Data Centers secure access to detailed data.

For further information on NCHS and its programs, visit the NCHS website at <u>http://www.cdc.gov/nchs</u>. Updated February 2014