NCHS Dataline

The National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC) conducts an extramural research program to support research and training activities to strengthen survey research both within NCHS and more generally in the health statistics field. A number of funding opportunities are available. Recent releases from NCHS summarize the status of childhood asthma in the United States and provide the latest data on overweight among children from infants through the teenage years.

EXTRAMURAL RESEARCH PROGRAM

To support the NCHS mission of monitoring the nation's health, NCHS conducts an extramural research program to advance survey research. The initiative-based extramural program focuses on *(1)* survey research methodology and statistics and *(2)* expanding the use of NCHS datasets used alone or in conjunction with other datasets. One of the key funding mechanisms for the Extramural Research Program is the Omnibus Solicitation for Small Business Innovation Research (SBIR) (R43/44) (http://grants.nih.gov/grants/funding/sbirsttr1/2007-2_SBIR-STTR-topics.doc). The SBIR program supports research and development by small businesses of innovative projects that have the potential to succeed commercially. The program allows for partnerships with universities, other research institutions, and health departments. Examples of research topics within the mission of the NCHS that may be of interest to small businesses are shown in this article. These listings illustrate the range of areas that are of interest to NCHS but are not intended to be exhaustive:

(1) the development and refinement of innovative techniques for measurement of biomarkers in survey research conducted in households or other nonclinical settings, including the collection of biological specimens such as urine or blood, measuring heart rate, or measuring senses;

(2) the development of kits for collecting biomarkers that can be used in survey research conducted in households or other nonclinical settings;

(3) the validation of biomarkers collected via nontraditional measures, such as filter paper and saliva, with those collected using traditional measurement techniques;

(4) the development and refinement of summary measures of health including measurement of functioning and disability;

(5) the development and improvement of sampling strategies for subpopulations of interest, including minority populations, people with specific rare diseases or conditions, specific socioeconomic statuses, or people with only cell phones;

(6) the development and improvement of techniques to avoid disclosure of confidential data in public use data, including tabular data, microdata, Web-based query and regression servers, and secure distributed statistical analysis;

(7) the development and validation of improved diary methods to record data such as short-term contraceptive use, intercourse, pregnancy outcomes, cohabitation, and other health-related behaviors;

(8) the development of improved training techniques and programs for collection of birth certificate data in hospitals;

(9) in conjunction with state registrars, the development of a process for evaluating Electronic Birth Registration System (EBRS) software and associated worksheets;

(10) the evaluation of current methods and development of improved measures and methods of data collection for "date of last normal menses," and other factors associated with preterm birth and low birth weight, especially as collected on birth certificates;

(11) the development and evaluation of a process and procedures for validating data from birth certificates using the 2003 revision:

(12) a feasibility study of the bridging of data from the 1989 and 2003 revisions of the birth certificate.

Submission dates for the small business innovation projects are August 5 and December 5, 2007. For more information about this and other funding opportunities, contact Dr. Virginia S. Cain, tel. 301-458-4395; fax

301-458-4020; e-mail <vcain@cdc.gov>; or check the NCHS website at www.cdc.gov/nchs.

CHILDHOOD ASTHMA IN THE U.S.

A new NCHS report on childhood asthma[1] shows that death rates for asthma among children under age 18 have declined since 1999, while doctor visits for the condition have more than doubled during the past decade. In 2005, nearly 9% of children—6.5 million children younger than 18 years—were reported to currently have asthma. The percentage of children who had asthma more than doubled between 1980 and 1995, from 3.6% to 7.5%. In 2001, NCHS introduced a more precise measurement of asthma, and during the five years since then, the trend has remained stable at historically high levels.

Other highlights of the report

- After increasing steadily between 1980 and 1998, asthma death rates among children have for the most part declined since 1999. A change in the way causes of death are coded resulted in a sizable one-year decline between 1998 and 1999, but since then the asthma death rate for children has fallen from 3.0 deaths per 1 million children younger than 18 in 1999 to 2.5 deaths per 1 million in 2004.
- Asthma-related visits to physician offices have increased sharply since the early 1990s, from less than 40 visits per 1,000 children younger than 18 years of age in 1990 to 89 visits per 1,000 in 2004.
- Among race/ethnic groups, Puerto Rican and non-Hispanic black children were reported to have the highest percentages of asthma (19.2% and 12.7%, respectively).
- According to 2003 data, children with at least one asthma attack in the previous year (nearly 4 million children) missed a cumulative total of 12.8 million school days due to asthma.
- Asthma-related emergency-room visits for children remained fairly stable from 1992 to 2004 (103 visits per 10,000 children in 2004 compared with 97.6 visits per 10,000 in 1992).
- Among the 37 states for which data were available, the states with the highest percentage of children with asthma were Massachusetts, Hawaii, Oklahoma, Maryland, and Rhode Island. The states with the lowest percentage of children with asthma were Utah, California, Iowa, Tennessee, and Washington.

"The State of Childhood Asthma, United States, 1980–2005" is available on the NCHS website at www.cdc.gov/nchs.

OVERWEIGHT AMONG CHILDREN

An estimated 9.5% of infants and children younger than 2 years of age were overweight according to results from the 2003–2004 National Health and Nutrition Examination Survey (NHANES). Using measured recumbent lengths and weights, overweight was defined as weight ≥95th percentile of weight-for-recumbent length on the sex-specific growth charts from the CDC (http://www.cdc.gov/growthcharts/). Earlier NHANES surveys conducted in the 1970s and 80s covered children from 6 through 23 months of age or 2 through 23 months of age. Trend data are available only for those aged 6 to 23 months and show an increase in overweight from 7.2% to 11.5% from 1976–1980 to 2003–2004. Results from the 2003–2004 NHANES indicate that an estimated 17% of children and adolescents aged 2 to 19 years are overweight. Overweight increased from 7.2% to 13.9% for those aged 2 to 5 years, from 11% to 19% among 6- to 11-years-olds, and from 12% to 17% for adolescents aged 12 to 19, during the time period 1988–1994 to 2003–2004. Two Health E-Stats issues[2,3] present these findings and are available on the NCHS website at www.cdc.gov/nchs/pubs/pubd/hestats.

U.S. HOUSEHOLD RELIANCE ON WIRELESS PHONES GROWS

The number of U.S. households with only wireless telephones continues to increase, up to 10% according to preliminary results from the January–June 2006 National Health Interview Survey (NHIS), recently published by NCHS.[4] These are the most up-to-date estimates available from the federal government concerning the size of this population. The estimates are based on in-person interviews completed as part of the NHIS. This cross-sectional survey of the U.S. civilian noninstitutionalized population, conducted continuously throughout the year, is designed to collect information on health status, health-related behaviors, and health-care utilization. The survey also includes information about household telephones and whether anyone in the household has a wireless (cell) phone.

The reliance on cell phones varied considerably by age and living arrangements, with the highest prevalence of cell phone-only use (42%) noted for adults living with unrelated roommates. Renters, young adults, and those living in poverty are also more likely to have

substituted cell phones for landlines. These data have many uses including providing essential information for those conducting research by telephone.

NCHS Dataline was prepared by Sandra S. Smith, MPH, Communications Consultant at the National Center for Health Statistics, Centers for Disease Control and Prevention.

REFERENCES

1. Akinbami L. The state of childhood asthma, United States, 1980–2005. Adv Data 2006 Dec 12:1-24.
2. Prevalence of overweight, infants and children less than 2 years of age, United States, 2002–2004. NCHS Health E-Stats, January 2007.
3. Prevalence of overweight among children and adolescents: United States, 2003–2004. NCHS Health E-Stats, January 2007.
4. Blumberg S, Luke J. Wireless substitution: preliminary data from January–June 2006. National Health Interview Survey. NCHS Health E-Stats, January 2007.