NCHS Dataline

More American households are wireless-only, affecting the ability of health and other organizations that conduct telephone surveys to reach a representative sample of the U.S. population, according to results from the National Health Interview Survey (NHIS) conducted by the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC). Unmarried childbearing is on the rise in the U.S. with a pace similar to that in other countries, a new NCHS report states. Many hospital emergency departments (EDs) are overcrowded and divert patients to other facilities; a new study looks at the ways EDs are coping. All of these recently released publications are available and can be viewed or downloaded from the NCHS website at www.cdc.gov/nchs.

WIRELESS SUBSTITUTION ON THE RISE, DIFFERS BY STATE

NCHS regularly tracks the households in America that no longer have landline telephones but have switched to wireless telephones. A new report, "Wireless Substitution: State-Level Estimates from the National Health Interview Survey, January–December 2007,"[1] is the latest release of NCHS data on wireless substitution and presents modeled state-level estimates.

The NHIS is a household interview survey conducted annually with a nationally representative sample of the nation's civilian, noninstitutionalized population. The survey uses a two-sample modeling strategy to estimate the prevalence of wireless-only households and adults by state. This modeling was based on data from the 2007 NHIS and the 2008 Current Population Survey's Annual and Social Economic Supplement.

Oklahoma leads the nation's wireless-only movement with more than one in four households (26.2%) in that state using only wireless telephones in 2007. On the other end of the spectrum, only 5.1% of households in Vermont were wireless-only in 2007. States with the highest percentage of wireless-only households, following Oklahoma, included Utah (25.5%), Nebraska (23.2%), Arkansas (22.6%), and Idaho (22.1%). States with the lowest percentages, following Vermont, included Connecticut (5.6%), Delaware (5.7%), South Dakota (6.4%), and Rhode Island (7.9%).

The new report also shows that the percentage of wireless-only telephone use among households and adults varies greatly within regions. For example, in the Midwest, the state that has the most wireless-only households—Nebraska—borders the state with the least wireless-only households—South Dakota. Results from previous NCHS reports on wireless substitution show that wireless-only telephone use continues to grow on a national level. Overall, one out of every six American homes (17.5%) had only wireless telephones during the first half of 2008—nearly three percentage points higher than the estimate for 2007 (14.7%). The percentage of adults using only wireless telephones also grew from 13.6% in 2007 to 16.1% in the first half of 2008.

NCHS tracks wireless-only telephone use to assess potential implications for data collection for health surveys and other research conducted using random-digit-dialing (RDD) methods on landline telephones. Most major survey organizations, including NCHS, have not traditionally included wireless telephone numbers when conducting RDD surveys, but are now exploring ways that wireless telephones may be included in future surveys.

UNMARRIED CHILDBEARING

The proportion of births to unmarried mothers in the U.S. has risen steeply during the past few decades, consistent with patterns in other countries, a new NCHS report states. "Changing Patterns of Nonmarital Childbearing in the United States" documents trends in the U.S. and other countries from 1980 to 2007.[2] (Data for Iceland, France, the United Kingdom, Ireland, Spain, and Canada are for 2006.) In 2007, about four in 10 births in the U.S. were to unmarried mothers. The trend in unmarried childbearing was fairly stable from the mid-1990s to 2002, but showed a steep increase between 2002 and 2007. Between 1980 and 2007, the proportion of births to unmarried women in the U.S. more than doubled, from 18% to 40%. The report shows that the U.S. falls midway in the ranking of countries by nonmarital birth rates.

- Iceland (66%), Sweden (55%), Norway (54%), France (50%), Denmark (46%), and the United Kingdom (44%) all had higher proportions of births to unmarried mothers than the U.S.
- Ireland (33%), Germany and Canada (30%), Spain (28%), Italy (21%), and Japan (2%) had lower percentages of births to unmarried mothers than the U.S.
- The Netherlands (40%) had the same percentage

of out-of-wedlock births as the U.S., but its percentage was 10 times higher than in 1980, when only 4% of Netherlands' births were to unmarried mothers.

- All countries examined showed substantial increases in the proportion of births to unmarried mothers between 1980 and 2007. The countries with the biggest increases, after the Netherlands, included Spain (4% to 28%), Ireland (5% to 33%), and Italy (4% to 21%).

The report also looks in-depth at U.S. birth rates among unmarried women by age and race/ethnicity, showing that:

- Birth rates among unmarried U.S. mothers are highest for women in their early 20s (80 births per 1,000 unmarried women aged 20–24 years), and lowest for teens younger than age 18 and for women older than age 35.
- Birth rates among unmarried mothers are highest for Hispanic women (106 births per 1,000 unmarried Hispanic women), followed by non-Hispanic black women (72 per 1,000) and non-Hispanic white women (32 per 1,000).
- The overwhelming majority of births to teenagers are nonmarital. Among teens aged 15–17 years, 93% of births were nonmarital in 2007, while among teens aged 18–19 years, 84% of births were nonmarital.
- In 2007, 45% of births to women in their 20s were to unmarried women. Sixty percent of births to women aged 20–24 years were nonmarital in 2007, up from 52% in 2002. Nearly one-third of births to women aged 25–29 years were nonmarital in 2007, up from one-quarter in 2002.

HOW EMERGENCY DEPARTMENTS HANDLE AMBULANCE DIVERSION

Hospital EDs frequently experience overcrowding. In some instances, this will result in ambulance diversion where patients will be directed to other EDs rather than the original or usual destination. The additional time for transport and delay in treatment can have an adverse impact on patients, resulting in complications or further deterioration of their condition and likelihood of recovery. Approximately 500,000 ambulances are diverted annually in the U.S. Hospitals have adopted a number of practices to better handle overcrowding and to reduce the number of ambulance diversions.

The National Hospital Ambulatory Medical Care Survey monitors the use of hospital emergency and outpatient departments in the U.S. by annually surveying a nationally representative sample of providers. The survey produces data on characteristics of EDs, the services provided, characteristics of the patients, and the care received. For the first time, the 2007 survey included new data items to document the use of practices recommended in response to overcrowding, and these findings appear in "Estimates of Emergency Department Capacity: United States, 2007."[3]

Ambulance diversion occurs most often in large, urban hospital EDs as compared with EDs in smaller, rural hospitals. Large EDs (annual visit volume >50,000) in metropolitan statistical areas comprised 17.7% of EDs, but accounted for 43.8% of all ED visits. One of the techniques to reduce overcrowding is the designation of a bed coordinator. Both overcrowding in the ED and ambulance diversion can be caused by a lack of inpatient beds to which ED patients can be transferred after admission. Admitted ED patients were kept for more than two hours in the ED while waiting for an inpatient bed in 62.5% of EDs. Among EDs that kept patients, 14.8% used inpatient hallways or another space outside the ED while it was critically overloaded.

In the two years prior to the survey, 24.3% of EDs increased the number of standard treatment spaces. Although only 19.5% of EDs expanded their physical space in the last two years, 31.5% planned to do so within the next two years. Almost half of all hospitals with EDs had a bed coordinator. About 58.0% had elective surgeries scheduled five days a week, and 66.0% had bed census data available instantaneously. Electronic medical records systems—either all electronic or part paper and part electronic—were used in 61.0% of EDs. More than one-third of EDs had an observation or clinical decision unit and 61.1% used bedside registration. Other techniques reported by EDs included computer-assisted triage (40.0%), zone nursing (35.3%), electronic dashboard (35.2%), separate fast-track unit for nonurgent care (33.8%), capacity to assign nurses to the ED to respond to surges in demand (33.2%), full capacity protocol (21.1%), and radio frequency identification tracking (9.8%). The report also examines the utilization of these techniques by ED volume and compares use by EDs in urban and rural areas.

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