Numerous barriers to health care have been identified among residents of border counties. For example, physicians are unevenly distributed, and the ratio of population to health professionals is high. Additionally, residents along the border have lower education levels, greater poverty, and a greater prevalence of persons without insurance than residents of non-border counties. Because of these barriers, diabetes complications might be more advanced, which could lead to higher rates of LEAs among persons with diabetes. Rates calculated among persons with diabetes were higher in border counties, but primarily among men aged ≥45 years.

The disabling and life-altering nature of LEAs has substantial effects on society and the health-care system. Total charges for diabetes-related LEA hospitalizations in Texas reached $324 million in 2003. Because of the greater prevalence of diabetes and possibly because of poor access to and use of preventive health-care services, LEAs disproportionately affect the border region. The border region accounted for 19% ($61 million) of the charges for all diabetes-related LEA hospitalizations in Texas, even though the border population is only 10% of the state’s population. In addition, a significantly larger proportion of diabetes-related LEAs in border counties were paid for by Medicaid than in nonborder counties (16.4% versus 7.8%, respectively; p<0.01, chi-square test).

The findings in this report are subject to at least four limitations. First, rates were calculated based on the number of hospital discharges for amputations rather than the number of persons who received an amputation. The TIHDD does not distinguish between whether a person was discharged for an amputation or a subsequent reamputation (i.e., a higher level amputation on the same extremity, such as a toe amputation followed by a foot amputation on one leg) within the same year. One study in Texas estimated the rate of reamputation to be as high as 26.7% within a year; therefore, a disproportionately higher rate of reamputations along the border might have contributed to the higher rates of amputations found in this analysis. Second, rates of LEAs among persons with diabetes were calculated using a denominator based on diabetes prevalence estimates from the Texas BRFSS. Because BRFSS is a landline telephone survey and estimates of diabetes prevalence are based on self-report, the BRFSS survey is thought to underestimate diabetes prevalence. Finally, race/ethnicity data were defined and collected differently in each data set used in this analysis, and few amputations occurred in border counties among non-Hispanics; therefore, corresponding rates and RRs limited to non-Hispanics were imprecise, and rates adjusted for and stratified by race/ethnicity are not presented. However, differences between residents with diabetes in border counties and nonborder counties were similar when comparing LEA rates among Hispanics only.

Controlling blood-glucose levels, having regular foot examinations and doctor visits, and using appropriate footwear can prevent diabetes-related amputations. Community outreach to educate the public and improve access to health care along the border is important. Diabetes education interventions along the U.S.-Mexico border have proven to be effective in teaching diabetes self-management, resulting in better diabetes control. Future interventions in Texas border communities should include community health workers (known as promotores de salud), culturally adapted curricula, and classes at community health centers to increase diabetes knowledge. Furthermore, measures to prevent obesity and diabetes are essential to reduce the effects of diabetes along the border.

Acknowledgments
This report is based, in part, on contributions from the Texas Health Care Information Collection, Texas Dept of State Health Svcs, and A De, Office of Workforce and Career Development, CDC.

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*Border counties were defined as the 32 of 254 counties within 100 km (62 miles) of the Mexico border.†For Hispanics with diabetes in border versus non-border counties, men: 18-44 years (RR=1.2), 45-64 years (RR=1.6), ≥65 years (RR=1.8); women: 18-44 years (RR=0.9), 45-64 years (RR=1.1), ≥65 years (RR=1.0).

National, State, and Urban Area Vaccination Coverage Among Children Aged 19-35 Months—United States, 2005

MMWR. 2006;55:988-993

1 figure, 2 tables omitted

The National Immunization Survey (NIS) provides vaccination coverage estimates among children aged 19-35 months for each of the 50 states and selected urban areas. Findings from the 2005 NIS† include nationwide increases in coverage with ≥3 and ≥4 doses of pneumococcal conjugate vaccine (PCV) and continued high levels of coverage for the other recommended vaccines and vaccine series. In addition, no racial/ethnic disparities in coverage estimates were observed in the 4:3:1:3:3:1† vaccine series, the recommended series for children aged 19-35 months that includes DTP/DT/DTaP;§ poliovirus vaccine; measles, mumps, and rubella vaccine (MMR); Haemophilus influenzae type b vaccine; hepatitis B vaccine; and varicella vaccine. An important accomplishment indicated by the 2005 NIS data is the achievement of >50% coverage for the full series of PCV (≥4 doses) and >80% coverage for ≥3 doses within 5 years after being added to the U.S.-recommended childhood immunization schedule in 2000. This occurred despite shortages of this vaccine during 2001-2004, which might have affected accessibility to PCV.

To collect vaccination data for age-eligible children, NIS uses a quarterly random-digit–dialed sample of telephone numbers for each survey area. NIS methodology, including the weighting of responses to represent the entire population of children aged 19-35 months, has been described pre-
During 2005, the household survey response rate was 65.1%; health-care provider vaccination records were obtained for 17,563 children (63.6%) for whom household interviews were completed.

National vaccination coverage estimates increased from 2004 to 2005 for PCV, from 73.2% to 82.8% for ≥3 doses and from 43.4% to 53.7% for ≥4 doses. Coverage for ≥1 dose of MMR vaccine decreased from 93.0% to 91.5%. Coverage estimates for all other vaccines and vaccine series in 2005 were not significantly different (by t test) from 2004 estimates.

In previous years, estimated vaccination coverage levels varied substantially among states. Estimated coverage with the 4:3:1:3:3:1 vaccine series ranged from 90.7% (95% confidence interval [CI]=±3.8) in Massachusetts to 62.9% (CI=±8.1) in Vermont. Coverage also varied substantially among the 27 urban areas. The highest estimated coverage among the urban areas for the 4:3:1:3:3:1 series was 84.5% (CI=±6.0) for Jefferson County, Alabama, and the lowest was 58.8% (CI=±7.9) for Clark County, Nevada.

In 2005, coverage estimates for the 4:3:1:3:3:1 vaccine series did not vary significantly by race/ethnicity among children aged 19-35 months, ranging from 79.5% (CI=±2.2) for children of multiple races, 77.1% (CI=±6.0) for Asians, 76.3% (CI=±3.0) for blacks, 76.0% (CI=±1.4) for whites, and 75.6% (CI=±2.6) for Hispanics. During 2002-2004, coverage for the 4:3:1:3:3:1 vaccine series was lower among black compared with white children.

In 2005, estimated coverage varied significantly by race/ethnicity for three individual vaccines: DTP/DTaP; varicella vaccine; and PCV. For ≥4 doses of DTP/DTaP, coverage was significantly lower for black (84.0% [CI=±2.5]) and Hispanic (83.6% [CI=±2.3]) children compared with white children (87.1% [CI=±1.1]). For ≥1 dose of varicella vaccine, coverage was significantly higher for black (90.6% [CI=±1.8]) and Hispanic (89.2% [CI=±1.7]) children compared with white children (86.1% [CI=±1.2]). For ≥3 doses of PCV, coverage was significantly lower for black (79.6% [CI=±3.1]) compared with white children (83.2% [CI=±1.3]). For ≥4 doses of PCV, coverage was significantly lower among black (46.2% [CI=±3.8]) and Hispanic children (50.5% [CI=±2.8]) compared with white children (57.3% [CI=±1.6]).

The 2005 data reflect the first year that the 4:3:1:3:3:1 vaccine series was used to evaluate progress toward one of the Healthy People 2010 objectives, which aims to achieve >80% coverage with the 4:3:1:3:3:1 series among children aged 19-35 months (objective 14.24a). Although the 80% target was met in 2004 for 4:3:1:3:3 coverage (excludes varicella vaccine), vaccination coverage for the 4:3:1:3:3:1 series in 2005 remained stable at 76.1%, compared with 76.0% in 2004.

In the 2005 NIS survey cohort, coverage levels for the 4:3:1:3:3:1 series were similar among racial/ethnic groups, which represents an improvement over recent years; an evaluation of NIS data from 1996 to 2002 revealed increasing or stable racial/ethnic disparities in the 4:3:1:3:3 vaccine series coverage levels for black and Hispanic children compared with white children. Continued monitoring is needed to determine whether the narrowing gaps in coverage among racial/ethnic groups persist. Monitoring the disparities in administration of DTP/DT/DTaP, varicella vaccine, and PCV will be important, particularly for PCV, which protects against a disease with higher incidence among black children.

The only statistically significant decrease in coverage from 2004 to 2005 was for ≥1 dose of MMR. However, this decrease was modest, and national MMR coverage has remained consistent, ranging from 91% to 93% since 2001. The recent outbreak of mumps in the United States underscores the importance of timely administration of the first dose of MMR and the need for administration of the second dose at ages 4-6 years. Coverage in this age group is assessed by state health departments in their evaluation of school entry immunization requirements.

The findings in this report are subject to at least three limitations. First, NIS is a telephone survey; although NIS results are weighted to make them representative of all children aged 19-35 months (e.g., accounting for nonresponse and households without telephones), some bias might remain after these statistical adjustments. Second, NIS uses provider-verified vaccination histories and assumes that coverage among children whose providers did
not respond is similar to coverage among children whose providers did respond; thus, incomplete reporting might have resulted in underestimates of coverage. Finally, although national estimates are precise,1 annual estimates and trends for states and urban areas should be interpreted with caution because of wider confidence intervals.

High vaccination coverage levels should be achieved and maintained to reduce the impact of vaccine-preventable diseases. Routine childhood vaccination with the vaccines included in the 4:3:1:3:3:1 series results in net societal savings of an estimated $43 billion per annual birth cohort.10 Coverage varied substantially by state, ranging from 63% to 91% for the 4:3:1:3:3:1 vaccine series, and by race/ethnicity for DT/DTP/DTaP, varicella vaccine, and PCV, indicating that further progress in increasing coverage is needed in many areas. NIS data will continue to be used to monitor vaccination status among preschool-aged children for recommended vaccines. Future NIS data will be used to assess routine rotavirus and hepatitis A vaccination of preschool-aged children, recommended in 2006, and use of a measles-mumps-rubella-varicella (MMRV) vaccine licensed in 2005.

In addition to the recently recommended vaccines for preschool-aged children, three vaccines have been recommended recently for children aged 11-12 years: meningococcal conjugate vaccine (MCV4); tetanus, diphtheria, and acellular pertussis (Tdap) vaccine instead of tetanus and diphtheria toxoids vaccine (Td); and human papillomavirus vaccine (HPV). The NIS will be expanded during the fourth quarter of 2006 to assess coverage for recommended vaccines received among children aged 13-17 years. This enhancement underscores the importance of survey systems such as the NIS in monitoring new vaccine implementation, which can provide valuable information for improving overall vaccination coverage.

Although Orleans Parish, Louisiana, was initially oversampled in 2005, estimates are not available because of interruptions in telephone service, movement of the population, and difficulty locating providers in the aftermath of Hurricane Katrina.

‡/4 doses of diphtheria and tetanus toxoids and pertussis vaccines, diphtheria and tetanus toxoids vaccine, or diphtheria and tetanus toxoids vaccine and any acellular pertussis vaccine (DTP/DT/DTaP); /3 doses of poliovirus vaccine; /1 dose of MMR vaccine; /3 doses of Haemophilus influenzae type b vaccine; /3 doses of hepatitis B vaccine; and /1 dose of varicella vaccine.
§Diphtheria and tetanus toxoids and pertussis vaccines, diphtheria and tetanus toxoids vaccine, or diphtheria and tetanus toxoids vaccine and any acellular pertussis vaccine.

[For this report, persons identified as white, black, Asian, or multiple race are all non-Hispanic. Persons identified as Hispanic might be of any race.]

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The 28 areas separately sampled for the 2005 NIS included 23 oversampled in previous years (Jefferson County, Alabama; Maricopa County, Arizona; Los Angeles County, California; District of Columbia; Duval County, Florida; Fulton and Dekalb counties, Georgia; Chicago, Illinois; Orleans Parish, Louisiana; Baltimore, Maryland; Detroit, Michigan; Newark, New Jersey; New York, New York; Cuyahoga and Franklin counties, Ohio; Philadelphia County, Pennsylvania; Davidson and Shelby counties, Tennessee; Bexar, Dallas, and El Paso counties, and Houston, Texas; King County, Washington; and Milwaukee County, Wisconsin), and five areas oversampled for the first time (Alameda and San Bernardino counties, California; Denver-Ni Tri County, Colorado, consisting of Adams, Arapahoe, Denver, and Douglas counties; St. Louis City and County, Missouri; and Clark County, Nevada).

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Reasons for No Health Insurance Coverage* Among Uninsured Persons Aged <65 Years—National Health Interview Survey, United States, 2004†

Overall, approximately 17% (41 million) of persons aged <65 years had no health insurance at the time of interview. Of these, approximately one half did not have coverage because of cost, and one fourth did not have coverage because of loss of a job or a change in employment. Approximately 14% of uninsured persons did not have coverage because their employer did not offer it or the insurance company refused coverage, and 10% did not have coverage because of cessation of Medicaid benefits. Less than 3% of persons without health insurance did not have coverage because of a change in marital status or death of a parent.