

WHO'S GETTING SHOTS AND WHO'S NOT: RACIAL/ETHNIC DISPARITIES IN IMMUNIZATION COVERAGE

This brief report provides data from the National Health Interview Survey (1989–2002) and offers commentary on reasons for the racial/ethnic disparities in immunization coverage for both influenza and pneumococcal vaccines for persons aged ≥ 65 years. The findings in this report indicate that, although influenza and pneumococcal vaccination rates have increased for non-Hispanic Blacks and Hispanics, substantial gaps by race/ethnicity persist. Differences are observed even among individuals with similar characteristics (eg, education levels, similar numbers of healthcare visits, and similar insurance status) but from different ethnic groups. In addition, rates of vaccination for ethnic/racial groups have not increased at a sufficient rate to reach the national health objective for 2010 (90% of persons aged >64 years receiving annual influenza vaccination and having ever received pneumococcal vaccination). By examining the successes of new initiatives such as the READII (Racial Ethnic Adult Disparities in Immunization) demonstration projects, researchers hope that progress can be made to close these racial/ethnic disparities. (*Ethn Dis.* 2005;15[suppl 3]:S3-4–S3-6)

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BACKGROUND

To further understanding of the racial/ethnic disparities in influenza and pneumococcal vaccination levels in those 65 and older, this presentation at the symposium provided background information published in the October 2003 *Morbidity and Mortality Weekly Report (MMWR)*.¹ Data from that report indicate several gaps in vaccination levels reported herein.

VACCINATION RATES AMONG ETHNIC GROUPS

According to the National Health Interview Survey (1989–2002), rates of vaccination have mostly increased during a 10-year period, but during the same time period, significant differences (nearly 20 percentage points) were found in the rate of vaccination for Blacks and Hispanics compared to Whites of the same age group.³

In the analysis of these NHIS results, substantial racial/ethnic disparities in vaccination coverage were observed among persons with zero to one, two to nine, and ≥ 10 healthcare provider contacts during the preceding 12 months, with 76% of non-Hispanic Whites who visited the doctor 10 or more times a year receiving influenza vaccination in the past 12 months, compared to 62% Hispanics and 52% Blacks who visited the doctor 10 or more times a year ($P<.05$) (Table 1). Likewise, disparities exist for those of similar education levels but of different ethnic groups. During 2000–2001, 61% of non-Hispanic Whites with less than a high school education received vaccination in the last 12 months, compared to only 52% and 45% of Hispanics and Blacks, respec-

tively, who had less than a high school education ($P<.05$) (Table 2). Similar differences exist by insurance status: 68.7% of Whites with Medicare plus supplemental insurance received influenza vaccination in the past 12 months compared with 54% of non-Hispanic Blacks ($P<.05$) (Table 3). Similar patterns, although with even greater differences in vaccination rates, are observed for ever receiving pneumococcal vaccination. These data suggest that use of care, education, and other factors might not play a decisive role in ethnic disparities in lower immunization rates.

Reasons for Differences Poorly Understood

The 1996 Medicare Current Beneficiary Survey collected information on reasons for non vaccination for influenza vaccination; the two leading reasons for not being vaccinated were not knowing that the vaccine was recommended and concerns about the safety of the vaccine.² For pneumococcal vaccination, the leading reason for not being vaccinated was not knowing that the vaccine was recommended. Reasons given for non-vaccination were similar for Whites, Blacks, and Hispanics. The October 2003 *MMWR* report suggests that possible reasons for the disparities might include differences in the provider-patient interaction for non-Hispanic Blacks and Hispanics compared with non-Hispanic Whites, or differences in vaccination rates in settings where non-Hispanic Blacks and Hispanics receive care, compared with Whites.¹

CDC'S RESPONSE

To find ways to reduce the disparities experienced by African Americans

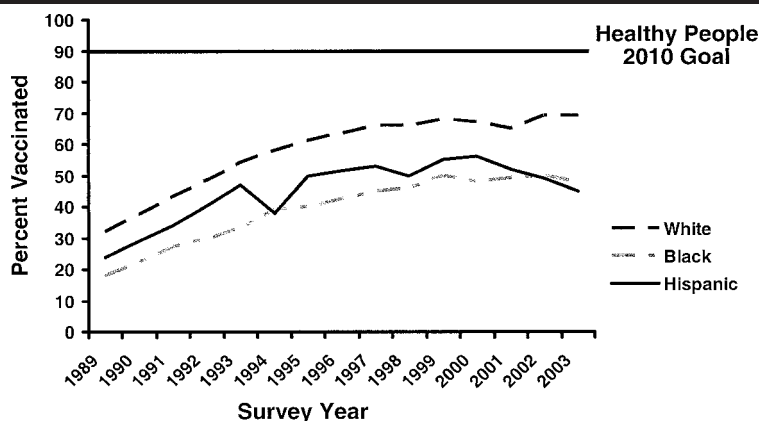


Fig 1. Receipt of influenza vaccination during the previous 12 months by race/ethnicity among persons >65, 1989–2003, National Health Interview Survey

and Hispanics 65 years of age and older, CDC is completing a demonstration project, READII (Racial Ethnic Adult Disparities in Immunization), initiated in 2002 and conducted in five areas (Chicago, Ill; Rochester, NY; San Antonio, Tex; Milwaukee, Wis; and 19 counties in the Mississippi Delta region).

READII sites developed partnerships with public health professionals, medical providers, and community organizations (eg, large health plans, insurers, minority health professional organizations, churches, local community groups, and civic leaders). They collaborated with these stakeholders to develop and implement community-based plans focusing on evidence-based interventions and innovative approaches to increasing immunization levels.

Interventions varied by site and were based on state and local choice. READII interventions included:

- provider-based interventions (assessment and feedback to providers, multi-component provider education, standing orders, and provider reminder/recall);
- increasing community demand for vaccinations (client reminder/recall and multi-component interventions, including community-wide and clinic based education);
- enhancing access to vaccination services (expanding access in healthcare settings and reducing out of pocket costs); and
- community vaccination clinics.

CURRENT SUCCESSES

A brief review of a few studies and systems in place today demonstrates best practices and points to areas in need of programming, change, or new systems to reduce the disparities that exist be-

tween vaccination coverage among ethnic groups. For example, Veterans Administration (VA) hospitals and facilities have been successful in implementing a very comprehensive, aggressive program in which few, if any, Black/White disparities were found. While the patient population of the VA is not representative of the general US population, this suggests that systems changes that ensure systematic offering of vaccine are effective at reducing disparities.

The Rochester (New York) READII demonstration site is beginning to report success in reducing disparities in immunization rates among ethnic groups in clinics that implemented a combination patient and provider reminder system to encourage individuals to receive flu vaccination. Formal evaluation data will be available in 2005. In another “best practice,” medical assistants at a primary healthcare clinic in Detroit were successful in offering and providing influenza vaccines while conducting the initial patient assessment before the doctor visit. In both sites, preliminary data suggest that, when vaccines are offered systematically, acceptance of vaccination differs little by race (personal communication Dr. Kendra Schwartz, Wayne State University, and Dr. Sharon Humiston, University of Rochester School of Medicine).

CONCLUSIONS

To fully address racial/ethnic disparities in rates of influenza and pneumococcal immunization, researchers should attempt to understand how systems’ characteristics may play a role in these persisting disparities. These may include differences between providers who see Black patients and providers who see White patients with respect to, for example, the use of systems to promote immunization, the availability of vaccine, or the time available to assess patients for vaccination. Thus, a better understanding of the impact each makes in

Table 1. Percent vaccinated for influenza in the previous 12 months, by race/ethnicity and number of doctor visits, United States, 2000–2001, National Health Interview Survey

	Number of Doctor Visits		
	0–1 % (95% CI)	2–9 % (95% CI)	≥10 % (95% CI)
Non-Hispanic White	49.7 (±2.7)	67.7 (±1.4)	74.2 (±2.1)
Hispanic	38.5 (±6.9)	56.2 (±4.5)	63.2 (±6.9)
Non-Hispanic Black	29.2 (±6.4)	52.6 (±4.1)	53.1 (±7.1)

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Table 2. Percent vaccinated for influenza in the previous 12 months, by race/ethnicity and level of education, United States, 2000–2001, National Health Interview Survey

	Level of Education		
	<High School	High School	>High School
Non-Hispanic White	61.6 (±1.9)	65.5 (±2.0)	70.0 (±1.8)
Hispanic	51.4 (±4.6)	53.0 (±8.5)	63.9 (±8.0)
Non-Hispanic Black	45.2 (±4.3)	50.7 (±6.1)	49.4 (±6.7)

Table 3. Percent vaccinated for influenza in the previous 12 months, by race/ethnicity and insurance coverage, United States, 2000–2001, National Health Interview Survey

	Insurance Coverage		
	Medicare Medicaid	Medicare	Medicare Plus Suppl
Non-Hispanic White	55.6 (±5.4)	60.3 (±2.3)	68.7 (±1.4)
Hispanic	51.6 (±6.4)	50.7 (±5.4)	62.5 (±7.5)
Non-Hispanic Black	47.2 (±7.3)	48.8 (±6.1)	54.0 (±5.5)

the final delivery of services and subsequent health outcomes will be developed.

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