## PREVENTING CHRONIC DISEASE PUBLIC HEALTH RESEARCH, PRACTICE, AND POLICY

VOLUME 2: NO. 2

APRIL 2005

SPECIAL TOPICS ORIGINAL RESEARCH: FEATURED ABSTRACT FROM THE 19TH NATIONAL CONFERENCE ON CHRONIC DISEASE PREVENTION AND CONTROL

## Race, Ethnicity, and Linguistic Isolation as Determinants of Participation in Public Health Surveillance Surveys

Michael Link, Ali Mokdad, Herbert Stackhouse, Nicole Flowers

Suggested citation for this article: Link M, Mokdad A, Stackhouse H, Flowers N. Race, ethnicity, and linguistic isolation as determinants of participation in public health surveillance surveys [abstract]. Prev Chronic Dis [serial online] 2005 Apr [date cited]. Available from: URL: http://www.cdc.gov/pcd/issues/2005/apr/04\_0142c.htm.

## PEER REVIEWED

## Track: Methods and Surveillance

Public health officials and researchers require valid and reliable public health surveillance data to plan, implement, and evaluate programs designed to eliminate health disparities among racial and ethnic minority populations. Monitoring chronic disease and behavioral risk factors among such populations, however, has proven challenging. This research is designed to assess disparities among minority populations in participation levels in public health surveillance efforts and to test alternative methods for reducing these disparities.

We analyzed data from the 2003 Behavioral Risk Factor Surveillance System (BRFSS), which is a monthly, random-digit-dialed telephone survey of the noninstutionalized adult (aged 18 years and older) population in the United States. County-level data from the 2003 BRFSS and 2000 U.S. Census are modeled using ordinary least squares regression to examine the effects of race, ethnicity, and linguistic isolation on six measures of survey participation (e.g., resolution, screening, cooperation, refusal, refusal conversion, response rates). The study finds that even after adjusting for other factors such as socioeconomic conditions, average commute time, use of call screening technology, and level of data collection effort (other factors thought to be related to survey response), areas with higher percentages of African Americans (regression coefficient, -.14, P < .001), Hispanics (regression coefficient, -.57, P < .001), and those who do not speak English — particularly those speaking only Asian (regression coefficient, -1.67, P < .001) or Indo-European (regression coefficient, -2.73, P < .001) languages — were significantly less likely than whites to participate in the public health surveillance.

In response to this finding, the BRFSS is investigating two alternatives for reaching these underrepresented groups: 1) use of alternative survey modes; in particular, providing translated hard-copy versions of the BRFSS by mail, and 2) use of specialized language line translation services to offer real-time translation of the BRFSS into languages beyond English and Spanish.

The collection of valid and reliable data for public health surveillance in the United States is becoming challenging. Current methods increasingly underrepresent racial, ethnic, and linguistically isolated groups. As a result, the health problems and needs of these groups may be significantly underreported. The development of successful public health interventions and programs capable of reducing health disparities requires that monitoring systems be developed that are capable of tracking the public health of all groups.

The opinions expressed by authors contributing to this journal do not necessarily reflect the opinions of the U.S. Department of Health and Human Services, the Public Health Service, the Centers for Disease Control and Prevention, or the authors' affiliated institutions. Use of trade names is for identification only and does not imply endorsement by any of the groups named above.

**Corresponding Author:** Michael W. Link, PhD, Senior Survey Methodologist, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Adult and Community Health, 4770 Buford Highway NE, Mail Stop K-66, Atlanta, GA 30341-3717. Telephone: 770-488-5444. E-mail: MLink@cdc.gov.

The opinions expressed by authors contributing to this journal do not necessarily reflect the opinions of the U.S. Department of Health and Human Services, the Public Health Service, the Centers for Disease Control and Prevention, or the authors' affiliated institutions. Use of trade names is for identification only and does not imply endorsement by any of the groups named above.