

Maryland study finds that US Hispanics were at greater risk for H1N1 flu during 2009 pandemic

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Social determinants, including the lack of paid sick leave, contributed to higher risk of exposure to the influenza A (H1N1) virus among Hispanics in the U.S. during the 2009 H1N1 pandemic, according to a study led by Sandra Crouse Quinn, professor of family science and senior associate director of the Maryland Center for Health Equity at the University of Maryland School of Public Health. The findings are published online ahead of print in the *American Journal of Public Health*, November 17, 2011.

Several other studies from the pandemic found that H1N1 disease had a disproportionate impact on minorities, but the factors contributing to this disparity were not clear. Dr. Quinn's team, which included lead author, Dr. Supriya Kumar, and other researchers from the University of Pittsburgh and the University of Georgia, investigated how social determinants, such as workplace policies and household size, contributed to the incidence of influenza-like illness during the pandemic. By surveying a nationally representative sample of 2,079 U.S. adults in January 2010, the research team discovered that incidence of influenza-like illness was strongly associated with [workplace policies](#), such as lack of access to [sick leave](#), and structural factors, such as having more children and crowding in the household. Even after controlling for income and education, the researchers found that Hispanic ethnicity was related to a greater risk of influenza-like illness attributable to these social determinants.

"Our findings suggest that we could significantly reduce the incidence of flu, particularly among Hispanics, by creating federal mandates for sick leave that allow people to stay home from work when they need to," said Dr. Quinn, who is also the school's Associate Dean for [Public Health Initiatives](#) and the senior author. "The underlying [social determinants](#) that affect the health of Hispanics and other minorities also limit their ability to protect themselves during a pandemic. We need to implement policies before an acute disease outbreak happens that allow people to create the social distance necessary to slow the spread of infection."

The study analysis also suggests that the absence of such sick leave policies could contribute to 5 million additional cases of influenza in the general population and 1.2 million additional cases among Hispanics during a subsequent pandemic.

"Dr. Quinn's team was the first to empirically test our conceptual model of disparities in the context of a pandemic, documenting how underlying social disparities can exacerbate the [pandemic](#), unless they are systematically addressed," said Dr. Paula Braveman, Professor of Family and Community Medicine at the University of California, San Francisco, and senior author of a study that urged policy makers to create plans to minimize disparities during flu pandemics (Blumenshine, et al, in *Emerging Infectious Diseases*, May 2008). "This is a significant first step in advancing our understanding of how disparities are perpetuated and aggravated in the absence of well-conceived preventative actions."

More information: The Impact of Workplace Policies and Other Social Factors on Self-Reported Influenza-like Illness Incidence During the 2009 H1N1 Pandemic was written by Supriya Kumar, PhD, MPH, Sandra Crouse Quinn, PhD, Kevin H. Kim, PhD, Laura H. Daniel, PhD, and Vicki S. Freimuth, PhD and published online, ahead of print, on November 28, 2011 in the *American Journal of Public Health*.

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