

# Demographic disparities found among children with frequent ear infections

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Research has documented that ethnic and socioeconomic disparities exist among patients with conditions such as heart disease and diabetes. Now, a new study by researchers from UCLA and Harvard University has found disparities among children suffering from repeated ear infections.

The findings, published in the August edition of the journal *Laryngoscope*, show that frequent ear infections plague white children and children living below the poverty level more than children of other racial or ethnic backgrounds or income levels.

Despite a recent overall decline in the incidence of otitis media, or ear infection, it is still one of the most common and burdensome ailments affecting children. More than 80 percent of children have at least one infection by the age of 3, and medical and surgical treatments for these infections cost \$3 billion to \$5 billion annually. Each year, about 4.65 million children in the U.S. suffer "frequent" ear infections, defined as more than three infections over a 12-month period.

"An understanding of the size and distribution of the population of children with frequent ear infections is important because it is often these patients who will require more invasive and costly treatments," said study co-author Dr. Nina Shapiro, director of pediatric otolaryngology at Mattel Children's Hospital UCLA and an associate professor of surgery at the David Geffen School of Medicine at UCLA. "In this era of health care reform, it will be important to determine how to reach out to this population of children, whose inadequate health insurance coverage

limits their options for treatment."

Researchers used data from a 10-year period (1997-2006) taken from the National Health Interview Survey, a large-scale, household-based survey of a statistically representative sample of the U.S. population.

Parents of children under the age of 18 were asked various questions, including whether their child had three or more ear infections over the previous 12 months. For those who answered yes, researchers pulled demographic data — including age, sex, race/ethnicity, income level and insurance status — to determine the influence of these variables on frequent ear infections.

The average age of children in the study was 8.5 years old, and 51 percent were boys. Of the parents surveyed, 6.6 percent reported having a child who suffered frequent ear infections.

The researchers found that among white children, 7.0 percent had frequent ear infections, compared with 6.2 percent of Hispanic children, 5.0 percent of African American children and 4.5 percent of children from other racial or ethnic groups.

They also found that children from households under the poverty level had a higher incidence — 8.0 percent — of frequent ear infections than children from above the poverty level, even after adjusting for race and ethnicity.

"The racial and ethnic disparity was somewhat surprising," Shapiro said. "We are not certain why these gaps exist, but possible explanations could include anatomic differences, cultural factors or disparate access to health care. It could also be that white children are overdiagnosed and non-white children are underdiagnosed."

The next stage of research is to better understand the impact of racial/ethnic and socioeconomic disparities and inequalities related to access to health care within the population of [children](#) with frequent ear infections.

Provided by University of California - Los Angeles

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