

Vaccinating Residents and Staff Can Reduce Influenza Outbreaks in Nursing Homes

Influenza outbreaks in nursing homes are common. The effects can be devastating, even in facilities where most residents have been vaccinated. Older adults are especially susceptible to influenza, particularly those with functional impairments and multiple health conditions.

- Between 1979 and 2000, over 90 percent of deaths attributable to influenza in the United States occurred among the elderly.
- Moreover, nursing home residents are among the most vulnerable elderly: They have far higher hospitalization and mortality rates than community residents of similar age.

The Centers for Disease Control and Prevention recommends immunizing nursing home residents and staffs as a way to prevent influenza outbreaks in nursing homes. However, to date, few studies have examined the effect of vaccinating both groups.

A study led by RAND researcher Lisa Shugarman examined how immunization rates among both nursing home residents and staff affect influenza outbreaks in nursing homes. The study collected information from 301 nursing homes across the United States. One-third of these nursing homes had experienced an outbreak of influenza-like illness during the 2004–2005 flu season. An outbreak was defined as three or more cases occurring within 72 hours in close proximity to each other inside the nursing home.

The study found the following:

- Nursing homes with high rates of immunization—89 percent or higher for residents and 55 percent or higher for staff—were substantially less likely to experience outbreaks of influenza.
- High rates of immunization, among residents alone or among staff alone, had no significant effect on the likelihood of influenza outbreaks.
- Other facility characteristics, such as size, were not important. There was one exception: Facilities with significant numbers of Medicaid patients were less likely to have an outbreak. This finding deserves further study.

The study concluded that immunizing nursing home staffs as well as residents is a key part of any strategy to reduce influenza outbreaks in nursing homes. In addition, publicly disseminating information about nursing home staff immunization rates might be wise policy.

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Shugarman, Lisa R., Craig Hales, Claude Messan Setodji, Barbara Bardenheier, and Joanne Lynn, "The Influence of Staff and Resident Immunization Rates on Influenza-Like Illness Outbreaks in Nursing Homes," *Journal of the American Medical Directors Association*, published online September 26, 2006.

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