

National Institute of Allergy and Infectious Diseases (NIAID)/National Institutes of Health (NIH): More Effective Flu Vaccines for the Elderly

Influenza causes illness and death in elderly persons, who are at increased risk for serious complications associated with the flu. For this reason, finding flu vaccines that are more effective in elderly populations is an important public health concern. The findings of this study suggest that higher doses of seasonal influenza vaccine may be a safe and viable way to enhance protection against influenza among elderly persons.

Lead Agency:

National Institute of Allergy and Infectious Diseases (NIAID)
National Institutes of Health (NIH)

Agency Mission:

The mission of the National Institute of Allergy and Infectious Diseases is to conduct and support basic and applied research to better understand, identify, treat, and prevent infectious and immune-related diseases.

Principal Investigators:

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Partner Agency:

Sanofi Pasteur

General Description:

NIAID has a longstanding commitment to advancing scientific research focused on the development of therapies, diagnostics, and devices needed to reduce the threat posed by both seasonal and pandemic influenza. Influenza causes significant morbidity and mortality in the elderly, a population at increased risk for serious flu complications, including pneumonia, bronchitis, and sinus infections. Support for the development of new influenza vaccines is a major focus of the NIAID Influenza Research Program. One aspect of this vaccine effort focuses on developing flu vaccines that are more effective in elderly populations, where influenza morbidity and mortality is significantly high. The findings from this NIAID-funded study suggest that a higher dose of seasonal influenza vaccine can safely and significantly increase the immune responses of older people to the virus. Investigators observed that vaccinated, elderly patients produced higher levels of antibodies to influenza. These results suggest that larger doses of vaccine may be a safe and viable way to enhance protection against influenza among elderly persons.

Excellence: What makes this project exceptional?

This study provides a basis for further evaluation of enhanced potency vaccines in the elderly.

Significance: How is this research relevant to older persons, populations and/or an aging society?

Influenza causes significant morbidity and mortality in the elderly, a population at increased risk for serious flu complications, including pneumonia, bronchitis and sinus infections. These findings are an important first step in developing new strategies to better protect the elderly against influenza-associated hospitalizations and mortality.

Effectiveness: What is the impact and/or application of this research to older persons?

Influenza morbidity and mortality is significant in the elderly as they do not mount as robust an immune response as younger persons. Research looking at how to optimize the immune response in the elderly could lead to improved prevention strategies that could reduce the incidence rate of influenza in elderly persons.

Innovativeness: Why is this exciting or newsworthy?

This research helps provide the foundation for the support of influenza vaccines that may induce a higher antibody response in the elderly than the currently recommended vaccine.