

REINVIGORATING INFLUENZA PREVENTION IN US ADULTS AGE 65 YEARS AND OLDER

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Abstract

Two factors are primarily responsible for the elevated risk of influenza-related complications and deaths in adults age 65 years and older: an increased likelihood of chronic conditions and immunosenescence, a gradual age-related decline in the immune system.

Immunosenescence is also a factor in reduced vaccine efficacy in older adults. This paradox—those who most need vaccine-related immunity are least likely to achieve it—has led to the development of vaccines specifically designed to improve immune responses in adults 65+.

Influenza vaccine coverage rates in the US had been stagnant in the 65+ population for several years until the 2015-2016 influenza season when rates decreased by about 3 percent. In July 2016, the National Foundation for Infectious Diseases (NFID) convened experts to examine ways to reinvigorate influenza immunization efforts among the 65+ population. NFID developed an outcomes report and related resources to support optimal influenza prevention strategies for older adults.



www.nfid.org

Methods

Content and direction were developed by a multidisciplinary roundtable convened by NFID and moderated by William Schaffner, MD, NFID Medical Director, in addition to literature reviews.

▪ **Speakers:** Stefan Gravenstein, MD, MPH, Case Western Reserve University; Robert H. Hopkins, MD, University of Arkansas for Medical Sciences, Daniel B. Jernigan, MD, MPH, Centers for Disease Control and Prevention

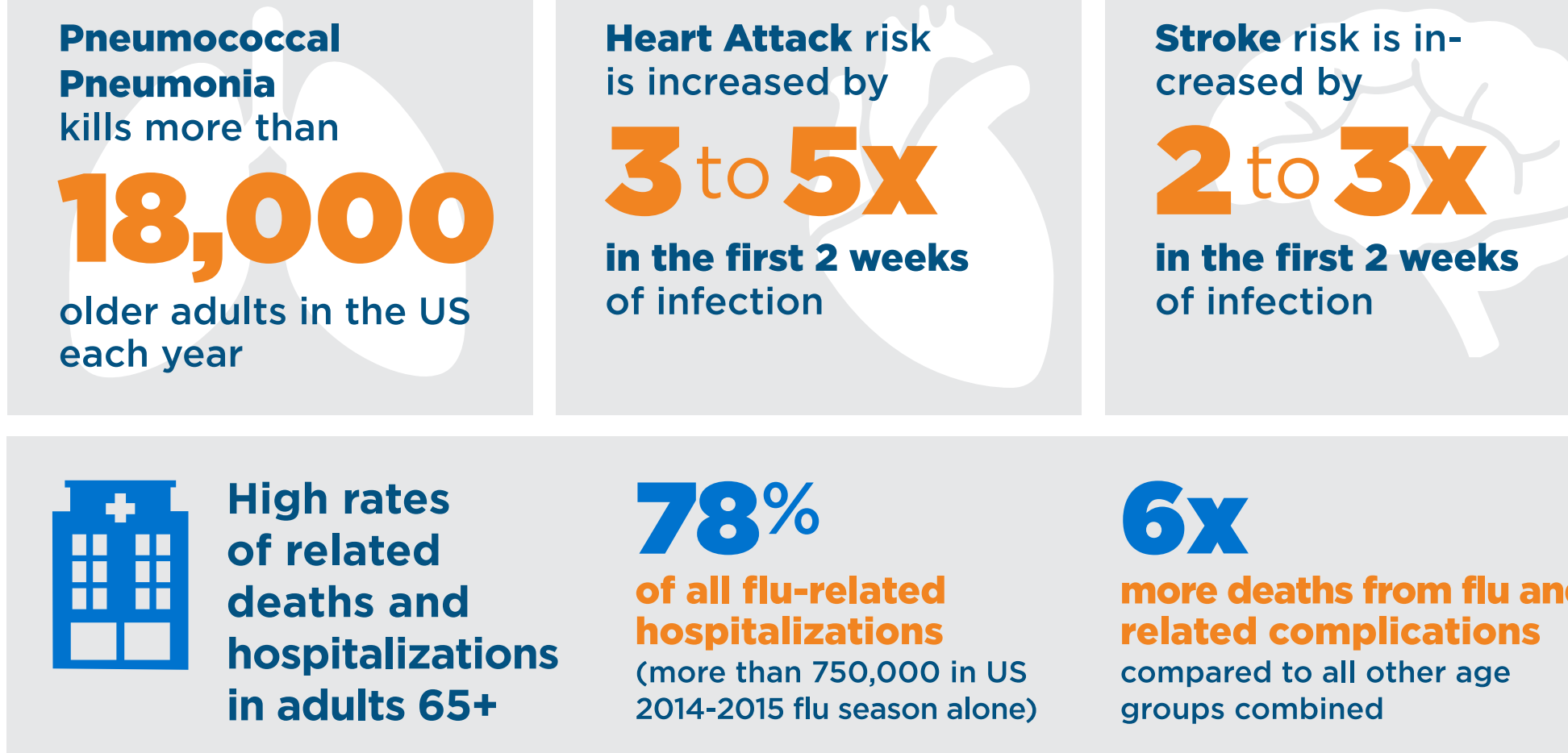
▪ **Participants:** AARP, Alliance for Aging Research, American Academy of Family Physicians, American College of Physicians, American Lung Association, Gerontological Society of America, Griffith University School of Medicine (Australia), Immunization Action Coalition, University of Maryland School of Medicine, University of Michigan, and Vanderbilt University School of Medicine

Aging and Immunosenescence Increase Risk

- Immunosenescence increases risk from viral respiratory diseases¹
- Frailty, marked by lack of physiologic reserve,² may predict immunosenescence and response to immunization better than age.^{3,4}
- Anatomic changes also increase risk: decreased strength in respiratory muscles and diaphragm; decreased protective mucus levels, lung compliance, and elastin.

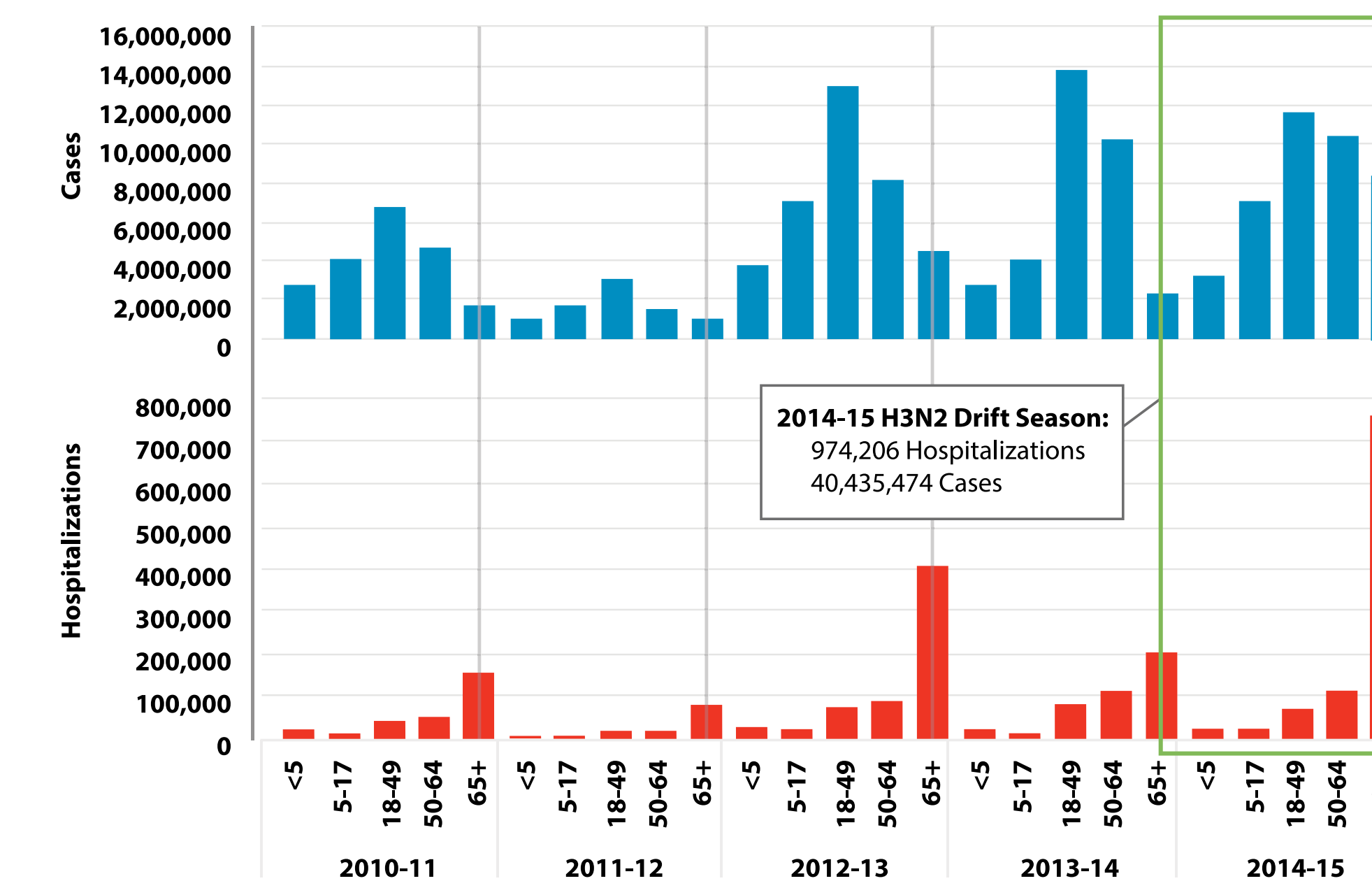
1. Pera A. Maturitas. 2015;82(1):50. 2. Fried LP. J Gerontol A Biol Sci Med Sci. 2001;56(3):M146. 3. Ridha I. Vaccine. 2009;27(10):1628. 4. Yao X. Vaccine. 2011;29(31):5015.

Adults ≥65 Years and Flu-Related Complications



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Flu Hospitalization Rates Highest in Age ≥65 Years in the US



Reed C. PLoS One. 2015;10(3):e0118369. CDC. www.cdc.gov/flu/about/disease/2014-15.htm.

Prevention: Influenza Vaccines

Immune systems decline as adults age. Certain vaccines are available to help boost immune response, specifically in adults 65+:



If a specific flu vaccine is not available in your area, **don't delay!** Vaccination with any available influenza vaccine is recommended and will still provide protection.

Best Practices & Resources

1. **Be prepared to answer patient question (whether or not vaccines are provided)**
A strong HCP recommendation matters
2. **Walk the walk and ensure all staff are vaccinated annually**
Set a good example and make sure you are not spreading flu to your patients
3. **Plan ahead for flu season**
Time spent planning can result in healthier patients and reduced demand for healthcare during flu season
4. **Address influenza vaccination coverage gaps in African-American and Hispanic patients**
Targeted efforts should focus on identifying and addressing specific concerns or knowledge gaps that limit uptake
5. **Partner with and utilize community resources**
Know what your public health department offers, where local clinical are held, consider recommending vaccination at local pharmacies when appropriate

NFID free resources (infographics, reports, fact sheets, etc.) available at:

www.nfid.org/influenza