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 revitalize influenza immunization efforts among the 65+ population. NFID developed an outcomes report and related resources to support optimal influenza prevention strategies for older adults.

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 Grafestrand, 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 mucous levels, lung compliance, and elastin.

Adults 65+ Years and Flu-Related Complications

Prevenum-racial Prevent 91% or more

Heart attack risk is increased by 3 to 5x in the first 5 weeks of infection

Stroke risk is increased by 2 to 3x in the first 5 weeks of infection

CDC, www.cdc.gov/features/flu/65-year-old

Prevention: Influenza Vaccines

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

Best Practices & Resources

1. Be prepared to answer patient question (whether or not vaccines are provided)

2. Promote HCP recommendation matters

3. Walk the walk and ensure all staff are vaccinated annually

4. Set a good example and make sure you are not spreading flu to your patients

5. Plan ahead for flu season

Address Influenza vaccination coverage gaps in African-American and Hispanic patients

NFID free resources (infographics, reports, fact sheets, etc.) available at: www.nfid.org/influenza