Use of high-dose influenza vaccine in older adults
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Clinical question
When should I consider using the high-dose influenza (flu) vaccine?

Recommendations
Health care providers should consider offering high-dose flu vaccine to their patients aged 65 years and older.

Note: All authorities agree that vaccination should never be delayed if a certain product is not immediately available. If high-dose vaccine is not immediately available, please bear in mind that a patient vaccinated with any flu vaccine is safer than an unvaccinated patient.

As it ages, the immune system’s ability to defend against influenza weakens, so the ability to mount a good immune response to flu vaccine wanes. This places older adults at greater risk of having severe illness associated with influenza infection, regardless of whether they have been vaccinated.

High-dose flu vaccine (Fluzone) has four times the amount of antigen as the standard-dose flu vaccine, and has been shown to produce a higher antibody response in older adults. Recent research suggests that Fluzone is likely more effective than standard-dose vaccine at preventing influenza infection as well as some serious complications of influenza.

The high-dose vaccine is FDA-approved for use in people aged 65 years and older. Adverse effects are similar to those seen with standard-dose vaccine, although some events (including injection site reactions/pain and moderate-to-severe fever) occur more frequently with high-dose vaccine. A study published in the New England Journal of Medicine (DiazGranados 2014) indicated that the high-dose vaccine was 24.2% more effective in preventing flu in adults aged 65 years and older relative to a standard-dose vaccine. However, the reduction in absolute risk was small (1.4% rate of catching influenza in those who received high-dose vaccine, compared to 1.9% in those who received regular-dose vaccine).

The Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) does not state a preference for high-dose versus standard-dose influenza vaccine for patients in this age group.

How could this change my practice?
This will provide information necessary to allow providers to have an informed discussion with persons aged 65 and older about the choice of high-dose versus standard-dose flu vaccine.
Why did we select this topic?
Public awareness of new research on the effectiveness of high-dose flu vaccine has led to increased questions from older adults about whether high-dose vaccine may be an appropriate choice for them.

Resources
For questions about flu vaccine ordering, contact Laurie Sarver, Flu Campaign Manager, Pharmacy Administration.

References
Centers for Disease Control and Prevention. Fluzone High-Dose Seasonal Influenza Vaccine. CDC website.


U.S. Food and Drug Administration. Fluzone, Fluzone High-Dose and Fluzone Intradermal. FDA website.