

Immunizations for Older Adults

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WHY: Vaccination rates for influenza and pneumococcal disease in the United States approach only 60% in spite of aggressive vaccination efforts. These preventable illnesses cause substantial morbidity and mortality in older patients, who tend to have more medical co-morbidities and are at higher risk for complications. In the USA, influenza causes 36,000 annual deaths, 90% of which are people beyond the age of 65 (Palevsky, et al, 2006). Pneumonia, most often due to strep. pneumonia, has a mortality rate of up to 40%. In older adults, tetanus, while not as common as the flu or pneumonia, involves people aged 60 or older more than 60% of the time with the highest mortality rate in this age group.

BEST PRACTICES:

Screen for patient's immunization histories during office visits and hospital admissions and offer vaccination as indicated. Need to screen health care staff on a pre-employment basis, and keep them immunized at recommended intervals.

TARGET POPULATION:

- Adults above age 50 (for annual influenza vaccination) and above age 65 (for one-time pneumococcal vaccination) and above age 50 (for every ten-yearly tetanus-diphtheria toxoid booster) who are either healthy OR have medical conditions such as: heart disease, pulmonary disease, diabetes mellitus, liver disease, renal failure, alcoholism, immune suppression such as HIV and congenital immunodeficiency, anatomic or functional asplenia (sickle cell disease, splenectomy), malignancies (lymphoma, leukemia, solid tumors), patients receiving immunosuppressants including steroids, bone marrow- and organ-transplant recipients.
(Younger adults with these medical conditions should also be immunized).
Patients with chronic debilitating conditions which increase risk for aspiration should also be vaccinated against influenza.
- Residents of assisted living and long-term care facilities.
- Healthcare workers such as hospital staff, assisted living staff, nursing home staff and home care givers.

STRENGTH AND LIMITATIONS:

Vaccines for influenza, pneumococcal pneumonia, and tetanus have preventive efficacy rates approaching 90%. Such vaccines are relatively safe, with very few contraindications and a low rate of adverse reactions. Most non-vaccinated individuals either are not offered vaccination, do not know that such vaccines are available or have refused vaccination. Only one out of every three health care workers is immunized against influenza. This means two out of every three health care workers can transmit a potentially lethal illness to the very population being cared for.

ADMINISTRATION OF VACCINES:

All vaccines are administered intramuscularly in the deltoid muscle. Pneumococcal vaccine and influenza vaccine may be administered at the same time, (by separate injection in the other arm) without an increase in side effects or decreased antibody response to either vaccine. Tetanus-diphtheria toxoid booster also may be administered concurrently with other vaccines.

RECOMMENDED IMMUNIZATION PRACTICES:

For the Older Adult Patient

1. Try to obtain patient's immunization history. Check medical records to verify prior vaccinations. Note any history of neurological or hypersensitivity reactions.
2. Educate the patient on vaccine-preventable diseases and the importance of vaccination. Offer vaccination as indicated. Patients and their families often have misconceptions regarding immunization.
3. Provide clear documentation of vaccination provided to minimize risk of unnecessary duplication.
4. Follow the following guidelines recommended by the Department of Health and Human Services (DHHS)/Centers for Disease Control (CDC):
 - Give influenza vaccine annually, starting October and ending February. This refers to the intramuscular inactivated virus vaccine. The live, intranasal flu vaccine is indicated only for persons ages 5-49 and is contraindicated in the geriatric population. The influenza vaccine is contraindicated in those with egg allergies.
 - Give pneumococcal vaccine once after the age of 65 with a revaccination after 5 years if diseases such as chronic renal failure, chronic immunosuppression, malignancies, and functional or anatomic asplenia are present. Give one-time revaccination for patients older than 65 years old if they were previously vaccinated more than 5 years previously and were aged less than 65 years at the time of initial vaccination.
 - Provide Tetanus-diphtheria toxoid (Td) as a booster shot every ten years to those who have either completed the immunization series during childhood or teen years and have not received a booster dose in the last 10 years. If the patient has never been vaccinated, administer 0.5 mg intramuscularly twice with a 1-2 month interval and an additional dose 6-12 months later.
5. In selected patients aged 60 years or more, vaccination against herpes zoster (shingles) has decreased the incidence of herpes zoster and postherpetic neuralgia by 51% and 67% respectively.
6. Certain subsets of the geriatric population may require vaccinations for Hepatitis A, Hepatitis B, meningococcal disease, varicella and for measles, mumps, rubella (MMR), due to certain health problems, occupations or risks posed by lifestyles. Furthermore, if such patients travel, it would be advisable to offer relevant vaccines such as yellow fever vaccine.

HOSPITAL IMMUNIZATION PROTOCOLS

Work with hospital administration to develop a system that:

1. Screens for immunization upon admission of older adults.
2. Educates new admissions about immunization.
3. Incorporates immunization history and standing orders into the electronic medical record.
4. Tracks healthcare staff immunizations and ensures adequate compliance.
5. Provides immunization education and screening to the community at large.
6. Updates and maintains immunization records for older adults.

MORE ON THE TOPIC:

Best practice information on care of older adults: www.ConsultGerIRN.org.

Department of Health and Human Services (DHHS)/Centers for Disease Control (CDC). National Immunization Program website: www.cdc.gov/nip/default.htm.

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