

- The consequences of low vaccination rates
- The “myths of immunization”
- Current indications for influenza and pneumococcal vaccine

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AN OUTBREAK OF MULTIDRUG-RESISTANT PNEUMOCOCCAL PNEUMONIA AND BACTEREMIA AMONG UNVACCINATED NURSING HOME RESIDENTS

J. PEKKA NUORTI, M.D., JAY C. BUTLER, M.D., JAMES M. CRUTCHER, M.D., M.P.H., RAMON GUEVARA, M.P.H.,
DAVID WELCH, PH.D., PATRICIA HOLDER, M.T., AND JOHN A. ELLIOTT, PH.D.

Myth - “the vaccines are not effective”

Influenza Vaccine Effectiveness

- 30-40% at preventing influenza illness
- 50-60% effective in preventing hospitalization or pneumonia
- 80% effective in preventing death

Pneumococcal Vaccine Effectiveness

- Up to 75% effective at preventing invasive disease (bacteremia and meningitis)
 - fewer severe complications of pneumonia
 - reduced mortality rate

*A vaccine not given
is 100% ineffective!*

Myth - “the vaccines are not safe”

Vaccine Safety

- Cannot cause the flu or pneumonia!
- Local reactions self-limited
- Systemic reactions uncommon in elderly
- Serious adverse events are exceedingly rare
- Much safer than many other therapies!

**Myth - “the cost of the vaccines
may not be reimbursed”**

Vaccine Reimbursement

- Pneumococcal vaccine
 - covered Medicare benefit since 1981
- Influenza vaccine
 - covered Medicare benefit since 1993

Myth - “most patients have been immunized”

Barriers to Immunization

- Overestimation of rates of immunization
- Undocumented vaccination status
- Healthcare provider oversight
- Lack of a systems-based approach

Indications for Influenza Vaccine

- All nursing home residents
- Persons aged 50 years old or greater
- Adults or children with
 - chronic cardiac or pulmonary disease
 - chronic metabolic disease, renal disease, immunosuppression (including HIV)
- Children on long-term aspirin therapy
- Pregnant women in 2nd or 3rd trimester during influenza season

Indications for Influenza Vaccine

- Persons who can transmit influenza to those at high risk:
 - physicians and nurses
 - nursing home employees
 - employees of assisted living centers
 - persons who provide home care to high risk
 - household members of high risk groups

Indications for Pneumococcal Vaccine

- All patients aged 65 or greater
- All residents of nursing homes and chronic care facilities
- Those < 65 years old
 - chronic heart, lung, renal diseases, or diabetes
 - compromised immunity (including HIV)
 - alcoholism, cirrhosis, chronic liver disease
 - sickle cell anemia, prior splenectomy
 - cerebrospinal fluid leaks

Timing of Vaccination

- Influenza vaccine
 - October and November optimal
 - unimmunized patients should receive through March
- Pneumococcal vaccine
 - year round

Unknown Vaccination Status

- Patients (and their families) uncertain about prior vaccination status or those with an unreliable history who meet the indications for influenza or pneumococcal vaccine should be immunized