

**BQC-93-015**

Date: March 3, 1993

To: Nursing Homes  
Facilities for the Developmentally Disabled

From: Susan Wood, Deputy Director  
Bureau of Quality Compliance

Subject: Pneumococcal Vaccine

NH 11  
FDD 6

Mortality from pneumococcal disease is estimated at 40,000 deaths annually in the United States. The highest incidence of deaths is among patients who have bacteremia or meningitis, patients with underlying medical conditions and the elderly.

The elderly are at increased risk of pneumococcal disease generally due to deterioration of their immune defenses, weakened cough reflex, and the presence of underlying chronic conditions such as: cardiovascular disease, pulmonary disease, diabetes mellitus, alcoholism and cirrhosis. Other conditions that increase the risk of pneumococcal infection include anatomic asplenia, Hodgkins disease, multiple myeloma, chronic renal failure, nephrotic syndrome, cerebrospinal fluid leakage, organ transplantation, AIDS and other types of immune suppression. Bedridden persons and those persons with limited mobility have an increased risk of pneumococcal infection associated with the tendency to pool pulmonary secretions. Nursing home residents, residents of facilities for the developmentally disabled, and other persons residing in an institutional setting are also at increased risk of pneumococcal infection.

Pneumococcal polysaccharide vaccine is recommended for all persons considered to be at increased risk of pneumococcal infection. The current vaccine includes protection against 23 types of Streptococcus pneumoniae (the pneumococcus) which are responsible for approximately 90% of pneumococcal disease in the United States. Studies suggest that the vaccine has a 60% to 80% efficacy in protecting against pneumococcal disease. A thorough review of the resident's medical and vaccination history should be done prior to the administration of the vaccine. When there is doubt or no information regarding whether an individual at risk has received pneumococcal vaccine, the vaccine should be administered. Although routine revaccination is not recommended, revaccination should be strongly considered after six years for those at highest risk of rapid decline in antibody levels (those with chronic renal failure, nephrotic syndrome, transplant recipients and asplenic patients).

At this time, the literature informs us that risk-benefit should be considered when the following medical problems exist: Febrile illness, severe sensitivity to pneumococcal vaccine and thrombocystopenia purpura idiopathic.

Side/adverse effects of the vaccine may occur and if bothersome, medical attention should be obtained. Frequent complaints may be redness, soreness, hard lump, swelling or pain at injection site.

Less frequent or rare complaints are:

adenitis (swollen glands), arthralgia or Myalgia (aches or pain in joints or muscles)  
Asthenia (unusual tiredness and weakness)  
Fever of 38.3 degrees C.(101 degrees F) or less

Malaise (vague feeling of bodily discomfort)  
Skin rash

Approximately 50% of persons given pneumococcal vaccine develop mild side effects such as redness and pain at the injection site. Fever, muscle aches, and severe local reactions have been reported in less than one percent of those vaccinated. Severe systematic reactions, such as anaphylactic reactions, have been rarely reported.

The safety of pneumococcal vaccine for pregnant women has not been evaluated. Ideally, women at high risk of pneumococcal disease should be vaccinated before pregnancy.

Medical problems, potential drug interactions, contraindications and potential adverse effects must be considered for each individual who is a candidate to receive the vaccine. Pharmacologic literature will provide the prescribing physician with the appropriate knowledge about the administration of the vaccine.

There are no federal or state regulations which require a specific informed consent form for the administration of pneumococcal vaccine. However, Wisconsin Administrative Codes HSS 132.31(1)(n) (nursing homes), and HSS 134.31(3)(o) (FDD) and federal regulations 42 CFR 483.10(d)(2) (SNF/NF) and 42 CFR 483.420(a)(2) (ICF/MR) provide residents with the right to be informed, and to participate in their treatment and care.

If you have any questions, please direct them to the following contact persons:

Infection Control:       Bureau of Quality Compliance  
                                  Bonnie Landgraf, R.N. (608) 266-6691  
                                  Thomas Haupt, M.S.   (608) 267-1445

Immunizations:         Bureau of Public Health  
                                  (608) 267-9003 or  
                                  Local Public Health Agency

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