

PNEUMOCOCCAL VACCINE

Information for health professionals



HE Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

WHY IS THERE A NEED FOR VACCINATION?

Pneumococcal disease caused by the streptococcus pneumoniae leads to significant morbidity and mortality, particularly amongst the very young, the very old and those with impaired immunity and those with anatomic or functional asplenia. It is responsible for 50% of community acquired pneumonia. Streptococcus pneumoniae causes a wide variety of other infections from meningitis, sinusitis, osteomyelitis, bronchitis and otitis media. It can also cause serious infections in the blood (bacteremia) where the overall mortality can be as high as 25%.

In Ireland each year almost 2,000 people die as a result of pneumonia. Ninety percent of these are aged over 65 years. About 8,000 are admitted to our hospitals each year with a diagnosis of pneumonia.

Over the years Streptococcus pneumoniae has become resistant to many medications making the treatment of pneumococcal infections much more difficult. Data show that 19% of Streptococcus pneumoniae in Ireland are penicillin resistant. **Prevention of disease through vaccination is now more important than ever.**

WHO SHOULD BE VACCINATED?

- Everybody aged 65 years and over
- Those aged over 2 years and less than 65 years who have any of the following:
 - Diabetes mellitus
 - Chronic heart, respiratory or liver disease
 - Chronic renal disease or nephrotic syndrome
 - Sickle Cell Disease
- Those with missing or non functioning spleens
- Those with immunodeficiency due to disease or treatment
- Persons with HIV infection

Vaccination is **not recommended** for healthy young adults, as there is little risk of pneumococcal infection.

ARE THERE ANY CONTRAINDICATIONS?

- Pregnancy and breast feeding.
- Hypersensitivity to any of the vaccine components.
- Revaccination within 5 years of a previous dose of pneumococcal vaccine

ARE THERE ANY SIDE EFFECTS OF THE VACCINE?

The vaccine is very safe. Approximately 50% will get tenderness and redness at the injection site. Less than 1% will develop fever, aches or more severe local reactions.

IS THE VACCINE A LIVE VACCINE?

No, the vaccine is not live. It is made from capsular polysaccharides of the pneumococcus. It contains polysaccharides from 23 different type of pneumococci.

HOW EFFECTIVE IS THE VACCINE?

The vaccine is 60-70 % effective in preventing invasive pneumococcal disease. It is less effective in immunocompromised persons, but is still of value.

The vaccine is not recommended in those aged less than 2 years, as it is poorly immunogenic in this age group.

HOW OFTEN IS VACCINATION REQUIRED?

Revaccination is not normally required. Revaccination is only recommended for those with absent or non-functioning spleens and those with nephrotic syndrome and then only after an interval of five years.

DOSE AND ROUTE OF ADMINISTRATION

A single dose of 0.5ml should be given subcutaneously or intramuscularly. The deltoid area or the lateral aspects of the thigh are the preferred sites for injection.

CAN THE VACCINE BE GIVEN AT THE SAME TIME AS THE INFLUENZA VACCINE?

Yes. Pneumococcal vaccine may be given at the same time as influenza vaccine but at a different site. As there is considerable overlap in the target groups for both vaccines, it may be appropriate to offer the pneumococcal vaccine to patients when they attend for their influenza vaccine.

Note: This document should be read in conjunction with the Summary of Product Characteristics (SPC) issued by each vaccine manufacturer.

