Pneumococcal Conjugate Vaccine

Pneumococcal disease is a serious illness caused by the **Streptococcus pneumoniae** bacteria. This infection can lead to life-threatening conditions like **pneumonia**, **meningitis**, and **sepsis**, particularly in young children, the elderly, and people with weakened immune systems. In South Africa, the **Pneumococcal Conjugate Vaccine** (**PCV**) is used to protect against this disease. Two types of PCV vaccines are available: **PCV 10** and **PCV 13**.

What is Pneumococcal Disease?

Pneumococcal disease occurs when bacteria spread from the nose and throat to other parts of the body, causing infections. The bacteria can cause:

- Pneumonia (lung infection)
- **Meningitis** (infection of the brain and spinal cord)
- **Sepsis** (a severe blood infection)
- · Middle ear infections

Children under the age of 2, older adults, and people with underlying health conditions are at higher risk of severe illness or death from pneumococcal disease. This is why vaccination is crucial.

What is the Pneumococcal Conjugate Vaccine (PCV)?

The **Pneumococcal Conjugate Vaccine** is designed to protect against several strains of the **Streptococcus pneumoniae** bacteria. In South Africa, two versions of the vaccine are available: **PCV 10** and **PCV 13**. These vaccines are included in the **Expanded Programme on Immunisation (EPI)** and are administered to infants and young children as part of their routine immunisation schedule.

- PCV 10 protects against 10 strains of the pneumococcal bacteria.
- **PCV 13** protects against 13 strains, offering broader coverage.

Both vaccines are effective in preventing severe forms of pneumococcal disease, but **PCV 13** covers three additional strains, which may be important in areas with higher rates of those specific strains.



Who Should Get the PCV Vaccine?

In South Africa, the PCV vaccine is part of the routine childhood vaccination schedule, meaning it is given to all infants as part of their immunisations. The schedule includes doses at:

- 6 weeks
- 14 weeks
- 9 months

This early vaccination is crucial as it protects babies, who are most vulnerable to pneumococcal disease, before they are exposed to the bacteria in their environment.

Adults and older children with certain medical conditions, such as HIV or chronic lung diseases, may also be advised to get the pneumococcal vaccine.

Why is the PCV Vaccine Important?

Pneumococcal disease is a leading cause of serious illness and death in children under the age of 5. In South Africa, where pneumonia is a major health concern, the **PCV vaccine** plays a vital role in reducing childhood deaths from this disease.

The vaccine has significantly reduced the number of pneumococcal infections, leading to fewer hospitalisations and deaths from pneumonia, meningitis, and sepsis. Vaccinating young children also helps reduce the spread of the bacteria to other vulnerable groups, such as the elderly.

PCV 10 vs. PCV 13: Which One is Used in South Africa?

Both **PCV 10** and **PCV 13** are available in South Africa. The **Department of Health** primarily uses PCV 13 in the public immunisation programme because of its broader protection. However, some private healthcare providers may offer PCV 10 as well.

Regardless of which vaccine is used, it's essential to ensure that your child is vaccinated on schedule to protect them from serious pneumococcal infections.

References:

1. Expanded Programme on Immunisation (EPI)

