

Currently there are 90 different known serotypes of *Streptococcus pneumoniae*. There is no vaccine that can protect against all of them. However, two types of vaccines are available to help prevent infection with the most common strains.

Pneumococcal polysaccharide vaccine (PPV23): this contains containing 23 serotypes of the pneumococcus, which account for 88% of pneumococcal bacteremia disease and cross-react with other types that causes additional 8% of disease. It is licensed for persons with certain risk factors who are 2 years and older. The vaccine is not effective in children younger than 2 years and less. The vaccine is administered as a single dose which result in protection for 2-3 years.

Pneumococcal conjugate vaccine (PCV): 3 types of this vaccine are currently available. These include PCV 7, which contains 7 serotypes, PCV10, which includes 10 erotypes and PCV13, which contains 13serotypes of the pneumococcus serotypes.

Currently available PCVs are safe and efficacious and the increased number of serotypes present in these vaccines, compared to the first licensed PCV7, represent significant progress in the fight against pneumococcal morbidity and mortality, in particular from a developing country perspective.

The vaccine is given to children as part of the routine vaccination schedule with the first dose of PCV given at the age of 6 weeks or 2 months (depending on the national schedule), followed by 2 doses at one to two months intervals. The third dose can be given at 12 months of age and a booster dose above one year of age can also be added.

Both PCV7, PCV10 and PCV13 are licensed for active immunization for the prevention of invasive disease, pneumonia and acute otitis media caused by the respective vaccine serotypes of *S. pneumoniae* in infants and children from 6 weeks to 5 years of age. In addition, PCV13 is licensed for the prevention of pneumococcal disease in adults >50 years of age.

Tuesday 21st of May 2024 01:29:08 PM