

Pneumococcal polysaccharide vaccine (PPV23) prioritisation

- A quick reference guide

Supply of pneumococcal polysaccharide vaccine (PPV23) has been problematic since 2017 and supplies marketed by MSD as Pneumovax® 23 (now in pre-filled syringes), continue to be limited in 2020. In response to this Public Health England and Welsh Government produced guidance in 2017 for how vaccine supplies should be prioritised in light of the shortages. This was shared in a Public Health Link from the Chief Medical Officer in 2017 and again in late 2020 ([CMO Public Health Link 2020](#)).

This quick reference guide describes the guidance developed in 2017, which continues to be valid in 2020, and is intended to support general practices with the planning of immunisation services. Practices should continue to prioritise vaccination according to these recommendations, when shortages in supply exist. Practices may wish to print, laminate and display Table 1 for use as a visual prompt.

Advice on how to manage the PPV23 programme

1. Prioritise those newly diagnosed with conditions in the high priority group, followed by those in moderate priority groups who have never received PPV23 (see table 1). (PPV23 can be given from 2 years of age.)
2. If no PPV23 vaccine is available, please ensure that individual's medical records are flagged in order to enable you to more easily call them for a future appointment when vaccine is available. Also ensure that other aspects of their health care management are optimised and in place as advised in relevant guidance, or by the specialist clinician caring for the patient (for example antibiotic prophylaxis, or booster doses of PCV13).
3. Any PPV23 that the practice is able to access should be offered to **high** and **moderate** priority groups who have never received PPV23 and are due this vaccine. This can be offered by personal invitation and/or opportunistically when they are attending an appointment at the practice.
4. PPV23 vaccination for lower priority groups (including healthy individuals aged 65 years and over) and booster doses for asplenic individuals, those with splenic dysfunction and people with chronic kidney disease are less urgent and can be planned when sufficient stock is available.

National stocks of PCV13 (Prevenar13), or separately procured PCV10 (Synflorix), **should not** be used in place of PPV because herd protection from the childhood PCV13 programme has reduced the incidence of pneumococcal disease due to these serotypes across all ages, including the elderly. PPV23 helps provide additional protection against serotypes that are not covered by PCV13 or PCV10.

Information sources:

- The Green Book Chapter 25: Pneumococcal chapter. Available at <https://www.gov.uk/government/publications/pneumococcal-the-green-book-chapter-25>
- CMO, Public Health Link – Update on Pneumovax 23 @ vaccine supplies. Available at: [http://www2.nphs.wales.nhs.uk:8080/Contacts.nsf/HealthAlerts/1590CAA37ED945B18025861800317831/\\$file/CMO-CEM-2020-29%20-%20Update%20on%20Pneumovax23%20\(PPV23\)%20vaccine%20supplies%20and%20clinical%20prioritisation%20guidance.pdf](http://www2.nphs.wales.nhs.uk:8080/Contacts.nsf/HealthAlerts/1590CAA37ED945B18025861800317831/$file/CMO-CEM-2020-29%20-%20Update%20on%20Pneumovax23%20(PPV23)%20vaccine%20supplies%20and%20clinical%20prioritisation%20guidance.pdf)

Table 1: Priority groups for PPV23 vaccine

Clinical risk group	Examples (decision made on clinical judgement)
High priority	
Asplenia or dysfunction of the spleen	This also includes conditions that may lead to splenic dysfunction such as homozygous sickle cell disease and coeliac disease.
Immunosuppression	Due to disease or treatment, including patients undergoing chemotherapy leading to immunosuppression, bone marrow transplant, complement disorder, HIV infection at all stages, multiple myeloma or genetic disorders affecting the immune system (such as IRAK-4, NEMO). Individuals on or likely to be on systemic steroids for more than a month at a dose equivalent to prednisolone at 20mg or more per day (any age), or for children under 20kg, a dose of 1mg or more per kg per day.
Individuals with cochlear implants	It is important that immunisation does not delay the cochlear implantation.
Individuals with cerebrospinal fluid leaks	This includes leakage of cerebrospinal fluid such as following trauma or major skull surgery (does not include CSF shunts).
Moderate priority	
Chronic respiratory disease	This includes chronic obstructive pulmonary disease (COPD), including chronic bronchitis and emphysema; and conditions such as bronchiectasis, cystic fibrosis, interstitial lung fibrosis, pneumoconiosis and bronchopulmonary dysplasia (BPD). Also included are children with respiratory conditions caused by aspiration, or a neurological disease (e.g. cerebral palsy) with a risk of aspiration. Asthma is not an indication, unless so severe as to require continuous or frequently repeated use of systemic steroids (as defined in Immunosuppression above).
Chronic heart disease	This includes those requiring regular medication and/or follow-up for ischaemic heart disease, congenital heart disease, hypertension with cardiac complications, and chronic heart failure.
Chronic kidney disease	Nephrotic syndrome, chronic kidney disease at stages 4 and 5 and those on kidney dialysis or with kidney transplantation.
Chronic liver disease	This includes cirrhosis, biliary atresia and chronic hepatitis.
Diabetes	Diabetes mellitus requiring insulin or anti-diabetic medication. This does not include diabetes that is diet controlled.
Low priority	
Healthy individuals aged 65 and over	

Please note: PPV23 is also recommended for those at risk of continued occupational exposure to metal fumes. This group would also be considered low priority. Vaccination of these individuals does not exclude the need for measures to prevent or reduce exposure to metal fumes (see The Green Book Chapter 25 p.9).