

Version 1.4 March 2017
Pneumococcal Information for
Candidates for, or recipients of, cochlear implants
Updated March 6th 2017

Individuals with cochlear implants and risk of bacterial meningitis

- Children with cochlear implants are more likely to get bacterial meningitis than children without cochlear implants. In addition, some children who are candidates for cochlear implants have anatomic factors which may increase their risk for meningitis.
- Meningitis in people with cochlear implants is most commonly caused by the bacteria *Streptococcus pneumoniae* (pneumococcus).

Immunisation recommendations

- Candidates for, and recipients of, a cochlear implant should be vaccinated with pneumococcal conjugate vaccine (PCV) and pneumococcal polysaccharide vaccine (PPV).
- Ideally, all individuals should be vaccinated before they receive cochlear implants (preferably at least two weeks).
- Children should receive PCV according to the national schedule at 2, 6 and 13 months of age (Prior to December 2016 children received at 12 months).
- A dose of PPV is recommended for children ≥ 24 months (at least 2 months after PCV).
- A dose of PCV13 (covers at least 13 serotypes) is recommended for these children even if they were already vaccinated with the PCV7.

Table 1. Pneumococcal immunisation for children at high risk of IPD due to cochlear implant

Age at 1 st vaccination	Vaccine Type, number of doses and intervals	
	PCV	PPV
6 weeks -< 12 months	Doses 1 & 2 at 2 month intervals Dose 3 given at 13 months of age, ≥ 2 months after dose 2	1 dose given ≥ 24 months of age (≥ 2 months after final dose of PCV)
12 -< 24 months	1 or 2 doses ¹ at 2 month intervals	
24 months to 5 years²	1 or 2 doses ¹ at 2 month intervals	1 dose (≥ 2 months after PCV)
>5 - <18 years²	1 or 2 doses ^{1,2}	1 dose (≥ 2 months after PCV)
18 and older	1 or 2 doses ^{1,2}	

¹1 dose of PCV required for all medically at risk over 12 months except when response may be blunted e.g. asplenia/hyposplenia including sickle cell disease, IgA-, IgG subclass- and specific antibody deficiencies. This group needs 2 doses unless they have previously received PCV or PPV in which case they need 1 dose of PCV.

² 1 dose of PCV13 is recommended for children who have already completed a course of PCV7

Booster doses- are not routinely recommended

- Once a child has completed the appropriate vaccination schedule additional booster doses are not currently recommended, unless the child has antibody levels likely to decline more rapidly. In these circumstances a once only PPV23 should be given at least 5 years after the first dose.

- Source: **Chapter 16. Pneumococcal infection.** Immunisation Guidelines for Ireland (2013) located [here](#)