



# Pneumococcal information for candidates for, or recipients of, cochlear implants Updated December 11<sup>th</sup> 2019

## 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  $\geq$  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 and adults at high risk of IPD due to cochlear implant

Age at 1 <sup>st</sup> vaccination	Vaccine type, number of doses and intervals	
	PCV	PPV
6 weeks -<24 months	Routine schedule	1 dose at ≥2 years of age
2 -<5 years	If unvaccinated, 2 doses	1 dose ≥2 months after PCV
>5 - <18 years	If unvaccinated, 1 or 2 <sup>1</sup> doses <sup>2</sup>	
18 -<65 years	1 or 2 <sup>1</sup> doses	$1-2^3$ doses ≥2 months after PCV
≥65 years	1 or 2 <sup>1</sup> doses	1 dose ≥2 months after PCV

<sup>1</sup> 2 doses 2 months apart if response may be blunted e.g. asplenia/ hyposplenia

<sup>2</sup> If fully vaccinated with PCV7 give 1 dose of PCV13

<sup>3</sup> 2 doses 5 years apart if response may be blunted e.g. asplenia/ hyposplenia

#### 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 (2018) located here