

Spleen Australia

Guidelines for Children with Asplenia/Hyposplenism Aged 0-18 Years *(reviewed and updated 26/5/2026)*

Disclaimer: This guideline is intended for use by clinicians.

These guidelines have been produced to help guide clinical decision making for the healthcare practitioners. These clinical guidelines should never be a substitute for clinical judgement and comprehensive clinical assessment of an individual patient.

Background

Spleen Australia is a support service for people living without a functioning spleen (asplenia or hyposplenism). We provide education, vaccination and antibiotic advice, and ongoing support to help reduce the risk of serious infections. People living in Victoria, Western Australia, Queensland, and Tasmania are eligible to register.

For more information regarding living without a functioning spleen or assistance with immunisation, please visit the Spleen Australia [website](#).

- These recommendations are based on the [Australian Immunisation Handbook guidelines for people with asplenia and hyposplenism](#)
- The first two years following splenectomy are considered the highest risk for infection, although several reports indicate that the risk is lifelong.
- Children with congenital asplenia, cancer-related asplenia/hyposplenism, haematological conditions requiring splenectomy and those with sickle cell anaemia are at greater risk of infection than those who have had a splenectomy for trauma. Some of these infections are vaccine-preventable diseases and protection can be optimised by appropriate and timely immunisation.
- Individuals without a functioning spleen are at increased risk of infection with encapsulated bacteria, most importantly *Streptococcus pneumoniae* (pneumococcus), the cause of invasive pneumococcal disease (IPD) which includes meningitis, septicaemia and pneumonia.
- If the child is not up to date with routine National Immunisation Program (NIP) recommendations, please refer to [catch-up vaccination](#).
- This guideline is written by paediatric infection specialists, vaccinology experts, immunisation nurses, paediatric pharmacists and Spleen Australia staff and has been reviewed and permitted for use in Queensland, Western Australia, Tasmania and Victoria.

PAEDIATRIC GUIDELINES Aged 0 to 18 years

If possible, give vaccines 14 DAYS PRIOR to elective splenectomy or 7 DAYS AFTER splenectomy

Vaccine	Vaccinations recommended at age of diagnosis		Catch up dose (all ages)
Pneumococcal Conjugate (20vPCV) Prevenar 20	< 12 months	4 dose schedule as per NIP (2, 4, 6 and 12 months of age)	- If a child completed their PCV13/15 schedule, give one dose of 20vPCV at age 4 or 12 months after the last PCV booster whichever is later. - If a child had PCV13/15 and one dose of 23vPPV, give 20vPCV at least 5 years later. 20vPCV is not needed if the child completed course of PCV13/15 and two doses of 23vPPV.
	>12 months to < 18 years	A single dose of 20vPCV at diagnosis	
Meningococcal Conjugate (MenACWY) Nimenrix	< 5 months	Nimenrix & Bexsero (4 doses) (2, 4, 6 months of age) + booster at 12 months or 8 weeks after 3 rd dose	≤ 6 years: Nimenrix & Bexsero Booster at 3 years post-primary course
AND	6 to 11 months	Nimenrix & Bexsero (3 doses) 2 doses (8 weeks apart) + booster at 12 months or 8 weeks after 2 nd dose	7 to 18 years: Nimenrix & Bexsero Booster at 5 years post-primary course
Meningococcal B Conjugate (MenB) Bexsero*	≥12 months	Nimenrix & Bexsero 2 doses (8 weeks apart)	Nimenrix only Booster every 5 years after previous booster
Haemophilus influenzae type b (Hib) refer to table 2	< 18 months	3 doses as per NIP + 1 dose at 18 months	No boosters required
	>18 months	One dose	
Influenza	Annually as per NIP using age-appropriate brand (preferably in April)		*Bexsero - prophylactic paracetamol is recommended for those <2 years of age (15mg/kg per dose) 30 minutes prior vaccination (or as soon as possible after), with two subsequent paracetamol doses (4-6 hours apart) to reduce the likelihood and severity of fever.

Table 1	Additional Information for people living without a spleen
Pneumococcal vaccines	For more information see Pneumococcal disease , or NIP pneumococcal vaccine advice 13vPCV, 15vPCV and 23vPPV have been replaced by 20vPCV in children <18 years
Meningococcal vaccines	For more information see Meningococcal disease
<i>Haemophilus influenzae</i> type B	For more information see Haemophilus influenzae type B
Influenza vaccine	For more information see Influenza Two doses (at least 4 weeks apart) are recommended and funded in the first year of vaccination for under 9 years of age
Timing of vaccines	Elective splenectomy – if possible 14 days prior, in some cases it can be 10-12 weeks prior to enable administration of primary course of vaccines. Emergency splenectomy – if possible 7 days post-splenectomy
Multiple immunisations	It is safe to co-administer these vaccines simultaneously, provided they are injected into two different sites on the deltoid separated by 2.5cm. If child <12 months of age, administer in the anterolateral thigh.
Live vaccines	People without a functioning spleen can receive live vaccines safely, unless they have other comorbidities that contraindicate live vaccines.
Family members	Family members and close contacts should be up to date with all recommended vaccines and receive the annual influenza vaccine
Immunotherapy/Chemotherapy	For more information see people who are immunocompromised
Overseas Travel	Seek specialist advice regarding vaccines required for travel 4-6 weeks prior to travel. If travelling to malaria endemic areas, patients should be aware of the increased risk of severe malaria and take precautionary measures: • Adhere to strategies to avoid mosquito bites (e.g. applying insect repellent, wearing long sleeved shirts from dusk until dawn) • Taking appropriate anti-malarial prophylaxis. Animal and tick bites: seek immediate medical attention.
Animal bites	Dog or cat bites and/or severe scratches can result in bacterial infections and therefore require presumptive antibiotic treatment: • Amoxicillin/clavulanate (Augmentin) • If beta-lactam hypersensitive: metronidazole PLUS trimethoprim/sulfamethoxazole (Bactrim)
Tick bites	Babesiosis is a rare tick-borne infection endemic to certain regions (including North and South America, Europe, Asia and Africa). Patients with asplenia or hyposplenism travelling to these areas should take precautions to avoid tick bites.
Other bacterial infections	Patients with asplenia are at increased risk of severe infections caused by a range of other bacteria including <i>Salmonella</i> species, <i>Staphylococcus aureus</i> , <i>Escherichia coli</i> , <i>Campylobacter</i> species, <i>Bacteroides</i> species, <i>Pseudomonas</i> species & <i>Plesiomonas shigelloides</i> .
Dental and surgical procedures	Dental procedures or general surgery do not require additional antibiotic prophylaxis unless the patient has an underlying medical condition in addition to a non-functioning spleen. The patient's dentist can prescribe an antibiotic if needed.
Education	• Highlighting the need for early investigation and management of any febrile illness • Recognition of signs of bacterial infection and when to give emergency supply of antibiotics (after checking expiry dates) • Recommendation to wear or carry a Medi-Alert bracelet or alert card to inform health professionals of risk of overwhelming infection.

Table 2 – Vaccine Brand on NIP	Age Group	Type of Vaccine	Abbreviation
Prevenar 20	≤18 yrs	20 valent pneumococcal <i>conjugate</i> vaccine	20vPCV
Nimenrix	All	ACWY Quadrivalent meningococcal <i>conjugate</i> vaccine	MenACWY
MenQuadfi	14-16 years	ACWY Quadrivalent meningococcal <i>conjugate</i> vaccine	MenACWY
Bexsero	All	Meningococcal B <i>recombinant</i> vaccine	MenB
Act-Hib	>6 weeks	<i>Haemophilus influenzae</i> type b <i>conjugate</i> vaccine	Hib
Infanrix hexa and Vaxelis (contains Hib and other antigens)	>6 weeks	<i>Haemophilus influenzae</i> type b <i>conjugate</i> vaccine	Hib

Table 3 Antibiotics	Recommendation	Duration
Daily prophylactic	Amoxicillin 20 mg/kg orally daily (up to 250 mg) OR Phenoxymethylpenicillin - Child <1 year old: 62.5 mg orally BD - Child 1-5 years old: 125 mg orally BD - Child >5 years old: 250 mg orally BD	Required duration of antibiotic prophylaxis is patient specific. A reasonable recommendation for prophylaxis is up to 16 years of age. Minimum recommended duration of daily antibiotic prophylaxis: - Children with congenital asplenia, sickle cell anaemia or other congenital haemoglobinopathy: until 5 years of age - Children with splenectomy: For 3 years following splenectomy Consider lifelong prophylaxis for patients who are: Severely immunosuppressed (e.g. hypogammaglobulinaemia or advanced liver disease, solid organ transplant recipients etc.) - Haematological malignancy, particularly those with graft-versus-host diseases (GVHD) - Immunosuppressive therapy - Survived overwhelming post-splenectomy infection, particularly pneumococcal infection
Emergency supply	Amoxicillin+ clavulanate 22.5 mg/kg + 3.2 mg/) (max 875mg/dose+125mg) orally BD (child > 2 months) Immediate non-severe or delayed non-severe hypersensitivity to beta-lactams (child >3 months): Cefuroxime 15mg/kg (up to 250mg/dose) orally BD	All patients should also have an emergency supply of antibiotics available at home and when travelling. If a sudden unexplained fever develops and immediate medical review is not available, antibiotics should be started without delay. After taking the first dose, it is essential to seek medical review.
Severe immediate Antibiotic allergies	If a patient reports hypersensitivity to beta-lactams, assess and verify allergy Assessment form for patient reporting penicillin allergy For infants and children with immediate or delayed severe hypersensitivity to penicillin, consult an Infectious Diseases Physician or Immunologist. Refer to Australian Therapeutic Guidelines or seek specialist advice regarding testing or alternative prophylaxis.	