

# Monash Children's Hospital Referral Guidelines PAEDIATRIC INFECTION AND IMMUNITY

## EXCLUSIONS

Services not offered by Monash Children's Hospital

Patients over 18 years of age: [Click here](#) for Monash Health Infectious Diseases guidelines

## CONDITIONS

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[Refer to Allergy Guideline](#)

### IMMUNOLOGY

[Primary immunodeficiency](#)

### IMMUNISATION SAFETY

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### NON-SYSTEMIC CONDITIONS

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### PREVENTATIVE MEDICINE

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## PRIORITY

All referrals received are triaged by **Monash Children's Hospital clinicians** to determine **urgency of referral**.

### EMERGENCY

For emergency cases please do any of the following:

- send the patient to the Emergency department OR
- Contact the on call registrar OR
- Phone 000 to arrange immediate transfer to ED

### URGENT

The patient has a condition that has the potential to deteriorate quickly with significant consequences for health and quality of life if not managed promptly.

### ROUTINE

The patient's condition is unlikely to deteriorate quickly or have significant consequences for the person's health and quality of life if the specialist assessment is delayed beyond one month

**Head of unit:**  
Prof. Richard Doherty

**Program Director:**  
Prof Nick Freezer

**Last updated:**  
14/12/2020

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## REFERRAL

How to refer to  
Monash Children's  
Hospital

### Mandatory referral content

#### Demographic:

Full name  
Date of birth  
Next of kin  
Postal address  
Contact number(s)  
Email address  
Medicare number  
Referring GP details  
including **provider number**  
Usual GP (if different)  
Interpreter requirements

#### Clinical:

Reason for referral  
Duration of symptoms  
Management to date and response to  
treatment  
Past medical history  
Immunisation History  
Current medications and medication  
history if relevant  
Functional status  
Psychosocial history  
Dietary status  
Family history  
Diagnostics as per referral guidelines



[Click here](#) to download the outpatient referral form

## CONTACT US

### Medical practitioners

To discuss Paediatric Infection and  
Immunity referrals please contact the  
Paediatric Infectious Disease Registrar on  
9594 6666

### General enquiries

Phone: (03) 8572 3004

### Submit a referral

Fax referral form to Monash Children's  
Hospital Specialist Consulting Services:

Fax: 8572 3007

Email: [scmonashchildrens@monashhealth.org](mailto:scmonashchildrens@monashhealth.org)

### OR

Refer via electronic referral using  
HealthLink. Details available at  
<https://monashchildrenshospital.org/for-health-professionals/gp-ereferrals/>

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# IMMUNISATION SAFETY

## IMMUNISATION SAFETY

## WHEN TO REFER?

### Initial GP Work Up

Suspected adverse events following immunisation

- Detailed history of symptoms after immunisation
- copy of Australian Immunisation Register Vaccination Statement (Medicare) with referral
- Adverse events following immunisation can be reported directly to [SAEFVIC](#) when referral is made.

### Management Options for GP

The Monash Immunisation Nurse-Led clinic provides a range of immunisation services including a drop-in service for high risk / special risk groups, initial advice about symptoms following vaccination, vaccine administration questions, managing anxiety during administration of vaccines.

[monashhealth.org/services/immunisation](https://monashhealth.org/services/immunisation)

GP Referrals for BCG vaccination can be directed to Monash Immunisation. This clinic does not provide a comprehensive travel consultation service

### Urgent

- Consultation in infants < 6 months regarding routine immunisations following suspected adverse events

### Routine

- Adverse events following immunisation
- Suspected vaccine allergy
- Immunisation of high-risk patients
- Consultation regarding under-immunised children
- BCG vaccine abscess
- Immunisation under sedation
- Vaccination of children with immunodeficiencies or on immunosuppressive therapy
- Management of immunisation of infants born to mothers on biologics or other immunosuppressive medications

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# PRIMARY IMMUNODEFICIENCY

## Primary Immunodeficiency (PID)

### Presentation:

History of severe, recurrent or unusual infections; multi-system autoimmune manifestations suggestive of immune dysregulation

### Initial GP Work Up

- Immunoglobulins
- Lymphocyte subsets
- Full blood count

### Management Options for GP

- Discuss as required with on-call Infection and Immunity registrar
- Any suspected SCID or HLH cases are to be discussed **urgently** with the hospital Infection and Immunity team.



## WHEN TO REFER?

### Emergency

Suspected Severe Combined Immunodeficiency (SCID) or Haemophagocytic lymphohistiocytosis (HLH)

### Urgent

Agammaglobulinaemia or significant low IgG

Failure of an infant to thrive

Persistent oral thrush or fungal infections

Recurrent severe infections / difficult to control infections

### Routine

Recurrent sinopulmonary infections or persistent cough

Unusual infections

Concern regarding possible immune dysregulation with multi-organ autoimmune conditions

Family history of a PID

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## SYSTEMIC CONDITIONS

### BLOODBORNE VIRUSES

#### WHEN TO REFER?

#### Presentation

- Positive blood test for Hepatitis C, Hepatitis B, HIV
- Community needle stick or blood exposure
- Rabies & Australian Bat Lyssavirus exposure

#### Initial GP Work Up

- Community needlestick or blood exposure: Hepatitis B vaccination status and serology (if known)
- Hepatitis B or C: LFTs, FBE, alpha fetoprotein, Hepatitis A serology or Hepatitis A vaccination status

#### Management Options

Post-exposure prophylaxis and vaccination can be done in primary care: Immunoglobulins can be authorised and ordered through the Department of Health and Human Services

The infection and immunity clinic does not offer post-exposure Rabies/bat Lyssa virus immunisation

#### Emergency

Only refer to the Paediatric Emergency Department if patient is acutely unwell.

#### Urgent

Contact the Paediatric Infectious Diseases Registrar via 95946666 if:

#### Advice required

#### New Diagnosis of HIV

#### Routine

Follow up of children born to mothers with Hepatitis C or Hepatitis B infection

Children with known chronic HCV infection, chronic HBV infection or HIV infection

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### PERINATAL EXPOSURE TO MATERNAL INFECTIONS:

- BLOOD BORNE VIRUSES
- SEXUALLY TRANSMITTED INFECTIONS

#### WHEN TO REFER?

#### Initial GP Work Up (as relevant)

- Maternal Hepatitis B Status
  - Surface antigen, Envelope antigen
  - Viral Load
- Maternal Hepatitis C antibodies
- Maternal HIV status
- History of Hepatitis B vaccination and if immunoglobulin given at birth
- Maternal STI history
- Maternal syphilis serology and documented treatment

#### Emergency

Only refer to the Paediatric Emergency Department if patient is acutely unwell

#### Urgent

Suspected infection with chlamydia, gonococcus, or syphilis

#### Routine

Follow up of low risk infants for potential syphilis exposure

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## SYSTEMIC CONDITIONS (cont'd)

### FEVER AND RASH

#### Initial GP Work Up

- History of travel, animal contacts
- Seek history of medication and bites
- Immunisation History

#### Investigations

- FBE, LFTs, U+E, Cr
- Blood cultures
- If vesicular rash, swab for herpes virus PCR
- Consider measles serology and/or buccal swab for measles PCR

#### Management Options for GP

- Consider meningococcal infection
- Please contact the Department of Health on clinical suspicion of measles or meningococcal disease

### WHEN TO REFER?

#### Emergency

If suspected measles AND requires hospital admission for complications please call the paediatric emergency department.

*Suspected measles should **not** routinely be referred to the emergency department*

#### Urgent

Please contact the Paediatric Infectious Disease Registrar for advice about fever and rash in returned travellers

#### Routine

Recurrent HSV lesions  
Recurrent Zoster / Shingles

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### FEVER IN IMMUNOCOMPROMISED

#### Initial GP Work Up

- Medical history

#### Investigations

- FBE, LFTs, U+E, Cr
- Blood cultures
- If vesicular rash, swab for herpes virus PCR

### WHEN TO REFER?

#### Emergency

Refer to the Emergency Department and contact the Bedcard unit for further advice

#### Urgent

For vesicular rash suggestive of HSV or VZV for advice please call the treating team +/- Paediatric Infectious Disease Registrar

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### FEVER / PYREXIA OF UNKNOWN ORIGIN

#### Initial GP Work Up

- Travel and animal contact history
- Confirm immunisation history

#### Investigations

- FBE + blood film
- LFTs
- CRP, ESR
- Hold serum
- Urine for MSU
- Blood cultures
- CXR
- Respiratory Virus PCR Panel
- Consider an abdominal ultrasound in prolonged fever or as clinically indicated

### WHEN TO REFER?

#### Emergency

Infants less than 3 months of age  
If rigors present, or systemically unwell

#### Urgent

Patients with suspected Kawasaki Disease, or prolonged fever in infants less than 12 months contact the Paediatric Infectious Diseases Registrar

#### Routine

Recurrent / Episodic Fevers

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## SYSTEMIC CONDITIONS (cont'd)

### POST TRAVEL

### WHEN TO REFER?

#### Initial GP Work Up

- History of travel, animal contacts
- Seek history of medication and bites
- Immunisation History
- Malaria chemoprophylaxis

#### Investigations

- Blood cultures (typhoid)
- FBE, LFTs, U+E, Cr
- Thick and thin film and ICT for malaria (x3)
- CXR
- Urine M&C
- Faeces M&C
- Serology: Dengue, Hepatitis A

#### Management Options for GP

- Consider meningococcal infection

#### Emergency

Call ahead to the Emergency Department and/or Infectious Diseases if communicable disease possible

Fever in Returned Traveller

Suspected bacteremia or malaria

#### Urgent

Fever in a returned traveller. Consider referral to the Emergency Department. Contact the Paediatric Infectious Diseases Registrar via 95946666

#### Routine

Follow up of potential infectious diseases exposure

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### BONE AND JOINT INFECTIONS

### WHEN TO REFER?

#### Initial GP Work Up

- History of travel, animal contacts
- Immunisation History

#### Emergency

Suspected septic arthritis or acute osteomyelitis: refer to the Emergency Department

#### Urgent

Antimicrobial management of osteomyelitis and septic arthritis. Discuss with the Infectious Diseases Registrar

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## NON-SYSTEMIC CONDITIONS

### DIARRHOEA

#### Presentation

- Acute diarrhoea
- Chronic diarrhoea – refer to [Gastroenterology](#)

#### Initial GP Work Up

- Travel and exposure history
- Stool specimen for MC&S, OCP

### WHEN TO REFER?

#### Emergency

Only refer to the Paediatric Emergency Department if requires hospital management of hydration or other complications of a clinical syndrome presenting with diarrhoea

#### Urgent

- For advice for diarrhoea in a returned traveller, or in immunocompromised children, contact the Paediatric Infectious Diseases Registrar (in hours) or Consultant (after hours)

#### Routine

Refer on confirmation of diagnosis

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### MENINGITIS

#### Management Options for GP

If suspected meningococcal infection (sepsis/meningitis) treat immediately

### WHEN TO REFER?

#### Emergency

Suspected bacterial meningitis. Do not delay IM or IV antibiotic treatment

#### Routine

Immunology consultation following bacterial meningitis

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## NON-SYSTEMIC CONDITIONS (cont'd)

### RESPIRATORY INFECTIONS

### WHEN TO REFER?

#### Initial GP Work Up

- History and Examination
- Respiratory Rate, Pulse, Blood Pressure, Oximetry
- Conscious state, level of alertness
- Co-morbidities, Social circumstances
- Travel, animal, tuberculosis contact
- Immunisation Status

#### Investigations

- CXR
- Nasopharyngeal swab for respiratory viruses
- Chronic upper respiratory tract infections should be referred to ENT or Paediatric Respiratory (excluding mycobacterial or suspected mycobacterial infections)

#### Emergency

If features of sepsis, rigors, breathless on room air or hypoxaemia

#### Urgent

- For LRTI in returned travellers or exposure to TB contact the Paediatric Infectious Diseases Registrar

#### Routine

Immunology consultation for children with recurrent severe pneumonia

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## NON-SYSTEMIC CONDITIONS (cont'd)

### SKIN AND SOFT TISSUE INFECTIONS

#### WHEN TO REFER?

#### Initial GP Work Up

- MRSA is common in the community setting and does not require routine review, unless associated with significant or recurrent infections
- Consider Buruli (Bairnsdale) ulcer (*Mycobacterium ulcerans*) as a cause of a chronic skin lesion

#### Investigations

- Swab of purulent discharge
- PCR for *M. ulcerans* if suspicious

#### Management Options for GP

- Buruli ulcers can often be diagnosed on swab of an ulcer sent for *M. ulcerans* PCR. Biopsy and debridement can often be avoided / deferred until after initiation of medical therapy

#### Emergency

Features of sepsis or toxic shock

#### Urgent

Suspected or proven Buruli ulcer; Skin lesions in returned travellers or children who have recently immigrated (eg Leishmaniasis)

#### Routine

Recurrent skin and soft tissue infections

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### TUBERCULOSIS AND OTHER MYCOBACTERIAL INFECTIONS

#### WHEN TO REFER?

#### Presentation

- Tuberculosis (Pulmonary or Extra-pulmonary)
- Suspected Latent Tuberculosis
- Skin Lesions & Ulcers
- Mycobacterium Avian Complex
- Leprosy or contact with leprosy

#### Initial GP Work Up

- CXR
- Mantoux Test
- IGRA (Quantiferon-Gold)
- If suspected Buruli ulcer, superficial flocced swab for *M. ulcerans* PCR

#### Emergency

Acute unwell children with suspected Tuberculosis. Call ahead to paediatric A&E to ensure appropriate infectious precautions instigated on arrival

#### Urgent

Management of a positive mantoux test of children aged less than 5 years of age if asymptomatic; or any child with a positive mantoux or IGRA (Quantiferon Gold) with symptoms suggestive of tuberculosis

Management of local BCG-related abscess or lymphadenitis

Please contact the Paediatric Infectious Diseases Registrar:

- Suspected active tuberculosis
- Contacts of smear-positive pulmonary tuberculosis under the age of 5,

#### Routine

Management of latent Tuberculosis in children over the age of 5

Contact with suspected / proven leprosy

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## PREVENTATIVE MEDICINE

### SPLenic DISORDERS HYPOSPLENIA, ASPLENIA, POST-SPLENECTOMY

#### WHEN TO REFER?

#### Initial GP Work Up

- Reason for splenectomy
- Reason for hyposplenism e.g. extensive spleen damage, splenic hypoembolisation
- Date of splenectomy
- Vaccination history
- Prophylactic history
- History of sepsis/thrombosis
- Referral if travel advice given

#### Investigations

- FBE and film
- Howell – Jolly bodies
- IgM memory B cell

#### Management Options for GP

If semi-elective splenectomy planned please call the Paediatric Infectious Disease Registrar for advice re: optimising pre-splenectomy immunisation

#### Emergency

If signs of bacterial infection refer immediately to the Emergency Department.

#### Urgent

If semi-elective splenectomy planned please call the Paediatric Infectious Disease Registrar as soon as possible for advice re: optimising pre-splenectomy immunisation

#### Routine

Immunisation and Travel advice

#### GP Resources

Spleen.org.au - recommended vaccines  
 Australian Immunisation Handbook Online  
 Asplenia – Melbourne Vaccine Education Centre  
<https://mvec.mcri.edu.au>

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### Travel Medicine

#### WHEN TO REFER?

#### Initial GP Work Up

- Clinical history
- Record of previous vaccinations
- Medications
- Travel plans (specific dates of travel and destinations)

#### Management Options for GP

- Consider [www.smarttraveller.gov.au](http://www.smarttraveller.gov.au) for travel advice

#### Routine

Travel in immunocompromised patients  
 For BCG Vaccination, refer to the BCG Clinic via Monash Immunisation.

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