

RHEUMATIC HEART DISEASE (RHD)

Screening

Everyone with confirmed or suspected acute rheumatic fever (ARF) AND / OR Aboriginal people with a murmur need **echocardiography** to exclude or diagnose rheumatic heart disease (RHD).

Case Definition

Echocardiogram with valve changes consistent with RHD (tethering/thickening of mitral valve and/or combined mitral and aortic valve damage).

SEVERITY:

HIGH	MODERATE	LOW
Severe valve lesion. Moderate valve lesion with ↓ LV function or ↑ LV size. moderate valve lesion with symptoms (see box below). valve replacement or repair.	Moderate valve lesion WITH <ul style="list-style-type: none">• no symptoms.• normal LV function and size.	Thickening with normal valve function. Trivial or mild valve lesion.

Symptoms of valvular RHD:

- Shortness of breath on exertion.
- Orthopnoea, Paroxysmal nocturnal dyspnoea.
- Syncope.
- Oedema.
- Chest pain.

Principles of Management

- **Prevent recurrences of ARF** with benzathine penicillin (see [ARF](#)).
- **Prevent endocarditis** with good dental hygiene and regular dental review.
- Monitor and manage heart failure (see [HEART FAILURE](#)).
- **Prevent thromboembolic** complications.
- Ensure appropriate management. Valve repair/replacement typically required for high severity disease.
- **Pregnancy** can significantly **worsen** RHD.
- Always highlight RHD on referrals.

Therapeutic Protocols

Ensure **pneumococcal / influenza** vaccines up to date.

Valve repair/replacement = mitral valve repair/valvuloplasty, bioprosthesis or mechanical valves.

Anticoagulate everyone with mechanical valves. Generally aim for **INR 2.5 - 3.5** but always review and be guided by cardiothoracic discharge summary.

Antibiotic prophylaxis to prevent endocarditis:

For all dental procedures or incision of infected skin lesions use single dose of **clindamycin** orally 1 hour before procedure:

- Adults 600mg.
- Children 15mg/kg (up to 600mg).

Secondary prophylaxis to prevent recurrent episodes of ARF:

Every 4 weeks Benzathine penicillin:

Use either:

- LA Bicillin 900mg/2.3ml (preferred), **OR** if unavailable:
- Panbenzathine penicillin (900mg or 1.2 m units per vial).

Dose:

- Adults and children > 20kg: 900mg stat.
- Children < 20kg: 450mg stat.

benzathine penicillin is superior to any oral prophylaxis and should be used except when there is severe documented allergy to penicillin when oral **erythromycin** 250mg twice a day is indicated (all ages).

DURATION OF PROPHYLAXIS:

i. No RHD/normal valves on echocardiogram:

Until 21 years old or 10 years since last episode of ARF whichever is **longer** (MUST have echocardiogram at 21 years **before** stopping to confirm no RHD).

ii. RHD/consistent valve changes on echocardiogram:

Mild or moderate changes: Until 35 years old or 10 years after last episode of ARF whichever is longer.

Severe changes: Until 40 years old or 10 years after last episode of ARF whichever is longer.

Follow-up

Review frequency according to SEVERITY:

High - cardiologist annually, physician/paediatrician 6 monthly

Moderate - physician/paediatrician annually

Low - physician/paediatrician every second year

ECHOCARDIOGRAPHY:

High and Moderate - annually

Low - every 2 years

DENTAL REVIEW:

Annually.

RHEUMATIC HEART DISEASE (RHD)

Women of Child Bearing Age

- The implications of pregnancy need to be discussed with all women with **moderate / severe valve disease** or with **valve replacements on warfarin** (Marevan).
- Consider **Implanon**.
- Physician / cardiology review *before* planned pregnancy and *early* in unplanned pregnancy.

Refer / Discuss

TO PHYSICIAN / PAEDIATRICIAN / CARDIOLOGIST:

- Recurrent ARF.
- Endocarditis (unexplained fever).
- Worsening valve lesion (shortness of breath / dizziness).
- Embolus (stroke or leg pain).
- Pregnancy.