Government of **Western Australia**
**WA Country Health Service**

**RHD**
WA Rheumatic Heart Disease Register

# Acute Rheumatic Fever and Rheumatic Heart Disease

# NOTIFICATION FORM

ARF and RHD are notifiable conditions and it is mandatory to report all confirmed and suspected cases. Please submit this form to the WA RHD Register and Control Program via fax 6553 0899, email RHD.Register@health.wa.gov.au or call 1300 622 745 if you have any questions.

## 1. BACKGROUND

### PATIENT DETAILS

**Family name**

**Given name/s**

**Address**

**Suburb/Town/Community**

**Postcode**

**State**

**Contact Number**

**Email address**

**Unique medical record number**

**Also known as**

**Date of Birth**

**Sex**

☐ **Male** ☐ **Female** ☐ **Other**

**Pregnant**

**if yes estimated due date**

**Name and contact number of usual health service or site attended**

**Ethnicity**

☐ **Aboriginal** ☐ **Torres Strait Islander** ☐ **Maori** ☐ **Pacific Islander** ☐ **Middle Eastern**

☐ **African** ☐ **Asian** ☐ **Other** ☐ **Unkown**

### PARENT/GUARDIAN/CARER DETAILS

**Name**

**Address**

**Suburb/Town/Community**

**Postcode**

**State**

**Contact number**

**Email address**

## 2. DIAGNOSTIC TESTS

| Elevated or rising[1] | Date | Result (highest if more than one) | Pending |
|---|---|---|---|
| Wound culture | | | |
| Throat culture | | | |
| ASO Titre (U/ml): | | | |
| Anti DNase B (U/ml): | | | |

**If patient is from a high risk[2] population**

| Major Manifestations | Minor Manifestations |
|---|---|
| ☐ Clinical carditis | ☐ Fever[4] ≥ 38C |
| ☐ Subclinical carditis (lesions on echo) | ☐ Monoarthralgia[5] |
| ☐ Polyarthritis[3] | ☐ ESR ≥30mm/hr Date: Highest result: |
| ☐ Polyarthralgia | OR |
| ☐ Aseptic monoarthritis | ☐ CRP ≥30mg/L Date: Highest result: |
| ☐ Erythema Marginatum | ☐ Prolonged PR interval:[8] _____msec |
| ☐ Subcutaneous nodules | |
| ☐ Sydenham chorea | |

**If patient is not from a high risk population**

| Major Manifestations | Minor Manifestations |
|---|---|
| ☐ Clinical carditis | ☐ Fever[4] ≥ 38.5C |
| ☐ Subclinical carditis (lesions on echo) | ☐ Polyarthralgia |
| ☐ Polyarthritis[3] | ☐ ESR ≥60mm/hr Date: Highest result: |
| ☐ Erythema Marginatum[6] | OR |
| ☐ Subcutaneous nodules | ☐ CRP ≥30mg/L Date: Highest result: |
| ☐ Sydenham chorea[7] | ☐ Prolonged PR interval:[8] _____msec |

**If ARF diagnosis is difficult to confirm, investigate differential diagnoses**

| |
|---|
| ☐ STI Screen |
| ☐ Joint aspirate (microscopy and culture) for possible septic arthritis |
| ☐ Copper, ceruloplasmin, antinuclear antibody, drug screen for choreiform movements |
| ☐ Serology and autoimmune markers for arboviral, autoimmune or reactive arthritis |

| Echocardiogram performed | If yes, date | If no, reason | Referral completed |
|---|---|---|---|
| | | | |

# 3. DIAGNOSIS

Please use the Diagnosis Calculator App for further help

## ARF DIAGNOSIS

| | 2020 Criteria for ARF Diagnosis |
|---|---|
| **Definite initial episode of ARF** | 2 major manifestations + evidence of preceding Strep A infection, **or**<br>1 major + 2 minor manifestations + evidence of preceding Strep A infection‡ |
| Definite recurrent§ episode of ARF in a patient with a documented history of ARF or RHD | 2 major manifestations + evidence of preceding Strep A infection, or<br>1 major + 2 minor manifestations + evidence of preceding Strep A infection‡,<br>**or**<br>3 minor manifestations + evidence of a preceding Strep A infection‡ |
| Probable or possible ARF (first episode or recurrence§) | A clinical presentation in which ARF is considered a likely diagnosis but falls short in meeting the criteria by either:<br>• one major or one minor manifestation, or<br>• no evidence of preceding Strep A infection (streptococcal titres within normal limits or titres not measured)<br>Such cases should be further categorised according to the level of confidence with which the diagnosis is made:<br>• Probable ARF (previously termed 'probable: highly suspected')<br>• Possible ARF (previously termed 'probable: uncertain') |

‡ Elevated or rising antistreptolysin O or other streptococcal antibody, or a positive throat culture or rapid antigen or nucleic acid test for Strep A infection.
§ Recurrent definite, probable or possible ARF requires a time period of more than 90 days after the onset of symptoms from the previous episode of definite, probable or possible ARF

**Clinic of initial presentation**

**Likely date of onset of symptoms**

**Date of diagnosis**

**Type of episode**

☐ Initial ☐ Recurrent

**Diagnosis of ARF Episode**

☐ Definite ☐ Probable ☐ Possible

**Hospitalised for this episode**

**if yes, name of hospital**

**and admission date**

## RHD DIAGNOSIS

| | 2020 Definitions of RHD Status and Severity |
|---|---|
| **Borderline** | Borderline RHD on echocardiogram without a documented history of ARF - only for patients < 20 years of age |
| **Mild** | Echocardiogram showing: Mild regurgitation or mild stenosis of a single valve OR Atrioventricular conduction abnormality on ECG§ during ARF episode |
| **Moderate** | Echocardiogram showing: Moderate regurgitation or moderate stenosis of a single valve OR Combined mild regurgitation and/or mild stenosis of one or more valves Examples: Mild mitral regurgitation and mild mitral stenosis; Mild mitral regurgitation and mild aortic regurgitation |
| **Severe** | Echocardiogram showing: Severe regurgitation or severe stenosis of any valve OR Combined moderate regurgitation and/or moderate stenosis of one or more valves Examples: Moderate mitral regurgitation and moderate mitral stenosis; Moderate mitral stenosis and moderate aortic regurgitation OR Past or impending valve repair or prosthetic valve replacement |

§ Normal ECG means no atrioventricular (AV) conduction abnormality during the ARF episode - including first-degree heart block, second degree heart block, third-degree (complete) heart block and accelerated junctional rhythm.

**Status**

☐ Definite ☐ Borderline ☐ Absent

**Severity**

☐ Mild ☐ Moderate ☐ Severe ☐ N/A

# 4. SUPPORTING INFORMATION

## SECONDARY PROPHYLAXIS

**Benzathine Benzylpenicillin G** | **If yes date commenced** | **If no, reason**

**Other antibiotic regime**

## ENVIRONMENTAL HEALTH REFERRAL

**Referral made** ☐ **Please ensure you have informed the patient and they agree to the referral before it is made**

## SUPPORTING DOCUMENTATION ATTACHED

☐ **Pathology/serology results** ☐ **Echocardiogram report** ☐ **ECG (if prolonged PR interval)**

☐ **Clinical documentation**

**It is mandatory to forward supporting documentation. If not attached, required to forward within 14 working days for ARF and 30 days for RHD as per the Health (Rheumatic Heart Disease Register) Regulations 2015.**

## NOTIFYING CLINICIAN DETAILS

**Name**

**Hospital/health service** | **He number (if applicable)** | **Notification date**

## OTHER COMMENTS

[1] **Streptococcal antibodies**: Upper limits of normal for serum streptococcal antibody titres in children and adults (in u/mL). AntiStreptolysin O (ASO) and Anti-DeoxyriboNuclease B (Anti-DNase B):

| AGE GROUP (YEARS) | ASO titre | Anti-DNase B titre |
|---|---|---|
| 1-4 | 170 | 366 |
| 5-14 | 276 | 499 |
| 15-24 | 238 | 473 |
| 25-34 | 177 | 390 |
| >35 | 127 | 265 |

[2] **High Risk:** Living in an ARF-endemic setting; Aboriginal and/or Torres Strait Islander peoples living in rural or remote settings; Aboriginal and/or Torres Strait Islander peoples, and Maori and/or Pacific Islander peoples living in metropolitan households affected by crowding and/or lower socioeconomic status; Personal history of ARF/RHD and aged. May be at high risk: Family or household recent history of ARF/RHD; Household overcrowding (≥2 people per bedroom) or low socioeconomic status; Migrant of refugee from low- or middle-income country and their children. Considerations which increase risk: Prior residence in a high ARF risk setting; Frequent or recent travel to a high ARF risk setting; Aged 5-20 years (peak years for ARF). (Table 5.1 of 2020 Guideline)

[3] **Polyarthritis**: A definite history of arthritis is sufficient to satisfy this manifestation. Note that if polyarthritis is present as a major manifestation, polyarthralgia or aseptic monoarthritis cannot be considered an additional minor manifestation in the same person.

[4] **Fever:** In high-risk groups, fever can be considered a minor manifestation based on a reliable history (in the absence of documented temperature) if anti-inflammatory medication has already been administered.

[5] **Arthralgia/Monoarthritis:** If polyarthritis is present as a major criterion, monoarthritis or arthralgia cannot be considered an additional minor manifestation.

[6] **Erythema marginatum:** Care should be taken not to label other rashes, particularly non-specific viral exanthems, as erythema marginatum.

[7] **Chorea** does not require other manifestations or evidence of preceding Strep A infection, provided other causes of chorea are excluded. Can meet ARF criteria on its own.

[8] **Prolonged P-R interval:** If carditis is present as a major manifestation, a prolonged P-R interval cannot be considered an additional minor manifestation. Upper limits of normal for P-R interval: 3-11 years (0.16seconds); 12-16 years (0.18 seconds) and 17+ years (0.20 seconds)

**Go to www.RHDaustralia.org.au for the Diagnosis Calculator App and the 2020 ARF/RHD Guideline**