

Table 6.1. 2020 Updated Australian criteria for ARF diagnosis

	High-risk groups [†]	Low-risk groups	
Definite initial episode of ARF	2 major manifestations + evidence of preceding Strep A infection, OR 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 1 major + 2 minor manifestations + evidence of preceding Strep A infection [‡] , OR 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: one major or one minor manifestation, OR no evidence of preceding Strep A infection (streptococcal titres within normal limits or titres not measured) Such cases should be further categorised according to the level of confidence with which the diagnosis is made: Probable ARF (previously termed 'probable: highly suspected') Possible ARF (previously termed 'probable: uncertain') 		
Major manifestations	Carditis (including subclinical evidence of rheumatic valvulitis on echocardiogram) Polyarthritis [¶] or aseptic monoarthritis or polyarthralgia Sydenham chorea ^{††} Erythema marginatum ^{‡‡} Subcutaneous nodules	Carditis (including subclinical evidence of rheumatic valvulitis on echocardiogram) Polyarthritis [¶] Sydenham chorea ^{††} Erythema marginatum ^{‡‡} Subcutaneous nodules	
Minor Manifestations	Fever ^{§§} ≥38°C Monoarthralgia ^{¶¶} ESR ≥30 mm/h or CRP ≥30 mg/L Prolonged P-R interval on ECG ^{†††}	Fever ≥38.5°C Polyarthralgia or aseptic monoarthritis ^{¶¶} ESR ≥60 mm/h or CRP ≥30 mg/L Prolonged P-R interval on ECG ⁺⁺⁺	

† High-risk groups are those living in communities with high rates of ARF (incidence >30/100,000 per year in 5–14-year-olds) or RHD (all-age prevalence >2/1000). Aboriginal and Torres Strait Islander peoples living in rural or remote settings are known to be at high risk. Data are not available for other populations but Aboriginal and Torres Strait Islander peoples living in urban settings, Māori and Pacific Islanders, and potentially immigrants from developing countries, may also be at high risk.

‡ 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.

¶ 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.

++ Chorea does not require other manifestations or evidence of preceding Strep A infection, provided other causes of chorea are excluded.

tt Care should be taken not to label other rashes, particularly non-specific viral exanthems, as erythema marginatum.

§§ 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.

¶¶ If polyarthritis is present as a major criterion, monoarthritis or arthralgia cannot be considered an additional minor manifestation.

+++ If carditis is present as a major manifestation, a prolonged P-R interval cannot be considered an additional minor manifestation.

CRP, C-reactive protein; ECG, electrocardiogram; ESR, erythrocyte sedimentation rate.

Table 6.2. Suggested upper limits of normal (ULN) for serum streptococcal antibody titres in children and adults¹

Age group	ULN (U/mL)	
(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

Anti-DNase B, antideoxyribonuclease B; ASO, antistreptolysin O; ULN, upper limit of normal.

Table 6.3. Upper limits of normal for P-R interval

Age group (years)	Seconds
3-11	0.16
12-16	0.18
17+	0.20

Source: Adapted from Park MK, Pediatric cardiology for practitioners, 2nd ed. Chicago: Year Book Medical; 1998.

Reference: RHDAustralia (ARF/RHD writing group). The 2020 Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease (3rd edition); 2020 pp74-75 (https://www.rhdaustralia.org.au/arf-rhd-guideline)