

Exercise Considerations for Adults with ACHD - Extract from the ACPICR Standards for Physical Activity and Exercise 2015 (3rd Edition)



Condition	Category 1 Sports Endurance training, athletic competition, contact sports	Category 2 Sports Low intensity competitive sports	Category 3 Recreational Activity Moderate exercise	Category 4 Recreational Activity Light exercise	Additional considerations
VSD	Defect / repair with normal pulmonary pressure 3months post repair			Defects with pulmonary hypertension	
ASD	Defects / repairs with normal pulmonary pressure 3months post repair	Defects with mild pulmonary pressure (Class 1A)		Defects with right-to-left shunt and cyanosis	Avoid scuba diving with remaining shunt
PDA	Small PDA normal LV 3m post-surgical repair			Moderate / large PDA with pulmonary hypertension	
Pulmonary stenosis / RVOTO	Normal RV and peak systolic gradient <40mmHg 2-4 weeks post valvuloplasty	Peak systolic gradient >40mmHg (Class 1A &1B)		Severe pulmonary stenosis	Mild avoid competitive static sports
Aortic stenosis / LVOTO / coarctation aorta	Mild AS with normal ECG Mild coarctation without root dilatation 3 months post angioplasty	Moderate AS without LV Hypertrophy (Class 1A) 1B, IIA if ETT to level of sport without symptoms Coarctation with systolic arm/ leg gradient > 20mmHg (Class 1A) Aortic root dilatation (Class 1A & 1B)		Severe AS	Severe AS – avoid isometric activity Mild AS excessive static sports at competition level No competitive sport if LV dysfunction or symptoms

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Tetralogy of Fallot	Normal R heart pressure Mild RV volume overload No residual shunt	Marked pulmonary regurgitation, RV hypertension (Class 1A)			Avoid isometric exercise
Transposition of Great Vessels post Mustard/ Senning repair		If mild chamber enlargement with no arrhythmias or syncope (Class 1A & IIA)	Encourage regular moderate to low intensity activity		
Transposition of Great Vessels post arterial switch	Normal LV	Mild haemodynamic abnormalities / ventricular dysfunction (Class 1A, 1B, 1C, IIA)			Avoid extreme exercise
Ebsteins Anomaly	No cyanosis, normal RV, no arrhythmias	Moderate tricuspid regurgitation		Severe Ebsteins anomaly without surgical repair	Avoid extensive static sports to competition level Avoid heavy isometric exercise if mild TR or RV dysfunction
Fontans Circulation		Class 1A Class 1B if normal LV and SpO2			Mostly advised to limit ambitions to recreational sports
Pulmonary atresia			Excellent haemodynamics	Without excellent haemodynamics	Avoid isometric exercise
Hypertrophic Cardiomyopathy		Selected individuals (Class 1A)	Encourage low to moderate intensity activity		Avoid competitive sports Avoid extreme sports
Dilated Cardiomyopathy		Selected individuals			Avoid competitive sports Avoid extreme sports
Long QT Syndrome				Encourage light activity	Avoid swimming or diving (LQT1) Avoid sudden noise (LQT2) Avoid competitive sports Avoid extreme sports
Brugada Syndrome				Encourage light activity	Avoid competitive sports Avoid extreme sports

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Arrhythmogenic RV Cardiomyopathy		Selected individuals (Class 1A)	Encourage light activity	
Pulmonary hypertension / Eisenmengers' Syndrome	Peak systolic pressure <30mmHg	If SaO ₂ >80%, no arrhythmia or <moderate RV dysfunction	Encourage light to moderate exercise with pacing	Avoid strenuous exercise

Table adapted from, ESC Guidelines, AHA scientific statement and Bethesda 36 Conference Task Force recommendations

All individuals in Category Sports 1 and 2 should be encouraged to participate in regular moderate intensity physical activity if not engaging in sports participation.

Bethesda Conference 36, Task Force 8: classification of Sports

	A. Low dynamic < 40% VO ₂ max	B. Moderate dynamic 40-70% VO ₂ max	C. High dynamic >70% VO ₂ max
III. High static > 50% MVC	Bob sledding / luge Gymnastics Martial arts Sports climbing Water skiing Weight lifting Windsurfing	Body building Downhill Skiing Skateboarding Snowboarding Wrestling	Boxing Canoeing/kayaking Cycling Decathlon Speed Skating Triathlon
II. Moderate static 20- 50% MVC	Archery Diving Equestrian Motorcycling	Jumping field events Figure skating Rugby Sprinting Surfing Synchronized swimming	Basketball Ice Hockey Cross country skiing Lacrosse Middle distance running Swimming Handball
I Low static < 20% MVC	Billiards Bowling Cricket Golf Rifle shooting	Baseball Fencing Table tennis Volleyball	Badminton Hockey Race walking Orienteering Squash Long distance running Tennis