Return to Exercise After COVID

FAQs

What are concerning pre-existing cardiac conditions that should automatically require cardiology referral and assessment after a child or adolescent is released from isolation following COVID-19 infection?

One criterion for an automatic referral to cardiology is a pre-existing cardiac condition. In general, this is meant for patients who are already followed by cardiology for significant heart defects or disease. Such patients are usually seen frequently by their cardiologist (every year or more frequently) for ongoing conditions. This would include patients with acquired heart disease or complex congenital heart disease who are on medications or oxygen. This would also generally include patients with activity restrictions as indicated in their cardiology notes.

What are the pre-existing cardiac conditions that, absent other risk factors or concerning symptoms, do not warrant EKG or referral?

Among the "minor" cardiac conditions that do not trigger an automatic referral to cardiology are small atrial or ventricular septal defects (ASD, VSD) or patent ductus arteriosus (PDA), repaired ASDs, VSD, PDAs or other lesions without significant residual lesions, mitral valve prolapse, vasovagal syncope, and many arrhythmias. These patients are typically seen infrequently (> 1 year between cardiology visits), are on no cardiac medications, and have no activity restrictions in place from their cardiologist. However, even these patients may require referral if there are concerning cardiac symptoms. For questions about whether a cardiac condition qualifies for automatic referral, please contact pediatric cardiology.

If I order an EKG, what findings require referral to cardiology?

Unless otherwise indicated in the official reading, minor EKG findings such as sinus arrhythmia (a normal finding), left or right axis deviation, incomplete right bundle branch block, and possible left ventricular hypertrophy do not need referral for exercise clearance following a COVID infection, but primary care providers can call or refer to cardiology if they have questions about EKG findings in general.

Can you explain the gradual return to sports following clearance for patients ≥ 12 years of age engaging in competitive or intense activities? Once a child in this age group and exercise category is cleared by a healthcare provider, the physical activity should be gradually increased over at least a seven-day period and monitored by a supervising parent, caregiver, coach or school personnel to ensure that increasing physical activity is tolerated without symptoms. The AAP-recommended gradual return to sports progression is as follows:

Stage 1: Day 1 and Day 2 - (2 Days Minimum) - 15 minutes or less: Light activity (walking, jogging, stationary bike), intensity no greater than 70% of maximum heart rate. NO resistance training.

Stage 2: Day 3 - (1 Day Minimum) - 30 minutes or less: Add simple movement activities (eg. running drills) - intensity no greater than 80% of maximum heart rate.

Stage 3: Day 4 - (1 Day Minimum) - 45 minutes or less- Progress to more complex training - intensity no greater than 80% maximum heart rate. May add light resistance training.

Stage 4: Day 5 and Day 6 - (2 Days Minimum) - 60 minutes -Normal training activity - intensity no greater than 80% maximum heart rate.

Stage 5: Day 7 - Return to full activity/participation (ie, - Contests/competitions).

What if a child has persistent loss of taste or smell, or prolonged nasal congestion or cough? Do these symptoms raise concern for further cardiac evaluation?

No. High risk systemic symptoms include fever >100.4, myalgia, chills, or profound lethargy. Prolonged loss of taste or smell, or respiratory symptoms are often still present after release from isolation, do not constitute increased risk for myocarditis, and do not require further evaluation or referral to cardiology.

Does this apply to college-age students? Who will see our older patients – 18 years and older?

Yes, patients who are 18 years and older who qualify as higher risk by severity of COVID symptoms or current cardiac symptoms/risk should have further evaluation as per the algorithm. Pediatric cardiology will see patients through age 17 years; those 18 years and older should be referred to adult cardiology.

We have seen different versions of this algorithm and guidance in the last month. Do you expect revisions in the future?

Yes. This AAP guidance is informed by expert opinion. We continue to work with specialists in pediatric cardiology from centers around the country as more children are seen with COVID-19 to determine what revisions can be made to both age limits and screening criteria, and we will update our community accordingly.