New AAP interim guidance on post-COVID-19 conditions in children and adolescents recommends all patients who test positive for SARS-CoV-2 infection have at least one follow-up conversation or visit with their pediatrician to discuss residual symptoms, explore new symptoms and guide their return to activities.

More than 4 million U.S. children have tested positive for SARS-CoV-2. Although acute illness may be less severe in children and adolescents than adults, severity does not predict subsequent or ongoing symptoms. According to the guidance, “COVID-19 can lead to many secondary conditions, which can range from subacute to severe. Long-term effects from SARS-CoV-2 infection may be significant, regardless of the initial disease severity.”

Post-COVID-19 check
During the visit, pediatricians should work with families to identify any continuing symptoms of COVID-19, which may include respiratory symptoms, cardiac symptoms, fatigue or cognitive fogginess. Pediatricians and families also should determine if the child or adolescent might require additional academic supports such as a gradual return to school and cognitive activities based on tolerance and offer guidance on rest periods and other accommodations. Some children and adolescents may require the support of pediatric subspecialists, and patients with previously underlying medical or behavioral conditions may require additional support.

Pediatricians should discuss COVID-19 vaccination for all eligible individuals, which can occur immediately after the recommended quarantine period unless the patient received monoclonal antibody therapy.

A telehealth visit may be sufficient for patients who were asymptomatic or had mild disease severity and have no residual symptoms.

Common post-COVID-19 conditions

The guidance outlines ongoing or residual symptoms known to occur in children after infection and explains next steps.

- **Respiratory symptoms** like chest pain, cough and exercise-induced dyspnea can last for three months or longer. The guidance addresses when to follow up with chest imaging, pulmonary function testing or cardiopulmonary exercise testing.
- **Cardiac involvement** may be part of the initial disease presentation, a sequela of disease or occur after vaccination. Myocarditis can develop after COVID-19 infection or, less frequently, after receipt of the mRNA vaccine. Common presenting symptoms can include chest pain and shortness of breath, arrhythmias and fatigue. Severe cases can lead to heart failure, myocardial infarction, stroke or sudden cardiac arrest. Pediatric cardiologists may be a helpful resource in supporting patients with myocarditis.
- **Anosmia and ageusia** can affect nutritional status, mood and quality of life. For persistent anosmia, the AAP recommends further evaluation, nutrition optimization, olfactory testing and potentially olfactory training.
- **Neurodevelopmental** and age-specific evaluation can assess for delays/changes in cognitive, language, academic, motor or mood/behavior domains. Pediatricians should watch for subtle neurodevelopmental sequelae, especially in younger children.
- **Cognitive fogginess or fatigue** may manifest as inattentiveness, slower reading or processing, or less endurance on cognitive tasks. Persistent cognitive complaints may warrant a neuropsychological evaluation.
- **Physical fatigue/poor endurance** typically improves over time, assuming cardiac and respiratory functions are clinically normal.
- **Headache** is common but mostly related to factors such as changes in routine and sleep, medication overuse, social isolation and poor hydration. Evaluation for red flag characteristics is recommended.
- **Mental health/behavioral health** sequelae are very common and likely multifactorial. Pediatricians can refer to the AAP interim guidance on emotional and behavioral health needs.

The AAP guidance emphasizes a conservative approach that includes minimal diagnostic evaluation, optimizing function in those patients with continued symptoms and working toward achievable goals during the first four to 12 weeks after illness to avoid potential harm from excessive testing. Pediatricians should consider other differential diagnoses and pursue additional investigation as clinically appropriate.

If concerns persist past 12 weeks, the AAP recommends additional testing or referral to a multidisciplinary post-COVID-19 clinic for consultation.