Return to play after COVID-19 infection

Adapted from the AAP COVID-19 Interim Guidance: Return to Sports and Physical Activity by Anna Zuckerman, MD, FAAP

Healthcare professionals are likely to encounter many questions about the safety of participation in school sports during the pandemic, as well as the need to clear athletes to return to play after COVID-19 infection. For detailed guidance, please refer to the AAP COVID-19 Interim Guidance: Return to Sports and Physical Activity.

Additionally, please find a chart below that summarizes the guidance regarding clearing athletes to return to play:

**Severity of symptoms**

**Asymptomatic or mild**

- (<4 days of fever >100.4, <1 week of myalgia, chills, or lethargy)
- At least phone/telemedicine assessment by PCP

During assessment:
1. Guidance re: duration of quarantine
2. Do not exercise while in quarantine
3. **AHA 14-element screening evaluation**, with special emphasis on symptoms of myocarditis (incidence: 0.5-3%): chest pain, SOB out of proportion to URI symptoms, new-onset-palpitations, or syncope

- No symptoms
  - In-office visit with complete PE, consider EKG, post-quarantine
  - Normal evaluation
  - Cleared to return to play (Refer to Box A)

- Yes symptoms
  - In-office visit with complete PE, consider EKG, post-quarantine
  - Positive symptom screen, abnormal exam, or abnormal EKG
  - Refer to cardiology, exclude from physical activity until cleared by cardiology then return to play (Box B)

**Moderate**

- ≥4 days of fever >100.4°F, ≥1 week of myalgia, chills, or lethargy, or a non-ICU hospital stay and no evidence of MIS-C
- In-person evaluation by PCP after symptom resolution and completion of quarantine

During in-person evaluation:
1. Do not exercise until cleared by PCP
2. **AHA 14-element screening evaluation**, with special emphasis on chest pain, SOB out of proportion to URI symptoms, new-onset-palpitations, or syncope
3. Complete physical exam and EKG

- Normal evaluation
  - Normal evaluation
  - Cleared to return to play (Refer to Box A)

- Positive symptom screen, abnormal exam, or abnormal EKG
  - Refer to cardiology, exclude from physical activity until cleared by cardiology
  - Gradual return to play (Box B) only after:
    1. 10 days since positive test result
    2. At least 10 days of symptom resolution off fever-reducing medications

**Severe**

- ICU stay and/or intubation, or MIS-C
- Restrict from exercise for 3-6 months, obtain cardiology clearance prior to resuming training or competition

**Additional note:** If the patient has already advanced back to physical activity on their own and is without abnormal cardiovascular signs/symptoms, then no further evaluation is necessary. COVID-19 disease history should be documented.

**Abbreviations:** PCP: primary care physician; SOB: shortness of breath; URI: upper respiratory infection; PE: physical exam; EKG: electrocardiogram; MIS-C: multisystem inflammatory syndrome in children.
**BOX A: Additional Guidance on Returning to Play**

**When should children and adolescents return to play?**
1. Completed quarantine and minimum amount of symptom free time has passed
2. Can perform all activities of daily living
3. No concerning signs/symptoms

**At what pace should children and adolescents return to play?**
4. <12yo: progress according to own tolerance
5. 12+: gradual return to physical activity (Box B); should be done over a 7-day minimum and may extend duration for children with moderate symptoms

**When should children and adolescents pause return to play?**
If patient develops any chest pain, SOB out of proportion to URI infection, new-onset palpitations, or syncope when returning to exercise, immediately stop and go to PCP for in-person exam

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**BOX B: Gradual Return to Play**

(Adapted from Elliott N, et al, infographic, British Journal of Sports Medicine, 2020; copied from AAP Policy statement)

**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).**