



Arizona Interscholastic Association Recommended Guidelines for Returning to Athletic Activity

The Arizona Interscholastic Association (AIA) strongly supports the return of athletics and competitive sports. However, it must be done so in the safest way possible. The following document provides guidance and recommendations for resuming athletic activity in AIA member schools and programs. As a living document, this may be updated as new information and recommendations become available. Authored by members of the Sport Medical Advisory Committee, this document includes recommendations for athletes, coaches, administrators, and facilities.

The Centers for Disease Control (CDC) recognizes the benefits of physical activity particularly in this time of the COVID-19 pandemic. The challenge is to reintroduce physical activity in a manner that follows federal, state, and county public health guidelines to reduce the spread of illness amongst athletes, coaches, athletic training staff, and the community. This document outlines a phased return to sport following the guidance of the county and state health department recommendations.

Continued presence of COVID-19 in the Community

COVID-19 is and will continue to be present in our communities indefinitely. As long as there is active community spread which means that new cases are still increasing we must all be stewards of maintaining a healthy community by limiting the spread of disease.

There are general considerations for returning to play in youth sports that apply until there is an effective vaccine for COVID-19 and there is minimal community spread. These considerations include promoting behaviors that reduce the spread of illness, maintaining a healthy environment, maintaining healthy operations, and having protocols and procedures in place for when someone gets sick.

I. Guidelines for ALL Members of the Athletic Community

A. Promoting behaviors that reduce the spread of illness

- a. Stay home when sick
- b. Healthy hygiene
 - i. Wash hands
 - ii. Discouraging spitting
 - iii. Cover your mouth and face if you sneeze or cough
 - iv. Shower immediately upon arriving home and wash hands after placing clothes in a place to be washed that other people living in your house are not in contact with
- c. Avoid touching face with hands
- d. Avoid physical contact
 - i. No high fives or fist bumps
 - ii. No hugs
- e. Use of cloth face coverings is strongly recommended
 - i. At all times for athletes except when engaging in moderate to vigorous physical activity
 - ii. For coaches, sport staff, parents, and spectators (once able to be present)
- f. Ensure vaccinations are up to date
 - i. Flu vaccination is also strongly recommended
- g. Adequate supplies
 - i. Soap

- ii. Hand sanitizer
- iii. Paper towels
- iv. Tissues
- h. Posting signs and messaging
 - i. Proper hand washing
 - ii. Proper use of a mask
 - iii. Proper way to disinfect surfaces

B. Maintaining healthy environments

- a. No water fountains
- b. Outdoor practice when possible
- c. Modified layouts and social distancing
 - i. Maintain at least 6 feet of distance between all people present
- d. Physical barriers and guides
 - i. Outline training areas for each athlete
- e. Communal spaces
 - i. Closed locker rooms
 - ii. Athletes shall come to play and leave immediately after practice
- f. No shared objects
 - i. Each participant shall have his/her own ball, additional equipment, and protective gear
 - ii. All gear shall be disinfected before and after all training sessions
 - iii. Each athlete has own water bottle and towel
- g. Cleaning and disinfecting frequently touched surfaces between uses and deep cleaning daily

C. Maintaining healthy operations

- a. Identifying small groups and keeping them together (cohorting)
- b. Staggered arrivals
 - i. Set a time limit for athletes to arrive before practice and time at which they need to leave at the end of practice
- c. Designated COVID-19 point of contact
- d. Implement communication systems regarding COVID-19 exposures
 - i. Add reporting pathway to emergency action plan for school
- e. Provide education to coaches and staff on protocols for COVID-19
- f. Daily symptom reporting of coaches, athletes, and staff
 - i. Temperature checks
- g. Limiting large gatherings
 - i. Games, competitions, and social gatherings where social distancing is not possible
- h. Athletes shall be dropped off by one parent or guardian or drive themselves to and from practice when possible
- i. Outside observers shall not be permitted to stay and observe practices particularly those in a facility
- j. Whenever reasonable, minimize travel outside of your community

D. Protocol for sick athlete, coach, staff member, or a person with whom they live

- a. Do not come to practice or sports activity and do not return until he/she has met the CDC's criteria to discontinue home isolation.
- b. Provide sick individual and his/her family with home isolation criteria
- c. Avoid contact with other members of team
- d. Notify team COVID-19 point of contact immediately
 - i. Follow directive from county and state health department
- e. If athlete, coach, or staff member becomes sick at athletic practice/contest/event:
 - i. Remove person who is sick from contact with anyone else present

- ii. Notify team COVID-19 point of contact
- iii. Arrange for transportation of sick person to home or medical facility as needed
- iv. Area where individual was when they became sick should be closed for a minimum of 24 hours and then cleaned and disinfected per CDC protocol (see section on Recommendations for Facility Management)
- v. All close contacts of the sick individual shall be sent home immediately and should monitor for symptoms over a 14-day period. If symptoms develop the sick individual will follow the return to play guidance for a sick athlete.
 - Definition of a close contact
 - Individual (mask or no mask) who has been <6 feet for greater than 15 minutes (does not have to be consecutive), has had direct physical contact, or who has had direct exposure to infected body fluids with a person who has tested positive for COVID-19 (with symptoms or without symptoms).
 - Period of contact occurred from 2 days before symptom onset or positive test whichever is first until that individual meets criteria for discontinuing home isolation.
- f. Do not return to practice until they have met CDCs criteria to stop home isolation and are cleared by physician and athletic training staff if available to begin a return to play progression.
- g. Athletes who have positive COVID-19 test will require clearance by a qualified medical professional to return to practice and will have return to play protocol that must be followed due to the risk of cardiac complications from COVID-19 (see section on Return to Play Recommendations after COVID-19 illness).

II. Recommendations for Athletes and Coaches

Five factors for a safe return to sport are addressed in this section. These factors include the continued presence of COVID-19 in the community, a phased return to sport based on metrics and benchmarks for level of community spread, heat related illness, injury prevention upon return to sport after a prolonged period of relative inactivity, and the pre participation physical.

A. Return to Athletics with a Continued Presence of COVID-19 in the Community

There are four key components to resuming school sponsored athletics. First, is the risk of spread of illness from the way sports are played and the way equipment is shared. Second, is the setting of the sport activity. Third is the quality of the school's mitigation plan, or what they have put in place to reduce the spread of COVID-19 amongst players, coaches, and athletic staff. Fourth, is the level of spread occurring within the community. Each of these components and the factors to consider as decisions are being made to return to sports are addressed in this section. These factors serve as the foundation for the recommendations for return to sport found at the end of this section.

1. **Factors to consider when assessing risk of spread in sports activities**
 - a. Physical closeness of players and the length of time that players are close to each other or to staff.
 - b. Amount of necessary touching of shared equipment and gear.
 - c. Ability to engage in social distancing while not actively engaged in play.
 - d. Players or staff at higher risk of developing serious disease.
 - e. Size of the team.
 - f. Nonessential visitors, spectators, volunteers.
 - g. Travel outside of the local community.
2. **Risk of COVID-19 spread in athletic sports settings**
 - a. Lowest Risk: performance skill-building drills or conditioning at home, alone or with family members.
 - b. Increasing Risk: team-based practice.
 - c. More Risk within-team competition.
 - d. Even More Risk: Full competition between teams from the same local geographic area.
 - e. Highest Risk: Full competition between teams from different geographic areas.
3. **Strategies to reduce the spread of COVID-19**
 - a. Promoting healthy behaviors

- i. Stay home when appropriate
 - 1. Actively sick
 - 2. If you have tested positive for COVID-19
 - 3. If you have close contact (defined in category I section D) with a person who tests positive for COVID-19
- ii. Frequent and proper handwashing
 - 1. Hand sanitizer with a least 60% alcohol available
- iii. Discouraging spitting
- iv. Proper disposal of tissues
- v. Teach and reinforce the use of masks
- vi. Signs and messages promoting above behaviors
- b. Maintaining healthy environments
 - i. Clean and disinfect frequently touched surfaces
 - ii. Identify adult staff members/volunteers to ensure proper cleaning and disinfection of objects and equipment at practice especially if needed to be shared.
 - iii. Develop a schedule for increased routine cleaning and disinfecting
 - iv. Adequate supplies to minimize sharing of protective gear or equipment
 - 1. If equipment must be shared, limit to one small group and clean and disinfect between use
 - v. Keep pleyer's belongings separated from others'
 - vi. If unable to play outside, ensure circulation with as much outside air as possible
 - vii. Modified Layouts and Social Distancing
 - 1. Assign staff to ensure social distancing is occurring
 - a. Provide physical guides
 - 2. Space players 6 feet apart at all times
 - a. Warmup
 - b. Skill building activities
 - c. Simulation drills
 - 3. Discourage unnecessary physical contact
 - a. High fives
 - b. Handshakes
 - c. Fist bumps
 - d. Hugs
 - e. Hands-on coaching
 - 4. Practice outdoors whenever possible
 - a. Minimize indoor practice time
 - 5. Encourage players to arrive to practice in gear no more than 10 minutes prior to the start of practice and leave immediately after practice
 - 6. Discourage athletes grouping together before/after practice
 - 7. Encourage athletes to be transported to games/competitions by person living in the same household
 - 8. Closed shared spaces such as locker rooms
 - a. If they must be used, stagger athletes to small cohort practice groups and clean and disinfect between use
- c. Maintaining healthy operations
 - i. Provide low risk options for players or staff who are considered high risk of severe illness from COVID-19
 - ii. Limit participation to youth and staff who live in the same geographic area
 - iii. Follow public health department guidelines for group gathers/events
 - iv. Cohort players – limit mixing groups, including coaching staff
 - v. Staggered arrival and drop-off times and locations by cohort

- 1. Limit contact between groups and guardians
- vi. Limit non-essential visitors
- vii. Identified COVID-19 points on contact
- viii. Communication systems
 - 1. Symptom reporting for players, coaches, umpires and athletic staff
 - 2. Ensure school has worked with local public health department to draft a letter for COVID-19 point of contact to distribute to anyone identified as a close contact of a person who is positive for COVID-19 and their family when appropriate.
- ix. Recognize signs and symptoms of COVID-19
 - 1. Conduct daily health checks
- x. Support coping and resilience
 - 1. Daily mental health check
- d. Have a COVID-19 emergency action plan for when someone gets sick
 - i. Refer to section on Protocol for sick athlete, coach, staff member or a person with whom they live
- 4. **Level of spread within the community**
 - a. Minimal community spread (green)
 - i. <75 cases/100,000
 - ii. <5% of COVID-19 PCR tests performed are positive
 - iii. <5% of hospital visits due to COVID-like illness
 - b. Moderate community spread (yellow)
 - i. 75-100 cases/100,000
 - ii. 5-10% of COVID-19 PCR tests performed are positive
 - iii. 5-10% of hospital visits due to COVID-like illness
 - c. Substantial community spread (red)
 - i. > 100 cases/100,000
 - ii. >10% of COVID-19 PCR tests performed are positive
 - iii. >10% of hospital visits due to COVID-like illness

Guidelines for return to athletic activities with mitigation strategies in place are based on the three benchmarks defined by the Arizona Department of Health Services (ADHS) guide to reopening of schools to offer in-person instruction. These benchmarks are county specific and are updated on the ADHS dashboard every Thursday for the two-week period ending 12 days earlier. Once the three benchmarks are met, communities will be in the category of moderate community spread (yellow).

It is recommended that county-specific benchmarks fall within the moderate or minimal community spread category in all three benchmarks for two weeks in order to begin a phased return to sport for team sports. School districts should refer to the published benchmarks on the ADHS website and work with their county public health department to determine when it is safe to progress to the next phase as outlined below.

Benchmarks

1. Two weeks below 100 cases per 100,000 OR two-week decline in the number of new cases (not including current week)
2. Two weeks with percent positivity below 7% (not including current week)
3. Two weeks with hospital visits due to COVID-like illness below 10%

It is important to emphasize that once the Arizona state benchmarks are met, that the community is in a category of moderate spread (yellow) and NOT in a category of minimal spread (green). At a level of moderate community spread, there is sustained transmission with high likelihood or confirmed exposure within communal settings and potential for rapid increase in cases. During this time, in-person sport activities are permitted, but ONLY with measures in place that are strictly enforced to reduce the spread of illness amongst members of the athletic community. Sport specific strategies to reduce the spread of illness shall be followed for fall sports and are available for reference on the AIA website.

<http://aiaonline.org/files/17110/fall-2020-sports-modifications.pdf>

Members of the athletic community who are not experiencing symptoms of COVID-19 do not need a COVID-19 test prior to beginning in-person team activities.

All athletes, coaches, and other support staff must be free from symptoms for at least 14 days and no individual may be in close contact with anyone who is sick within that 14 day period before group in-person training may begin.

Athletes who had a positive COVID-19 test and meet the criteria for return to play after a positive COVID-19 test do not need an additional test that is negative prior to returning to sports. Per the most recent CDC guidelines, current data shows that “a person who has recovered from COVID-19 may have low levels of virus in their bodies for up to 3 months after diagnosis. This means that if the person who has recovered from COVID-19 is retested within 3 months of initial infection, they may continue to have a positive test result, even though they are not spreading COVID-19.”

B. Phased Return to Sport

1. Scenario 3 – Substantial Community Spread

- One or more benchmarks are in the “red” category or substantial community spread
- Train on your own with your own equipment preferred
- Virtual training sessions encouraged especially for high risk coaches, staff, or athletes
- Screening for symptoms occurs based on a daily COVID-19 symptom questionnaire of all participants including coaches and staff.
 - Each athlete shall log their self-reported questionnaire and temperature
 - COVID-19 point of contact for team shall maintain symptom logs
 - Temperature checks are strongly encouraged for all participants
- Small individual non-contact sports (minimal risk sports) may consider team practices
 - Cross Country
 - Golf
 - Swim and Dive
 - Tennis
 - Track and Field
- Guidelines for maintaining healthy operations and a healthy environment must be followed at all times
- Sport specific modifications for fall sports shall be followed
- Athletes must remain 6 feet from each other
- Athletes and staff must wear masks at all times when they are not in the water or performing moderate/vigorous physical activity
- Hands off coaching
 - Staff must be masked at all times
 - Staff to remain 6 feet from athletes at all times
- Larger team sports and contact sports may provide access for small groups of athletes (cohorts) to participate in summer individual conditioning and weight room sessions
 - Maintaining healthy operations and healthy environment guidelines shall be followed at all times
 - Athletes shall be kept in the same training group (cohorting)
- No spectators permitted at practice
- No competitions/meets/tournaments shall occur

2. Scenario 2 – Moderate Community Spread

- All three benchmarks are in the “yellow” or “green”
- All athletes, coaches, and support staff who are a member of a high-risk group, as defined by the CDC or live at home with a member of a high risk group strongly consider attend training sessions virtually
- Screening for symptoms occurs based on a daily COVID-19 symptom questionnaire of all participants including coaches and staff.
 - Each athlete shall log their self-reported questionnaire and temperature
 - COVID-19 point of contact for team shall maintain symptom logs
 - Temperature checks are strongly encouraged for all participants

- Small individual non-contact sports may consider local competitions
 - Local county public health department regulations must be followed
 - Social distancing must be maintained amongst athletes, coaches, and spectators
 - Considerations regarding competition
 - size of venue
 - limiting number of spectators
 - having athletes transported by household contacts to/from venue
 - ability to socially distance, creating visual barriers for spectators and athletes
 - limit number of teams
 - keep teams from same community or areas with similar levels of community spread
- Team non-contact sports (moderate risk sports) may consider team practice
 - Badminton
 - Baseball
 - Basketball
 - Soccer
 - Softball
 - Volleyball (Girls/Boys/Beach)
 - Guidelines for maintaining healthy operations and a healthy environment must be followed at all times
 - Sport specific modifications for fall sports shall be followed
 - Disinfecting and cleaning of all personal equipment and material shall occur before and after practice as well as any other time there is contact with another person
 - Cleaning schedule of shared equipment (i.e. ball)
 - Athletes shall be kept in the same training group (cohorting)
 - Competitions permitted between teams in communities with the same level of community spread
- Larger team sports and contact sports may consider non-contact team practice with cohorts at least 6 feet from other cohorts at practice
 - Football
 - Wrestling
 - Outside practice encouraged when possible
 - Maintain healthy operations and healthy environment guidelines shall be followed at all times
 - Athletes shall be kept in the same training group (cohorting)
 - Athletes should have their own equipment (i.e. helmets)
 - Training drills with shared equipment may occur (i.e. sleds)
 - Cleaning and disinfecting schedule in place
 - Minimum cleaning before and after each cohort, but preferred before and after each athlete
 - No close contact drills between players
 - No competitions
 - All coaches and staff should wear masks at all times

3. Scenario 1 – Minimal Community Spread

- All three benchmarks met for no to minimal community spread
- All sports, with and without contact may resume with usual activity.
- Social distancing still recommended
- Training sessions return to normal with average athlete group amount
- Equipment and other shared material can be used but cleaning shall continue before and after each different athlete group
- Screening for symptoms occurs based on a daily COVID-19 symptom questionnaire of all participants including coaches and staff should continue
 - Each athlete shall log their self-reported questionnaire and temperature
 - COVID-19 point of contact for team shall maintain symptom logs
 - Temperature checks are strongly encouraged for all participants
- Competitions may resume with considerations
 - Between local communities or communities also with no to minimal community spread

B. Heat Related Illness

Over the last couple of months with a stay at home order in place, most athletes, coaches, and staff had significantly less exposure to the heat. With the return of youth sports aligning with rising temperatures across most of Arizona it is important to allow athletes, coaches, and staff a period to adjust or acclimatize to the heat especially as indoor athletes may have more outdoor practices to follow current guidelines. As coaches and teams begin training outside, we strongly encourage all groups to follow the current AIA heat acclimatization policy.

HEAT ACCLIMATIZATION & EXERTIONAL HEAT ILLNESS MANAGEMENT POLICY

41.4.1 It is the position of the AIA that prevention is the best way to avoid exertional heat stroke. Prevention includes educating athletes and coaches about:

- Recognition and management of exertional heat illness;
- The risks associated with exercising in hot, humid environmental conditions;
- The need for gradual acclimatization over a 14 day period;
- Guidelines for proper hydrations;
- Implementing practice / competition modifications according to local temperature and relative humidity readings.

41.4.2 Definitions

Exertional heat illness includes the following conditions, ordered from the least to the most dangerous:

- a) Exercise associated muscle cramps: an acute, painful, involuntary muscle contraction usually occurring during or after intense exercise, often in the heat, lasting approximately 1-3 minutes.
- b) Heat syncope: also known as orthostatic dizziness, it refers to a fainting episode that can occur in high environmental temperatures, usually during the initial days of heat exposure.
- c) Exercise (heat) exhaustion: the inability to continue exercise due to cardiovascular insufficiency and energy depletion that may or may not be associated with physical collapse.
- d) Exertional heat stroke: a severe condition characterized by core body temperature $>40^{\circ}\text{C}$ (104°F), central nervous system (CNS) dysfunction, and multiple organ system failure induced by strenuous exercise, often occurring in the hot environments.

Heat Acclimatization Protocol

(A team may not choose to train in a less severe climate)

Days 1-5:

- Days 1 through 5 of the heat-acclimatization period consist of the first 5 days of formal practice. During this time, athletes may not participate in more than 1 practice per day.
- If a practice is interrupted by inclement weather or heat restrictions, the practice should recommence once conditions are deemed safe. Total practice time should not exceed 3 hours in any 1 day. In addition to practice, a 1-hour maximum walk-through is permitted during days 1-5 of the heat acclimatization period. However, a 3-hour recovery period should be inserted between the practice and walk-through (or vice versa). (Note: a walk-through is defined as no contact with other individuals, dummies, sleds or shields).
- During days 1-3 of the heat-acclimatization period, in sports requiring helmets or shoulder pads, a helmet is the only protective equipment permitted. The use of shields and dummies during this time is permissible as a non-contact teaching tool.
- During days 4-6, only helmets and shoulder pads may be worn.
- Football only: on days 4-6, contact with blocking sleds and tackling dummies may be initiated.

Days 6-14:

- Beginning no earlier than day 6 and continuing through day 14, double-practice days must be followed by a single-practice day.
- On single-practice days, 1 walk-through is permitted, separated from the practice by at least 3 hours of continuous rest. When a double-practice day is followed by a rest day, another double-practice day is permitted after the rest day.
- On a double-practice day, neither practice should exceed 3 hours in duration, nor should student-athletes participate in more than 5 total hours of practice. Warm-up, stretching, cool-down, walkthrough, conditioning and weight-room activities are included as part of practice time. The two practices should be separated by at least 3 continuous hours in a cool environment.
- Beginning on day 7, all protective equipment may be worn and full contact may begin.
- Full-contact sports may begin 100% live contact drills no earlier than day 7.
- Because the risk of exertional heat illnesses during the preseason heat-acclimatization period is high, we strongly recommend that an athletic trainer be on site before, during and after all practices.

41.4.3 Hydration Strategies

- Sufficient, sanitary and appropriate fluid should be readily accessible and consumed at regular intervals before, during and after all sports participation and other physical activities to offset sweat loss and maintain adequate hydration while avoiding overdrinking.
- Generally, 100 to 250 mL (approximately 3-8oz) up to 1.0 to 1.5 L (approximately 34-50oz) per hour for adolescent boys and girls is enough to sufficiently minimize sweating-induced body-water deficits during exercise and other physical activity as long as their pre-activity hydration status is good.
- Pre-activity to post-activity body-weight changes can provide more specific insight to a person's hydration status and rehydration needs. Athletes should be well hydrated before commencing all activities.
- The following guidelines are suggested:

Condition	% Body Weight Change
Well Hydrated	+1 to -1
Minimal dehydration	-1 to -3
Significant dehydration	-3 to -5
Serious dehydration	>-5

C. Injury Prevention Recommendations for Return to Sport after a Prolonged Period of Inactivity

Return to sport considerations should take place throughout the different phases of reopening to ensure that athletes are adequately prepared to participate in their respective sport. Due to school closures and a statewide stay at home order, Arizona interscholastic athletes have been out of sports participation for several months. During this time, Arizona athlete's activities levels have been variable. As athletes begin returning to sports, coaches, parents, and athletes must understand the potential consequences of this period of inactivity and the resulting detraining.

Detraining is defined as a decrease in performance and loss of physiological adaptations following a reduction in the frequency, volume, and/or intensity of training. In athletes, periods of detraining can lower maximal oxygen uptake, shorten the time to exhaustion during activity, and reduce strength and power. In addition, detraining can have negative consequences on health metrics such as higher resting, submaximal, and maximal heart rates, lower blood volume and stroke volume, higher blood pressure and weight gain. Lastly, after periods of inactivity there is a greater risk of non-contact (exertional or systemic) injury, such as sudden cardiac death, exertional heat illness, and exertional rhabdomyolysis if the return to training is not adjusted to account for an athlete's lower fitness level (NCCSIR).

The current transition period should follow a similar approach as to returning to sport following an extended time away due to injury. Reconditioning will take time and needs to be done slowly to avoid injury. The Collegiate Strength and Conditioning Coaches Association and the National Strength and Condition Association outline recommendations for safe return to training following inactivity (Caterisano, 2019). In general, workouts should have lower work to rest ratios (i.e. more breaks) and progress on a weekly basis. The general structure of the return to training protocol should be used for high school athletes, but the specific workloads may need to be adjusted for the adolescent age group. The table below provides an overview of recommendations for transitioning after periods of inactivity with percentage reduction of volume and workload for the first 2-4 weeks of returning to training.

Status	Conditioning activities	Testing	Weight training	Plyometrics
Midseason athletes	Conditioning program on file with appropriate sport administrator			
Returning athletes or new sport coach	50/30% weekly reduction from max conditioning volume on file over 2 weeks. Even distribution per week.	20/10% weekly reduction in workload (volume, intensity, or rest time) for any tests over 2 weeks.	FIT rule to guide volume, intensity, and W:R ratio over 2 weeks. IRV between 11 and 30 (Tables 7 and 8).	<70 foot contacts per session first week, 1:4 W:R. <100 foot contacts/session, 1:3 W:R second week. Intensity as appropriate.
New athletes or new head strength coach	50/30/20/10% weekly reduction from max conditioning volume on file over 4 weeks. Even distribution per week.	50% reduction in testing volume, completed on first day. 30/20/10% weekly reduction in test volume if repeated in following 3 weeks.	FIT rule to guide volume, intensity, and W:R ratio over 2 weeks. IRV between 11 and 30 (Tables 7 and 8).	<70 foot contacts per session first week, 1:4 W:R. <100 foot contacts/session, 1:3 W:R second week. Intensity as appropriate.

(Caterisano, 2019)

Specific to weight training, special care should be made in the first two weeks in regards to volume, intensity, and frequency. The table below summarizes recommendations for returning to weight training.

Category	Week 1 parameter	Week 2 parameter	Citation
Frequency	3 sessions/wk maximum	4 sessions/wk maximum	McMaster et al., (95)
IRV	11–30 units	11–30 units	McMaster et al., (95)
Time rest interval	1:4 W:R minimum	*1:3 W:R minimum	Casa et al., (25)
*W:R ratio after 2 weeks should be a minimum of 1:2 for the remainder of the preseason (21).			
IRV = intensity relative volume.			

(Caterisano, 2019)

D. Pre Participation Guidelines

The AIA up to this point requires an annual sports physical for all of its athletes. Over the past several months due to COVID-19 many families and athletes have not felt comfortable visiting their primary care provider for routine healthcare. While the AIA endorses that primary care offices are taking necessary precautions to minimize you and your family’s risk of being exposed to COVID-19, we also want to respect the choices you make for your families health, while still honoring the AIA commitment to player health and safety. For these reasons, the AIA with support from the AIA sports medicine advisory committee is adopting the following guidelines for the 2020-2021 school year.

1. The 2019-2020 sports physical shall be accepted for the 2020-2021 school year if the following criteria are met over the time period since the athletes 2019-2020 sports physical.
 - a. Athlete has a 2019-2020 AIA sports physical on file with the school he/she is attending for 2020-2021.

- b. Athlete did not have any new injury or illness requiring outside medical evaluation or if injury did occur, was released for full athletic participation by a qualified medical professional.
 - c. Athlete did not have a concussion
 - d. Athlete did not receive a new medical diagnosis
 - e. Athlete has not had COVID -19
2. Athlete must see his/her primary care provider and have an updated sports physical for 2020-2021 if any of the above criteria are not met.
 3. If athlete does not have a 2019-2020 sports physical form on file at the school he/she is attending for the 2020-2021 school year, the athlete will also need to complete a 2020-2021 sports physical.
 4. 2020-2021 Health History (15.7-A, page 3) is to be completed and signed by student and parent/guardian.

E. General Guidelines for Athletic Training Staff

- a. Athletic training staff may begin treating athletes on a limited basis as long as guidelines for social distancing and practices to maintain a healthy environment and healthy operations are followed
 - Only one athlete shall receive treatment at a time
 - Athlete and athletic trainer shall wear a mask at all times while in athletic training facility and/or when receiving treatment
 - Athletes who can wear a brace that they put on themselves shall wear a brace rather than being taped by an athletic trainer.
 - Athletic training facility shall be disinfected before and after each athlete receives treatment
 - At least 6 feet of distance shall be maintained between athlete and athletic trainer when there is no hands-on treatment
 - Hands-on treatment should be minimized

III. Recommendations for Administrators

It is recommended that administrators strive to meet the guidelines for all of your athletic and activity programs on a daily basis. Athletes, coaches and staff should be informed, encouraged, and reminded to practice healthy habits to minimize the spread of infection. Your training facilities, courts, fields, and athletic training facilities should be healthy environments for athletes, coaches and staff. Establish protocols for maintaining healthy operations with consistent delivery through all programs at your school. Lastly, establish protocols for when there is a sick member or household contact of a member of the athletic community in one of your programs.

A. Promoting Behaviors that Reduce the Spread of Illness

- a. Ensure signage is posted throughout institution
 - i. Signs and symptoms of COVID-19
 - ii. Physical distancing policy
 - iii. How to protect yourself and others
 - iv. Healthy habits
 1. Proper hand washing and frequency
 2. No spitting
 3. Proper wearing of face coverings
 4. Cover coughs and sneezes
 5. Don't touch your face
 - v. Do not share any sport equipment
 1. Protective gear
 2. Water bottles
 3. Towels
 - vi. What to do if you are sick

- b. Water bottles
 - i. Athletes shall fill up their own water bottle in a contactless system when possible
 - ii. If contactless system is unavailable then a designated person shall fill water bottle while athlete holds his/her bottle
 - iii. Alternatively, athlete shall use hand sanitizer before and after filling up his/her water bottle

B. Maintaining Healthy Environments

- a. Ensure that adequate supplies that reduce the spread of illness are available and accessible for all in person sessions
 - i. Hand sanitizer
 - ii. Soap
 - iii. Paper towels
 - iv. Tissues
 - v. Garbage cans
 - vi. Equipment surface cleaners and rags – one per piece of equipment
- b. Closure of locker rooms, water fountains, and common showers until declared safe to open by local public health departments and school districts
 - i. Enforce time period when athletes may enter facility/field for practice session and by what time he/she needs to leave after the session ends (staggered arrivals)
- c. Support and encourage outdoor practice when possible
- d. Work with coaching staff to create physical/visual barriers in facilities and outdoors to maintain social distancing
 - i. Outline training areas for each athlete
- e. Clearly identify and separate entrance to and exit from facility

C. Maintaining Healthy Operations

- a. Designate a COVID-19 point of contact for each of your programs
 - i. Athletic trainer
 - ii. School nurse
 - iii. Athletic director
- b. Develop a COVID-19 communication pathway
 - i. Add to the school’s emergency action plan
 - ii. Shall start with reporting any illness to the COVID-19 point of contact
- c. Provide education to all coaching staff on COVID-19 protocols and procedures at your institution
- d. Establish protocol for screening ALL members of the athletic community prior to all in-person activities
 - i. Fever (reported or measured)
 - ii. Loss of smell and/or taste
 - iii. Sore throat
 - iv. Cough
 - v. Difficulty breathing
 - vi. Body aches
 - vii. Runny nose
 - viii. Sinus congestion
 - ix. Headache
 - x. Lymph node enlargement
 - xi. Contact with COVID19 positive person
- e. Ensure daily symptom reporting is occurring
- f. Develop accommodations for athletic community members who are at increased risk of severe illness or have a person living in their home who is in one of these high risk groups
 - i. People over the age of 65
 - ii. People who live in a nursing home or long-term care facility
 - iii. People of any age who have a serious underlying medical condition, especially if it is not well controlled such as
 - 1. cancer
 - 2. serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies
 - 3. weakened immune systems from solid organ transplant
 - 4. sickle cell disease

7. Type 2 diabetes mellitus
8. chronic kidney disease
9. obesity (BMI >30)
- iv. People with the following conditions might be at an increased risk for severe illness from COVID-19
 1. asthma (moderate-to-severe)
 2. Cerebrovascular disease (affects blood vessels and blood supply to the brain)
 3. cystic fibrosis
 4. hypertension or high blood pressure
 5. immunocompromised state (weakened immune system) from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines
 6. neurologic conditions, such as dementia
 7. liver disease
 8. pregnancy
 9. pulmonary fibrosis (having damaged or scarred lung tissues)
 10. smoking
 11. thalassemia (a type of blood disorder)
 12. type 1 diabetes mellitus
 13. children who have medical complexity, who have neurologic, genetic, metabolic conditions, or who have congenital heart disease
- g. Enforcement of public health department and school district recommended group sizes
- i. Encourage coaches NOT to move athletes to different small groups (cohort)
 - ii. Limiting large in-person gatherings where social distancing is not possible
 1. Games
 2. Competitions
 3. Parent nights
 - iii. Post signs and educate community that parents/spectators are not to be at any athletic event including practice until it is deemed safe from local health department and school district
 - iv. Minimize unnecessary travel outside your community
 1. Consider limiting competitions to in-district only
- h. Enforcement of established cleaning protocols

D. Communication with Community

- a. Message to public – primarily parents and families of athletes
 - i. Steps being taken to reduce the risk of illness in athlete and his/her family
 1. Small groups that remain the same each day
 2. Wearing masks when not exercising
 3. Maintaining 6 feet of separations for drills and activities – no contact until safe to start
 4. All coaches and staff will wear a mask
 - ii. Facility cleaning and disinfecting plan
 1. What you are doing
 2. How you are doing it
 3. Why you are doing it
 - iii. New facility policies
 1. Physical distancing
 2. Healthy habits – masks
 3. Stay your child home if he/she is sick or another member of your home is sick and notify coach and/or COVID contact point for team
- b. Utilize your resources to deliver the message
 - i. COVID-19 point of contact person
 1. Helps to establish his/her presence in the community

- ii. Team physician(s) and/or other medical personnel who work directly with the athletics community
- iii. School nurse
- iv. Coaches and staff
 - 1. Encourage them to be the example
- v. Signage around the institution
- vi. Website, social media, other electronic communication

E. Returning to Participation Following COVID Exposure or Diagnosis

a. COVID-19 Positive Athlete

Should an athlete have a positive COVID-19 test they will need to follow the return to participation protocol outlined below. The AIA has developed the COVID-19 Return to Play Form and mandate that this form (or a district specific equivalent form must be completed by a qualified medical provider prior to the athlete returning to practice. Individuals who have had COVID-19 are at risk of developing severe cardiac complications that can affect participation in sport. There is limited research in this area particularly in youth athletes to standardize clinical decision making. For these reasons, it is strongly recommended that this form be completed by the patient’s primary care provider who is preferably an MD or DO. Evaluation and management by the primary care provider allows for the patient’s past medical and cardiac history to be known.

The school’s medical staff (athletic trainer and team physician) should develop a list of referrals for local pediatric and family practice providers that includes all health systems (to account for various insurances) for patients who may not currently have a medical home. This list should be provided to families who do not have an identified primary care physician along with information on the CDCs self-isolation criteria and the COVID-19 return to play form.

Families have a minimum of 14 days to establish and arrange an appointment with a primary care provider for clearance to begin the return to sport protocol.

The evaluation to determine whether an athlete is ready to begin the return to play progression must include:

- Symptoms are resolved or nearly resolved, any remaining symptoms are not interfering with daily activities without medication
- No fever ($\geq 100.4F$) for minimum of 14 days without fever reducing medication
- COVID-19 respiratory and cardiac symptoms (moderate/severe cough, shortness of breath, fatigue) have resolved
- Athlete was not hospitalized due to COVID-19 infection.
- Cardiac screen negative for myocarditis/myocardial ischemia (All answers below must be no)

Chest pain/tightness with daily activities	YES <input type="checkbox"/> NO <input type="checkbox"/>
Unexplained Syncope/near syncope	YES <input type="checkbox"/> NO <input type="checkbox"/>
Unexplained/excessive dyspnea/fatigue w/ daily activities	YES <input type="checkbox"/> NO <input type="checkbox"/>
New palpitations	YES <input type="checkbox"/> NO <input type="checkbox"/>
Heart murmur on exam	YES <input type="checkbox"/> NO <input type="checkbox"/>

*If any cardiac screening question is positive or if athlete was hospitalized, had prolonged fevers (greater than 3 days) or was diagnosed with multisystem inflammatory syndrome in children (MIS-C), further workup is recommended based on the Return to Play After COVID-19 Infection in Pediatric Patients Clinical Pathway.

If the athlete has met the above criteria, they may begin a return to play progression under the supervision of the school’s athletic trainer or other school personnel. Each stage must be completed without development of chest pain, chest tightness, palpitations, excessive fatigue, lightheadedness, pre-syncope or syncope. If these symptoms develop at any stage, the patient shall be referred back to the evaluating provider who signed the form. This protocol will take a minimum of 7 days to complete.

Stage	Timing	Activities
Stage 1	2 days minimum	Light activity for 15 minutes or less at an intensity no greater than 70% of maximum heart rate (eg. walking, jogging, stationary bike). No resistance training
Stage 2	1 day minimum	Light activity with simple movement activities (eg. Running drills) for 30 minutes or less at an intensity no greater than 80% maximum heart rate. No resistance training
Stage 3	1 day minimum	Progress to more complex training for 45 minutes or less at an intensity of no greater than 80% maximum heart rate. May add light resistance training.
Stage 4	2 days minimum	Normal training activity for 60 minutes or less at an intensity no greater than 80% maximum heart rate
Stage 5		Return to full activity

b. Athlete identified as a close contact to a COVID-19 + individual

If any member of the athletic team is in close contact with an individual who has a positive PCR test for COVID-19, that member must self-isolate for a minimum of 14 days to monitor for symptoms. A close contact is defined by the CDC guidelines and is found summarized in this document in Section D, Part V.

As long as the exposed athlete remains without COVID-19 symptoms while in self-isolation, they are encouraged to engage in stage 1 and stage 2 exercises as tolerated and as long as the athlete is able to maintain self-isolation while engaging in these activities.

If symptoms develop, the athlete is “presumed positive” and shall, follow the guidelines set forth in Section E, Part A for a COVID-19 positive individual.

If no symptoms develop in that 14 day period, the individual in self-isolation is encouraged to have a COVID-19 PCR test (nasal swab or saliva testing only) performed between 10-14* days from the last exposure to the COVID-19 positive individual. If documentation of this negative test is presented and the individual remains without COVID-19 symptoms, the individual is allowed to return to athletics on day 15 after the last known exposure without needing to complete the COVID-19 return to play clearance form or needing to complete a gradual return to play protocol.

*Negative tests obtained on days 1-9 of the self-isolation period will not be accepted for clearance under this protocol because of the high rate of “false negative” test results that may occur during this time.

Please direct families and members of the athletic community needing a COVID-19 test to the Arizona Department of Public Health and Maricopa County testing locations websites. It is also important to note, that test results may take several days to become available. It is important to ask the testing site how long it will take for the individual to receive the test results to make sure this does not limit their ability to return to play at the conclusion of the 14-day self-isolation period if the individual is negative.

<https://www.azdhs.gov/preparedness/epidemiology-disease-control/infectious-disease-epidemiology/index.php#novel-coronavirus-testing>

If the member returning to athletics after a 14-day self-isolation period is unable to provide documentation of a negative COVID-19 PCR test through the process described above, the individual will remain “presumed positive” and must complete a COVID-19 return to play clearance form and complete the gradual return to play protocol as outlined in Section E, Part A.

F. SUSPENSION OR DISCONTINUATION OF COMPETITION

Attempting to play sports during the COVID–19 pandemic involves significant risk. The strategies and guidelines outlined in this document are recommended to mitigate that risk to a level that allows for safer participation in sport while COVID-19 continues to be present in the community. Participation at some level in sport is reasonable as long as there are established policies that are followed with strict enforcement.

The ability to participate in sports should be continually reassessed based on local and state levels of community spread as well as the school’s mitigation practices. The level of community spread will be determined by the local, county, and state public health departments based on the three benchmarks established by ADHS. If the local, county, or state public health department changes the level of community spread for a community, then the schools in that community should limit athletic participation to those activities that are permitted for the current level of community spread. Qualified medical professionals, school administrators, and school boards should work closely with local public health officials to stay up to date with standards and guidelines to ensure continued safe play.

Each school (or district) should develop plans based on these criteria to temporarily suspend or stop individual or all sports as appropriate. The following criteria can be used to create a stop/pause protocol that can be applied at the school, district, local and state level. Considerations regarding suspending sport-related activities where physical distancing cannot be maintained should include:

1. Inability to isolate new positive cases and/or quarantine high risk contacts.
2. Inability to provide appropriate medical care or screening within the school to provide a safe environment.
3. Lack of ability to supply appropriate cleaning materials or staff needed to maintain a safe environment.
4. Lack of availability or inability for members of the athletic community to obtain COVID19 testing.
5. Inability to perform adequate contact tracing.
6. One or more benchmark categories fall within the substantial spread category.
7. Anytime in-person school instruction is suspended due COVID-19 cases, in-person sports activities should also be suspended until it is determined to be safe to resume in-person activities by school officials in conjunction with the local public health department.
8. Staff members, coaches or students not following mitigation standards put forth by their institution or AIA and after appropriate education and warnings have been instituted.

Limitations of Activity due to COVID-19 positive athletes, coaches, or athletic staff on a team

- An outbreak is defined as two or more laboratory-confirmed COVID-19 cases among students or staff with onsets within a 14-day period, who are epidemiologically linked, do not share a household, and were not identified as close contacts of each other in another setting during standard case investigation or contact tracing.

- Anytime there are multiple members of a team who develop COVID-like symptoms or have a positive COVID-19 PCR test a consideration of suspending athletic activity should be considered.
- The number of team members, coaches, or staff working with a team who develop acute COVID-like illness or positive COVID-19 PCR tests on a team that call for a suspension of in person activities is defined as >2 members per team for teams with 25 or more members and 2 members for teams with less than 25 members.
- Once the above numbers are reached, all team activities should be paused for a minimum of 8 days from the last exposure of the team to the sick individual.
- The time should be extended if other members of the team develop symptoms.
- The team should not resume activities until 8 days have passed from start of symptoms of the last team member to develop symptoms or the last member to have a positive COVID-19 PCR test.
- During the suspension of team activities, the school should work closely with the local public health department to ensure that appropriate contact tracing is completed so that those who are ill or determined to be close contacts of those who have a positive COVID-19 PCR test are placed in quarantine to reduce the spread of illness.
- All athletes, coaches and staff with acute COVID-like illness or positive COVID-19 PCR testing will be quarantined for at least 14 days and then will be cleared only by a health care professional utilizing the AIA Return to Play Form.

“Team” in this context is defined as an individual sport plus its sub-category: Example JV football is one team; Varsity football is another team. If more than one sub-team practices together, for example JV Women’s Volleyball and Varsity Women’s Volleyball practice together sharing equipment, completing drills or scrimmages together than they would be considered ONE team for the purpose of this document.

IV. Recommendations for Facilities Management

In addition to hand washing and social distancing, maintenance of athletic facilities is essential to preventing the spread of infection. For facility staff, particularly those charged with regular cleaning of high-touch areas and equipment, proper training can help slow and prevent the transmission of disease.

Below are key points for maintaining healthy environments that are recommended for review with facilities management personnel.

A. Prior to opening of facilities, institutions shall ensure the following

- a. Ventilation systems are operating properly
- b. Increasing circulation of outside air as much as possible
- c. All water systems and features are safe to use after a prolonged shut down
 - i. Turn water fountains off until determined safe to use
- d. Minimize frequent touch points throughout facility
 - i. Ensure no-touch features are working properly
 1. Faucets
 2. Soap dispensers
 3. Hand dryers
 4. Paper towel dispensers
 5. Toilet flush valves
 6. Motion controlled light switches

- ii. Consider installing no-touch features where possible
- iii. Remove vending machines
- iv. Prop doors open where possible

B. Use the CDCs reopening tool to develop a facilities management cleaning plan ([CDC Re-Opening America Cleaning and Disinfection Decision Tool](#))

- a. Determine what will remain in the facility or what will be removed to minimize cleaning and exposure
- b. Determine what needs to be cleaned – soap and water
- c. Determine what needs to be disinfected – EPA list of approved products
- d. Frequency of cleaning and disinfecting
- e. Ensure the institution has adequate supplies to perform cleaning and disinfecting on protocol schedule
- i. Ensure cleaning supplies are readily available when athletic facilities are in use
- f. Follow the Environmental Protection Agency 6 Steps for Safe and Effective Disinfectant Use ([EPA 6 Steps for Safe Disinfectant Use](#))

C. Develop and implement a deep cleaning protocol (visit [CDC's website on How to Clean and Disinfect](#))

- a. To be performed at the end of the day by facility staff

D. Develop and implement a protocol for cleaning frequently touched surfaces ([CDC Guidance for Cleaning and Disinfecting Public Spaces - Schools](#))

- a. Shall be implemented after each athlete uses a piece of equipment if there is shared equipment such as in the weight room AND after each small group training session prior to the next group entering the training environment.
- b. Each member of the athletic community shall be educated in this protocol to be an active participant
- c. Protocol shall include the following information
 - i. If any personal protective equipment needs to be worn when using the product
 - ii. How long the product needs to sit on the surface prior to using it again (contact time)
 - iii. Who is responsible for the cleaning of the equipment
 - 1. Recommend including all members of the athletic community
 - iv. Frequency of cleaning
 - 1. Before and after each new training group
 - 2. Before and after each new person using equipment
 - a. If athletes are following each other in a circuit and observed the person before them clean after he/she used the equipment, the new athlete does not need to clean again prior to use, but shall clean after use
- d. Provide education to all members of the athletic community regarding frequently touched surfaces that need to be cleaned and/or disinfected throughout the day

<ul style="list-style-type: none"> i. Tables ii. Doorknobs iii. Light switches iv. Countertops v. Handles vi. Desks vii. Phones viii. Keyboards ix. Toilets 	<ul style="list-style-type: none"> x. Faucets and sinks xi. Balls, mats, bleacher seats xii. Free weights, weight machines, treadmills, cardio machines, xiii. Athletic training facilities, equipment, first aid supplies xiv. Touch screens xv. Audio-Visual equipment
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- E. Establish protocol for cleaning athletic area where someone with suspected/confirmed COVID-19 was present**
- a. Please follow CDC recommendation for U.S. community facilities with suspected/confirmed coronavirus disease 2019 at [CDC's website on How to Clean and Disinfect](#)
 - b. If it has been more than 7 days since the person with suspected/confirmed COVID-19 visited or used the facility, additional cleaning and disinfection is not necessary

Resources:

Caterisano, A, Decker, D, Snyder, B, et al. CSCCa and NSCA Joint Consensus Guidelines for Transition Periods: Safe Return to Training Following Inactivity. *Strength and Conditioning Journal*; 2019;41(3).

Centers for Disease Control and Prevention. Coronavirus Disease (2019) COVID-19: How to protect yourself and others. Retrieved from: <https://www.cdc.gov/coronavirus/2019-ncov/%20prevent-getting-sick/prevention.html>

Key Facts About Detraining. NATA.

Accessed at https://www.nata.org/sites/default/files/key_facts_about_detraining_-_ic.pdf

National Collegiate Athletic Association. Core principals of resocialization of collegiate sport. Retrieved from: <http://www.ncaa.org/sport-science-institute/core-principles-resocialization-collegiate-sport>

National Strength and Conditioning Association. COVID-19: Return to training. Guidance on safe return to training for athletes. Retrieved from: <https://www.nasca.com/contentassets/61c0fb0a476149848de009f1630fa457/nsca-covid-19-rtt.pdf>

The Aspen Institute. Health, Medicine, and Society Program. Return to play COVID-19 risk assessment tool. Retrieved from: https://assets.aspeninstitute.org/content/uploads/2020/05/Return-to-Play_v5.pdf?_ga=2.120456205.428626999.1588983700-150149164.1588983700

USOPC Sports Medicine. Return to training considerations post COVID-19.

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