

Health and Well Being Considerations for Pac-12 Institutions

Guidance for Local Planning for Return to Sporting Activity: Updated 12/04/2020

The Pac-12 COVID Medical Advisory Committee has engaged in twice weekly (often more frequent) calls and discussions since March 2020 reviewing and analyzing developing information regarding the COVID-19 pandemic. The Pac-12 COVID Medical Advisory Committee includes the Student-Athlete Health and Well-being Initiative (SAHWBI) Board and national experts in public health, infectious disease, laboratory medicine, epidemiology, and cardiology. In addition, Pac-12 SAHWBI board members are also involved in discussions at the national level including the Autonomy 5 Medical Group, the NCAA COVID Advisory Group, the AMSSM-NCAA COVID Working Group, and the Autonomy 5 Physicians Discussion Group. Finally, SAHWBI board members have been liaising with other stakeholder groups in the Pac-12 infrastructure including the broader group of Pac-12 physicians and athletic trainers, strength and conditioning groups, coaches, administrator groups, operations, officials' groups, and student-athletes and their parents. The following recommendations have been informed by these collaborations.

This document is based on the most up-to-date information available to us as of December 4, 2020. It will continue to be updated as our understanding evolves. This document is comprehensive and replaces previous documents (Health and Well Being Considerations for Pac-12 Institutions in The Local Planning for Return to Sporting Activity (5/22/20) and subsequent updates (8/10/20), (9/17/2020).

Each institution remains subject to the restrictions imposed by its individual institutions, state and local health departments, and state and local laws and regulations.

UPDATES TO THE DOCUMENT SINCE 9/17/2020

- Adoption of the updated categorization of sport risk in alignment with NCAA recommendations.
- Universal masking for coaches/staff should be implemented in alignment with NCAA recommendations.
- Revised recommendations for cardiac testing in alignment with national and AMSSM-NCAA recommendations removing the requirement of echocardiogram for all student-athletes prior to return to play. Echocardiograms should be ordered for student-athletes as clinically indicated by medical staff.
- Revised recommendation for antibody serology testing on initial (or subsequent) return to campus. Serology for antibody testing to guide cardiac testing is no longer recommended on initial or subsequent return.
- Temperature checks require significant staff resources and their utility in detecting asymptomatic infection is limited. If allowed by local public health officials, temperature checks at the facility may be omitted. Daily symptom attestation is still recommended.
- Additional details on Pac-12 testing plan which includes 6-day a week antigen testing and at least weekly PCR testing for higher risk of transmission activities.
- More detailed recommendations on travel and non-practice/competition activity
- Information on requirements for non-conference opponents.

The increased workload for medical staff caused by COVID-19 protocols and testing and the ability of medical staff to follow recommended policies and procedures should be taken into consideration when making decisions about student-athletes and sports participating. Institutions should have a detailed plan to insure adequate staffing for all health care delivery and implementation of testing.

As of the date of this document, the prevalence of COVID-19 infection is rising in many local communities within the Pac-12 footprint. We believe that continued sports participation may be continued safely because of the rigorous safety protocols and the testing paradigm employed by Pac-12 institutions. The opportunity to participate offers an important health, mental and emotional benefit to many Pac-12 student-athletes. The Pac-12 COVID Medical Advisory Committee will continue to monitor and advise the Pac-12 with respect to the medical considerations and safety of athletic participation.

RETURN TO CAMPUS FOLLOWING ABSENCE

No student-athlete is required to return to campus. Athletic scholarships will be honored should student-athletes choose not to return because of health concerns related to COVID-19.

Prior to return to campus, student-athletes should follow all public health guidelines including limiting contacts, wearing a face covering whenever in public, and frequent hand washing. They should be symptom-free and not have contact with any COVID-19-infected person for the 14 days prior to initiating return travel.

Return to campus guidelines initially addressed student-athletes returning to campus for the first time, and a 7-day quarantine and PCR testing prior to entry into the athletic footprint were recommended. The majority of COVID-19 cases have occurred when student-athletes are returning to campus from time away or time spent out the athletic bubble. Return to campus policies should be developed at each institution that reflect the local prevalence of COVID-19 in the community and should include, at a minimum, a negative PCR test prior to re-entry. Quarantine may also be considered. Each institution may determine what length of absence would constitute an extended absence and trigger a return to campus protocol. Student-athletes should be made aware so that they can consider this when planning breaks and travel. When away from campus, student-athletes should continue to follow all public health guidelines including limiting contacts, wearing a face covering whenever in public, and frequent hand washing.

Serology for antibody testing to guide cardiac testing is no longer recommended on initial or subsequent return.

High-risk staff and students should consider delaying return *or* go through an informed decision-making process with medical staff before a return to the athletic facility. For details, visit: [CDC high-risk definition](#).

All student-athletes and staff should be educated on COVID-19 policies, expectations for social and team interaction, and face covering use prior to returning to the athletic facility. They should be reminded frequently and kept up to date on evolving changes.

FACE COVERINGS AND PHYSICAL DISTANCING

Face coverings are effective at reducing transmission of COVID-19. **Face coverings should always be used by coaches and staff.** Student-athletes should always use face coverings when not conditioning, practicing, and competing and may consider their use to include those activities. In the most recent NCAA recommendations, *Resocialization of Collegiate Sport: Developing Standards for Practice and Competition, Second Edition (November 13, 2020)* it is noted that:

“Individuals who participate in athletics activities while in proximity (less than six feet) to an infected individual and who may otherwise be considered a high-risk contact because of that proximity, could possibly not be considered a high-risk contact for contact tracing purposes by the relevant local agency if the infected individual and the individual in proximity to the infected individual were wearing a mask/cloth face coverings that covers the nose and mouth during those athletics activities.”

If a student athlete is not wearing a face covering while exercising, they should replace it before talking to or interacting with coaches or staff whenever possible. This includes on the sideline or bench. Exceptions to this include when hydrating or drinking recovery fluid in a physically distanced manner. Although uncomfortable to some, face coverings are not dangerous to those wearing them, even in the heat. If there is a medical condition which precludes regular use of a face mask, a reasonable accommodation analysis should be performed through campus ADA office. It is possible that participation may be denied because of the risk to others.

Student-athletes should be provided adequate face coverings to facilitate replacement should they become wet or soiled, and they should be laundered daily. Clean cloth face coverings should be used each day by student-athletes and staff.

Face coverings should fit student-athletes and staff properly with the chin, mouth, and nose covered. More than one size/type of face covering may be necessary to properly fit everyone. Student-athletes and staff should be instructed on how to put on and remove their face covering. In addition, student-athletes and staff should avoid touching mouth, nose, eyes, and nearby surfaces when putting on, using, and removing face coverings.

FACILITY-SPECIFIC CONSIDERATIONS

Facilities access

To be admitted to the athletic facility, student-athletes should complete a daily symptom attestation and may not have a fever > 100°F (or elevated temperature as defined by campus protocol, if lower). **Temperature checks require significant staff resources and their utility in detecting asymptomatic infection is limited. If allowed by local public health officials, temperature checks at the facility may be omitted.** However, if an athlete is symptomatic, they should be denied access and their temperature checked as part of routine assessment of illness and appropriate testing performed.

Entrances to the facility should be limited to prevent unauthorized access and prescribed traffic flow patterns should be developed and well-marked with temporary signage or floor markings. Rooms should be evaluated for maximum safe capacity and furniture removed or otherwise blocked from use to prevent close contact. Lounges and gathering areas should be closed or furniture removed. There should be a protocol and schedule developed for regular disinfection by both athletic and janitorial staff.

Equipment

COVID-19 cleaning recommendations per the CDC for all equipment (electronic, medical, workout, etc.) should be followed. Avoid sharing workstations and workout equipment. If it is not possible to avoid sharing workstations or other equipment, meticulous hand sanitization and disinfection of the shared equipment should be completed prior to and after use. If student-athletes are paired up during weight room workouts, consideration should be given to living groups/roommates as these living arrangements are already deemed close contacts. Maintaining these pairs without change should be a strong consideration.

Weight rooms and conditioning activities

It is now well established that activities are safer when completed outdoors and in larger spaces with increased ventilation (HVAC adjustments, open windows). To accommodate for increasing numbers of student-athletes without increasing density in the facility, utilizing outdoor spaces as the primary workout location and creative use of larger spaces such as indoor practice facilities and fieldhouses should be considered whenever possible. In addition, limiting the number of student-athletes in a weight room at any one time is important and should be carefully planned. Weight room use needs to be scheduled with time allowed between groups for disinfection and cleaning. Weight room hours may need to be extended to accommodate the smaller groups and increased cleaning.

Ideally, face coverings should be worn when conditioning, particularly when indoors or outdoors if social distancing cannot be maintained. Coaches and staff should always wear face coverings when supervising weight room or conditioning activities.

Locker rooms

Management of locker room access is an important part of COVID-19 mitigation. Access to locker rooms should be predicated on the ability of the individual school to meet the local public health guidelines for indoor access, physical distancing, and adequate disinfection; if these cannot be met, locker rooms should remain closed. Student-athletes should be encouraged to avoid loitering while in the locker room. It is the expectation that face coverings and social distancing be maintained during locker room use.

Several measures can be used to limit the density of the locker room for large roster teams or smaller roster teams in smaller locker rooms. These measures include a staged release from practice or workout session, use of guest locker rooms, showering at home or alternative location, coordination to ensure every other or every third locker is used and efficiently changing and showering with a goal of less than 15 minutes spent in the locker room. Functioning shower head spacing should be changed to ensure the appropriate 6-foot spacing can be maintained. In addition to spacing of shower heads, placement of partitions such as plexiglass or shower curtains to mitigate droplet cross contamination should be considered. Removal of couches and recreational equipment will also discourage additional time spent in the locker room. Additionally, strength & conditioning coaches or sport operations personnel could monitor and encourage staged groups to keep their locker room use time to less than 15 minutes.

Locker room facilities for visiting teams should also be addressed to comply with distancing recommendations. This may require the use of additional space than normally afforded for the visiting team. The logistical considerations for visiting team locker room facilities should be reviewed with the visiting team prior to their arrival.

Athletic training facilities/Physical therapy

The athletic training facility is a place where healthcare providers provide care to student-athletes. The COVID-19 pandemic has significantly changed the athletic training staff's ability to provide care to large numbers of student-athletes at a given time due to the need for social distancing measures within the facility. Training facilities across the Pac-12 vary greatly; thus, each institution will need to individualize these considerations. Athletic training rooms should follow infection prevention and control recommendations as healthcare facilities per CDC guidelines.

For routine care and treatments, student-athlete care should be scheduled to ensure the ability to physically distance while in the facility. Student-athletes should always comply with all rules regarding entering an athletic department facility and wear a face covering while in the athletic training room.

Providers should always wear a face covering. Consideration should be given on how to tape and complete other pre-practice or game athletic training activities which may include extending the taping area outside of the usual footprint or staggered taping times to prevent close contact.

Many Pac-12 institutions partner with athletic training students who assist with athletic training services as they participate in active learning. Learning activities may need to be curtailed or modified to ensure the safety of students.

Food distribution/dining in the facility

Nutrition is an important part of the student-athlete care provided by Pac-12 institutions, but eating can result in COVID-19 exposure and spread. Avoidance of self-serve dining options and time spent waiting in lines is optimal. Meals should be pre-boxed and provided “to-go”. If there is a single dining or training table location for all student-athletes, it is optimal to limit the number of teams accessing food to avoid cross contamination of teams, especially those teams who are in midst of competitive seasons that include frequent travel. Consideration for meals could include delivery or pick-up at alternative locations, including outdoors. Indoor dining is not currently advisable. Student-athletes should be reminded to dine physically distanced and outdoors or at their place of residence.

Athletes are provided with several opportunities to re-fuel per day. These snacks should be prepackaged options that do not require any preparation by the student-athlete (i.e., toasting, cutting, or spreading of toppings). Ideally, there would be no consumption of these snacks inside athletic facilities. There are situations that may warrant fueling options such as a strength & conditioning session followed by practice. In these situations, snacks provided should be easily consumed in single or limited swallows such as a gel shot or a high-density carbohydrate chew that can be placed in the mouth and consumed with face covering back in place. The student-athletes should also be appropriately socially distanced during snack consumption in a large space with good air movement.

Dining while traveling is addressed in the travel section.

RISK ASSESSMENT OF PARTICIPATION IN VARIOUS TYPES OF ATHLETIC ACTIVITY

On November 13, 2020, the NCAA updated its categorization of sport risk for all NCAA-sponsored sports based on consensus from the NCAA COVID-Medical Advisory Group, the AMSSM COVID-19 Working Group and the Autonomy 5 Medical Advisory Group. **The Pac-12 SAHWBI has adopted the updated categorization.** Sport transmission risk is based on the projected probability of respiratory droplet and/or aerosolized spread during vigorous exercise when physical distancing and masking are not applied or are not possible. This update also differentiates outdoor from indoor sport, as emerging evidence in professional and collegiate football and professional soccer reveal that on-field risk of infection is low in these outdoor sports, with infections being sourced primarily to off-field social situations. Sport classification refers to sport-specific training and competition and not cross-training or other aspects of training or activities that occur outside of training such as time spent on the bench, sideline, team meetings, dining, travel, and activities of daily living. **These considerations mean that the training and competition environment should be considered beyond the transmission of risk classification of the sport.**

Table 1: Sport Transmission Risk Summary

Higher Risk of Transmission (HROT)		Intermediate/Medium Risk of Transmission (MROT)		Lower Risk of Transmission (LROT)	
Basketball	Indoor	Baseball	Outdoor	Beach Volleyball*	Outdoor
Football	Outdoor	Field Hockey	Outdoor	Cross Country*	Outdoor
Ice Hockey	Indoor	Lacrosse	Outdoor	Fencing*	Indoor
Rugby	Outdoor	Rowing (2 or more)	Outdoor	Golf	Outdoor
Water Polo	Indoor/Outdoor	Soccer	Outdoor	Gymnastics*	Indoor
Wrestling	Indoor	Softball	Outdoor	Rowing (single skull)	Outdoor
Acrobatics & Tumbling	Indoor	Track & Field (Indoor)	Indoor	Skiing	Outdoor
		Volleyball- if masked*	Indoor	Swimming & Diving*	Indoor
				Tennis	Outdoor
				Track & Field (Outdoor)	Outdoor
				Triathlon*	Outdoor

Although sports can be broadly categorized into risk of transmission levels, HROT sports can include LROT activities and vice versa. The Pac-12 has developed guidance on higher, intermediate/medium, and lower risk activities within each sport which can be considered in developing practice plans and testing strategies. (Appendix 1).

COVID-19 TESTING RECOMMENDATIONS

This section has been updated to reflect current Pac-12 institution practices and experiences and updated NCAA recommendations. Testing strategies need to consider local and campus policies, the risk level of the sport, time of season, and the use of mitigation strategies such as physical distancing and the use of face coverings. Any proposed deviations from these recommendations should be submitted to the Pac-12 COVID Medical Advisory Committee, which includes infectious disease and public health physicians, for review and approval. The Pac-12 Testing Plan represents a minimum and institutions are free to test more frequently.

COVID-19 Testing Strategy

There are a variety of different tests available to diagnose infection with COVID-19. In a college-aged population, between 40% - 60% of those infected with COVID-19 will not have symptoms; therefore, a prevention strategy based on symptom identification alone is insufficient. In addition, our current understanding is that individuals are typically infectious 24 – 48 hours prior to symptoms developing. In order to prevent those who are asymptomatic or pre-symptomatic from spreading COVID-19 during activities where physical distancing and other mitigation strategies cannot be maintained, the Pac-12 has recommended an aggressive surveillance strategy based on the risk of transmission of sport and on the activities occurring within that sport.

An RT-PCR test detects viral particles, can diagnose early infection, and is considered the standard by which other tests for COVID-19 are measured. RT-PCR tests are generally performed by lysing the virus into particles and then expanding it. Newer methods have been introduced (e.g., Saliva Direct) that do not require these steps and may improve turn-around time and decrease expense, but these tests are not as sensitive as most traditional RT-PCR tests and still must be performed in a high-complexity

laboratory. Other methods for decreasing cost include pooling of sampling which also increases the limits of detection (decreases the sensitivity) and may increase the time required to identify a positive test. Disadvantages of RT-PCR include the requirement for a high complexity lab to perform the test, the turn-around time, particularly in some communities, the availability, and the expense. RT-PCR tests can be performed on a variety of different sample sources including saliva. The Pac-12 has contracted with Fulgent Laboratories to provide RT-PCR testing for those where local resources are limited or impacted. They will provide results within 24-hours of receiving samples at the laboratory, but additional time is required for shipping. RT-LAMP tests are another test performed in a high complexity lab which are not as sensitive as RT-PCR but can detect relatively low levels of the virus. Rapid PCR tests may also be available, but their sensitivity and specificity vary and the number of tests that can be run at one time is generally limited.

Antigen tests which detect viral proteins are available to each Pac-12 athletic department. There are higher limits of detection by antigen tests as they have relatively lower sensitivity than RT-PCR, but results are available in minutes to hours. The antigen tests can be performed in a low-complexity lab and are less expensive than RT-PCR; therefore, they can be repeated more frequently. It is proposed that antigen tests detect the presence of the virus prior to infectiousness, but this has not yet been definitively demonstrated. One strategy which has been promoted is to test an at-risk population more frequently with antigen tests to make-up for its decreased sensitivity. Neither RT-PCR nor antigen testing has been studied for surveillance testing in asymptomatic populations.

The Pac-12 has adopted a strategy for in-season HROT sports which includes daily antigen testing augmented with weekly PCR testing. Institutions may elect to test more frequently with PCR based on local public health requirements, prevalence in the community or other factors. This strategy was selected because of the accessibility of this testing to every team in the Conference. It is also hoped that local public health officials will consider the frequent testing in this population when considering contact tracing.

COVID-19 Testing After Return to Campus

When returning to campus after being away, the athlete should complete any campus-required quarantine and be tested with an RT-PCR before return to the facility or practicing or competing. Return to campus remains a time of high risk, with Pac-12 data showing the highest rates of positive test clustering in the weeks when student-athletes and students return to campus (see *Return to Campus after Absence*).

COVID-19 Testing Recommendations for Practice and Competition

Off-Season testing:

Off-Season training should consist of weightlifting, conditioning, and lower/intermediate risk of transmission activities. Sports which are categorized as HROT can condition and train with LROT and MROT activities and testing frequency should reflect the activity risk. Testing frequency should be performed in conjunction with the school plan for all students, with additional testing for those which are symptomatic and individuals who have had a high-risk exposure. Regular surveillance testing may be considered based on community prevalence.

If teams or individuals engage in HROT activities, then PCR testing 1x week is recommended.

Although some sports may be categorized as LROT or MROT, time in locker rooms, meals and social contacts will increase risk and should be modified to decrease risk and/or considered in any overall testing strategy.

Pre-season testing:

During the preseason, HROT sports typically engage in activities required for their sport where social distancing is not maintained. The NCAA requires PCR testing once a week or antigen testing three times a week. For MROT or LROT sports, there is no additional recommendation for testing beyond that performed for off-season testing. The Pac-12 COVID Medical Advisory Committee agree this is a reasonable testing strategy during the preseason.

In-Season testing (not including travel):

Recommendations for in-season testing will vary based on the risk of transmission. For LROT sports, recommendations are the same as the off-season. Testing should be performed in conjunction with a school plan for all students plus additional testing for those that are symptomatic or have had a high-risk exposure. For in-season MROT sports, the NCAA requires 25%-50% of student-athletes to be tested every 1 – 2 weeks. The Pac-12 recommends once a week with PCR testing in this population.

HROT sports present unique challenges because physical distancing cannot be maintained during participation. Therefore, more frequent testing is recommended to prevent spread from occurring during sport. The Pac-12 has contracted with Quidel to make available Sofia-2 SARS-CoV-2 antigen testing to perform for frequent testing in HROT sports. This will be done daily in-season on days when practice or competition occur, generally 6 days a week. On at least one day a week, PCR testing will be done concordantly (on the same day). If an antigen test indicates a positive result, the athlete should be isolated, and a confirmatory PCR test performed. Discordant results would prompt evaluation of the cycle threshold (Ct) values and repeat PCR testing to determine further disposition in consultation with an infectious disease expert.

See **Table 4** for summary.

Discordant Results

Positive Antigen Test Confirmation or Clearance: A PCR test should be obtained within 24 hours of a positive antigen test result. If the PCR test is negative, the student-athlete may be reinstated to daily antigen testing cadence and may return to activity (subject to local/state regulations and if deemed appropriate by institution’s medical staff).

Figure 1: Example of the positive antigen test confirmation/clearance cadence.

Red = confirmation of infection/placement into institution’s isolation/quarantine protocol.
 Green = “false positive” and clearance to return to activity/resume regular antigen testing cadence.

A		B	
Day 1*	Day 2	Day 1	Day 2
Antigen (+)	X	Antigen (+)	Antigen (-)
PCR (+)		PCR (-)	

*PCR should be administered within 24 hours of first Antigen (+), which may occur the day following Day 1. Second antigen should not be administered until after PCR results are received.

Incongruent Antigen/PCR Tests: It appears that there are rare individuals who repeatedly have positive antigen tests which are not confirmed by PCR. These individuals are eligible for alternative testing. To qualify, they should have multiple positive antigen tests followed by at least two consecutive PCR negative tests administered over the subsequent 48 – 72 hours. These individuals may switch to a minimum 3x/week PCR testing cadence in lieu of antigen testing (subject to local/state regulations and if deemed appropriate by institution’s medical staff). A negative PCR completed within 48 hours of game time is required to participate in competition.

Figure 2: Example of the incongruent antigen/PCR tests cadence.

Yellow = incongruent antigen/PCR.

Red = confirmation of infection.

Green = “false positive” and clearance to return to activity and begin alternative min. 3x/week PCR cadence.

C			D			E		
Day 1*	Day 2-3	Day 3-4	Day 1	Day 2-3	Day 3-4	Day 1	Day 2-3	Day 3-4
Antigen (+)	Antigen (+)	PCR (-)	Antigen (+)	Antigen (+)	X	Antigen (+)	Antigen (+)	PCR (+)
PCR (-)	PCR (-)		PCR (-)	PCR (+)		PCR (-)	PCR (-)	

Results from testing will be recorded in the Presagia system and de-identified results will be available to inform on-going testing strategy. In addition, results from consented student-athletes will imported into the research portal for further review and analysis.

Daily testing presents enormous logistical challenges for the medical staff, in particular the athletic training staff. Athletic departments should consider augmenting the sports medicine staffs with additional personnel or managing current staff workload by limiting the number of student-athletes participating.

Testing Prior to Travel and Competition

Travel represents unique challenge (see travel section for risk mitigation recommendations). The NCAA recommends testing of student-athletes for COVID-19 with PCR three days prior to departure or with antigen/rapid PCR within one day prior to departure for away competitions. The Pac-12 has additional recommendations.

For football, student-athletes should receive daily antigen testing for each day in which student-athletes are engaged in higher risk of transmission activity, including on practice days, the day of travel and the day of competition. If game day kickoff is scheduled to occur prior to 1:05 pm local, the antigen testing may be done the evening prior to the game. In addition, PCR testing should be performed no more than 48 hours of travelling to a competition for the visiting team or 48 hours prior to the scheduled game time for the home team.

Football game day testing will be performed by SafeSite, an independent testing company contracted by the Pac-12. Mobile labs will be available at each game location. Independent testers will collect swabs at each team hotel. Two swabs will be collected, one for an antigen test and one for a confirmatory PCR in the case of a non-negative antigen test. A Quidel Sofia-2 SARS CoV2 antigen test will be performed at the mobile lab site. If the antigen test is positive, one (1) confirmatory Accula rapid-PCR will be performed. If the rapid-PCR is negative, the antigen test is considered a false-positive and the athlete is cleared to play. If the rapid-PCR is positive, no additional rapid PCRs should be performed and the

team’s testing contact should be notified, the athlete isolated, and appropriate contact tracing performed. The opposing team should be notified team and medical staff should assess if criteria for game cancellation are met in coordination with appropriate team and conference administrators.

For basketball and other HROT sports, student-athletes should receive daily antigen testing for each day in which student-athletes are engaged in higher risk of transmission activity, including on practice days, the day of travel and the day of competition. In addition, a PCR test should be performed no more than 48 hours of travelling to a competition for the visiting team or 48 hours prior to the scheduled game time for the home team.

For MROT and LROT sports, a PCR should be performed with results returned within 48-hours of travel or antigen testing done on day of travel. Team may wish to consider testing when returning from travel.

Some locations may have additional public health or institutional requirements regarding testing which should be clearly communicated to visiting teams and along with strategies to facilitate compliance.

These testing recommendations are a minimum recommendations and institutions and conference administration are free to require more testing.

Table 4: Summary of Testing Recommendations for Student Athletes

	Out of Season	Pre-Season	In-Season	Travel/Competition
HROT	School Plan Symptomatic High-Risk Contact If HROT activities, consider surveillance q 1-2 weeks	PCR testing 1x/week or antigen 3x/week*	6x/week antigen + 1x/week PCR done on same day as antigen test	Football: antigen test day of travel and game day + PCR within 48-hours prior to travel (visiting team) 48-hours prior to kick-off (home team) Basketball (and other HROT): antigen tests day of travel, game day and between game days when teams are practicing + PCR within 48-hours prior to travel (visiting team) 48-hours prior to first event of week (home team)
MROT	School Plan Symptomatic High-Risk Contact If HROT activities, consider surveillance q 1-2 weeks	School Plan Symptomatic High-Risk Contact If HROT activities, consider surveillance q 1-2 weeks	1x/week PCR or 3x/week antigen	PCR within 48-hours of travel or antigen test day of travel. Optional test on return. For home team, PCR test should be administered 48-hours prior to first game of the week if using PCR.
LROT	School Plan Symptomatic High-Risk Contact If HROT activities, consider surveillance q 1-2 weeks	School Plan Symptomatic High-Risk Contact If HROT activities, consider surveillance q 1-2 weeks	School Plan Symptomatic High-Risk Contact If HROT activities, consider surveillance q 1-2 weeks	PCR within 48-hours of travel or antigen test day of travel. Optional test on return. No testing required prior to home competitions.

* NCAA requirement

Post-Recovery Test Exemption

Following recovery of from a Covid-19 infection, individuals are exempt from the surveillance testing cadence for one hundred and fifty (150) days in alignment with NCAA policy. This is based on preliminary evidence of persistence of immunity for five to seven months following recovery and reports of false positive PCRs based on persistent shedding of low levels of viral particles. If someone presents with symptoms consistent with COVID-19, a PCR test should be obtained regardless of prior infection. In keeping with CDC guidance, individuals should be quarantined and otherwise managed in accordance with established school protocols after the 90-day post-infectious window. Post-recovery testing exemption periods are subject to more restrictive local/state regulations and campus policies. Pac-12 teams may schedule competition with non-conference teams with alternate post-recovery testing policies. Non-conference opponent testing minimums will still apply for all individuals who are not in their respective team's post-recovery exemption period.

Testing of High-Risk Contacts

When a positive test occurs, contact tracing will ensue to identify high-risk contacts (see *Contact Tracing*). High-risk contacts of a positive case should be quarantined for the time frame recommended by local public health authorities or per CDC guidelines. Testing of high-risk contact should be considered and should be repeated if the contact becomes symptomatic.

Testing of Staff

Staff should always wear a face covering and maintain physical distancing when possible; however, some "inner bubble" staff such as coaches, strength and conditioning professionals, and athletic trainers may have higher risk encounters than ideal. The NCAA refers to these individuals as Tier 1 and recommends PCR testing once a week or antigen testing three times a week. Pac-12 Covid Medical Advisory Committee has revised its recommendation of antigen testing two times per week to be aligned with the NCAA; once a week PCR or three times a week antigen. When traveling, the whole travel party should be tested with antigen testing on the day of travel and game day. For home competitions, anyone within the box for football or designated staff for basketball should be antigen tested on game day.

Game Officials

Officials and referees may operate in proximity to student-athletes and school personnel during or as part of competition events. As a result, they may create risk for these individuals and may also be at risk for contracting the disease from student-athletes. The Conference and each institution should consider how best to plan for and address these additional risks. For example, the implementation of appropriate distancing and masking practices should be considered, as well as the use of electronic whistles or whistles with a pouch or covering, and should consider how best to ensure that officials are aware of any other competition-specific practices or expectations that will be implemented for risk mitigation purposes (for example, teams not changing benches between periods). Football and basketball have recommendations for testing of officials. See **Appendix 2** for specific recommendations.

Monitoring

Infection rates on each team using this approach will be monitored. If there is an outbreak on a team due to athletic-related activity, all team activity should be halted and the team quarantined. Decisions regarding outbreaks and team quarantine will ultimately be up to local public health officials who ideally are working closely and in concert with institutions' medical staff.

Individually de-identified infection rates in the conference will be reviewed by the SAHWBI board executive committee. Any concerns will be reviewed collaboratively with the local institution.

Research

Outcomes will be tracked in a systematic way for both quality improvement and better understanding if the recommended approach is successful and could be applied to community or school settings.

RESPONSE TO INFECTION / PRESUMED INFECTION

Infected Person

Individuals with infection should be isolated. The individual should be remotely monitored for worsening or development of symptoms and managed medically as indicated. Student-athletes who become infected with COVID-19 should not exercise until they are cleared from isolation. Particularly in young persons, many infections will either not have symptoms or only have mild symptoms. Currently CDC guidelines for asymptomatic, mildly or moderately symptomatic persons is isolation for 10 days. Asymptomatic individuals may be released from isolation 10 days after their positive test. Symptomatic patients should have improvement in symptoms and should be afebrile for 24 hours without the aid of fever reducing agents. For those with severe symptoms or immunocompromised persons, a minimum of 20 days isolation is recommended, and the student-athlete must have resolution of fever and improvement in symptoms prior to return. The student-athlete should be evaluated and cleared by the team physician prior to beginning a return to exercise. Those that have more prolonged or severe illness should have individualized management.

Arrangements should be made for delivery of food to the infected student-athlete and their quarantined contacts.

Diagnosis While Traveling

If a member of the travel party is diagnosed while traveling, they should be isolated upon diagnosis and may not travel back with the team or use public forms of transportation. The host medical staff should assist the visiting institution regarding transportation, access to testing and medical evaluation as appropriate. The Pac-12 has contracted with AirMed as an option for institutions to use for transportation of individuals diagnosed with COVID-19. If there is space available, high-risk contacts of the infected individual may also return on the AirMed transport. If high-risk contacts are unable to travel via AirMed, they should be placed in a surgical mask, KN95 or N95 mask and transported back to school. Every attempt should be made to minimize contact with others.

Post-Infection

Once cleared from isolation, the student-athlete should meet with a team physician for clearance prior to return to activity, including cardiac testing. Return to exercise should include a gradual, graded return. Current recommendations for return to exercise can be found [here](#).

WORK-UP AND MONITORING OF CARDIAC CONCERNS

Guidelines regarding cardiac testing have been revised several times based on evolving information and expert opinion based on developing experience. Initially, ECG and troponin were recommended by the Pac-12 COVID Medical Advisory Committee prior to return to play. In the 8/10/20 update, the addition of an echocardiogram was recommended in all Pac-12 student-athletes. This has, to date, been low yield for the diagnosis of cardiac issues related to COVID-19 in asymptomatic or mildly symptomatic individuals. Current guidelines from the [NCAA-American Medical Society for Sports Medicine](#) were

revised on 11/3/2020. We recommend Pac-12 physicians follow these guidelines. For many student-athletes with asymptomatic or mild illness, an ECG and troponin are reasonable in conjunction with evaluation and clearance by a physician prior to return to activity. If clinically indicated, or with moderate/severe illness, an echocardiogram should be considered. Consultation with a cardiologist is recommended in most cases prior to ordering a cardiac MRI. All Pac-12 institutions are encouraged to report their de-identified cardiac data to the *Outcomes Registry for Cardiac Conditions in Athletes (ORCCA Study) – COVID-19* to enhance ongoing assessment.

CONTACT TRACING AND RISK OF CONTACT

To date, transmission of infection in Pac-12 teams through athletic activity transmission has been infrequent, and transmission is believed to have occurred primarily with household or social contact.

Contact tracing guidance may be different from state to state or county to county. In some jurisdictions, a close contact may be defined differently based on the various mitigation strategies employed in the Pac-12, which occur in almost no other setting. These strategies include frequent testing of the asymptomatic population, strict face covering use, and rigorous attention to hygiene and disinfection. Contact tracing may be performed by either public health officials, athletic staff, or university health center staff, in cooperation with local public officials. As contact tracing is time consuming, Pac-12 athletic departments should work closely with local health departments to ensure adequate capacity for contact tracing. If capacity is inadequate, Pac-12 institutions should consider the need and benefit of training on-site personnel through accepted courses such as the Coursera class, John Hopkins training course and other CDC-endorsed trainings.

The CDC defines close contact as someone who was within 6 feet of an infected person for a cumulative total of 15 minutes or more over a 24-hour period starting from two days before illness onset (or, for asymptomatic patients, two days before test specimen collection) until the time the patient is isolated. Close contacts of infected individuals should be determined by contact tracers, working in coordination with local public health officials and by following required contract tracing protocols. The CDC has decreased the length of recommended quarantine for asymptomatic individuals to 10 days, or 7 days if there is a negative COVID-19 test. The COVID-19 test may be performed 48 hours prior to the 7-day mark. The Pac-12 provided de-identified data in conjunction with other NCAA schools which assisted the CDC in their considerations of this recommendation. Quarantine length should be based on CDC recommendations or that recommended by local public health authorities.

Contact time during practice and competition may be estimated or be assessed quantitatively by review of practice and game film or using activity tracker chips. Contact tracers may wish to take into consideration that in HROT activities student-athletes are tested every day prior to participation and therefore it is unlikely that an infectious athlete will be participating.

TRAVEL

Travel during the COVID-19 pandemic presents challenges for individuals and teams who travel for individual reasons and for team competition. Travel on chartered and commercial air carriers, through airports, on chartered buses, vans and in private vehicles presents unknown risk for infection and should be limited when possible. During travel for personal or work-related reasons, strict adherence to face coverings, hand hygiene and physical distancing when possible should be maintained. Quarantine or testing may be required by local public health or institutions upon return from travel. A travel protocol that includes physical distancing as possible, universal masking for all individuals travel with others by

private car, van, chartered bus, or chartered plane should be created. The travel protocol should properly be communicated to everyone in the travel party and for individuals' travel.

Travel for Competition

During the COVID-19 pandemic, travel parties should be limited to essential personnel ONLY (student-athletes, coaches, administrators, and medical staff) who comply with face coverings, hygiene, physical distancing, and testing procedures. Each Pac-12 Institution should have an ongoing evaluation regarding the risk of travel related to all forms of travel. Risks of travel should be carefully considered and if possible, competitions should be scheduled to occur close to home minimizing travel and avoiding overnight stays.

Mitigation strategies are recommended for all team travel. First, universal masking, physical distancing when possible and hand hygiene are the core strategies. Consider wearing a KN95 for team travel. It is also recommended to hand sanitize upon boarding the plane and sanitizing the arm rests and tray tables prior to use. Assigned seating charts that remain unchanged for all modes of travel is preferred. Strategic placement of individuals who are roommates, a defined cohort, and appropriate intermixing of those who have previously been infected/recovered within the prior 150 days. **No one who is symptomatic, infected (even if asymptomatic), or a high-risk contact of an infected person should travel.**

For chartered travel on planes, the following additional mitigation strategies are recommended. If possible, the middle seat in all rows should remain empty. Masks should be worn during the entire flight. Eating in-flight should be avoided. Flight attendants should limit their passes through the cabin.

For teams that travel commercially, airlines which maintain open middle seats and have robust COVID-19 prevention plans should be used whenever possible. Eating in-flight or in the airport is not recommended. Hand sanitizer and sanitizing wipes should be given to everyone in the travel party to use during travel. Teams and staff should also occupy the same section of the plane, if possible. They should attempt to board later in the boarding process and deboard as soon as possible. Face coverings should always be worn and recommended hygiene should be maintained. KN95 masks could be considered, if available.

For teams that travel via motor vehicle, there should be ample spacing on buses and cars/vans should not be overfilled. All passengers should wear face coverings during travel and the vehicle should be well-ventilated with open windows. Eating is not recommended during motor vehicle travel.

Testing per the Pac-12 Conference guidelines should be followed.

Team hotel

Athletes and staff should have single occupancy rooms or rooms shared by current roommates. Face coverings should be worn whenever out of the room. Team meetings should be virtual when possible. Team meals should be pre-packaged or grab and go options and eaten outside, away from other people, or in the room. Alternatively, if eaten in a ballroom the number of student-athletes being fed at any one time should be decreased and eating at a table alone or with one household contact is acceptable. Lingering in eating spaces is also not recommended. Visitors and family should be restricted at team hotels. Likewise, staff should not meet or visit with anyone outside the travel party.

Recruiting

Coaches who travel for recruiting purposes and come into contact with individuals outside of their living unit should quarantine for a minimum of 7 days and have a negative COVID-19 test prior to re-engagement with other staff or student-athletes. Prospective student-athletes who arrive by air travel and anyone who accompanies them should be screened for symptoms and fever, always wear face coverings, practice appropriate hygiene, and always maintain physical distancing. When interacting with coaches and student-athletes, all parties should wear face coverings. Ideally, recruiting should be virtual.

SUSPENSION OR DISCONTINUATION OF COMPETITION

We affirm the principals laid out in the 8/10/20 document for the suspension or discontinuation of competition. Attempting to play sports during the COVID-19 pandemic involves some level of risk. The above strategies and guidelines have been made to try to mitigate that risk to a level that allows for reasonable safety through strict policies and surveillance testing; however, the situation needs to be continually reassessed on individual institutional and local levels, as well as at the conference, and national levels. If a student-athlete deems the potential health risks do not merit play (or continued play), their scholarship will be honored.

From an institutional, conference, local, state, and national level, considerations regarding suspension or discontinuation of activity where physical distancing cannot be maintained include:

- 1) Inability to isolate new positive cases and/or quarantine high-risk contacts
- 2) Lack of availability or inability to perform testing at the recommended frequency, including the ability to test within 24 hours of competition and have results prior to that competition
- 3) Inability to perform adequate contact tracing
- 4) Local public health officials deem that hospital resources are in danger of being overwhelmed
- 5) Lack of access or ability to perform recommended cardiac evaluation
- 6) Inability for medical staff provide adequate care for an institution's student-athletes because of increased workload
- 7) Uncontrolled community/campus spread
- 8) Local public health official's restrictions on group athletics

RESUMPTION OF CONTACT/COMPETITION

Resumption of contact/competition after a pause can be considered when the following criteria are met. There may be other considerations that are important but not listed.

- 1) COVID 19 is not actively spreading uncontrolled among the school community
- 2) Access and ability to complete cardiac evaluation on those who do test positive (troponin, EKG, echo, CMRI)
- 3) Testing access and capacity to satisfy testing recommendations above, including the ability to test within 24 hours of competition and have results prior to that competition
- 4) Capability to isolate new positive cases and quarantine high-risk contacts. Campus or community access to housing and food options to effectively ensure basic conditions for successful quarantine and isolation
- 5) Adequate local health care capacity as determined by local public health officials

- 6) Ability to provide adequate care for the institution's student-athletes

CONCLUSION

The continuation of sport is desirable for many reasons, including the physical and mental health of student-athletes. The Pac-12 Covid Medical Advisory Committee has developed strategies based on rigorous policies and procedures which include cleaning, disinfection, and operations modification to ensure social distancing when possible, and frequent testing for COVID-19 in order to prevent transmission of infection. Thus far, it does not appear that infections have been transmitted due to sporting activity, but rather, individuals who are infected typically contract infection through social or household contact. Frequent testing has allowed early identification of infected individuals with appropriate contact tracing and quarantine. We believe it is reasonable to continue to athletic participation with the current hygiene, social distancing, and testing plans in place.

Updated December 4, 2020

Appendix 1: Activity and the Risk of COVID-19 Transmission

The purpose of this table is to define lower, intermediate, and higher risk of COVID-19 transmission and provide examples of activities in each sport which fall within each category in order to ensure consistency among schools.

Definition of Risk:

LOWER risk of viral transmission means that the risk of an individual getting infected from participation in that activity if it is unlikely that someone in the group is positive and quarantine is typically not necessary.

INTERMEDIATE risk of viral transmission means that the risk of an individual getting infected if someone in the group is positive is possible but relatively unlikely. There may be mitigating factors such as use of a mask, indoor or outdoor location, that may increase or decrease risk and alter quarantine decision-making.

HIGHER risk of viral transmission means that an individual has a reasonable potential of getting infected during that activity if someone participating is positive. Most individuals with a higher risk of viral transmission contact will require quarantine. The use of daily surveillance testing hours prior to this contact may obviate this need.

The lists are not comprehensive, serves as a guideline/framework and it is also important to keep in mind:

- Transmission of the virus is much less likely outdoors vs. indoors. While group size per se does not increase the risk of an activity, if it occurs indoors, particularly with poor ventilation, risk of transmission does increase. This should be taken into consideration when planning activities and group size reduced appropriately in indoor spaces.
- The use of face coverings decreases the risk of viral transmission. Certain activities which may be higher risk can potentially be reduced to intermediate risk with the use of face coverings. Face covering should be worn whenever possible.
- This document lists sport-related activity and does not focus on all risks associated with sidelines, time outs, water breaks, huddles, celebrations, arguments, or the myriad of other things that occur during games and practices that may increase risk and need to be addressed when planning.

Transmission risk	Features	Football examples	Soccer examples	Volleyball examples	Basketball examples
Lower	<ul style="list-style-type: none"> Spacing > 6 feet always maintained (including during pre- and post-training activities and during any breaks) No physical contact with other athletes Shared equipment 	<ul style="list-style-type: none"> Receivers running routes/catching passes “on air” Tackling drills using shared pad Individual drills not against another player 	<ul style="list-style-type: none"> Spaced groups for passing, receiving, finishing, or technical drills 	<ul style="list-style-type: none"> Individual drills and “Routines” (i.e., Pepper, Block Moves, Pancakes) Serve/Pass/Receive/Spike Hitting lines with setter/s and one group (Middles, Outsides). No blockers. 	<ul style="list-style-type: none"> Individual or paired shooting drills Individual dribbling drills Passing drills Spaced defensive drills
Intermediate*	<ul style="list-style-type: none"> Spacing > 6 feet mostly maintained Rare and brief physical contact with other athletes not intended but may occur No face-to-face time anticipated 	<ul style="list-style-type: none"> Receivers running routes with defense Offensive walk through (no defense) Defensive walk through (no offense) Position specific drills with only brief physical contact 	<ul style="list-style-type: none"> Possession drills Small sided games in larger space and maintaining > 6 feet between players (no tackling) 	<ul style="list-style-type: none"> Full offense drills (no defense or minimal defense-i.e., no defense at net) Full defense drills (no offense or minimal offense-i.e., no offense at net) Drills with multiple players on court but no net play 	<ul style="list-style-type: none"> 5-on-0 transition Offense running plays (no defense) Defense running plays (no offense) Group shooting drills
Higher	<ul style="list-style-type: none"> Spacing not maintained Close face-to-face time anticipated Clustering of groups (sidelines, huddles, time outs, celebrations) 	<ul style="list-style-type: none"> Running plays (at any speed) with offense and defense Any player to player blocking drill Scrimmage and games Drills with more than brief physical contact 	<ul style="list-style-type: none"> Small sided games in limited space Scrimmage and games Corners and set pieces Post goal celebrations 	<ul style="list-style-type: none"> Net play with multiple blockers and hitters at same time Scrimmage and games Post point coming together of players/Team huddles Traditional timeouts during a game 	<ul style="list-style-type: none"> 3-on-2, 2-on-1 Rebounding drills Offense vs. defense Scrimmage and games Timeouts and huddles

Transmission risk	Features	Gymnastics examples	Baseball/Softball examples	Golf examples	Tennis
Lower	<ul style="list-style-type: none"> • Spacing > 6 feet always maintained (including during pre- and post-training activities and during any breaks) • No physical contact with other athletes • Shared equipment 	<ul style="list-style-type: none"> • Gymnastics meets • Gymnastics practices 	<ul style="list-style-type: none"> • Bullpen sessions • Batting practice with no catcher • Defensive drills-ground ball work, • Base running • Outfield technique drills (line drills, outfield throw, pop up comm) • Batting cage • PFP (Pitcher fielding practice) • Catcher drills (throw downs, blocking/technique drills) 	<ul style="list-style-type: none"> • Driving Range • Golfing (maintaining distance from others) 	<ul style="list-style-type: none"> • Singles play with each SA on their own side of the court
Intermediate*	<ul style="list-style-type: none"> • Spacing > 6 feet mostly maintained • Rare and brief physical contact with other athletes not intended but may occur • No face-to-face time anticipated 	<ul style="list-style-type: none"> • Warm-ups before meets • Circuits which involve high amounts of body weight exercises that are spotted 	<ul style="list-style-type: none"> • Full defense drills-play situation • Batting practice with catcher-bunt defense drill • Base running/tag drills-Run down drill 	<ul style="list-style-type: none"> • >1 Riding in Golf Cart 	<ul style="list-style-type: none"> • Doubles Play
High	<ul style="list-style-type: none"> • Spacing not maintained • Close face-to-face time anticipated • Clustering of groups (sidelines, huddles, time outs, celebrations) 	<ul style="list-style-type: none"> • Extended Spotting (especially bars) • Team holding areas(corrals) during 3/4 way meets 	<ul style="list-style-type: none"> • Dugout use 		

Transmission risk	Features	Lacrosse	Track/Cross Country examples	Rowing examples	Beach Volleyball examples
Low	<ul style="list-style-type: none"> Spacing > 6 feet always maintained (including during pre- and post-training activities and during any breaks) No physical contact with other athletes Shared equipment 	<ul style="list-style-type: none"> Full/half field passing Footwork drills not against another player Shooting drills Non-contact ground ball drills 	<ul style="list-style-type: none"> Individual base runs or >6 feet side by side distance from another runner Individual running drills/practice heats Workouts - adequate spacing available for passing other runners 	<ul style="list-style-type: none"> Erg/Stationary bike outside or in own home Rowing in single shell 	
Intermediate*	<ul style="list-style-type: none"> Spacing > 6 feet mostly maintained Rare and brief physical contact with other athletes not intended but may occur No face-to-face time anticipated 	<ul style="list-style-type: none"> Skeleton walk through Position specific drills Small field work 	<ul style="list-style-type: none"> Workouts - athletes pass each other on narrow trail or sidewalk Running behind another runner (drafting) for <15 minutes XC: Races - staggered start times TF: Races - alternating lanes filled 	<ul style="list-style-type: none"> Small group erg/bike training with 12' distancing Large group erg/bike training Rowing in shells (any number) 	<ul style="list-style-type: none"> Full offense drills (no defense) Full defense drills (no offense)
Higher	<ul style="list-style-type: none"> Spacing not maintained Close face-to-face time anticipated Clustering of groups (sidelines, huddles, time outs, celebrations) 	<ul style="list-style-type: none"> Running plays (at any speed) Scrimmage/games 1v1 locked up drills Face-off drills 	<ul style="list-style-type: none"> Running behind another runner (drafting) for >15 minutes XC: Standard race TF: Races - lanes filled 		<ul style="list-style-type: none"> Net play Scrimmage

Transmission risk	Features	Wrestling examples	Water polo	Swim & Dive examples	Skiing examples
Lower	<ul style="list-style-type: none"> • Spacing > 6 feet always maintained (including during pre- and post-training activities and during any breaks) • No physical contact with other athletes • Shared equipment 	<ul style="list-style-type: none"> • Stance motion while social distancing 	<ul style="list-style-type: none"> • Swimming: Individual athlete per lane unless living together • Spaced groups for passing, receiving, finishing, or technical drills • 	<ul style="list-style-type: none"> • Individual athlete per lane 	<ul style="list-style-type: none"> • Trail running, roller skiing, outdoor biking (alone or distanced) • Ski lift line with chair spacing
Intermediate*	<ul style="list-style-type: none"> • Spacing > 6 feet mostly maintained • Rare and brief physical contact with other athletes not intended but may occur • No face-to-face time anticipated 	<ul style="list-style-type: none"> • Group circuit in wrestling room with more than 10 people 	<ul style="list-style-type: none"> • Sharing lanes • Possession drills • Full offense drills (no defense) • Full defense drills (no offense) • Small sided games in larger space/maintaining > 6 feet between players if possible 	<ul style="list-style-type: none"> • Sharing lanes 	<ul style="list-style-type: none"> • Race day scenario with modified mass start format (XC) • Race day scenario with athletes overtaking one another (XC) • Race day scenario start staging area and start gate (Alp) • >1 per lift chair (Alp)
Higher	<ul style="list-style-type: none"> • Spacing not maintained • Close face-to-face time anticipated • Clustering of groups (sidelines, huddles, time outs, celebrations) 	<ul style="list-style-type: none"> • Drill instruction • Hand fighting • Live wrestling • Sports game • Partner circuits 	<ul style="list-style-type: none"> ☒ Small sided games in limited space ☒ Scrimmage and games 		

Transmission risk	Features	Acrobatics and Tumbling Examples	Field Hockey	Conditioning/Weightlifting
Lower	<ul style="list-style-type: none"> ● Spacing > 6 feet always maintained (including during pre- and post-training activities and during any breaks) ● No physical contact with other athletes ● Shared equipment 	<ul style="list-style-type: none"> ● Tumbling 	<ul style="list-style-type: none"> ● Full/half field passing ● Footwork drills not against another player ● Shooting drills ● Non-contact ground ball drills 	<ul style="list-style-type: none"> ● Warm-up ● Stretching ● Injury prevention exercises ● Conditioning (maintaining distance) ● Agility
Intermediate*	<ul style="list-style-type: none"> ● Spacing > 6 feet mostly maintained ● Rare and brief physical contact with other athletes not intended but may occur ● No face-to-face time anticipated 		<ul style="list-style-type: none"> ● Skeleton walk through ● Position specific drills ● Small field work 	
Higher	<ul style="list-style-type: none"> ● Spacing not maintained ● Close face-to-face time anticipated ● Clustering of groups (sidelines, huddles, time outs, celebrations) 	<ul style="list-style-type: none"> ● Full routine practice ● Competition 	<ul style="list-style-type: none"> ● Running plays (at any speed) ● Scrimmage/games ● 1v1 locked up drills ● Face-off drills 	<ul style="list-style-type: none"> ● Spotting

Appendix 2. Officials Testing and Masking Recommendations

Sport	Regular Season Competition	Officials' Proximity to Competitors
Baseball	<p>No testing if masking maintained for non-home plate officials.</p> <p>For any official who works behind home plate: Preferential use of hand signals and masking if tolerated.</p> <ul style="list-style-type: none"> • PCR: within three days prior to first scheduled competition for that week. • Antigen/rapid PCR: same day as each competition. 	<p>For non-home plate officials: on the field of play near participants; can distance and be universally masked. Potential for occasional close contact but would be momentary (close call at a base/plate).</p> <p>For home plate officials: prolonged close contact between official and catcher. Masks required when speaking with participants/coaches.</p>
Basketball (more than one game and one team per week)	<p>Officials working 1 game in a week:</p> <ul style="list-style-type: none"> • PCR test prior to travel, coordinated by Conference office • POCT on game day, results prior to contest <p>Masks required during non-playing time conversations. Whistle with pouch or electronic.</p>	<p>On the court near student-athletes. Masking not feasible during competition; masks required when speaking with participants/coaches.</p>
Basketball (one or two games per week with same team at same location, not separated by > one day)	<p>Officials working 2 or more games in a week:</p> <ul style="list-style-type: none"> • Min 3 x week testing non-consecutive days • POCT on game day, results prior to contest (POCT may be included in 3x week testing cadence) <p>Masks required during non-playing time conversations. Whistle with pouch or electronic.</p>	<p>On the court near student-athletes. Masking not feasible during competition; masks required when speaking with participants/coaches.</p>
Cross Country	<p>No testing. Masks required during competition/while on-site.</p>	<p>On the course (mainly start and finish areas) near participants but can distance most of the time from participants; can be universally masked. Clerking positions interact with student-athletes-can be universally masked.</p>
Fencing	<p>No testing. Masks required during competition/while on-site.</p>	<p>Judges distanced from range and contact with participants; can be universally masked.</p>
Field Hockey	<p>No testing. Masks preferred during competition/while on-site; masks required during non-playing time conversations.</p>	<p>On the field near participants. Masking not always feasible during competition; masks required when speaking with participants/coaches.</p>
Football	<p>Testing prior to competition:</p> <ul style="list-style-type: none"> • PCR: within three days prior to scheduled competition for that week. • Antigen/rapid PCR: same day as each competition. <p>Masks required during non-playing time conversations.</p>	<p>On the field of play near participants. Masking not feasible during competition; masks required when speaking with participants/coaches.</p>
Golf	<p>No testing. Masks required during competition/while on-site.</p>	<p>Can distance and universally mask on the course. Masks required when speaking with participants/coaches.</p>

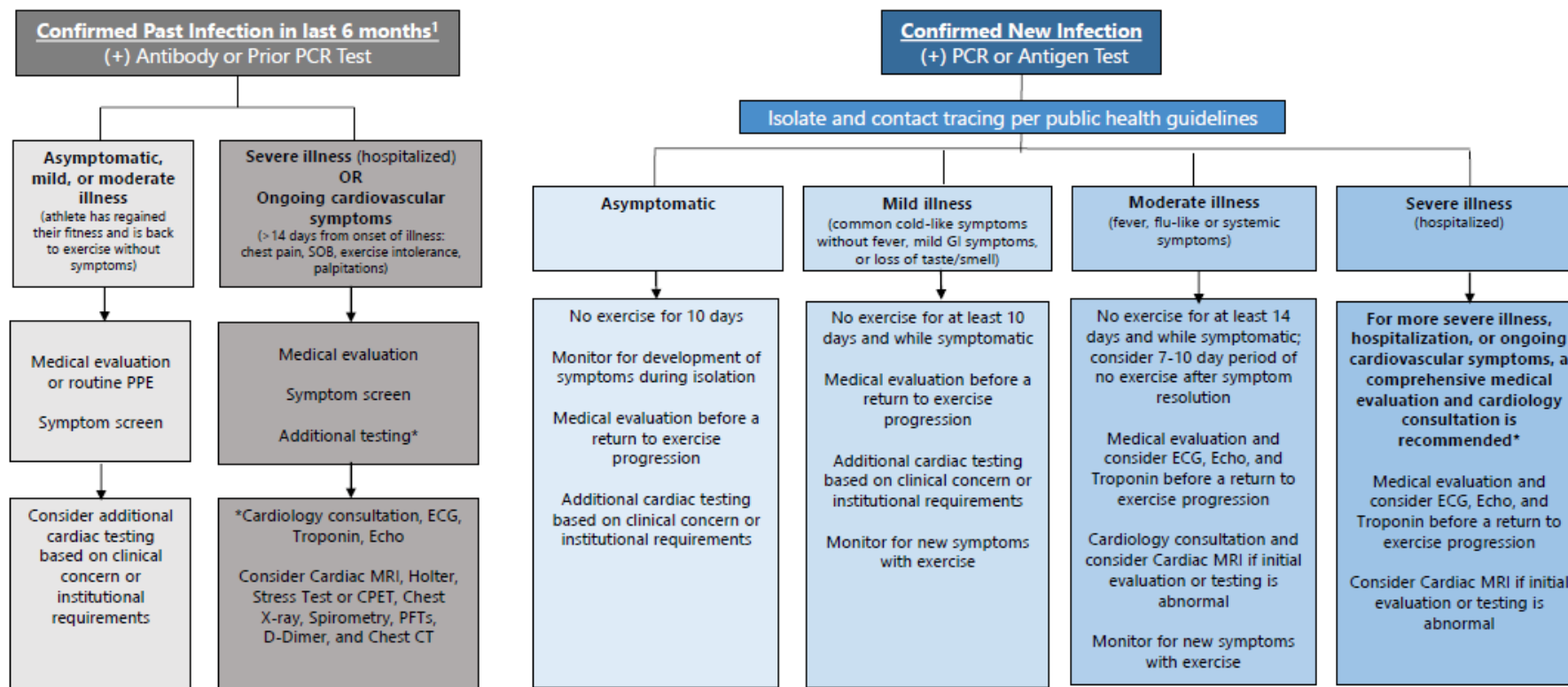
Gymnastics	No testing. Masks required during competition/while on-site.	On the gymnastics floor near the apparatus but no direct contact with participants. Can distance and be universally masked.
Ice Hockey (more than one game and one team per week)	PCR or antigen test three times per week on non-consecutive days. Masks required during non-playing time conversations. Whistle with pouch or electronic.	On the ice near participants. Masking not feasible during competition; masks required when speaking with participants/coaches.
Ice Hockey (one or two games per week with same team at same location, not separated by > one day)	PCR test within three days prior to scheduled game, or, if two games, prior to second scheduled game, OR Antigen/rapid PCR test same day as each scheduled game. Masks required during non-playing time conversations. Whistle with pouch or electronic.	On the ice near participants. Masking not feasible during competition; masks required when speaking with participants/coaches.
Indoor Track and Field	No testing. Masks required during competition/while on-site.	On the track near participants but can distance from participants, brief conversations with participants but can be universally masked. Clerking positions interact with student-athletes- can be universally masked.
Lacrosse (Men's and Women's)	No testing if masking maintained. Masks required during competition/while on-site.	On the field near participants. Masking not always feasible during competition; masks required when speaking with participants/coaches.
Outdoor Track and Field	No testing. Masks required during competition/while on-site.	On the track near participants but can distance most of the time from participants, can be universally masked. Clerking positions interact with student-athletes-can be universally masked.
Rowing	No testing. Masks required during competition/while on-site.	Officials can distance from participants and be universally masked.
Skiing	No testing. Masks required during competition/while on-site.	Judges distanced from competition area and contact with participants, can be universally masked.
Soccer	No testing. Masks required during competition/while on site.	On the field near participants. Masking not always feasible during competition; masks required when speaking with participants.
Softball	No testing if masking maintained for non-home plate officials. For any official who works behind home plate: Preferential use of hand signals and masking if tolerated. <ul style="list-style-type: none"> • PCR: within three days prior to first scheduled competition for that week. • Antigen/rapid PCR: same day as each competition. 	For non-home plate officials: on the field of play near participants; can distance and be universally masked. Potential for occasional close contact but would be momentary (close call at a base/plate). For home plate officials: prolonged close contact between official and catcher. Masks required when speaking with participants/coaches.
Swimming & Diving	No testing. Masks required during competition/while on-site. May need to have multiple masks due to humidity. Whistle with pouch or electronic.	On the pool deck near participants, however, could distance and maintain brief periods of time near participants - can be universally masked.
Tennis	No testing. Masks required during competition/while on-site.	Official on perch courtside; line judges also distance from court and contact with participants, can be universally masked. Ball handlers may encounter closer but brief contact with participants, can be masked.

Volleyball	No testing. Masks required during competition/while on-site.	Up official courtside (above net); down official on sideline but can distance from participants, can be universally masked. Line judges encounter closer but brief contact with participants, can be universally masked.
Water Polo	No testing. Masks required during competition/while on-site.	On the pool deck distanced from participants, can be universally masked. Ball handlers and goal judges may encounter closer but brief contact with participants, can be universally masked.
Wrestling	<ul style="list-style-type: none"> • PCR: within three days prior to scheduled meet/competition for that week, or within three days of the second meet if back-to-back. • Antigen/rapid PCR: same day as each competition. <p>Masks required during competition/while on-site.</p>	On the mats near participants. Can maintain distancing around the mat but officials on the mat are near participants, can be universally masked.

Appendix 3: AMSSM Cardiac Considerations for College Student-Athletes during the COVID-19 Pandemic

Cardiac Considerations for College Student-Athletes during the COVID-19 Pandemic

*Recommendations for cardiac testing are based on expert consensus with limited evidence



¹Antibody testing alone should not determine cardiac work-up

- ECG should be compared to previous when available
- Troponin testing (hs-cTnI or cTnI) should be performed after 48 hours without exercise
- Confirmed myocarditis, pulmonary embolism, or other cardiopulmonary disorder should be managed per medical guidelines

Considerations were developed by an expert panel from the American Medical Society for Sports Medicine and the American College of Cardiology