

RETURN TO SPORT IN THE TIME OF COVID-19

Michele LaBotz MD CAQSM FAAP
InterMed Sports Medicine
Barbara Bush Children's Hospital Scholarship Academy
Tufts University School of Medicine

1

MY DISCLOSURE

- Neither I, Michele LaBotz, nor any family member(s), have any relevant financial relationships to be discussed, directly or indirectly, referred to or illustrated with or without recognition within the presentation

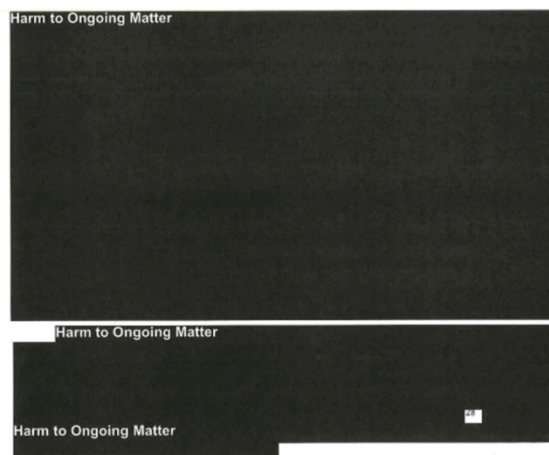
2

Return at community/program level

Return of individual athlete

3

INCOMPLETE INFORMATION























²⁴ Harm to Ongoing Matter

²⁵ Harm to Ongoing Matter

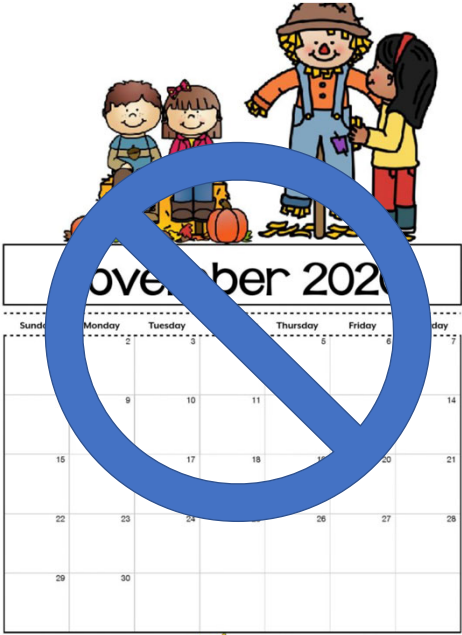
²⁶ The term "troll" refers to internet users—in this context, paid operatives—who post inflammatory or otherwise disruptive content on social media or other websites.

4

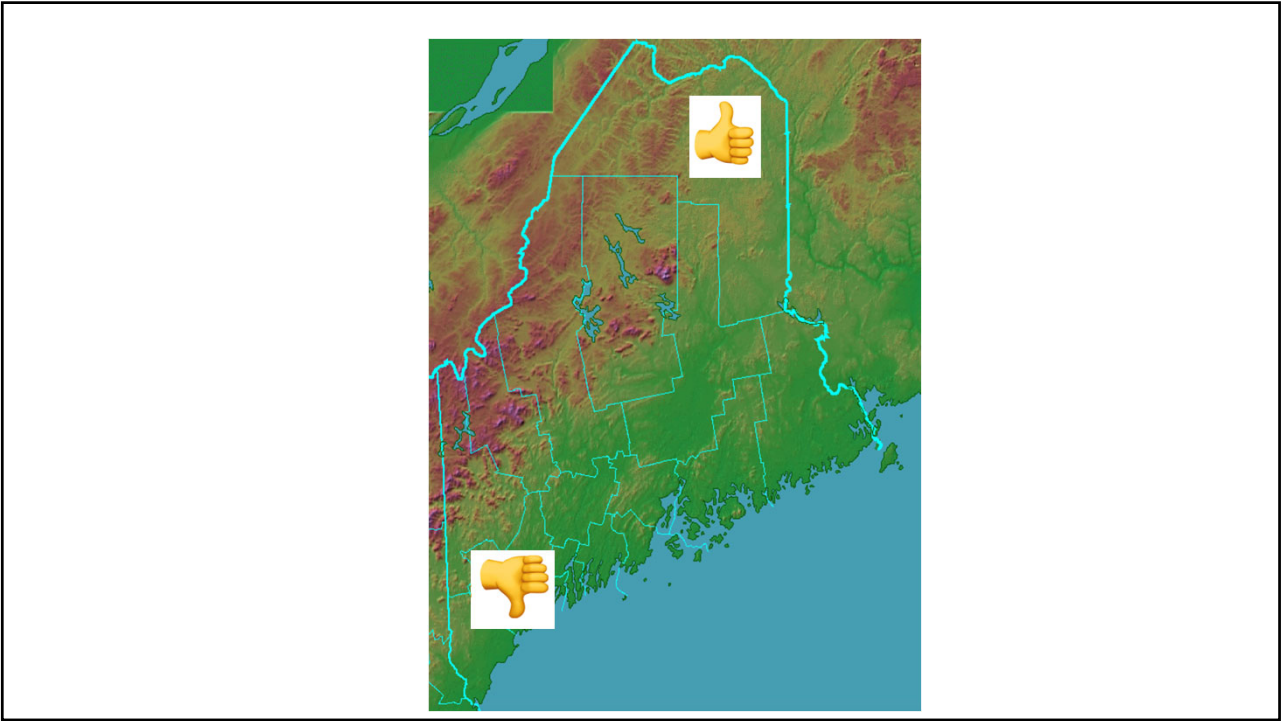
October 2020

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
						
5 	6	7	8	9	10	11 
12 	13	14	15	16	17	18 
19 	20	21	22	23	24	25 
26 	27 	28 	29 	30 	31 	

Calendargratis.com



5



6

HIGH SCHOOL SPORTS

- National Federation of State High School Associations (NFHS)
 - Maine Principals' Association (MPA)
 - Advisory regarding "best principles"
 - Each school district/unit makes own decisions



7

RETURN TO HIGH SCHOOL SPORTS

- Consensus between
 - Maine Principals' Association
 - Maine School Superintendents Association
 - DHHS/Mills administration
- Assure consistency between scholastic sports and recommendations from Maine's Dept. of Economic and Community Development
 - General guidance for community sports activities
 - Fall 2020: no high school football or volleyball

8

YOUTH SPORTS

'High-risk' youth sports skirt Mass. coronavirus rules to compete
 By Kay Lazar and Jenna Ciccotelli Globe Staff and Globe Correspondent, Updated August 11, 2020, 2:15 p.m.

- Typically
 - Youngest athletes
 - Fewest resources
 - Variable oversight
 - Lowest level of coach training



9

REQUIREMENTS FOR RETURN TO SPORT

- Community factors
 - COVID prevalence
 - COVID burden
 - COVID-related resources
- Program resources
 - Compliance with CDC recommendations
 - Cleaning supplies
 - Adequate space for distancing
 - Capacity to enforce "best practices"
 - Particularly behavior related



10

ASSESSING COVID-RELATED RISK

- Sport type
 - Physical proximity
 - During participation
 - On sideline (i.e. “dugouts”)
 - Shared equipment
 - Balls/bats
 - Mats
 - Protective gear
 - Team size



11



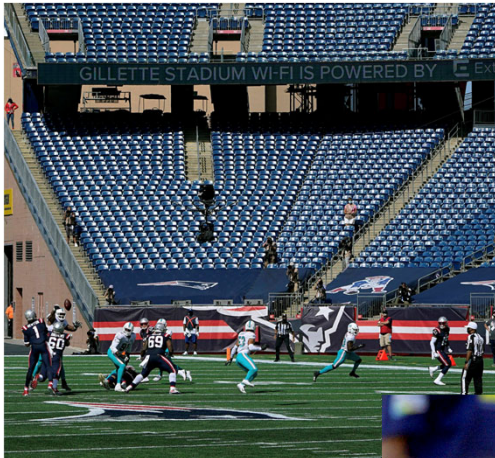
12

ASSESSING COVID-RELATED RISK

- Player characteristics
 - Age
 - Players/family members at higher risk for severe illness
- Non-essential personnel
- Travel
- Program resources



13



14

YOUTH SPORTS GAME PLAN

Reduce the Spread of COVID-19

LOWER RISK
➔
HIGHER RISK



Skill-building drills
at home



Team practice



Within-team
competition



Competition with
teams from your area



Full competition from
different areas



cdc.gov/coronavirus

CS 317099-E 05/28/2020

15

LETTER FROM COACHES

Youth sport administrators and coaches can customize the letter below to help communicate with parents about steps the league or team is taking to protect athletes and families.

Click the text highlighted in **[YELLOW]** to tailor your messaging. The header and footer can also be customized by double-clicking in and changing shape colors. Right click on the logo and select 'change picture' to replace the placeholder with your logo.

—DELETE this box when ready to proceed —

LOGO
Right Click > Change Picture

Dear Parents,

First and foremost, we hope that you and your loved ones are safe and healthy. We have received questions from the community about if and how COVID-19 will change this year's athletic season. We know this outbreak has been stressful to many and recognize that exercising and participating in activities like sports can be a healthy way to cope with stress and connect with our community. After careful thought and planning, we are excited to let you know that we plan to resume youth sports while following CDC considerations to protect players, families, and our community.

The health and safety of our athletes, staff, and volunteers remain our highest priority. Below, you will find a summary of actions we are taking to help ensure we are lowering COVID-19 risk as much as possible while also allowing our athletes to play. We are:

- Intensifying cleaning, disinfection, and ventilation within our facilities and premises by **[insert examples, such as cleaning and disinfecting frequently touched surfaces on the field, court, or play surface at least daily or between use as feasible, cleaning and disinfecting shared objects and equipment between use, and ensuring safe and correct use and storage of disinfectants]**

https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/youth-sports.html#anchor_1590786034

16

PROMOTE BEHAVIORS THAT REDUCE SPREAD

- Know when to stay home
- Hand hygiene
 - Adequate supplies
- Signs and messaging
 - In high traffic areas
 - PA announcements



17

MAINTAIN HEALTHY ENVIRONMENTS

- Minimize shared objects and shared spaces
 - Adequate supplies of balls/other equipment
 - Avoid use of locker rooms
 - Separate belongings
- Clean and disinfect
 - Adult oversight
 - Schedule for routine cleaning and disinfection



18

MAINTAIN HEALTHY OPERATIONS

- Cohorting during practice and competition
 - Staggered scheduling
 - Community and geography
- Train
 - Coaches/staff
 - Athletes/families
- Clearly stated “sick plan”
- Always consistent with local regulations

19

MAINTAIN HEALTHY ENVIRONMENTS

- Enable social distancing
 - Identify adults for enforcement
 - Structure facilities and protocol
 - Physical markers/barriers
 - Individual skills and drills
 - Outdoor > Indoor
 - Discourage unnecessary physical contact
 - No huddles



20

STAY SAFE ON AND OFF THE FIELD



Stay home if you are sick.



Bring your own equipment and gear (if possible)



Cover your coughs and sneezes with a tissue or your elbow.



Wash your hands or use sanitizer before and after events and sharing equipment.



Tell a coach or staff member if you don't feel well.



cdc.gov/coronavirus

21

MASK USE

- Indoor activity
- By anyone not actively participating

Most important when distancing difficult

BUT

NOT recommended during intense activity



22

RULES VERSUS REALITY



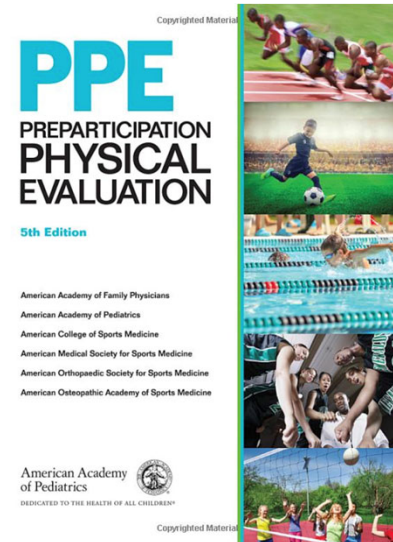
23

INDIVIDUAL RETURN

24

GENERAL MPA PPE RECOMMENDATIONS

- For 2020-1 preparticipation evaluation (i.e. the “other PPE”) recommendations include a complete PPE history and examination for
 - Athletes who have not previously competed at the high school level
 - Ongoing medical conditions
 - COVID-19 infection



<https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Pages/PPE.aspx>

25

GENERAL MPA PPE RECOMMENDATIONS

- Athletes who have previously competed in high school athletics complete PPE health history questionnaire for review by school healthcare personnel
 - School ATCs and/or RNs then make determination about need for add'l eval

■ PREPARTICIPATION PHYSICAL EVALUATION

HISTORY FORM

Note: Complete and sign this form (with your parents if younger than 18) before your appointment.

Name: _____ Date of birth: _____
 Date of examination: _____ Sport(s): _____
 Sex assigned at birth (if M, or intersex): _____ How do you identify your gender? (if M, or other): _____

List past and current medical conditions: _____

Have you ever had surgery? If yes, list all past surgical procedures: _____

Medicines and supplements: List all current prescriptions, over-the-counter medicines, and supplements (herbal and nutritional): _____

Do you have any allergies? If yes, please list all your allergies (e.g., medicines, pollen, food, stinging insects): _____

Patient Health Questionnaire Version 4 (PHQ-4)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (Circle response.)

	Not at all	Several days	Over half the days	Nearly every day
Finding nervous, anxious, or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Little interest or pleasure in doing things	0	1	2	3
Felling down, depressed, or hopeless	0	1	2	3

(A sum of ≥3 is considered positive on either subscale [questions 1 and 2, or questions 3 and 4] for screening purposes.)

GENERAL QUESTIONS

Explain "Yes" answers at the end of this form.

Circle question if you don't know the answer.

	Yes	No
1. Do you have any concerns that you would like to discuss with your provider?		
2. Has a provider ever denied or restricted your participation in sports for any reason?		
3. Do you have any ongoing medical issues or recent illness?		

HEART HEALTH QUESTIONS ABOUT YOU

	Yes	No
4. Have you ever passed out or nearly passed out during or after exercise?		
5. Have you ever had discomfort, pain, tightness, or pressure in your chest during exercise?		
6. Does your heart ever race, flutter in your chest, or skip beats (irregular beats) during exercise?		
7. Has a doctor ever told you that you have any heart problems?		
8. Has a doctor ever requested a test for your heart? For example, electrocardiography (ECG) or echocardiography.		

HEART HEALTH QUESTIONS ABOUT YOU (CONTINUED)

	Yes	No
9. Do you get lightheaded or feel shorter of breath than your friends during exercise?		
10. Have you ever had a seizure?		

HEART HEALTH QUESTIONS ABOUT YOUR FAMILY

	Yes	No
11. Has any family member or relative died of heart problems or had an unexpected or unexplained sudden death before age 35 years (including drowning or unexpected car crash)?		
12. Does anyone in your family have a genetic heart problem such as hypertrophic cardiomyopathy (HCM), Marfan syndrome, arrhythmogenic right ventricular cardiomyopathy (ARVC), long QT syndrome (LQTS), short QT syndrome (SQTS), Brugada syndrome, or catecholaminergic polymorphic ventricular tachycardia (CPVT)?		
13. Has anyone in your family had a pacemaker or an implanted defibrillator before age 35?		

26

SHOULD YOUR ATHLETE RETURN TO SPORT?

- Consider individual risk profile
 - Family members/other contacts "at risk" for poor COVID-related outcomes
 - Individual comorbidities

Common issues with significant increased risk	No or minimal increased risk
-Moderate or severe asthma -Diabetes -Obesity, esp. BMI > 30 (however, BMI is less accurate as an obesity indicator in athletic populations)	-Mild asthma -Sickle cell trait (theoretic concern about possible hypercoagulability) -Hypertension

Harmon KG, Pottinger PS, Baggish AL, et al. Sports Health 4(5):456-8, 2020.

27

RETURN TO SPORT AFTER COVID-19 INFECTION

- Current concern focused on post-infection myocarditis
 - Ohio State University athletes
 - Selected 26 athletes post-COVID recovery
 - 14 were asymptomatic COVID-19 infections
 - 4 of 26 met at least 2 criteria for myocarditis by cardiac MR imaging
 - 2 had related symptoms/2 were asymptomatic
 - 8 additional athletes had evidence of cardiac strain
- Recovered adults in German cohort 2-3 months s/p symptoms
 - 78% with myocardial injury
 - 60% with ongoing myocardial inflammation

Puntmann VO, Carerj ML, Wieters I, et al. Outcomes of Cardiovascular Magnetic Resonance Imaging in Patients Recently Recovered From Coronavirus Disease 2019. *JAMA Cardiol.* Published online July 27, 2020

28

RETURN TO SPORT AFTER COVID-19

- Necessary steps depends upon severity of illness
 - Severe infection/Multisystem Inflammatory Syndrome in Children (MIS-C)
 - Moderate infection
 - Mild infection
 - Asymptomatic infection
- Higher risk for sequela
 - Children participating in higher intensity activity
 - Children >12 years of age

29

INFORMATION SOURCES

- Multiple national level guidance documents
 - American College of Cardiology (July 2020)
 - American Medical Society for Sports Medicine and National Federation of State High School Associations (August 2020)
 - American Academy of Pediatrics (September 2020)
- Assimilated into an ongoing algorithm for Maine providers
 - Considers local prevalence patterns and cardiac resources throughout state
 - Local expertise (T. Miller DO)

30

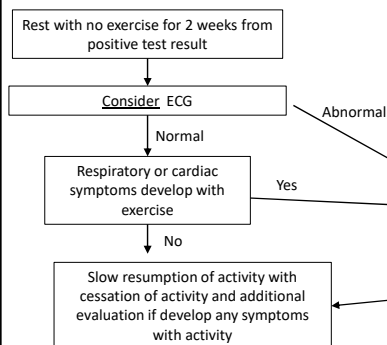
Return to Play for High School Athletes Following COVID-19 Infection

Considerations:

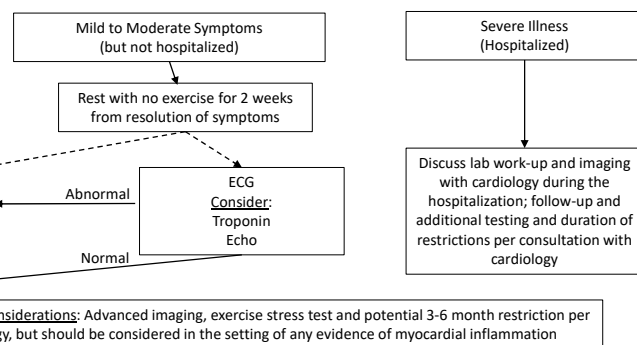
- The proposed clinical shared baseline is based on very limited data regarding the risk of persistent myocardial inflammation following COVID-19 infection. Evidence based recommendations may change as more data emerge.
- The proposed clinical shared baseline applies to high school athletes.
 - College athletes and individuals >17 years old should consider evaluation according to adult sports medicine/cardiology guidelines
 - Multisystem Inflammatory Syndrome in Children (MIS-C) may occur 3-4 weeks following COVID-19 infection. Based on early reporting, >80% of MIS-C cases are in individuals <15 years old. Cardiovascular collapse may be acute and profound with MIS-C
 - The proposed clinical shared baseline does NOT apply to return to play following MIS-C infections
- Restrictions based on myocarditis guidelines (which includes 3-6 month restriction from activity and competitive play, with advanced imaging and additional testing prior to return to play) should be done with cardiology consultation

ALL ATHLETES WITH SUSPECTED OR PROVEN COVID INFECTION NEED TO CONTACT THEIR PRIMARY CARE PROVIDER FOR CLEARANCE TO RETURN TO PLAY

Asymptomatic COVID+



Symptomatic COVID Infection



31

RETURN TO SPORT: ACTIVITY PROGRESSION

- 7 days of progressive activity.

Example from Missouri High School Athletic Association:

- **Stage 1: (2 Days Minimum)** Light Activity (Walking, Jogging, Stationary Bike) for 15 minutes or less at intensity no greater than 70% of maximum heart rate (able to sustain comfortable conversation). NO resistance training.
- **Stage 2: (1 Day Minimum)** Add simple movement activities (e.g. running drills) for 30 minutes or less at intensity no greater than 80% of maximum heart rate.
- **Stage 3: (1 Day Minimum)** Progress to more complex training for 45 minutes or less at intensity 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 intensity no greater than 80% maximum heart rate
- **Stage 5: Return to full activity**

32

TAKE HOME

- Sports CAN be played safely during the pandemic
 - But, there is a spectrum of risk
- “Reality” rather than “rules” determines risk
- Gray zone regarding mask using during high intensity contact activity
- Link to MPA recommendations and PPE forms are on the MAAP website
- Access Maine algorithm for return to play decision-making for patients s/p COVID-19 infection

33

THANK YOU

Michele LaBotz MD FAAP

mlabotz@gmail.com

mlabotz@intermed.com

34