Utilizing Artificial Turf in the Heat

PHYSICAL EDUCATION

If the National Weather Service issues a Heat Advisory, the artificial turf and/or track may not be utilized if the air temperature is over 85° degrees combined with humidity reading of 60% or more. Due to the variety of levels of fitness and/or lack of consistent preparatory exertion in heat conditions, only a grass surface may be utilized. There must be water available outside (cooler, cups) for students if there is a heat advisory issued. If the **National Weather Service** issues a **Heat Warning**, physical education classes should not be held outside during the hours of 11 a.m. to 2 p.m. when the sun is the highest in the sky.

INTERSCHOLASTIC ATHLETIC/ MARCHING BAND

During the first two weeks of the fall pre-season when the National Weather Service issues a Heat Advisory or Warning, practices must be scheduled in the early morning or late evening when the sun is low in the sky to limit heat illness or stroke while athletes are getting acclimated. Practice may not be more than 1 hour in length. The turf and/or track may be used only if the surface temperature is below 100 degrees (heat index = air, field temperature and humidity combined) otherwise, a grass field must be utilized.

The guidelines below are for athletes who have been acclimated for at least 2 weeks. When the National Weather Service issues a Heat Warning for a minimum of 2 hours, there will be NO practice or play on an artificial turf or track surface during the full sun hours of 11 a.m. - 4 p.m. Practice or game play on a grass surface may be no more than one hour in length and no equipment is to be worn (i.e. helmets and pads)

First Reading: 7/25/17 Second Reading: 8/22/17

Adopted by the Burlington School Committee: 8/22/17

Procedures for Artificial Turf Use in the Heat

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Guidelines for hydration and rest breaks:

- 1. A heat gun will be utilized by the Athletic Director or a designee to determine field temperature
- 2. Rest time will include no activity and unlimited hydration intake
- 3. For football, helmets should be removed during rest time
- 4. The site of the rest time should be a "cooling zone" and not in direct sunlight
- 5. When the **National Weather Service** issues a Heat Advisory/Warning: Ice towels and cooling fan will be utilized
- 6. Subpolar suit will be available on site for cold immersion for any player showing signs of heat illness

- 7. **In the event of a game,** if the risk is determined to be in the danger zone (Heat Advisory) according to the National Oceanic and Atmospheric Heat Index chart, the Athletic Director or designee will:
 - Speak with visiting coaches prior to game day to inform them of the heat policy
 - Meet with game officials and visiting coaches to discuss concerns
 - Schedule an extra 5 minute break per half for hydration and rest

Possible scenarios for field use guidelines. The Chart provided includes many variables that should be used when making a final decision on artificial turf participation.

Heat Index (Humidity/Field Temp)

Activity/Rest Guidelines

Under 82° F Humidity under 75% Field Temp 120° F or less	Normal activity: More than 3 water breaks per hour, minimum 3 minutes duration. • If artificial turf temperature is 121° or above, the activity will be moved to grass
82°-86.7° F Humidity under 55% Field Temp 120° F or less	Use discretion for intense or prolonged exercise: more than 3 water breaks per hour, minimum 4 minute duration. • If artificial turf temperature is 121° or above, the activity will be moved to grass
87°-89.9° F Humidity under 60% Field Temp 120° F or less	Maximum practice = 2 hour length. Football-helmet, shoulder pads, shorts. All protective equipment removed for conditioning. For all sports, more than 4 water breaks per hour, minimum of 4 minute duration. Watch at risk players carefully: (obese, diabetic, sickle cell, ADHD) • If artificial turf temperature is 121° or above, the activity will be moved to grass
90°-93.9° F Humidity less than 50% Field temp 100°F or less With Heat Advisory issued by National Weather Service	Possibility of Heat Cramps. Maximum practice = 2 hour length. No protective equipment worn and no conditioning drills. More than 4 water breaks per hour, minimum of 5 minute duration. • If game day, provide 2 extra 5 minute breaks per game.
90°-93.9° F Humidity more than 50% Field temp 100°F or less With Heat Advisory issued by National Weather Service	Heat cramps or exhaustion likely. Heat Stroke possible. Maximum 1 hour practice with no equipment. More than 4 water breaks per hour, minimum of 5 minute duration. Reschedule games.
94° F and above Humidity under 65% Field Temp 100° F or less No Turf Use With Heat Warning issued by National Weather Service	Heat Stroke a definite risk Outdoor practice cancelled

	NWS	В Не	at Ir	ndex		Temperature (°F)								35 2005 00			
		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
_	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
Humidity (%)	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
Ž	55	81	84	86	89	93	97	101	106	112	117	124	130	137			
5	60	82	84	88	91	95	100	105	110	116	123	129	137				
E	65	82	85	89	93	98	103	108	114	121	128	136					
	70	83	86	90	95	100	105	112	119	126	134						
Relative	75	84	88	92	97	103	109	116	124	132							
ati	80	84	89	94	100	106	113	121	129								
%e	85	85	90	96	102	110	117	126	135								
	90	86	91	98	105	113	122	131								no	IAA
	95	86	93	100	108	117	127										4
	100	87	95	103	112	121	132									1	
•			Like	lihood	of He	at Dis	orders	with	Prolo	nged E	xposi	ire or	Strenu	ious A	ctivity		
	Caution						Extreme Caution					anger		Ex	treme	Dange	er

It is important to note that there is not one piece of data that covers air temperature, humidity and turf field temperature when making safety recommendations regarding use of a turf field. The possible scenario chart above was designed by using the NOAA heat index guide above with ball park numbers. Final determination for participation will include all factors and will be at the discretion of the Athletic Director and/or a designee.