

Exertional heat stroke is on the rise and is a threat to the lives of athletes. Exertional heat stroke is currently among the top three reasons athletes die during sport and in the summer months it is the number one reason. What makes these tragedies worse is that exertional heat stroke risks can be minimized through proper heat acclimatization. Sports medicine researchers and advocates indicate that periods of rest and a progressive system of early practices can reduce the instances of exertional heat stroke in athletes. Heat acclimatization in humans is a biological adaptation that controls physiological activities like heart rate and body temperature. The most vital change that occurs is an increase in sweating. Humans who have adapted to hot climates begin sweating earlier and more profusely, controlling their body temperature more efficiently. Another result of this acclimatization is the reduction of body heat production, as it is no longer as important as it is in colder environments. The goal of the acclimatization period is to increase exercise heat tolerance and enhance the ability to exercise safely and effectively in warm and hot conditions. This period should begin on the first day of practice or conditioning. Below is a summary of the Heat Acclimatization requirements.

Diagram 1.7 (1)
SUMMARY OF THE 16-DAY ACCLIMATIZATION PERIOD

(Days 1-5)

1. Days 1 through 5 of the acclimatization period consist of the first 5 days of formal practice. During this time, athletes are not allowed to participate in more than 1 practice per day.
2. If a practice is interrupted by inclement weather or heat restrictions, the practice may recommence once conditions are deemed safe. Total practice time should not exceed 3 hours in any 1 day.
3. A 1-hour maximum walk-through is permitted during days 1–5 of the acclimatization period. A 1-hour recovery period is required between the practice and walk-through (or vice versa).
4. During days 1–2 of the acclimatization period, in sports requiring helmets or shoulder pads, a helmet is the only protective equipment permitted (goalies, as in the case of field hockey and related sports, may not wear full protective gear or perform activities that would require protective equipment).
 - A. Football only: On days 3–5, contact with blocking sleds and tackling dummies may be initiated.
 - B. Field Hockey: On days 3-5 goalie can wear protective equipment with extended breaks.
 - C. Full-contact sports: 100% live contact drills may begin no earlier than day 6.

Beginning on day 6, all protective equipment may be worn and full contact may begin.

(Days 6-16)

1. Beginning no earlier than day 6 and continuing through day 14, double-practice days must be followed by a single-practice day. On single-practice days, 1 walk-through is permitted, separated from the practice by at least 1 hour of continuous rest. When a double practice day is followed by a rest day, another double practice day is permitted after the rest day.
2. On a double-practice day neither practice may exceed 3 hours in duration nor may student-athletes participate in more than 5 total hours of practice. Warm-up, stretching, cool-down, walk-through, conditioning, and weight-room activities must be included as part of the total practice time. The 2 practices must be separated by at least 3 continuous hours in a cool environment.
3. Because the risk of exertional heat illnesses during the preseason heat-acclimatization period is high, it is recommended that an athletic trainer be on site before, during, and after all practices, but it is not required.

Diagram 1.7 (2)

Day	Heat Acclimatization Practice Plan	Sports Equipment/Helmets/Pads
1	One Practice per day (3 hours Total) 1 hour walkthrough after 1 hour of rest	FB-Helmet only; SB and BB catchers equipment allowed *
2	One Practice per day (3 hours Total) 1 hour walkthrough after 1 hour of rest	FB-Helmet only; SB and BB catchers equipment allowed *
3	One Practice per day (3 hours Total) 1 hour walkthrough after 1 hour of rest	FB-Helmet / shoulder pads / blocking sleds / tackling dummies only
4	One Practice per day (3 hours Total) 1 hour walkthrough after 1 hour of rest	FB-Helmet / shoulder pads / blocking sleds / tackling dummies only
5	One Practice per day (3 hours Total) 1 hour walkthrough after 1 hour of rest	FB-Helmet / shoulder pads / blocking sleds / tackling dummies only
6-16	<ul style="list-style-type: none"> • Alternate double practice days w/ a single practice day or a rest day. • <u>Double Practice Day</u>: 3 hour max per practice; 5 hour max total w/ 3 hour minimum rest between the two. • <u>Single Practice Day</u>: 3 hour max; 1 hour walkthrough after 1 hour rest. • During the preseason heat acclimatization period, if practice occurs on six consecutive days, participants should have one day of complete rest (no conditioning, walk-throughs, practices, etc.). Therefore, 16 days are needed to complete the 14-practice requirement. • On-site Athletic Trainer for the heat acclimatization period (days 1-16) if possible, but not required. 	FB-All equipment / full contact

* Baseball and Softball catchers may wear protective gear for their safety and by rule, but must be allowed extra rest and water breaks during the practice.

** Field Hockey: On days 3-5 goalie can wear protective equipment with extended breaks.

*** Golf is excluded from the heat acclimatization schedule but must have 14 days of practice completed before competition

**** The preseason scrimmage is a practice and the time spent for this scrimmage counts towards the total hours of practice in a day.

Heat Acclimatization Questions & Answers:

Q1: During the first five days of the acclimatization period may a school split up its one three hour practice into two 1½ hour practices with an hour or more of rest between them, then take the required one hour rest period before having a one hour walk-through?

A1: No. During days one through five, a school may only conduct a single practice not to exceed three hours including stretching and warm-ups. If a team practices for an hour and takes a half hour rest and water break they only have an hour and a half left before the practice session must be concluded. Athletes are typically pushed harder during shorter exercise sessions, causing a greater amount of total work load and exertion over two shorter practice sessions than would be expected over one session. Intensity of exercise increases body temperature faster and higher, putting athletes at risk for heat stroke. Exception: a golfer may exceed the time limit for a practice as it is not considered to be an exertional sport.

Q2: On the second day of practice our full-back twisted his ankle and was seen by the trainer. On days 3-5 he came to practice and watched from the sidelines. Do these 3 days count towards his conditioning requirements?

A2: No. In order for the days to be counted, athletes must be healthy and participating in the conditioning activities. Simply being present at practice would not meet the requirement for conditioning. Further, in the fall, each athlete must meet the 14 days of acclimatization before they may compete in a contest. If an athlete is unable to participate in acclimatization with the rest of the team, the acclimatization limits and requirements would be in place for that particular athlete until he is able to complete the acclimatization period.

Q3: Two of our soccer players moved into our school district late this fall and did not start practicing with the team until the fifth day of practice, nor were they involved in any practices with their former school. a) May they begin two-a-days with the rest of the team on team practice day six? b) Would they be eligible to participate in the preseason interschool scrimmage on Saturday?

A3: a) No. Each player must follow the heat acclimatization schedule. These players may only participate in a single practice on each of their first five practice days. b) No. Each participant in the scrimmage shall have at least nine individual days of conditioning practice prior to participating in the preseason interschool scrimmage. Due to when these players started practicing and the required rest day after six practice dates it is not possible for them to have completed nine conditioning practices before the scrimmage.

Q4: During the 16-day acclimatization period we started a practice and at some point during the practice our athletic trainer and administration deemed the weather conditions too severe to continue practicing outdoors. a) Can we move our practice indoors? b) If we cancel the practice completely at this point will it count towards the conditioning requirements?

A4: a) Yes, you may move the practice indoors. The time that has already been spent at practice will count towards the total time allowed. The travel time to a new location will not be counted towards the time allowed. While indoors you must include specific activities, drills and/or instruction involving physical activity designed to elevate the student's level of physical condition for the specific sport. b) It can only count towards the conditioning requirements if you are satisfied that you have met the requirement to engage the student in specific activities, drills and/or instruction involving physical activity designed to elevate the student's level of physical condition for the specific sport.