

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 hot and humid 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), in a cool environment.
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, in a cool environment. 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.