



SPORTS MEDICINE POLICY AND PROCEDURES

Sports Medicine Healthcare Team:

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Dr. Chris Dougherty – Team Physician (Northwest Medical)

Dr. Brandon Munson – Team Chiropractor (Munson Chiropractic)

Athletic Training Facilities:

Tiger Athletic Complex – 479-254-5116

South Gym Athletic Training Room – 479-254-3539

Summary of Sports Medicine Guidelines

1) Clearance to Participate:

1.1 No student athlete will be allowed to practice or compete with an athletic team until the following requirements are met:

All student athletes, prior to receiving a physical, must complete an Athlete Information and Health Questionnaire (SportsWare Online) and provide a copy of their current insurance card. If a student athlete has had previous attention by a physician or other healthcare professional, a report of such should be forwarded to Bentonville Sports Medicine Department. Failure to properly disclose or provide the proper documentation for pre-existing injuries and or conditions may delay or disqualify the student athlete from participating in athletics.

2) Completion of the Athletic Pre-Participation Physical Examination:

2.1 All athletes will be required to complete and pass a PPE administered by a physician:

- Bentonville Sports Medicine in partnership with Northwest Medical Center will provide all athletes a free physical on a yearly basis
- Student athletes may receive a PPE from a physician of their choosing. This will be at their cost and must be in accordance to Bentonville Sports Medicine Policy. A copy of the physical must be submitted to Bentonville Sports Medicine before final clearance is given.
- All student athletes are required to have one athlete PPE for each school year
- The team physician and the head athletic trainer will be the final authority regarding limitations that will exclude a student athlete from participation
- PPE clearance may be revoked at anytime at the digression of the team physician and the head athletic trainer

3) Official Notification of Clearance:

3.1 Coaches will receive regular PPE updates from Bentonville Sports Medicine as well as any follow up necessary to clear an athlete for full participation.

4) Physical Examination Clearance Status:

4.1 An athletes' physical examination clearance status can fit into 3 categories:

- *Cleared: athlete may participate without reservation or restriction*
- *Not Cleared: athlete may not participate in any physical activity. The athlete and coach will be advised of the necessary follow-up. If the athlete fails to follow-up, they will remain ineligible to participate, practice or compete.*
- *Cleared With Restrictions: athlete may participate, however a situation or condition exists that precludes the athlete from unrestricted participation. The athlete and coach will be advised necessary follow-up to remove the restrictions. If the athlete does not make a conscious effort to follow-up as directed, the head athletic trainer will be bound to revoke their clearance and therefor make the athlete ineligible to participate, practice and compete.*

5) HIPPA Acknowledgement and HIPPA Signature Form:

5.1 All athletes are required to sign the Release of Personal Health Information Form (SportsWare Online). This form must be signed on a yearly basis and maintained in the athletes file.

6) Sickle Cell Acknowledgement and Sickle Cell Signature Form:

6.1 All athletes are required to sign the Acknowledge of Sickle Cell Trait Form (SportsWare Online). This form must be signed on a yearly basis and maintained in the athletes file.

7) Start Dates:

7.1 Each sport is to submit the starting and ending dates of their declared seasons (both championship and non-championship) to the head athletic trainer. This should be done at the earliest possible time, but no later than one month before the first practice.

8) Try Outs:

8.1 For individuals wishing to try out for an athletic team, the following requirements exist:

- Sign the try out waiver
- Sign a HIPPA form
- A PPE signed by authorized medical personnel, no older than 6 months, that has cleared them for participation
- A sickle cell waiver

8.2 *any student athlete making a team will be required to obtain a new physical on or after June 1st of that year of competition but no later than the start of that sports season*****

9) Athletic Injury and Illness Procedure:

9.1 When a student athlete is injured, the athletic trainer will go to his/ her aid as quick as possible, evaluate the situation and proceed with immediate care. The coach will be informed as quickly as possible regarding the student athlete's health status and availability in that particular practice or event.

9.2 All therapeutic treatment in the athletic training room will be administered by the Bentonville Sports Medicine Staff under the direction of the team physician and the head athletic trainer.

9.3 During a road trip without an athletic trainer present, the coach should refer to the emergency room of the nearest hospital, if the situation is warranted. (The host team's athletic training staff may also be consulted for assistance). Bentonville Sports Medicine should be made aware, by the coach, of any athlete that has been referred to a hospital for treatment.

10) Athletic Training Room Policy:

10.1 Sports in their championship declared season will have priority in utilizing all services of the athletic training room and its staff.

10.2 In cases where sports overlap, the sport completing their championship declared season will have priority.

10.3 All taping, bandaging, injury evaluation, injury care, referrals to Bentonville Team Physicians, etc... will be handled by a member of the Bentonville Sports Medicine Staff

10.4 The athletic training room will be open for practices and games as arranged by the head athletic trainer. Any changes or scheduling without 24 hours' notice may not be accommodated. Bentonville Sports Medicine will notify, as soon as possible, of any changes to athletic training room hours.

10.5 Therapy and rehabilitation will occur during normal operating hours and at the discretion of the Bentonville Sports Medicine Staff. Student athletes are expected to complete any home care program given to them as well as receive treatment before practice and after practice as designated by the sports medicine staff. A member of the Bentonville Sports Medicine Staff will determine the type and duration of therapy to be given to student athletes.

10.7 Coverage of athletic events by athletic trainers will be based on the following criteria:

- 1) season status
- 2) collision / contact sport
- 3) sports will increased injury rates
- 4) by discretion of the head athletic trainer

10.8 The sports medicine staff may not be able to travel with all teams, but they will provide the best service they can to all teams.

11) Hazardous Field Conditions:

11.1 As per the policy of Bentonville Sports Medicine, fields of play and or practice will be evacuated when the time interval between the sighting of lightning and the sound of thunder is 30 seconds and under or when deemed necessary by an athletic trainer through the use of an approved lightning detector. Activity may resume 30 minutes after the last lightning strike or at the discretion of the athletic trainer and or the game administrator.

11.2 Any playing surface or surroundings deemed unsafe will be reported to the coach, to encourage a change of venue or cancellation of the event.

12) Bentonville Sports Medicine Operating Principles

12.1 Prevention of injuries is the prime concern of Bentonville Sports Medicine. Any suggestions made to the coach from a member of the sports medicine staff as to how this may be accomplished are made in both a professional and constructive manner; the sports medicine staff would appreciate and encourage any and all cooperation toward areas of injury prevention.

12.2 Do not request drugs, medication, or ergogenic aids, which are labeled as “performance enhancers”. Our belief, as a staff, is there are **no ergogenic aids that will enhance athletic performance other than the student athletes mental and physical capabilities balanced with good hydration and proper diet.** Any and all approved supplements will be made known to members of the coaching staff by Bentonville Sports Medicine at an appropriate time.

12.3 Bentonville Sports Medicine operates under a; mission statement, code of ethics set by the NATA and a practice act set by the state of Arkansas. Our decisions are based upon these principles.

12.4 All reasonable requests for athletic training coverage of special circumstances not regularly scheduled should be made at least 5 days in advance to the primary athletic trainer of that sport. Due to other commitments, coverage cannot be guaranteed; however the sports medicine staff is committed to providing the best possible care to all teams.

12.5 Please inform the Bentonville Sports Medicine Staff of changes to normally scheduled practices or events. Schedule requests or changes within 24 hours may not be accommodated due to other staff commitments.

12.6 Bentonville Student Athletic Trainers have growing backgrounds and interest in sports and the care of the student athletes. However, they are not certified athletic trainers and should not be expected to serve in that capacity. Please have patience with them and they will evolve into an important part of your team. Please remember they have restrictions which affect when and what they can do with your team.

13) Return to Play Policy

13.1 The Bentonville Athletic Training Staff and or the Bentonville Team Physician has the final authority in deciding if and when an injured / ill athlete may return to practice / competition. ***A student athlete's private physician or coach does not have jurisdiction as to the participation status of the student athlete.*** If the student athlete is under the care of a private physician for an injury or illness and the physician's treatment precludes or alters activity in athletics, the student athlete must secure **in writing** a release to reinstate the student athlete to full participation status. At that point, no student athlete will be allowed to return to participation until the athlete has been cleared by a member of the Bentonville Sports Medicine Team.

14) Limitations

14.1 The importance of having some kind of medical insurance coverage cannot be overemphasized. ***Any unpaid balances resulting from injuries as seen by any medical personnel other than those pre- approved and with prior arrangement by Bentonville Sports Medicine and Bentonville Team Physicians is the responsibility of the student athlete and or the student athlete's parents or guardians.***

15) Over the Counter / Prescription Medication Procedures

15.1 All over the counter and prescription medication will be stored in a locked room within all athletic training facilities. Only Bentonville Athletic Trainers and Bentonville Team Physicians will be permitted to access the medication supply.

16) Physician Referrals / Consultations

16.1 Bentonville Sports Medicine has and will continue to foster positive relationships with many medical providers in the area who have consistently provided high quality services to Bentonville Athletics. Members of the Bentonville Sports Medicine staff will always offer referral to these providers when warranted. Ultimately the choice of physician lies with the student athlete and or parents or guardians.

16.2 Student athletes who are late or miss appointments with Bentonville Team Physicians, medical consultants and or diagnostic tests may be financially responsible for any and all charges resulting from the missed appointment.



BENTONVILLE PUBLIC SCHOOLS

HEAT INDEX GUIDELINES AND POLICY

<i>Wet Bulb Temperature Guidelines for Athletics</i>					
Wet bulb temperature will be determined by approved digital psychrometer					
** Indoor practices must adhere to the guidelines**					
Level	Heat Index WBT Fahrenheit	Heat Index WBT Celsius	Precautions and Practice Lengths	Breaks (work: rest ratio)	Fluids
1 White	< 64 ⁰	< 17 ⁰	Low Risk; Practice sessions reasonable	As Needed or 6 : 1	As Desired
2 Green	65 ⁰ – 72 ⁰	18 ⁰ – 22 ⁰	Moderate Risk; Use Caution for practice sessions and monitor on basis of risk factors	(4-6:1)	Cold Water
3 Yellow	73 ⁰ – 81 ⁰	23 ⁰ – 28 ⁰	High Risk; Use increased caution for practice sessions and consider practice lengths and intensity level	(2-3:1)	Cold Water

4 Red	81 ⁰ – 86 ⁰	28 ⁰ – 32 ⁰	Very High Risk; Consider rescheduling or delaying the event until safer conditions prevail; if the event must take place, be on high alert. Take steps to reduce risk factors (e.g., more and longer rest breaks, reduced practice time, reduced exercise intensity, access to shade, minimal clothing and equipment, cold tubs at practice site, etc.).	(1-2 :1)	Cold Water / Gatorade
5 Black	> 86 ⁰	> 32 ⁰	Extreme Risk; No Practice	No Practice	No Practice

** 10 degrees Fahrenheit must be added for athletes in full gear, not acclimatized, or other extraneous factors due to the aggressive nature of the policy**

*Guidelines adopted from the National Federation of State High School Association recommendations for Heat Stress and Athletic Participation, United States Marine Corps Heat Index, and from the National Athletic Training Association Consensus Position Statement on Exertional Heat Illnesses

Guidelines for Outdoor Extracurricular Activities

DURING EXTREME HOT AND HUMID WEATHER

1. Each program shall have and use a digital psychrometer, or a similar device for measuring environmental factors. All activities will monitor and follow guidelines.
2. Practices and games should be held early in the morning and later in the evening to avoid times when environmental conditions are generally more severe.
3. An unlimited supply of cold water shall be available to participants during practices and games.
 1. Any request by a student to receive water will be granted without question by the coach or supervisor.
 2. Hydration and fluid replacement is a daily process. Students should hydrate themselves before, during, and after practice. Meals should include an appropriate amount of fluid intake in addition to a healthy diet.
4. Give adequate rest periods.
 1. Football players shall be allowed to remove helmets.
 2. Shoulder pads should be removed if conditions warrant.
5. Gradually acclimatize participants to the heat.
 1. Research indicates 80% acclimatization may be achieved in 7-10 days, but could take up to 14 days. In some cases, it may take several weeks to become fully acclimated.
 2. The length and intensity of practice should be adjusted according to the WBT until acclimatization occurs.
6. Athletic participants **should weigh in** before practice and weigh out after to monitor water loss to identify those who are becoming dehydrated.
7. Participants should wear clothes that are light in weight and color.

8. Students who need careful monitoring include:

1. Overweight students
2. Weight control problems (fluctuation)
3. Those taking over-the-counter and prescription medication
4. Students who have done absolutely no exercise at all

9. Be familiar with all heat related symptoms and corresponding treatments.

10. Be familiar with any emergency and 911 procedures.

11. Be familiar with the Wet Bulb Temperature Chart and utilize guidelines determining length of practice and rest periods.

12. After each practice and/or game, coaches should monitor the dressing room to insure each student/athlete does not require medical attention.



HEAT ILLNESS SYMPTOMS AND TREATMENTS

Heat illness is used to define several types of afflictions suffered when an individual experiences a rising body temperature and dehydration. Following are the different forms identified by the N.A.T.A.

	Symptoms	Treatments
Heat Cramps	<ul style="list-style-type: none">- Muscle spasms caused by an imbalance of water and electrolytes in muscles- Usually affects the legs and abdominal muscles	<ul style="list-style-type: none">- Rest in a cool place- Drink plenty of fluids- Proper stretching and massaging- Application of ice in some cases
Heat Exhaustion	<ul style="list-style-type: none">- Can be a precursor to heat stroke- Normal to high temperature- Heavy sweating- Skin is flushed or cool and pale- Headaches, dizziness- Rapid pulse, nausea, weakness- Can occur without prior symptoms, such as cramps	<ul style="list-style-type: none">- Get to a cool place immediately and out of the heat- Drink plenty of fluids- Remove excess clothing- In some cases, immerse body in cool water
Heat Stroke	<ul style="list-style-type: none">- Body's cooling system shuts down- Increase core temperature of 104°F or greater- If untreated it can cause brain damage, and even death- Sweating stops- Shallow breathing and rapid pulse- Possible disorientation or lose consciousness- Possible irregular heartbeat and cardiac arrest	<ul style="list-style-type: none">- Call 911 immediately- Cool bath with ice packs near large arteries, such as neck, armpits, groin- Replenish fluids by drinking or intravenously, if needed

Heat Illness	Definition/Description	Signs/Symptoms	What to Do
Muscle (Heat) Cramps	Occurs during or after intense exercise. Athlete will experience acute, painful, involuntary muscle contractions typically in the arms, legs, or abdomen.	Dehydration Thirst Fatigue Sweating Muscle cramps	<ul style="list-style-type: none"> • Stop all activity and sit quietly in a cool place. • Drink clear juice or a sports drink. • Do not engage in exercise/strenuous activity for a few hours after cramps subside, as this may lead to heat exhaustion or heat stroke. • Seek medical attention if heat cramps do not subside in 1 hour.
Heat Syncope	Occurs as result of exposure to high temperatures. Typically occurs during the first 5 days of acclimation to physical activity in the heat. May also occur after a long period of standing after physical activity.	Dehydration Fatigue Fainting Lightheadedness Tunnel Vision Pale or sweaty skin Decreased pulse rate	<ul style="list-style-type: none"> • Lie down in a cool place. • Drink clear juice or a sports drink.
Heat (Exercise) Exhaustion	The inability to continue exercising that is associated with heavy sweating, dehydration, energy depletion, and sodium loss. *Frequently occurs in hot, humid conditions	Normal or elevated body-core temp (97-104°F) Dehydration Dizziness/Lightheadedness Headache Nausea/Diarrhea Weakness	<ul style="list-style-type: none"> • Seek medical attention immediately if symptoms are severe, the athlete has existing heart problems or high blood pressure. • You may attempt to cool the athlete using: cool, non-alcoholic beverages (as directed by physician), rest, cool

		Persistent muscle cramps Profuse sweating Chills Cool, clammy skin	shower/bath/sponge bath, moving to an air conditioned environment, and wearing lightweight clothing.
Heat Stroke	Life-threatening unless promptly recognized and treated. Occurs as a result of prolonged heat exposure while engaging in physical activity. Symptoms are a result of the body shutting down when it is no longer able to regulate temperature naturally.	Same Symptoms as Heat Exhaustion and: High body-core temp (>104°F) Change in Mood (e.g., apathy, irrational) Hot and wet or dry skin Increased heart rate Confusion	<ul style="list-style-type: none"> • If any symptoms are evident-CALL 9-1-1 or seek immediate medical assistance. • Move the athlete to a shady area. • Cool the athlete rapidly using whatever methods you can: immerse the victim in a tub of cool water; place the person in a cool shower, spray the victim with cool water from the hose, sponge the person with cool water; fan the athlete. • Monitor body temperature and continue to cool the athlete until temp drops to 101-102°F. • Continue until medical professionals arrive and take over, if medical attention is delayed; call the emergency room for further instructions.

References

Brinkley, H.M., Beckett, J., Casa, D.J., Kleiner, D.M., & Plummer, P.E., (2002). National Athletic Trainers' Association position statement: Exertional heat illnesses. *Journal of Athletic Training*, 37 (3), 329-343.

Center for Disease Control (2003). Hot weather health emergencies. Retrieved from <http://www.cdc.gov/nceh/hsb/extremeheat/heatillness.htm>. (June 14, 2004).

Important information with online resources to help you learn more about the prevention of heat illnesses:

- Coaches need to stay on top of athletes and make sure they are actually using water break and re-hydrating during-just by giving athletes water breaks does not mean they are drinking enough (see <http://www.nlm.nih.gov/medlineplus/heatillness.html>).
- Take the necessary steps toward preventing heat illness. Visit http://www.gssiweb.com/tackleheat/pdf/danger_zone.pdf for tips on keeping your athletes safe.
- Encourage your athletes to come to practice/camp physically fit and acclimatized to exercising in the heat. This and nine other tips for heat illness prevention are described. Visit <http://www.gssiweb.com/reflib/refs/571/prevheattips.cfm?pid=38&CFID=488365&CFTOKEN=55576146> for ten ways to beat the heat.
- **Safety tips for two-a-days** regarding what and how often to drink, as well as tips on how to be prepared and manage two-a-days. (See <http://www.gssiweb.com/reflib/refs/280/heatnewsletter.cfm?btid=2>).

As summer programs begin and pre-season approaches, coaches, parents, and athletes should be reminded to stay properly hydrated-this means drinking when you may not feel thirsty and avoiding carbonated or sugar-laden beverages! Heat illnesses can be life threatening. Be aware and be prepared. Be familiar with the "Heat Illnesses: Signs, Symptoms, & What to Do" chart and be sure to follow the advice of your athletic trainers and team physicians about exercising in the heat and humidity. The NFHS has also published hydration recommendations and prevention and awareness guidelines (see http://www.nfhs.org/scriptcontent/va_custom/SportsMedicine/HeatStressFlyers.pdf and http://www.nfhs.org/ScriptContent/VA_Custom/va_cm/contentpagedisplay.cfm?Content_ID=211&SearchWord=Heat%20Stress).

BENTONVILLE PUBLIC SCHOOLS

CONCUSSION GUIDELINES

Introduction

The Centers for Disease Control (CDC) estimates that there are approximately 300,000 cases of mild traumatic brain injury (MTBI) or concussions annually in the United States as the result of participation in sports. The Sports Concussion Institute estimates that 10 percent of athletes in contact sports suffer a concussion during a season. A 2006 report estimated that there were 92,000 cases of concussions in American High School sports annually, and that these rates seem to be increasing. Also of concern is the risk of repeated concussions and second impact syndrome to athletes. These two problems can have long lasting, and even terminal effects, on the individual. In order to have a standard method of managing concussions for Bentonville student-athletes, the following guidelines are intended to serve as a written protocol for concussion management.

Definitions

Concussion or Mild Traumatic Brain Injury (MTBI) - A concussion or MTBI is the common result of a blow to the head or body which causes the brain to move rapidly within the skull. This injury causes brain function to change which results in an altered mental state (either temporary or prolonged). Physiologic and/or anatomic disruptions of connections between some nerve cells in the brain occur. Concussions can have serious and long-term health effects, even from a mild bump on the head. Symptoms include, but are not limited to, brief loss of consciousness, headache, amnesia, nausea, dizziness, confusion, blurred vision, ringing in the ears, loss of balance, moodiness, poor concentration or mentally slow, lethargy, photosensitivity, sensitivity to noise, and a change in sleeping patterns. These symptoms may be temporary or long lasting.

Second Impact Syndrome – Second impact syndrome (SIS) refers to catastrophic events which may occur when a second concussion occurs while the athlete is still symptomatic and healing from a previous concussion. The second injury may occur within days or weeks following the first injury. Loss of consciousness is not required. The second impact is more likely to cause brain swelling with other widespread damage to the brain. This can be fatal. **Most often SIS occurs when an athlete returns to activity without being symptom free from the previous concussion.**

Prevention Strategies

1. For sports that require headgear, a coach or appropriate designate should check that all headgear is NOCSAE (National Operating Committee on Standards for Athletic Equipment) certified, that the headgear fits the individual and the air bladders work and are appropriately filled. Padding should be checked to make sure they are in proper working condition.
2. Mouth guards should fit and be used at all times.
3. Neuro-psychology (ImPACT) testing on students that participate in contact sports prior to season, in order to form a baseline.
4. Assess safety of playing surfaces/fields, making sure that potential hazards are remedied or removed (i.e. cracks in flooring that an athlete can trip on, defective fences around fields that an athlete can run into)

Evaluation for Concussion/MTBI

1. At time of injury, administer one of these assessment tests:
 - a. Sports Concussion Assessment Tool (Care Sport, King Devick, SCAT 3, SWAY)
 - b. Graded Symptom Checklist (GSC)
 - c. Sideline Functional & Visual Assessments
 - d. On-field Cognitive Testing
2. Observe athlete 5 to 10 minutes and re-evaluate.
3. **If concussion is suspected, student-athlete does not return to a game or practice on that day, regardless of resolution of signs/symptoms.**
4. Doctor/Hospital Referral if necessary
5. Home Instructions
6. Return to Play Guidelines
7. First neuro-cognitive retest 48 hours after injury. Other tests may be administered as needed throughout the evaluation period (IMPact. King DeVick, CARESport, SCAT 3, Sway Testing).

Concussion Management

1. Academic modifications
 - a. Notify coaches and class professors that the student-athlete has MTBI
 - b. Notify teachers of post-concussion symptoms
 - c. Ask teachers to contact athletic trainer with concerns or observations of abnormal student behavior
 - d. Student-athlete may need special accommodations such as limited computer work, reading activities, testing, assistance to class, etc. until symptoms subside
 - e. Student-athlete may only be able to attend school for half days or may need daily rest periods until symptoms subside

Return to Play Guidelines

1. Graduated return to play protocol
2. Component scores of ImpACT, King Devick and or SCAT 3 testing, balance testing (SWAY) are normal and within normal limits of baseline.
3. Athletic Trainer and/or Physician clearance for return to play

Table 1 Rehabilitation stage	Functional exercise at each stage of rehabilitation	Objective of each stage
1. No activity	Complete physical and cognitive rest	Recovery
2. Light aerobic exercise	Walking, swimming or stationary cycling keeping intensity <70% maximum predicted heart rate	Increase heart rate
3. Sport-specific exercise	Skating drills in ice hockey, running drills in soccer. No head impact activities	Add movement
4. Non-contact training drills	Progression to more complex training drills, e.g. passing drills in football and ice hockey	Exercise, coordination, and cognitive load
<i>May start progressive resistance training</i>		
5. Full contact practice	Following medical clearance participate in normal training activities	Restore confidence and assess functional skills by coaching staff
6. Return to play	Normal Play	

Day 1 – Bike or Elliptical (15 min. @ level 12)

Day 2 – Bike or Elliptical (15 min. @ level 15)

Day 3 – Bike or Elliptical (20 min. @ level 18)

Day 4 – Bike or Elliptical (20 min. @ level 20)

Day 5 – Bike or Elliptical (25 min. @ level 20)

BENTONVILLE PUBLIC SCHOOLS

LIGHTNING POLICY

All coaches and athletes will use the following guidelines in the event of lightning: In the event of lightning being present, the Athletic Trainer will alert all coaches when the lightning detection system detects lightning within 3-8 miles. Should an Athletic Trainer not be present, use the flash to bang method (Flash to Bang Method – count the seconds from the time that lightning is sighted to when the clap of thunder is heard. A flash to bang count of 30 seconds or less indicates an unsafe proximity). In either event all individuals are to leave the athletic site and head for safe shelter (enclosed, non-metal structure). It is recommended that you not return to the field for 30 minutes after the storm is passed (last thunder heard), or until the Athletic Trainer has given clearance. **The Athletic trainer will begin a timer from the last thunder heard. If 30 minutes has passed and thunder has not been heard, the athletic trainer can give clearance to return to participation. Should thunder be heard during the timing process, the timer must be reset until 30 minutes has passed.

