

## **HEALTH, WELLNESS, AND SAFETY PLAN**

Participation in Spirit of Sunnyvale is physically, mentally and emotionally demanding. Marching members should have made every effort to be properly conditioned for the activity and have a clear understanding of how to manage any preexisting injury, illness or medical condition. Marching members will need to carry instruments, learn music and perform complex movements. Instruments range in weight from 3 pounds to 45 pounds, and most instruments will need to be carried for multiple hours each day. Members will march the equivalent of 6 to 13 miles each day. Rapid marching movements forward, backward, and sideways are required. There are often interspersed dance and acrobatic moves. Rehearsal and performance schedules involve greater than 8 hours of activity per day. Estimated caloric requirements are greater than 5000 kcal/day. Environmental conditions often involve high heat and humidity.

Adequate preseason conditioning can help reduce the risk of overuse injuries. Members are expected to follow instructions from the corps staff as well as take responsibility for their own health and safety. Each member is expected to have a reasonable level of fitness. Early reporting of medical, musculoskeletal, and mental health issues is expected.

Spirit of Sunnyvale will have a trained staff member on site who is, at least, CPR and First Aid certified.

All Spirit of Sunnyvale members will submit emergency contact information (a name and phone number) in the event of injury, illness, or an emergency. If the member is under 18, their parent or guardian information will also be submitted. All emergency contacts, and parent/guardian contacts if the member is under 18, will be kept securely in a Google Drive with limited access.

#### **INJURY**

If a member becomes injured while at a Spirit of Sunnyvale rehearsal or performance, they are to (if they can) immediately step out of the rehearsal or performance to a safe area and let a staff member know they are hurt. If a member becomes injured and they can't step out, a trained staff member will attend to the injured member at their location. The trained staff member will evaluate the injury. The injury is minor, such as a minor cut, then first aid will be administered on-site. If the injury requires more than first aid, then a staff member will call 911 and the member will be immediately transported to the newest hospital for treatment, and a staff member will accompany the injured member. The injured member's emergency contact will also be notified. If the injured member is a minor, the member's parent or guardian will also be contacted.

If the member is injured while not at a Spirit of Sunnyvale rehearsal or performance, they are to let a staff member know of the injury and any doctor's recommendations which staff will follow.

For concussions, please see our Concussion Protocol.

#### **ILLNESS**

If a member becomes ill while at a Spirit of Sunnyvale rehearsal or performance, they are to (if they can) immediately step out of the rehearsal or performance to a safe area and let a staff member know they are not feeling well. If a member becomes ill and they can't step out, a trained staff member will attend to the ill member at their location. The trained staff member will evaluate the illness. The illness is minor, then first aid will be administered on-site. If the illness requires medical attention, then a staff member will call 911 and the member will be immediately transported to the newest hospital for treatment, and a staff member will accompany the ill member. The ill member's emergency contact will also be notified. If the ill member is a minor, the member's parent or quardian will also be contacted.

If a member becomes ill while not at a Spirit of Sunnyvale rehearsal or performance, they are to let a staff member know of the illness and any doctor's recommendations which staff will follow. The member will not be permitted to attend a rehearsal or performance until 7 days after they are symptom-free.

All members are to complete a Waiver/Release Form For Communicable Diseases Including COVID-19 which will be kept securely in a Google Drive with limited access.

#### **MEDICATION**

Members who require medication are responsible for having access to their own medication. In the case of critical medications (i.e. insulin, epi pen, etc.), members must have additional medication readily available in case the primary supply is lost, damaged, or otherwise not available. The member is responsible for having a discussion with their medical provider with regards to this.

#### **EMERGENCIES**

If there is an emergency during a Spirit of Sunnyvale rehearsal or performance, such as an "Act of God" or emergency that is out of Spirit of Sunnyvale's control, all emergency contacts will be notified by staff members. In addition, if the member is under 18, their parent or guardian contact will also be notified.

#### **MENTAL HEALTH**

Members with a history of mental health issues should be assessed by a mental health practitioner prior to participation. Drum corps is a high stress activity—including stressors related to being a public performer, as well as participating in an activity with numerous environmental challenges (e.g., long practice days, extensive travel, variable sleep conditions, performance expectations by instructors, and extensive peer interaction). Members with a prior history of, or who are currently prescribed, psychiatric medication, should be re-assessed with the consideration of the aforementioned stressors in mind. For ADHD in particular, consideration of the rehearsal and performance schedule may require

modifications in medication dosing schedule to accommodate the long hours of daily activity (i.e., extended and short acting release).

## **FOOD AND DRINKS**

Members are responsible for their own food, snacks, meals, etc. at Spirit of Sunnyvale rehearsals. For Spirit of Sunnyvale performances, snacks will be provided for members.

For hydration, please see the Hydration Guidelines document.

#### **REST/BREAKS**

For information regarding rests/breaks, please see the Heat Protocol document.

#### **ADDITIONAL INFORMATION**

For additional information, please see the following documents:

- Concussion Protocol
- Hydration Guidelines
- Heat Protocol
- Weather Monitoring Protocol



## CONCUSSION PROTOCOL

A concussion is a complex injury to the brain that is induced by a traumatic injury to the head or body, and which may or may not involve a loss of consciousness. Concussions may result in a constellation of physical, cognitive, emotional, social, and sleep-related symptoms. Signs or symptoms may last from several minutes to days, weeks, months or longer in some cases. The signs and symptoms of concussion may occasionally not be present immediately post-injury. Concussions are most common in contact and collision activities.

#### **BASELINE**

- Baseline Testing will be performed on members at first camp/rehearsal. The baseline test given will be the same test used for follow up tests during the season. Spirit of Sunnyvale will use SCAT-6 for testing (available at <a href="https://completeconcussions.com/wp-content/uploads/2023/06/SCAT6.pdf">https://completeconcussions.com/wp-content/uploads/2023/06/SCAT6.pdf</a>). If the entire team cannot be tested then the focus should be on those members at higher risk (color guard, brass).
- 2. Members are encouraged to discuss any questions about concussions or any health concerns with team medical professionals or other healthcare providers consulted who are knowledgeable in concussion management.

#### **INITIAL CONCUSSION MANAGEMENT**

- 1. Staff will immediately inform team medical personnel about any member who sustains an injury during rehearsal that involves trauma to the head or body and suspects concussion.
- 2. If a concussion is suspected, the member will be removed from activity and assessed by a healthcare provider trained in the diagnosis and management of sports concussion. If no such healthcare professional is available at the time of concussion, then the evaluation be obtained outside of the organization and that this evaluation and subsequent management (if concussion is diagnosed) follow the laws and policies of the state in which the organization resides. If the member is taken to a medical facility for concussion evaluation, the member will be accompanied by the team medical personnel or administrative staff. If the member is a minor, a parent or quardian will immediately be notified and kept informed about the minor's condition throughout this process.
- 3. Following the diagnosis of a concussion the member will be placed on concussion protocol by the team medical staff. Per the protocol, they will be excluded from full participation in team activities and will progress through the "return to play" steps as monitored by the team medical staff until the member is medically cleared to return to full participation.
- 4. The team medical personnel will notify the Director and appropriate staff of the initial injury and subsequently include the status of concussed members in an injury report.
- 5. Staff will never, under any circumstances, override the decision of the Director or team medical personnel regarding concussion management and return to activity decisions. The athletic trainer or appropriate health care provider will have the final say about returning to activity. At the time of diagnosis, one can not predict time to recovery.

#### RETURN TO PLAY PROGRESSION STEPS

Individuals must be symptom free in all portions of each step prior to progressing to the next step. Each step will take at least 24 hours provided the individual remains asymptomatic. If symptoms occur at any step, the activity is suspended for the day and the individual will be reevaluated for progression the following day, beginning at or below the step which caused symptoms. All other team-related activities (loading, unloading equipment, set up, tear down, moving heavy equipment, noise exposure, etc.) are restricted at the discretion of the athletic trainer until the individual is back to full participation.

#### Wind Instruments and Percussion

Protocol may begin following 24-48 hours of relative rest (i.e. activities of daily living).

Step 1 - The member may do light aerobic activity (eg. fast walking) under team medical personnel supervision that does not increase their symptoms significantly or cause a prolonged increase in symptoms.

A concussed individual can begin the remaining progression once they have returned to their baseline level of cognitive functioning and been asymptomatic for at least 24 hours.

- Step 2 Marching basics without an instrument and stand still playing (wind instruments), percussion on drum pad only. Staff should be attentive to volume and intensity of sound exposure during this step.
- Step 3 Marching basics with instrument and stand-still playing.
- Step 4 Marching basics, small group, limited drill and stand-still playing (no full ensemble).
- Step 5 Limited full ensemble participation (50% participation at the discretion of the medical staff guiding concussion management).
- Step 6 Full participation

#### **Color Guard**

Protocol may begin following 24-48 hours of relative rest (i.e. activities of daily living).

Step 1 The member may do light aerobic activity (eg. fast walking) under team medical personnel supervision that does not increase their symptoms significantly or cause a prolonged increase in symptoms.

A concussed individual can begin the remaining progression once they have returned to their baseline level of cognitive functioning and been asymptomatic for at least 24 hours

- Step 2 Flag/Weapon/Equipment basics, no tossing. Body warm-up and stretch, no "across the floors."
- Step 3 Full basics block. Dance, with "across the floors." No tossing.
- Step 4 Sectionals, spinning on the move. No tossing.
- Step 5 Limited full ensemble participation (50% participation at the discretion of the medical staff guiding concussion mgt). Can introduce tossing at this step.

Step 6 Full participation



## **HEAT PROTOCOL**

Over each of the past several summers, record-breaking heat across the U.S. has resulted in a dramatic increase in the number of injuries and fatalities due to exertional heat illness. Given the time periods, locations and performance surfaces chosen for DCI rehearsals and shows, DCI performers are at great risk for exertional heat illness. Certain costumes, performance styles, props, and outdated rehearsal methodologies are known to increase the risk of heat illness.

During the summer DCI tour, rehearsal and performance surfaces vary from natural turf to artificial surfaces such as cement or blacktop and synthetic turf.

The temperature of these diverse surfaces varies dramatically when they are exposed to direct sunlight, with pavement and synthetic surfaces easily reaching temperatures that can result in direct conductive skin burns.

Pavement and synthetic turf surfaces in summertime direct sunlight conditions can easily and regularly reach temperatures over 150F during peak afternoon heating times from 1pm to 5pm. Direct temperature observations of rehearsal and performance surfaces during the 2023 DCI summer tour revealed that surface temperatures can exceed 170F during heat waves that annually occur across Texas and other parts of the south.

The National Institute of Standards and Technology (NIST) has determined that skin burn risk begins to increase at surface temperatures of 140F, with damage to skin tissue possible at temperatures of 162F and higher (NIST, 2023).

## REHEARSAL/PERFORMANCE SURFACE HEAT PROTOCOL

In response to safety concerns associated with the risk of direct skin burns as a result of touching props and/or rehearsal/performance surfaces, Spirit of Sunnyvale will do the following:

1. Use a "hand held" infrared thermometer gun (i.e. pizza thermometer), with an upper temperature threshold of at least 500F, as per manual instructions\*, to measure the temperature of all surfaces to be used for rehearsals and performances. This includes all props, instruments, field turf, pavement, etc. When making surface temperature measurements, team will pay close attention to painted surfaces such as mid field or end zone logos as these can be even hotter than the typical green colored field surface.

- 2. If the infrared temperature device measures a direct surface temperature of 140F-159F, no direct contact of bare skin to that surface will be allowed during any rehearsal or performance. Direct skin contact may be mitigated through the use of proper personal protective equipment such as shoes, gloves, etc.
- 3. If the infrared device measures a direct surface temperature of 160F or higher, the surface may not be used for any purpose until the temperature cools below the 160F threshold. The team will seek alternative areas for necessary work, including outdoors in the shade, grass surfaces, or indoors.

\*Appropriate measurement protocol is to hold the temperature gun away from your body with your arm at a 45- degree angle. The gun should now be approximately waist height, pointed perpendicular to the ground. Make sure your body is not shading the area to be measured.

#### REHEARSAL/PERFORMANCE WBGT GUIDELINES

In order to gain a quantitative assessment of heat in athletics, the wet bulb globe temperature (WBGT) has been determined to be the industry standard in athletics and marching arts (NCAA, MLS, Korey Stringer Institute, two dozen state high school athletic sanctioning bodies). The WBGT device is a measurement tool that uses sunshine, ambient temperature, relative humidity, wind, and solar radiation. Monitoring WBGT both prior to and during all rehearsals and shows allows for implementation of guidelines that determine safe modifications in activity level (work/rest ratios, hydration breaks, cooling breaks, clothing choice, rehearsal time and length) with the goal of reducing heat illness risk.

The guide below provides a guideline for modification of activity based on the WBGT. (Source: Grundstein et al. Regional heat safety thresholds for athletes in the contiguous United States. Appl. Geography. 2015.pdf). Spirit of Sunnyvale will use a Heat Safety, ZELUS, or equivalent app that displays WBGT and will take appropriate measures based on the below guide.

GREEN WBGT Less than 82F – Normal Activities. "3 and 3" Provide at least three shaded rest/water breaks of at least three minutes each hour.

YELLOW WBGT 82F to 86.9F – Modification. "15 and 5" Provide at least three shaded rest/water breaks of at least five-minute duration each hour (Total of 15 minutes rest each hour divided across three equally spaced breaks. 15-5-15-5)

ORANGE WBGT 87F to 89.9F – Caution. "2-hour limit" Outdoor rehearsals may not exceed a total time of 2 hours. Provide at least a five-minute shaded or air-conditioned break after each 13-minute rehearsal block.

RED WBGT 90.0 to 91.9F – Alert. "1-hour limit" Outdoor rehearsals may not exceed a total time of 1 hour. Provide at least a five-minute shaded or air-conditioned break after each 13-minute rehearsal block.

BLACK WBGT above 92F – Warning. Outdoor Stop. Move all rehearsals into shaded or air-conditioned spaces until WBGT returns to 90F or below.

#### **ADDENDUM**

#### Important Supporting Materials Designed for Directors, Educational Staff and Training Staff

During typical summer weather conditions, DCI marching artists are subject to the following:

- Heat Cramps Painful cramps involving abdominal muscles and extremities caused by intense, prolonged exercise in the heat and depletion of salt and water due to sweating.
- Heat Syncope Weakness, fatigue and fainting due to loss of salt and water in sweat and exercise in the heat.
   Predisposes to heatstroke.
- Heat Exhaustion (Water Depletion) Excessive weight loss, reduced sweating, elevated skin and core body temperature, excessive thirst, weakness, headache and sometimes unconsciousness.
- Heat Exhaustion (Salt Depletion) Exhaustion, nausea, vomiting, muscle cramps, and dizziness due to profuse sweating and inadequate replacement of body salts.
- Heatstroke An acute medical emergency related to thermoregulatory failure. Associated with nausea, seizures, disorientation, and possible unconsciousness or coma. It may occur suddenly without being preceded by any other clinical signs. The individual is usually unconscious with a high body temperature and a hot dry skin (heatstroke victims, contrary to popular belief, may sweat profusely).

Medical professionals have long argued that the impacts of heat on the human body can be controlled provided appropriate precautions for dangerous weather conditions are taken. The following practices and precautions are recommended:

- Each performer must have a physical exam with a medical history when first entering a corps as well as an annual health history update each year. History of previous heat illness should be included as part of the health assessment.
- Lack of physical fitness impairs the performance of an athlete who participates in high temperatures.
- Directors should have a comprehensive knowledge of the physical condition of their performers and set rehearsal schedules accordingly.
- Acclimatization to heat is important. Acclimatization is the process of becoming adjusted to heat and it is essential
  to provide for gradual acclimatization to hot weather. It is necessary for the performer to rehearse in the heat if
  he/she is to become acclimatized to it. It is suggested that a graduated physical conditioning program be
  implemented, and that 80 percent acclimatization can be expected to occur after the first seven to ten days. Final
  stages of acclimatization to heat are marked by increased sweating and reduced salt concentration in the sweat.
- The myth that water should be withheld from performers during workouts has no scientific foundation. The most important safeguard to the health of the athlete is the replacement of water. Water, preferably cold, must be on the field and readily available to the performers at all times. It is recommended that a minimum of ten minutes be scheduled for a water break every half hour of heavy exercise in the heat. Water should be available in unlimited quantities. Drinking ample water before rehearsals and shows has also been found to aid performance in the heat.

- Water loss is best replaced by allowing the athlete unrestricted access to water. Water breaks two or three times
  per hour are better than one break an hour. The best method is to have water available at all times and to allow
  the athlete to drink water whenever he/she needs it.
- Performers should weigh each day before and after rehearsals and weight charts checked. Generally, a three
  percent weight loss through sweating is considered safe. If a performer loses over three percent of body weight,
  the performer should be allowed a heat recovery day and not be allowed to rehearse in hot and humid conditions.
  Observe the athletes closely under all conditions. Do not allow performers to rehearse until they have adequately
  replaced their weight.
- Observe performers carefully for signs of distress, particularly athletes who lose significant weight, and the eager athlete who constantly competes at his/her capacity. Some trouble signs are nausea, incoherence, fatigue, weakness, vomiting, cramps, weak rapid pulse, visual disturbance, and unsteadiness.

#### IN CASE OF EMERGENCY

Know what to do in case of emergency and have your emergency plans written with copies to all your staff. Be familiar with immediate first aid practices and prearranged procedures for obtaining medical care, including ambulance service.

Heat Stroke - This is a medical emergency. ANY DELAY COULD BE FATAL. Follow these steps to initiate emergency treatment (source: Korey Stringer Institute):

- 1. Remove all equipment and excess clothing.
- 2. Cool the athlete as quickly as possible within 15 minutes via whole body ice water immersion (place them in a tub/stock tank with ice and water approximately 35-58F); stir water and add ice throughout cooling process.
- 3. If immersion is not possible (no tub or no water supply), take athlete to a shaded, cool area and use rotating cold, wet towels to cover as much of the body surface as possible.
- 4. Maintain airway, breathing and circulation.
- After cooling has been initiated, activate emergency medical system by calling 911.
- 6. Monitor vital signs such as rectal temperature, heart rate, respiratory rate, blood pressure, monitor CNS status.
- If rectal temperature is not available, DO NOT USE AN ALTERNATE METHOD (oral, tympanic, axillary, forehead sticker, etc.). These devices are not accurate and should never be used to assess an athlete exercising in the heat.
- 8. Cease cooling when rectal temperature reaches 101-102F (38.3-38.9C).
- Exertional heat stroke has had a 100% survival rate when immediate cooling (via cold water immersion or aggressive whole-body cold-water dousing) was initiated within 10 minutes of collapse

Heat Exhaustion - OBTAIN MEDICAL CARE AT ONCE. Cool body as you would for heat stroke while waiting for transfer to hospital. Give fluids if athlete is able to swallow and is conscious.

Talk to your medical personnel concerning emergency treatment plans.



## HYDRATION GUIDELINES

It is fundamentally important to maintain adequate member hydration in the drum corps setting. The human body is made up of 50-75% water. The amount of water a student athlete needs depends on their body size, metabolism, the weather and the fluid they eat and their activity levels. Fluids maintain body temperature and help people from becoming overheated. It also is essential for digestion and removal of waste products. Fluids also help transport nutrients and substances and prevents dehydration. If an athlete does not drink enough fluids their strength and endurance will decrease and this affects overall concentration and performance. Lack of fluids can lead to cramping, heat exhaustion, heat stroke and even death.

Fluids will be provided at every meal and snack as well as scheduled water breaks, show sites and on the bus when traveling. Fluids should be offered at least every 15-20 minutes during every rehearsal block. Whenever possible both water and electrolyte-based fluids such as Gatorade will be made available throughout the day. Electrolyte-based drinks are needed because they help replace necessary minerals such as sodium, potassium and chloride which are lost from sweating. Beverages will not have more than 8% carbohydrate. Examples of fluids with more than 8% carbohydrate include fruit juices, sodas, honey, and carbohydrate gels. Carbohydrates in sports drinks aid in muscle energy stores and can improve sports performance. Beverages containing caffeine and carbonation will be discouraged because they act as diuretics which lead to increased urine production which leads to dehydration.

Symptoms of dehydration include fatigue, headache, weakness, dizziness, muscle cramps, nausea, vomiting, irritability, uncoordinated movements, difficulty concentrating, decreased performance and lack of sweating. Members will be encouraged to drink before they feel thirsty.

Evaluating fluid requirements is important to understand when the body needs any additional fluid for training. All athletes should begin exercise well hydrated. Members should drink 16-24 fluid ounces of water within 2 hours of rehearsal. Members should also drink at least one 12 oz cup of fluids with their meals and should consume fluids on the bus when traveling. An average recommendation is 1 ml for every calorie consumed. For example if the student consumes 4000 calories per day they would need 4000 cc of fluid (4 Liters or 128 oz) 1 liter is equal to 32 ounces. During exercise, members should consume 6-12 fluid ounces every 10-20 minutes throughout rehearsals and performances. Ideally athletes should record their weights before and after training. For every one pound loss of weight loss they should replace 16-24 fluid ounces of water. This should be done within 2-6 hours post training. Members can monitor their urine intake by

observing the color of the urine. Urine should be light yellow like lemonade instead of dark colored like tea. A urine color chart can also be posted for reference. See example attached.

# **AM I HYDRATED?**

# **Urine Color Chart**

1	If your urine matches these colors you are drinking enough fluids
2	Drink more water to get the ideal color in Shade 1 and 2.
3	Dehydrated
4	You may suffer from cramps and heat-related problems
5	Health risk! Drink more water.
6	Health risk! Drink more water.
7	Health risk! Drink more water.
8	Health risk! Drink more water.

Water loss can be cumulative and often happens during rehearsals and performances. This can be detected by monitoring daily pre-practice and post practice weights and monitoring urine color. Rehydration rates may need to be increased during exercise to minimize fluid deficits. Members can easily track this themselves with a scale and clipboard. Spirit of Sunnyvale will recommend that members bring water to rehearsals and performances. Water and Gatorade will also be provided at all rehearsals and performances.

## Wet Bulb Globe Temperature Guidance for Drum Corps International Outdoor Rehearsals

		STANDSTILL		BASIC MARCHING & DANCE		FULL RUN THROUGHS	
WBGT	HEAT RISK	WATER	REST*	WATER	REST*	WATER	REST*
		Quarts per hour	Minutes per hour	Quarts per hour	Minutes per hour	Quarts per hour	Minutes per hour
80-84.9°F	GREEN	1/2	6	3/4	9	1	12
85-87.9°F	YELLOW	3/4	9	3/4	12	1	15
88-90°F	RED	3/4	12	3/4	15	1	18
>90°F	BLACK**	1	15	1	18	1+	21

<sup>\*</sup> Rest includes, but is not limited to: SHADED hydration breaks out of direct sunlight, sit down, allow chance for heart rate and body temperature to return to baseline.

**NOTE**: Wet Bulb Globe Temperature will be LESS than the Air Temperature! Wet Bulb Temperature is NOT the same as Wet Bulb Globe Temperature. Wet Bulb Globe Temperature requires measurements of wind speed, temperature, wet bulb temperature and solar radiation in order to be accurate WBGT Heat Stress Tracker: https://kestrelmeters.com/products/kestrel-5400-heat-stress-tracker

<sup>\*\*</sup> BLACK Heat Risk category requires enhanced vigilance for the symptoms of heat exhaustion.



## WEATHER MONITORING PROTOCOL

#### SCHEDULE PLANNING

Spirit of Sunnyvale will designate a staff member to be their weather safety monitor. That designee will need to be present for the day and will be an integral part of the planning for that day's rehearsal and/or performance schedule. The plan will adhere to the written DCI weather safety recommendations regarding heat exposure exposure, lightning, wind, and air quality index. Ideally this plan would be completed the day beforehand and reassessed that morning based on more current weather conditions. The two forecasting websites recommended are as follows:

- A. weather.gov: the designated weather safety monitor will type in the location of the area of concern into the search field in the upper-left portion of this site's weather map. This will result in a graphical depiction in the official weather forecast from the National Weather Service (NWS) for that location from which the weather safety monitor can then evaluate the NWS forecast for severe weather threats such as heat, cold, rain, wind, lightning, and air quality.
- B. www.wpc.ncep.noaa.gov/heatrisk: the designated weather safety monitor will be able to locate the area of concern on the site's weather map by zooming in on that location and assess the forecasted heat risk.
- C. The weather safety monitor will report weather conditions and any severe weather threats to the administrative team member who sets the plan for the next day so that these threats can be mitigated ahead of time. For example, if there is a severe weather threat while planning to rehearse outdoors, and if no fully enclosed building is quickly accessible, a plan can be made to have buses parked adjacent to the rehearsal space for safe refuge.

#### REAL-TIME WEATHER MONITORING

For each section's rehearsal location, the designated weather safety monitor will take WBGT and field surface temperature measurements. If those measurements indicate that the corps' rehearsal plan is incongruous with written DCI weather safety recommendations, the weather safety monitor will report that to the administrator on-site for the team who will change the plan to meet the weather and site conditions. If the administrator is not readily available the weather safety monitor will have the authority to change the rehearsal plan.

- A. The weather safety monitor will need to document their readings and any mitigation plan taken. The weather safety monitor will take a photo of the WBGT and Field temp gun as photos are time and date stamped, and enter these into a documentation document kept by the team.
- B. If the weather conditions should unexpectedly change, the designated weather safety monitor will be given the authority to mitigate the plan accordingly (increased shade & water breaks), or seek appropriate shelter if severe weather occurs. The designated weather safety monitor will remain in communication with the administrator on-site if there is an unexpected change in the plan due to severe weather.
- C. Spirit of Sunnyvale will use the Zelus or equivalent app, which will give an approximate WBGT reading for the general area. Spirit of Sunnyvale will also have a handheld infrared thermometer gun for surface temperature measurement.

#### LIGHTNING

Lightning is a deadly hazard and can strike even if rain is not falling. It is imperative that all staff are aware of a lightning threat, as well as know appropriate locations for safe refuge.

Staff will be aware of how long it takes to end an activity, secure equipment and props, and have everyone reach safe refuge.

Safe refuge is a sturdy, fully enclosed building. A tour bus and vehicles are also safe, and buses can be parked adjacent to rehearsal space in advance if lightning is possible.

#### **Lightning Monitoring/Detection**

Spirit of Sunnyvale will designate a staff person to monitor lightning when thunderstorms are forecast. This person should be present at all outdoor rehearsals. This task needs to be assigned the night beforehand to a staff member who will be present for the entire next day and who will be responsible for weather monitoring. This person will have the authority to end outdoor activities immediately and move everyone to shelter without delay.

Smart phone apps will be utilized to monitor lightning. (WeatherBug Elite, My Lightning Tracker Pro, RadarScope Pro, etc.).

At the first flash of lightning or clap of thunder, no matter how far away, the team will seek shelter in a safe refuge. Lightning can be seen at great distances at night, therefore use of lightning location data will allow for more accurate decision making.

#### Safe Lightning Distance

All team members will be INSIDE safe refuge by the time lightning reaches 8 miles from your location. There may be times when first lightning strike occurs within 8 miles. In these instances, everyone should move quickly to safe refuge.

The team will remain in safe refuge until lightning is beyond 8 miles, is moving away from your location, and no additional lightning is moving towards you. Allow 30 minutes to elapse with no lightning within 8 miles before resuming outdoor activities.