



Madera Unified School District

Air Quality Procedures

AIR QUALITY AND HOT WEATHER PROCEDURES

During declared air pollution episodes, restriction of physical activities will be implemented in the following manner:

Notification

- A. The Environmental Services Manager or designee will send a District email message to all sites that a Health Advisory, Stage 1, Stage 2, Stage 3, or Stage 4 air pollution episode has been forecasted. The email will be sent at approximately 4:00pm. The forecast is for the next school day.
- B. Once an air pollution episode has been forecasted and notification has been given to the sites, the procedures required by these regulations shall remain in effect until further notice is given.
- C. The forecasted Air Quality Reading is a Forecast. When necessary, on days when the forecasted reading is at a Health Advisory Stage 2 (Purple Flag), or a Health Advisory Stage 3 (Red Flag), a real time call for Physical Education and Athletics will be made. For Physical Education, an emergency real time call will be sent upon notification that air quality has changed from a Stage 2 to a Stage 3. For Athletics, a real time call will be made at 11:00am for any change in the forecasted stage. The call will be made from the District Athletic Manager's Office. The government air quality web site www.valleyair.org will be used to determine the real time conditions.

The real time call is made to ensure the safety of our students. And, to ensure our students are not needlessly denied participation opportunities. There are times when a Stage 2 (Purple Flag) can become a Stage 3 (Red Flag), and there are times when a Stage 3 (Red Flag) can become a Stage 2 (Purple Flag). During the winter months, air quality is worse in the morning hours, due to particulate matter. As the day goes on, the air can get better. During the warmer months, the air quality is worse in the afternoon hours, due to ozone and heat. As the day goes on, the air quality can get worse.

- D. Each administrator/principal shall establish written procedures for notifying staff and students of an air pollution episode, and monitoring modified activities.

Procedures

The following actions shall be taken upon the declaration of these stages:

A. Heath Advisory

- a. **Physical Education:** During a Health Advisory action will be taken to protect the health and welfare of students and school personnel. Students at every school level with special health problems shall follow the precautions recommended by their physicians and shall refrain from all vigorous and strenuous activities. *Students with special health problems (i.e., cardiac, asthma, or any other respiratory problems) will be identified on the confidential health list prepared and distributed by school nurse.* Strenuous physical activities for all students should be reduced and less strenuous activities substitutes, e.g., running to walking. Sensitive children and adults should curtail outdoor activities and everyone else should limit prolonged outdoor exertion.
- b. **Athletic Events:** The school Principal or designee shall check district email frequently for notification of declaration of Health Advisory. If a Health Advisory, Stage 3 is declared, the principal or designee at the “home” school shall postpone, reschedule, relocate, or cancel an athletic event scheduled to begin prior to the announced end of the Health Advisory.
- c. **Practice Session:** (athletic teams, band, color guard, etc). In accordance with the Health Advisory Stage, practice and recreational activities being conducted during a Health Advisory shall be modified to reduce strenuous and vigorous activity.
- d. **Maintenance and Operations Department Activities:** In accordance with the Health Advisory Stage, Activities by Maintenance and Operations staff shall be limited to those which do not require prolonged or strenuous physical activities. Activities which contribute to air pollution should be restricted (e.g., spray painting, running engines).
- e. **Bus Transportation:** In accordance with the Health Advisory Stage, District vehicular activities shall be limited to emergency repair response, home-to-school-to-home bussing, or return to the District of students and staff who are away from the district.
- f. **Employees:** In accordance with the Health Advisory Stage, all sensitive employees, especially those with respiratory diseases, shall limit their outdoor exertion, except for emergency responses.

B. **Stage 1 Air Pollution Episode – Orange Flag (AQI = 101-150)**

- a. All sensitive students and adults should avoid all outdoor activities and remain indoors.
- b. Everyone else should avoid prolonged outdoor exertion.

C. **Stage 2 Air Pollution Episode – Purple Flag (AQI = 151-169)**

In addition to the actions taken during a Health Advisory and Stage 1 Episode, the following procedures shall be implemented:

- a. All sensitive students and adults should avoid outdoor activities and remain indoors.
- b. Everyone else should be aware of prolonged outdoor exertion.
- c. Regular school activities: During a stage 2 air pollution episode, *strenuous* outdoor physical education shall be discontinued. But, modified outdoor physical education may continue.

D. Stage 3 Air Pollution Episode – Red Flag (AQI = 170+)

- a. No physical activity
- b. Practice sessions: No physical activity. Chalk talk or film strategy sessions only.
- c. All games canceled.
- d. Maintenance and operations department activities: The Director of Maintenance and Operations shall notify employees to curtail all physical exertion.
- e. Bus Transportation Department activities: District vehicular activity shall be limited to necessary bussing of students and extreme emergency response.

E. Stage 4 Air Pollution Episode (AQI = 300+)

A stage 4 Air Pollution episode declaration will result in closing of the schools and all District offices as required in the State of California air pollution control regulations. Normally, a prediction of this condition will be made on the previous day.

HOT WEATHER PROCEDURE

By the nature of our weather, coaches should be well aware of the physical problems for their athletes when practices are conducted in hot weather. Hot weather practices causing heat illness to athletes is a major concern of the American College of Sports Medicine, the American Academy of Pediatrics, The National Trainers Association, the National Federation of High Schools, and the Madera Unified School District.

Many States have adopted Procedures and Policies on a statewide basis to deal with Hot Weather Practices/Games. The Procedures and Policies include limiting practice times, modifying practice, and canceling practices/games. At this point in time, California has yet to adopt a Statewide Policy. For the safety of our student-athletes, the Madera Unified School District has implemented the following Procedures:

Stage 1: Forecast under 95 Degrees	All Sports
	<ul style="list-style-type: none">• Provide ample amounts of water. This means that water should always be available and athletes should be able to take in as much water as they desire. And, athletes should be able to get water when they feel the need.• Optional water breaks every 30 minutes for 10 minutes in duration.• Watch/monitor athletes carefully for necessary action.
Stage 2: Forecast from 95 Degrees to 99 Degrees	All Sports
	<ul style="list-style-type: none">• Provide ample amounts of water. This means that water should always be available and athletes should be able to take in as much water as they desire. And, athletes should be able to get water when they feel the need.

	<ul style="list-style-type: none"> • Mandatory water breaks every 30 minutes for 10 minutes in duration. • Watch/monitor athletes carefully for necessary action.
Stage 3: Forecast from 100 Degrees to 104 Degrees	All Sports
	<ul style="list-style-type: none"> • Provide ample amounts of water. This means that water should always be available and athletes should be able to take in as much water as they desire. And, athletes should be able to get water when they feel the need. • Mandatory water breaks every 30 minutes for 10 minutes in duration. • Watch/monitor athletes carefully for necessary action. • FOOTBALL: Coaches need to be sensitive to heat related issues. <ul style="list-style-type: none"> ○ If humidity is forecasted for 25%+, or if the day is muggy (humid), be prepared for a stage 4 or 5.
Stage 4: Forecast for 105+ Degrees	All Sports
Schools should be prepared for a potential Red Flag notification from the District Athletic Office.	<ul style="list-style-type: none"> • No long distance running or strenuous conditioning/practice if Heat Index is 105 or higher. • Frequent hydration whenever needed. • Frequent shade breaks. • If possible, practice before 11:00am and after 7:00pm. • All Coaches need to be sensitive to heat related issues. <ul style="list-style-type: none"> ○ FOOTBALL: No Pads if Heat Index is 105+.
Stage 5: Heat Advisory	All Sports
A Heat Advisory is issued when index is 105 and nighttime heat index is above 80. Red Flag will be in effect.	<ul style="list-style-type: none"> • All Games and Practices Cancelled until Heat Advisory is lifted.

Precautions for Hot Weather Athletics

The main problem associated with exercising in hot weather is water loss through sweating. Water loss is best replaced by coaches allowing a “water as needed” policy. The athlete should be allowed water anytime he or she feels the need. **Coaches should make sure all athletes are taking in fluids.** In addition, the following precautions should be taken:

1. Physical examination with athlete’s school health-history available to the examining physician. State high school associations recommendations should be followed with annual reference to heat stress.
2. Lack of physical fitness impairs the performance of an athlete who participates in high temperatures. Coaches should know the physical condition of their athletes and gear their practice schedules accordingly.
3. **The acclimatization factor to heat is important.** It is the process of becoming adjusted to heat, and it is essential to provide for gradual acclimation of hot weather activities. It is suggested that a graduated physical conditioning program be used and that 80% acclimatization can be expected to occur after the first 7-10 days. It is fully recommended that our coaches wisely use spring practice time, the preconditioning week in August, and pre-schedule practice with acclimatization well in mind.
4. The old idea that water should be withheld from athletes during workouts has no scientific foundation. **The most important safeguard to the health of the athlete is the replacement of water.** Iced water is preferable.
5. Know both the temperature and the humidity. The greater the humidity, the more difficult it is for the body to cool itself. Madera generally has low humidity, and that is a plus. But our late summer and early fall usually have very high temperatures- we must be just as alert and preventative.
6. Cooling by evaporation is proportional to the area of skin exposed, in extremely hot weather; reduce the amount of covering on the body as much as possible. Never use rubberized clothing.
7. After strenuous practices, athletes should replace fluids. Water or sports drinks should be encouraged.
8. Athletes should weigh each day before and after practice and weight charts checked. Generally, a three percent weight loss is safe through sweating and over a three percent weight loss is in the danger zone. Compensate with a less rigorous workout in weather that is hot.
9. Watch your athlete’s carefully-particularly those who lose much weight, overweight athletes, and the over-eager athlete. Some trouble signs are nausea, incoherence, fatigue, weakness, vomiting, cramps, weak rapid pulse, visual disturbance and unsteadiness.
10. Know what to do in case of such an emergency. Be familiar with immediate first aid practice and prearranged procedures for obtaining medical care, including ambulance service.

Signs of Heat Illness

Heat Cramps

Painful cramps and spasms of active muscles- most common in the calf muscles caused by intense and prolonged exercise in the heat and depletions of water and salt due to sweating.

Heat Fatigue

Feelings of weakness and tiredness caused by depletions of water and salt due to sweating and exercise in the heat.

MEDICAL EMERGENCIES

HEAT EXHAUSTION

Heat exhaustion is one of the heat-related syndromes, which range in severity from mild heat cramps to heat exhaustion to potentially life threatening heatstroke. Signs and symptoms of heat exhaustion often begin suddenly, sometimes after exercise, heavy perspiration and inadequate fluid intake. Signs and symptoms resemble those of shock and may include:

- Feeling faint
- Nausea
- Heavy sweating
- Ashen appearance
- Rapid, weak heartbeat
- Low blood pressure
- Cool, moist skin
- Low-grade fever

HEAT EXHAUSTION: FIRST AID

- Get the person out of the sun and into a shady or air conditioned location.
- Lay the person down and elevate the legs and feet slightly.
- Loosen or remove the person's clothing.
- Have the person drink cool water, not iced, or a sports drink containing electrolytes.
- Cool the person by spraying or sponging him/her with cool water and fanning.
- Monitor the person carefully. Heat exhaustion can quickly become heatstroke. If fever greater than 102 F, fainting, confusion or seizures occur, dial 911 or call for emergency medical assistance.

HEATSTROKE

Heatstroke is a life threatening medical emergency. What makes heatstroke much more severe and potentially life-threatening is that the body's normal mechanisms for dealing with heat stress, such as sweating and temperature control, are lost. The main sign of heatstroke is a markedly elevated body temperature – generally greater than 104 F – with changes in mental status ranging from personality changes to confusion to coma. Skin may be hot and dry, although in heatstroke caused by exertion, the skin is usually moist.

Other signs and symptoms may include:

- Rapid heartbeat
- Rapid and shallow breathing
- Elevated or lowered blood pressure
- Cessation of sweating
- Irritability, confusion or unconsciousness
- Fainting, which may be the first sign in older adults

HEATSTROKE: FIRST AID

- Move the person out of the sun and into a shady or air-conditioned space
- Dial 911 or call for emergency medical assistance
- Cool the person by covering him or her with damp sheets or by spraying with cool water. Direct air into the person with a fan or newspaper