



**Parks and Recreation Division
1200 Gerault Rd.
Flower Mound, TX 75028
972.874.PARK**

INCLEMENT WEATHER GUIDELINES AND PROCEDURES

(Effective November 5, 2020, as approved by the Parks Board)

Purpose

To provide safe sports fields for the use and enjoyment of Flower Mound residents and their guests as well as establish guidelines and procedures for inclement weather. This policy serves to inform sports field users of the Earth Networks Total Lightning Network and describes guidelines to utilize when thunderstorms approach. It also describes the Town's decision-making process that occurs during periods of inclement weather and rainout contact information.

Lightning Detection System

Lightning is a hazard that must be taken seriously by coaches, officials, parents, spectators, and participants. Lightning is a form of electrical discharge between clouds or between a cloud and the ground, or building. The discharge may take place between two parts of the same cloud, between two clouds, or between a cloud and the ground. Thunder is the sound waves produced by the explosive heating of air in the lightning channel during the return. The average lightning strike is six miles long (but could strike from up to 20 miles away resulting in "a bolt from the blue"), reaches 50,000 degrees Fahrenheit (four times as hot as the sun's surface), and voltage in a cloud-to-ground strike is 100 million to 1 billion volts. Thunder can only be heard about 12 miles away under quiet outdoor conditions. Ground-based items such as fences, trees, blades of grass, light poles, bleachers, dugouts, and people emit varying degrees of induced electric activity which can act as a lightning rod.

Previously, many people have relied on the "Flash/Bang" technique (the sound of thunder will take five seconds to travel one mile) to measure their distance from lightning. You must be aware that, on average, thunder can only be heard over a distance of only three to four miles. By the time you hear thunder, you are already well within the reach of a lightning strike. For this reason the Town of Flower Mound has purchased and installed the Earth Networks Total Lightning Network at Bakersfield Park, Gerault Park, Jake's Hilltop Park, Glenwick Park, and the Chinn Chapel Soccer Complex.

Total Lightning Network incorporates patent pending systems and methods for the detection of lightning activity to provide unmatched in-cloud (IC) and cloud-to-ground (CG) detection efficiency. It is an integrated IC and CG detection network capable of detecting long range IC lightning, which is critical for the advanced notification of severe weather phenomena such as: CG lightning strikes, heavy rain rates, high winds, hail and tornadic activity.

When the conditions for a lightning strike exist, the Earth Networks Total Lightning Network system will give a 15-second blast on the horn cluster that can be heard up to 700 yards away depending on terrain. At the same time, a 170,000 peak candela strobe light visible from most areas of the park will activate and stay on until the danger has passed. A 30-minute countdown clock to resume operations will activate that could also be available to view on the association's website. The countdown clock will automatically reset when lightning is recorded. Once the potential for a lightning strike has passed, the system will activate the horns giving the all-clear signal – three, five second blasts -- and the strobe light will go off. However, if weather conditions appear unsafe and the system has not sounded the alarm, common sense should be your guide and activities should cease despite the absence of a Earth Networks Total Lightning Network warning.

Due to the unpredictability of weather patterns, it may be possible for the alarm to sound multiple times within an hour or even sound when there appears to be no danger (i.e. clear skies). While stopping and restarting athletic activities due to Earth Networks Total Lightning Network warnings may result in some frustration, it is important to remember that the Earth Networks Total Lightning Network system's warnings must be heeded at all times. If the Earth Networks Total Lightning Network system sets off the alarm on a sunny day, it is not malfunctioning. There is a chance of being struck by lightning if the alarm is not heeded (“a bolt from the blue”). It is worth noting that many of the lightning deaths and injuries that occur each year are from the first lightning strike from an incoming storm or come from the rear of a storm that appears to have passed through an area.

Delay the Practice and/or Game when Thunderstorms Approach

People on open sports fields are at higher risk for lightning strikes. Sports fields are dangerous because they are large open areas. Sports fields also have metal bleachers, fences, light poles, soccer goals, and goal posts that attract lightning. When lightning hits these objects, its charge travels along the object shocking anyone who is touching it. Lightning can bounce off any of these objects and strike people nearby. Lightning can also travel through moist soils for dozens of feet.

The following lightning policy has been implemented and is enforced by the Town of Flower Mound and all youth sports associations for your safety:

- Stay tuned to local weather forecasts and radar if thunderstorms are predicted.
- Once the Earth Networks Total Lightning Network senses conditions that favor lightning, there is often a flash of lightning in the area within 10 minutes.
- When the Earth Networks Total Lightning Network warning is sounded, suspend all practices and games and seek shelter immediately until the all-clear signal is heard.
- Everyone should immediately seek shelter anytime they believe lightning threatens them, even if the Earth Networks Total Lightning Network warning has not been sounded.
- Stay away from metal including fencing, bleachers, flagpoles, dugouts, sheds, and goals.
- Avoid high places, open areas, overhead wires and power lines, telephones and cellular phones, radios, isolated trees, picnic shelters, golf carts, or any type of standing water.
- If you are outside, the interior of a car, truck, or bus with a metal roof and the windows closed is relatively safe from lightning. To be safe, do not touch the metal on the inside of the vehicle.

- If you are outdoors with no shelter available, find a low spot away from trees, bleachers, fences, and other metal structures. Make sure the area is not prone to flooding.
- If you feel your hair suddenly stand on end, it means you may be a lightning target. Crouch low on the balls of your feet and try not to touch the ground with your knees or hands.
- Anyone not following these guidelines when the Earth Networks Total Lightning Network is activated and remains outdoors or in an inappropriate area or shelter will do so at their own risk.
- If park patrons return to the sports fields prior to the all-clear signal from Earth Networks Total Lightning Network, they do so at their own risk.
- Once the all-clear signal sounds, activities can proceed.
- Earth Networks Total Lightning Network will be operable during league practices, games, tournaments, scheduled reservations, and other sanctioned/sponsored Town activities.

Earth Networks Total Lightning Network helps assess the threat for lightning. Neither the warning nor the system is intended to guarantee that conditions are safe. If the weather is threatening and no warning signal is heard or seen, use good judgment and clear the sports field immediately. Do not wait for the warning signal to activate, as the system can malfunction. While the system is not infallible, common sense should still be followed. Earth Networks Total Lightning Network system is an important tool for enhancing the safety of Town sanctioned activities.

General Information for Inclement Weather

Experience has shown that most of the turf damage to sports fields occurs with overuse and/or use during inclement weather, especially in early spring and late fall. Periods of wet weather, prolonged rain, or heavy downpours combined with field use will cause damage to the turf and skinned infield areas. In order to keep this damage to a minimum and ensure sports fields are safe, the Parks and Recreation Department makes a decision regarding opening or closing a sports field based on the following criteria:

- Presence of standing water on the field.
- Amount of precipitation that has fallen and is expected to fall.
- Drainage conditions on the sports field.
- Time of year and the cumulative amount of stress on the sports field.
- Type and amount of damage that could occur if the fields were to remain open.

Once a visual assessment has been made of the various sports fields, the Sports Field Crew Leaders share information with the Athletic Field Supervisor. Based on the above criteria, a decision is made on whether to open or close the sports fields. Notifications are normally disseminated by 3:00 p.m. on weekdays and 8:00 a.m. on weekends. If the sports fields are publicized as closed and damage occurs as a result of a user's decision to play, the user may be held accountable for repair costs and possibly have future sports field reservation privileges revoked.

Sports Field Conditions/Rainout Contact Information

- Adult softball, adult flag football, adult kickball, and summer track: 972.874.6277
- Or contact the Town's youth sports associations at <https://www.flower-mound.com/800/Youth-Sports>