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CAMPUS SAFETY WEATHER SOLUTION

A BUYING GUIDE

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Campus Safety & Weather Introduction

Safety has become a major focus on campus, and with good reason. As a place parents send their children to study, you are in loco parentis – or "in the place of a parent." You're responsible for the safety of your students from all dangers and that isn't an easy responsibility.

It seems like every year there are new risks threatening your students, staff, visitors, and campus systems. While decreasing campus violence and protecting campus systems from cyberattacks are two of the more popular safety initiatives, one high-impact risk that often goes overlooked or under-funded is the weather.

Your students check the weather forecast daily to see what they should wear to class or if they'll be able to study outside, but you need to check the weather for a far more important reason: Overall campus safety from weather threats. Both newsworthy and everyday weather events can have a profound impact on the overall safety of your athletic safety, overall campus resiliency, and planning activities.

If you don't know anything about weather safety at ourdoor facilities, this is a great place to start. Get ready to learn to build your campus safety weather policy from the ground up and how to implement an effective weather technology stack to make these processes automated, effective and second-nature at your university. The goal? Achieving a safe campus environment free from weather threats for your students, staff and visitors, while having time to focus on other safety initiatives.

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Weather Threats and Impacts on Campus

The first step to creating a weather-safe campus or university is understanding what weather events can cause danger in the first place.

Weather presents a lot of problems to campuses around the U.S. It doesn't matter if your campus is 5 square miles or 50: You still must know what weather events are coming and have the tools to protect your campus from them – even if it's a multi-location school. Depending on your location, there are many dangerous and destructive weather events that affect your campus.

These include:

1. **Big severe weather events like hurricanes and cyclones**
2. **Every day severe weather events like lightning, extreme cold, high winds and heat waves**

Whether it's a high-impact, low-frequency event like a tropical cyclone, or something more common like extreme heat, there are plenty of stakeholders affected. It can be overwhelming to think about all at-risk parties, so we like to break it up into three distinct operational groups.

1. Athletic Safety   2. Campus Safety   3. Emergency Management

Group one includes all **Athletic Decision-Makers** on campus including folks like athletic directors and athletic trainers. Your key stakeholders include student-athletes, athletic trainers, grounds crew, spectators, and referees.

Group two includes the **Campus Risk & Safety Team** like school leadership and safety managers. Your key stakeholders include the student body, staff, and visitors.

Group three includes the **Emergency Management Team**. This can be the emergency management department, fire department, or even the police department. Your key stakeholders include everyone already mentioned as well as the surrounding community.

By understanding what group you fall into on campus, you should be able to make sure everyone is prepared to handle severe weather threats.

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Developing a Weather Safety Policy with the Three Pillars

Weather safety policies are necessary for individuals in all three groups. Once you figure out where you belong, it's easier to develop a weather safety policy. An effective weather safety policy includes three pillars. These pillars are analyze, plan, and implement.

STEP ONE: ANALYZE

Whether you're an Athletic Director, Campus Safety Manager, or Emergency Operations Director, you must analyze several different things in order to build an effective weather safety policy for your specific stakeholders. Your checklist should include:

✔ **ASSETS AND EXPOSURES**
Who or what are you trying to protect? Why are they in danger?

✔ **ACTIVITIES AND EVENTS**
What activities put your people/assets in danger?

✔ **THREATS POSED BY WEATHER VARIABLES**
What weather events are you susceptible to? (like lightning, heat, or snow)

✔ **SANCTIONING BODY GUIDELINES**
What rules must you follow?

✔ **EVACUATION PROTOCOLS AND SHELTERING LOCATIONS**
What do you do during each threatening event? Where does everyone take shelter?

When creating your sheet, make sure you write everything down. It's fine to include details, notes, or questions. This will help you craft the most effective policy. We also recommend having others in your group look over your analysis to ensure you didn't miss anything.

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STEP TWO: PLAN

Now it's time to pull all that into a practical plan. You should build a custom policy spreadsheet based on the results of your analyses. This will include separate policies depending on the type of outdoor activity, assets and exposures, season or month, and responsible parties.

For example, the athletic department should have a different plan for practice sessions and games. The campus safety department can have multiple plans for different seasons and weather threats. The emergency management department can have different plans for different outdoor festivals and events.

When you're making your spreadsheet, you must include a plan of action that includes:

- **Forecasting and detection**
- **Alerting procedure(s)**
- **Criteria for event suspension and resumption**
- **Safety protocols**
- **Designated safe shelters**
- **Chain of command**

Severe weather events can be frightening and chaotic. When you have comprehensive policies that are specific to your campus you ensure that everyone is on the same page. These policies will lead you through the stress and panic so that safety can be restored throughout your school.

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STEP THREE: IMPLEMENT

Now that your comprehensive policies are drafted up and ready to go, it's time for you to implement. You may be wondering how to get these policies up and running at your school. Don't worry: We have an implementation checklist that you can follow:

- ✔ **Identify and install technology or technologies to support your customer policy**
- ✔ **Activate alerts for your established protocols**
- ✔ **Disseminate policies and procedures**
- ✔ **Communicate with external associations and emergency departments**
- ✔ **Educate all parties about threats and safety protocol**
- ✔ **Communicate the chain of command**
- ✔ **Test, evaluate, and monitor**

You can't control the weather, but upon following these three pillars you'll control exactly how your campus reacts to inevitable weather threats. If all three areas are detailed and supported, your facility's quick automated reaction will minimize negative effects of severe weather like event disruptions, property damage, and injuries.

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Building the Ultimate Weather Safety Stack

While reading through this guide, you may have noticed that a weather-safe campus relies heavily on weather technologies, alerting systems, and expertise.

This next part is extremely important as we'll outline the most popular tools that you should be using to build a comprehensive weather safety solution.

There are eight components of the ultimate weather safety stack. Together with your meticulous planning, these technologies will support total protection for severe weather at your campus. Here are the items you should look for:

1. REAL-TIME STORM TRACKING

The forecast can change a lot from when you listen to the weather report on your drive to work to when athletes, officials, and fans end up on campus for the big game. That's why real-time storm tracking is so important to have in your weather safety stack. Modern visualization tools enable severe weather intelligence by incorporating dozens of up-to-the-minute data points like total lightning information, National Weather Service alerts, and radar.

KEY FEATURES TO LOOK FOR:

- 👁 Real-time systems with outstanding weather network quality providing updates every 2 seconds
- 👁 An extensive library of visual layers that you can add to your map for a more customized and integrated analysis

WHO IT'S PERFECT FOR:

Real-time storm tracking is perfect for athletic safety professionals who have a lot riding on the game, including the safety of players and spectators. By watching the weather systems move around campus, the athletic director can make the right call on game day

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2. **LOCALIZED WEATHER FORECASTS**

Real-time weather information is important, but so is looking ahead. While forecasts can change, they're still an asset when planning for the days ahead. Unlike the forecast you hear on the news, a localized weather forecast focuses just where your campus is located. This is provided through onsite weather equipment connected to weather networks with comprehensive coverage around the United States.

KEY FEATURE TO LOOK FOR:

👁 Network-based data so that your forecasts include information from your school, not the nearest airport.

WHO IT'S PERFECT FOR:

Localized weather reports are perfect for Athletic Directors who need to access on-the-field temperatures for threats to their athletes such as Heat Stress. The ability to look-ahead is also an important tool that the campus safety team can use to plan for year-round outdoor activities, events and festivals.

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3. CUSTOMIZED MOBILE ALERTS

One important component of an ideal weather safety technology stack is alerting capabilities. You should be picky about your alerting tools and insist on using providers that enable full alert customization. The best alerting systems allow users to customize what weather events trigger the alerts, the distance when each event triggers the alerts, how the alerts are delivered, and who receives them.

KEY FEATURES TO LOOK FOR:

- Real-time data delivery methods rely on push methods. This means the tools that use real-time data send the information automatically, without any manual requests made by the user.
- Multi-channel delivery. Get alerts in a way that works for you. Look for providers that offer text, email, desktop, and in-app notifications.
- Multi-recipient capability is also key. You more than likely have a team of multiple admins and on the ground enforcers that need to stay in the know, so keep that in mind.
- Threat and distance-specific alerts. For example, different alerts for total lightning when it's 12, 8, and 4 miles away from campus.

WHO IT'S PERFECT FOR:

Everyone, because they're customizable! For example, the athletic safety group may need alerts for lightning to protect everyone from accidental strike as well as high winds to protect those tailgating from being hit with airborne tents or other debris. On the other hand, the campus safety group may request customized alerts for winter weather conditions to be sent to safety managers via text message as they move about campus. When it comes to dealing with a state of emergency called due to weather, emergency managers need real-time alerts delivered straight to their desktop so they can continue working on their responsibilities. Customized alerts are perfect for anyone in any group.

EN Sferic Mobile 8:38 PM
Sferic Mobile - Alert
Lightning Notification - Germantown, Maryland. I

EN Sferic Mobile 7:12 PM
Sferic Mobile - Alert
Flood Notification - Orlando, Florida. Flooding in you

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4. OUTDOOR ALERTING HORN AND STROBE

While your staff certainly need alerts to put plans into action, it's also imperative that you include a mass notification system that doesn't require access to a cell phone or smart device. That's where automated high-decibel audible and visible alerts come into play. Known as outdoor alerting systems or lightning horns and strobes, these tools make it easy to put your weather safety plans into action as long as all stakeholders know where to seek shelter.

KEY FEATURES TO LOOK FOR:

- Systems that use robust network-based weather detection technology pull storm information from global networks. Unlike single-node tools, network-based weather warnings see the whole picture and minimize back-and-forth situations.
- The latest systems provide a countdown clock so that decision-makers can clearly see how much longer they must wait to resume activities and communicate that information to all involved stakeholders.

WHO IT'S PERFECT FOR:

Athletic Safety and Campus Safety groups benefit the most from horn and strobe alerts. That's because these groups are typically responsible for large numbers of people in an outdoor setting. Outdoor Alerting Systems are quick, easy-to-understand, and get people moving towards shelter – no questions asked.

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5. 24/7 ACCESS TO METEOROLOGISTS FOR EVENTS

Imagine being able to pick up a phone and talk to an expert about a potential severe weather event at your campus. That's what it's like when you have meteorological support. When it comes to more complex weather events, there is nothing more valuable than the ability to talk to a meteorologist and get their take.

You should look for meteorologists who will tailor forecasts to your campus' needs, take the call no matter the time or day, and answer any questions you may have without judgement.

KEY FEATURES:

- 24/7 coverage so you have expert advice no matter where your location or what the clock says.
- A team of meteorologists who meet, confer, and check each others' forecast and alerts to ensure quality.

WHO IT'S PERFECT FOR:

Meteorologists are an asset to any group on campus but Campus Safety benefits the most. Meteorological support is perfect for those tricky outdoor situations like graduations, festivals, and concerts. Campus safety personnel can plan for these events more confidently with a trusted weather expert on their side.

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6. ONLINE WEATHER CENTER

A personal weather portal gives your entire team a centralized place to go to see current weather conditions like wind speed, temperature, and humidity. Good ones also include space for weather warnings, forecasts, and weather camera views.

An online weather portal is a great communication tool for all stakeholders and can be embedded on to various websites. This will improve overall weather awareness and safety at your school.

KEY FEATURES TO LOOK FOR:

- Real-time condition updates that are easy-to-read and share.
- Personalization options that include space for school name, location, and live weather camera feed integrations to improve school spirit.

WHO IT'S PERFECT FOR:

Online Weather Center are perfect for school leadership professionals who want to include weather information on various school websites. It also benefits Emergency Management members as they can get a live look at the campus through a weather camera.

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7. PUBLIC WEATHER DISPLAY

Most schools find it beneficial to also provide weather information in a physical spot on campus. We recommend schools do this with a type of public weather display. You can set up this display in a student center, dining hall, or other central location where other important notices are posted to give students and staff a physical center for weather information.

Another element to a public weather display is the ability to integrate the visualized weather data into existing school platforms like the website, intranet, social media accounts or app. Ultimately, the goal is to keep the public informed through all channels, so finding a solution that allows for that is key.

KEY FEATURES TO LOOK FOR:

- A display that includes basic conditions so that community members can quickly digest weather information and carry on with their days.
- Customization that allows you to include your organization's name, logo, location, or a message of your own.
- The ability to integrate weather data into existing systems.

WHO IT IS PERFECT FOR:

Staff in the Campus Safety group love the Public Weather Display because it brings the entire community together. We recommend placing other important campus safety information near the command center, that way the student body may retain more of your important information!

8. MANAGED WEATHER EQUIPMENT

Weather stations, lightning sensors, and weather cameras are three important pieces of weather equipment that schools use to protect stakeholders from severe weather. They're only beneficial to your overall weather safety plan if they function properly. As with any safety purchase, you want to make sure your weather safety solution lasts long-term. That's where the value of a weather maintenance team lies.

If one of your tools isn't working properly, an experienced team of weather maintenance experts should only be a call away to help your safety plan get back to business as usual.

KEY FEATURES TO LOOK FOR:

- 👁 You'll want your weather equipment managed by an in-house team of experts, not one-time contractors. This ensures the people maintain your equipment are experts in it.
- 👁 As an added value, some organizations have meteorologists on their maintenance teams, so you know you're getting the best possible service.

While you can pick and choose which weather protection tools you'd like to include, please note that only by using all these together will you have the strongest weather safety policy.

Conclusion

To review, you should walk away from this piece knowing the following:

1. What weather events commonly impact school
2. Which stakeholders feel those weather impacts
3. Which group you fit into (Athletic Safety, Campus Safety, Administrator)
4. The three pillars of an effective weather safety policy (Analyze, Plan, Implement)
5. What eight components go into an effective weather safety stack
6. Where to go for more information

Need help designing and implementing your weather safety policy?
We are here to help! Contact us at **info@earthnetworks.com** or give us a call at **301.250.4000**

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