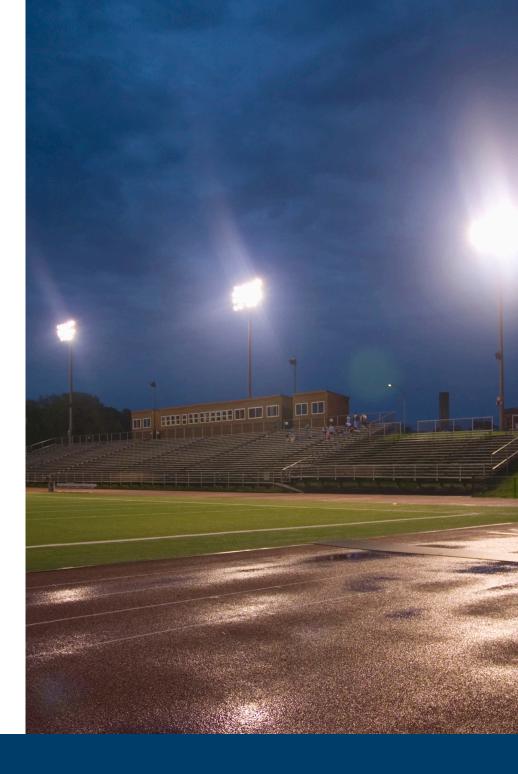
DTN°

Why Alerting Matters for Outdoor Events



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Introduction

In running outdoor activities or events, you've likely experienced your fair share of weather-related disruptions. We're not here to tell you that the weather can affect safety, costs, and day-to-day operations. You already know that. Instead, we'd like to focus on something much more beneficial to you: how you can proactively reduce those impacts with an on-site severe weather alerting system.

You're responsible for the well-being of those who participate in your activities or events, be they guests, players, spectators, vendors, or staff. Maintaining their safety is your number one priority. To do this, you must proactively manage the impact of adverse weather by keeping everyone informed about changing conditions.

Accurate, reliable weather intelligence is essential. So are alerting capabilities. Being notified of dangerous conditions well before they arrive is one of the best ways you can keep people safe and informed. It's also vital for providing sufficient time to calmly evacuate everyone from the area — as well as knowing when it's safe to return. Likewise, it is important to minimize false alarms and cancellations that can unnecessarily disrupt activities and damage trust.

In these situations, it simply isn't enough to rely on free forecasts or local news to manage threats like lightning, excessive heat, and more. It's only with a higher level of support that you can access accurate, current, and consistent weather insights and alerts for your specific location.

The dangers of high winds

Seven people died and dozens were injured during an August 2011 Sugarland concert.

The Indiana State Fair stage collapse occurred during an outdoor concert by the country band Sugarland. A severe thunderstorm with wind gusts reaching nearly 80 mph hit the stage's temporary roof structure, causing it to crash down onto the crowd, killing seven people and injuring dozens more.

The cost of cancellations **£45 million***

The cost to the local economy when Boardmasters in Newquay, UK was cancelled in 2019.

Protecting your investment and planning is made easier by adopting the best weather and alerting technology possible. In addition to obvious safety concerns, weather uncertainties can cause problems for your bottom line, too. In the UK alone, there are more than 7,000 major outdoor <u>events</u> each year. They are worth an estimated £1.1 billion to the economy — and cancelations impact not only organizers, but also the local area.

*Source: <u>BBC News</u>, Boardmasters cancellation a 'bitter blow' for Newquay businesses, August 8, 2014

Why alerting matters for outdoor activities & events

Whether you're organizing a sporting event, music festival, or other outdoor activity, it's no surprise that the weather can be a threat. Read on to discover four factors that make onsite weather alerting more important than ever.

Factor #1. Incidents of extreme weather are increasing

Studies show that heavy rain has become more frequent. Incidents of extreme rainfall and flooding have surged by more than 50% in the last decade, worldwide. They are occurring at a rate four times higher than in 1980, according to a report by the European Academies' Science Advisory Council (EASAC). And the U.S. Geological Survey revealed that flooding costs the country more than \$7 billion USD in damages and kills more than 90 people each year.

In the United States, according to the National Oceanic and Atmospheric Administration, lightning kills an average of 49 people a year and injures hundreds more. Tornadoes, on average, kill 80 people a year and injure upwards of 1,500 people, though in particularly active years, these figures can be significantly more. In 2011, for example, 552 people lost their lives due to tornadoes, and over 5,300 people were injured.

These and other weather-related risks put pressure on organizers like you to have solutions in place to mitigate them.





More extreme weather conditions can impact the viability of outdoor activities and events, increasing the risk of delays, evacuations, and postponements. Having a system in place to alert people to danger becomes more critical with this increased frequency.

Factor #2. People expect you to deliver excellent experiences

Events and activities are made — and broken — by their reputation. Word-of-mouth, good reviews, and positive feedback are essential to success and growth, year after year. While people attend for many different reasons, their expectations are almost always high.

While canceling or postponing an event or activity might sound like a sure-fire way to disappoint people, what will upset them more is a lack of clear communication and not understanding why a decision was made. Typically, the public understands that adverse weather means outdoor events and activities could be affected. What they are less forgiving about is when they aren't warned of approaching dangers, are put at risk, or when their plans are needlessly canceled or delayed.

> People who have a bad experience can damage your reputation. They expect you to prioritize their safety and not place them at undue risk. Failing to effectively alert people can result in public backlash and scathing reviews.



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Factor #3. You have a duty of care to everyone on-site

Intense thunderstorms can come on quickly, bringing deadly lightning, dangerously high winds, and the potential for flash floods — which put people at significant risk.

If you are hosting an outdoor event or activity, you must monitor the weather for potential hazards. Early notification provides valuable time to enact your pre-planned safety protocols and move people to secure locations quickly and efficiently.

Sudden weather changes can disrupt your careful planning. However, having to second guess how conditions will develop and being slow to warn and update those in your care leaves them at risk.

Impact on

outdoor

activities

& events

As the organizer, you are responsible for ensuring that your guests, players, spectators, vendors, and staff are safe. On-site alerting allows you sufficient time to move people to a secure place when weather conditions warrant.

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Factor #4. You may not be as mobile as you think

Many alerting systems rely on decision-makers and stakeholders to have a mobile device in hand at crucial moments. In practice, however, this isn't always possible. Other priorities take precedence, and they may not end up being quickly alerted to approaching threats like lightning or severe weather.

An alerting system that does not rely solely on mobile notifications provides more comprehensive coverage, especially during those moments when decision-makers don't have their smartphone or tablet in hand.

> Impact on outdoor activities & events

Relying on mobile devices can mean you and your team won't get the essential alerting information you need in time.

In Summary

- You must balance public expectations with your safety-focused responsibilities
- The number of extreme weather events are on the rise
- You need to have a plan in place and the right tools to manage and communicate threats to those in your care

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How outdoor activities & events are innovating with weather insights

As you've read, weather conditions are increasingly impacting the success and safety of outdoor events and activities. However, not every team is aware of the value that accurate, reliable weather data can provide. Let's explore two examples that use weather data to support safety and alerting.



Concert officials use accurate weather insights to protect attendees and crews

The University of Notre Dame transformed its open-air stadium into a concert venue for the first time in October 2018, as Garth Brooks and his band entertained some 85,000 fans, despite worsening weather conditions.

"Strong wind gusts were a primary concern. But the on-site meteorologist immediately notified us of predicted changes, which allowed us to make accurate and informed decisions for the safety of our guests," said Mike Seamon, vice president for campus safety and university operations. DTN solutions were instrumental in maintaining safety regulations surrounding the concert setup. With high winds prevailing throughout much of the day and into the evening, this tool allowed officials to make a decision to evacuate the stadium in the early afternoon hours in anticipation of 50 mph winds. This information also assisted in the decision to lower the stage support equipment.

With rain mixed with small hail predicted by the DTN solution at the planned 7 p.m. start time,

the decision to postpone the show an hour was made. At 7:45 p.m., the on-site meteorologist notified officials that the rain and winds were expected to die down at 8 p.m., resulting in Garth Brooks and his band taking the stage to begin the show.

Throughout the show, concert officials were able to consult with the on-site meteorologist to ensure that the isolated rain and wind gusts were within safety regulations.

How the Seahawks play it safe with accurate weather insights

The Seattle Seahawks are a professional American football franchise based in Seattle, Washington. The only National Football League franchise located in the Pacific Northwest, the team attracts support from nearby states and Canadian provinces.

Seattle is famed for its inclement weather, yet team management was juggling multiple free websites to try to understand and predict the weather. But when it comes to Seahawks games, storms especially lightning — are a real threat to staff, spectators, and players in the open-air stadium. The stakes were too high; they knew they needed something better. The DTN solution allows Seahawks management to monitor real time lightning as it approaches and helps them make the right decisions to keep people safe. They also set up custom advisory and warning zones and receive a text as soon as lightning strikes in a designated area. They receive an allclear text when the danger has passed, and until then, there's a countdown that tells them when that notification will likely happen.

The weather is just as critical to the team's safety during weekday practices as it is during games. Detailed reports on precipitation, temperature, and humidity help them determine whether to play indoors or outdoors, on grass or artificial turf, to keep players safe.

Successful outdoor events and activities use safety protocols

If weather experts warn that a thunderstorm will arrive within the hour, your team should be ready to enact their alerting and safety protocols. Depending on the nature of your event or activity, this may include switching on warning signs, clearing fields, stopping rides, suspending play or work, covering stages and equipment — and most importantly, moving everyone indoors to ensure their safety. Crucial to such procedures are the protocols — or action plans — that describe in detail which steps should be taken when a specific weather threat occurs. Large organizations are often prepared as they have added resources, but smaller organizations sometimes struggle. However, preparation and the right tools can go a long way.

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Three key benefits of accurate alerting for outdoor activities and events

Smart organizers deploy modern outdoor alerting solutions to help keep their guests, players, vendors, spectators, and staff safe and informed. They do this because they understand these three key benefits.

#1. Safety risk management

The number one benefit is maintaining public safety during an outdoor activity or event. Adverse weather can cause injury or even death, which makes timely alerting paramount. It's also important to get alerting right for two reasons. False alarms cause people to take shelter needlessly, and when they see that unsafe conditions never materialized, they often become frustrated, even angry over the inconvenience and worry. Likewise, if they are not alerted in time to dangerous conditions, they may be exposed to unnecessary weather risks, which can have potentially deadly consequences.



How alerting can help

With accurate weather intelligence, your risk of false alarms is reduced. If you're using a basic weather product, then deciding whether to stop or continue is difficult because you can't be confident in the forecast's accuracy. As a result, you have to allow for a lower risk tolerance to ensure safety, which can lead to more inaccurate calls and false alarms. Additionally, insurance premiums can often be reduced when you invest in professional weather services.

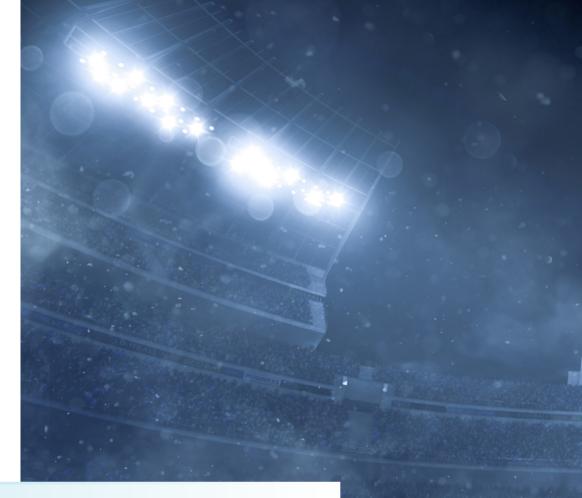
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#2. Decision-making confidence

For events, in particular, planning begins well before the precise weather conditions can be known. As it draws nearer, organizers and meteorologists alike will have a clearer idea of the forecast. But as conditions develop, they need to be confident in making go/no-go calls. The same holds true for those organizing regular activities.

If the forecast shows they should go ahead, they need to be confident that conditions will not change and subsequently impact safety. However, if the weather changes and the data and alerts inform them that conditions will be unsafe, they must make a no-go call and ensure that everyone in the area is aware of the danger.



How alerting can help

Accurate weather data provides you with confidence in your decisions. In situations where weather conditions are marginal, accurate data can be the difference between you going ahead, delaying, or canceling. The impact can be potentially huge, both financially and in terms of the effort it takes to reschedule. That's why it's important to avoid unnecessary changes when possible, but never at the cost of safety.



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#3. Delivering a clear message

Before dangerous weather hits, the message needs to be shared as quickly as possible. Any doubt or confusion can cause people to delay taking proper action, which increases safety risks. In addition, in situations where the information isn't clearly presented to decision-makers, valuable time can be wasted trying to understand the severity of the situation.

How alerting can help

Alerting that uses both audio and visual warnings to clearly and immediately communicate the risk to people in the area offers you an added layer of protection. When horns and flashing lights go off, it grabs everyone's attention. Such a system allows you to quickly and confidently enact your safety protocols, streamlining communication, and encouraging fast, orderly evacuations.

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Plan, prepare, & mitigate with on-site alerting

Teams looking for best-in-class solutions are choosing outdoor notification systems that provide an added level of safety and awareness for weather threats. Such solutions supply focused, actionable insights that enhance awareness, increase lead time, and support vital on-site alerting functions. This can deliver greater decision-making confidence when every moment counts.

At DTN, we offer the OnGuard Siren Alerting solution, which does all of this and more.

We've got you covered OnGuard Siren Alerting

Discover just a few of the benefits of our on-site weather alerting solution.

You can customize your alerts and choose the types you'd like to receive — such as lightning advisory, lightning caution, lightning warning, severe thunderstorm warning, tornado warning, and all-clear notifications.

The OnGuard solution utilizes our industry-leading, patented alerting system to provide you with accurate, advance notice to changing conditions.

This allows you to better manage weather threats and ensure safer, more efficient operations when you must stop and evacuate.

The OnGuard Siren Alerting system can be placed where you need it, delivering the most benefit.

It includes multiple multi-directional sirens and a dual-color, omnidirectional beacon to provide audio and visual alerts, which are activated automatically and meet the FEMA-rated distance for sound.

Your alerts will activate the system's beacon and sirens for a set amount of time to notify everyone in the immediate area of the dangerous situation.

To manage sizeable distances, large complexes, or multiple locations, additional sirens and beacons can be purchased to meet your needs.

Reduce risk at vulnerable locations and keep everyone safe and informed with accurate, reliable weather intelligence.

Learn more at **www.dtn.com/onguard**

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