31
NOUS41 KBOX 221238
PNSBOX
CTZ002>004-MAZ002>024-026-RIZ001>008-230045-

Public Information Statement
National Weather Service Boston/Norton MA
838 AM EDT Mon Apr 22 2024

...SEVERE WEATHER PREPAREDNESS WEEK - DEFINITION OF A SEVERE THUNDERSTORM...

The National Weather Service (NWS) Boston, MA has declared April 22 through April 26 as Severe Weather Preparedness Week. Each day this week we will highlight a different preparedness topic.

A severe thunderstorm is defined as a thunderstorm that produces wind gusts of at least 58 mph and/or hail 1.00 inches in diameter or larger, the size of a quarter. Severe thunderstorms can and occasionally do spawn tornadoes.

A Severe Thunderstorm Watch is issued by the Storm Prediction Center in Norman, Oklahoma for large portions of the region when the potential exists for severe thunderstorms. A severe thunderstorm warning is issued by the local National Weather Service forecast office, such as in Taunton, when severe thunderstorms are imminent based on radar or already occurring based on spotter observations.

Note that torrential downpours of rain that cause flooding are not part of the definition of severe weather. They would prompt the issuance of Flood or Flash Flood Warnings, but not Severe Thunderstorm Warnings. It is important to note that frequent lightning also is not a criterion for what is termed severe weather. Of course, lightning can be extremely dangerous, but every thunderstorm has lightning. That is what causes the thunder. It is not practical to issue a warning for every thunderstorm, thus we issue Severe Thunderstorm Warnings for those storms that could produce large hail and/or damaging winds.

NOAA Weather radios, with warning alarm tones, will alert you when a Severe Thunderstorm Warning is issued. However, they will not sound an alarm for non-severe thunderstorms, which still can produce deadly lightning. We recommend that lifeguards at beaches and pools have hand-held lightning detectors. The same is true for athletic coaches, camp directors, and parks and recreation workers. Even without equipment, you can protect yourself by moving indoors to a place of safety at the first rumble of thunder. If you can hear the thunder, the storm is usually close

enough for you to have the potential to be struck by lightning.

For more information, visit Weather.gov/safety/thunderstorm

$$

For the latest updates...please visit our webpage at
www.weather.gov/boston

You can follow us on Facebook at
www.facebook.com/NWSBoston

You can follow us on Twitter at
@NWSBoston

505
NOUS41 KBOX 232024
PNSBOX
CTZ002>004-MAZ002>024-026-RIZ001>008-240830-

Public Information Statement
National Weather Service Boston/Norton MA
424 PM EDT Tue Apr 23 2024

...SEVERE WEATHER PREPAREDNESS WEEK...WAYS TO RECEIVE SEVERE
WEATHER ALERTS...

The National Weather Service (NWS) Boston, MA has declared April
22 through April 26 as Severe Weather Preparedness Week. Each day
this week we will highlight a different preparedness topic.

Today's Topics: Ways to receive severe weather alerts

One of the keys to staying safe during the severe weather season
is making sure that you have a way to receive life saving severe
weather watches and warnings. There are many methods and tools,
some of which are available with no cost or fees, that you can
use to receive these important life saving alerts no matter where
you are -at home, at school, or at work. Here is a partial list
of these methods and tools.

NOAA Weather Radio (NWR): NWR is a nationwide network of radio
stations broadcasting continuous weather information from the
nearest National Weather Service office. Specially built receivers
receive the NWR broadcast 24 hours a day, 7 days a week, and sound
an audible alert when official watches and warnings are issued for
your area. Think of these radios as a smoke detector for severe
weather alerts.

Wireless Emergency Alerts (WEA): In addition to other alert types

such as AMBER Alerts, this free service transmits extreme weather warnings such as Tornado and Flash Flood warnings to your cell phone. Beginning on or about July 15, 2021, the wireless alerts will also include ultra-severe thunderstorms - those that might produce baseball size hail and/or 80 mph wind gusts. The alerts look like a text message and show the type and time of the alert, and any action you should take. WEA messages include a special tone and vibration. If you receive a WEA message, you should follow any action advised by the emergency message. Seek more details from your favorite TV or radio station, NOAA Weather Radio, news website, desktop application, mobile application, or other trusted source of information.

Cell phone apps: There are many great cell phone apps that provide real-time NWS warnings and alerts, some of which are free to download and use, and others that may charge a small fee. A simple search of your app provider will reveal many of these apps.

Emergency Alert System (EAS) and your favorite TV and radio stations: EAS is the message dissemination pathway that sends warnings via broadcast, cable, satellite, and wireline services. EAS may be used by state and local authorities, including the National Weather Service, in cooperation with the broadcast community, to deliver important emergency information such as severe weather information, AMBER alerts, and local incident information targeted to specific areas. In short, when severe weather strikes, it's a good idea to tune to your favorite local TV or radio station or website for detailed information about the severe weather threat.

In addition to the aforementioned alerting system, many communities also offer free emergency alert notifications through their own systems, such as reverse 911 phone systems. Be sure to check with your local emergency management agency to learn what is available in your area.

Be sure to take some time this week to learn more about severe weather safety. Learning and practicing severe weather safety when the weather is good will allow you to react more quickly when the weather turns bad.

For more information, visit Weather.gov/safety/thunderstorm

$$

For the latest updates...please visit our webpage at
www.weather.gov/boston

You can follow us on Facebook at
www.facebook.com/NWSBoston

You can follow us on Twitter at
@NWSBoston

516
NOUS41 KBOX 242029
PNSBOX
CTZ002>004-MAZ002>024-026-RIZ001>008-250830-

Public Information Statement
National Weather Service Boston/Norton MA
429 PM EDT Wed Apr 24 2024

...SEVERE WEATHER PREPAREDNESS WEEK - STAYING SAFE DURING HAIL AND DAMAGING WINDS...

The National Weather Service (NWS) Boston, MA has declared April 22 through April 26 as Severe Weather Preparedness Week. Each day this week we will highlight a different preparedness topic.

While hail and straight-line winds generally do not garner the same attention or respect as tornadoes, they can be just as deadly! Hail can exceed the size of softballs and fall at speeds of over 100 mph, seriously injuring or killing anyone in its path. Straight-line winds can topple trees onto cars, houses, and power lines. Many deaths from straight-line winds are the result of trees falling onto the person, whether they are outside, in their house, or driving in their car. Strong straight-line wind events can even destroy buildings, especially mobile homes and manufactured homes.

When damaging straight-line thunderstorm winds or large hail is expected, the National Weather Service will issue a Severe Thunderstorm Warning. When a Severe Thunderstorm Warning is issued for your area, or when threatening thunderstorms approach your area, you should seek shelter immediately! To stay safe during high winds, the same safety rules that are used for tornadoes also apply during straight-line wind events, namely, you should seek shelter in an interior room on the lowest floor of a sturdy building or shelter, get away from windows, and get down low to protect yourself from possible flying debris and falling trees. During large hail situations, you should move indoors and stay away from windows. Wind-blown hail can shatter windows. If you are driving during a large hail episode, pull over into a parking lot or gas station and use blankets or coats to cover yourself in case the windshield shatters and hail enters the vehicle.

While not as notorious, or perhaps as spectacular to witness as a tornado, straight-line winds are responsible for most thunderstorm wind damage, especially across southern New England.

A downburst is a strong, relatively small, area of rapidly descending air beneath a thunderstorm. It can result from stronger winds aloft being transported downward to the surface, or it can result as air within the downburst is cooled significantly as rain evaporates into initially drier air. This cool, thus dense, air sinks rapidly to the surface. A downburst is differentiated from common thunderstorm winds because the downburst winds have the potential to cause damage near the ground. Surface damage patterns have shown that whether the winds are straight or even a little bit curved, they tend to spread out, or diverge, considerably as they reach the surface. Conversely, damage patterns resulting from a tornado generally converge toward a narrow central track.

Intense downbursts can be phenomenal. Speeds have been clocked as high as 175 mph near Morehead City North Carolina and at 158 mph at Andrews Air Force Base in Maryland. Closer to home, 104 mph downburst winds were measured at both Worcester Massachusetts on May 31 1998 and Whitman Massachusetts on May 21 1996. Strong downbursts will definitely cause roaring sounds and people may often refer to a sound like a freight train, terms typically associated with tornadoes. Although downbursts are not tornadoes, they can cause damage equivalent to that of a small to medium tornado. After all, wind is wind.

Downbursts are classified as either macrobursts or microbursts, depending on the areal extent of the damaging wind swath. A macroburst's damage extends horizontally for more than 2.5 miles. A microburst is a small downburst with its damaging winds extending 2.5 miles or less. The small horizontal scale and short time span of a microburst makes it particularly hazardous to aviation.

The National Weather Service issues Severe Thunderstorm Warnings for thunderstorms that are expected to produce damaging wind gusts of 58 mph or greater, or hail that is one inch or greater in diameter.

Be sure to take some time this week to learn more about severe weather safety. Learning and practicing severe weather safety when the weather is good will allow you to react more quickly when the weather turns bad.

For more information, visit Weather.gov/safety/thunderstorm

$$

For the latest updates...please visit our webpage at www.weather.gov/boston

You can follow us on Facebook at
www.facebook.com/NWSBoston

You can follow us on Twitter at
@NWSBoston

765
NOUS41 KBOX 251013
PNSBOX
CTZ002>004-MAZ002>024-026-RIZ001>008-252215-

Public Information Statement
National Weather Service Boston/Norton MA
613 AM EDT Thu Apr 25 2024

...SEVERE WEATHER PREPAREDNESS WEEK - TORNADOES IN SOUTHERN NEW ENGLAND IN 2023...

The National Weather Service (NWS) Boston, MA has declared April 22 through April 26 as Severe Weather Preparedness Week. Each day this week we will highlight a different preparedness topic.

In a typical summer season, southern New England averages 2 or 3 tornadoes. Last year was above normal with 13 tornadoes in NWS Boston's jurisdiction. Most were on the weaker side with EF-0 ratings on the Enhanced Fujita Damage Scale, which ranges from 0 to 5. The strongest was an EF-2 in Rhode Island.

July 16, 2023 - A NWS survey determined that an EF-0 tornado, with maximum estimated peak wind of 80 mph, touched down in North Brookfield at 1056 AM EDT. There were no injuries or damage to homes in the area. There were several eyewitnesses to the tornado, although none of them saw an actual funnel. One eyewitness was in an auto body shop and reported strong winds making the garage door bow inward. Another eyewitness, the Fire Chief of North Brookfield, saw debris lofted into the air. A third eyewitness described chaotic swirling as the tornado passed by. The tornado is estimated to have touched down a little east of the North Brookfield Waste Water Center. It traveled about 2 miles to the northeast, although not on the ground continuously, and ended a little east of the intersection of Ryan Road and Hillsville Road. The damage was limited to trees, with the most concentrated damage area along Ryan Road, slightly north of the Ward Street intersection.

July 29, 2023 - An EF-1 tornado was confirmed to have touched down in a small neighborhood in Foxboro near the Mansfield town line very close to the town of Easton. Several locations on a west to east path in the neighborhood had several large trees up to 2 feet in diameter snapped at the trunk. Observed tree damage had a

convergent pattern consistent with violently rotating winds. No major damage to homes was observed, but one chimney appeared to have been knocked over by a fallen tree. Path width was estimated to be around 25 yards. Path length of the surveyed damage points was just shy of 300 yards. Per radar data, a velocity couplet was over the surveyed neighborhood for only a minute or two before continuing east over conservation land. It is possible that the tornado was on the ground for longer, but surveyors were unable to access conservation land east of the last surveyed damage point. Additional significant tree damage was found east of aforementioned conservation land in Easton, but patterns were more consistent with west to east straight line winds. This is also consistent with archived KBOX radar which displayed strong outbound (west to east) velocities over this area.

August 8, 2023 - A small EF-1 tornado touched down in the town of Mattapoisett Massachusetts at 11:20 AM EDT. The storm was on the ground for approximately 3 minutes. The storm moved to the northeast at approximately 20 MPH and lifted off the ground on North Street just north of Eldorado Drive. Numerous large Pine and Maple trees were uprooted falling in several directions. There were also numerous pine trees along the path that were snapped off between 10 and 20 feet above the ground. The most concentrated damage was found along Eldorado Drive by Granada Court. The top wind speed was estimated to be 95 mph.

August 8, 2023 - A small EF-0 tornado touched down in the town of Barnstable, near the village of Marstons Mills, at 11:52 AM. The storm tracked ENE from Evergreen Drive for approximately four minutes before lifting over Joe Thompson Road, at approximately 11:56 AM. The primary damage indicators were an uprooted hardwood tree and a downed electrical pole, supplemented by strewn debris inclusive of smaller trees, fence posts, and branches. The damage was most concentrated near the center of the track at the intersection of Race Lane and Osterville-West Barnstable Road. Witnesses described a chaotic event, observing airborne fence posts and branches. Top wind speeds were estimated at 80 mph.

August 18, 2023 - The storm that produced the Rhode Island tornado produced a second tornado as it crossed into Massachusetts, just over the Cumberland line in North Attleborough. Many trees were snapped or uprooted on Mendon Road near the intersection of Monticello Drive. An eyewitness saw swirling debris before taking shelter in her home. From there, damage was more sporadic. A home on Mary Ann Way had its third floor window blown in. Additionally, there were a number of downed or snapped trees on Lisa Drive. The tornado then lifted briefly before touching back down in Mansfield along Gilbert Street, where it sheared several large trees near their tops, one of which fell on a car. An air conditioning unit, estimated to have weighed

1000 pounds, was knocked over on the roof of a one-story commercial building.

August 18, 2023 - An EF-0 tornado briefly touched down in Stoughton on Eighth Street and Corbett Street. Sporadic damage along a short path included fallen trees, one of which fell onto a shed. Part of a fence was blown in.

August 18, 2023 - An EF-1 tornado touched down in Weymouth near the intersection of Pleasant and Torrey Streets. Numerous trees were uprooted and snapped. A home at the intersection of Burton Terrace and Torrey Street had about twenty singles torn from its roof. On Park Avenue, a three-inch diameter branch from a tree trop was blown about 120 yards and driven into the ground to a depth of 2 feet. An eyewitness who received a Wireless Emergency Alert could see swirling debris out a window as she took shelter in her cellar. The tornado lifted near a water tower at the end of Lockewoods Drive.

August 18, 2023 - An EF-2 tornado caused significant damage along a discontinuous path in Scituate, Johnston, and North Providence, Rhode Island. This is the strongest tornado to have struck Rhode Island since the F-2 tornado in Cranston and Providence on August 7, 1986. The tornado first touched down near Byron Randall Road in Scituate which is where the most severe damage occurred. There were hundreds of large trees either uprooted or snapped at their bases. One home sustained damage to its roof, the top of its chimney was blown off, windows were blown in, and an exterior door was dislodged from its framing. Damage was consistent with winds of around 115 mph which is classified as EF-2 on the Enhanced Fujita Scale. The tornado then tracked into Johnston where it crossed I-295 at Exit 10 and lifted a vehicle into the air before dropping it back onto the highway. The driver was transported to an area hospital with minor injuries. From there, the tornado moved across Bridle Way and Carriage Way where a number of trees were snapped or uprooted, some of which fell onto homes or vehicles. Some homes also lost some singles from their roofs. A metal Stop sign pole was bent in half and the sign was blown away. The tornado then caused damage in Highland Memorial Park Cemetery where a number of large trees were either snapped or uprooted. The damage observed in Johnston was consistent with winds of 90 to 100 mph which is classified as EF-1 on the Enhanced Fujita Scale. Finally, the tornado crossed into North Providence. Similar to Johnston, a number of trees were either snapped or uprooted, some falling onto homes or vehicles. Most of the damage observed was to the north of Mineral Spring Avenue. One of the harder hit areas included Lydia Avenue, Armand Drive, and Bennett Street where two homes were made uninhabitable from fallen trees. The damage observed in North Providence was consistent with winds of 90 to 100 mph which is classified as EF- 1 on the Enhanced Fujita Scale.

The National Weather Service would like to thank the Rhode Island Emergency Management Agency, the Scituate Police Department, the Johnston Police Department, the North Providence Fire Department, and Skywarn Amateur Radio Operators for their assistance with the damage survey.

August 18, 2023 - A tornado caused damage in the town of Scotland, located in Windham County, CT. The tornado touched down on Bass Road and continued along Route 14 (Huntington Road) and crossed Pinch Street before it eventually lifted near Brook Road. While there wasn't much in the way of structural damage observed, other than gutter damage to two homes, there was significant tree damage. It was estimated that well over one hundred trees were either downed or sheared off at their tops.

September 13, 2023 - An EF-0 with maximum winds of 75 mph briefly touched down in a rural area of North Attleborough on Ellis Road which caused tree damage south of High Street. The tree damage was limited to the tops of three trees having been twisted off and lofted into nearby pasture. After speaking with the homeowners they described seeing the sheets of rain change direction before seeking shelter in their basement. The tree damage along the path was consistent with wind speeds between 65 and 75 mph, resulting an EF-0 rating on the Enhanced Fujita Scale.

September 13, 2023 - An EF-1 with maximum winds of 100 mph began on Bailey Hill Road in the town of Killingly, CT between Cranberry Road and Ledge Road, here the tornado removed shingles from a two story home and either snapped or uprooted healthy and mature trees. The tornado moved northeast towards Ledge Road causing similar tree damage before dissipating on Shippie Schoolhouse Road in the town of Foster, RI. Tree damage along the path was consistent with wind speeds between 90 and 100 mph, resulting an EF-1 rating on the Enhanced Fujita Scale.

September 13, 2023 - An EF-1 with maximum winds of 100 mph began in a wooded area between Chopmist Hill Road (Route 102) and Bungy Road in the town of Glocester, RI here the tornado either snapped or uprooted an estimated 75 or more, healthy and mature trees. The tornado moved northeast and crossed Bungy Road before dissipating over an open field. Most notable, a small outbuilding, used as bus stop shelter was blown away by the tornado with remnants littered west of the original location. Some pieces were found an a neighbors roof. This damage and the tree damage along the path was consistent with wind speeds between 90 and 100 mph, resulting an EF-1 rating on the Enhanced Fujita Scale.

September 13, 2023 - An EF-1 with maximum winds of 100 mph began east of North Central State Airport along Wellington Road in the

town of Lincoln, RI. A video did show a funnel cloud passing over the adjacent airport but found no damage. The tornado uprooted a large tree and damaged am estimated 20' by 30' section of roof on a building across the street and due north of the uprooted tree. Video provided by Lincoln Animal Control showed a thin tornado passing at the end of the facility's driveway and twisting a large branch from a tree. The tornado moved northeast into a field of solar panels which uplifted two sections. From here, the tornado likely lifted before moving across Route 146 at Route 116 which was documented on a DOT camera. This damage and the tree damage along the path was consistent with wind speeds between 90 and 100 mph, resulting an EF-1 rating on the Enhanced Fujita Scale.

$$

For the latest updates...please visit our webpage at
www.weather.gov/boston

You can follow us on Facebook at
www.facebook.com/NWSBoston

You can follow us on Twitter at
@NWSBoston

563
NOUS41 KBOX 261332
PNSBOX
CTZ002>004-MAZ002>024-026-RIZ001>008-270145-

Public Information Statement
National Weather Service Boston/Norton MA
932 AM EDT Fri Apr 26 2024

...SEVERE WEATHER PREPAREDNESS WEEK CONTINUES -- TORNADO SAFETY AND MAKING A PLAN...

The National Weather Service (NWS) Boston, MA has declared April 22 through April 26 as Severe Weather Preparedness Week. Each day this week we will highlight a different preparedness topic.

We know that tornadoes do occur here, such as the EF3 in Monson and Springfield, Massachusetts in 2011, the EF2 in Revere, Massachusetts in 2014, and 17 EF0 and EF1 tornadoes in southern New England in 2018. The question is, are people prepared? Take these steps to ensure that you and your family are safe during a Tornado Warning.

When your area is under a Tornado Warning, or if you see a tornado approaching, you should seek shelter immediately! Most injuries

associated with high winds are from flying debris, so remember to protect your head. The following are safety tips for seeking shelter during high winds and tornadoes.

If you are in a structure such as a residence, small building, school, nursing home, hospital, factory, shopping center, or high-rise building: 1. Go to a pre-designated area such as a safe room, basement, storm cellar, or the lowest building level. If there is no basement, go to the center of a small interior room on the lowest level (such as a closet, bathroom, or interior hallway) away from corners, windows, doors, and outside walls. Put as many walls as possible between you and the outside. Get under a sturdy table and use your arms to protect your head and neck. 2. In a high-rise building, go to a small interior room or hallway on the lowest floor possible. 3. Do not open windows.

If you are in a manufactured home or office: 1. Get out immediately and go to a pre-identified location such as the lowest floor of a sturdy, nearby building or a storm shelter. Mobile homes, even if tied down, offer little protection from tornadoes.

If you are outside with no shelter available, there is no single research-based recommendation for what last-resort action to take, because many factors can affect your decision. Possible actions include: 1. Immediately get into a vehicle, buckle your seat belt and try to drive to the closest sturdy shelter. If your vehicle is hit by flying debris while you are driving, pull over and park and cover your head with your arms and a blanket, coat or other cushion if possible. 2. Lie in an area noticeably lower than the level of the roadway and cover your head with your arms and a blanket, coat or other cushion if possible. 3. Do not get under an overpass or bridge. You are safer in a low, flat location. 4. Never try to outrun a tornado in urban or congested areas in a car or truck. Instead, leave the vehicle immediately for safe shelter.

Make sure that you know the difference between a Tornado Watch and a Tornado Warning. A Tornado Watch means that you should be prepared because conditions are such that a tornado could form, somewhere within the large Watch area. However, a Tornado Warning means that you need to take action! A tornado is either occurring, or is imminent, based on radar or spotter observations!

During a Tornado Watch, check for forecast updates, keep an eye to the sky, and know where to take shelter. During a Tornado Warning, take shelter immediately! Seek further forecast information on NOAA Weather Radio, the NWS website, or local media outlets for the latest updates.

The first step in making sure that you and your family are

prepared for severe weather is pledging to prepare. This includes developing a family emergency and communications plan. In short, know what to do before severe weather strikes by creating an emergency plan today.

Your family may not be together when a disaster strikes, so it is important to plan in advance: how you will get to a safe place; how you will contact one another; how you will get back together; and what you will do in different situations.

Planning for severe weather also includes: Ensure that you and your family members know about your surroundings and severe weather risks specific to your area. Have an emergency plan in place, and know what to do before severe weather strikes. Stay informed by having multiple sources for weather alerts. Exercise the plan with your family.

History teaches that a lack of awareness and preparation are common threads among all major weather disasters. Knowing your vulnerability and what actions you should take can save your life and others. During this preparedness week, we ask you to be a force of nature. Know your risk, take action and be an example by sharing what you have done to prepare, with your friends, family, neighbors, and co-workers, and encourage them to do the same.

For more information, visit Weather.gov/safety/thunderstorm or Ready.gov/make-a-plan

$$

For the latest updates...please visit our webpage at www.weather.gov/boston

You can follow us on Facebook at www.facebook.com/NWSBoston

You can follow us on Twitter at @NWSBoston