

# Winter Storm & Blizzard Plan

## Introduction

The Brown University Winter Storm & Blizzard Plan is written to provide planning information and procedures for a winter storm or blizzard event. It is designed to work in conjunction with the Emergency Management & Preparedness Plan and other emergency plans, with specific procedures that are necessary when a Winter Storm Watch has been declared by the National Weather Service.

The primary objectives of the plan are as follows:

- Safety and security of students, faculty, staff and visitors
- Mitigation of damages caused by the storm
- Restoration of business and academic operations as quickly as possible

## Winter Storm & Blizzard – General Information

A major winter storm can last for several days and be accompanied by high winds, freezing rain or sleet, heavy snowfall, and cold temperatures. People can become trapped at home, without utilities or other services. Heavy snowfall and blizzards can trap motorists in their cars. Attempting to walk for help in a blizzard can be a deadly decision. Winter storms can make driving and walking extremely hazardous.

The aftermath of a winter storm can have an impact on a community or region for days, weeks, or months. Storm effects such as extremely cold temperatures and snow accumulation, as well as coastal flooding, can cause hazardous conditions and hidden problems for people in the affected area.

A winter storm can range from a moderate snow over a few hours to blizzard conditions with blinding wind-driven snow that lasts several days. Some winter storms may be large enough to affect several states, while others may affect only a single community. Many winter storms are accompanied by low temperatures and heavy and/or blowing snow, which can severely reduce visibility.

## Definitions

Blizzard Warning – Notification by the National Weather Service, meaning sustained winds or frequent gusts to 35 miles per hour or greater and considerable falling or blowing snow (reducing visibility to less than a quarter mile) are expected to prevail for a period of three hours or longer.

Shelters – Areas of refuge to be used in the event of a winter storm or blizzard. They should be a substantial building with limited glass. Refer to Red Cross and FEMA guidelines for details.

Storm Surge – A dome of water pushed on shore with the storm that may cause flooding up to 20 feet above normal sea level along major stretches of coastline.

Winter Storm Warning – Notification by the National Weather Service, indicating that a winter storm is occurring or is imminent in about 30 minutes to an hour.

Winter Storm Watch – The first notification issued by the National Weather Service that a winter storm is a definite threat to a geographic region. This is typically issued between 12 to 36 hours prior to storm begins.

## Developing a Family Preparedness Plan

It is essential to University operations that families of the Brown community are properly prepared for winter storms and blizzards. This is particularly important for essential staff. One of the most important steps in preparing for a winter storm or blizzard is to have a Family Preparedness Plan in place before a storm strikes. A Family Preparedness Plan can keep the family safe and out of harm's way in a severe weather event. Once the family develops and finalizes the plan, be sure to review at least annually and practice it frequently.

## University Buildings

During a winter storm or blizzard, Facilities and Campus Operations (F&CO) with the assistance of the Department of Public Safety and Emergency Management (DPSEM) will determine which buildings will be closed and remain unoccupied.

Brown University owns or occupies several buildings protected by the Fox Point Hurricane Barrier or within the bounds of the 100 year floodplain and are subjected to flooding in certain scenarios. These buildings include the following:

- 121 South Main Street
- 26,58 – 60, 70 Ship Street
- 43, 110 Elm Street
- 339, 349, 350, 365, 389 Eddy Street
- 196, 222, 233, 300 Richmond Street
- 200, 225 Dyer Street
- 200 Chestnut Street
- 1 Davol Square
- 34 Parsonage Street
- 1 Point Street (River House Apartments – Graduate housing)
- Danoff Laboratories (under construction in 2026)
- Marston Boathouse

## Notification of Suspended Operations

All instructions such as canceling classes, closing of buildings, releasing of employees, special instructions and the relocation of students will be announced via email to Brown email addresses by the appropriate authorized University official. A decision to close or delay the opening of administrative offices and functions shall be made by the Executive Vice President for Finance and Administration. A decision to cancel or delay scheduled classes and academic functions shall be made by the Provost. The Standard Operating Procedures for Emergency and/or Administrative Closures may be found [here](#).

## At the Beginning of the Winter Season

- All employees are particularly members of the Emergency Response Group should review the Winter Storm & Blizzard Plan, [Emergency Action Plan](#), and other emergency plans.
- Departments should review and update their [business continuity plan](#) in the BrownReady system.
- DPSEM, Facilities and Campus Operations, Dining Services and others should confirm accurate and current telephone numbers for support vendors/responders such as water suppliers,

emergency generator suppliers, fuel suppliers, food suppliers, snow removal contractors and others as needed.

- Dining Services should consider available supplies of food, water, and other necessities should extended shelter-in-place procedures be required.
- Facilities and Campus Operations should:
  - Arrange for adequate fuel supplies for vehicles, boilers and generators
  - Check grounds and remove dead limbs
  - Properly support weakly rooted trees
  - Clean up loose debris
  - Begin moving all loose equipment and materials
  - Check roofs for loose debris
  - Make sure all storm & floor drains are clear

### **When a Winter Storm or Blizzard is Predicted**

When a winter storm or blizzard is predicted the following groups should take action on the items listed below to ensure proper preparedness.

#### Emergency Management and Crisis Group (EMCG)

- The convener of the EMCG will ensure that the group is kept informed of developing conditions
- Approve or suggest changes to proposed campus status (e.g., Delayed Opening, Early Dismissal, Administrative Closure)

A decision to close or delay the opening of administrative offices and functions shall be made by the Executive Vice President for Finance and Administration (EVP for F&A). A decision to cancel or delay scheduled classes and academic functions shall be made by the Provost. Both the EVP for F&A and the Provost are members of the EMCG. The Standard Operating Procedures for Emergency and/or Administrative Closures may be found [here](#).

#### Emergency Response Group winter storm & blizzard procedures

- Review Winter Storm & Blizzard Plan, Emergency Action Plan, and other emergency plans.
- Begin frequent monitoring of weather-related media sources including the National Weather Service, NOAA, FEMA, RIEMA and PEMA.
- Discuss general plans and readiness and recommend actions to the EMCG.
- In conjunction with others, begin implementation of shelter-in-place procedures as needed depending on conditions and warnings.

#### University department winter storm & blizzard procedures

- Follow the directions that the University provides regarding the closure of the University.
- Initiate any specific departmental shut down procedures.
- Libraries and Museums begin preparation for priority collections and exhibits as needed.
- Consider protecting books, valuables and equipment by covering with plastic sheeting, particularly in areas where water and weather intrusion has occurred previously.
- Research staff shall begin preparations of laboratory facilities by completing experiments, storing materials and securing rooms.
- Center for Animal Resources and Education (CARE) staff will assess the needs of the animals and prepare for limited staffing until the storm has passed.

Athletics winter storm & blizzard procedures

- Athletics will work with Facilities and Campus Operations to consider preparations necessary at the Marston Boathouse if there are significant storm surge predictions.
- Make sure all essential vehicles are fully fueled, stocked and inspected.
- Adjust schedules as needed to ensure the safety of students, coaches and staff. Travel considerations are paramount.

Dining Services winter storm & blizzard procedures

- Dining Services will review inventory and ensure it can provide food and water for all students and essential staff for at least a 7 to 10 day duration.
- Dining Services will review emergency water supplies and will coordinate with Facilities and Campus Operations or others as needed if it has been determined that water should be moved to an accessible and secure location before the storm arrives.
- All essential personnel shall report to supervisors for assignments.
- Make sure all vehicles are fully fueled, stocked and inspected.

Facilities and Campus Operations winter storm & blizzard procedures

- Make sure all vehicles are fully fueled, stocked and inspected.
- Make sure equipment fuel levels are inspected and filled for the duration of winter storms. For prolonged winter storms inspect building locations for fuel deliveries to ensure equipment can be accessed.
- Ensure that, outdoor equipment, trash and recyclable receptacles, benches, and all other loose items that may become projectiles in high winds are appropriately secured.
- Ensure that contractors working on campus secure all equipment and materials from their site which may become projectiles in high winds and prepare their sites for the coming storm.
- All essential personnel shall report to supervisors for assignments.
- Secure provisions for essential personnel that are working during the winter storm.
- Issue plastic sheeting and other protective materials as requested and deemed appropriate.
- Consider particular operational issues for the Central Heat Plant, which will depend on storm specific information and other information.
- Refuel all vehicles and continues securing equipment, assessing buildings, and protecting properties from storm conditions, including rooftops.
- Inspect for water intrusion in areas of building prone to flooding.
- Initiate procedures to protect buildings located in the 100-year flood plain including the Marston Boathouse. Procedures may include providing sandbags and securing the buildings. These buildings may experience worst case flood waters of between 3.5 and 6 feet as the Seekonk River peaks at 16.5 feet (Mean Sea Level).
- Coordinate with DPSEM if evacuation of buildings located in the floodplain is required. Consider the shutdown of utilities in these buildings.
- Make sure all storm response equipment is inspected and ready for operation. This includes but is not limited to chainsaws, blowers, water pumps, tractors, portable generators, and snow moving machines and tools.
- Inspect roofs during prolong winter storms and post snow storms for snow loads and redistribution of snow drifts as needed while following fall protection measures.
- Inspect and clear roof drains for proper clearances, at gutter collection points, at HVAC air intakes and roof top emergency generators.
- Inspect and clear drains, window wells and gas meters near air intake to buildings.
- Inspect and de-ice walkways, building entrances/exits and parking lots.

Health Services winter storm & blizzard procedures

- All essential personnel shall report to supervisors for assignments.
- Make sure all essential vehicles are fully fueled, stocked and inspected.

University Human Resources (UHR) and Office of University Communications (OUC) winter storm & blizzard procedures

- UHR will update the message on the University's Employee Emergency Information Line (401-863-3111)
- OUC will update the University Homepage and notify the appropriate media of University delays and closings.

DPSEM winter storm & blizzard procedures

- Make sure all vehicles are fully fueled, stocked and inspected.
- All essential personnel shall report to supervisors for assignments.
- Help verify that all non-essential personnel have evacuated the campus and unoccupied buildings have been secured.
- Coordinate with F&CO if evacuation of buildings located in the floodplain is required.

Student winter storm & blizzard preparation procedures

- The Division of Campus Life begins notification to students regarding shelter-in-place procedures, locations and other details as needed.
- Campus Life will communicate with students regarding designated shelters if necessary.
- Off-campus students should ensure they have food, snack items and water as part of their preparations. FEMA recommends one gallon of water per person per day for drinking and other uses.
- Students who have access to bathtubs should clean the tub and fill it halfway with water. If the water supply is cut off, the water in the tub may be used for flushing toilets or for washing. Do not drink this water.
- Each student should provide his or her own flashlight to be used during a power failure. Do not use candles or other flame type lighting under any circumstances. Fire can be uncontrollable during a winter storms & blizzards due to high winds and limited access for emergency vehicles.
- Students who have cars on campus should ensure all windows are closed and leave the vehicle in the designated parking area until after the storm.
- If an emergency shelter is provided, students should bring the following items to their temporary assigned living area (shelter):
  - Bedding and pillow
  - One small bag with clothing, etc.
  - Needed medications, glasses, etc.
  - Non-perishable food items
  - Small toiletry bag
  - Flashlight
  - No smoking, drugs or alcohol will be allowed in a shelter

**During a Winter Storm or Blizzard**

- All remaining residents should stay indoors throughout the entire storm.
- Residents should follow the instructions of University officials including, but not limited to, DPSEM, Campus Life, the Office of the Provost or from the Providence Fire Department.

- In the event of power failure during the height of the storm, there will be no elevator service. Do not attempt to travel between floors using elevators.
- First aid and/or food service will be made available whenever the storm passes or power is restored.
- Do not use candles during power outages due to the increased fire hazard.
- Report all accidents, injuries, broken windows, or excessive water to the Brown Public Safety at 863-4111 or Facilities and Campus Operations Service Response at 863-7800.

### **After a Winter Storm or Blizzard**

Following the lifting of the winter storm or blizzard WARNING status, essential staff in F&CO and DPSEM will assess and advise the EMCG and ERG which buildings and facilities can be used safely for classes and other purposes. Recommendations for repair work or building closings will also be made.

Facilities and Campus Operations and DPSEM will include the following as priorities following the storm:

- Assist Providence Public Works in clearing roads to allow the movement of Emergency Vehicles including EMS, Fire and Police.
- Ensure access to Health Services, Emergency Shelters, and Emergency Operations Centers.
- Stage water pickups, and prepare emergency supplies for rapid distribution.
- Check roof drains to ensure that none are clogged once wind conditions permit.
- Inspect roofs, doors and exteriors of buildings for egress, security and loose material.
- Secure campus buildings from unauthorized access and looting.

The timeline for recovery after a winter storm or blizzard will vary depending on the severity of storm damage and other factors.

Essential staff performing snow removal operations should follow the guidance listed in the [Snow Removal Safety Program](#).

The essential staff should also follow the guidance listed in the [Working in Extreme Temperatures Program](#).

### **Resumption of University Operations**

The Provost and EVP for Finance & Administration, upon recommendations from the Emergency Management and Crisis Group and Emergency Response Group, will issue necessary directives and instructions concerning the resumption of classes and the use of University buildings and facilities.

The Division of Campus Life will assist with relocating students back to residence halls if shelters had been set up. Deans will be available to support students during this process of reopening the University.

In situations of University closure, the following communication mechanisms will be used to communicate with faculty, staff and students:

- [The Brown Emergency Announcements Page](#) (which will be accessible from the Brown home page during an emergency) and the Employee Emergency Information phone line (401-863-3111) provide official information when the University is under a severe weather emergency.

- The University may communicate with students, faculty and staff via their Brown email addresses. Brown email can be accessed with the appropriate user ID and password by visiting <http://gmail.brown.edu>
- The University may communicate with students, faculty and staff via BrownAlert which can send text messages, email or voice messages.
  - Students may enter cell phone number in Banner at: <https://selfservice.brown.edu/>
  - Faculty and staff may enter cell phone number in Workday at: <http://www.brown.edu/about/administration/workday/workday-log>
- Radio announcements - 92.3 FM, 105.1 FM, 630 AM, 1480 AM, 1400 AM
- Television announcements - Channel 10 WJAR

All employees must check in with their supervisor within a reasonable amount of time following the storm. Employees will be required to report for duty as soon as is practical after they are requested to. During the period of recovery, employees will be expected to perform duties as requested by their supervisor. Some of these duties may not be part of their regular job descriptions.

Faculty and staff should provide updated contact information to their supervisors. It may be helpful to provide personal cell phone numbers and non-Brown email addresses.

For additional information, or to review Brown University policies and procedures, refer to the following Brown University websites or call the listed phone numbers. The Brown University Emergency Preparedness website ([BrownReady](#)) provides additional useful information and links.

### Brown Resources

- **Faculty & Staff Emergency Information Number (message) 401-863-3111**
- Brown University Homepage: <http://www.brown.edu/>
- Brown University Emergency Preparedness ([BrownReady](#))
- [Facilities and Campus Operations](#) – 863-7800
- [Department of Public Safety and Emergency Management](#) – 863-3322 (863-4111 for Emergencies)
- [Division of Campus Life](#) – 863-1800
- [Office of Environmental Health & Safety](#) – 863-3353
- [University Human Resources](#) – 863-3175

### Other Resources

- [Rhode Island Emergency Management Agency \(RIEMA\)](#)
- [Providence Emergency Management Agency \(PEMA\)](#)
- [American Red Cross](#)
- [National Weather Service](#)
- [National Oceanic & Atmospheric Administration \(NOAA\)](#)
- [Intellicast](#)

## Rhode Island's History of Winter Storm and Blizzard Preparedness

Probably the most well-known winter storm in Rhode Island history is the Blizzard of 1978. On February 5, 1978 a severe nor'easter brought up to 55 inches of snow accumulation over a period of 33 hours. Many people were left without heat, water, food, and electricity for over a week after the storm ended. Approximately 10,000 people were forced to temporarily move into emergency shelters. Some 2,500 houses were reported seriously damaged or destroyed and 54 people were killed, many from fallen electric wires. Several people were found dead in downtown Providence, Rhode Island, particularly in the vicinity of the central police station, possibly while trying to seek shelter. The majority of the interstate system had to be shut down, with some stretches not reopening to traffic until the following week. Air and rail traffic also had to be shut down until the situation cleared up.

On December 13, 2007 a winter storm shut down many of the roads in the State and stranded thousands of people in their cars for hours. The timing of the storm and intensity (more than an inch of snow per hour) had a lot to do with the problems that it caused. Although there was not nearly as much accumulation as the 1978 blizzard, this storm caused massive traffic jams, thus proving that every winter storm requires preparation.

Like a hurricane, a winter storm or blizzard may create a tidal surge that could have devastating effects on. Since 1960, there has not been any significant flooding in the area of downtown Providence due in large part to the construction of the Fox Point Hurricane Barrier. More information about the Hurricane Barrier's function can be found in the Brown University Hurricane Plan.