



## **ANNEX F**

### **SEVERE WEATHER EVENTS**

#### **I. Purpose and Scope**

##### **A. Purpose**

For this annex, severe weather is defined as any dangerous meteorological phenomenon with the potential to cause property damage, severe social disruption, personal injury, or loss of human life. Types of severe weather addressed in this annex include winter storms, thunderstorms, tornadoes, high winds, extreme temperatures, and flooding.

This annex will define types of severe weather that may impact the University of Northern Colorado. It also outlines the coordinated strategic response from UNC departments and partner agencies to a severe weather event such as:

- Meteorological Partnerships
- Types of Severe Weather
- Assignment of Responsibilities
- Concept of Operations

##### **B. Scope**

This annex applies to all departments with primary and support responsibilities during a severe weather event. It provides overarching guidance for those with responsibilities to protect the campus community against injury or loss of life. This annex pertains to several different severe weather scenarios which may include:

- Severe thunderstorms that can produce heavy rain, large hail, and flash flooding.
- Tornado approaching campus.
- Winter storms producing blizzard conditions.

- High winds associated with passage of a storm system.

## II. Meteorological Partnerships

### A. National Weather Service

The National Weather Service (NWS) in Boulder, Colorado provides weather forecasts, *advisories*, *watches*, and *warnings* for the protection of life and property. The NWS is a partner with the University of Northern Colorado and will provide forecast advice for weather-dependent events and support high-value decision making. The NWS will use the following notifications in the event of hazardous weather:

- A *warning* is issued when a hazardous weather event is occurring, imminent, or likely. **A *warning* means weather conditions pose a threat to life or property.** People in the path of the storm need to take protective action.
- A *watch* is used when the risk of a hazardous weather event has increased significantly, but its occurrence, location, or timing is still uncertain. **A *watch* means that hazardous weather is possible.** A *watch* provides enough lead time to prepare for the weather event, and people in the watch area should have a plan and be ready to act in the event of severe weather.
- An *advisory* is issued when hazardous weather is occurring, imminent or likely. *Advisories* are for less severe conditions than *warnings* that cause significant inconvenience, and if caution is not exercised, could lead to situations that may threaten life or property.

## III. Types of Severe Weather

### A. Winter Storm

A winter storm can be defined as the combination of heavy snow, blowing snow, freezing rain or sleet, high winds, and dangerous temperatures/wind chills.

- Winter storms range from moderate snow over a few hours to blizzards with wind-driven snow that last for several days.
- Snow squalls are possible across northern Colorado, and produce gusty winds with periods of intense snow and significant accumulations.

- Blizzards produce heavy snow and winds over 35 mph that reduce visibilities to  $\frac{1}{4}$  mile or less.

## **B. Thunderstorms**

A thunderstorm is a short-lived weather disturbance associated with heavy rain, hail, strong winds, visible lightning, and audible thunder.

- Strong to severe thunderstorms can be one of the most dangerous weather phenomena, producing flash floods and tornadoes.
- Super cell thunderstorms can form in Weld County and produce torrential rainfall, hail, strong winds, and downbursts.

## **C. Tornado**

A tornado is a violent rotating column attached to a powerful thunderstorm. Tornadoes can cause wide-spread damage and fatalities as winds may reach over 100 miles per hour.

- In the past decade, Colorado averages around 60 tornadoes a year.
- Most tornadoes are weak with wind speeds less than 110 mph, but stronger tornadoes are possible.
- On the eastern plains, tornadoes occur every year, particularly during the spring and summer.

## **D. High Winds**

Wind is defined as perceptible natural movement of air. Wind direction is determined by the direction from where it originates. There are many causes of high winds in Colorado.

- Pressure difference between strong low pressure and high-pressure systems.
- Mountain waves, driven by strong winds aloft and a mountain top stable layer (associated with above).
- Strong winds produced by thunderstorms (winds in excess of 58 mph, a point which wind can damage trees, signs, and buildings).
- Microbursts, strong winds associated with heavy rains.

## **E. Extreme Temperatures**

Extreme temperatures are one of the leading weather-related killers in the United States, resulting in hundreds of fatalities each year.

- During extreme temperatures, heat or cold, University officials should be aware of conditions where heat exhaustion, heat stroke, or in cases of extreme cold, hypothermia and frostbite.

## **F. Flash Flooding**

Flash flooding is caused by slow-moving thunderstorms or when thunderstorms move over the same area repeatedly.

- Flash flooding can be more life threatening as it occurs rapidly, minutes or hours during/after a period of excessive rainfall.

## **IV. ASSIGNMENT OF RESPONSIBILITIES**

### **A. General**

Each department having response authority or responsibility during severe weather affecting UNC has its own emergency functions in addition to their normal day-to-day duties. These emergency functions usually parallel or complement normal functions.

### **B. Departments/Individuals Involved in a Severe Weather Response**

- Associate Vice President for Administration
- University Police Department
- Facilities Management Department
- Environmental Health and Safety Department
- University News and Public Relations
- Deans, Directors, and Department Heads
- Building Coordinators
- External agencies and partners

### **C. Assignment of Responsibilities**

#### **1. Associate Vice President for Administration**

- a. Responsible for gathering appropriate information from Incident Command (UNC Chief of Police, University Police Communication Center, Assistant Vice President for Facilities Management or Director of Environmental Health and Safety) to determine the type of severe weather emergency that exists and its impacts to campus.

- b. Amend operating hours based on weather hazards (i.e. delayed open, early closure, suspend operations, or recommend campus closure).
- c. Responsible for informing the University President of the decision to amend campus operations and communicate the decision to all involved departments.
- d. Maintain situational awareness for subsequent weather impacts to the University.
- e. Serve as liaison with National Weather Service and participate in conference calls regarding large-scale weather events.

## **2. University Police Department**

- a. Public Safety Authority responsible for responding to and managing all incidents that threaten life safety and property on campus.
- b. Receive and process requests for emergency assistance.
- c. First response and establish control using the Incident Command System (ICS).
- d. Direct campus community to safer locations regarding threat or hazard.
- e. Alert the campus community of threats and hazards via the Emergency Notification System.
- f. Report accurate size-up of incident status to Associate Vice President for Administration on weather conditions that may affect personal safety on and near campus.
- g. Request and manage emergency resources to support initial response.
- h. Assist in non-technical rescue of victims in immediate danger until Greeley fire arrives on scene.
- i. Establish and maintain perimeter security around hazardous or unstable areas.
- j. Provide traffic control in and around campus if traffic signals are damaged.

- k. During campus closure due to severe weather event, conduct security checks of all buildings.
- l. If the weather emergency results in an activation of the Emergency Operations Center, the Incident Commander will be the central point of contact for the Associate Vice President of Administration
- m. Coordinate with University News and Public Relations regarding the update of the UNC weather information line.

### **3. Facilities Management Department**

- a. Provide current information to the Associate Vice President for Administration on snow and other weather conditions that may affect the use of campus buildings, roadways, and other facilities.
- b. Facilities Management will maintain the serviceability of buildings, grounds, and roadways during severe weather events.
- c. AVP of Facilities Management will provide updated reports regarding the status of changing weather conditions to the UNC Police Department Communications Center.
- d. The AVP for Facilities Management or their designee will update the Associate Vice President for Administration on conditions and mitigation efforts.

### **4. Environmental Health and Safety Department (EHS)**

- a. The Director of EHS or their designee will provide safety information to Incident Command during severe weather events.
- b. The Director of EHS or their designee will work with the Chief of Police in monitoring thunderstorms and tornado weather events and will provide current information to the Associate Vice President for Administration.
- c. The Director of EHS or their designee will monitor weather during certain large events on campus.

## **5. Office of Integrated Marketing and Communications**

- a. Activate UNC Public Information Officer (PIO) and establish communications with AVP for Administration and Incident Commander.
- b. Notify students, staff, and faculty about critical information or changes in the university's operational status on the UNC website and social media.
- c. Assist the UNC EOC with emergency information messages via the campus emergency alert system.
- d. Coordinate with University Police Communications Center regarding updates the UNC weather information line.
- e. Receive and manage all media inquiries regarding the incident.
- f. Control and correct misinformation and rumors.
- g. Activate the UNC Joint Information Center (JIC) and call center for incident public information management.

## **6. Deans, Directors, and Department Heads**

- a. Identify specific functions and personnel who need to be physically present during severe conditions and notify those employees of their responsibilities.

## **7. Building Coordinators**

- a. Building Coordinators will provide severe weather Emergency Response Plan information to building occupants.
- b. Building Coordinators will assist as a liaison to Emergency Response personnel and building occupants.

## **8. Greeley Police Department / Weld County Sheriff / Colorado State Patrol**

- a. Mutual aid support to all law enforcement needs on campus.
- b. Establish/Support Unified Command

- i. Request and manage additional law enforcement resources from Weld County and the State.
- ii. Support University Police with traffic control in and around campus. Assist fire/EMS with access to scene.

#### **9. Greeley Fire Department**

- a. Authority responsible for responding to and managing fire, hazmat, and rescue incidents on campus.
- b. Establish /Support Unified Command
  - i. Request and manage specialized fire and rescue teams from Greeley Fire Department
  - ii. Neutralize or contain hazards regarding fire, smoke, hazardous materials, radiological or biohazardous contaminations.

#### **10. Banner Health – Emergency Medical Services**

- a. Default authority responsible for responding to and managing emergency medical services and critical care transport incidents.
- b. Lead patient triage, treatment, transportation, and tracking.

#### **11. Weld County Office of Emergency Management**

- a. Assist with processing and coordinating logistics, such as resources and other materials needed for UNC.
- b. Assist with acquiring State and Federal resources, as needed.



## **V. CONCEPT OF OPERATIONS**

The Concept of Operations contains information about the tasks that will need to be completed to ensure an effective response to a severe weather event. The following tasks represent the flow from onset of severe weather through recovery.

### **A. Notification and Warning**

- a. Upon notification of a severe weather event by the National Weather Service, University Police Communication Center shall:
  - i. Activate the UNC emergency notification system to alert campus community regarding a severe weather event (Tornado Warning or severe winter weather) and any protective actions recommended by the NWS.
  - ii. Notify the Associate Vice President for Administration as soon as possible of severe weather event and impacts to campus.
- b. As the threat increases or after an accurate assessment can be made, the IC from the UNC Police Department or Facilities Management may request emergency resources (Greeley Police Department, Greeley Fire Department, or EMS) appropriate to the respond to the weather event.
- c. The Incident Command System (ICS) will be used to manage large, potentially life-threatening weather incidents on the UNC campus.
  - i. The IC, either UNC Chief of Police, Assistant Vice President for Facilities Management, Director of Environmental Health and Safety or designee will:
    - Gather information from on-duty police officers, facilities management personnel, neighboring police agencies, or National Weather Service statements regarding conditions on campus and the surrounding community.
    - Make recommendations to the Associate Vice President for Administration whether non-essential UNC services should be suspended.

- Establish an Incident Command Post (ICP) in an area that is safe from the hazard.
  - Provide an assessment of the situation to the University Police Communications Center and Associate Vice President for Administration.
  - Identify any resources needed for response.
  - Direct all on-scene incident management activities.
  - If necessary, activate the UNC Emergency Operations Center (EOC)
- d. Unless delegated to the EOC, University Police Communications Center will be the primary department for managing incident communications and resource requests through the Weld County Office of Emergency Management.
- e. Most incidents that occur on campus are managed by field Incident Command. When emergencies/disasters exceed field capabilities, or at the request of the IC, the Emergency Operations Center (EOC) will be activated to provide assistance to meet the growing need of the incident.
- The EOC will serve as a coordination center for campus response and recovery operations.
  - The EOC should be activated and staffed appropriately to support field operations and carry out additional functions as needed.
  - At the request of the IC or Communication Center, the Logistics section may assume the responsibility of resource ordering.
  - The EOC will remain active for the duration of the incident and provide strategic recommendations, planning, resource coordination, public information, policy support, and core emergency management tasks.
- f. Planning for recovery and rapid deployment of resources necessary to facilitate recovery will begin as soon as the threat to life safety is no longer a concern.

- g. If all or portions of the UNC campus is deemed unsafe due to impacts from a severe weather event, a campus closure will be declared by the Associate Vice President for Administration.
- In-person classes and activities will be canceled, and faculty and staff will be released from duties as soon as safety and security are assured.
  - If necessary, all students impacted by a severe weather emergency living in University housing will be evacuated and relocated.
- h. To reach all UNC constituents, notification regarding the decision to close the University will be delivered by some or all the following mediums:
- Emergency notification system
  - UNC website and social media platforms