

FM Cold Weather Protocol



Updated January 5, 2023

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Facilities Management

Cold Weather Protocol

Cold Weather Protocol Steering Group Members:

- FM @ Your Service Manager
- Senior Manager of Operations and Maintenance
- Director of Operations and Maintenance
- Manager of Controls Engineering
- Manager, Maintenance Planning

Annual Preparation Cadence:

- By Late November/early December:
 - Steering Team reviews Cold Weather Protocol
 - Building Operations & Maintenance and FM@YS team review of Cold Weather Protocol
 - Update the template of the planned work order project
 - Review of prior year's Cold Weather Event projects to inform creation of the planned work orders for the current year (review/updates to approved project)
 - Intentional focus on any areas currently impacted by construction or maintenance projects, vulnerable areas, etc.
- December:
 - Cold Weather Protocol presented at Building Coordinator Meeting*
 - Refresher communication for on-call team on Cold Weather Protocol

Preparatory Actions when Trigger Event is forecasted:

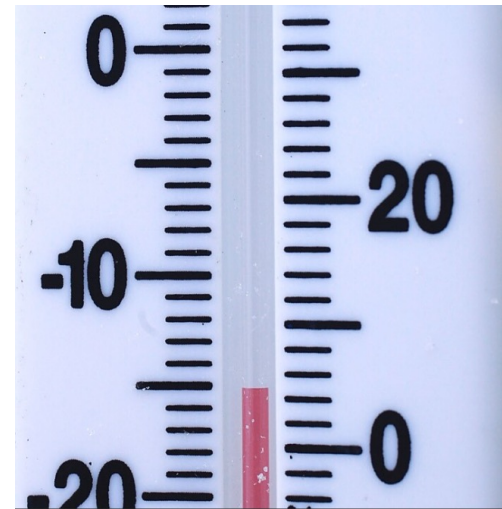
- When outside air temperature is forecasted below 0F for longer than 24 hours (Accuweather), a steering group meeting will be scheduled (Director responsibility) to discuss which of the following risk mitigation activities are relevant for the given cold weather situation:
 - Resourcing Considerations:
 - Assign designee(s), as necessary
 - Addition of a secondary on-call team member into standby status (FM@YS Manager)
 - Hotel rooms secured for primary and secondary on-call members (FM@YS Manager)
 - Managers secure volunteer lists of team members who will be available to take calls as needed. FM@YS manager compiles this information for the on-call

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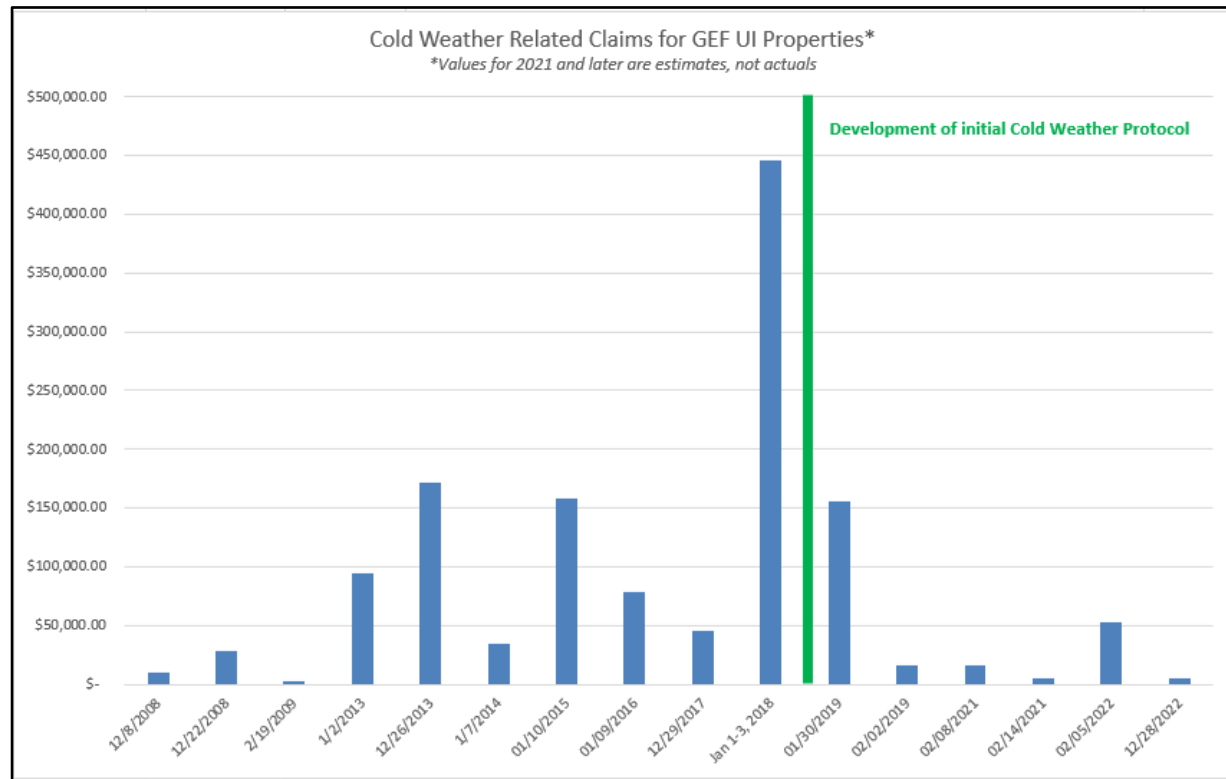
A Data-Driven Approach:

- Buildings are vulnerable to damage during extended periods of sub-zero temperatures
- FM leverages a data-based trigger to implement mitigation plans once the forecast shows more than 24 hours below 0 degrees Fahrenheit.



Continuous Improvement:

→ Initial version of the Cold Weather Protocol was developed after 2018 and has been evolving ever since:



Annual Cadence Established:

Late November/early December:

- Steering Team reviews Cold Weather Protocol
- Building Operations & Maintenance and FM@YS team review
- Update planned work orders:
 - Review of last year's notes
 - Addition of any current building-specific vulnerabilities

December/January:

- Building Coordinator Meeting presentation
- Review with On-Call Team



Mitigation Planning:

Theme 1: Resource Considerations

- Addition of a secondary standby team member
- Secure hotel room(s)
- Compile area resource and controls team lists
- Addition of BAS reviews



Mitigation Planning:

Theme 2: Communication Considerations

- Cadence of daily meetings
- Notification to key partners that FM is entering Cold Weather Protocol Mode:
 - Facilities Management team
 - **Building Coordinator Group**
 - Risk Management
 - Engie
 - Campus Safety



Mitigation Planning:

Theme 3: Workload Organization Considerations

- Promote Cold Weather Project planned work orders
- Cold weather FDD (fault detection & diagnostic) reviews
- Removal of BAS schedules
- Override report reviews
- Outage/shutdown delays

001			
0300, JB, JB: Cold Weather Building Walk (please note any observations/outages)			
Checkpoint	Value	Description	Extra Description
1.	COMPLETE	Check outside of building for open windows.	
2.	COMPLETE	Check outside air intakes and vents for blockage or obstructions.	
3.	COMPLETE	Check building pressure with a simple paper test. If negative, review BAS for issues	
4.	COMPLETE	Check entryways and exterior stairwells for cold areas and ensure heaters are operational.	
5.	COMPLETE	Check mechanical spaces.	
6.	COMPLETE	Check problem areas throughout the building.	
7.	COMPLETE	Check drain to ensure it is not backing up (please note any observations/outages) supplies are in basement for clearing drain.	
DATE	12/21/22	Date Completed	
DATE (2)	12/22/22	Second date completed if applicable	
DATE (3)	12/23/22	Third date completed if applicable	12/28/2022

Your Partnership is Vital!

From: James, Lisa M <lisa-james@uiowa.edu>
Sent: Thursday, December 08, 2022 1:32 PM
To: Rourke, Stephanie S <stephanie-rourke@uiowa.edu>
Subject: RE: BU

Hi Steph- this re
 open- it droppe
 it must have be
 We had everyon
 will not latch. T
 office.
 Yes subm

From: Rourke, Stephanie S <stephanie-rourke@uiowa.edu>
Sent: Friday, December 9, 2022 11:35 AM

To: Jame
Cc: Schor
Subject: 23-754820

Created By MICHELLE MARVEN On 12/13/22 1:48 PM
 Last Edited by URIAH BARNES On 12/14/22 3:58 PM

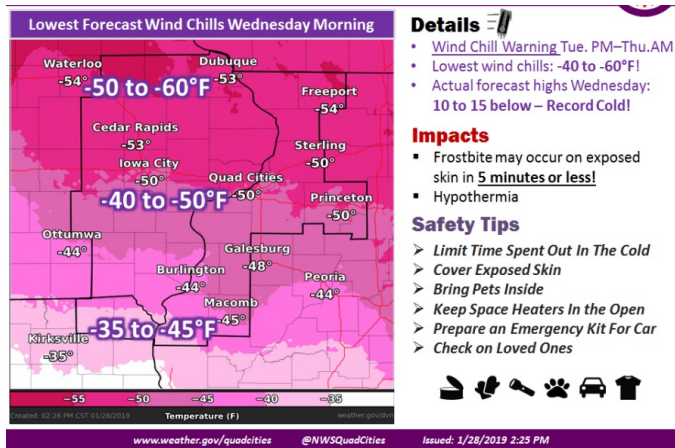
Wl- multiple rooms in SH and SW. 3rd and 4th floors -Some windows will not latch- top window has shifted down and top/bottom windows will not line up in order to make latch functional. (More)
 Contact: Lisa James 319-335-4550

Status: **JOB COMPLETE**
 Project
 Customer Request: 117100
 Desired Date
 Budget: \$0.00

Date	Room	Person	Category	Description
Dec 14, 2022 2:31 PM	PHORESOW	PATRICK HORESOWSKY	CLOSEOUT	Secured all windows on list. PH
Dec 13, 2022 2:18 PM	PVANELSW	PETER VAN ELSWYK	GENERAL	Room Number / Window 4203- 2nd window 4201- both 4199- left window 4189- desk in back, right window 4218- left window 4188 4184- right bank of windows 4163- right bank of windows 4164- both 3192 and 3194- have plastic covering, not checked 3194 3203- right and left 3185- right window 3183 3159- 1 window back left; right window in bank 3165A Front desk- left back cubicle, right window

The Process Works!

2019 Polar Vortex:



February 2021 Extreme Duration & New Records:

11th NIGHT OF -2 OR COLDER
CEDAR RAPIDS

NEW FEBRUARY RECORD BREAKS PREVIOUS OF 10 NIGHTS IN 1899

CONSECUTIVE HOURS BELOW ZERO

1AM FRI - 1PM TODAY

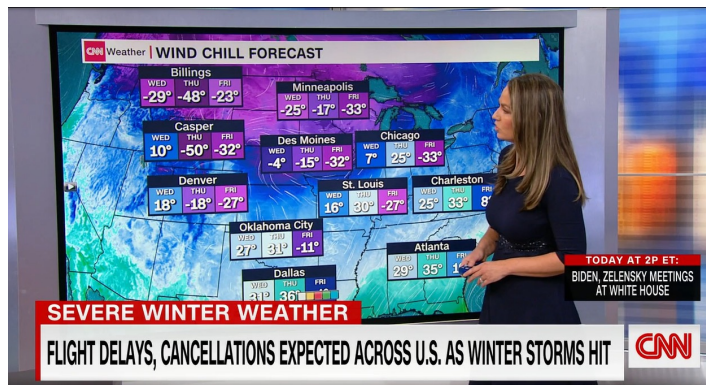
108 HOURS

A COLD FIRST HALF OF FEBRUARY

Avg Temperature of 3.2 Degrees

COLDEST SINCE 1936

December 2022 “Once in a Generation” storm:



Significant Winter Storm This Week
Major Impacts to Holiday Travel Expected
December 22, 2022 4:21 AM

Key Messages

- Significant winter storm expected to continue through Saturday morning
- Snow to end this morning into the afternoon before strong winds begin. This could give the false sense of improving conditions!
- Northwest winds will quickly increase Thursday night, leading to blizzard conditions (whiteout) through Saturday morning with gusts of 40-50 MPH!
- Travel, especially in rural areas will become difficult, if not impossible Thursday night and Friday.
- Temperatures will drop rapidly after the snow ends with dangerous wind chills of 20 to 40 below zero Thursday afternoon through Saturday AM.
- We are monitoring the need to start the blizzard warning sooner. Blizzard conditions could be seen this afternoon

What Has Changed

- Winds (30 to 40 MPH gusts) now expected as the snow ends. Those out shoveling should expect wind chills of 15 to 30 below zero. Cover all exposed skin and bundle up!

Next Scheduled Briefing

- No new webinar scheduled. Briefing packets will continue

Winter Storm Warning **Blizzard Warning**

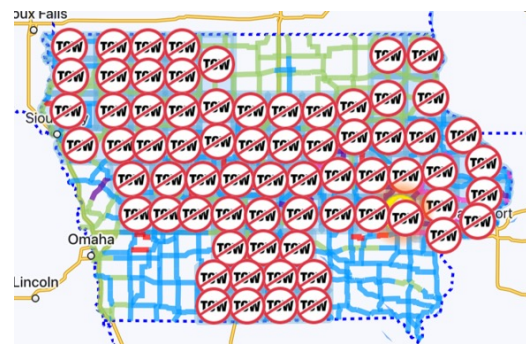
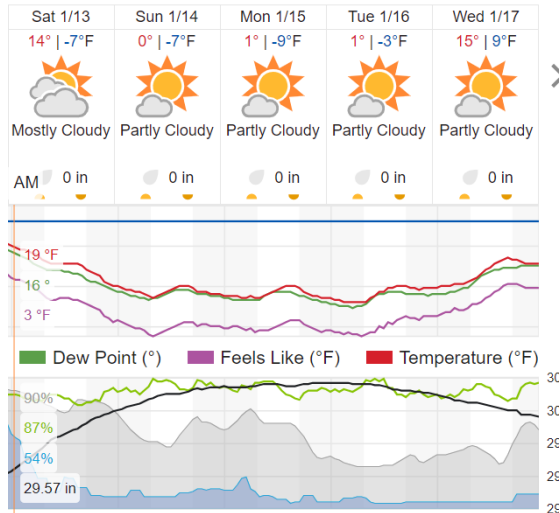
Latest Winter Weather Headlines

National Weather Service
Quad Cities, IA/IL

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Facilities Management

January 2024



- Noteworthy Items:
 - One fan coil freeze-up with impact to 4 rooms (VAN)
 - Two fire impairments, caught early enough to avoid building damage (MERF, BB)
 - Intermittent power issues, great team work with P&T to secure generator fuel (BB)
- Mitigation Plans Remain in Place All Week:
 - Cold weather inspection work orders
 - Building schedules removed
 - Planned air handling unit shut-downs rescheduled
- Looking Ahead to Next Week:
 - Thaw Protocol