

Impacts of Climate Change Events: A National Healthcare System Response to the 2024 Polar Vortex

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# **Large Health System Perspective**

#### **Clinical Stats**

Number of Births \_ \_ \_ \_ >79k
ED Visits \_ \_ \_ \_ >3.1M
Outpatient Visits \_ \_ \_ >16.5M
Surgical Visits – Outpatient >599k
Equivalent Discharges – >716k

**139** Hospitals



2,600 Sites of Care

More than 25k Available Beds



19 States and the District of Columbia



35k Affiliated Physicians



134k Associates





# Medxcel is the leading facilities services provider in the U.S. exclusively serving the healthcare industry.



**Emergency Management, Environment of Care, and Safety** 

**Direct Chain of Command Ensures:** 



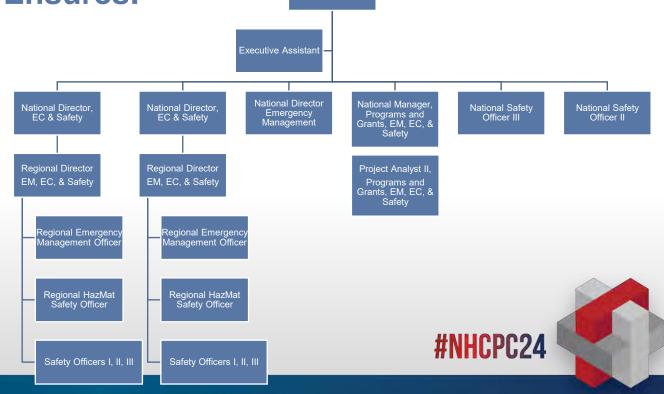
Standardization



Optimization



Communication

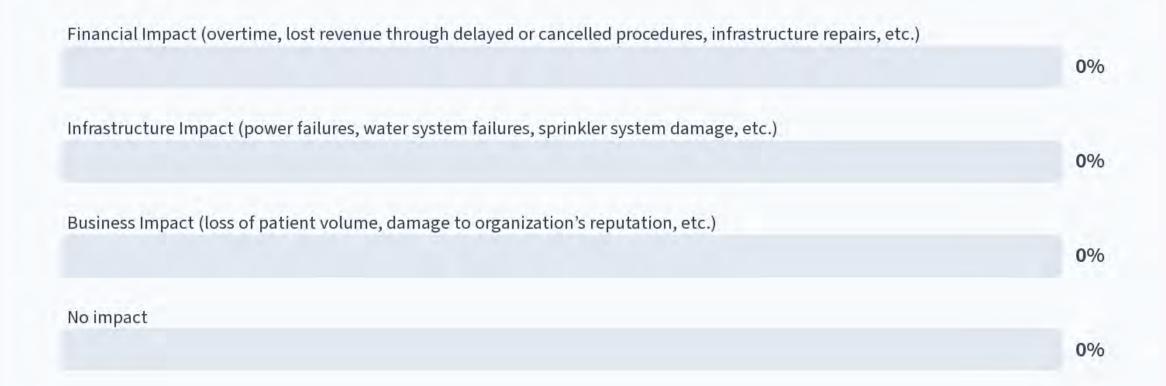


# **Polling Question #1**

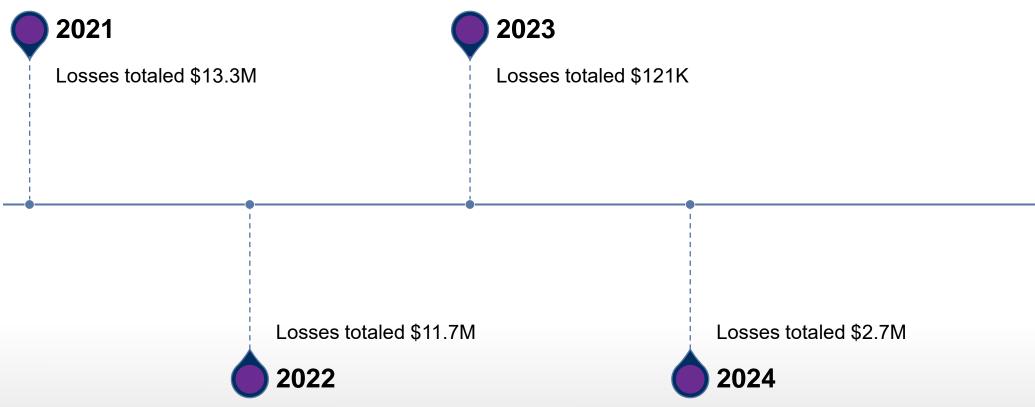
- > How has your organization been impacted by polar vortex events? (select all that apply)
  - ☐ Financial Impact (overtime, lost revenue through delayed or cancelled procedures, infrastructure repairs, etc.)
  - ☐ Infrastructure Impact (power failures, water system failures, sprinkler system damage, etc.)
  - Business Impact (loss of patient volume, damage to organization's reputation, etc.)
  - No impact



#### How has your organization been impacted by polar vortex events? (select all that apply)



# Why do we worry about polar vortex events?



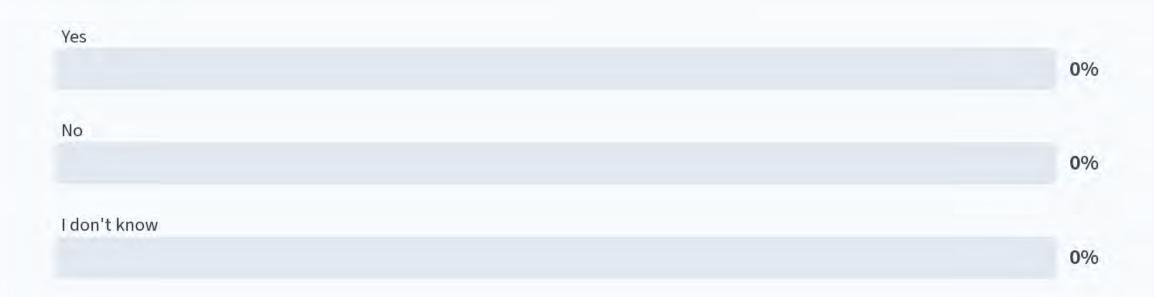


# **Polling Question #2**

- > Does your organization have standard operating procedures (SOPs) or emergency response plans (ERPs) that are consistent across all levels of the organization (facility, local, statewide, national, etc.)?
  - ☐ Yes
  - No
  - ☐ I don't know



Does your organization have standard operating procedures (SOPs) or emergency response plans (ERPs) that are consistent across all levels of the organization (facility, local, statewide, national, etc.)?



# Disrupting the Cycle of Loss

- National workgroup created in 2023 focused on mitigating impacts from polar vortex events
  - Team comprised of emergency management and facilities management subject matter experts
  - » All geographic areas of the health system represented
  - Charged with developing standard operating procedures to prepare for, respond to, and recover from polar vortex events



# Development of the IPRG

- > Extreme Cold Incident Planning and Response Guide (IPRG)
  - » Built off the Hospital Incident Command System (HICS) Incident Response Guides (IRG) formatting
  - Planning section outlines activities to be completed prior to an extreme weather event
  - » Response section broken into two parts:
    - 48-24 hours prior to event
    - Imminent event and day of event
- Deployed for use in preparation / response to the 2024 polar vortex event



# Mitigation and Preparedness

- > Ongoing activities to be conducted well in advance of an extreme weather event
  - » Maintenance of roof drains and landscaping
  - » Validating process for generator fuel deliveries
  - Testing of emergency equipment throughout the facility
  - » Locations identified to house staff, discharged patients, and community members

#### MITIGATION/PREPAREDNESS

#### EXTREME COLD WEATHER MITIGATION AND PREPAREDNESS CHECKLIST

**Purpose:** Winter storms or hazardous winter weather is likely to occur as indicated in the facility's Hazard Vulnerability Assessment (HVA) and is a threat to life or property.

**Risk Areas:** Damage to facilities (physical plant), from flooding or wind; potential for roof collapse from weight of heavy snow fall; loss of power or heat (boilers); the hospital/ Healthcare Facility (HCF) is inaccessible in and out due to impassable or closed roads; loss of power and resultant disruptions in the environment of care; disruptions of supply lines; difficulty for staff to report to work, travel, and conduct home visits.



# Response

- Activities to be conducted 48 24 hours in advance of an extreme weather event
  - » Routine monitoring of weather information
  - » Prepare/activate hospital incident command team
  - » Validate communication methods with snow/ice removal team
  - » Review current supply levels for all departments
  - » Review housing plan for staff remaining on site
  - Develop staffing plan for rounding in areas typically unoccupied (i.e. closed units, construction areas, business offices, etc.)
  - » Review plan for documenting response related costs
  - » Obtain/deploy supplemental heating devices if available

#### EXTREME COLD WEATHER RESPONSE CHECKLIST

**Purpose:** To prepare hospital/ HCF for a significant winter storm or hazardous winter weather that is likely, imminent or occurring. Preparations for the storm can be enacted to mitigate the threat to life or property.





# Response

- Activities to be conducted upon storm onset and throughout extreme weather event
  - » Routine monitoring of weather information
  - » Activate hospital incident command team
  - » Evaluate current supply levels for all departments
  - Implement housing plan for staff remaining on site
  - » Implement staffing plan for rounding to typically unoccupied areas (i.e. closed units, construction areas, business offices, etc.)
  - Communicate facility status to patients and families
  - » Document all event response expenses

#### EXTREME COLD WEATHER RESPONSE CHECKLIST

**Purpose:** To prepare hospital/ HCF for a significant winter storm or hazardous winter weather that is likely, imminent or occurring. Preparations for the storm can be enacted to mitigate the threat to life or property.





### Polar Vortex Reimbursements 2021-2024



Losses totaled \$13.3M \$12.6M recovered from insurance



2023

Losses totaled \$121K

\$91K recovered

 Applied for Public Assistance for Debris and Emergency Protective Measures

Losses totaled \$11.7M \$8.5M recovered



Losses totaled \$2.7M \$2.6M recovered





### **Success Drivers in 2024 Polar Vortex**

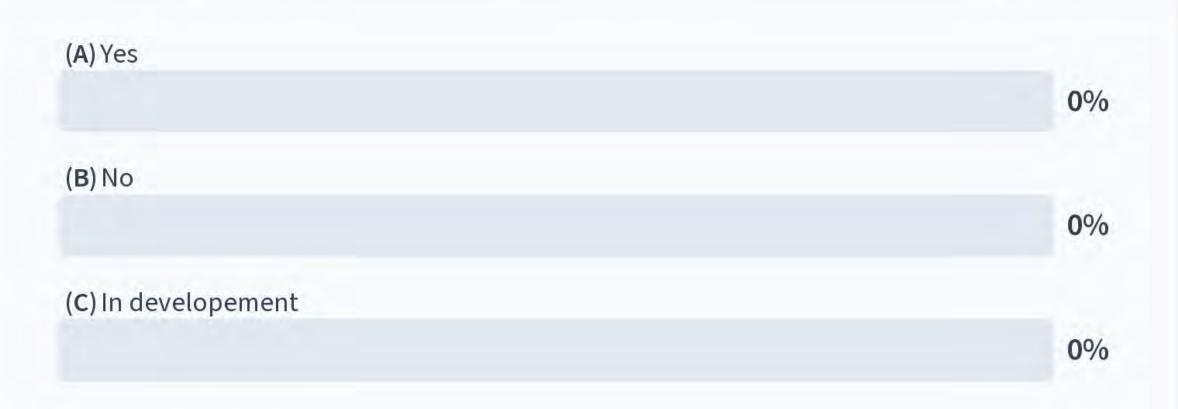
- > Routine rounding of unoccupied areas and deployment of staff to typically unoccupied buildings
- Identification of vulnerable areas based on experience, implementing protective measures
  - Drained sprinkler systems and initiated fire watches in areas with minimal protection from extreme temperature
- Consistent communication between local, state, and national teams on facility status
- Standard process implemented for documenting damage expenses throughout organization
- > Deployment of standard cost center for additional personnel hours
- > Early procurement of ice melt supplies able to withstand extreme temperatures #NHCPC24

# **Polling Question #3**

- Does your organization have a standard process or system for tracking expenses related to extreme weather event responses?
  - Yes
  - No
  - ☐ In development



# Does your organization have a standard process or system for tracking expenses related to extreme weather event responses?



# FEMA Grants, Public Assistance, and Insurance Claims



# **FEMA Grant Programs**

- > FEMA has funding programs available for pre-disaster mitigation and post-disaster recovery
- Maximizing funds available requires a structured program and training before the disaster strikes
  - Program management coordinates with regional emergency management officers, site safety officers, and local hospital incident command teams
- > Program structure can be applied to other government and non-government programs
- > Process is useful during the insurance claim process



# **FEMA Grant Programs**

- FEMA Public Assistance (after a presidentially declared disaster)
  - Provides supplemental grants to nonprofit entities enabling organizations to quickly respond to and recover from major disasters or emergencies
  - » Cost-share 75% federal/25% non-federal
- > Hazard Mitigation Grant Program (HMGP)
  - Funding enabling organizations to rebuild in a way that reduces or mitigates future disaster losses in their communities
  - Sost-share 75% federal/25% non-federal
- > Management costs available
  - » Up to 5% of the total obligated amount
  - Costs for indirect and administrative grant management



### **Our Process**

- > Launched enterprise emergency management program in 2015 and identified opportunity for public assistance after the 2016 hurricane season
- > Identified opportunities in the areas of grants, proper filing, capturing expenses, and compliance with FEMA requirements
- Hired a program manager to develop a multi-disciplinary team, a disaster response guide, a process for collecting data, debris-specific documentation, and standardized activity logs for emergency protective measures
- Continued work on best practices, including developing a module for all staff to review regarding requirements and documentation collection
- > Added a program analyst in 2020 to provide additional support
- > Ongoing search for additional grant opportunities (such as security grants)



### **Documentation**

- National approach for education and training for hospital incident command teams
- > We document time and expenses related to the disaster
  - The site(s) establish a department code for all time and expenses, capturing all expenses related to the disaster
  - The facilities' related items are documented via our work order system so we can track time, materials, and equipment
  - » Incident command forms track attendance, activities, and procurement processes



### **Disaster Guide and Module**

- Disaster Response and Recovery Annex
  - » Incident Reimbursement
    - Guidance includes:
      - Eligible expenses
      - Procurement
      - HICS forms and use
      - Required documentation
- In 2023, we developed a learning module for leaders to review before disasters to understand documentation needs, resource allocation, assets, safety, emergency management, and responsibilities during an emergency

#### Incident Reimbursement

Attachment F – Disaster Response and Recovery Annex

Date: 30 April 2021





### **Other Benefits**

- > We use a similar process for insurance claims
  - You cannot "double dip" insurance and FEMA assistance
- > FEMA pays up to 5% of assistance/grant value for the administration of the process
  - Indirect and direct administrative costs associated with requesting, obtaining, and administering a grant
  - Obligated \$497K and potential for \$8M based on the projects we are currently working on



### **Public Assistance Grant Dollars**

- Applied for public assistance for 13 disasters (data does not include COIVID-19 pandemic)
  - » 9 hurricanes, 3 severe storms, and 1 winter storm
  - Since 2017, we have applied for over \$18M and received over \$10M to date
    - Includes the FEMA cost-share (75% 100% depending on the disaster)
    - Several projects are ongoing with FEMA, and we anticipate payment in the next few months
  - » Types of categories
    - A Debris
    - B Emergency protective measures
    - E Buildings and equipment
    - G Parks, recreational facilities, and other items



# **Hazard Mitigation Grant Dollars**

- > Applied for two grants for damages from Hurricane Irma
  - » Applied for and were awarded over \$88M
    - Currently working on the projects
    - Cost-share 75% 25%





#### Resources

- > https://www.fema.gov/assistance/public
- https://www.fema.gov/grants/preparedness/nonprofit-security
- > <a href="https://www.fema.gov/grants/mitigation/hazard-mitigation"> https://www.fema.gov/grants/mitigation/hazard-mitigation</a>
- > <a href="http://cdphready.org/fema-reimbursement-for-acute-care-hospitals-guide-2/">http://cdphready.org/fema-reimbursement-for-acute-care-hospitals-guide-2/</a>





# **Questions?**

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