



# Extreme Cold Event Emergency Operations Plan

City of Milwaukee Health Department  
Disease Control and Environmental Health Division

FEBURARY 2019



**City  
of  
Milwaukee**  
Health Department

Tom Barrett  
Mayor

Jeanette Kowalik, PhD, MPH, MCHES  
Commissioner of Health

*Think Health. Act Now!*

THIS PAGE INTENTIONALLY LEFT BLANK



Tom Barrett  
Mayor

Jeanette Kowalik, PhD, MPH, MCHES  
Commissioner of Health

[www.milwaukee.gov/health](http://www.milwaukee.gov/health)

Frank P. Zeidler Municipal Building, 841 North Broadway, 3rd Floor, Milwaukee, WI 53202-3653

phone (414) 286-3521

fax (414) 286-5990

February 12, 2019

Re: Extreme Cold Emergency Operations Plan Implementation

Extremely cold temperatures can create a dangerous public health environment for the City of Milwaukee. Infants and the elderly are most susceptible to prolonged exposure to the cold, which can cause potentially life-threatening conditions such as hypothermia and frostbite. Freezing temperatures may also cause pipes to freeze and burst in homes that are poorly insulated or without heat. In addition, overworked or unmaintained furnaces are more vulnerable during extreme cold events and increase the risk of harmful levels of carbon monoxide gas exposure. These extreme cold conditions may prompt the need for the City of Milwaukee to limit or close certain City services and recommend the closing of public schools.

In response, the Milwaukee Health Department has developed the Extreme Cold Event Emergency Operations Plan to address the public health hazards associated with extremely cold temperatures in the City of Milwaukee. A copy of the Plan will be available to the public on the City of Milwaukee Health Department website at <http://city.milwaukee.gov/Cold-Weather-Safety>. The City of Milwaukee Health Department is responsible for maintaining this Plan and providing updates and revisions as defined in the Plan Maintenance section.

Regards,

Jeanette Kowalik, PhD, MPH, MCHES  
Commissioner of Health

**Table of Contents**

Record of Changes ..... 5

I. Purpose ..... 6

II. Scope..... 6

III. Situation Overview..... 6

IV. Notification and Activation Thresholds ..... 8

V. Concept of Operations..... 9

    A. Phase 1: Pre-Cold Weather ..... 9

    B. Phase 2: Launch of Extreme Cold Season ..... 10

    C. Phase 3: Extreme Cold Event – Wind Chill Advisory ..... 11-12

    D. Phase 4: Extreme Cold Event Warning ..... 12-13

    E. Phase 5: Cold Emergency..... 14-15

    F. Phase 6: Post-Winter ..... 16

VI. Definitions..... 17

VII. Referrals/Important Links..... 18

VIII. MHD Emergency Response staff ..... 19

IX. Warming Centers and Sheltering..... 20-21

X. Extreme Cold Weather Quick Health Response Guide..... 23

### Record of Changes

Change No.	Page No.	Date	Change ID	Summary
1	All	07/20/2013	JRR	First Plan Draft
2	All	11/20/2013	JRR	Converted Plan to MS Word
3	All	02/14/2014	JRR	Updated formatting, added Sections I-IV, inserted Attachment X, and revised Phases
4		12/17/18	JRR	Updated contact info
5		02/12/19	NCT	Updated table of contents, contact info, resource links, references

**I. Purpose**

To limit the adverse public health effects of extreme cold weather by reducing the incidence of morbidity and mortality attributed to extreme cold weather events

**II. Scope**

The Extreme Cold Event Emergency Operations Plan describes a phased approach to how the City of Milwaukee Health Department will prepare for and respond to an extreme cold weather event in Milwaukee. In order to ensure an effective response, a coordinated effort must include partnerships with other government entities, as well as non-profit and private organizations. The following organizations have been recognized as essential to fulfill the tasks outlined in this Plan:

City of Milwaukee Department of Public Works	Milwaukee County Transit System
City of Milwaukee Fire Department	Milwaukee Public Schools
City of Milwaukee Health Department	National Weather Service Southern Wisconsin Office
Community Advocates	Repairers of the Breach Homeless Shelter
Hospital Emergency Departments	The Salvation Army of Milwaukee County
Guest House of Milwaukee	We Energies
Housing Authority of the City of Milwaukee	Wisconsin Community Services
IMPACT 2-1-1	Wisconsin Department of Health Services
Milwaukee County Emergency Management	Wisconsin Emergency Management Agency
Milwaukee County FAsT	Wisconsin Hospital Emergency Preparedness Program (WHEPP) Region 7
Milwaukee County Medical Examiner	

These resources and organizations external to the Milwaukee Health Department are needed to execute preparedness and response tasks. However, the tasks identified in this Plan are intended as guidelines and are not mandated to these organizations.

The Extreme Cold Event Emergency Operations Plan identifies preparedness and response tasks critical to accomplish the following objectives:

- Preparedness and response operations based on capabilities, lessons learned and best practices**

---

- Clearly defined thresholds for issuing closure recommendations for City services and schools**

---

- A communications strategy for disseminating public alert notifications which includes targeting the hard to reach vulnerable population**

---

- A mechanism for the surveillance of cold weather related morbidity and mortality**

---

- A system for monitoring homeless and emergency shelter capacities and needs**

*The Extreme Cold Emergency Operations Plan does not address reducing the number, or severity, of extreme cold weather events in Milwaukee.*

**III. Situation Overview**

Whenever temperatures drop decidedly below normal and wind speed increases, heat can leave a person’s body more rapidly. Exposure to cold temperatures, whether indoors or outside, can cause serious or life-threatening health problems such as hypothermia and frostbite. Extreme cold is a dangerous situation that can bring on health emergencies in susceptible people, specifically those without shelter or who are stranded, or who live in a home that is poorly insulated or without heat. Infants and the elderly are particularly at risk, but anyone can be affected.<sup>1</sup>

The National Weather Service Southern Wisconsin Office utilizes the Windchill Temperature (WCT) index to characterize the intensity of cold weather’s impact on people. The "Wind Chill" index is a calculation of how cold it feels outside when the effects of temperature and wind speed are combined. The WCT uses advances in science, technology, and computer modeling to provide an accurate, understandable, and useful formula for calculating the dangers from winter winds and freezing temperatures. The index:

- Calculates wind speed at an average height of five feet, typical height of an adult human face, based on readings from the national standard height of 33 feet, typical height of an anemometer
- Is based on a human face model
- Incorporates heat transfer theory, heat loss from the body to its surroundings, during cold and breezy/windy days
- Lowers the calm wind threshold to 3 mph
- Uses a consistent standard for skin tissue resistance
- Assumes no impact from the sun (i.e., clear night sky).<sup>2</sup>



# Wind Chill Chart

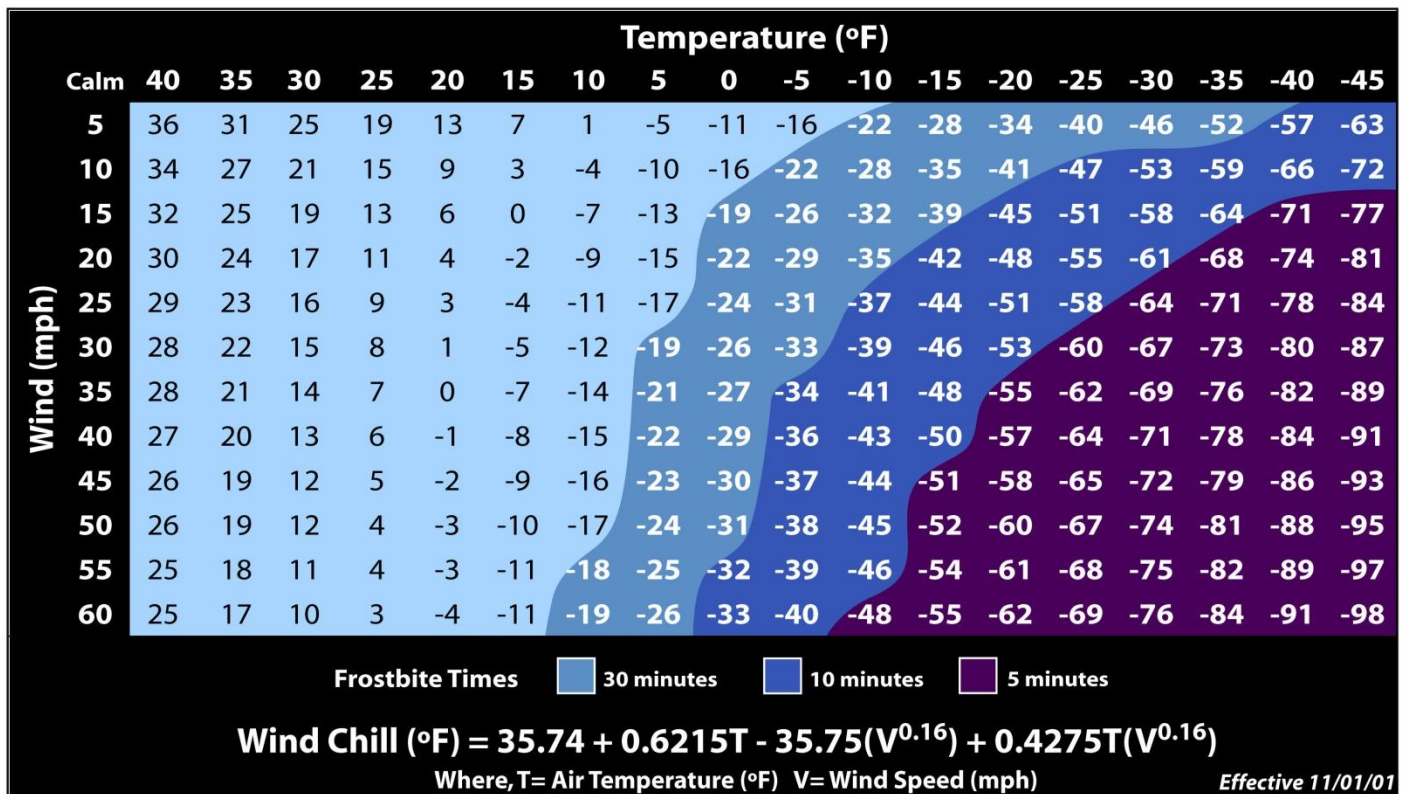


Figure 1: NOAA’s National Weather Service Windchill Temperature Index Chart

When winter temperatures drop significantly below normal, staying warm and safe can become a challenge for some residents in Milwaukee. Extremely cold temperatures often accompany a winter storm, so people may have to also cope with power failures and icy roads. Although staying indoors as much as possible can help reduce the risk of car crashes and falls on the ice, Milwaukee residents may also face indoor hazards. Many homes will be too cold—either due to a power failure or because the heating system isn’t adequate for the weather. When people must use space heaters and fireplaces to stay warm, the risk of household fires increases, as well as the risk of carbon monoxide poisoning.

## IV. Notification and Activation Thresholds

The Extreme Cold Event Emergency Operations Plan recognizes the southern Wisconsin office of the National Weather Service cold weather-related alerting products for decision making and Plan activation. Each alert product is based on projected Wind Chill indices that may cause serious or life-threatening health problems with continued exposure. The Plan implementation, response activities, and level of response are associated with the alert issued by the southern Wisconsin office of the National Weather Service in conjunction with the City of Milwaukee Health Department. The criteria for cold weather-related alerting products can vary by region. The below windchill criteria is current for the state of Wisconsin, including the Milwaukee metropolitan area.

### A. Hazardous Weather Outlook

A Hazardous Weather Outlook indicates that a hazardous weather or hydrologic event may develop. It is intended to provide information to allow considerable lead time to prepare for the event. It indicates the potential for significant weather events up to 7 days in advance with a forecaster confidence around 30%. **A Hazardous Weather Outlook does not indicate an activation of the Extreme Cold Event Emergency Operations Plan, but alerts Plan members to a potential activation.**

### B. Wind Chill Advisory

An advisory is issued when a particular weather event is imminent or occurring and the weather event will lead to nuisance conditions. Advisories are issued up to 48 hours in advance with forecaster confidence of at least 80%. **The southern Wisconsin office of the National Weather Service issues Wind Chill Advisories when indices are predicted to reach -20°F. A Wind Chill Advisory encourages an enhanced readiness and initiates City of Milwaukee Health Department public messaging.**

Figure 2: Plan Activation Levels

### C. Wind Chill Warning

A warning is issued when a hazardous weather event is occurring, is imminent, or has a very high probability of occurring. A warning is used for conditions posing a threat to life or property. **The southern Wisconsin office of the National Weather Service will issue Wind Chill Warnings when indices are projected to drop to -35°F or lower.** An "Extreme Cold Health Update" will be issued to all Plan members. **The City of Milwaukee Health Department will issue recommendations to the Office of the Mayor and Milwaukee Public Schools for closures and/or limitations to City services and schools.** These recommendations will be based on the severity of the extreme cold event and the circumstances surrounding the cold weather conditions.



## V. Concept of Operations

Describe the phased approach.

### A. Phase 1: Pre-Cold Weather

#### Activation

- Pre-cold weather activities begin in October

#### Monitoring

- The southern Wisconsin office of the National Weather Service (NWS) determines the impact of cold weather in their forecasts
- The Wisconsin Emergency Management Agency (WEM) maintains constant monitoring of weather conditions throughout the state. WEM relies on severe weather early warning information from the NWS offices serving Wisconsin, as well as observations from County Emergency Managers, volunteer NOAA Sky Warn weather observers, and the public.
- MHD conducts daily analysis of syndromic surveillance data from hospital emergency departments for indications of an increase in Hypothermia, Frostbite or Carbon Monoxide Poisoning.

#### MHD Actions

- Conduct an annual review of the MHD Extreme Cold Event Emergency Operations Plan and revise and update as necessary. Plan revisions may include but not limited to:
  - ✓ Coordinate and conduct a conference call with Plan partners to review and update planning efforts.
  - ✓ Obtain updated shelter contact information where applicable. <http://www.homelessshelterdirectory.org/cgi-bin/id/city.cgi?city=Milwaukee&state=WI>
- Provide guidance and recommend best practices to aid Plan partners in revising Cold Emergency Plans as requested.
- Update website to include accurate health department contact information.
- Distribute the revised Extreme Cold Event Emergency Operations Plan to Plan partners.
- Make revised public education materials available to stakeholders
- Monitor the NWS for local temperature data. <http://www.weather.gov/>
- Review planning activities and maintain situational awareness. <http://city.milwaukee.gov/health>

#### Public Information

- MHD will review and revise written and electronic public information materials
- MHD will develop and/or review public messages for outdoor citizens and department employees in extreme cold and what safety precautions should be taken.

## B. Phase 2: Launch of Extreme Cold Season

### Activation

- MHD should consider holding press conferences or issuing a press release on or prior to the day of the first forecasted extreme cold event. If the aforementioned press release does not occur, cold plan activities will be launched by the 2<sup>nd</sup> week of December.

### Monitoring

- MHD and local agencies should monitor weather forecasts for the possibility of predicted weather conditions consistent with extreme cold.
- MHD will distribute weekly reports and analysis of the public health impact of cold-related illnesses. The weekly reports will be made available internally at a predetermined time every week. These reports will include but may not be limited to:
  - ✓ Temperature Data via the National Weather Service and WEM.
  - ✓ Emergency Department visits for Hypothermia, Frostbite, Carbon Monoxide Poisoning, Medical examiner, EMS through MHD syndromic surveillance system.
  - ✓ Number of cold-related and Carbon Monoxide Reference Information.
- MHD with City of Milwaukee, WE Energies will monitor power outages City wide.
- MHD will coordinate with local Emergency Management (EM) to monitor large public events with the potential to create a mass casualty incident.
- MHD to monitor and track the number of Hypothermia, Frostbite and Carbon Monoxide poisoning emergency calls.

### MHD Actions

- Make a press announcement on or just prior to the day of the first extreme cold event or by 2<sup>nd</sup> week in January if no extreme cold events have occurred.
- Review and revise this plan following any extreme cold events as necessary.
- Office of Healthcare Quality will contact nursing homes to promote winter preparedness, reminding them to check their generators and HVAC systems as well as to remind them to report real or potential concerns and issues.
- Update the Health Department website <http://city.milwaukee.gov/health> with phone numbers and information.
- Make revised public education materials available to their stakeholders.
- Monitor the NWS for local temperature data.
- Review planning activities and maintain situational awareness.

### Demobilization

- Proceed to step 6 of this plan in March or selected (date).

### C. Phase 3: Extreme Cold Event - Wind Chill Advisory

#### Activation

- The NWS has issued a Wind Chill Advisory or temperatures meeting the criteria for a Wind Chill Advisory Indices -24F or lower are likely within the next 12 to 48 hours. A Wind Chill Advisory is issued when wind chill temperatures are potentially hazardous.

#### Monitoring

- MHD will maintain situational awareness on vulnerable facilities.
- MHD will continue to monitor syndromic surveillance systems and issue the weekly report outlined in step 2.
- MHD and WEM will monitor NWS forecasts for any indication of Extreme Cold.
- MHD will monitor power outages.
- MHD will notify the state or jurisdiction expected to be impacted by an extreme cold event.
- MHD advisory will also be sent to other state and local agencies.
- MHD may choose to make the advisory public through release to media outlets, posting on select state agency websites and other means deemed appropriate including social media.
- MHD will review Extreme Cold checklists and begin taking appropriate actions.
- MHD will coordinate with WEM, (Centers for Disease Control ) CDC, Health Clinics to issue Facility Resource Emergency Database
- MHD and WEM will maintain situational awareness and gauge the potential impact of the anticipated event.

#### MHD Actions

- Report information regarding local facilities in crisis.
- Notify local extreme cold planning partners (Mobilizing for Action through Planning and Partnerships) MAPP, (Milwaukee Public Schools) MPS, SHELTERS, Ext.
- Activate any transportation assistance programs for vulnerable populations to be transported to shelters.
- Coordinate with WEM recommending heightened mitigation protection for or discouraging outdoor public events.
- Review plans for extra staffing and emergency support services and stage potential resources.
- Coordinate with relevant organizations to provide outreach to vulnerable populations.
- Coordinate with existing volunteers and partners for responding to extreme cold.
- Coordinate public messaging with public access numbers such as non-emergency dispatch, 2-1-1, 3-1-1 or using reverse 9-1-1 systems.
- Recommend government and schools restrict outdoor activities.

#### Public Information

- MHD will coordinate with each jurisdiction on Extreme Cold Event communications.
- MHD should provide all locally used call centers (9-1-1, 2-1-1, hospital and private) information on transportation options.
- MHD will employ consistent messaging that urges individuals to check on elderly neighbors and family members, or if possible, recommend the usage of reverse 9-1-1 systems by local jurisdictions to contact at-risk and vulnerable populations and provide cold advisory warnings.
- MHD will include Pet Emergency Preparedness for cold emergency prevention in messaging. Resources can be found at <http://www.ready.gov/animals>.
- Local Jurisdictions (Milwaukee Transit System) MTA, (Department of Transportation) DOT utilize existing digital signage (such as outside firehouses, other public buildings or on public buses) to display concise cold safety tips.

- Safety officer, MHD will issue cold safety tips for outdoor workers.

### **Demobilization**

- MHD will revert to Step 2 when temperatures rise above 20 degrees.

## D. Phase 4: Extreme Cold Event - Wind Chill Warning

### Activation

- The NWS has issued a Wind Chill Warning or temperatures meeting the criteria for a Wind Chill Warning Wind Chill Warning Indices = -25F imminent are likely within the next 12 to 48 hours. A Wind Chill Warning is issued when wind chill temperatures are life threatening.
- Temperatures meeting the criteria for a Wind Chill Advisory are expected to continue for three or more days.

### MHD Actions

- Take all the actions outlined in Phase 3: Extreme Cold Event – Wind Chill Advisory.
- Engage 2-1-1 as a public access number for cold-related questions and provide 2-1-1 with up-to-date public messaging materials.
- Conduct conference calls to discuss potential impact of event with stakeholders. The calls may include, but are not limited to:
  - Internal MHD Staff
  - Local Health Department Staff
  - Other State Agencies
- Gather information on Sheltering operations to report to WEM. Work cooperatively with the Municipality's faith-based and community partners, the Milwaukee Fire Department (MFD) and other Agencies to provide a safe temporary cold weather shelter for vulnerable homeless individuals.
- Operate at an Enhanced Readiness level, in preparation for a Complex Cold Emergency.
- Supply health departments, Health clinics with updated lists of licensed facilities for tracking.
- Maintain a list of vulnerable non-medical facilities such as assisted living facilities.
- Update information on local shelters.

### Demobilization

- MHD will revert to Step 2 when temperatures rise above 32 degrees.

## E. Phase 5: Cold Emergency

### Activation

- MHD and WEM will use discretion in deciding what conditions constitute a complex emergency, which may include, but are not limited to:
  - ✓ Significant power outages.
  - ✓ Extended periods of low temperatures with a Wind Chill of -35°F.
  - ✓ Severe precipitation during a cold event causing significant hail or snowfall.
  - ✓ Any other factors that would exacerbate a Cold Emergency.
- Monitoring
- MHD will begin issuing the Daily Cold-Related Illness Surveillance Report through the duration of the emergency.
- The final Daily Report will be issued the day following the final Cold Advisory day, with surveillance data from the final Cold Advisory day.
- The disbursement of death data will follow a prescribed flow of information due to the overwhelming number of requests for information during these events.
- CDC/MHD Death Data will be routed internally to the Office of Preparedness & Response.
- Local Health Officers or their designee will be notified of the details of deaths in their jurisdiction by MHD.
- The daily report is sent to planning partners and posted to the MHD website.
- MHD will release death information to the public on daily basis during the duration of an event requiring SEOC (State Emergency Activation Center) SEOC activation. This information will be released at a set time to be determined at the beginning of the event.
- MHD will map cold deaths and 911 calls reported by (Wisconsin Emergency Medical Services) WEMS with Hypothermia, Frostbite and Carbon Monoxide as a chief complaint for use in targeting vulnerable population outreach.
- MHD will also monitor power outages, social media, special events and weather.

### MHD Actions

- Conduct regular conference calls to discuss potential impact of event with stakeholders. The calls may include but are not limited to:
  - ✓ Internal MHD Staff
  - ✓ Local Health Department Staff
  - ✓ Other State Agencies
- Coordinate with WEM, Wisconsin Department of Health Services (WDHS), Aging and Disability Resource Centers (ADRC), Local Health Departments and other organizations as necessary to determine if facilities with vulnerable populations need additional assistance.  
<http://www.dhs.wisconsin.gov/>, <http://www.redcross.org/>  
 Facilities may include:
  - ✓ Dialysis Centers
  - ✓ Nursing Homes
  - ✓ Senior Assisted Living Facilities
- Coordinate with WEM, WDHS, and Local Health Departments to monitor, track and post the locations of shelters City wide and statewide.
- Request information from local Emergency Management (EM) on events that may be affected by the complex cold emergency.
- Assume incident command for Cold Incident and begin coordinating Emergency Support Functions in support of a response.
- Coordinate with volunteer organizations to gather teams to supplement outreach efforts and/or pass out supplies.

- Open a temporary emergency center for areas that may be without power for an extended period of time as necessary.
- Modify public transportation to be utilized as a heating method for vulnerable groups or to transport them to a shelter
- Notify their local Emergency Management (EM) of large-scale public events in the local jurisdiction that have the potential to result in a mass casualty incident. Refer to list maintained from step 2. Preposition local assets with the authority to cancel the events.
- Cancel or ensure greater mitigation measures for outdoor public events.
- Expand shelter capacity as necessary and notify state officials.

### Power Outages

- In the event of a widespread and/or prolonged power outage, MHD will coordinate with WEM <http://emergencymanagement.wi.gov/> , the Public Service Commission <http://psc.wi.gov/utilityinfo/electric/index-electric.htm> and Power Companies <http://www.we-energies.com/> to ensure that facilities with vulnerable populations, outlined above, receive priority in restoration due to the life-threatening nature of extreme cold in a powerless facility.
- Pharmacy restrictions on the ability to renew prescriptions will be lifted.

### Shortage of Water

- In the event of a widespread and/or prolonged water shortage, the Jurisdiction's Health Department <http://city.milwaukee.gov/Health> and the Department of Public Works <http://city.milwaukee.gov/mpw> should consider providing alternative potable water to affected residents. Resources can also be requested through local EMA.
- May request assistance from the private sector in providing and distributing free water.

### Public Information

- MHD will activate a Joint Information Center (JIC), Emergency Operations Center (EOC) to address public messaging.
- MHD and WEM, through the JIC/EOC, will use 2-1-1 or public access numbers to distribute cold emergency information.

### Demobilization

- MHD will revert to previous steps once the emergency factors have been resolved, or WEM stands down.
- MHD will revert to Step 5 if a Wind Chill Warning is in effect.
- MHD will revert to Step 4 if a Wind Chill Advisory is in effect.
- MHD will revert to step 2 if temperatures have risen back to 20 degrees.

## F. Phase 6: Post-Extreme Cold Weather

### Activation

- Post winter activities typically begin in mid-March and include After Action Reporting and planning for the next operational period.

### MHD Actions

- Ceases circulating weekly cold reports in March.
- Where applicable, collect After Action Reports from the jurisdictions and determine best practices to be included in the following year's planning efforts.
- Collect, analyze and release statewide surveillance data from the winter for use in future cold planning (After Action Report).
- Review and update the Cold Plan, including a comprehensive review of local plans and resources, to be completed by October 31st
- Cease cold-event monitoring and return shelters to normal hours if applicable.
- Identify organizations serving high-risk populations that can be utilized in following season.
- Develop or revise information on high-risk individuals.
- Create voluntary registries for individuals, families and neighbors.
- Develop or revise an accessible record on facilities and locations.
- Review evaluation tools to monitor effectiveness.
- Shelter usage.

**(SHELTERS SHALL ONLY BE ACTIVATED IF A CRITICAL COMPONENT(S) OF THE INFRASTRUCTURE SYSTEM FAILS, SUCH AS ELECTRIC POWER AT ANY TIME OF YEAR, LACK OF NATURAL GAS DURING THE WINTER MONTHS, AND ANY OTHER NATURAL OR MAN-MADE DISASTER WHEREBY EVACUATION IS NECESSARY).**

- Transportation program usage, if available.

**(ALTERNATIVE USES OF TRANSPORTATION CAN GREATLY REDUCE ROAD CONGESTION, PROVIDE MOBILITY TO RESIDENTS WITHOUT PERSONAL TRANSPORTATION AND CAN REDUCE THE NUMBER OF TRAFFIC RELATED ACCIDENTS).**



## VI. Definitions

**Extreme Cold Event** – An extreme cold event is a weather condition with excessively low temperatures or a combination of cold temperatures and wind that has the potential to cause cold-related illnesses or injuries.

An extreme cold event is defined in hours, a day or series of days when:

- The minimum temperature or wind chill is forecasted to be approximately -5°F or lower,
- Weather or environmental conditions are such that a high incidence of cold-related illnesses or injuries can reasonably be expected.

**Complex Cold Emergency** – A Complex Emergency is a condition of an Extreme Cold Event with complications requiring additional response. Examples of such complications are power shortages, heavy precipitation (snow or ice) or an extended period of low temperatures combined with strong winds.

**Warming Centers and Sheltering** – The actual definition of a ‘warming center’ may vary from jurisdiction to jurisdiction. For the purposes of this plan, a warming center refers to a public building with heat, water and sanitation facilities. However, due to the coldest temperatures occurring overnight, sheltering the homeless is the primary concern in sheltering operations. Sheltering operations may also be employed or expanded during winter storms to reduce the risk to vulnerable populations. Warming centers and shelters will be referred to in this plan as simply ‘shelters’.

**Wind Chill** – Wind Chill or the apparent temperature is a measure of what the temperature actually feels like. Wind Chill is a factor of both the actual temperature and wind speed, and is the best indicator for a pending extreme cold event. Wind Chill is the key indicator of Extreme Cold by the National Weather Service.

**Wind Chill Advisory** - The National Weather Service issues this product when the wind chill could be life threatening if action is not taken. In Wisconsin wind chill advisories are issued when wind chill temperatures are forecasted to range from -10°F to -24°F.

**Wind Chill Warning** - The National Weather Service issues this product when the wind chill is life threatening. In Wisconsin wind chill warnings are issued when wind chill temperatures are forecasted to be below -25°F imminent

**Cold-related Illness** – A Cold-related Illness is a condition caused by extreme cold, usually hypothermia medical condition exacerbated by the cold. Hypothermia is likely at lower temperatures when the subjects are wet due to rain, fog or snow. For the purposes of this plan, Cold-related injuries will be referred to as cold-related Illness.

**Hypothermia** – When exposed to cold and the mechanisms are unable to replenish the heat that is being lost, a drop in body’s core temperature occurs; causing systems such as shivering and mental confusion.





**Cold-related Injury** – A Cold-related Injury is damage caused by extreme cold, which is known as frostbite. Like hypothermia, frostbite is likely at lower temperatures when the subjects are exposed to the cold as well as being wet due to rain, fog or snow.

**Frostbite** – Frostbite is the medical condition where localized damage is caused to skin and other tissues due to extreme cold.

**Carbon Monoxide Poisoning** – Due to the prevalence of heaters and fuel-burning devices during the winter, Carbon Monoxide poisoning presents the greatest risk during the winter months.<sup>3</sup>

**High-Risk Groups** – High-Risk Groups are populations that are disproportionately affected by Extreme Cold. These groups include babies sleeping in cold rooms, elderly people with inadequate food, clothing or heating, people who remain outdoors for long periods (homeless, hunters, hikers, etc.), and people who drink alcohol or use illegal drugs.

**VII. Quick List / Important Links**

<p><b>American Red Cross</b>  <a href="https://www.redcross.org/local/wisconsin.html">https://www.redcross.org/local/wisconsin.html</a>                  Phone: (414) 342-8680</p>	 <p><b>American Red Cross</b></p>
<p><b>Centers for Disease Control and Prevention (CDC)</b>  <a href="http://www.cdc.gov">http://www.cdc.gov</a>  <a href="http://emergency.cdc.gov/disasters/winter/">http://emergency.cdc.gov/disasters/winter/</a>                  Phone: (800) 943-0003</p>	
<p><b>City of Milwaukee Fire Department</b>  <a href="https://city.milwaukee.gov/MFD">https://city.milwaukee.gov/MFD</a>                  Phone: (414) 286-8948</p>	
<p><b>City of Milwaukee Health Department (MHD)</b>  <a href="http://city.milwaukee.gov/Health">http://city.milwaukee.gov/Health</a>  <a href="http://city.milwaukee.gov/health/Emergency-Preparedness">http://city.milwaukee.gov/health/Emergency-Preparedness</a>                  Phone: (414) 286-3521</p>	
<p><b>Department of Homeland Security – Ready</b>  <a href="https://www.ready.gov/winter-weather">https://www.ready.gov/winter-weather</a>  <a href="https://www.ready.gov/animals">https://www.ready.gov/animals</a>                  Phone: (800) 621-3362</p>	
<p><b>Homeless Shelter Directory</b>  <a href="https://www.homelesshelterdirectory.org/wisconsin.html">https://www.homelesshelterdirectory.org/wisconsin.html</a></p>	<p><b>HOMELESS SHELTER DIRECTORY</b>                  Helping The Needy of America</p>
<p><b>Milwaukee Public Schools</b>  <a href="http://mps.milwaukee.k12.wi.us/en/home.htm">http://mps.milwaukee.k12.wi.us/en/home.htm</a>                  Phone: (414) 475-8393</p>	
<p><b>National Emergency Management Association</b>  <a href="http://nemaweb.org/">http://nemaweb.org/</a>                  Phone: (859) 244-8162</p>	
<p><b>National Oceanic and Atmospheric Administration</b>  <a href="https://www.noaa.gov/">https://www.noaa.gov/</a>                  Phone: (828) 271-4800</p>	
<p><b>We Energies</b>  <a href="http://www.we-energies.com">http://www.we-energies.com</a>                  Phone: (800) 261-5325</p>	
<p><b>Wisconsin Department of Health Services</b>  <a href="https://www.dhs.wisconsin.gov/">https://www.dhs.wisconsin.gov/</a>                  Phone: (608) 266-1865</p>	
<p><b>Wisconsin Emergency Management (WEM)</b>  <a href="https://dma.wi.gov/DMA/WEM">https://dma.wi.gov/DMA/WEM</a>                  Phone: (608) 242-3000</p>	

## VIII. Milwaukee Health Department Emergency Response Staff Contacts

1) Dr. Jennifer Freiheit – Health Operations Administrator

Email: [JFREIH@milwaukee.gov](mailto:JFREIH@milwaukee.gov) work phone: 414-286-5060 24 hour: 414-336-8366

2) Nick Tomaro – Public Health Emergency Response Planning Coordinator

Email: [NTOMAR@milwaukee.gov](mailto:NTOMAR@milwaukee.gov) work phone: 414-286-5769 24 hour: 414-336-8039

3) Lindsey Page – Infectious Disease Epidemiologist

Email: [LPAGE@milwaukee.gov](mailto:LPAGE@milwaukee.gov) work phone: 414-286-5789 24 hour: 414-207-5282

4) Diamond Hansen – Health Communications Officer

Email: [DHANSO@milwaukee.gov](mailto:DHANSO@milwaukee.gov) work phone: 414-286-5141 24 hour: 414-758-0136

5) Lindor Schmidt – Environmental and Disease Control Specialist/Safety Officer

Email: [LESCHMI@milwaukee.gov](mailto:LESCHMI@milwaukee.gov) work phone: 414-286-2359 24 hour: 414-324-1315

## IX. Warming Centers and Sheltering

### Milwaukee Area Warming Centers:

List current as of January 18, 2019. Call 211 for information about places to stay warm, including emergency shelter options that are available year-round.

#### **Adullam Family Warming Center, 3033 N. 30th St. in Milwaukee, (414) 301-3033**

- Serves families with children
- Open from 7 p.m. to 7 a.m. (guests must arrive by 8 p.m.) when the temperature is 15 degrees or lower

#### **Benedict Center, 209 W. Orchard St., Milwaukee, (414) 347-1774**

- Accessible Benedict Center and New Paths referrals
- Serves single women in the sex trade
- Warming Center open 6 p.m. to 7:30 a.m. Monday through Friday, and Saturday and Sunday from 8 p.m. to 7:30 a.m.
- No temperature threshold

#### **Divine Intervention (Ministry to the Homeless) Tippecanoe Church, 125 W. Saveland Ave., Milwaukee, (414) 481-4680**

- Call 211 for entry
- Serves single adults age 18 and older
- Open from 6 p.m. to 8 a.m.
- No temperature threshold

#### **Greater New Birth Warming Center, 8237 W. Silver Spring Drive, Milwaukee, (414) 264-5683**

- Call 211 for entry or walk in 7 p.m.-10 p.m.
- Serves single adults
- Open Sun.-Sat. 7 p.m.-7 a.m., when 15 degrees or below

#### **Guest House of Milwaukee 1216 N. 13th St., Milwaukee, (414) 345-3240**

- Must call 211 for entry
- Serves single men age 18 and older
- Open 24 hours, 7 days a week
- No temperature threshold

#### **Lissy's Place, 5131 W. Center St., Milwaukee, (414) 874-2560**

- Serves women under the age of 30
- Open 24 hours, 7 days a week
- No temperature threshold

#### **Milwaukee Rescue Mission – Joy House, 830 N. 19<sup>th</sup> St., Milwaukee, (414) 344-2211**

- Serves women and children
- Open 24 hours, 7 days a week
- No temperature threshold

**Repairers of the Breach, 1335 W. Vliet St., Milwaukee, (414) 342-9323**

- Serves single adults age 18 and older
- Open from Monday through Saturday, 7 a.m. to 4 p.m. as a day shelter
- Reopens for overnight shelter at 8 p.m. when the temperature is 20 degrees or lower, but guests must arrive no later than 10 p.m.
- Walk-ins welcome

**Salvation Army, multiple locations**

- Call 211 entry or walk-in
- Serves men, women and families
- 1645 N. 25th St., Milwaukee, Monday through Friday, 8:30 a.m. to 4 p.m.
- 4129 W. Villard Ave., Milwaukee, Sundays from 10 a.m. to noon, Monday through Friday from 9 a.m. to 4 p.m.
- 2900 W. Coldspring Road, Greenfield, open 9 a.m. to 3 p.m., Monday through Thursday; and Friday from 9 a.m. to 1 p.m.
- 8853 S. Howell Ave., Oak Creek, open 6 a.m. to 6 p.m. Monday through Friday

**St. Ben's Community Meal, 924 West State Street, (414) 271-0135**

- Serves single adults age 18 and older
- Open from 8 p.m. to 8 a.m. when the temperature is 20 degrees or lower
- Walk-in any time during open hours

**Walker's Point Youth and Family Center, 732 S. 21<sup>st</sup> St., Milwaukee, (414) 647-8200**

- Serves single adults age 18 and older
- Open from 8 p.m. to 8 a.m. when the temperature is 20 degrees or lower
- Walk-in any time during open hours

# Hospital Emergency Department Extreme Cold Surveillance Report

City of Milwaukee Health Department  
Frank P. Zeidler Municipal Building  
841 N Broadway, 3<sup>rd</sup> Floor  
Milwaukee, WI 53202  
Phone: (414) 286-3521 Fax: (414) 286-5164

**HOSPITAL NAME:** \_\_\_\_\_

**TODAY'S DATE:** \_\_\_\_ / \_\_\_\_ / \_\_\_\_ **PERSON COMPLETING FORM:** \_\_\_\_\_

\*Please submit completed reports daily to the Milwaukee Health Department by FAX at **(414) 286-5164** or email to [leschmi@milwaukee.gov](mailto:leschmi@milwaukee.gov).

### Date and Time of Reporting Period

**DATE:** \_\_\_\_ / \_\_\_\_ / \_\_\_\_ **TIME:** \_\_\_\_ : \_\_\_\_ **TO DATE:** \_\_\_\_ / \_\_\_\_ / \_\_\_\_ **TIME:** \_\_\_\_ : \_\_\_\_

*(Please submit a report at the time requested for each day of the event, unless otherwise noted)*

### Extreme Cold Weather-Related Injuries Surveillance

1) What is the nature of each cold-weather injury and/or suspected death?

<b>Total Count:</b>	<b>Notes:</b>
_____ Hypothermia	
_____ Frostbite	
_____ Carbon Monoxide Poisoning	
_____ Other	

2) How many of these patients were admitted? \_\_\_\_\_

3) What are the characteristics of each patient?

**Total Count:**

**Age:** \_\_\_\_\_ 0-4 yrs \_\_\_\_\_ 5-24 yrs \_\_\_\_\_ 25-49 yrs \_\_\_\_\_ 50-64 yrs \_\_\_\_\_ ≥65 yrs

**Sex:** \_\_\_\_\_ Male \_\_\_\_\_ Female

**Race:** \_\_\_\_\_ White \_\_\_\_\_ Black \_\_\_\_\_ Other

4) Were there any consistent or notable aggravating or predisposing underlying health conditions?

**Summary:** \_\_\_\_\_

\_\_\_\_\_

For any questions, please contact City of Milwaukee Health Department Disease Control and Environmental Health staff at **(414) 286-2359**. Thank you for your assistance.

Extreme Cold Weather Quick Health Response Guide			
Type	Monitoring	MHD Health Messages	Response Actions
Expected	Seasonal Winter Weather	<ul style="list-style-type: none"> <li>Stay Warm, Stay Dry</li> <li>Avoid lengthy outdoor activity</li> <li>Help others; check on the elderly or people with disabilities/live alone.</li> <li>Learn to identify signs of cold injuries and know what to do.</li> </ul>	<ul style="list-style-type: none"> <li>Health information posted on MHD website</li> <li>Media release on cold weather information</li> <li>Send updated information to community partner agencies.</li> </ul>
Wind Chill Advisory	<ul style="list-style-type: none"> <li>A daily predicted temperature of -24F or lower are likely within the next 12 to 48 hours</li> </ul>	<ol style="list-style-type: none"> <li>Take action to avoid injuries from the cold:                             <ul style="list-style-type: none"> <li>Cover unprotected skin, dress in layers an outer layer that is wind resistant.</li> <li>Avoid prolonged outdoor exposure.</li> <li>Drink warm fluids (no alcohol or caffeine)</li> <li>Watch for signs of frostbite and hypothermia</li> </ul> </li> <li>Check on the elderly or people with disabilities.</li> </ol>	<p>MHD will issue a <b>Cold Weather Health Alert</b> directly to community partner agencies.</p> <p>Schools, daycares, long term care homes, neighborhood associations, emergency service providers ect.</p> <p>Cold alert media release will be sent out.</p>
Wind Chill Warning	<ul style="list-style-type: none"> <li>A daily predicted temperature of -25F or lower</li> <li>-25F imminent are likely within the next 12 to 48 hours</li> <li>NOAA issues a severe winter storm warning</li> </ul>	<p><b>Temperature is -25F or Wind Chill is -28 or colder:</b></p> <ol style="list-style-type: none"> <li>Children indoors</li> <li>Check ears, nose, cheeks, chin fingers and toes often for signs of frostbite.</li> </ol> <p>-Unprotected skin can freeze in as little as 10-30 minutes</p> <p><b>Wind chill -35F or colder:</b></p> <ol style="list-style-type: none"> <li>Check ears, nose, cheeks, chin fingers and toes often for signs of frostbite.</li> <li>Serious risk of hypothermia if cold, or cold and wet, and outdoors for long periods</li> <li>Consider cancelling outdoors for long periods</li> <li>Check frequently on vulnerable populations</li> </ol>	<p>MHD will issue a <b>Cold Weather Health Alert</b> directly to community partner’s agencies and via media release.</p> <p>This information will be posted in the MHD website, tweeter, Witrac, ect.</p>
Cold Emergency	<ul style="list-style-type: none"> <li>Extended periods of low temperatures with a Wind Chill of -35F</li> <li>Cold weather health warning issued</li> <li>Existence of a contributing factor such as power outage, or critical infrastructure failure</li> </ul>	<p>Core cold weather message:</p> <p>-Danger</p> <p>-Outdoor conditions are hazardous</p> <p><b>Stay Indoors</b></p> <p>-Ensure vulnerable are in a warm, safe, and environment.</p>	<ul style="list-style-type: none"> <li>MHD will issue a <b>Cold Weather Health Alert</b> directly to community partner’s agencies and via media release.</li> <li>Possible activation of the <b>MHD Extreme Cold Plan</b></li> <li>Post information at the MHD website, tweeter, Witrac, ect.</li> <li>Advice community partners agencies and media when status is lifted.</li> </ul>