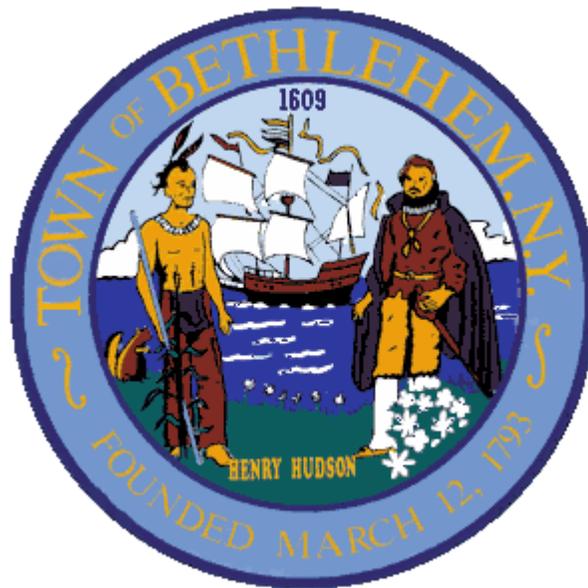


ANNEX 1

TOWN OF BETHLEHEM

EMERGENCY MANAGEMENT



EXCESSIVE HEAT INFORMATION and RESPONSE PROCEDURES

**EMERGENCY MANAGEMENT OFFICE
445 Delaware Ave. Delmar, New York 12054
518-439-4955
Fax 518-439-1699**

**David VanLuven
Supervisor**

**John E. Brennan
Director**

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TOWN OF BETHLEHEM EXCESSIVE HEAT INFORMATION AND RESPONSE PROCEDURES

Introduction

The summer heat that we enjoy every year and wish for during the depths of winter has a very negative impact on some of our residents. Excessive heat during the summer has and will continue to be a problem for our at-risk community within the Town of Bethlehem. While we enjoy the summer warmth and the many aspects of increased recreational events, excessive heat and humidity over a long period of time create problems for many of our residents.

Excessive heat over a prolonged period of time or exacerbated by power shortages or blackouts is a public health threat and directly impacts the possibilities of increased mortality and suffering. Groups within the Town of Bethlehem who are older, very young, of lower income or have physical or mental impairments are at an elevated risk for excessive heat attributed to or aggravated by health problems.

Since we have no ability to reduce the temperature or to create a weather change we must find ways to mitigate the impact to our residents. Today, this problem can often be accurately forecasted and a number of effective response measures are available that may assist the affected population. These procedures will assess the at-risk groups and recommend steps to alleviate and reduce the possible suffering surrounding excessive heat. Studies indicate that most of these problems are preventable.

Impact

The majority of the residents of the Town of Bethlehem will not be overly affected by excessive summer heat, as may the more urban communities. Our demographic dissimilarity with the larger urban cities and towns dramatically lowers the probability of widespread deaths and other medically associated results. However, the threat of death and severe medical consequences are still a matter of concern for our at-risk community.

- 1901- 9500 deaths in Eastern United States,
- August 2003- 70,000 deaths in Europe, 15,000 deaths in France alone, due to excessive heat,
- 1988- 5,000+ deaths in North America
- July 1995- 700 deaths attributed to excessive heat in Cook County (Chicago), IL,
- July 1993- 120 deaths due to conditions in Philadelphia

The At-Risk Community

Those individuals who may be affected within the Town of Bethlehem do not differ greatly from those of our neighbors across the country.

- Frail persons
- Infants (age 1 and under)
- Homeless
- Low Income

- Socially isolated
- Mentally impaired
- Mobility restricted
- Individuals under the influence of alcohol or drugs
- Those involved in vigorous outdoor work or exercise

The Albany County Sheriff’s Department, Office of Community and Emergency Services, through its voluntary enrollment Special Needs Registry Program, lists individuals within the Town of Bethlehem who may because of their age, frailty or other conditions be unable to evacuate themselves in the event of an emergency. The Town’s Department of Senior Services has access to this information, and through additional sources attempts to monitor those identified residents who may need assistance during a period of “extreme heat”. The Sheriff’s Department registration form has been affixed to this document for your use.

The National Grid has established its Life Support/Critical Care Program to list and monitor those individuals who may need assistance during a time of crisis, such as a period of excessive heat conditions, or prolonged power outages. Information regarding this and registration documents are available directly through National Grid, lifesupport@nationalgrid.com.

Goals

1. Provide background identification and evaluation of excessive heat characteristics.
2. Identify the potential health impacts relevant to excessive heat conditions.
3. Identify ways to mitigate or alleviate excessive heat conditions and their impact on humans and animals.
4. Establish plans for notification, and response measures for those at risk citizens and for the emergency response community.

Identifying Excessive Heat Characteristics

The fact that it is hotter and more humid during the summertime does not in itself lend to a conclusion of “excessive heat.” There are a number of factors that differentiate between a hot and humid period during the summer and an excessive heat condition, whereby the citizenry is in danger. The mere fact that it is hot and humid does not define nor create the problem. There are a number of characteristics that affect and create health risks. Two items to be considered as to the severity of an excessive heat event are the characterization of the event as a **Heat Wave**, which is more than 48 hours of over 90 degree heat and high relative humidity of 80% or higher.

Secondly, a dramatic increase of the **Heat Index**, which is the number of degrees that tells how hot it feels when relative humidity is added to the actual air temperature.

1. Meteorological Characteristics:
 - Increased temperatures
 - Increased relative humidity
 - Dry, hot winds
2. Demographic Characteristics
 - Physical-medical constraints
 - Mobility constraints
 - Economic constraints
 - Social isolation

3. Behavioral Choices
 - Inappropriate clothing
 - Inadequate hydration
 - Alcohol/drug consumption
 - Heavy eating/hot or spicy foods
4. Local Characteristics
 - Urban or Rural Environmental factors
 - Power outages or prolonged interruptions

All of the above characteristics may create situations or increase the possibility of health risks.

Identifying Medical Conditions Relative to Excessive Heat Conditions

Excessive heat conditions and their resultant physical and medical conditions, as listed below, stress the body's ability to maintain ideal internal temperature. While the medical conditions identified are attributed to excessive heat exposures, the impact on one's health could take many other forms and should not be underestimated. These medical conditions could cause, magnify, stress, or exacerbate pre-existing ailments and conditions.

1. Heat Cramps:
Painful muscle cramps and spasms, usually in muscles of legs and abdomen along with heavy sweating.
2. Heat Exhaustion:
Heavy sweating, weakness, cool pale and clammy skin with weak pulse. Normal temperature possible, along with muscle cramps, dizziness, fainting, nausea and vomiting.
3. Heat Stroke:
Altered mental state. Possible throbbing headache, confusion, nausea and dizziness. High body temperature (106°F) rapid and strong pulse. Possible unconsciousness. Skin may be hot and dry or person may be sweating. Sweating is likely if person was previously involved in vigorous activity.
4. Sunburn:
Symptoms include redness and pain, blistering, swelling fever and headaches. A physician should treat severe sunburn.

Suggested Mitigation Methods

As noted previously, climate and meteorological aspects of this problem cannot be changed. There are some measures, both specific and general, that can be undertaken by the residents themselves, employers and Town government on behalf of residents. Those measures taken on behalf of the residents by town government will be specified in the following section titled Planning Activities and Response Measures. The following are suggested measures that should be reviewed by those individuals that may be at-risk during times of excessive heat.

- Monitor weather forecasts and bulletins.
- Stay in contact with family and friends.
- Use air conditioning and/or fans if available.
- Curtail strenuous activities, particularly during the hours of 11a.m.-4a.m.
- Eat small meals, less protein and salty foods and more fruits and vegetables.
- Drink lots of water and stay hydrated.
- Stay out of the sun if possible. Use sunscreen if you must go in the sun.
- Go to public buildings or designated cooling locations.
- Stay on lower floors of non-air conditioned multi-floor buildings.

- Wear loose fitting, light colored clothing.
- Do not leave small children, seniors or at-risk individuals alone.
- Do not leave any of the above or animals in parked, closed vehicles.
- Check on your neighbors and relatives, particularly if at-risk.
- Feed and water your pets regularly.
- Do not, or moderately use alcohol.
- Curtail, if possible, the use of non-essential electrical appliances.
- Set air conditioners to cool not chill.

HUMIDITY

TEMPERATURE		10% ^b	20% ^b	30% ^b	40% ^b	50% ^b	60% ^b	70% ^b	80% ^b	90% ^b	
	104	98	104	110	120	132					
	102	97	101	108	117	125					
	100	95	99	105	110	120	132				
	98	93	97	101	106	110	125				
	96	91	95	98	104	108	120	128			
	94	89	93	95	100	105	111	122			
	92	87	90	92	96	100	106	115	122		
	90	85	88	90	92	96	100	106	114	122	
	88	82	86	87	89	93	95	100	106	115	
86	80	84	85	87	90	92	96	100	109		
84	78	81	83	85	86	89	91	95	99		
82	77	79	80	81	84	86	89	91	95		
80	75	77	78	79	81	83	85	86	89		
78	72	75	77	78	79	80	81	83	85		
76	70	72	75	76	77	77	77	78	79		
74	68	70	73	74	75	75	75	76	77		

HUMITURE DEG. F.	DANGER CATEGORY	INJURY THREAT
Below 60 Deg.	None	Little or no danger under normal circumstances
80-90 Deg.	Caution	Fatigue possible if exposure prolonged and there is physical activity
90-105 Deg.	Extreme Caution	Heat cramps and heat exhaustion possible if exposure is prolonged and there is physical activity
105-130 Deg.	Danger	Heat cramps or exhaustion likely, heat stroke possible if exposure is prolonged & there is physical activity
Above 130 Deg.	Extreme Danger	Heat stroke imminent !

Planning Activities and Response Measures

In an effort to assist the residents of the Town of Bethlehem and in particular to aid those at-risk during periods of excessive and extreme heat, the Town of Bethlehem government and personnel will undertake the following measures based on the three levels of severity of an excessive heat event.

Determining Levels of Excess Heat and Impact:

Low Level- 48 hours of high heat, 80-90degrees, as noted by NOAA, with accompanying high humidity and minor power losses.

Medium Level- 72-120 hours of high heat over 90degrees, as noted by NOAA with high humidity, with extensive power losses.

High Level- In excess of 96 hours of extreme heat 90+degrees with nighttime 80degrees for 48 hours, with high humidity and continued or worsening power outages or Medium Level with other major (non-identified) contributing factors.

Excessive Heat Event-LOW LEVEL

- Public information and education
- Canvas “at-risk” population
- Update identified “at-risk” individual’s information
- Maintain weather watch
- Provide location(s) for temporary cooling and equipment recharging, for a limited number.
- External or town hall (101)/auditorium during regular working hours.
- Tables and power strips to be made available.
- Monitor NWS-NOAA alerts and bulletins
- Consider upgrade to Medium Level

Excessive Heat Event-MEDIUM LEVEL

- All Low Level actions
- Establish liaison with Albany County EMO
- Supervisor meets with department heads on possible strategy
- Daily contacts with “at-risk” group
- Implement/update town Information Phone Line, Heat Alert recording
- Establish Town of Bethlehem Heat Hot Line
- Extend hours for Town Park locations
- Publish regular press statements
- Town Safety Committee reviews impact of outdoor employees
- Encourage increased use of Town Hall by the “at-risk” community
- Distribute cooling materials, if available
- Extend regular Town Hall opening hours on workdays to 7pm
- Review logistics (personnel, services and security) for formal Cooling Center at town hall for larger capacities to include weekend hours from 8:30am to 4:30pm
- Make available tables, power strips and other related items, if available
- Review need for water and/or ice stocks
- Distribute “stay cool” information to “at-risk” and general public

- Distribute energy conservation materials
- Request expertise and advice from Town Medical Advisor
- Increase outreach services to other than identified at-risk
- Consider upgrade to **High Level**

Excessive Heat Event-**HIGH LEVEL**

- All Low and Medium Level actions
- Contact Red Cross for possible assistance
- Assign volunteers, if available, to each of the at-risk individuals
- Institute regular Public Information Officer briefings
- Formally establish Town Hall Cooling Station with expanded hours and related services including overnight, if necessary.
- Establish additional cooling centers at designated fire houses
- Coordinate/publicize other possible cooling locations within town or nearby: i.e. library, countywide locations.
- Transfer at-risk to cooling center, hospital or other safe locations
- Request increased EMS and other response agency staffing
- Request assistance for transportation to cooling centers
- Suggest rescheduling or cancellation of local public events
- Institute neighborhood cooling locations (fire hydrants)
- Request assistance from sheltering community and volunteers
- Assist in suspension of utility cutoffs and/or evictions
- Supervisor convenes Strategy Board
- Supervisor considers Declaration of Emergency
- Supervisor issues Emergency Orders

Extraordinary Circumstances:

Power Outages, brown outs and other electrical interruptions most times exasperates already tenuous situations. Should long term power outages and/or interruptions be expected or anticipated, town government management and emergency response personnel should reevaluate and reassess the level of impact and need for immediate action and adjusted responses.

Special considerations will be taken by Town of Bethlehem department managers and supervisory personnel to assure that employees and constituents remain safe, hydrated and are protected from the possible effects of excessive heat. Town department managers should continually evaluate heat conditions, as they effect personnel, and take necessary corrective steps when needed. Excessive heat mitigation and other safety issues should be reviewed by the town's Safety Committee on a regular basis.

The specific Town of Bethlehem department(s) having the particular listed duty within their normal area of responsibility will perform the actions and tasks as needed. The coordination of the various actions noted above and those items not falling within any department's scope of operation will be the responsibility of the Director, Emergency Management Office or as designated by the Supervisor.

Additions, deletions, changes or modifications to these procedures will be made as deemed necessary and shall be reviewed on a regular basis by the Director, Emergency Management Office.

##

11/2024

Useful Excessive Heat facts and information:

<https://www.epa.gov/heat-islands/excessive-heat-events-guidebook>

See next page for Albany County Sheriff's Department:

Evacuation Functional Needs 911 Registry Application

Albany County Sheriff's Office
Community and Emergency Services
 58 Verda Avenue
 P.O. Box A
 Clarksville, NY 12041
 Phone: (518) 720-8030 * Fax: (518) 720-8031

Evacuation Functional Needs 911 Registry Application

Last	First	Middle Initial
Address	Apt.#	City
State	Zip Code	
Home Phone /TTY	Cell Phone	Email

Sex: Male Female Date of Birth: ___/___/___ Weight: _____ Height: _____

Social Security # (optional): _____

Number of relatives living with you who will accompany you to a shelter if need be: _____

Residence Type: Private Home Apartment/Condo Mobile Home High-rise
 Group Home Retirement Home Duplex Dorm

Name of Complex/Subdivision: _____

Yearly resident? Yes No If no, from _____ to _____

Do you have pets? Yes No

Do you have arrangements for them in an emergency? Yes No

Please be advised that pets may NOT accompany you to a shelter unless they are service animals.

Evacuation Information: PLEASE GIVE NAME AND PHONE NUMBER BELOW OF SOMEONE WE MAY CALL IF WE ARE UNABLE TO REACH YOU DIRECTLY:

Will you require evacuation assistance? Yes No

Do you: Care for yourself or Regularly have assistance from a caregiver

Name of Caregiver: _____ Phone #: _____ Cell #: _____

Address: _____ City: _____ Zip: _____

Transportation (check all that apply)

- I will provide my own transportation I can get to a bus pickup point
- I am ambulatory, with assistance I Need a wheelchair lift equipped vehicle
- I can transfer from a wheelchair to a seat I am bedridden and require stretcher transport

Is Your Disability: Temporary or Permanent

If temporary, please give a medical release date: _____

Note: unless you notify registry personnel, you will be deleted from registry as of the above date.

Type of Disability (check all that apply)

- None Hearing Impaired require a translator, If so specify: _____
- Blind I have a hearing/seeing service animal which will accompany me
- Mental Disability Bedridden Other: _____

Special Equipment (check all that apply)

- Wheelchair dependent collapsible non collapsible Walker/cane
- Electric Dependent Portable Oxygen – Hours per day: _____ Litre Flow: _____
- Other (please describe): _____

(Over)