
Climate Change and Public Health

— Jennifer Murphy, MPH —
Director, Winchester Health Department
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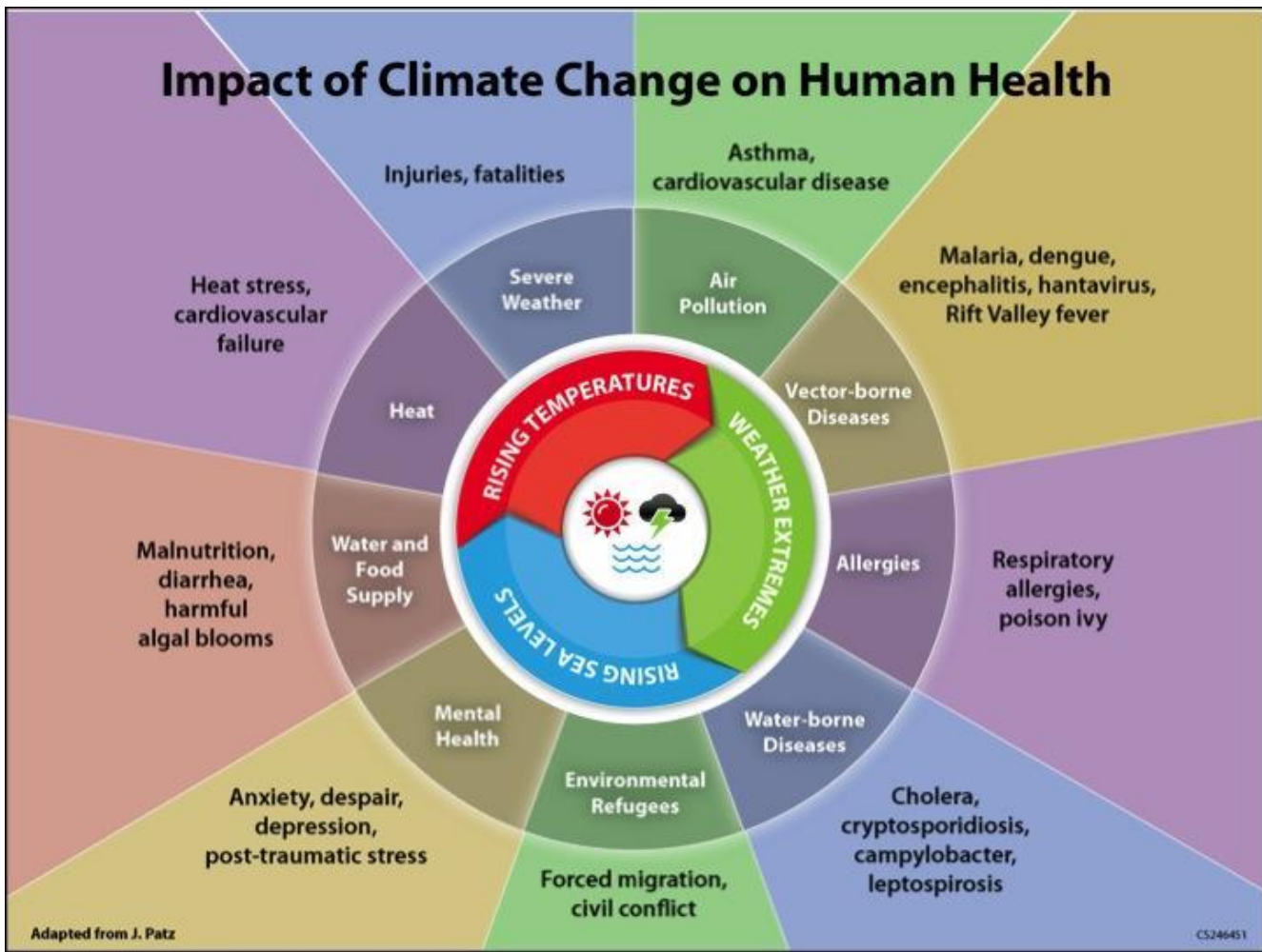


“Climate change is perhaps the greatest threat to our health and well-being”

Gregory Wellenius

Director of Climate Change and Health at the BU School of Public Health

Impact of Climate Change on Human Health



Winchester Emergency Response

Winchester's Emergency Management Director: Fire Chief Rick Tustin

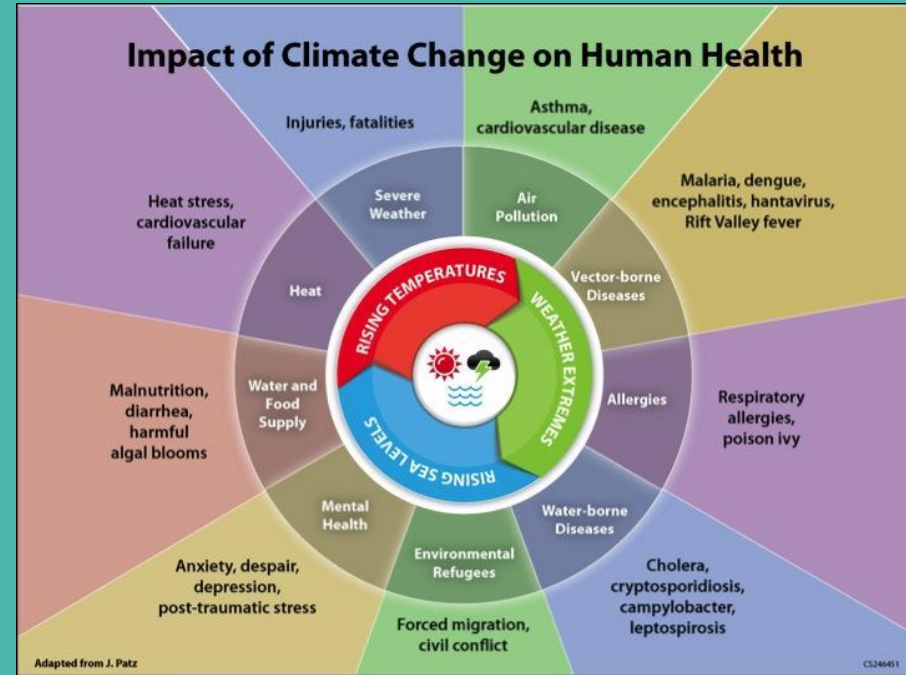
- Emergency preparedness planning
- Response to extreme weather events and natural disasters
 - Address any life safety issues, rescues and temporary shelter
 - Recovery and restoration
- Collaborative Team approach



Beth Israel Lahey Health 
Winchester Hospital

Winchester Health Department Areas of Focus

- Extreme Heat
- Vector Borne Diseases
- Water Borne Disease
- Mental Health



Extreme Heat



Extreme heat events are expected to become more common, more severe, and longer-lasting as our climate changes

Who is most at risk? Vulnerable populations including elderly, infants and children, pregnant women, outdoor and manual workers, athletes, and the poor

What are risks?

- Exacerbate current illnesses
- Increased hospital admissions for heat-related illness, cardiovascular, respiratory disorders and mental health
- Trigger heat stress conditions, such as heat stroke

Winchester Response:

- Cooling Centers
- A/C Services for Seniors
- Wellness Calls and Outreach

Vector Borne Diseases

Climate is one of the factors that influence the distribution of diseases such as the Zika virus, Chikungunya, and Lyme disease by altering conditions that affect the development and dynamics of the disease vectors and the pathogens they carry.

Winchester Response: Personal Protection is the best defense

Ticks



- **Education:** Hosted webinar on April 13, 2022 with tick expert (recording on our website winchester.us/ticks)
- **Awareness:** Tick Identification Cards sent home with all elementary students Spring 2022
- **Tick Testing Program:** Grant from Winchester hospital discounts testing ticks for Lyme Disease and other tick borne diseases

Mosquitoes

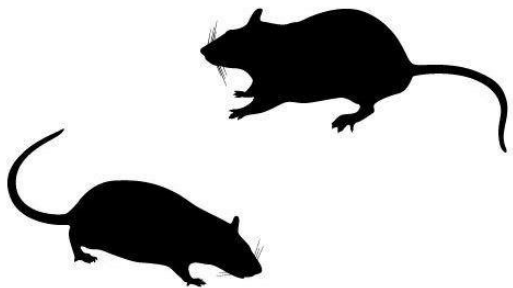


- **Prevention:** Apply larvicide to all catch basins and select wetlands
- **Surveillance:** Our mosquito district and DPH conduct West Nile Virus surveillance for us through mosquito pool sampling
- **Spraying:** when the West Nile Virus human risk is high (reported human cases in the area).

Vector Borne Diseases Continued...

As winters are getting warmer, the period in which rodents can reproduce increases which will naturally lead to higher populations.

Winchester Response: Education and Targeted Enforcement



- Pre-Demolition Pest Control Surveys
- Food Service Inspections
- Nuisance Complaint Follow Up
- Education at winchester.us/rodents

Water Borne Diseases

Extreme weather and increased high heat days lead to an increase in flooding/runoff and an increase in nutrient loading into our waterways. This results in elevated bacteria and cyanobacteria blooms.

Winchester Response

- **Monitor** - Water sampling and analysis
- **Address** - Treatment to prevent blooms
- **Educate** - Swimming/Recreational activity advisories, Lawncare



Wedge pond is subject to:

- **High levels of E.COLI BACTERIA**
 - Especially after rainfall
- **BLUE-GREEN ALGAE/ CYANOBACTERIA BLOOMS**
 - Toxins may be present

Contact with water may increase risk of illness.
Toxins are dangerous to humans and pets; do not swallow water.



For further information, please contact Winchester Health Department.



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Mental Health

Climate change and related disasters cause anxiety-related responses as well as chronic and severe mental health disorders. Flooding and prolonged droughts have been associated with elevated levels of anxiety, depression and post-traumatic stress disorders

Winchester Response

- Collaborate
- Educate
- Support



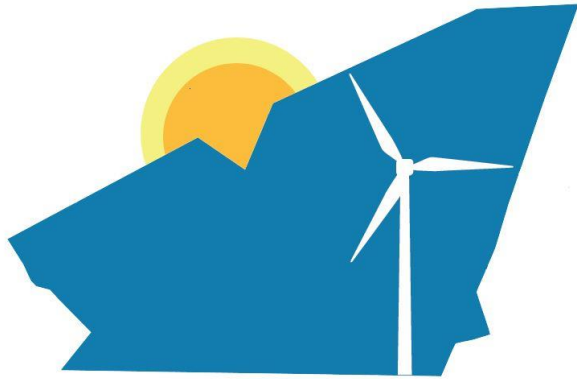
Resources for Help

Including local and national support services for mental health, substance misuse and crisis hotlines

Scan QR Code or go to winchester.us/wellness for the most current resources and to download the **01890 App**



What can you do?



WINCHESTER
CLIMATE SOLUTIONS
WEEK

- **Educate yourself:**
 - Eg, Attend events hosted by Winchester this week - more information at [winchester.us](https://www.winchester.us)
 - **Get involved:**
 - Eg, Winchester Climate Action Advisory Committee (CAAC)
 - **Sign up for Winchester Aware:**
 - Receive emergency and safety alert from the Town of Winchester. www.winchestermafire.com
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Questions?