

# HUMAN HEALTH

## OVERVIEW

Increases in extreme heat, poor air quality, flooding, and other hazards are impacting Vermonters' physical health, mental health, and general well-being. While all Vermonters should learn about how climate change may impact their health, efforts by nonprofits, public health and planning officials, and municipal leaders need to build systemic resilience, prioritize those most impacted, and simultaneously contribute to both mitigating climate change and supporting healthy Vermonters.



**1000+**

Homes uninhabitable after July '23 + '24 floods



**22,911**

Outdoor workers at risk from heat



**33%**

Households with no air conditioning



**4X**

Increase in Lyme disease cases 2008-2024



**5th**

Highest rate of asthma in the U.S.

## EXTREME HEAT ON THE RISE

Rising average temperatures and more extreme heat days due to climate change pose a challenge to Vermonters, especially since 33% of housing units lack indoor cooling systems. More hot days correspond to more emergency department visits (Figure 1). The Vermont Department of Health (VDH) recommends residents slowly increase the intensity of outdoor activities, also called early summer acclimatization. Interventions to reduce social isolation – like checking in on family and neighbors – can significantly limit extra deaths during heat waves.

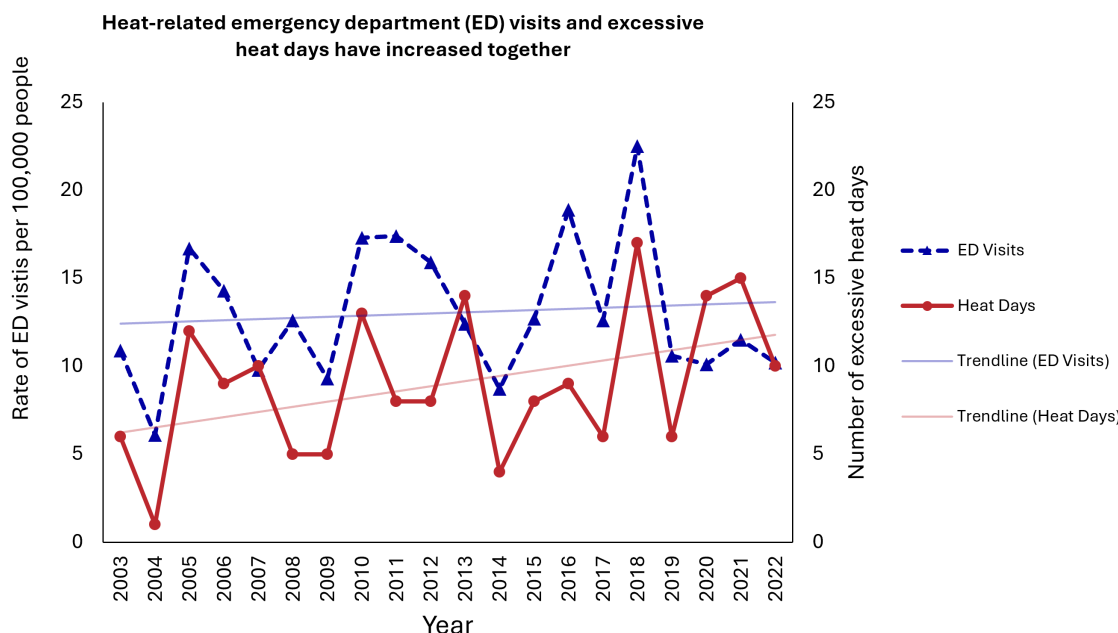


**Figure 1 Heat-related ED visits and excessive heat days in Vermont from 2003-2022**

Source: Vermont Department of Health (2026)

WORSENING WATER QUALITY

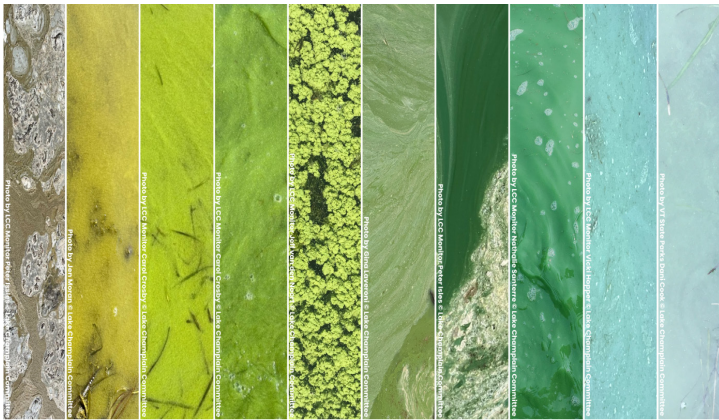


Figure 2 Category 3 cyanobacteria blooms can present a wide variety of colors, ranging from brown and yellow to vibrant green and teal

Source: Lake Champlain Committee

Warmer temperatures encourage the growth of cyanobacteria and some pathogens, impairing water quality (Figure 2). Flooding displaces Vermonters and their businesses, disrupts healthcare access and emergency response, spreads contaminants, and causes other health risks like mold growth. Drought is another emerging concern and can threaten water quantity (reducing surface and groundwater availability) and quality (concentrating pathogens). Private well owners should follow guidance from VDH on testing their wells, while all Vermonters should stay alert for cyanobacteria blooms when swimming and boating in the summer (Figure 3).

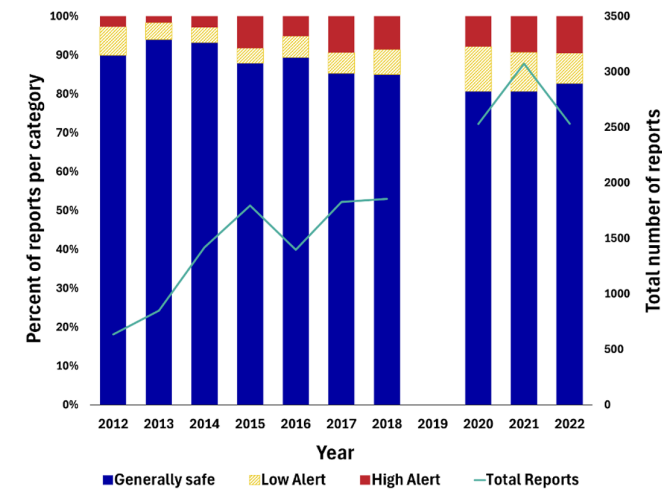


Figure 3 Cyanobacteria reports per year, percent per alert category (y-axis, left) and total counts (y-axis, right), 2012-2022

Source: Vermont Department of Health (2026)

DECREASED AIR QUALITY

Poor air quality from wildfire smoke and longer pollen seasons are threatening Vermonters’ health in a state where 11% of adults and 7% of children already have asthma. Following pervasive wildfire smoke in the summer of 2023, children’s asthma symptoms worsened. Increased flood risk further affects respiratory health due to increased mold risk. Following July 2023 and 2024 flood events, hundreds of homes reported the presence of mold, with many households reporting that they continued to live in those homes (Figure 4). Public health guidance to prevent mold growth includes opening windows, but exposure to other climate change events—including wildfire smoke and extreme heat—often require the opposite—closing windows. Vermonters need support and resources to protect themselves from these threats, including mold remediation and functioning HVAC systems — at home, work, and school.

Almost 1,000 homes reported mold presence after the July 2023 flooding

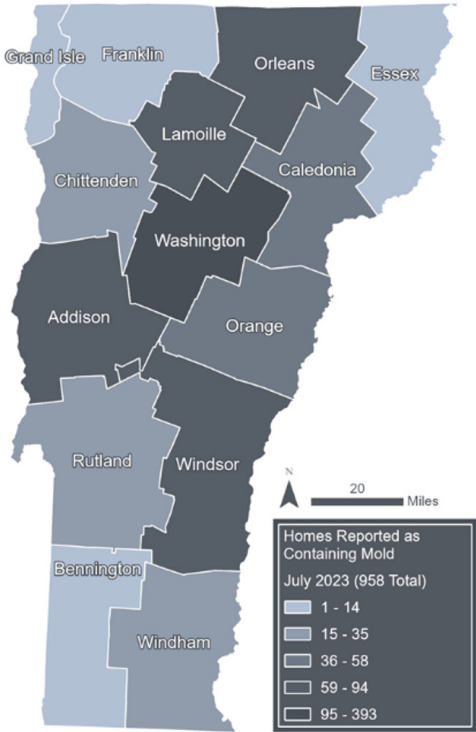


Figure 4 Map of residential properties by county that reported the presence of mold in their home following the July 2023 flood event

Source: Vermont Emergency Management (2023)

## RIISING TICK AND MOSQUITO-BORNE DISEASES

Disease transmission from ticks and mosquitoes is increasing as their active seasons lengthen. Rates of Lyme disease increased by about four times between 2008–2024 and over 50% of ticks tested positive for the pathogen that causes Lyme disease (Figure 5). In 2025, Jamestown Canyon Virus, a mosquito-borne disease, was detected in Vermont for the first time. Vermonters should use tick and mosquito repellent, wear long clothing, and check for ticks after spending time outdoors. Vermonters can also reduce standing water around their homes to protect themselves and their communities from mosquitoes.

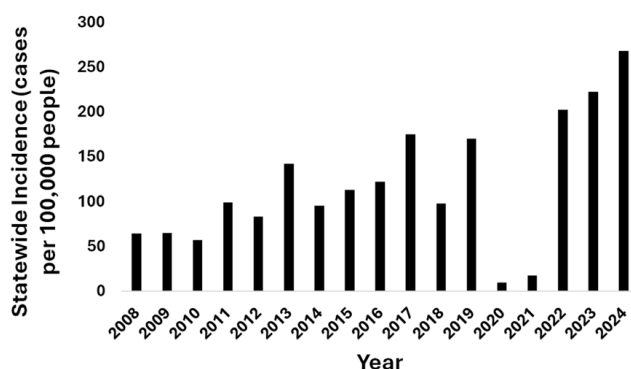


**Figure 5 Lyme disease incidence in Vermont (cases per 100,000 people), 2008-2024**

Source: Vermont Department of Health (2025)

## MENTAL HEALTH BURDENS

Vermonters' mental health, well-being, and sense of identity have been impacted as they survive disasters, change habits (like limiting outdoor recreation) to avoid environmental exposures, and confront changing seasons that endanger their livelihoods and culture. Repeated climate events can lead to “psychological cumulative burden,” where anxiety, grief, and uncertainty compound over time, such as for communities that experienced consecutive flooding events on the same day in 2023, 2024, and 2025.

“There’s this anxiety when they talk about rain. It makes you want to shut off the TV and run away. It sets off that feeling that, ‘Oh my god, are we going to go through this again?’”

— Doug Safford of Glover, VT, flood survivor  
(Malinak, 2024)

“I think it’s gonna be dark, muddy, the leaves still won’t be here, and all in all it’ll be a more **depressing experience.**”

— Gavin Sicard, UVM student  
(Kostelnik, 2024)

## HOW MULTISOLVING CAN HELP

Multisolving is a framework for addressing multiple problems through one solution (Figure 6). Vermonters can take action to safeguard their health while addressing climate change by biking to work, weatherizing and electrifying their homes, adopting a plant-based diet, or supporting the expansion of green spaces. Combining health promotion and climate change mitigation may boost policy support for these actions that helps all Vermonters.

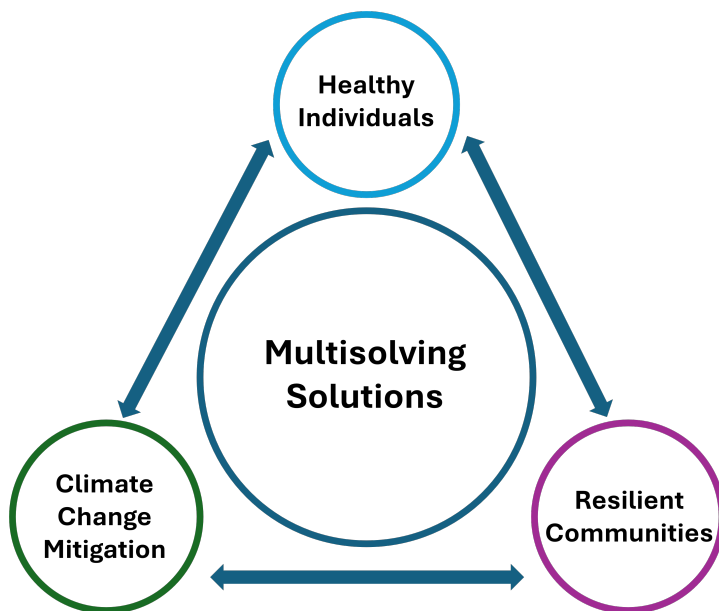


**Figure 6 Multisolving solutions can address individual health, community resiliency, and climate change mitigation**

See the full report at [vtclimate.org](https://vtclimate.org)

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