

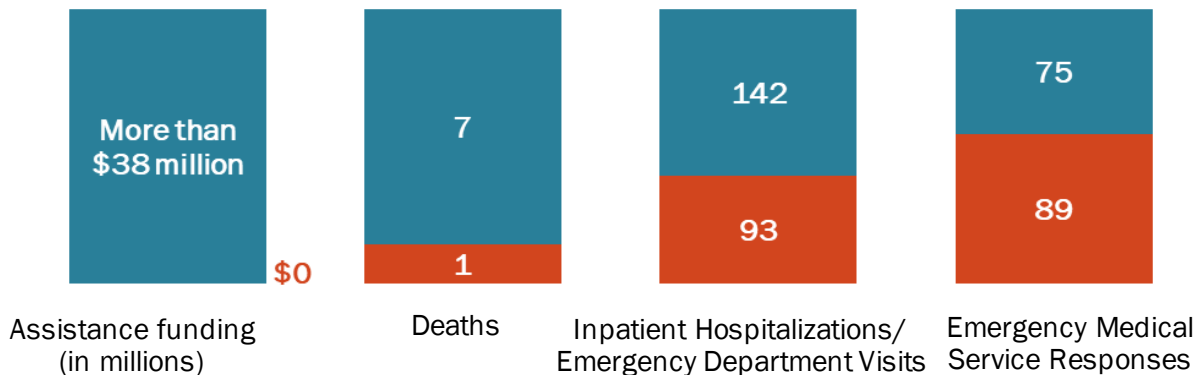
Illness and Death due to Hot and Cold Weather

December 2024

Being in very cold or hot weather for a long time can cause serious illness and even death. Cold weather can lead to frostbite or hypothermia, while hot weather can cause heat exhaustion, heat stroke and other heat-related illnesses. Being in extreme temperatures for too long can also make heart and breathing problems worse or cause other health problems. While anyone can be affected by extreme temperatures, older adults, young children and people with disabilities or preexisting chronic health conditions are at the greatest risk.

The risks from extreme temperatures are higher for people who are unhoused or cannot keep their home at a safe temperature, no matter their age or health. Vermont gives a lot of state and federal resources to help people stay safe and healthy during cold weather, which is important because of our harsh winters. Funding levels have fluctuated significantly since the start of the COVID-19 pandemic, but currently include about \$28 million for Fuel Assistance and Crisis Fuels programs that reduce the cost of home heating fuels for income-qualifying households, \$44 million for the General Assistance Emergency Housing Program (some of which is used to expand eligibility during the winter) and \$10 million for expanded capacity in winter shelters.

Both hot and cold weather cause illnesses and deaths in Vermont, but current assistance resources only help to prevent cold weather impacts.

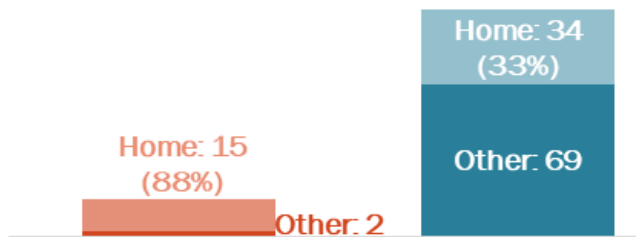


Data Sources: Deaths: Vermont Vital Statistics, 2009-2023; data from 2023 are preliminary and subject to change. Inpatient/ED visits: Vermont Uniform Hospital Discharge Dataset, 2012-2022. EMS responses: Statewide Incident Reporting Network, 2017-2023. Note: Deaths, inpatient/ED visits, and EMS responses are displayed as annual averages in this figure.

In contrast, there are no state or federal resources to help people with access to home cooling equipment or cooled shelter during hot weather.

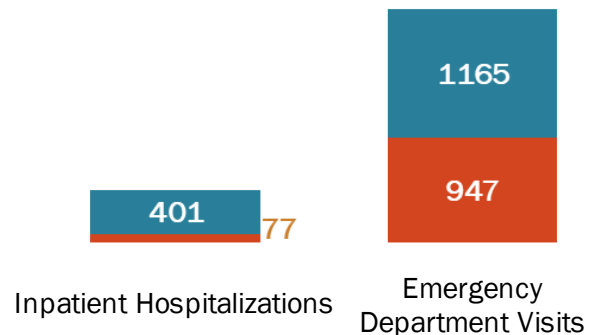
In recent years, hot weather has affected the health of people living in Vermont more and more. These effects are expected to get worse as our climate continues to warm. In cooler states like Vermont, most heat-related deaths occur inside homes without air conditioning. This happened during the heat wave in Vermont in June of 2018, when four older adults died. Vermont has one of the lowest rates of access to home air conditioning in the country, putting many people at higher risk for heat-related illnesses. Unhoused people also suffer more in the heat when they cannot access air-conditioned shelters. Vermont 2-1-1 and other organizations often get calls for emergency cooling assistance on hot days. As a result, some communities and organizations open daytime cooling centers, while others use their limited resources to buy home air conditioning units when people ask for them during emergencies.

While there was a larger total number of cold-related deaths, a greater percentage of heat-related deaths occurred in the person's home.



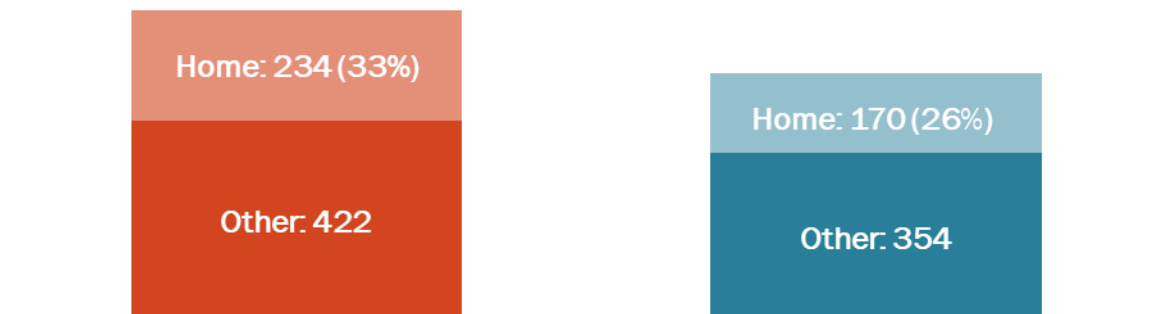
Data Source: Vermont Vital Statistics, 2009-2023; 2023 data are preliminary and subject to change. These data are for Vermont residents who died in Vermont from 2009-2023. Note: We cannot determine from the death certificate alone if home conditions contributed to a person's death, only that a person died at home.

There were more cold-related inpatient hospitalizations and emergency department visits.



Data Source: Vermont Uniform Hospital Discharge Dataset, 2012-2022.

There were more heat-related emergency medical service (EMS) responses to a person's home and overall.



Data Source: Statewide Incident Reporting Network, 2017-2023. Note: We cannot objectively determine from an EMS report if home conditions contributed to illness, only that EMS responded to a home. Based on review of narratives, it appears that home conditions contributed to at least 49 heat-related and at least 22 cold-related responses.