

Aging and Heat-Related Illness

August 2025

On hot days, sometimes our body temperature control systems can't keep up, causing our body temperature to get dangerously high. This puts us at greater risk for serious heat illnesses, including heat exhaustion and heat stroke. To learn more about symptoms of heat-related illness and how to stay safe in the heat, check out these [heat safety tips](#).

Everyone is at risk for heat-related illness, but some people, including older adults, are at higher risk. Older adults are more sensitive to heat for several reasons, including:



Increased likelihood of having pre-existing health conditions that are made worse by heat, like asthma or cardiovascular disease.



Use of prescription medications, like diuretics, some antihistamines, or stimulants, that interfere with the body's temperature regulation systems.



Having Alzheimer's or other cognitive challenges can make it difficult to be aware of how heat affects health or to remember the steps to take to manage heat exposure.



May be more likely to live alone or experience social isolation.



As people age, their bodies become less effective at temperature regulation due to reduced sweating and circulation.

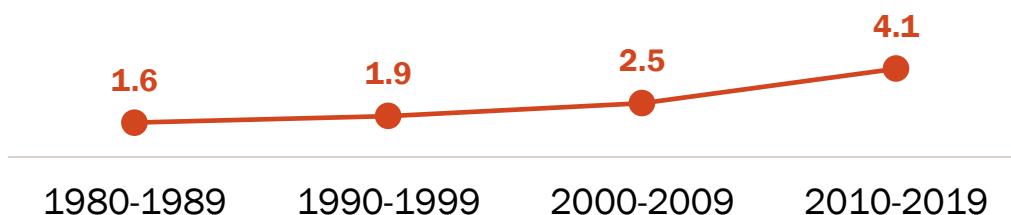
The impact of heat-related illness on Vermont residents 45 and older is described below.

If you need help accessing or understanding this information, contact ahs.vdhnpdpanalytics@vermont.gov.

Extreme Heat in Vermont is Increasing

The number of days in Vermont when the heat index, what the temperature feels like, is 90°F or hotter has more than doubled over the last four decades. When the heat index reaches 90°F or hotter, heat starts to have a [bigger impact on health in Vermont](#).

The average number of days where the heat index was 90°F or hotter increased over the last four decades.



Source: North American Land Data Assimilation System (NLDAS), 2022.



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Heat and Older Adults

Emergency Medical Services (EMS) Responses

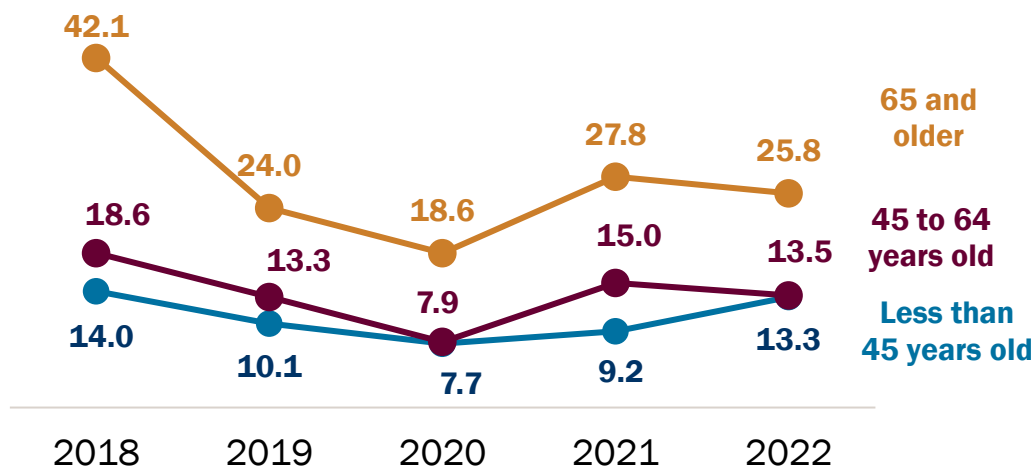
Vermont residents 65 and older consistently have higher rates of EMS responses for heat-related illness than Vermont residents under the age of 65. This difference is statistically significant across years. Review of the EMS reports revealed some common factors that contributed to heat-related illness. These include:

- Experiencing hot indoor conditions, often because a person did not have air conditioning or their air conditioning wasn't turned on.
- Participating in exercise, like running or cycling or other sports.
- Doing outdoor work, like gardening, lawn mowing or home maintenance.
- Attending community events like fairs or parades.

About 70% of people in each age group were subsequently transported to the hospital for treatment of their heat-related illness. The remainder were either successfully treated in the field by EMS or refused further medical care.

The rate of EMS responses for heat-related illness is highest for people 65 and older.

Rate per 100,000 Vermont residents



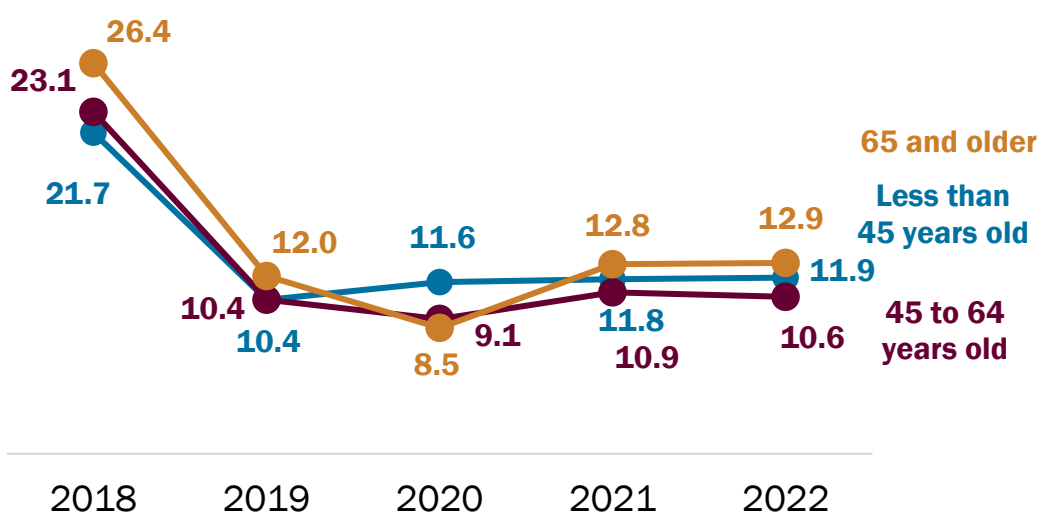
Source: The Statewide Incident Reporting Network (SIREN), 2018-2022.

Emergency Department Visits

Rates of heat-related emergency department visits for Vermont residents 65 and older are statistically similar to the rates for Vermont residents under the age of 45 and 45 to 64. Emergency department visits include those brought to the hospital by ambulance, as well as those who transport themselves to the hospital. The graph below shows rates for each age group for Vermont residents who sought care at a hospital in Vermont or New Hampshire.

The rate of emergency department visits for heat-related illness is about the same for all three age groups.

Rate per 100,000 Vermont residents



Source: Green Mountain Care Board (GMCB) Vermont Uniform Hospital Discharge Data Set (VUHDDS), 2018-2022. New Hampshire Hospital Discharge Dataset, 2018-2022.

Note: rates in 2018 are higher than rates in 2019-2022 due to significant heat wave that occurred in early July 2018.

When looking at co-occurring diagnosis codes among Vermont residents 45 and older who went to the emergency department for heat-related illness, the most common co-occurring conditions from 2018-2022 were **hypertension, mental health, heart disease and diabetes**.

There were 15 heat-related deaths in Vermont from 2014 to 2024. **Almost all (87%) of these deaths occurred among Vermont residents 45 or older** (Vermont Vital Statistics, 2014-2024 (preliminary)). In addition, almost all these deaths **occurred at the person's home**.

Conclusion and Action Steps to Reduce Risk

- The number of hot days in Vermont is increasing. As a result, the risk for heat-related illness and death among older adults will likely increase.
- Vermont residents 65 and older have consistently higher rates of EMS calls for heat-related illness. The rate of heat-related EMS responses for Vermont residents over 65 is about twice as high as the rate of heat-related emergency department visits for this group.
- Vermont residents 45 and older experience more heat-related deaths than Vermont residents under 45.
- Regardless of age, there are steps we can take to reduce risk on hot days.
 - Keep your house cool by closing shades and windows during the hottest part of the day. Use air conditioning if you have it.
 - Check on loved ones and neighbors, especially those who live alone, when it's hot out.
 - For helpful tips, see [Heat Safety Guidance for Caregivers](#). Or use this [mapping tool](#) to find a cooling site near you.

Disclaimer: All analyses, conclusions, and recommendations provided here are solely those of the Vermont Department of Health and not necessarily those of the Green Mountain Care Board.