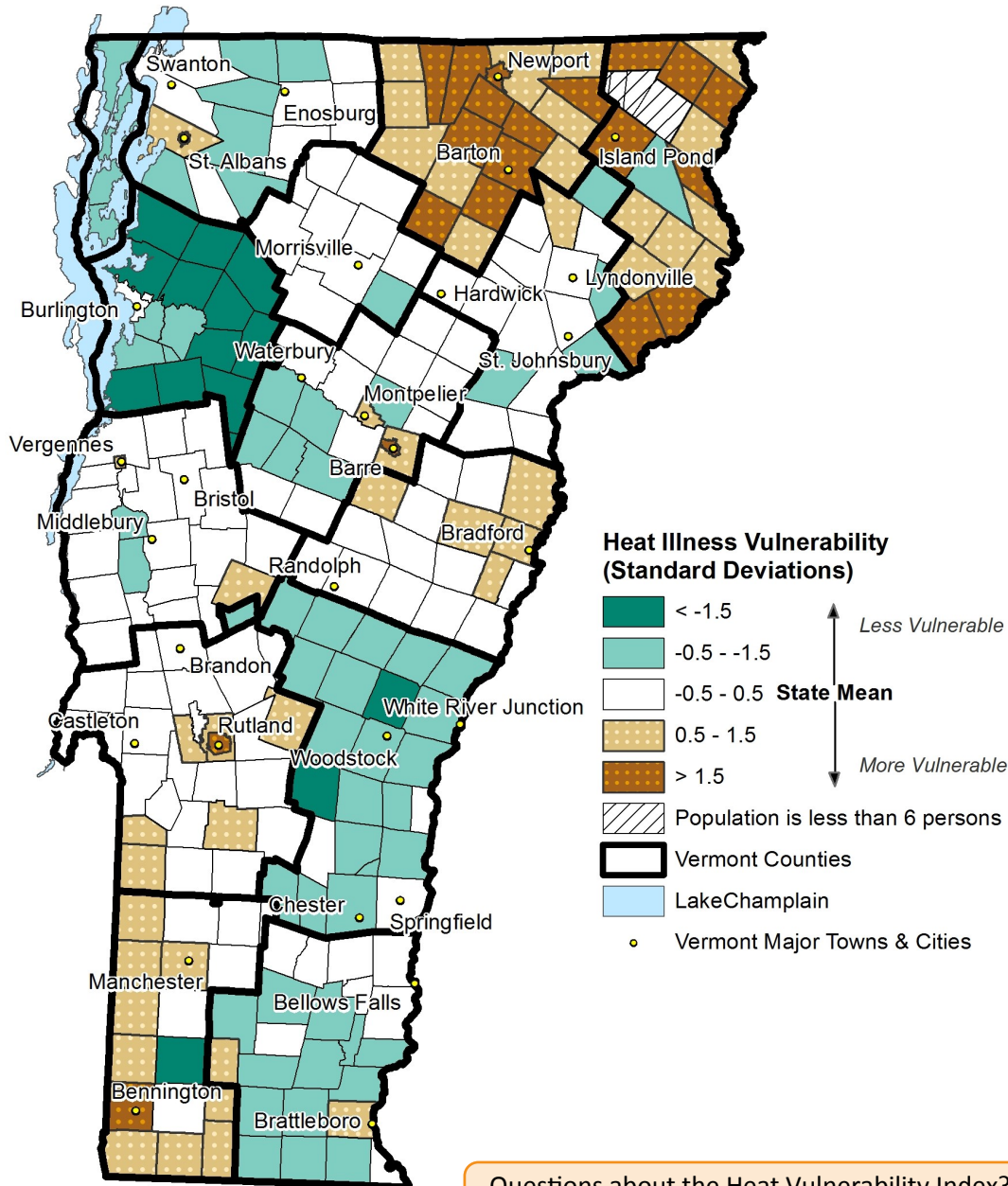


Vermont Heat Vulnerability Index

May 2016



The Vermont Heat Vulnerability Index draws together 17 different measures of vulnerability in 6 different themes: population, socioeconomic, health, environmental, climate, and heat illness. These measures are combined to measure the overall vulnerability of Vermont towns to heat-related events. This is a first step to identify populations that may be more vulnerable to extreme heat, however local knowledge should always be considered when it is available.

Heat Vulnerability Measures

Population Characteristics:

1. % population less than 5 years old
2. % population 65 years old or older

Socioeconomic Characteristics:

3. % population living below Federal Poverty Line
4. % adult population with no high school diploma
5. % adults 65 and older living alone
6. % adult population with no health insurance

Health Conditions:

7. % adults with diabetes
8. % adults with asthma
9. % adults with hypertension
10. % adults who are obese
11. % adults in fair or poor health
12. All-cause mortality, warm season deaths

Environmental Characteristics:

13. Housing units per square mile
14. % covered with Impervious surface
15. % covered by forest canopy

Climate Characteristics:

16. Average number of days per year 87° F or hotter

Observed Heat Illness:

17. Heat-related emergency department visits

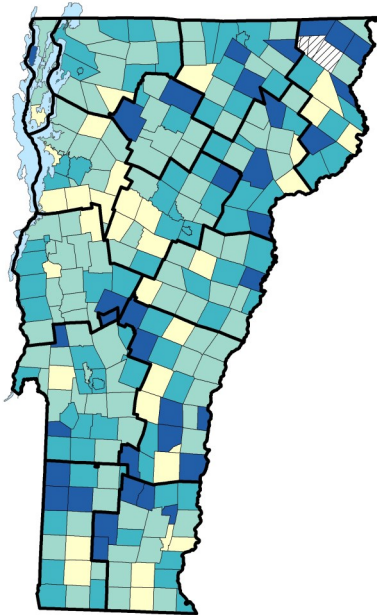
Questions about the Heat Vulnerability Index?

Contact: ClimateHealth@Vermont.gov

Heat Vulnerability Themes

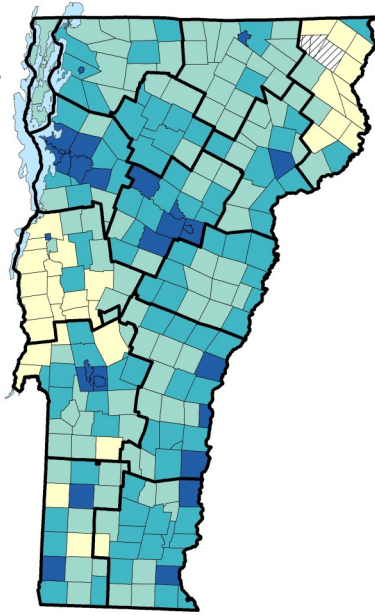
Population

This theme indicates vulnerability based on the population composition of the town. Young children and older adults are age groups at higher risk for heat-related illnesses.



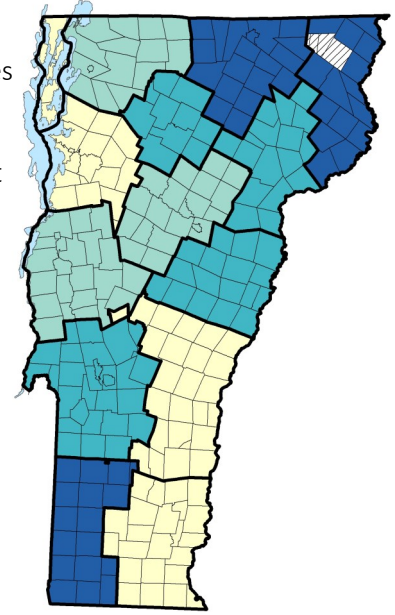
Environmental

This theme indicates vulnerability based on environmental characteristics. Summer heat is exacerbated in locations with dense housing, a high proportion of paved areas and rooftops, and few trees.



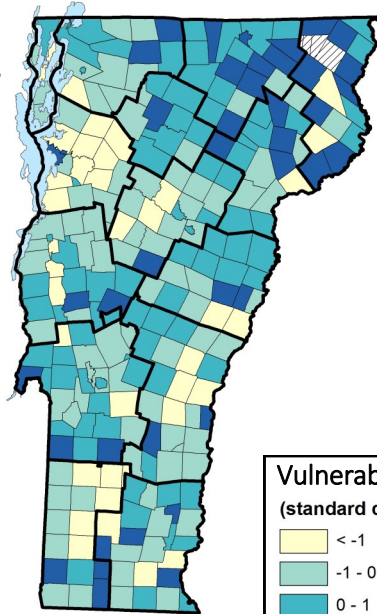
Acclimatization

This theme indicates vulnerability based on how acclimated residents are to hot summer temperatures. Those experiencing fewer hot days per year tend to be less adapted to the impacts of summer heat.



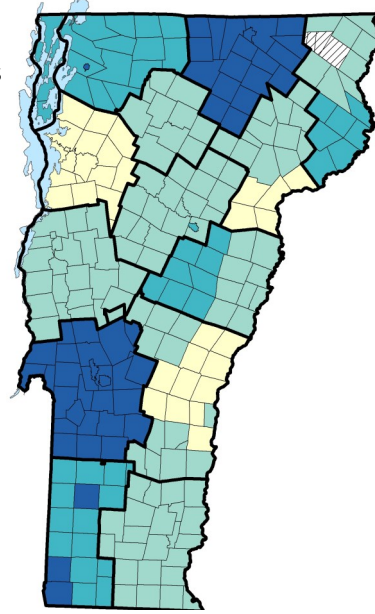
Socioeconomic

This theme indicates vulnerability based on social and economic resources available to town residents. Older adults living alone, those with less education, and those with fewer economic resources are often less able to find relief during summer heat.



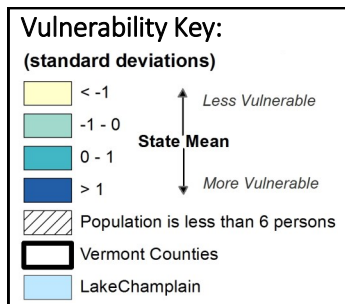
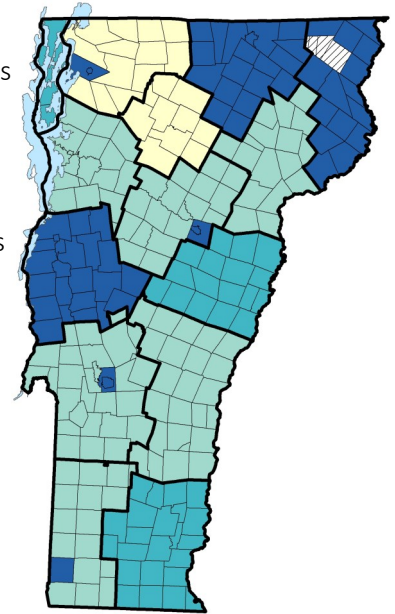
Health

This theme indicates vulnerability based on the health status of town residents. Those with pre-existing medical conditions are more likely to suffer health impacts during summer heat events.



Heat Emergencies

This theme indicates vulnerability based on emergency department visits for heat illness in recent years. Towns that currently experience a high rate of heat-related emergencies are expected to continue experiencing a high rate in the near future.



For more information about Heat Vulnerability and online versions of the maps, visit: <http://healthvermont.gov/enviro/climate/>