

# CLIMATE+HEALTH

## Climate and Health Adaptation Plan for the Public Health Council of the Upper Valley

Prepared by:  
Public Health Council of the Upper Valley  
With Assistance From:  
Upper Valley Lake Sunapee Regional Planning Commission





**Public  
Health  
Council**

*of the  
Upper Valley*

# Public Health Council

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# Project History

- Feb 2015: NH Division of Public Health Services offered funds to public health networks to create **adaptation plans** to address the health effects of climate change
- Opportunity for **collaboration** with Upper Valley Adaptation Workgroup and its partners to begin looking at health impacts of climate change
- **Principles:**
  - Build on what we have and on what we know
  - Use a defined project to build capacity for future work
  - Now is the time to learn how to build community resiliency because health impacts are likely to increase

# Planning Partners

- Dartmouth-Hitchcock Community Health
- Upper Valley Adaptation Workgroup
- Upper Valley Emergency Preparedness Coordinator
- Upper Valley Housing Coalition
- Upper Valley Lake Sunapee Regional Planning Commission
- Vital Communities
- Members of the Public Health Council

## What is the Public Health Council?

- Community leaders and representatives from a diverse group of community sectors working together to create a more healthy, safe, supportive, and vital Upper Valley.
  - Advancing collaboration
  - Delivering core public health services
  - Establishing public health priorities, and
  - Mobilizing resources to achieve measurable outcomes.

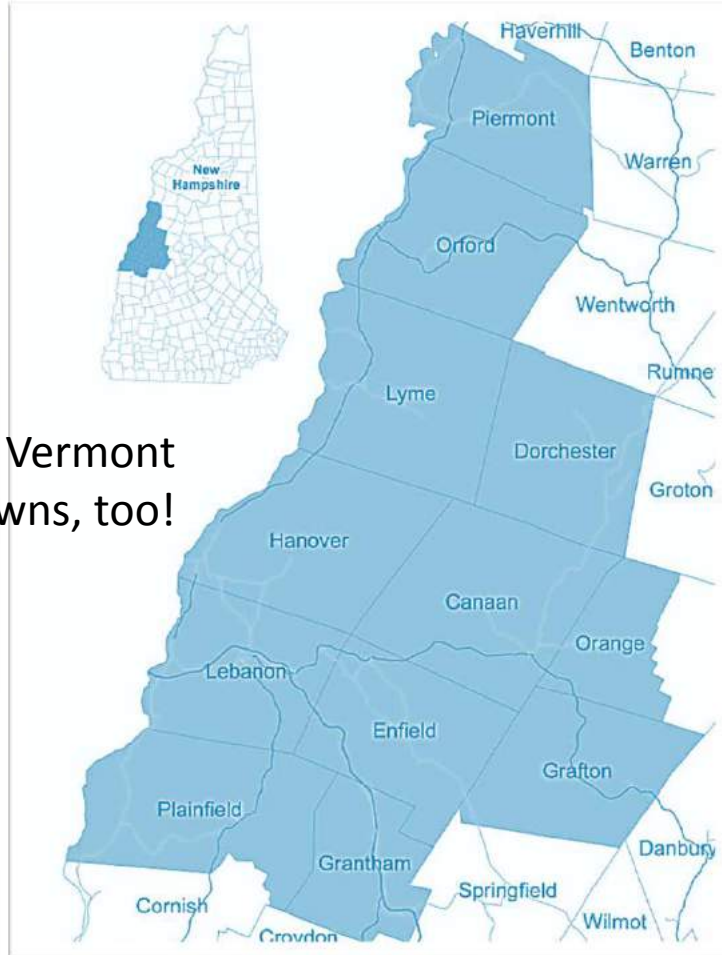




**Public  
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# What is the Public Health Council?



And Vermont  
Towns, too!

- **Vision:**
  - Working together, our Upper Valley community will be healthy, safe, supportive, and vital.
- **Mission:**
  - To improve the health of Upper Valley residents through shared public health initiatives and services within a network of community stakeholders.

## PLAN: We looked at...

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### ***Geography***

- Population Centers
- Topography
- Infrastructure

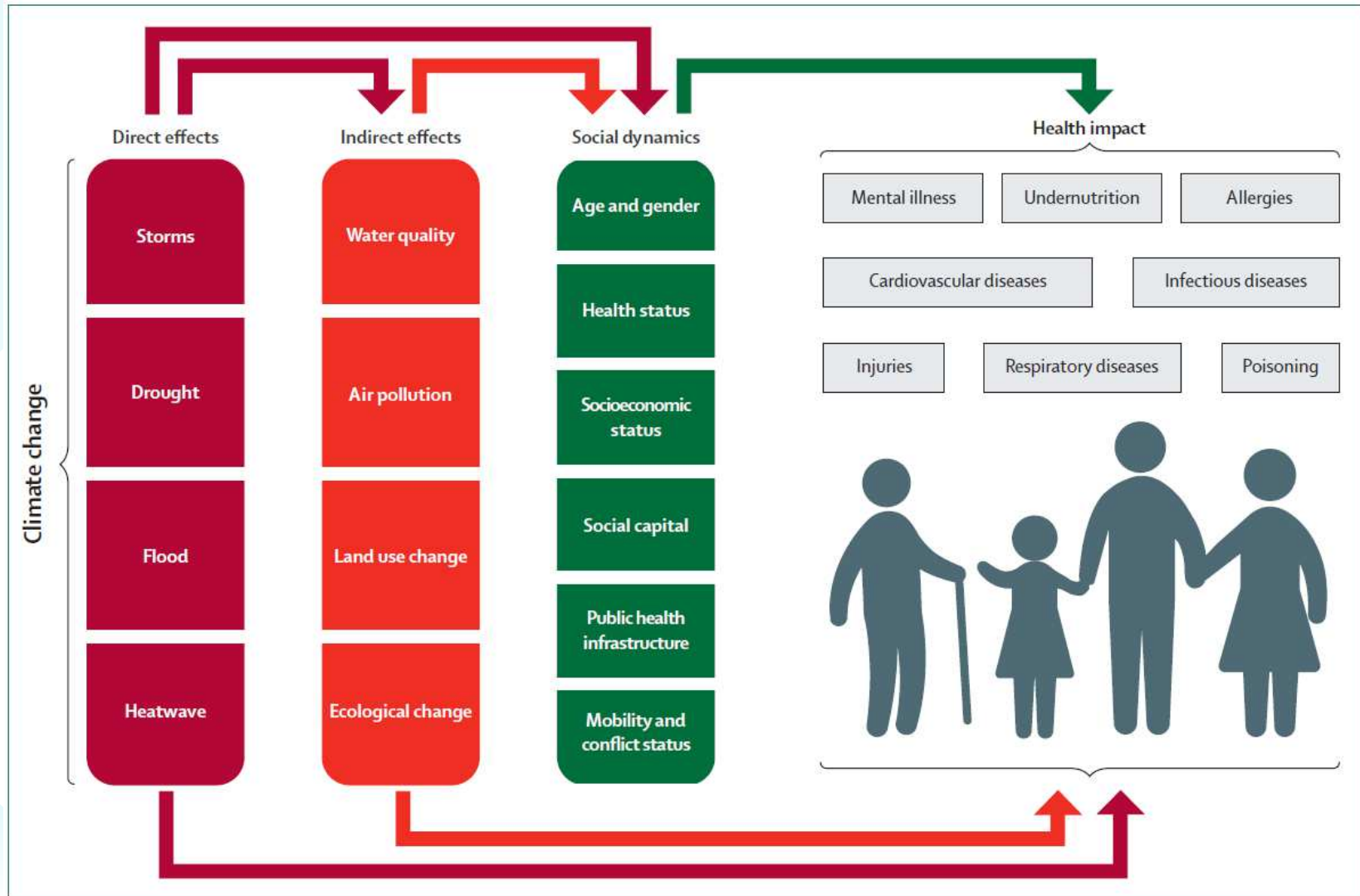
### ***Demographics***

- Population
- Age Cohorts
- Projections

### ***Existing Work***

- Regional & Municipal Emergency Response Plans
- Hazard Vulnerability Assessments

# PLANNING: What are the potential health risks?



Direct and Indirect Impacts of Climate Change on Health and Wellbeing; Source: [Health and Climate Change](#), 2015, The Lancet Commissions



## Health Vulnerability Prioritization Summary

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### High Priority Exposure:

- Increasing occurrence of extreme heat events (increase in days over 90°F)
- Increased extreme precipitation and occurrence of extreme weather events
- Threats to mental health

### Health Impact:

- Heat stroke
- Complicates chronic disease
- Injury
- Drowning
- Carbon Monoxide
- Mold
- Stress, Depression

# Health Vulnerability Prioritization Summary

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## Medium Priority Exposure:

- Longer Growing Seasons
  - Vector-borne disease
  - Allergens
- Water and food security, food and water-borne diseases



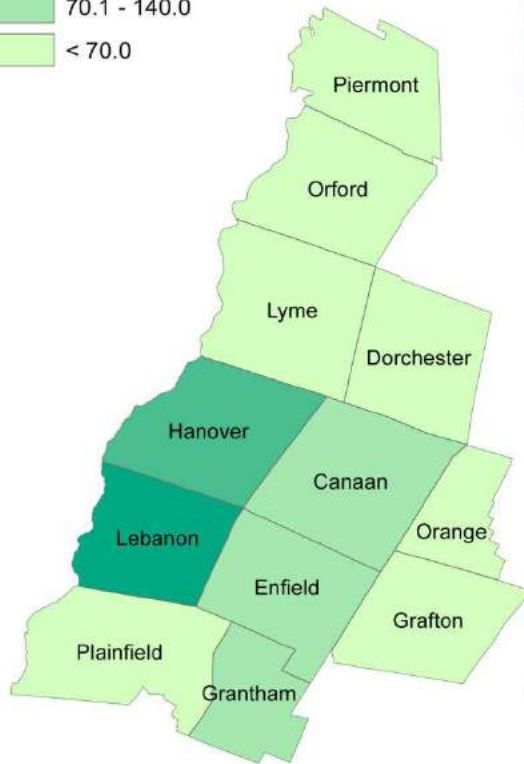
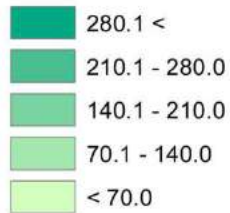
## Health Impact:

- Lyme & West Nile
- Aggravates respiratory illness
- Crop contamination
- Water Supply



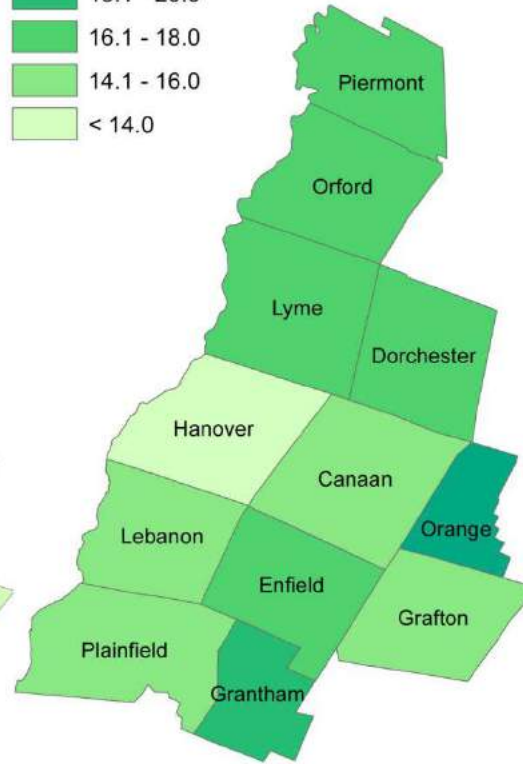
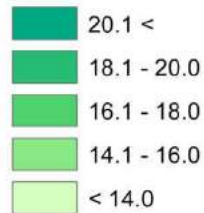
# REGIONAL CHARACTERISTICS

## Population Density



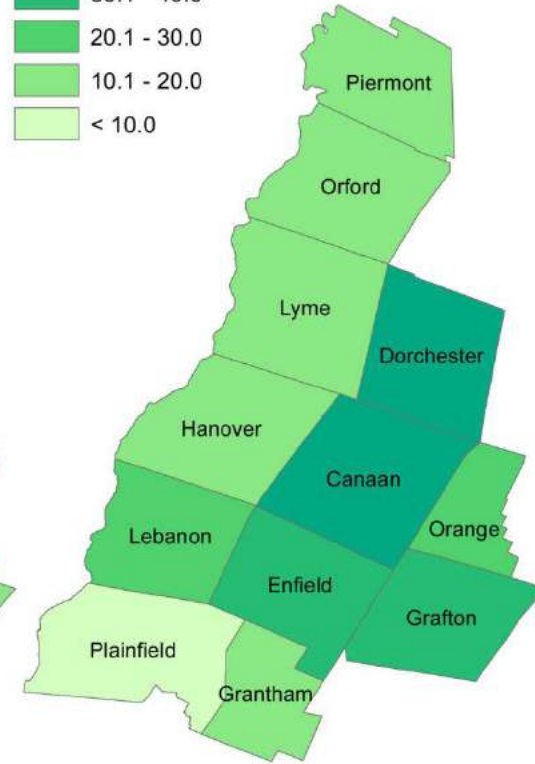
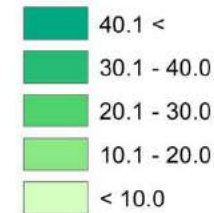
Data Source: 2013 Population Density data from the Economic & Labor Market Information Bureau, NH Employment Security, December 2014.

## Senior Population as a Percentage of Total Population (65+ Years Old)



Data Source: 2013 Population Density data from the Economic & Labor Market Information Bureau, NH Employment Security, December 2014.

## Percentage of Senior Population with Income Under 200% Poverty Level



Data Source: U.S. Census Poverty Aggregation Data 2014.  
Map created by UVLSRPC September 2015.

## PLANNING: What is the significant demographic trend?



	PHC Total Pop	Pop 65 yrs +	Percent 65 yrs +
2010 Census	44,020	7,568	17%
2015 Est.	44,015	9,098	21%
2025 Est.	45,463	13,354	29%
2040 Est.	46,676	16,727	36%

Population estimates for study area based on 2013 NHOEP Population Projections

## Reducing the Impact of Severe Heat: Goals



- Help older adults remain healthy when we experience very hot days in the summer
- Build partnerships with organizations that serve older adults so they can help us get information and resources out
- Figure out the strategies that are going to work best in our communities
- Strengthen our capacity to address this and other health impacts of climate change.

# Reducing the Impact of Severe Heat

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## *Effective Interventions*

- Outreach and Education
  - Heat Alert Systems
- Access to Cooling Shelters

## *Upper Valley Approach*

### ■ Phase One (until 9/2016)

- Outreach and Education
  - Community Forum
  - Work with Partners in Contact with Older Adults
    - What strategies might work?
    - What are the barriers?
    - Pilot Project

### ■ Phase Two (after 9/2016)

- Heat Alert Systems
  - Determine thresholds & strategies
- Access to Cooling Shelters
  - Build off current work of Emergency Planning