

A word from the locals....

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Rhode Island

- Official name:
 - The State of Rhode Island and Providence Plantations
- Nickname
 - Official: The Ocean State
 - Unofficial: Little Rhody
- Unofficial slogan
 - Rhode Island: 3% bigger at low tide

Don't Mess With RI, Either



Core Functions of Public Health

- Data
- Policy
- Access

Local data needs

- Air quality and health
 - Airport, transportation, school siting
- Climate change impacts on health, safety and welfare
 - Heat and drought
 - Precipitation and flooding
 - Storminess and sea level rise

Climate Change

- Increased **average** temperatures with later frosts and weaker winter freezes creates:
 - Extended season and geographic range of disease vectors (i.e. ticks and mosquitoes)
 - Promote pollen, pests, algae, and pathogen growth
 - Warmer ocean temperatures

Health Impacts of Avg Temp

- Vector-borne disease: EEE, WLN, Lyme
.....Dengue?
 - Reportable diseases
- Cyanobacteria
 - Veterinarian sentinel reporting
- Pesticides used to control disease vectors
 - Poison control limited to acute poisoning
- Hayfever, asthma occurrence, and pathogen exposure
 - Asthma data sharing with health plans

More Extreme Heat

- More air quality alert days
 - Linking cardiovascular/respiratory hospitalization to air quality not simple
- More air quality alerts lasting several days
 - Impacts may be easier to measure
- Increased number and/or severity of heat alert days

Ancillary impacts

- Restrictions on healthful activity for everyone
 - Obesity rates?
 - Sports programs
- Heat island effect in urban areas
 - Crime follows
 - infants, elderly, and socially isolated are most vulnerable to heat-illness and heat-related death
- Chronic disease patients vulnerable
- Productivity/illness for non-acclimated outdoor workers

Drought

- Water quantity
 - Fire suppression
 - Agriculture
- Water quality
 - Can't currently quantify impacts of impaired water quality on health

Heat and Drought, welfare

- Wide-ranging impacts in agricultural and fisheries that are difficult to predict.
 - Changes in species grown/harvested
- Closure of businesses/health services without air conditioning
- Closure of hotels/hospitality industry to conserve water, heat impacts on tourism +/-
- Inability to attract businesses that require a steady water supply

Precipitation and Flooding

- Health
 - Vector-borne disease, mold (asthma)
- Safety
 - Roads and facilities become inaccessible (PRIORITY)
 - Sewage treatment plants can release untreated sewage
 - People may be stranded in their homes
 - Emergency management capabilities may be stressed
- Welfare
 - Sewage impacts beaches/tourism, shellfish harvesting
 - Loss of damaged crops and livestock

Storminess/Sea Level Rise

- Building damage
 - Displacement impacts
 - Unsafe homes exacerbate all illness
- Infrastructure
 - How do you measure the health impacts of compromised roads and utilities
- Welfare
 - When economy bad, no one talks about public health

Conclusion

- Public health has competent system for quantifying major health/disease trends
- Will we be able to track impacts of climate change?
- How can we work together to do this?