

Presenter



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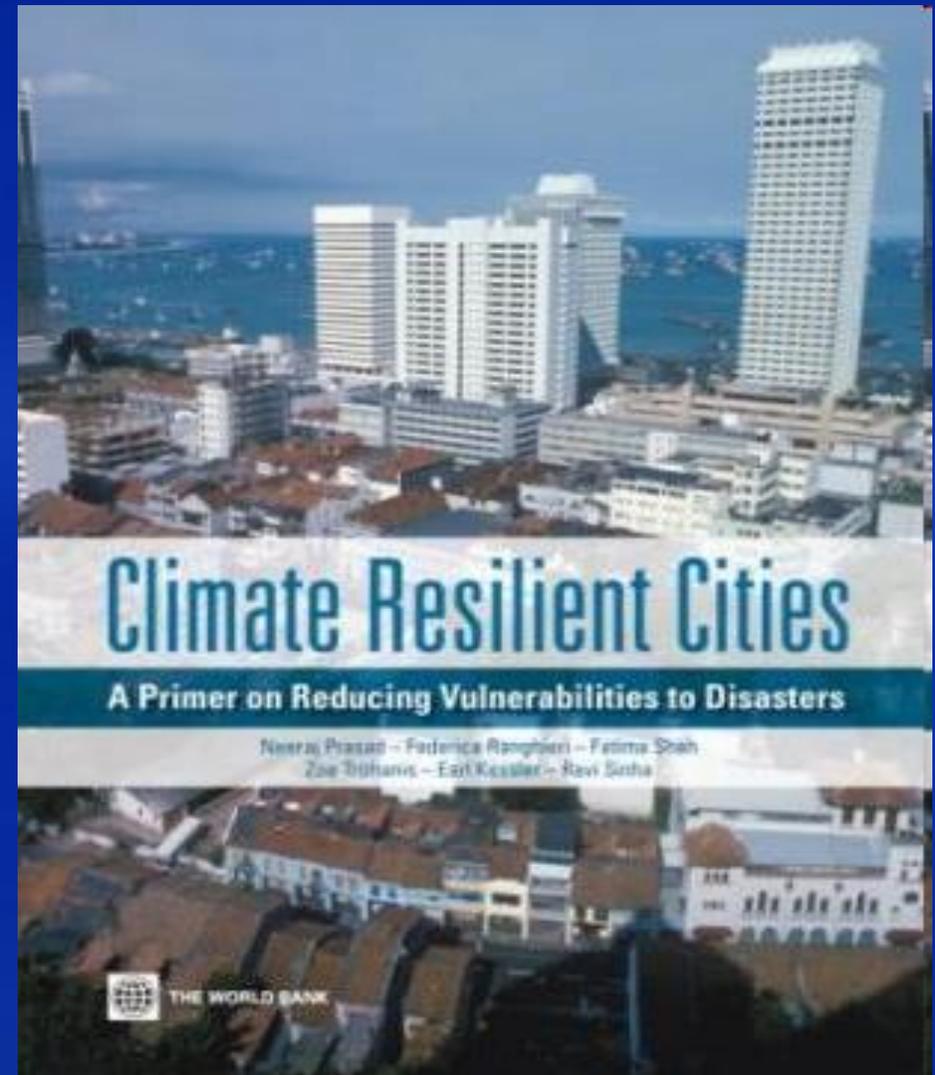


Opportunities for Action

Stephanie M. Chalupka, EdD, RN, PHCNS-BC, FAOHN, FNAP

Public Health Response

- Mitigation
- Adaptation
- Resilience



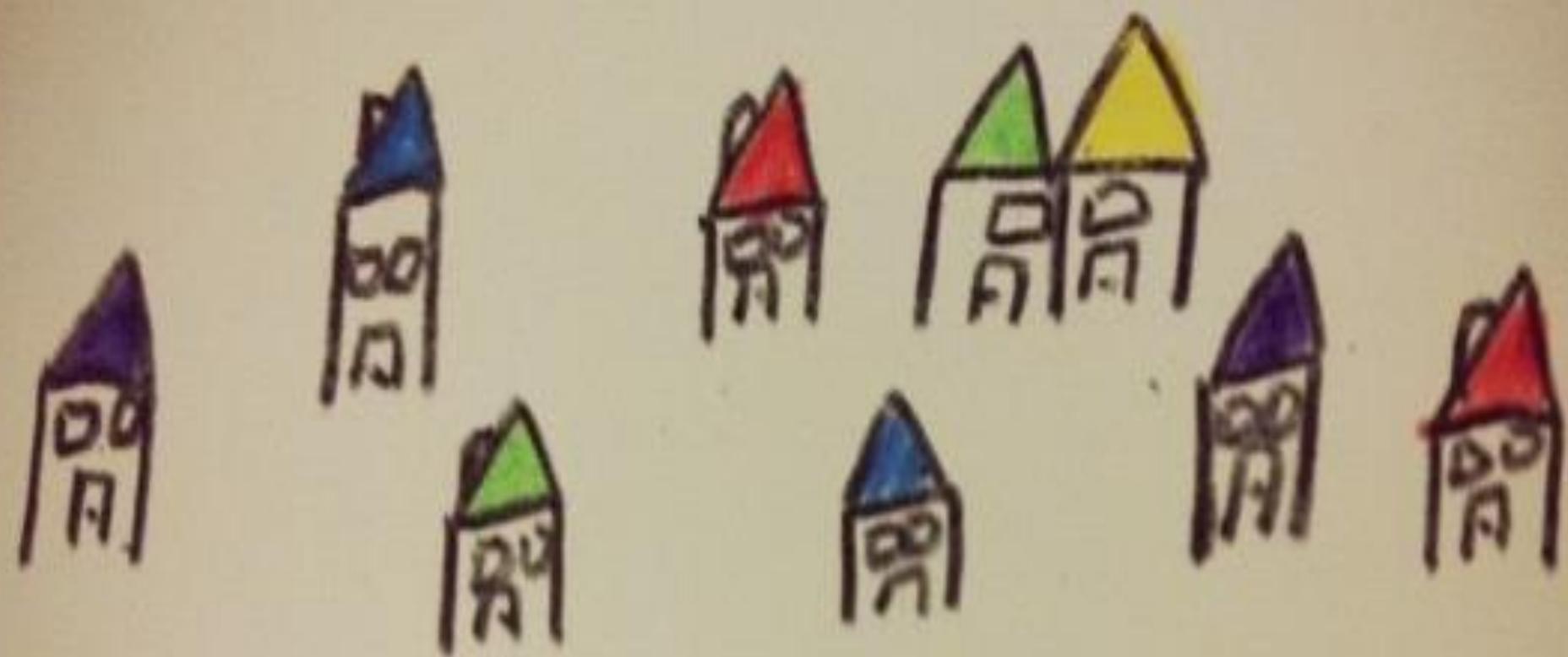
Resilience

“Resilience is the ability to prepare for, and adapt to, changing conditions and withstand and recover rapidly from disruptions. Resilience includes the ability to withstand and recover from deliberate attacks, accidents or naturally occurring threats or incidents.”

-U.S. Presidential Policy Directive 21 (2013)

Resilience: Cases in Point

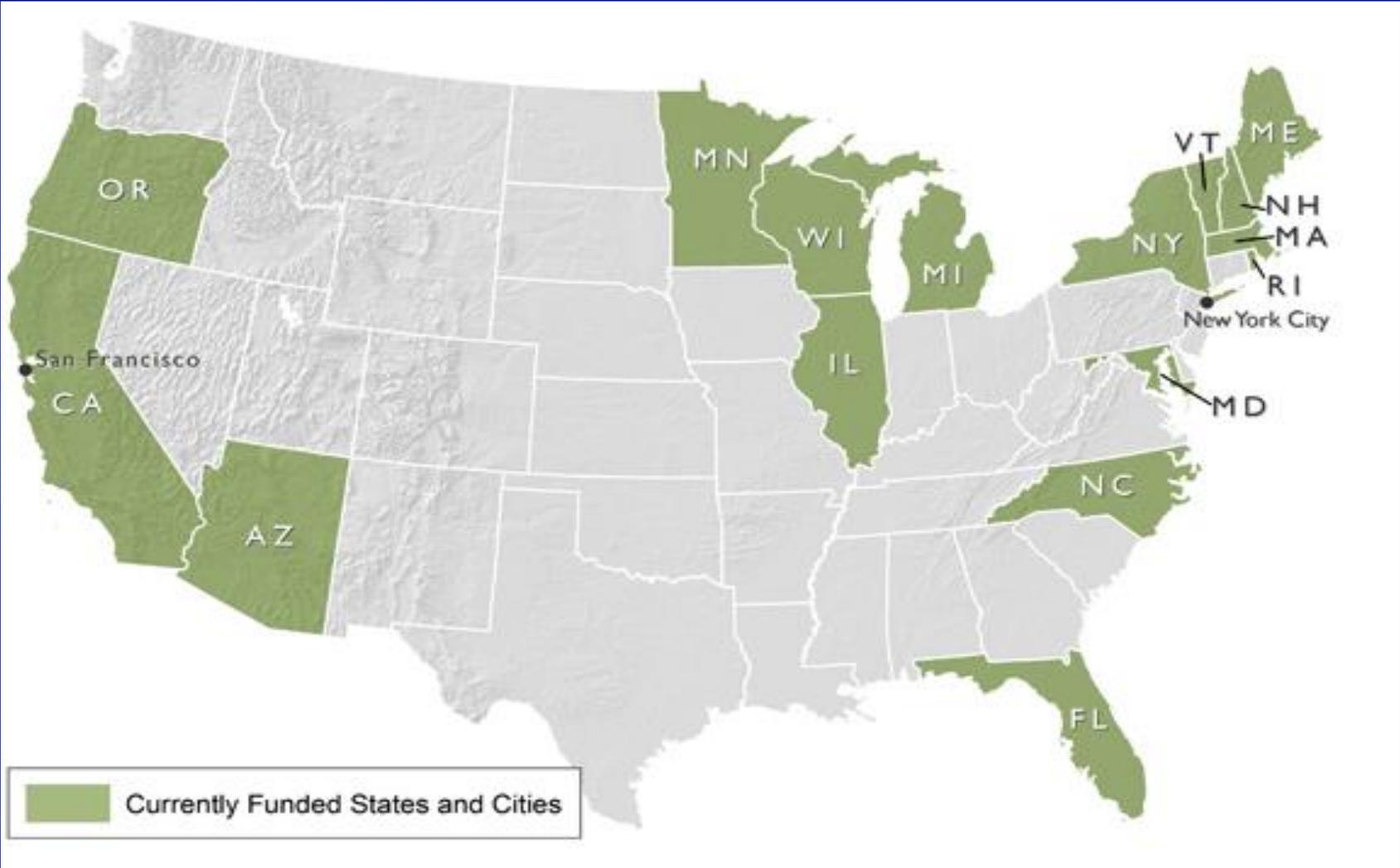




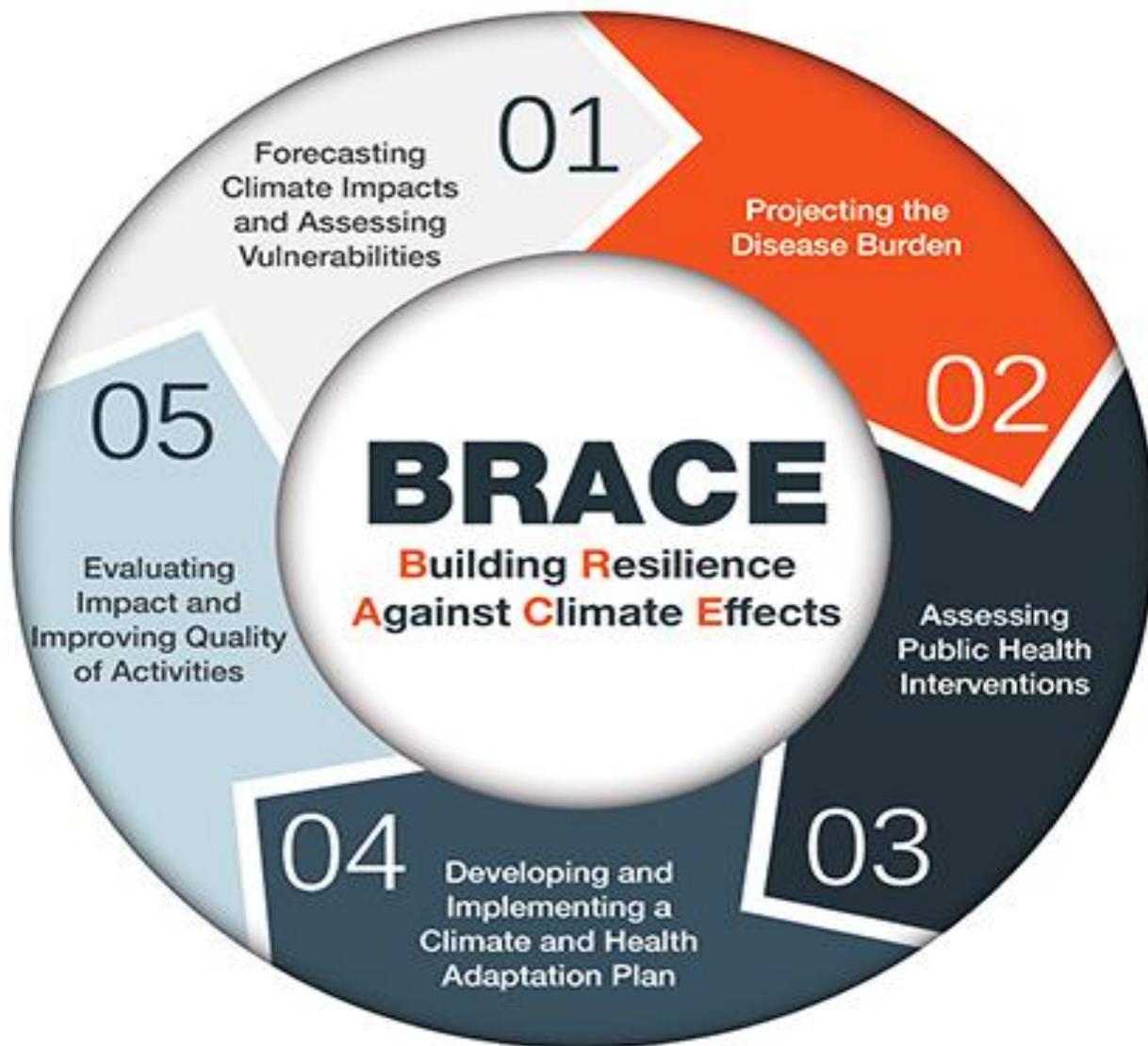
It takes a village...

**Healthy and Safe Communities:
An Effective Community, Statewide,
and National Response**

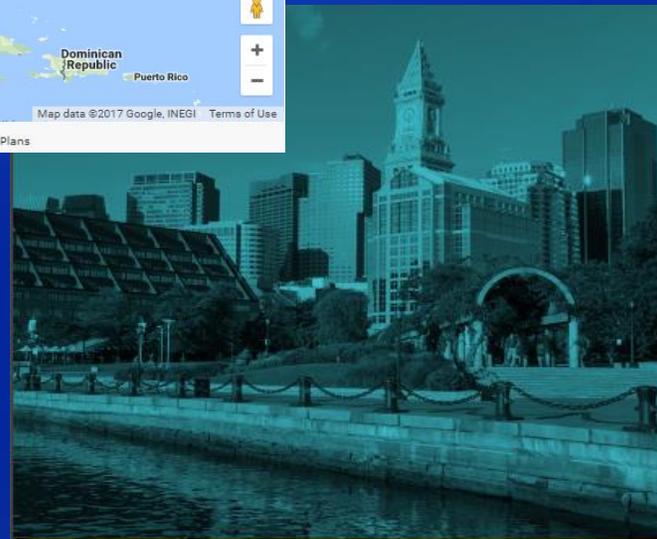
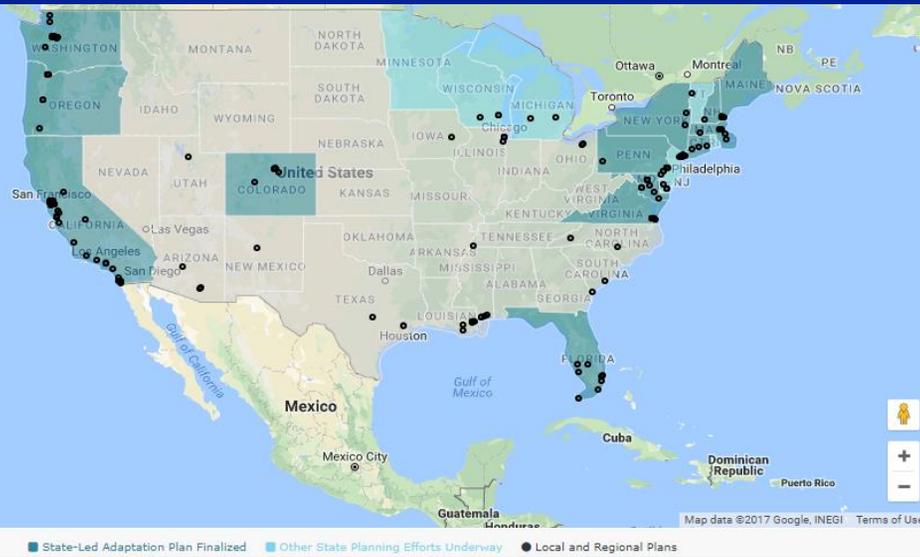
Climate-Ready States & Cities Initiative



Building Resilience Against Climate Effects



Adaptation Planning



CLIMATE READY BOSTON
FINAL REPORT

MAYOR MARTIN Z. WALSH | B | ECHO | C2M | CLIMATE READY BOSTON | DECEMBER 2014



Massachusetts
CLIMATE CHANGE ADAPTATION REPORT
September 2011

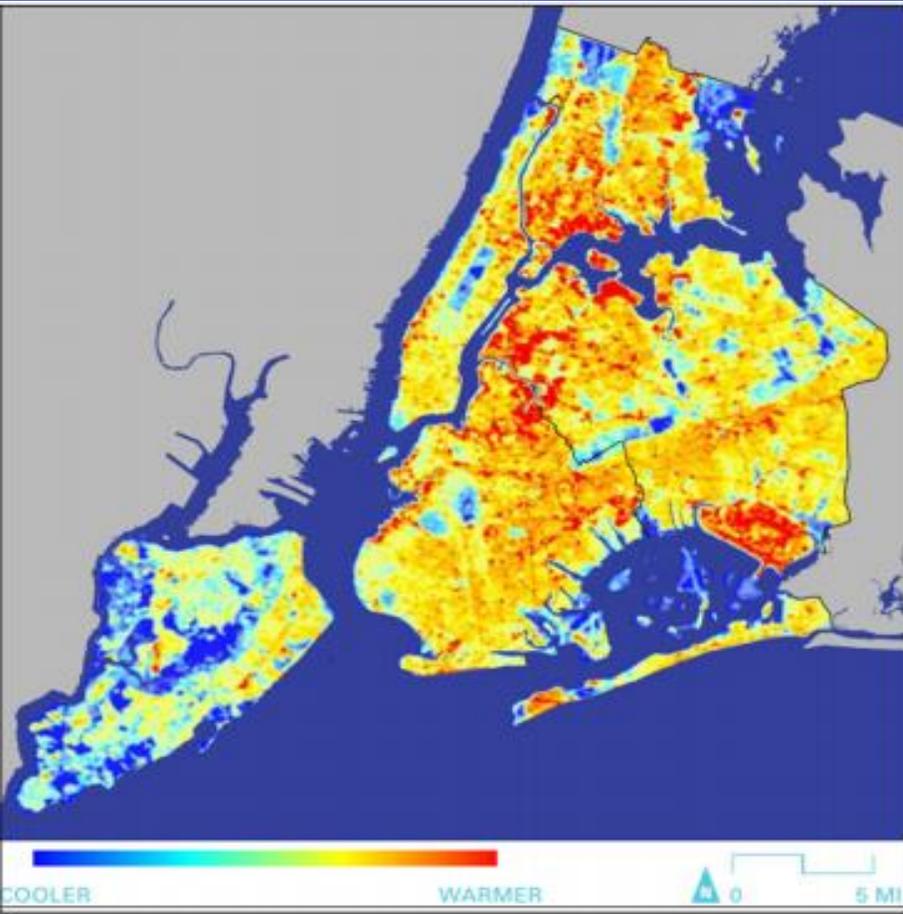


Submitted by the
Executive Office of Energy and Environmental Affairs
and the
Adaptation Advisory Committee



Powered by the Georgetown Climate Center's
Adaptation Clearinghouse™

Cool Neighborhoods NYC



**Cool
Neighborhoods for
cooler
summers.**

\$106 million invested to plant more trees, cool roofs, and more.



Source: LANDSAT Thermal Data, 2009.

NYC °CoolRoofs



What Makes Children Vulnerable?

Exposure: Coming into contact with a climate change threat



Sensitivity: Being biologically susceptible to a climate change threat given factors like health status and age



Ability to Adapt: Being able to adjust or respond to a climate change threat





The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment

Climate change is a significant threat to the health of the American people. This scientific assessment examines how climate change is already affecting human health and the changes that may occur in the future.



VIEW SUMMARY



1

Climate Change and Human Health



<https://health2016.globalchange.gov>

Around 88% of the global disease burden of climate change falls on children under 5 years.

Climate Resilient Schools



- Drought-tolerant landscapes
- Edible school gardens
- Promotion of resilient energy systems

Photo courtesy of Broward County.

Heat Illness Prevention School Project

Heat Illness Prevention School Project (HIPSP)



STAY COOL.
STAY HYDRATED.
STAY INFORMED.



When it's hot outside: Tips for preventing Heat Illness

HYDRATE before, during and after physical activity: Drink 10 gulps of water every 15-20 minutes.

Wear loose fitting, light weight clothing, a hat and apply sunscreen before going outside.

Monitor length of time outdoors, rest frequently and seek shade.

STAY in a cool environment: Avoid exercise or strenuous physical activity outside during periods of extreme weather.

STAY informed about weather-related health & safety updates.

Extremely hot weather can cause

Watch for common signs

HEAT CRAMPS: Muscle pains or spasms in arms, legs or abdomen. Heavy sweating.

First Aid: Apply pressure on cramping muscles or gently massage to relieve spasm. Give sips of water. If nausea occurs, discontinue water intake.

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This handout is designed to help parents and caregivers recognize the symptoms of heat-related illness and learn about how to treat and prevent its occurrence.

Heat cramps are muscle pains or spasms, usually in the legs, abdomen, or arms and might occur in association with strenuous activity.

Sweating depletes the body's salt and moisture and the low salt level in the muscles can cause painful cramps.

Treatment:

- Have athlete rest in a cool, shady, or air-conditioned place.
- Drink water, clear juice, or a sports beverage.
- Do not allow athlete to return to strenuous activity for a few hours after cramps subside.

Parent/Caregiver Information

Heat Stroke is the most serious heat-related illness. It occurs when the body becomes unable to control its temperature:

- the body's temperature rises rapidly,
- the sweating mechanism fails, and
- the body is unable to cool down.

Warning! Body temperature may rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided. **Seek medical attention immediately.**

Symptoms:

- An extremely high body temperature (104°F or higher)
- Red, hot, and dry or moist skin
- Rapid, strong pulse
- Throbbing headache

HEAT-RELATED ILLNESS

Welcome to the Teachers' Corner

This course was developed by the Centers for Disease Control and Prevention to help student athletes, coaches, athletic trainers, parents, teachers, and school nurses recognize symptoms, share prevention tips, and determine treatment options for heat-related illnesses (HRI). Therefore, this training is well-suited for adults or high school students (grades 9–12).

Teachers may use HRI to supplement their health education curricula. The HRI training course may be aligned with the National Health Education Standards (NHES). Therefore, the high school health course objectives may correspond to the objectives in this course.

This training may be implemented in one class lesson or taught in segments. The teacher may be the facilitator and project the Web-based modules onto a screen for classroom use. Students may also access the training in groups of two to four. Self-paced individual training is also appropriate. Furthermore, the scenario questions within the training may be discussed in group settings, including a classroom. Finally, the exam at the end of the training course may be used for individual assessment.

Content from slides and other resources throughout the course are available for printing. The HRI course objectives and a list of how they align with NHES are provided. A Discussion Questions Sheet for further assessment and a Crossword Puzzle are also available.

Standards

Crossword

Discussion



Goal: Educate students, school staff, athletic coaches, and parents regarding heat-related illness and prevention.

Air Quality Flag PROGRAM

Know Your Air Quality



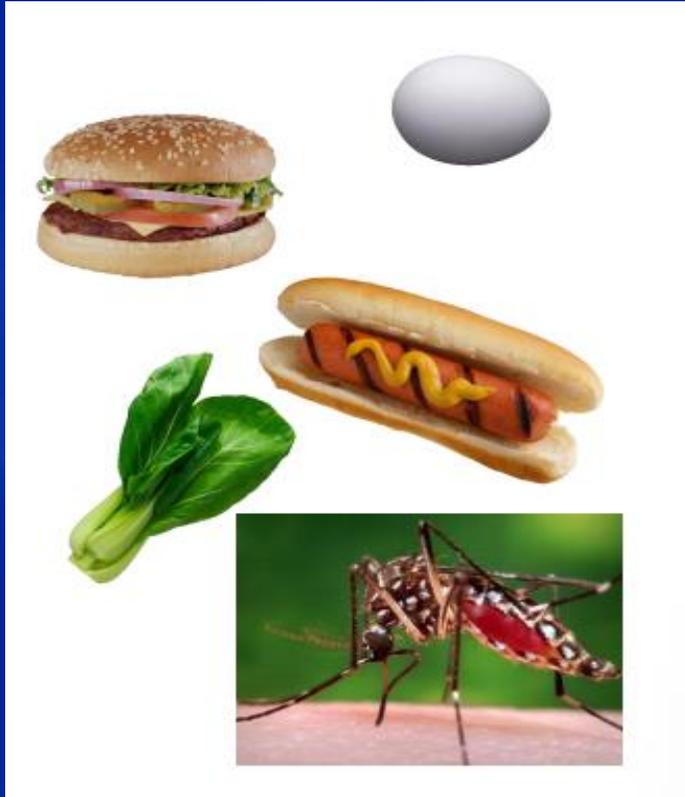
Air Quality Index	Outdoor Activity Guidance
 <p>green</p> <p>GOOD</p>	<p>Great day to be active outside!</p>
 <p>yellow</p> <p>MODERATE</p>	<p>Good day to be active outside!</p> <p>Students who are unusually sensitive to air pollution could have symptoms.*</p>
 <p>orange</p> <p>UNHEALTHY FOR SENSITIVE GROUPS</p>	<p>It's OK to be active outside, especially for short activities such as recess and physical education (PE).</p> <p>For longer activities such as athletic practice, take more breaks and do less intense activities.</p> <p>Watch for symptoms and take action as needed.*</p> <p>Students with asthma should follow their asthma action plans and keep their quick-relief medicine handy.</p>
 <p>red</p> <p>UNHEALTHY</p>	<p>For all outdoor activities, take more breaks and do less intense activities.</p> <p>Consider moving longer or more intense activities indoors or rescheduling them to another day or time.</p> <p>Watch for symptoms and take action as needed.*</p> <p>Students with asthma should follow their asthma action plans and keep their quick-relief medicine handy.</p>
 <p>purple</p>	<p>Move all activities indoors or reschedule them to another day.</p>

Climate Resilient Schools



Ocean Springs, Mississippi

Surveillance and Education: Food, Water and Vector-Borne Disease Risks



- Be alert to shifting timing, locations of diseases
- Food safety
- Ponds and lakes with algal blooms, mosquito/tick precautions
- Outdoor food presentation
- Vector control measures

Protecting Children During Disasters



- Physical harm
- Exploitation and violence
- Psychosocial distress
- Family separation
- Abuses related to evacuation
- Denial of access to quality education
- Emotional impact of disaster

The Emotional Impact of Disaster

Psychosocial programs:

- Rebuild a sense of safety and normalcy
- Express their thoughts and feelings about their experiences
- Strengthen resilience, or coping skills
- Build positive relationships with peers and caregivers



The Emotional Impact of Disaster: Preserving Family Unity



Thank you!

