Climate Change Adaptation
Planning for Public Health in
Orange County, Florida

Kevin M. Sherin, M.D., M.P.H.
Director, Orange County Health Department
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Climate Change Effects in Central Florida
The effects of climate change are expected to have a negative impact on health

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<th>Heat waves</th>
<th>Poor air quality</th>
<th>Extreme weather: hurricanes</th>
<th>Extreme weather: floods</th>
<th>Extreme weather: wildfires</th>
<th>Extreme weather: droughts</th>
<th>Increased average temperatures</th>
<th>Rising CO2 levels</th>
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Source: U.S. Global Climate Research Project, Global Climate Change Impacts in the United States, 2009.61

* Note: This includes the state of Hawaii and U.S. territories Puerto Rico, the U.S. Virgin Islands, Guam, and other Pacific island territories.
The most vulnerable will be impacted the greatest by the health effects of climate change.
Building Resilience

The Orange County Health Department is preparing for the actual and expected health effects of climate change to minimize the risks faced by our citizens and visitors.

Our climate change adaptation plan is based on those changes we believe we are most likely to see in Central Florida. Our approach looks at reducing the impact of climate change on a local and regional level.
Local Adaptation Planning

- Increased number of heat waves and outdoor air pollution through wildfires, increased CO2 and ground level ozone are expected to increase human and livestock mortality
  
  • Identification of high risk population through the special needs registry and database of assisted living facilities

  • Working on agreement to establish cooling centers at local shopping malls using public transportation

  • Reporting system for heat and outdoor air conditions posted on our website with warnings sent to the school system and media
Local Adaptation Planning

- Increased hurricanes, floods and droughts may result in contamination of drinking water and increased childhood asthma through mold and indoor air quality issues.

- Expansion of Indoor Air Quality program to serve neighboring counties and investigation of all algal blooms in Orange County.

- Using GIS information to identify areas most at risk for flooding.

- Cross training staff in drinking water program to have additional resources when needed.
Higher food prices and declining yields due to climate change and erratic weather patterns may lead to increased hunger and worse nutrition.

- **Local Adaptation Planning**
  - Women Infant and Children (WIC) nutrition program being expanded with longer hours, more staff, and more sites.
  - Community gardens created in at risk neighborhoods to improve access to nutritious food and inspire dietary changes.
Local Adaptation Planning

- Vector-Borne diseases are linked seasonally to rainfall and ambient temperature. Tropical Diseases may emerge here with changes in these conditions
  - Public notification of emerging diseases and threats such as cases of Dengue in the Florida Keys
  - EPI Net for disease surveillance
  - Atypical mosquito species detection alerts from the Orange County Mosquito control office

**KEY WEST (CBS4)** —The Monroe County Health Department and the Centers for Disease Control have confirmed multiple cases of Dengue Fever have appeared in 27 residents of Key West since July 2009. The latest case was reported on April 13, 2010.
Regional Adaptation Planning

- Orange County and our 7 surrounding counties have experienced tremendous growth in the last 10 years
- We participate in regional partnerships to keep health and the threats of climate change in the forefront
- MyRegion.org as a coordinated comprehensive planning tool for Central Florida’s future

- Public and private partners include: transit and expressway authorities, utility and telecommunication companies, civic organizations, consulting firms, Walt Disney World, space authority, port authority
How Shall We Grow?

- Process began in 2001, as 18-month campaign to create a Shared Growth Vision for Central Florida

- Nearly 20,000 Central Florida residents contributed to a shared vision for how our region can grow from 3.5 million in 2000 to 7.2 million in 2050.

- Vision focuses on higher development densities, preservation of environment and a regional transit system
Artist’s rendition of the 2050 Shared Growth Vision for Central Florida Transportation corridors connecting nodes of development
Current Climate Change Initiatives

- Orange County selected as a CDC/NACCHO Climate Change Demonstration Site

  - Conducting vulnerability assessment using GIS mapping to overlay poverty, access to fresh food, mosquito infestation, rainfall events/flooding and WIC participation

  - Training Health Department workforce regarding the health effects of climate change available at http://www.orchd.com/environmentalHealth/index.asp

  - Creating a video production and media campaign on the Health Effects of Climate Change highlighting issues of air, water, social impacts, nutrition, and diseases. This will be available when completed
Current Initiatives

- **PACE-EH**
  - Foster community and nutrition in Orange County through community gardens
  - Sought weatherization grants to address climate change adaptation need in vulnerable community
  - Increasing collaboration with public and private groups to build resiliency
Next Steps

- Increase capacity to prepare for Climate Change by seeking funding and preparedness monies

- Meet with others regarding Climate Change Adaptation efforts to include public health

- Prioritize climate change response based on vulnerability assessment

- Periodically evaluate our adaptation plans and modify as needed
“Climate change has emerged as an out-of-control driver of many of the world’s environmental and economic crises”

--Maurice Strong

Thank You

Kevin M. Sherin, M.D., M.P.H.
Director, Orange County Health Department
407-858-1400 ext. 1165
Kevin_Sherin@doh.state.fl.us