Stakeholder Views of Public Health Climate Change Preparedness in New Jersey

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Introduction
Climate change in New Jersey is anticipated to cause wide-ranging impacts, which may range from slow annual changes in temperature and precipitation norms to more damaging floods due to sea level rise. This project examined how public health stakeholders viewed vulnerabilities and preparedness to potential climate impacts. This project was part of a series of reports completed for the N.J. Climate Adaptation Alliance.

Approach
• In February 2013, about 50 N.J. public health officers participated in a focus group
• In April, 2013, online survey of public health officers was conducted and elicited 22 responses
• During late 2013 and early 2014, one-on-one interviews were conducted with targeted stakeholders and experts.

Perceptions of Impacts

Facility or provider vulnerabilities
• Impacts associated with extreme weather
• Practices are vulnerable to power loss because offices may have vaccines that must be refrigerated
• Travel difficulties due to extreme weather

Public Health Officers
• Heat and drought, with increases in heat stroke, decreased water supply, and food scarcity
• Drinking water contamination, food safety following power outages, and interruptions in care

Changes in Illness and Disease Risks
• Increased onset and duration of allergies
• Changes in vector-borne diseases
• Increases in mold or mildew

Environmental Health and Exposure
• Air quality, with an increase in air pollution
• Toxics exposure due to flooding of contaminated waterways or contaminated sites

Perceptions of Preparedness
Stakeholders report varying levels of preparedness for man-made disasters, extreme weather and pandemic events. There has been little to no planning directly addressing climate change.

Planning efforts include:
• Development of a state strategic plan that identified how local health departments can better coordinate in emergencies
• Mandated reporting on communicable diseases, though reporting systems are hard to use
• State-led voluntary collaborative planning efforts following Hurricane Sandy
• Long-term care facilities generally have well-developed emergency plans

Preparedness gaps include:
• Disaster plans vary in completeness and functionality
• No qualitative evaluation of plans, training, or implementation
• Planning horizons are short due to lack of resources and organizational culture
• Minimal to no funding for planning or mitigation
• No systemic identification of cold chain vulnerability
• Little recognition among providers about more subtle impacts climate change may have on patients
• Lack of funding and resources among PHOs
• Lack of statewide leadership, regional coordination, and pattern of prioritizing short-term needs
• No clean-up standards for property owners who find contaminated sediment after a flood
• No set occupational health standards for mold

Stakeholder Suggestions
Recommendations from stakeholders focused on funding, resources, communication, planning, and education. In some parts of the sector, basic understanding of the impacts of climate change is needed.

Specific recommendations include:
• New Jersey should adopt a Centers for Disease Control framework to help public health agencies develop climate adaptation strategies
• Map-based assessments of vulnerabilities
• Vulnerability assessments conducted on the census block or neighborhood level
• Improved regional shelter planning
• Improved communication coordination

Select Findings of New Jersey Public Health Officers climate adaptation programs.

<table>
<thead>
<tr>
<th>Program Type</th>
<th>In place</th>
<th>Planned</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local climate adaptation plans</td>
<td>6%</td>
<td>20%</td>
<td>67%</td>
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<tr>
<td>Heat warning system</td>
<td>29%</td>
<td>18%</td>
<td>47%</td>
</tr>
<tr>
<td>Home energy assistance program</td>
<td>29%</td>
<td>0%</td>
<td>71%</td>
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<tr>
<td>Population Vulnerability Assessments</td>
<td>11%</td>
<td>22%</td>
<td>67%</td>
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<tr>
<td>Risk maps</td>
<td>6%</td>
<td>19%</td>
<td>69%</td>
</tr>
<tr>
<td>Emergency plans include climate change</td>
<td>6%</td>
<td>18%</td>
<td>76%</td>
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<tr>
<td>Vulnerable populations in emergency plans</td>
<td>32%</td>
<td>32%</td>
<td>36%</td>
</tr>
<tr>
<td>Local Utility Communication plans for power outages</td>
<td>39%</td>
<td>33%</td>
<td>28%</td>
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<tr>
<td>Crisis and Emergency Response Risk Communication</td>
<td>55%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Coordinated short-term sheltering plans</td>
<td>50%</td>
<td>22%</td>
<td>28%</td>
</tr>
<tr>
<td>Health Impact Assessment related to climate change</td>
<td>13%</td>
<td>6%</td>
<td>81%</td>
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<tr>
<td>Public awareness program on climate change impacts</td>
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<td>19%</td>
<td>69%</td>
</tr>
<tr>
<td>Stockpiling of supplies</td>
<td>18%</td>
<td>41%</td>
<td>29%</td>
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<tr>
<td>Resources for local health departments in emergencies</td>
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<td>29%</td>
<td>59%</td>
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• Full report online at njadapt.rutgers.edu