Communicating Health Impacts of Climate Change In Oregon

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PRESENTATION FORMAT: Panel Presentation

TOPIC/TARGET AUDIENCE: This presentation will focus on health impacts of climate change. It is intended for public health professionals with an interest in environmental health, preparedness, climate change, and health equity.

ABSTRACT: Context: Oregon is experiencing a variety of climate impacts - hotter, drier summers, and increase in wildfires, and warmer winters with heavier rainfall and floods. We know that health impacts, such as heat-related illness, respiratory illness, water-borne and vector-borne disease, will likely increase over the next decade. We also know that some communities will be more affected than others. The Oregon Health Authority has several programs focused on climate-related risks, including those housed in the Environmental Public Health and the Acute and Communicable Disease Prevention sections.

Approach: Panelists are members of a climate change workgroup studying and planning for the health impacts of climate change in Oregon. Each will give a presentation on how they are communicating climate-related risks, including social vulnerability assessments, harmful algal bloom advisories, and communicating health risks related to increased drought and wildfires. Conclusions: New tools, systems, and processes are being developed to respond to the threats that climate change presents. Public health professionals will be introduced to new maps, risk communication tools, and recommendations for integrating more climate change considerations into public health practice.

OBJECTIVE(S): Discuss disproportionate impacts of climate change on the health of vulnerable populations; Explain climate-related health risks; Describe state-level resources for addressing climate-related health risks

ANEL ABSTRACT 1: Background: The Oregon Health Authority is in the process of developing a statewide climate and health resilience plan. As an input into the planning process, the Climate and Health program conducted a social vulnerability assessment.

Methods: The approach is modeled on similar efforts in other states, informed by literature associating indicators of vulnerability with climate impacts. A vulnerability score was calculated for each census tract in the state using variables drawn primarily from census and state sources.

Results: The assessment includes a series of maps that can be used to understand the magnitude and likelihood of health impacts from climate change on vulnerable populations. Maps and data files will be made available to local jurisdictions engaged in climate resilience planning.

Conclusions: Variables that are broadly indicative of socioeconomic status, such as educational attainment, are strong predictors of social vulnerability scores. The maps provide a tool for communicating about risks related to climate change, and the disproportionate impacts on vulnerable populations.

PANEL ABSTRACT 2: Context: Oregon is experiencing a variety of climate impacts - hotter, drier summers, and increase in wildfires, and warmer winters with heavier rainfall and floods. We know that incidence of health impacts, such as heat-related illness, respiratory illness, water-borne and vector-borne disease, will likely increase over the next decade, and that some communities will be more affected than others. The Oregon Health Authority has several programs working on climate-related risks, including those housed in the Environmental Public Health and the Acute and Communicable Disease Prevention sections.

Approach: Public Health Preparedness programs work closely with partners to understand new emerging risks and develop effective messages for communicating health risks to the public. This portion of the presentation will focus specifically on coordinating risk communication efforts related to drought and wildfire. Participants will hear an overview of simple messages explaining climate-related health risks accompanied by recommendations on actions the public can take to protect themselves during such events.

Conclusions: Public health professionals will be introduced to risk communication tools and recommendations for communicating climate-related risks.

PANEL ABSTRACT 3: Among the risks presented by a changing climate are changes in water quality and quantity. Harmful Algal Blooms such as cyanobacteria are expected to increase in fresh water sources used for recreation and drinking water as a result of changing temperatures, nutrients, and precipitation patterns. Similarly, marine algal blooms are expected to increase as a result of rising temperatures and changing ocean chemistry. Health effects from these hazards range from allergic reactions to paralytic shellfish poisoning. In addition, domestic animals with lower tolerance for toxins are susceptible to injury or death, and children five and under can be adversely affected by very small amounts of cyanotoxins in drinking water. Without appropriate measures to monitor water bodies and inform users of affected water ways, exposure is likely to increase.

In this presentation, Rebecca Hillwig of the Oregon Health Authority will detail recent observations of harmful algal blooms in Oregon, including the widely publicized 2014 bloom on the Willamette River in Portland. Participants will become familiar with available resources for characterizing the presence and extent of harmful algal blooms, as well as communication techniques to convey risk.

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