ALASKA STATE LEGISLATURE
HOUSE HEALTH AND SOCIAL SERVICES STANDING COMMITTEE
April 12, 2018
3:06 p.m.

MEMBERS PRESENT

Representative Ivy Spohnholz, Chair
Representative Geran Tarr
Representative Jennifer Johnston
Representative Colleen Sullivan-Leonard

MEMBERS ABSENT

Representative Tiffany Zulkosky, Vice Chair
Representative Sam Kito
Representative David Eastman
Representative Matt Claman (alternate)
Representative Dan Saddler (alternate)

COMMITTEE CALENDAR

PRESENTATION: ASSESSMENT OF THE POTENTIAL HEALTH IMPACTS OF CLIMATE CHANGE IN ALASKA

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

SARAH YODER
Acting Environmental Public Health Program Manager
Division of Public Health
Department of Health and Social Services
Anchorage, Alaska
POSITION STATEMENT: Presented a PowerPoint titled "Assessment of the Potential Health Impacts of Climate Change in Alaska."

ACTION NARRATIVE

3:06:25 PM

CHAIR IVY SPOHNHOLZ called the House Health and Social Services Standing Committee meeting to order at 3:06 p.m. Representatives Spohnholz, Tarr, Sullivan-Leonard, and Johnston were present at the call to order.

Presentation: Assessment of the Potential Health Impacts of Climate Change in Alaska

3:06:51 PM

CHAIR SPOHNHOLZ announced that the only order of business would be a presentation on the potential health impacts of climate change in Alaska.

3:08:43 PM

The committee took an at-ease from 3:08 p.m. to 3:10 p.m.

3:10:06 PM

CHAIR SPOHNHOLZ brought the committee back to order.

3:10:27 PM

SARAH YODER, Acting Environmental Public Health Program Manager, Division of Public Health, Department of Health and Social Services, introduced a PowerPoint presentation, published in January 2018, titled "Assessment of the Potential Health Impacts of Climate Change in Alaska." She shared slide 2, "Overview," and said that she would present about the Health Impact Assessment (HIA) because the report from Division of Public Health follows this framework. She would also present a summary of Observed and Predicted Changes and how these could lead to potential health impacts in Alaska. She added that she would also share some examples of monitoring and adaptation strategies related to human health. She directed attention to slide 3, "What is an HIA?" and explained that this report followed the framework of an HIA, a preventative health report which informed decision makers and other stakeholders, such as communities, for the potential health effects of proposed projects. She said that the ultimate goal of an HIA was to minimize adverse health effects and maximize health benefits. She shared slide 4, "Health Impact Assessment (HIA)," and stated that these were also useful for proposals that fall outside the traditional public health arenas, including transportation, resource development, and climate change. She moved on to slide 5, "What Prompted This HIA?" and explained that the 3rd National Climate

Assessment, in 2014, had detailed climate change predictions with chapters focused on potential environmental impacts in Alaska as well as potential impacts for human health and indigenous populations. She declared that this national assessment had inspired them to develop an in-depth report that would tie together these themes to serve as a resource for Alaska. She presented slide 6, "Purpose of This HIA," and explained that this HIA would add health specific information to the climate change conversation. It would provide a broad overview of the range of potential adverse impacts of climate change on human health in Alaska, as well as present examples of strategies for communities and decision makers to consider.

3:13:30 PM

MS. YODER shared slide 7, "Areas Not Addressed by the HIA," and noted that some areas were not addressed by this HIA, including prevention of any new models of climate change, new predictions of climate change in Alaska, or opinions about current predictions. This report does not address the potential beneficial health impacts of climate change.

3:14:05 PM

MS. YODER addressed slide 8, "Indicators," and reported that, prior to a review of any potential health impacts, it was necessary to form a clear picture of what changes had already occurred and what were predicted to occur in the environment. She listed the seven environmental indicators used to organize the findings: temperature, precipitation, weather, sea ice, glaciers, permafrost, and sea level. She stated that each of these indicators would be discussed in the report and that these were a compilation of available studies and not new predictions generated by the Division of Public Health. She moved on to slides 9 - 10, "Predicted Environmental Changes," sharing that Alaska could experience an increase in annual temperatures, increased precipitation and storm intensity, increased sea level, decreased sea ice, glacial recession, and decreased permafrost shifting hundreds of miles northward by the end of the century. She pointed out that the timing for these changes differed, from already occurring to decades in the future, and that the scale of predicted changes would differ by region.

3:16:14 PM

CHAIR SPOHNHOLZ asked about the reference to drier summers.

MS. YODER explained that, although the prediction was for increased precipitation, it would be constrained to winter and spring, and less so for the summer. She added that there was a prediction for an increase to the evaporation of surface water due to increased temperatures.

3:16:51 PM

MS. YODER returned to slide 10 and focused on the potential human health impact. She said that this demonstrated the complex relationship between the climate drivers, including the previously mentioned indicators, with the environment and health outcome. She stated that the relationship between climate and specific health outcomes was not always direct. She presented slide 11, "Health Effect Categories," and stated that there was a reliance on the HIA methodology to provide an organizational framework to systematically consider the wide range of potential health impacts, referred to as Health Effect Categories. She said that the categories considered included mental health and wellbeing, accidents and injuries, exposure to potentially hazardous materials, and infectious diseases. She said that she would highlight several key potential impacts in each Health Effect Category.

REPRESENTATIVE SULLIVAN-LEONARD asked about information pertaining to the regional areas in the state that may be more affected than others, and she offered an example of the changes to the Matanuska-Susitna Valley in the past 20 years.

MS. YODER explained that there was some discussion for regions, although the categorization focused on coastal, northern, and interior areas even as it was recognized for the differences within each.

REPRESENTATIVE SULLIVAN-LEONARD asked for any additional information.

MS. YODER reiterated that the focus was on Alaska predictions, and included changes in the coastal, northern and interior regions.

3:21:25 PM

MS. YODER directed attention to slide 12, "Mental Health and Wellbeing," and reported that climate change could impact health by causing an increase to psychosocial distress due to the changing environment. She offered examples for the imminent

need for relocation of a community, thawing permafrost causing infrastructure damage, or an increase in extreme weather events and wildfire near a residence. She defined solastalgia as the sense of loss caused by environmental change. She moved on to slide 13, "Accidents and Injuries," and said that climate change could lead to an increase due to factors or events such as infrastructure damage, wildfires, flooding, and unsafe ice conditions. Speaking about slide 14, "Exposure to Potentially Hazardous Materials," she noted that climate change could bring increased cardiovascular and respiratory disease due to an increase in air pollution or wildfire smoke. She spoke about slide 15, "Food, Nutrition, and Subsistence," and offered that there could be a decrease in subsistence food consumption and food security, as well as a change in food distribution and subsistence patterns. She reported that there had been increased difficulty for some Alaskans in accessing preferred hunting grounds due to changing permafrost and uncertain ice conditions. She presented slide 16, "Non-communicable and Chronic Diseases," and noted that climate change could lead to increased allergies and respiratory illness with an increase in pollen counts and wildfire smoke. She shared slide 17, "Water and Sanitation," and stated that climate change could cause increased water and sanitation infrastructure damage.

3:27:10 PM

MS. YODER shared slide 18, "Rating/Prioritizing Impacts," and explained that HIAs had ratings and prioritization of the health impacts. As each community would likely experience climate change differently, this proposed a ranking methodology that could be adapted by communities and stakeholders. She said that this report provided a system that considered the potential timing and magnitude of the impact by looking at dimensions such as time to impact, geographic extent, number of people directly impacted, and resources needed to adapt or respond to the impact. She moved on to slide 19, "Table 4. Notational Example," which demonstrated that the system from the previous slide was used to consider each identified potential health impact. The table provided a visual guide to which potential health impact may be more pertinent to the community, and which may need more attention and higher prioritization. She noted that this rating system could be useful when considering what was to be done to avoid or lessen potential health impacts. She moved on to slide 20, "Monitoring Recommendations," and stated that knowing which impacts may need prioritization could help determine appropriate monitoring recommendations and identify data to improve situational awareness of changes in specific

indicators. She reported that the Local Environmental Observer (LEO) Network was an online platform developed for local observers to connect with topical experts about unusual animal, environmental, and weather events. She addressed slide 21, "Monitoring Recommendations Table," which showed a portion of the monitoring recommendation table and it outlined the potential health impact, identified relevant indicators, and provided examples of where the data may exist.

3:31:23 PM

MS. YODER shared slide 22, "Adaptation Strategies," which considered climate change adaptation as adjusting to climatic changes in an effort to decrease negative impacts and increase potential opportunities. She moved on to slide 23, "Overarching Adaptation Strategies," which detailed some of the adaptation strategies that communities and other stakeholders could consider in terms of health. These were general strategies such as creating local climate change advisory groups and offering community members ample opportunity to relay their concerns about climate change. She spoke about slide 24, "HEC-Specific Adaptation Strategies," which included specific strategies such as a review of architecture and engineering designs to ensure that plumbing infrastructure could withstand changes to the underlying permafrost and to develop a community response plan for wildfires. She explained slide 25, "HEC-Specific Adaptation Strategy Table," which presented a portion of the adaptation strategies specific to each health effect category.

3:33:38 PM

MS. YODER described slides 26, 27, & 28, "Adaptation Strategies Already Occurring," which included the Alaska Climate Change Strategy and Climate Action for Leadership Team, a framework for Alaskans to build a strategic response to climate change. She shared another example at the regional level, Adapt Alaska, which created a discussion space for Alaska communities, tribes, agencies, and nonprofits to share information and learn from each other and how they can adapt. She offered a community level example, the Native Village of Georgetown on a climate vulnerability assessment in 2017, which documented climate related changes and trends in the area.

3:35:54 PM

MS. YODER closed with slide 29, "Summary," and the relationship between climate and health in Alaska, with strategies that

communities and other stakeholders could consider. She emphasized that, although there was a wide range of potential adverse health impacts in Alaska due to climate change, there were strategies that could be implemented to avoid or minimize these potential health impacts.

3:36:52 PM

REPRESENTATIVE SULLIVAN-LEONARD asked about the determination for geographic and scientifically inclined changes versus human changes in Alaska.

MS. YODER asked if this was due to humans or natural change for human populations.

REPRESENTATIVE SULLIVAN-LEONARD asked for the scientific natural occurrence in the changes to our environment.

MS. YODER explained that the report focused primarily on climate predictions for Alaska using national studies, as well as studies in Alaska. It did not focus on the cause of change.

REPRESENTATIVE SULLIVAN-LEONARD reflected on earlier coastal changes when groups were nomadic, and moved as necessary. She opined that it was now more difficult to move.

3:39:06 PM

REPRESENTATIVE TARR asked if there was a need for future funding now that the risks had been determined.

MS. YODER said that the future efforts to address health and adaptation would be up to the respective agencies and communities to develop their priorities. She mused that the Climate Action for Alaska Leadership team may be better suited to determine the next step and the necessary funding.

REPRESENTATIVE TARR asked about her day to day work.

MS. YODER explained that this was not her full-time responsibility, although she did pay attention to the new studies and literature, and they were compiling any new data.

REPRESENTATIVE TARR asked if anyone else at Department of Health and Social Services was looking at climate related health impacts.

MS. YODER said that she was not aware of anyone else, although she was attending other meetings for Arctic and climate. She mentioned that Dr. Joe Mclaughlin, Chief of Epidemiology, was also following the studies.

3:42:06 PM

CHAIR SPOHNHOLZ asked if there was going to be a more specific strategy.

MS. YODER acknowledged that the report was a high-level discussion of potential human health impacts, as it was intended to be guidance for communities and other stake holders to develop their response to climate change.

CHAIR SPOHNHOLZ asked if anyone was monitoring or participating in the Governor's Climate Action for Alaska Leadership team.

MS. YODER said that she had attended meetings as she was able and was staying as involved as possible.

3:44:32 PM

ADJOURNMENT

There being no further business before the committee, the House Health and Social Services Standing Committee meeting was adjourned at 3:44 p.m.