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**MEETING SUMMARY**

**ALASKA CLIMATE CHANGE ADAPTATION ADVISORY GROUP**

**Health and Culture Technical Working Group (HC TWG)**

Meeting #5, 13 August 2008, 8:30 – 10:30 AM

**Attendance:**

1. Technical Working Group members:

Harry Brower, Don Callaway, Jeff Demain, Bob Gerlach, Joe McLaughlin, Father Thomas Weise, Kristie Ebi, Jason Vogel

2. Public Attendees:

Amy Holman, Sally Schlichting, Susan McNeil, Lynn Zender

**Background documents:**

(posted at http://www.akclimatechange.us/Health_Culture.cfm)

1. Meeting Notice and Agenda

2. Summary of Meeting #4

3. Health and Culture Draft Catalog of State Actions

**Procedural items:**

1. Kristie Ebi and Jason Vogel called the meeting to order, completed the roll call, and reviewed the agenda and plans for the call.
2. The summary for meeting #4 was approved.

**Discussion items and key issues:**

1. Most of the call was spent discussing Health options HC-2 (waterborne diseases), HC-3 (vectorborne diseases), HC-4 (food security and foodborne diseases), and HC-5 (flooding and drought).

2. Discussion on HC-2:

a. Delete 2.1 as syndromic surveillance has not been effective in Alaska. These systems have low sensitivity and cost-effectiveness. A more effective approach is to increase reporting by health care providers and laboratories.

b. There was discussion of the importance of surveillance for vectorborne and zoonotic diseases that can affect humans. The Alaska Department of Fish and Game (ADFG) has a reporting system, however this information is not always communicated to health care providers and the public. It was noted that there is a need to increase source monitoring for waterborne pathogens.

c. There was a discussion of the need to educate the public and health care providers of the risks of waterborne diseases, and of observed factors that could indicate increased health risks. The public reports a large proportion of waterborne disease outbreaks.

d. It was recommended that a new overarching option be added on public awareness and education for all health risks of climate change, not just waterborne diseases. Education and training also is need for health care providers, environmental staff at local and state agencies and organizations, and others. It was noted that faith-based organizations could disseminate information through bulletin boards, etc., and could be designated meeting places during storms and other disasters.

e. For 2.4, it was noted that this option implies there is an inventory of vulnerable infrastructure, particularly in rural communities. Such an inventory is needed. Approximately 45% of rural communities drink untreated water. This option should be reworded to include solid waste.

f. In many areas, water and sanitation infrastructure may need to be modified, rebuilt, or moved to be more resilient to climate change. Landfills need to be resistant to climate change-related erosion and other risks. Research is needed to identify additional options.

3. Discussion on HC-3:

a. Sanitation infrastructure often provides breeding grounds for vectorborne diseases. Most rural villages are located within one mile of a landfill.

b. As with HC-2, there is a need for public education and training of health care providers on the risks of vectorborne diseases.

c. For 3.1, there is a need to increase the number of epidemiologists in the State. There may be mechanisms to share the few entomologists in the

State across the Departments that could benefit from their expertise. There is a need to increase State virology and other supplies.

d. This section should note that the State has a multi-disciplinary West Nile Virus working group; if any of these options are considered for further action, the working group would be a valuable resource.

e. Concerns were raised about the State response to the risks of avian influenza and distemper virus. The CDC Arctic investigations program is conducting monitoring and surveillance for avian influenza; this program will continue for several more years.

4. Discussion on HC-4:

a. See previous comment relevant to why 4.1 should be deleted (syndromic surveillance).

b. As noted in previous discussions, food shipping and storage, and fermentation of traditional foods are becoming possible sources of pathogens with warming temperatures. In 2004, Vibrio parahaemolyticus first appeared in the State when water temperatures rose above 15°C. It is possible that paralytic shellfish poisoning and other risks may appear in the State with additional climate change.

c. It was agreed it is important to support development of surveillance programs in rural communities to ensure safe temperatures in ice cellars. Alaska has the highest incidence of botulism in the US, with several outbreaks annually. The major risk factor is too warm conditions during fermentation of traditional foods. There has been movement away from fermentation in the ground to fermentation in wood barrels and plastic containers. Communities should be encouraged to go back to fermentation in the ground.

d. There are problems with ice cellars melting to greater depths. The water that accumulates can ruin stored food.

e. There should be consideration of the psychological effects of lack of access to traditional foods, particularly among the elders.

f. Another concern is that traditional diets are changing to foods with high glycemic indices, which is increasing the risk of chronic diseases. Traditional foods are becoming more difficult to access because of environmental changes due to warming temperatures.

5. Discussion on HC-5:

a. It was agreed that the title should be changed to Flooding and Other Weather Events. These events can have significant impacts on subsistence villages. For example, ice storms can ruin food on drying racks.

b. For 5.1, it was noted that the National Weather Service issues warnings for a variety of extreme weather events. A flood early warning system exists in southeast Alaska, where weather radios are commonly used. Responses to extreme weather events need to be coordinated with Federal programs and local emergency plans. Amy Holman will send information on relevant NOAA programs.

c. It was agreed that an overarching option should be added on increasing coordination across all relevant actors, including faith-based organizations, during major disasters, in urban and rural areas. This could include drills to practice response activities. The lessons learned should then be shared with other communities.

**Next steps and agreements:**

1. The next TWG meeting will be held on September 10, from 8:30 - 10:00 am.
2. Kristie L. Ebi will email to the TWG members: (1) the link to the document on climate change and health published by the Ontario College of Family Physicians (http://www.ocfp.on.ca/local/files/Addressing%20the%20Health%20Effects%20of%20Climate%20Change%20Family%20Physicians%20are%20Key%20April%207,%202008.pdf); and (2) a copy of the State of Maryland adaptation option on public awareness and education.