

**One Health Group Meeting 1**  
**Environment-Wildlife-Human HEALTH**  
**May 14, 2013, @ ANTHC**

**Participants**

Angela Matz – USF&W  
Michelle Davis - EPA  
Phil Johnson – USF&W  
Lori Verbrugge – USF&W  
Dana Bruden – CDC  
John Pearce - USGS  
Alan Parkinson – CDC  
Mike Brubaker – ANTHC  
Karsten Hueffer – UAF  
Kimberly Beckman – ADF&G  
Amy Holman - NOAA  
Louisa Castrodale

**Agenda**

**Introductions**

**Round Table / Updates and Observations**

**New Arrivals**

**Hot Topics**

**Next Meeting**

**Adjourned**

**ROUNDTABLE**

**Phil Johnson USF&W –**

- Coordination with USACE re. clean-up of federal sites. Addressing community concerns with APIA and other stakeholders.
- Working with Aleutian and Bering Sea LCCs on fisheries, shipping, contaminants and invasive species as priority management issues.
- With the DEC, marine debris issues related to tsunami and other debris.
- With USGS, the Western Mercury Synthesis Project (AK to Mex) source identification, modeling.
- Hydrocarbon odor in fish.

Comment – State of Alaska developing new mercury advisory. Phil raised the topic of the importance of lead shot as a One Health topic.

**Lori Verbrugge USF&W –**

- Environmental contaminants and conservation planning assistance (combined programs). Oil spill coordination.
- Conservation Planning – working with agencies and developers cooperatively in avoiding negative impacts. Focus: Pebble, Suisitna, Chitna, Donlin.
- One Health interests is subsistence and primarily water quality, contaminants and salmon, and impacts on refuges.
- We have a trust obligation to protect resources on interest lands.

## **Dana Bruden – CDC**

- 18 years of surveillance in respiratory illness in the Delta including looking at RSV and climate. Does climate lead to more severe disease?
- Health impact assessment into failure of wastewater in Kivalina (storm driven) and relationship to rates of infectious disease

Amy – have you tried NWS for information here. She will assist with a connection. Phil – interest in human health at NOAA strategy priorities? Amy yes human health program and water quality (mostly Great Lakes. Weather Service is focused on protection of life and property. New emerging issues such as harmful algal blooms.

## **Amy Holman - NOAA**

- Ecological forecasting is a new focus such as harmful algal blooms. Kachemak Bay Lab has been looking at Alexandrium located in SC Alaska.
- Alaska Ocean Observing System – understanding salmon run timing.
- Arctic research plan development (IARPC Committee).
- Harmful Algal Bloom forecasting tool is available for Lower 48. NOAA is working on the forecast tools for applications in Alaska. New kits are available for Domoic Acid and PSP, Test kits.
- Ocean Acidification and effects on Pacific Northwest

**Alan** – the IARPC committee is in the process of implementing a 5 year strategic plan for all research including human health. A health section in the plan describes a NOAA/CDC MOU that allows both agencies to share technologies and infrastructure to integrate climate, weather, oceanographic related marine animal and human health data and information to address public health issues.

**Michelle Davis – EPA**

- Institute of tribal environmental professionals webinars for building a climate change program. If anyone would like to participate in the webinar, contact Michelle Davis.

**John Pearce - USGS**

- Alaska Science Center, water, minerals etc.
- Disease worked began with h5N1 and migratory birds. Testing did not find H5N1 but did find many other Asian virus and genes.
- Influenza worked launched their interest in wildlife disease including many different species in Alaska and Nationally.
- New fact sheet available for science center work, invasive species, new wildlife illnesses, etc.
- Providing science to decision makers is our purview.

**Alan Parkinson - CDC**

- Conducts Infectious disease monitoring and control
- Climate and zoonotic and parasitic infections in the north
- 2009 Work Group formed, to plan a Climate Sensitive infectious disease Meeting in Fairbanks 08/2010

- Paper based on the meeting has been put out on zoonotic and infectious disease findings and recommendations for Alaska.
- Alan to share link for paper. Hueffer K, Parkinson AJ, Gerlach R, and Berner J. Zoonotic infectious in Alaska: Disease prevalence, potential impact of climate change and recommended actions for earlier disease detection, research, prevention and control. Int J Circumpolar Health 2013 72: 19562 <http://dx.doi.org/10.3402/ijch.v72i0.19562>
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- CDC also formed a collaboration with NOAA on climate change nationally. NOAA CDC plan involves developing surveillance systems for human and animal diseases, and determine baselines for infectious agents, and to improve communication between agencies to share information about the climate, wildlife, human health and disease nexus.

Karsten Heuffer UAF

- Research of basics of wildlife disease. Studying rabies and disease ecology as well as development of filter paper methods for subsistence hunters to test mercury and other pollutants.
- Working with Kimberly Beckman on rabies and other drivers of infectious disease. Developing a veterinary training program with out-of-state universities (AK 2yrs and Colorado State 2yrs).

Alan – what antibodies with test strips? Karsten – Used for mercury, toxoplasmosis etc. application is under development.

Alan – storage is an area of interest, and we would like to learn more about how well they store for antibodies.

Angela Matz – USF&W (Fairbanks)

- Contaminants in subsistence foods (mostly fish / mercury)
- Also some of the same USF&W projects

Louisa Castrodale DHSS

- Support and collaborate with all agencies.
- The rabies testing is currently very limited at the lab so developing new methodologies.

Kimberly Beckman ADF&G

- Funding from ADEC has resulted in more testing for rabies including first case in a wolverine and second wolf that has been trapped. Chandalar Lake has had what looks like an outbreak of rabies in foxes and wolves. There has been over 100 test performed.
- A One Health priority is ticks, many of which are provided by community members off their ticks. More than 30 ticks in the past year. Some in dogs that have not been out of state, and there may be some ticks that are now endemic. Tickborne disease needs to be (Rocky Mountain, Tick Fever, Q Fever and Lyme Disease) included in the evaluation of dogs.
- Cryptosporidium is of interest in moose and caribou feces. It was identified as an issue at the Fairbanks meeting. Working with CSU on strain typing.
- Trying to work through the ??

- (Louisa) State of Alaska Division of public health provides testing for PSP, Hg, infectious diseases including DRIT testing for rabies.

Hot Topics:

H7N9

Salmon / fish health

Rabies

Tickborne Illnesses

Q Fever

Cryptosporidium

HABs

Coxiella Burnetti

Mercury

Next Meeting: 3-4:30pm August 27, 2013