

Environmental Health

Assignment Description

Health Impact Assessment (HIA) is a tool used to predict the human health effects of development projects, public policies, or new public programs. HIA has been practiced internationally for decades, but is now increasingly performed in the United States. Alaska has established one of the nation's first HIA programs and staffed it with a medical epidemiologist board certified in occupational and environmental medicine. This program offers the CSTE fellow a unique opportunity to help develop the HIA program and advance the cutting edge field of Health Impact Assessment in Alaska. The fellow would be involved in several high profile and engaging HIA studies for major projects in Alaska related to mining or Oil and Gas development. After learning the elements of the field of HIA, the fellow would be involved in helping the program establish an effective and efficient approach to gathering and analyzing health surveillance from a variety of state and tribal sources. The fellow will also join in public hearings and briefings regarding the various development projects undergoing HIA. There will be rich opportunities for epidemiological analysis, scientific communication, and technical writing.

Day to Day Activities

The fellow will spend a portion of each day meeting with individuals who oversee various data sources at the state of Alaska and with various tribal entities. A portion of each day will be spent in project planning with the program manager and also reviewing progress on shared projects. At various times of the year, the fellow can expect to be involved with arranging and coordinating field studies in rural and urban locations as needed. On a monthly basis, the fellow will attend HIA working group meetings.

Potential Projects

1. Develop HIA Baseline surveillance program: Each HIA collects baseline health information from 10-12 sources of public information. This information must be gathered, ordered, and communicated in a summary report. Any one of these surveillance systems (for example BRFSS Alaska) would be available for a surveillance evaluation.
2. Analysis of field survey information: The HIA program will routinely conduct nutritional surveys related to subsistence foods consumed by Alaskan natives and others in rural AK. This often occurs in conjunction with sampling for various biomarkers of toxic substances. The fellow would be given the opportunity to analyze and report this information.
3. Project Specific Surveillance Analysis: Health data are collected and then summarized regionally in Alaska. This is often not relevant to a particular development project. The fellow would be given the opportunity to help define and appropriate epidemiological approach to reorganize and re-analyze the data so that it provides useful information for the HIA.

Preparedness Role

The fellow would have access to emergency preparedness personnel in the division of public health as well as access to emergency preparedness related to sensitive development projects in the state.

Assignment Location: Anchorage, Alaska

Primary Mentor: Paul Anderson, MD, MPH, MDiv, MA

Staff Physician
State of Alaska

Secondary Mentor:

Joe McLaughlin, MD, MPH
State Epidemiologist and Chief
State of Alaska