

Infectious Disease

The Alaska Immunization Program is located within the Section of Epidemiology, Alaska Division of Public Health. Program staff conduct a variety of activities to ensure Alaska's citizens are protected from vaccine-preventable diseases, including distributing vaccine to providers throughout the state, assessing compliance with immunization requirements in schools and child care facilities, and providing educational materials and programs for medical professionals and the general public. In addition, the state is implementing a new immunization information system to establish a web-based registry of immunization histories for Alaskans of all ages. Vaccine-preventable disease surveillance and case investigations are conducted in conjunction with members of the Section's Epidemiology Team.

The Alaska Immunization Program coordinates a vaccine delivery system that is unique among the states. The state maintains a universal vaccine distribution program, supplying all recommended vaccines for children and adolescents seen in both public and private medical settings. Selected vaccines also are provided for adults. Vaccine delivery is accomplished through a combination of methods and partners; although many vaccines are distributed through standard methods directly to providers' offices, delivery of vaccines to Alaska's remote villages requires hand carrying by itinerant public health nurses or Alaska Native health corporation staff. After vaccines reach the village, they often are administered through a network of providers including skilled Community Health Aides/Practitioners.

Historically, Alaska Natives have been disproportionately impacted by infectious diseases such as Haemophilus influenzae type b and hepatitis A. This history contributed to the development of an extraordinarily strong network of partnerships between the Alaska Immunization Program and Alaska Native organizations, including the Alaska Native Tribal Health Consortium and Alaska Native health corporations statewide. In addition, the Anchorage-based Arctic Investigations Program of the Centers for Disease Control and Prevention is a frequent partner in immunization activities. These partnerships involve regular meetings and planning opportunities to allow coordination of activities between the organizations. These groups often share epidemiologic data and surveillance information to assess the impact of vaccine-preventable diseases in these populations.

A Fellow within the Alaska Immunization Program would participate as a full member of the Program staff, as well as having multiple opportunities for interaction with other program areas within the Section, including General Epidemiology, Infectious Diseases, STDs and HIV/AIDS. For example, the Fellow could participate with the Infectious Disease program area to analyze vaccine-preventable disease surveillance activities and case reporting, as well as disease outbreak investigations resulting from case surveillance. The Fellow would have wide latitude in determining the projects he/she would pursue. Potential long-term analytic projects within the Immunization Program likely would involve some aspect of the state's universal vaccine distribution program, which offers

the opportunity to analyze vaccine use in all medical settings within the state. Possible points of interest for the Fellow include the following areas:

- Opportunities to conduct a variety of studies during the implementation phase of a statewide immunization information system - Possible areas for analysis include cost effectiveness of IIS participation for providers and immunization coverage levels within selected categories such as age group, geographic location and/or type of medical provider,
- Recommendations related to improvement of immunization coverage levels among Alaska's children who are 19-35 months of age - According to the 2006 National Immunization Survey (NIS), Alaska's 4/3/1/3/3/1 vaccine coverage level in this age group was 67.3%, resulting in a ranking of 47th among the states. Comprehensive NIS data is available from CDC to allow detailed analysis of Alaska's vaccine coverage levels that could illuminate and impact future programmatic activities.
- Analysis of vaccine wastage and potential methods to impact vaccine loss within this multi-million dollar program. (Alaska vaccine expenditures are expected to approach more than \$19,000,000 during 2008.)
- Assistance in development/continuation of Alaska's state emergency preparedness plan.
- Analysis of hepatitis B vaccine delivery for all newborns - Evaluation of the effectiveness of various Program activities, including school and childcare facility assessment. .

In addition to multiple opportunities for growth in the field of epidemiology, the Fellow would have the opportunity to live and work in Alaska, a state of extraordinary beauty and opportunity. When appropriate for the investigation/analysis being conducted, the Fellow would have the opportunity to visit remote locations to conduct outbreak investigations and gain field experience in applied epidemiology. In addition, the rugged beauty of the state would be accessible for countless recreational adventures, including, hiking, cross-country and downhill skiing, rock climbing and bicycling.

In summary, the opportunities for strong professional growth and exciting outdoor activities are virtually limitless in "The Last Frontier," one of the most beautiful locations in the world.

Assignment Location:	Anchorage, Alaska
Primary Mentor:	Joe McLaughlin, MD, MPH State Epidemiologist and Chief, Section of Epidemiology Alaska Section of Epidemiology
Advanced Degrees:	MD, University of Minnesota (1999) MPH, Tulane (2001)
Secondary Mentor:	Gerri Yett, BSN, MSN, CHES

Alaska_Infectious Disease

Nurse Epidemiologist
Alaska Section of Epidemiology

Advanced Degrees:

MSN, University of Alaska (2001)
BSN, University of Utah (1981)