



IHS



Injury Prevention Specialist Epidemiology Fellowship

Typical Information Packet

(Each time this program is offered this packet is updated. Refer to the packet of the year you are applying for the most current information and dates)

U.S. Department of Health and Human Services
Public Health Service
Indian Health Service



IHS Injury Prevention Class Epidemiology Fellowship Overview

What is the Epidemiology Fellowship?

The Epidemiology Fellowship is a 12-month advanced learning experience for individuals promoting injury prevention in American Indian/Alaska Native communities.

What will participants gain from the Epidemiology Fellowship?

- Enhanced skills in injury epidemiology and program evaluation, such as:
 - Designing a study
 - Data collection and analysis
 - Promoting community involvement
 - Reviewing the literature
- “Best practices” for prevention of intentional and unintentional injuries
- Enhanced skills in presenting scientific information
- College credits from the University of Michigan Summer Epidemiology courses
- Improved effectiveness and satisfaction in your injury prevention work
- Individualized learning experiences (e.g., using GPS devices)
- Completion of a project that will help reduce injuries in your community

What is the Epidemiology Fellowship curriculum?

- Academic sessions:
 - Injury prevention project development: Centers for Disease Control and Prevention, Atlanta: May or June (one week)
 - University of Michigan Summer Epidemiology Courses, Ann Arbor: July (3 weeks)
 - Injury prevention field work: Tucson Area: September or October (one week)
 - Scientific presentation skills: Albuquerque: February (one week)
 - Symposium: May or June (2 days)
- Completion of a project that will have an impact on injuries in your community
- Faculty and local mentors to assist you throughout the year

Who should apply?

Persons who have:

- Worked at least 2 years in the area of injury prevention;
- Attended at least two IHS injury prevention core courses (Levels 1,2,3 or equivalent);
- At least 3 years experience in public health;
- A college degree.

More information? <http://www.ihs.gov/MedicalPrograms/InjuryPrevention>.

For questions, please contact Nancy Bill, MPH, IHS Injury Prevention Program Manager, OEHE-EHS-TMP 610, 801 Thompson Ave, Suite 120, Rockville, MD 20852. Phone: 301-443-0105; Fax: 301-443-7538; email: nancy.bill@ihs.gov

A. The Two IHS Fellowship Programs

The Epidemiology Fellowship provides practical knowledge and skills for injury prevention

practitioners in American Indian and Alaska Native communities. Building on the IHS Injury Prevention Program Short Courses and the prior experiences of the participants, the Fellowship offers advanced training in injury epidemiology, program evaluation, scientific presentation skills, and field work. Fellows apply this training by working on individual projects involving data collection and/or program implementation and evaluation.

The Epidemiology Fellowship differs from the Program Development Fellowship option by focusing primarily on injury epidemiology. While the two Fellowships have a similar structure, the content of the courses, projects, and participant pre-requisites differ (Table 1).

Table 1
Comparison of Injury Prevention Fellowship Options

	<i>Epidemiology Option:</i>	<i>Program Development Option</i>
<i>Focus</i>	1. Evaluation/Surveillance/Data Collection 2. Community interventions	1. Community interventions 2. Evaluation/Surveillance/Data Collection
<i>Education Prerequisites</i>	Bachelor's Degree	No bachelor's degree required
<i>Training Prerequisites</i>	Introduction to IP (Level 1), Intermediate IP (Level 2).	Introduction to IP (Level 1) or equivalent.
<i>Field Experience Prerequisites</i>	3 years in public health, 2 years in injury prevention	1 year in injury prevention
<i>Long Distance Travel / Time Away from Home</i>	6 weeks + presentation (2 days)	4 weeks + presentation (2 days)
<i>Curriculum</i>	<ul style="list-style-type: none"> • 4.5 days: IP Project Development (CDC, Atlanta in May or June 2007) • 3 weeks: Epidemiology (University of Michigan, July) • 4.5 days: Field Course • 4 days: Presentations and publication (Albuquerque in February 2008) • 2 days: Symposium (May or June 2008) <p><i>Please see Appendix 1 for details.</i></p>	<ul style="list-style-type: none"> • 4.5 days: Injury Prevention Program Planning • 4.5 days: Program Implementation and Evaluation (August) • 4.5 days: Field Course • 4.5 days: Marketing & Advocacy (Albuquerque, following February) • 2 days: Presentation (May or June of following year)

B. Goal of the Epidemiology Fellowship: To provide advanced, relevant training for injury prevention practitioners.

All fellowship participants will be able to:

- Complete a project that will have an impact on injuries in their community
- Describe effective strategies for injury control in the areas of motor vehicle crashes, falls, intimate partner violence, fires, child abuse, firearms, and suicide
- Design data collection forms
- Analyze and interpret injury data
- Design an evaluation of an IP intervention or existing program
- Present the results of a study at a scientific meeting

Participants can also choose to learn specific skills, such as:

- Use a GPS device to create a map of injury sites.
- Write a grant proposal
- Design and conduct observational surveys (e.g., seat belt and child safety seat use, home surveys)
- Create an injury surveillance system

C. Pre-requisites

Applicants to the Fellowship may be tribal or IHS employees. Nominations for participation received from tribes who have compacted under the Self-Governance provisions of Public Law 93-638 will be accepted, reviewed, and selected through the routine process.

All of the following must be completed or obtained at the time of application:

1. A college degree.
2. At least 3 years experience in public health;
3. At least 2 years experience working in injury prevention activities.
4. Completion of the IHS Introduction to Injury Prevention (Level I) Course. An equivalent course (e.g., the one-week injury prevention overview course at Johns Hopkins) is acceptable.
5. Completion of either the Intermediate or Advanced IHS Injury Prevention courses (Levels II or III), or equivalent coursework.

NOTE: Please contact your IHS Area Injury Prevention Specialist to find out when core courses are offered. Area IP Specialists are listed at www.ihs.gov/MedicalPrograms/InjuryPrevention (click on IHS IP Staff)

D. Fellowship Projects

Fellowship participants are required to complete a special study related to some aspect of the injury problem among American Indians/Alaska Natives. Each Fellow is encouraged to select a topic of special interest to her or him before the Fellowship is begun, **in consultation with their supervisor and the Area IP Specialist**. Please submit a project form with your application (page 8). Projects may focus on epidemiology, program implementation, or program evaluation. Please see Appendix 2 for examples of project ideas. Abstracts of studies by former Fellowship participants can be viewed at www.injuryfellowship.org (click on “Compendium of projects”). Some funding may be available for projects from IHS Area Injury Specialists. Please discuss funding opportunities with them directly.

E. Presentations

Presentations of the results of the Fellows' studies will be given in May or June at a location to be determined. The course includes sessions on preparing presentations. The Fellows' presentations are given at the IHS Injury Prevention Specialist Fellowship Symposium before a gathering of IHS staff, injury prevention program consultants, and other guests. Each presentation is 15 minutes.

F. Mentors

Each Fellow will have both a faculty and local "mentor." Both these individuals will be available throughout the year to assist the Fellow in fulfilling their learning objectives and completing their injury prevention project. The local mentor can be an IHS Injury Prevention Specialist or a community member with experience or special expertise in the Fellow's project topic approved by the Academic Director (Dr. Larry Berger). The mentor's role is to assist the Fellow in developing a topic and study project outline, establishing timelines, meeting deadlines, and providing guidance in the design, implementation, and evaluation of the research project.

G. Time commitment

On average during the year, the Fellow's project requires 5-10 hours per week. In addition, Fellows will be attending courses away from their job sites for a total of about 6-1/2 weeks during the year. Appendix 1 shows a summary of the courses.

H. Financial support

IHS Area Offices will provide the funding for Fellowship participants' travel, per diem, and tuition for required course work, with the exception of participants from self-governance compact tribes that have taken their training shares from IHS. These tribes are responsible for paying all travel, per diem, and tuition expenses for their Fellowship participants. Financial arrangements for candidates from non-IHS agencies (e.g., state health departments, NIOSH, Coast Guard) can be discussed on a case-by-case basis.

I. Letters of interest and support

1. **Letter of interest from the applicant.** Your letter of interest should state:
 - a. Why you want to take the fellowship: why you believe this advanced training is important to you, your job, and your community; what you want to accomplish; how you might use this training in the future.
 - b. Your willingness and ability to participate in all components of the program (completing your project, attending all courses). The fellowship requires 5-10 hours per week of work related to your project and at-home activities, in addition to the 6-1/2 weeks from work to attend courses and give your presentation.
 - c. Your previous courses and training in injury prevention: names of courses and years of completion. Examples are the IHS core Injury Prevention courses (Introduction to IP, Intermediate IP, Advanced IP), IHS Injury Prevention Program Development Fellowship, and workshops for grant-writing, NHTSA child passenger safety, and IHS Tribal IP Cooperative Agreements Program training.
 - d. Your experience in injury prevention, including community or clinic-based injury

prevention: description of activities, amount of time, when (years).

2. **Letter of support from the IHS Area IP Specialist.** The letter should discuss the applicant's qualifications and ability to complete the Fellowship work, including completion of an individual project. The letter should state that the Specialist supports your applying to the Fellowship; supports your project idea; and will be available to assist you in working on your project.
3. **Letter of support from the applicant's supervisor.** The letter should state why the applicant is a good candidate for the fellowship and why the training will be of value. The supervisor needs to **state that she or he knows the time commitment involved (6 weeks + 2 days time away for courses, 5-10 hours per week for project activities) and will allow the applicant to fully participate in all components of the fellowship.** Letters for applicants from compacted tribes that have obtained their training shares from IHS should agree to bear the expenses associated with the Fellowship program.

J. Approximate Timeline

- *December of year before program starts:* Complete applications due
- *January of the year the program starts:* Program participants notified
- *May or June of the year the program starts:* First course

K. Contact information:

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Appendix 1

Epidemiology Fellowship Course Summary

Pre-course 1:

1. Identify personal learning objectives.
2. Explore project options with the Area IP Specialist and others.

A. Injury Prevention Project Development: ?

This 4-day course focuses on the design of quantitative injury prevention projects, including a review of epidemiologic approaches (case-control, cohort, etc.), ethical issues in data collection and publication, and conducting a literature review.

Learning Outcomes:

- Create a project plan that outlines hypotheses and study questions, methods, necessary approvals, and a project timeline. Identify resource persons; assign mentors.
- Conduct a preliminary literature review using the Internet.
- Describe similarities and differences between individual- and community-based institutional reviews of proposed projects.
- Overview of key concepts.
- Identify the process of approvals for individual tribes and the IHS.
- Review Fellows' learning objectives.
- Describe components of a comprehensive injury program

B. Graduate Summer Session in Epidemiology: U. Michigan, Ann Arbor

Fellows will attend four courses offered during the 3-week Summer Session in Epidemiology at the University of Michigan. Relevant courses offered in 2006 include "Epidemiology of Injury and Violence", "Epidemiology in Public Health Practice", "Public Health Surveillance", "Geographic Information Systems for Epidemiology," "Social Epidemiology", "Successful Scientific Writing," "Planning, Delivery, and Evaluation of Community Based Interventions for Behavioral and Social Change" and "Principles and Applications of Epi Info."

College credit available

Learning Outcomes:

- Identify the primary risk factors and vulnerable populations for leading causes of injury deaths among Native Americans.
- Describe the process of conducting an epidemiological investigation of an injury problem in a community.

C. Field Course: ?

This 5-day course is designed for Fellows to enhance skills in conducting field work in injury prevention. Fellows work in teams to address issues identified by the host Tribal Nation and IHS Tucson Area staff. Findings and recommendations will be presented to Tribal leaders and IHS Area staff at the conclusion of course.

Learning Outcomes:

- Describe major injury issues facing the Tucson Area.
- Use a GPS device to obtain coordinates.
- Explain at least 3 ways GIS has been used to promote environmental health and injury prevention.

- Use digital photography to document injury hazards and programs.
- List the steps in organizing and conducting a focus group.
- Prepare and administer a structured questionnaire for key informant interviews.
- Describe the usefulness and challenges of working within a team with a fixed deadline.
- Prepare a group presentation and written report for Tribal members.
- Review individual projects.

D. Oral and written presentations, marketing, and resource development: ?

This 5-day course is designed for Fellows to enhance their skills in oral presentations and report writing; identifying and applying for sources of funding; and marketing injury prevention programs in their communities.

Learning Outcomes:

- Prepare an oral presentation using Powerpoint
- Create a written project abstract suitable for submission to conferences and publications
- Identify the steps in submitting an article for publication
- Locate sources of funding for injury prevention projects
- Identify common errors in proposal-writing
- Explain the difference between internal and external marketing of programs
- Review individual projects.

E. Fellowship Symposium: location to be decided

During this 2-day session, Class of 2007 Fellows present their year-long projects before IHS headquarters and Area staff, and Tribal leaders. They also participate in a Symposium practice session, where their presentations will be constructively critiqued by their peers and IHS staff; and visit national agencies and organizations whose focus is injury prevention.

Learning Outcomes:

- Identify strengths and weaknesses in oral scientific presentations.
- Present a 12-minute summary of their year-long injury prevention projects before a national audience.
- Describe the mission, goals, and objectives of at least two national-level injury prevention programs.

Locations subject to change.

Appendix 2

Examples of Project Ideas: Revised August 25, 2006

Epidemiology, surveillance, cost data:

1. Contract care: IHS spends millions of dollars each year on contract care. Which Areas receive E-codes and cost information about injuries from contract care facilities? Why don't all areas? What could be done to make E-code and cost information a requirement for payment?
2. Falls from pickups: At some Tribes, more than half of family vehicles are pick-up trucks. What are the circumstances of injuries resulting from falls from these trucks? What are the ages (need observational data for denominators), position in the cargo area, times of year, purpose of trips, configuration of the cargo areas (carrying water tanks? empty?) when injuries occur? Conduct observation of pick up use: numbers, purposes of pickups – what and who are in cabins, rear beds? Extended cabs?
3. Cost of injuries, especially to smaller Tribes. Compacted vs. non-compacted Tribes.
4. Assaults: The Department of Justice has statistics on crime and American Indians. I think the data is very inaccurate, for many reasons. Your project would be to track down how the data was collected, what denominators are used, what proportion of tribal police departments report crime statistics to the national data center (perhaps by doing a mail or email survey of police chiefs), etc. This would be an epidemiology project, involving surveillance techniques, case definitions, validity of numerator and denominator data.
5. Severe injury surveillance: Leon Robertson helped IHS create an injury surveillance approach. How well is working? How might it be improved?
6. Methamphetamine and injuries: What is the national data/literature on the association? What do we know about the situation in Indian country?
7. CQI and the Area IP Programs: work with Area IP Specialist to build on the UNC Area Evaluation, designing a CQI approach that might be replicated at other Areas in the future.
8. Intentional injury data: What are existing data sources? How reliable and complete are they? How can data collection be improved?

Community interventions:

1. DWI: Where did motor vehicle injury victims (or DWI offenders) get their alcohol? Beer purchases at a package store off-reservation? Bootlegged wine? Bars? What recommendations for control might result from this information?
2. DWI: What alternatives to jail might be feasible for DWI offenders? Would the ignition interlock approach be a feasible one? New Mexico just passed a law on ignition locks, including funding for low-income DWI offenders. What are the costs, political issues, and community acceptability issues? What might focus groups suggest?

3. DWI: Victim Impact Panels (VIP) have mixed results in reducing repeat DWI. Could the VIP concept be expanded by 1) having offenders sign a contract with victims regarding treatment, rehabilitation and/or 2) having one or more follow-up meetings (say in 6 or 12 months) to see if the offender has changed anything?

4. Advocacy: What is the process for getting new regulations or programs approved by the Tribal Council in your community? What are the official procedures and the unofficial considerations? Can you apply what you learn by trying to pass an injury-prevention-related resolution or regulation?

5. Diabetes and injuries: People with diabetes are at increased risk for injuries. Eye problems, impaired mobility, and decreased sensation are 3 risk factors for falls, burns, and other injuries. How can injury control efforts be incorporated into on-going programs for people with diabetes? A case-control study would help identify specific hazards.

6. Distance learning: What are the distance learning opportunities in injury prevention and how can we best assess them for the fellowship? What would graduates of the fellowship program recommend?

7. Justice and law enforcement: Status of laws/police training and staffing/judges and courts in Indian country.

8. Aquanet inhalant abuse: Why not other hair sprays? Possible interventions?

9. Child maltreatment: What would be a comprehensive model for prevention, identification, and treatment of child abuse and neglect? What components of this model are working in your community and which are not? What would be recommendations for improvement?

10. Child maltreatment: Johns Hopkins has a home visiting program for teen parents in Whiteriver and the Navajo Nation. How well has this program worked? How can it be generalized to other communities?