

**ID: 33816855**

**Maternal and Child Health, Injury - Host Site Description**

**Washington State Department of Health**

**Assignment Location:** Tumwater, US-WA  
Washington State Department of Health  
Office of Health and Science

**Primary Mentor:** Maayan Simckes, PhD, MPH  
Senior Epidemiologist, Population Survey Supervisor  
Washington State Department of Health

**Secondary Mentor:** Amanda Tjemsland, MPH  
Senior Tribal Epidemiologist  
Washington State Department of Health

**Work Environment**

Hybrid

**Assignment Description**

The AEF Fellow will be housed in the Center for Epidemiology Practice, Equity, and Health Assessment (CEPEA) in the Office of Health and Science (OHS) under the agency's State Epidemiologist for Policy and Practice. Their primary mentor will be the Population Survey Supervisor and secondary mentor will be the Senior Tribal Epidemiologist. Each of these senior epidemiologists sits on the leadership team of CEPEA but also on two separate teams, affording the fellow the chance to engage with two core groups of colleagues.

CEPEA provides agency-wide expertise in epidemiologic and biostatistical methods, often offering coordination and support to agency divisions and teams. Though the position is formally labeled as mental health/substance use and maternal and child health, the projects described below are broadly crosscutting and will allow the fellow to work with epidemiologists with expertise in a variety of areas, including Tribal public health, injury and violence, environmental health, and communicable disease.

The range of projects the fellow will be able to work on will provide them with the chance to develop high proficiency in core applied epidemiologic competencies. Day to day, we anticipate variability depending on the projects the fellow has underway at the time. We envision the fellow being engaged in more than one project at a time, allowing them to experience the reality of being an applied epidemiologist. One day the fellow might spend a few hours getting to know a particular surveillance system followed by a collaborative work session with a multi-agency team focusing on improving adolescent injury prevention. A different day, the fellow might provide support on a cluster investigation, meet with agency leaders to present results on a new Tribal mental health report they developed, and begin analyzing a new dataset.

**Describe Statistical and Data Analysis Support, Such as Databases, Software, and Surveillance Systems Available to the Fellow**

The fellow will be provided with all basic software needed to conduct their work, including the analytic software of their choosing. If needed, they would be provided with access to programs such as Stata, SAS, R, NVivo, Atlas.ti, StatTransfer, EndNote, ArcGIS, or JoinPoint. They will complete an employee onboarding that will introduce them to various other tools and resources available to DOH staff. They will also have access to a Public Health Digital Library to allow them to download any scientific literature needed to support their work.

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Data for analytic projects will be made available depending on the final projects the fellow settles on with their supervisors. This could include line-level data for datasets such as BRFSS, Healthy Youth Survey, PRAMS, birth and death data, birth defects surveillance, home visiting, hospital discharge, health outcomes and clinical datasets, syndromic surveillance, environmental health, COVID-19, and others.

### **Projects**

#### **Surveillance Activity Title: Establishing Surveillance Best Practices for Socioeconomic Status and Examining Mental Health Outcomes among Adolescent Washingtonians**

##### *Surveillance Activity Description:*

Adolescent health is often assessed through clinical records alone. However, traditional clinical records generally fail to capture social determinants of health. These are most commonly assessed on surveys, making population-wide surveys, such as Washington's Healthy Youth Survey (HYS), a critical surveillance system for 12-18-year-olds. The fellow will use numerous methods for assessing socioeconomic status (SES) among youth, and they will design and implement an analytic plan to explore the relationship between SES and mental health outcomes. They will specifically focus on identifying differences across subgroups of youth and will work with internal programs to ensure the analysis plan supports program, policy, and evaluation needs. The fellow will also provide guidance to the HYS planning committee regarding the utility and reliability of these SES indicators to inform future survey planning.

##### *Surveillance Activity Objectives:*

###### **Objectives:**

- Gain familiarity with surveillance of SES and mental health outcomes among youth in WA
- Explore the relationship between SES and mental health outcomes among WA youth
- Support improved surveillance in these areas for WA

###### **Deliverables:**

- Develop a report on current surveillance methods for SES, including comparison of different methods and design recommendations for SES surveillance best practices for the HYS age group and cautions
- Develop and implement an analytic plan to identify health inequities related to the intersection of SES and mental health among youth

##### *Surveillance Activity Impact:*

As a key driver of health, SES receives remarkably little attention in the public health practice sphere. Yet, the literature is clear that adverse experiences in childhood, such as exposure to housing and food insecurity, can contribute to poor health outcomes later in life. Growing literature shows that the impacts of ACEs can also arise sooner, like in the mental health of adolescents. Through this project, the fellow will help to ensure effective surveillance of SES among Washington youth that will inform a broad range of programs, policies, and initiatives designed to improve adolescent health now and support health and wellbeing into the future.

#### **Surveillance System Evaluation Title: Law Enforcement and Criminal Legal System Epidemiology**

##### *Surveillance System Evaluation Description:*

Surveillance of law enforcement involved injuries and fatal encounters (LEIFE) was recognized as a priority by CSTE in 2022 and is an area of statewide interest in Washington. WA DOH is piloting a new surveillance process to track these encounters and related outcomes in partnership with CSTE and several other jurisdictions across the country. The fellow will join the WA DOH Steering Committee for this work and take on a primary role in all stages of the surveillance process. They will have the chance to learn about diverse data systems, data linkage, case definition application, data cleaning, data translation and presentation, communications, and external cross-disciplinary partnership. In particular,

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we anticipate the fellow will play a leading role in the pilot efforts to expand to non-fatal encounters and in building collaborations with Tribal partners. The fellow will be asked to lead the surveillance system evaluation of the new LEIFE surveillance process in WA, which will have a critical impact on if this work is supported going forward.

#### *Surveillance System Objectives:*

##### Objectives:

- Explore current methods in LEIFE epidemiology
- Build familiarity with LEIFE related data systems, both internal and external
- Contribute to agency expansion of LEIFE surveillance
- Conduct a surveillance system evaluation of fatal, non-fatal, or both forms of LEIFE to determine if ongoing implementation of the new methodology is worthwhile for WA DOH to continue

##### Deliverables

- Contributions to the LEIFE Surveillance Steering Committee at WA DOH
- Analysis and report of relevant and available data to be shared internally
- Conduct a surveillance system evaluation, including the standard components of such an evaluation, of either fatal, non-fatal, or both aspects of the news system
- Develop a conference abstract and/or a peer-reviewed manuscript
- Support presentations and reporting to external partners, including the Governor's Office

#### *Surveillance System Impact:*

Law enforcement epidemiology was identified as a CSTE Presidential Priority in 2021, though intentional surveillance of law enforcement encounters within public health remains relatively rare, despite the 2022 adoption of a new CSTE Position Statement on this subject. The fellow's contributions will help support Washington's expanded efforts to address the health inequities related to differential policing and the criminal legal system and its participation in a national workgroup hosted by CSTE. Their contributions will also inform current and new interdisciplinary partnerships between DOH, state agency partners, local organizations, and law enforcement, all directed toward reducing the adverse health effects associated with negative exposure to law enforcement and criminal legal system involvement.

### **Major Project Title: Inaugural CWS Reporting for Young American Indian and Alaska Native Families**

#### *Major Project Description:*

The Child Wellness Survey (CWS) is a survey for families with children aged 6 months to 11 years across Washington state that started in 2024. It is one of the four population surveys that is led by WA Department of Health and explores how families are doing by asking about the health and development of their child, access to childcare, and other topics. The sample for this first round of the CWS uses a novel strategy to create within region strata that includes targets for non-mutually exclusive race and ethnicity groups. The purpose of this strategy is to create a sample which is more balanced with respect to 'alone or in combination' (AOIC) race/ethnicity groups than would be created by stratifying solely on single race mutually exclusive groups.

There's a lot of interest in using survey data to understand how each race and ethnicity group is faring, especially for the AIAN AOIC group. Through this project, the fellow will help expand FPHS(?) or DOH's understanding of the young AIAN families across WA state. This project will prioritize the voices and perspectives of AI/AN communities, ensuring the data is relevant and respectful of cultural contexts. This report will also help AIAN communities make informed decisions based on their specific needs and priorities in our state.

The ideal report will be presented in a clear, accessible manner, using visual aids such as infographics to make the information more understandable for community members and advocates.

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*Major Project Objectives:*

Objectives:

- Collaborate with the HYS team working on the AIAN report to understand the AIAN reporting model drafted for HYS reporting
- Under guidance of the CWS team and Tribal partners, apply the HYS reporting guidance for AIAN data from CWS.
- Share the preliminary reporting framework and findings with partners including CAG.

Deliverables:

- Develop a report to highlight the key findings for AIAN communities.
- Share findings with Tribal partners and other internal and external partners.

*Major Project Impact:*

This report will be the first of its kind for the new CWS and will include highlights of AIAN communities in WA through their data. Key takeaways from this report can be used to help elevate Tribal needs, challenges and well as highlight the communities' strengths that are identified in the data.

**Additional Project #1 Title: Emergency Notifications for Tribal Nations**

**Project #1 Type: Major Project**

*Project #1 Description:*

Tribal Nations are part of the governmental public health system of Washington state. Similar to local health jurisdictions, Tribal Nations need to be informed about traveler monitoring, outbreaks, cluster investigations, and emerging infections. DOH would like to improve upon our current process for notification of Tribes when these emergency situations arise. To improve upon our established procedure for Tribal-related notifications, the fellow will work with the State Epidemiologists (Communicable Disease and Policy and Practice) to learn about current procedures for Tribes and local health jurisdictions, collaborate with the Tribal Engagement Director in the Office of Tribal Public Health and Relations, the Office of Emergency Preparedness and Response, and the Tribal Foundational Public Health System Workgroup, and host a formal Tribal consultation to improve coordination and ensure our current procedure is appropriate for Tribal needs.

*Project #1 Objectives and Expected Deliverables:*

Objectives:

- Evaluate the current emergency notification system for Tribes.
- Plan a formal Tribal consultation to improve upon a Tribe-specific procedure for emergency notification.
- Finalize a procedure for notification of Tribes.

Deliverables:

- Present on the refined procedure at Tribal public health meetings include the Northwest Portland Area Indian Health Board meeting, the American Indian Health Commission meeting, and the Tribal Foundational Public Health Services workgroup.
- Establish Tribal points of contacts for notifications and obtain necessary confidentiality agreements from the points of contact.
- Develop a final report for regional distribution and to support ongoing procedure implementation.

*Project #1 Impact:*

The WA Department of Health has called out honoring Tribal data sovereignty as a key priority. By providing Tribes with the information, Tribes need to effectively respond in emergencies we are helping to uphold the Tribal data sovereignty principle of Tribes controlling their own data and its application. Collaboration between the State, Tribal Nations, and Local Health Jurisdictions is key for a coordinated response to emergencies. By ensuring DOH has procedures and points of contact in place to reach out to Tribes to notify them in emergencies, the fellow will support more timely

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communication and culturally appropriate response to these emergent situations. Tribal Nations were leaders in the COVID-19 response in Washington state; in working together on a more coordinated response we may also seek Tribe's guidance on responding to emergencies

**Additional Project #2 Title: Climate and Air Conditioning Access among Washington Adults**

**Project #2 Type: Surveillance Activity**

*Project #2 Description:*

Across Washington, air conditioning access is not very common, especially compared to other parts of the U.S. where it's almost everywhere. In 2023, WA added questions related to air conditioner access and use to the BRFSS for the first time. However, no statewide analysis has been conducted yet on the available data. The fellow would be tasked with not only conducting basic descriptive analyses of the prevalence of air conditioning access and use across geographic areas, but also designing an evaluation strategy that includes reviewing both static and potentially modifiable risk factors that could be addressed through appropriate policies and programs, such as socioeconomic status, occupation, housing security, and more. This project would be used to inform intradepartmental efforts to evaluate readiness for extreme weather events and could help prepare the fellow to participate in particular incident management activities during heat-related events.

*Project #2 Objectives and Expected Deliverables:*

Objectives:

- Design an analytic plan and conduct descriptive and inferential statistics using data from Washington's air conditioning question module on the BRFSS
- Identify subpopulations within the state who are most at risk for heat-related outcomes
- Establish a baseline of air conditioning usage and occupational risk of exposure to extreme heat

Deliverables:

- Draft a report on the baseline assessment of climate change and air conditioning usage statewide
- Present findings to staff who work in environmental and occupational health and in preparedness and response in Washington
- Create communication materials on key findings from the first years of Washington's air conditioning question module

*Project #2 Impact:*

In Washington state, the conversation around climate, health, and wellbeing is active. This project will introduce the fellow to the concept of environmental justice through practical analytic methods with an opportunity to have meaningful impact on internal programs and statewide policy. While preliminary data has indicated that prevalence of air conditioning usage has increased in Washington State over the last decade, changes to environmental conditions increase Washington's likelihood of experiencing extreme heat events. In recent years, we have seen disproportionate impact of these events on some populations over others. Understanding the pattern of air conditioning access and use will help our state, local, and Tribal partners further prepare for the complexities of these extreme weather events.

**Additional Project #3 Title: Population Survey Administration and Data Lifecycles**

**Project #3 Type: Surveillance Activity**

*Project #3 Description:*

The fellow will be co-housed with the Population Survey Team and will have the chance to contribute to the operation of three population surveys that collect information on the wellbeing of Washingtonians ranging from 6 months through adulthood. Each survey operates differently and is run by a team of two people. The fellow will spend a portion of time with each team throughout their fellowship years, learning about different kinds of survey administration cycles and

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contributing to their success. They may support revising new questions, meetings with partners, trainings for data users, or data cleaning and dataset preparation. Throughout their time with these teams, the fellow will work with the Population Survey Team supervisor and survey methodologist to identify opportunities for cross-survey standardization, streamlining, life course analysis and reporting, Tribal data sovereignty expansion, and more. This project will be limited only by the fellow's creativity!

*Project #3 Objectives and Expected Deliverables:*

Objectives:

- Develop understanding of the use of population surveys in public health practice
- Contribute to the implementation of population surveys
- Participate in epidemiologic methods discussions and problem solving
- Identify projects and innovations that can advance the team's efforts

Deliverables:

- Contributions to the overall survey administrations
- Present themes and findings to the broader team at bi-weekly team meetings, as appropriate
- Propose a life course analytic project and conduct an analysis to be submitted either as a conference abstract or manuscript

*Project #3 Impact:*

Population Surveys are a critical surveillance tool for public health, academic, and government agencies across the state of Washington to understand the health and wellbeing of the population. The fellow's contributions will be part of this foundational public health work and will allow them the chance to learn translatable skills that can be applied in future work on other statewide or broad population surveys. The epidemiologic experience they bring to the Population Survey Team will bolster efforts to further advance methodologic processes while providing additional epidemiologic capacity that is greatly needed at all stages.

**Additional Project #4 Title: Guidance on Data Linkage Project and Race/Ethnicity Data Quality Improvements**

**Project #4 Type: Major Project**

*Project #4 Description:*

DOH has been working for over ten years now with the Northwest Tribal Epidemiology Center on utilizing Indian Health Services data through data linkages to improve our data quality on American Indian/Alaska Natives. However, while some data systems have incorporated this data, they do not do it uniformly and other systems have not yet begun. After conducting a thorough review of existing processes and systems, the fellow would be responsible for developing new standards and best practice guidance on the integration of enhanced race/ethnicity data, coordinating with data stewards, Tribal public health leaders, and the Northwest Tribal Epidemiology Center.

*Project #4 Objectives and Expected Deliverables:*

Objectives:

- Evaluate the current methods of the different data systems for incorporating linked data.
- Create guidance documents on how data stewards and their teams should incorporate the linked data into their data systems.

Deliverables:

- Submit an abstract to a conference on impact of linkage work on improvement in the quality of race/ethnicity data across DOH data systems.

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*Project #4 Impact:*

The data quality of race/ethnicity data is key to addressing health disparities. The race category of American Indian/Alaska Natives is generally considered of poor quality due to underreporting, misclassification, and other data collection issues. Therefore, using more than one source to determine the racial categorization of American Indian/Alaska Native can improve the data quality and help to better identify health disparities. Standardizing how this linkage work is integrated into DOH data systems will help other data systems who are interested in this improvement and help DOH to understand how the linked data has improved the data quality of their data systems overall.

**Please Describe the Fellow's Anticipated Role in Preparedness and Response Efforts – Include Activities and Time Allocation (Required Competency of Fellowship)**

We will explore with the fellow the current landscape of emergent health events of interest statewide so that we can identify an area where they can meaningfully contribute and not simply plug into a role that does not interest them. Here are some possible ways a fellow might achieve this required competency in preparedness and response, but this is by no means an exhaustive list. The Division of Emergency Preparedness, Resilience, and Recovery is quite active during summer fire season and the fellow could be involved in the agency's Incident Management Team supporting that response effort or in other activities that arise throughout the year in the wake of emergent disasters (e.g., chemical spills, natural disasters). The Division of Community Health Services also houses communicable disease and infectious disease programs, both with regular events requiring emergency response activities. This Division is colocated with CEPEA and engaging the fellow in these activities would also be an option. If the fellow has interest, there could also be an opportunity for them to support immunization strategic planning and distribution efforts within the Division of Prevention and Community Health. Time allocated to these activities will depend on the fellow's interest and agency need, while ensuring that the bulk of the fellow's time is spent addressing the rest of their required competencies.

**Please Describe the Fellow's Anticipated Role in Cluster and Outbreak Investigations – Include Activities and Time Allocation (Required Competency of Fellowship)**

The fellow would be invited to participate in a cluster and/or outbreak investigation during their fellowship. Should an interesting non-infectious disease cluster be identified, the fellow would likely work with the State Epidemiologist to conduct the investigation, develop messaging, and produce relevant materials for distribution. However, as these tend to be rarer, there are also ample opportunities for the fellow to participate in communicable disease outbreaks, including COVID-19 in non-healthcare congregate setting (e.g., fishing vessels, sports tournaments), foodborne outbreaks (both local and national), and zoonotic disease outbreaks. Depending on what is happening during the fellow's two years with the agency, we will be keeping an eye out for interesting learning opportunities and will encourage the fellow to try working on things outside of their wheelhouse.