

ID: 57549753

Maternal and Child Health - Host Site Description
Nevada Department of Health and Human Services

Assignment Location: Carson City, US-NV
Nevada Department of Health and Human Services
Division of Public and Behavioral Health

Primary Mentor: Ghasi Phillips-Bell, ScD, MS
Centers for Disease Control and Prevention Maternal and Child Health Epidemiology Assignee to Nevada
Nevada Department of Health and Human Services

Secondary Mentor: Max Moskowitz, MPH
Health Program Specialist II
Nevada Department of Health and Human Services

Work Environment

Hybrid

Assignment Description

The fellow would be assigned to the Bureau of Child, Family, & Community Wellness and largely work on projects related to Nevada's Title V MCH Block Grant priorities:

- Improve preconception and interconception health among individuals of childbearing age
- Reduce substance use during pregnancy
- Promote breastfeeding
- Promote Safe-Sleep
- Increase developmental screening
- Provide a Medical Home
- Improve care coordination among adolescents
- Increase transition care for adolescents and CYSHCN

As a team member, the fellow will contribute to regular day-to-day activities that include:

- Engage in planned projects and activities with other Division staff, national agencies, and university partners.
- Become familiar with surveillance systems in Nevada to understand the value and usefulness of data sources such as vital records and population-based national surveillance datasets to populations in Nevada.
- Use statistical software packages (e.g., SAS) to enter and clean data, and conduct descriptive and complex epidemiological analyses.
- Use Microsoft Office products to develop reports and presentations.
- Attend regularly scheduled staff/team meetings
- Attend monthly conference call meetings with the CDC MCH Epidemiology Program (MCHEP) with participation from MCHEP staff in Atlanta and MCH Epidemiology Assignees at state health departments throughout the nation.
- Complete data use agreements
- Collaborate with various stakeholders to assess the MCH needs in Nevada and identify/propose strategies for meeting those needs.
- Write original scientific manuscripts for peer-reviewed publication and data reports for online publication.

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

Statistical and data analysis support is readily available in a strong collegial fashion. Resources include:

- SAS statistical software
- JoinPoint for trend analyses
- Data from the Pregnancy Risk Assessment Monitoring System
- Publicly available national datasets such as the National Survey of Children's Health
- Vita Records (birth and death certificates)
- Exposure to data from the Supplemental Nutrition Program for Women, Infants, and Children
- NetSmart/NX data access from the Early Hearing Detection and Intervention Program
- Critical Congenital Heart Disease data reports

Projects

Surveillance Activity Title: Build the Nevada Pregnancy Risk Assessment Monitoring System (PRAMS) MCH Dashboard

Surveillance Activity Description:

This dashboard will contain MCH PRAMS survey data from a sample of mothers from Nevada with a recent live birth. PRAMS data can be used to identify groups of women and infants at high risk for health problems, to monitor changes in health status, and to measure progress towards goals in improving the health of mothers or birth parents and their infants. PRAMS data are used to investigate emerging issues in the field of reproductive health and to plan and review programs and policies aimed at reducing health problems among mothers and infants. The fellow will use PowerBI software and Nevada PRAMS data linked to birth certificate data to create the dashboard. The PRAMS survey covers a variety of topics before, during, and after pregnancy including experiences with breastfeeding, chronic and pregnancy-induced diseases (e.g. gestational diabetes), mental health (e.g., depression and substance use), infant safe sleep practices, and receiving counseling or services from health care providers. The fellow will have support for PowerBI training, if needed.

Surveillance Activity Objectives:

The objective will be to use PowerBI to build the deliverable product: a comprehensive PRAMS MCH data dashboard. This project is related to the Data Modernization Initiative priority of Accelerating Data into Action (Deeper Insights - Health Equity and Sharing More - Open Data).

Surveillance Activity Impact:

Not everyone in Nevada experiences the same opportunities to be as healthy as they would like. Tracking, measuring, reporting, and using data helps us to identify trends, pinpoint areas of concern and create community-based health solutions.

Surveillance System Evaluation Title: Evaluate the Nevada Fetal and Infant Mortality Review (FIMR) System

Surveillance System Evaluation Description:

FIMR is a statewide public health surveillance program that reviews abstractions of medical charts and summaries of interviews with parents to identify potential contributing factors to fetal and infant death. The fellow will work with supervisors to evaluate the FIMR process to determine areas for improvement and identify factors needed to make expansion successful. Currently, Nevada has one local team in Washoe County. For the evaluation, the fellow will assess the following system attributes based on guidelines from the Centers for Disease Control and Prevention: simplicity,

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flexibility, data quality, acceptability, sensitivity and predictive value positive, representativeness, timeliness, and stability.

Surveillance System Objectives:

The objective will be to evaluate Nevada's FIMR system. Deliverables are a comprehensive evaluation report, PowerPoint presentation, and possibly a survey for key informant interviews. This project is related to the Data Modernization Initiative priority of Building the Right Foundation (state and local capabilities).

Surveillance System Impact:

By identifying commonalities across cases, FIMR seeks to pinpoint areas that should be prioritized by programs that work to reduce mortality rates. Data can be used to guide policy creation and identify gaps in services, as well as the impact of demographic, socioeconomic, and local factors on infant health outcomes.

Major Project Title: Examine the impact of SARS-CoV-2 (COVID-19) infection on maternal mortality, infant mortality, and preterm birth

Major Project Description:

During the height of the COVID-19 pandemic, some researchers and other public health professionals reported a decrease in preterm birth rates, yet others reported no change. Preterm birth is a strong driver of infant mortality and other poor birth outcomes, a contributor to high medical costs, and has remained persistently high in the United States at around 10% of infants born prematurely. If there was a change in preterm birth rates in Nevada during the COVID-19 pandemic, an epidemiological analysis adjusting for confounders and examining potential effect measure modification could provide insight into possible factors or mechanisms related to the change. Analyses using data from vital records (birth and death certificates) would be replicated for infant mortality and maternal mortality in Nevada.

Major Project Objectives:

The objective is to use vital records data from Nevada and multivariable regression analyses to examine whether rates of maternal and infant outcomes in Nevada were different during the COVID-19 pandemic in 2020 compared with 2017-2019. Expected deliverables are a manuscript and conference abstract/presentation. This project is related to the Data Modernization Initiative priority of Accelerating Data Into Action (Sharing More Open Data and forecasting and outbreak analytics).

Major Project Impact:

The findings will help Nevada better understand how outbreaks can adversely impact maternal and infant outcomes and inform response to future outbreaks or epidemics.

Additional Project #1 Title: Evaluate the Nevada Early Hearing Detection & Intervention (EHDI) Surveillance Data System

Project #1 Type: Surveillance System Evaluation

Project #1 Description:

The purpose of the EHDI Program is to ensure all children in Nevada are screened for hearing loss at birth and those identified with hearing loss receive timely and appropriate audiological, educational and medical intervention. Hospitals are responsible for sharing screening data with the health department; however, there have been issues with consistent and timely submission of completed records into an electronic database that the health department oversees. Historically, the solution has been to manually merge medical records with key identifiable maternal data into SAS statistical software on a monthly basis and subsequently import that merged file into an online vital records database.

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To make this process more efficient, a new system has been introduced that will automatically merge and resolve the presence of duplicate records. For the evaluation, the fellow will assess the following attributes of this new system based on guidelines from the Centers for Disease Control and Prevention: simplicity, flexibility, data quality, acceptability, sensitivity and predictive value positive, representativeness, timeliness, and stability.

Project #1 Objectives and Expected Deliverables:

The objective will be to evaluate the Nevada EHDI surveillance system. Deliverables are a comprehensive evaluation report, PowerPoint presentation, and possibly a survey for key informant interviews. This project is related to the Data Modernization Initiative priority of Building the Right Foundation (state and local capabilities).

Project #1 Impact:

Hearing loss is the most common birth defect, affecting approximately two out of every thousand infants. Left undetected, hearing loss in infants can negatively impact speech and language acquisition, academic achievement, and social and emotional development. When diagnosed early, however, these negative impacts can be diminished and even eliminated through early intervention.

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

The fellow can work with our Public Health Preparedness team to identify the needs, barriers, and challenges of ensuring durable medical equipment (DME) and Access and Functional Needs are available to children in need, particularly in rural areas, during power outages or other reasons that may disrupt access. Also, develop and share educational emergency response content (e.g., flyers, website) on active outbreaks, for example immunization information specific to MCH populations. The MCAH and public health preparedness office work collaboratively to ensure the readiness of pods (i.e., trailers filled with equipment such as breast pumps, personal protective equipment, water filters, etc.) are including items specific to MCH population-specific needs. The amount of time allocated will depend on the project but can range from a few days to a few months.

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

Nevada experiences several outbreaks each year providing the fellow with a variety of potential opportunities for participation, according to their interests, over the two-year fellowship. The Office of State Epidemiology (OSE) is within our Division and we partner with OSE on urgent public health matters pertaining to maternal and child health, such as the ongoing outbreak of syphilis and congenital syphilis. Activities may include field work, conducting analytic projects, and developing communication materials to support efforts. The amount of time allocated will depend on the project but can range from a few days to a few months.

Please Describe the Fellow's Anticipated Role in the COVID-19 Response – Include Activities and Time Allocation

While we have low COVID-19 infection rates for pregnant people, we continue to share materials from technical bulletins to widespread messaging to providers and the public and work to address gaps in immunizations. The fellow will likely not have a major role in the COVID-19 response but we will encourage their attendance at webinars or any educational opportunities that may be of interest to the fellow.

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Please Describe Opportunities for Fellows to Work in Health Equity as well as Incorporating Diversity, Equity, and Inclusion into their Work

According to the American Public Health Association (APHA), health equity is when everyone has the opportunity to attain their highest level of health. The Nevada Title V MCH program works to center equity in all efforts, recognizing that to advance health equity, we must address structural and social determinants of health, including race/ethnicity, gender, employment, housing, education, public safety, and access to care. The fellow will have opportunities to infuse health equity into all projects.