Maternal and Child Health

Oregon Health Authority, Public Health Division, Maternal and Child Health Section
Portland, OR

Assignment Description

The MCH Epidemiology Fellow will be part of the Maternal and Child Health Section in the Center for Prevention and Health Promotion. This location allows for a wide range of projects because of the breadth of programs and associated surveillance, administrative, and research data available. In addition to working with Maternal and Child Health, sections the fellow may have the opportunity to partner with include Health Promotion and Chronic Disease Prevention, Adolescent, Genetic and Reproductive Health, Injury and Violence Prevention, Breast and Cervical Cancer Prevention, Oral Health, Immunization, and Women, Infants and Children (WIC).

The primary mentor for the fellow will be Dr. Suzanne Zane, the MCH Epidemiologist for the Oregon Health Authority. The secondary mentor will be Maria Ness, the Title V Research Analyst for the Maternal and Child Health Section. They will develop a fellowship that addresses the CSTE program design and the professional interests of the fellow, and builds on the strengths of the section and staff. Additional resources include Dr. Katrina Hedberg, State Epidemiologist and Dr. Paul Cieslak, Chief Science Officer for communicable diseases. The partnerships between the Oregon Health Authority and nongovernmental agencies provide unique access and support across multiple programs.

The Oregon Health Authority has strong connections with local academic institutions including the public health faculties of Oregon Health & Science University (OHSU), Portland State University and Oregon State University. Many Oregon Health Authority staff have appointments at these universities. Local academics often use Oregon PRAMS data for their research. In addition, Oregon has a Life Course Research Network of public health professionals and academics who investigate the fetal origins of disease and epigenetics.

Oregon has hosted five MCH Epidemiology Fellows since 2001. The MCH Epidemiology Fellow will be located in the Assessment & Evaluation Unit of the MCH section and will have the opportunity to work across all programs.

Day-to-Day Activities

Work will include learning about the complementary roles of state and local programs, surveillance systems in public health, program and surveillance system evaluation, survey design and methods, outbreak investigation, emergency preparedness, and study design and data analysis for presentations and publications. The Oregon Title V program has identified well woman care, breastfeeding, child physical activity, adolescent well visits, CSHCN medical home, CSHCN transition to adulthood, oral health, tobacco, toxic stress and trauma, food insecurity, and culturally and linguistically responsive services as our priority needs for the next 5 years.

The Fellow will work on 3-5 projects at any particular time. Prioritization will be developed by the Fellow and supervisors in accordance with the needs of the Fellow's education and the Title V
program. The Fellow will always have direct access to either the primary or secondary mentor in the immediate work environment.

**Potential Projects**

**Surveillance: Breastfeeding Exclusivity and Duration Activity**

Oregon consistently has one of the highest breastfeeding initiation rates in the U.S., however sustaining high rates of breastfeeding exclusivity and duration is the primary challenge in the state. Additionally, there is great variability in rates between different racial/ethnic groups. Oregon PRAMS and PRAMS-2 (a follow-back survey that re-interviews PRAMS respondents when the child is 2 years old) both ask questions about breastfeeding exclusivity and duration, in addition to other breastfeeding related questions, such as prenatal breastfeeding education, breastfeeding experiences at delivery hospitals, and infant feeding practices. By analyzing this data, we hope to gain a better understanding of ways to promote extended exclusivity and duration of breastfeeding.

**Surveillance: Oregon Birth Anomalies Surveillance System Evaluation**

Description: Oregon began its first birth defect surveillance system in 2013, utilizing linkage of administrative data (Medicaid claims, Hospital Discharge Data, and Birth Certificates) in order to determine the prevalence of 12 core birth anomalies. In 2016, we obtained a 4 year CDC grant to expand and provide quality assurance for BASS by increasing the number and types of data sources, expanding to 50 anomalies for surveillance, and including active surveillance for quality assurance related to congenital heart defects.

The CSTE Fellow would evaluate BASS based upon the CDC Updated Guidelines for Evaluating Public Health Surveillance Systems (MMWR, 2001), utilizing modalities best suited for this particular surveillance system. For example, stakeholders to engage in the BASS evaluation will include external partners on the BASS Steering Committee, who represent a diverse array of interests, ranging from specialty clinicians to March of Dimes to families with a child affected by a birth anomaly. The evaluation report and communications materials will include financial and other costs of any changes to the system that may be recommended, roles of partners, and ways in which recommendations of the evaluation can best be implemented by both the MCH Section and through partnerships.

**Major Project: Toxic Stress/Adverse Childhood Events (ACEs)**

Children who are exposed to toxic stress and trauma are at increased risk for mental and addictive disorders as well as learning deficits, which in turn can contribute to academic failure, compromised occupational achievement, lower socioeconomic status, and health problems. Without effective support and intervention, the risk increases for inter-generational exposure to toxic stress and trauma, creating a cycle of self-reinforcing mechanisms that undermine population health and well-being.
In Oregon, toxic stress and ACEs can be examined using a variety of data sources. PRAMS and PRAMS-2 both include questions on maternal stressful life events, including intimate partner violence, and maternal social support, which can be a protective factor for toxic stress. Child experience of ACEs can be examined using data from the National Survey of Children’s Health, in addition to supportiveness of neighborhoods, and parental social support. Past experiences of ACEs among adults and parental social support can be examined using data from the Behavioral Risk Surveillance System. In conjunction with the primary and secondary mentor, the Fellow would have the opportunity to develop a toxic stress/ACEs research project based on their particular interests.

**Surveillance Cultural and Linguistically Responsive Services**

Activity

The principal national standard for culturally and linguistically responsive services is: Provide effective, equitable, understandable and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy and other communication needs. This topic can be explored using a multitude of data sources, including: racial discrimination and culturally competent health care from the National Survey of Children’s Health, discrimination in health care and other settings from PRAMS, adolescent harassment from Oregon Healthy Teens (the Oregon Youth Risk Behavior Survey), and ratio of clients eligible to clients served using programmatic data from MIECHV and other home visiting programs. The Fellow could work in partnership with Title V staff to determine the most useful analysis.

**Additional Mental Health Issues in Women of Reproductive Age**

Project

Increased awareness among providers around perinatal depression is a priority in Oregon for improving screening, referral, and treatment. There is a lack of data in our state pertaining to a broader range of mental health issues in women of reproductive age, and to the prevalence of these issues in women in the perinatal period.

Oregon’s All Payers data contains both inpatient and outpatient claims data including Medicaid and private insurance, thereby providing a more representative picture of Oregon women than does Medicaid alone. MCH has not previously made use of this data source, which cannot be linked to other data sets. The Fellow will explore the use of All Payers data as a means of describing mental health issues in women ages 15-44, and determine whether it can also be used without linkage to describe the prevalence of perinatal mental health issues. This will provide MCH with a data-driven basis for formulating policy around mental health screening and referral for preconception and interconception well-woman visits.
**Preparedness Role**

The Fellow will: (1) work with Emergency Preparedness staff to incorporate the Maternal and Child Health focus into disaster planning and exercises (a large focus of disaster planning in Oregon pertains to a Cascadia subduction zone earthquake); (2) work with MCH staff to include emergency preparedness awareness in existing programs, particularly case management and home visiting for perinatal women and young children; and 3) take emergency preparedness training.

**Additional Activities**

As the Oral Health Unit is embedded in our MCH Section, our Fellow will have the unique opportunity to learn about oral health surveillance activities, including the Oregon SMILE survey among a school-based representative sample of 1st, 2nd, and 3rd graders, which also includes a BMI component. Other areas of learning content include 1) child dental sealant programs around the state, 2) pilot programs in which advanced-practice dental hygienists provide care to populations without other access to needed dental care (including tribal nations), and 3) the intricacies of public water system fluoride supplementation efforts in a state where supplementation has been politicized.

**Mentors**

**Primary**
Suzanne Zane, DVM, MPH  
Maternal and Child Epidemiologist/CDC Division of Reproductive Health MCH Epi assignee to Oregon

**Secondary**
Maria Ness, MPH  
Title V Research Analyst