

## **Maternal and Child Health**

### **Oregon Health Authority, Public Health Division**

Portland, Oregon

#### **Assignment Description**

Overview of the Fellow's assignment including description of fellow's placement in division or department and responsibilities of the division/department:

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 the Maternal and Child Health Section, which also includes Oral Health across the lifespan, the fellow may have the opportunity to partner with other sections within the organization including: Health Promotion and Chronic Disease Prevention; Adolescent, Genetic and Reproductive Health; Injury and Violence Prevention; Environmental 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 Public Health Division. 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 Public Health Division and nongovernmental agencies provide unique access and support across multiple programs.

The Public Health Division 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 doctoral level staff members at the Public Health Division have appointments at these universities. Local academics often use Oregon PRAMS data for their research. In addition, multiple public health professionals and academics have interest and work in the fetal origins of disease and epigenetics.

Oregon hosted five CSTE MCH Epidemiology Fellows since 2001 under the previous MCH epidemiologist. 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, Children with Special Health Care Needs (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 duration of the fellowship. The fellow may be also be involved in the planning for state priorities for the next Title V Block Grant cycle.

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 access to either the primary or secondary mentor (typically both) in the immediate work environment.

A typical day might include a key project team meeting, working through the steps of an analytic plan with their mentor, drafting a data use agreement for access to data and permission to perform a data linkage, sitting down with a health communicator/educator to outline a data and policy fact sheet, and/or providing input on priority items for strategic planning.

## **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 (BASS) Evaluation**

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, supportiveness of neighborhoods, and parental social support can be examined using data from the National Survey of Children's Health, in addition to. 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 would work in partnership with Title V staff to determine the most useful analysis.

**Additional      Evaluation of a maternal and child health services program  
Project**

The CSTE fellow would work with the MCH Nurse Team and other MCH staff to design and implement an evaluation study of an MCH services or home visiting program. The evaluation may include a study of program implementation processes and/or of program effectiveness in improving outcomes. Programs needing evaluation include

- 1)      Babies First! is Oregon's public health nurse home visiting program for children ages 0 to 5 with health and social histories that put them at risk for poor health and development outcomes. Working within a public health model, nurses in 34 counties provide over 25,000 home visits to more than 8,000 high-risk infants and children each year. The Oregon Public Health Division's MCH Nurse Team sets standards and guidelines, providing training and technical assistance to support local health department nurses.
  
- 2)      Oregon MothersCare provides prenatal needs assessment appointments at no charge and includes streamlined and coordinated intake and/or referral to prenatal care, Oregon Health Plan (Medicaid) application assistance, dental care, WIC, and home visiting services.

