

Maternal and Child Health,

Louisiana Department of Health, Office of Public Health, Bureau of Family Health

New Orleans, Louisiana

Assignment Description

The Bureau of Family Health works to promote optimal health for all Louisiana women, children, teens and families. Key activities include provision of reliable data to monitor health and inform programs and policy, provide preventive and educational services to promote optimal health, and partner with communities, government, and academia to advance common goals. Major areas of focus include efforts to prevent infant deaths and preterm and low birth weight births; promoting preconception health and prenatal care during pregnancy; ensuring quality family planning services, including access to long acting reversible contraceptive methods; promoting healthy nutrition and breastfeeding; preventing childhood injuries and fatalities such as those due to motor vehicle crashes, drowning, falls, fires, and child abuse or neglect; promoting safe sleep and reducing risk factors for Sudden Unexpected Infant Death (SUID); and bridging public health with community development to promote health equity.

The CSTE fellow will be part of the Data Action Team (DAT) of MCH Epidemiologists, will sit in the Bureau of Family Health office space with other DAT epidemiologists and staff, and will have opportunities to become familiar with the entire scope of work performed by DAT staff and other trainees. DAT currently employs eleven full-time epidemiologists and four PRAMS staff. DAT epidemiologists work closely with other epidemiology and program staff from the Bureau of Health Informatics, Children with Special Health Care Needs, Birth Defects, Newborn Screening, Injury Prevention, Lead, and Infectious Disease to further the scope of epidemiologic capacity in the State. DAT staff maintain strong relationships with the CDC through the MCH Epidemiology Assignee, PRAMS, and other CDC funded grants and technical assistance. In addition, DAT epidemiologists mentor students from two local schools of public health and interns through the Graduate Student Epidemiology Program. The primary mentor serves as faculty at the Tulane University School of Public Health and Tropical Medicine and actively participates in the Tulane MCH Leadership and MCH Epidemiology Training Program grants. DAT staff epidemiologists routinely meet or exceed all data needs of Bureau of Family Health program staff, assuring that students and fellows are afforded the opportunity to pursue interests that promote their individual interests and training goals.

Day-to-Day Activities

Daily activities will include participating in a few key projects of interest to the fellow, including design, analysis, and translation of analytic or evaluation studies, with ongoing support and assistance available through the mentors and other appropriate staff. The fellow will be expected to attend Bureau of Family Health staff meetings that foster a collaborative and/or learning environment and important and emerging topics are discussed. These currently include a weekly 30 minute Bureau of Family Health all-staff meeting, a bi-weekly one and a half hour DAT staff meeting where current MCH epidemiology analyses and data products such as briefs and reports are discussed, and a monthly journal club led by the secondary mentor where current methods and topics of interest are discussed in the context of peer reviewed articles. The fellow is also invited to periodically attend a one hour infectious disease staff meeting lead by the State Epidemiologist. The fellow will be encouraged to attend as many trainings and stakeholder meetings as feasible, while allowing sufficient time to complete CSTE competencies and projects.

Potential Projects

Surveillance Fatal and Non-fatal Injury in Louisiana Activity

Statewide injury surveillance is important to determine the magnitude of injury morbidity and mortality, determine the leading causes of injury among population groups and identify behaviors that put residents at greatest risk. Surveillance data are essential for informing, program priorities, resource allocation and policy initiatives. This project will afford the fellow experience managing and analyzing hospital discharge, emergency department, and death certificate data to find injury-related hospitalizations, emergency department visits and deaths (overall, by sex, and by age) in Louisiana. The fellow will summarize the findings into a report for the State's Core Injury Program's advisory body and submission to the CDC. The fellow may also use crash data and child welfare data to do more in-depth surveillance of crash-related injury and child abuse and neglect.

Surveillance Louisiana Hospital Inpatient Discharge Data Evaluation

Louisiana Hospital Inpatient Discharge Data (LaHIDD) is used routinely within the Bureau of Family Health to measure non-fatal injury, severe maternal morbidity, neonatal abstinence syndrome, and other health conditions, but this data system has not been evaluated in more than ten years. Quality of this data system is fundamental to the success of BFH priority initiatives. While the data system itself is managed under a separate bureau within the Office of Public Health, critical information is needed as to the completeness and reliability of the data for MCH related monitoring.

The fellow will be responsible for serving as the lead evaluator for this data system. Specifically, the fellow will interview key stakeholders, convene evaluation meetings and lead discussions, help focus evaluation questions of interest, lead the evaluation activities and calculations, and produce a written report of findings and recommendations. The fellow will present the findings to the Office of Public Health, Bureau of Health Informatics and Bureau of Family Health to review strengths, weaknesses, and recommendations for future directions as it relates to MCH analyses.

Major Project Estimating the Impact of Social Determinants of Health on Birth Outcomes

Social Determinants of Health are well recognized as having significant impacts on health and health outcomes. Louisiana participated in the development of the AMCHP Life Course Indicators project, which includes several measures on social determinants in a population. The Bureau of Family Health has calculated a specific measure called Concentrated Disadvantage and is interested in analyzing the association between this measure and selected maternal and infant health outcomes. Potential health outcomes could include preterm birth, low birth weight, infant mortality, and severe maternal morbidity.

The fellow will be responsible for conducting a thorough literature review on concentrated disadvantage and its use in behavioral and/or epidemiologic analyses. The fellow will also need to

gather additional resources on current practices in multilevel modeling by pulling peer reviewed articles or using statistical reference guides available within the Bureau of Family Health, as this analytic project would require use of a multilevel model that includes both individual level factors such as demographic characteristics or risk factors and neighborhood characteristics as measured through Concentrated Disadvantage or other community level data. The fellow will then analyze the data and produce a written report of findings, including recommendations on how the findings could be applied to Bureau of Family Health programs and activities. The fellow will also produce a presentation highlighting key findings for Bureau of Family Health Staff.

Additional

Project

Small Area Estimation for well woman visits

Many data sources that provide critical information relevant to monitoring and understanding the health of MCH populations are based on samples that are designed to produce state level estimates only. However, many areas desire to have estimates more specific to their local community to support program and policy decisions. Local-level data can also help state health departments target communities most in need of services to improve health that are supported as part of state priority initiatives. The Bureau of Family Health selected Title V National Performance Measure 1, Well woman visit, as a priority initiative through 2020. In order to better support efforts to promote well woman visits, data are needed at a smaller geographic area than the state.

The fellow will have the opportunity to use Louisiana Behavioral Risk Factor Surveillance System (BRFSS) data to estimate the prevalence of well-woman visits in various geographic areas of Louisiana. Specifically, the fellow will conduct a thorough literature review, become familiar with complex samples data through use of BRFSS, recommend the size of the geographic areas to be included in the analysis, apply small area estimation techniques to the data, summarize results, and write a report. Results will be used to target specific geographic areas in need of greater support to increase utilization of preventive health visits.

Additional

Project

Population Attributable Fraction (PAF) to support Title V investment priorities

The contribution of a risk factor to a health outcome can be quantified using the population attributable fraction (PAF). There is an increasing need for calculating PAF for pregnancy outcomes in Louisiana to target appropriate measures in reducing adverse pregnancy-related outcomes for women and children. Using vital records and other available data sources, the fellow will be responsible for calculating PAFs for multiple birth outcomes of interest, including preterm birth, low birth weight, hypertension in pregnancy, severe maternal morbidity, and NICU admissions, among others. Potential risk factors of interest include obesity, smoking, and prenatal care. The fellow will be responsible for writing a final report as well as designing a fact sheet or data brief to succinctly summarize the findings. Results will be used to present recommendations to State leadership on

where to invest resources that are likely to have the largest impact on improving outcomes in Louisiana.

Preparedness Role

The fellow will be expected to complete the standard four FEMA emergency and disaster planning trainings. In addition, the fellow will be offered the opportunity to attend one of the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) Chemical, Biological, Radiological, Nuclear, and explosives (LA-CBRNE) 2 day working group meetings. For example, a former CSTE fellow participated in a Louisiana Department of Health sponsored two day training specific to pediatric disaster response and emergency preparedness. Bureau of Family Health staff routinely collaborate with the State emergency preparedness committee, and the fellow will be encouraged to attend at least one planning meeting. The Office of Public Health wrote an emergency preparedness policy to address continuity of operations (COOP plan) in future emergency or health outbreak situations. One role of the fellow could be to review this document again, and make recommendations for any changes appropriate for the Bureau of Family Health staff based on current policy and/or any available national recommendations.

Additional Activities

The Bureau of Family Health has been pursuing health equity as a priority for more than 5 years. Most staff members have completed an undoing racism workshop and the Health Equity Action Team (HEAT) has been developed to focus on special projects where equity is a key priority. The fellow will be welcomed to this team if interested.

Separately, the DAT team participates in nearly weekly meetings, where the first and third Thursdays are filled with important updates from the team, while the second Thursday is reserved for journal club where peer reviewed literature of topics and / or methods of importance to BFH DAT staff and trainees are discussed (lead by the secondary mentor), and the fourth Thursday is reserved for time to work on special projects or participate in special topics or trainings conducted two to three times per year.

Both mentors strongly support the selection of specific projects based on the individual fellow's interests and goals. These may include both topic interests as well as skills interests, such as specific software or analysis techniques. All of the data systems mentioned elsewhere in the host site application will be available to the fellow for analytic projects. In addition to the specific projects mentioned above, some of the ongoing projects within the Bureau of Family Health include quantification of preventive medical visits; calculation and monitoring of family planning clinic quality measures; data analyses to support unintentional and intentional injury morbidity and mortality surveillance; and monitoring of measures such as breastfeeding and infant sleep position through

PRAMS. There are many opportunities for a fellow to participate in or lead, and final selection of activities will be aligned with the goals and interests of the fellow.

Mentors

Primary Lyn Kieltyka PhD, MPH
State MCH Epidemiologist

Secondary Kasia Baca PhD, MPH
Injury Surveillance Epidemiologist