

Maternal and Child Health

The Center for Public Health Practice (CPHP), Arkansas Department of Health (DOH), has an outstanding opportunity for an applied epidemiology fellow to gain experience in working with surveillance systems, conducting policy-related research, and working in an interdisciplinary team. The CPHP includes both the Health Statistics and Epidemiology branches. The fellow will be housed in the Health Statistics Branch in CPHP and will be involved with research and projects related to *Maternal and Child Health* (MCH) and *Chronic Disease*, primarily using the Pregnancy Risk Assessment Monitoring System survey (**PRAMS**) and the Behavioral Risk Factor Surveillance System survey (**BRFSS**) datasets.

Day-to-Day Activities

Day-to-day activities will include the following:

1. Developing a working relationship and working on collaborative projects with the *programs* in the Center for Public Health Practice and the Center for Health Advancement, which includes the Family Health Branch (the MCH program) and the Chronic Disease Branch. An example would be meeting with the Chief of the Family Health Branch (MCH person) to discuss possible research topics and results.
2. Developing working relationships with the epidemiologists currently working with the MCH and Chronic Disease programs to develop and implement collaborative research projects.
3. Developing working relationships with faculty in the Department of Epidemiology of the Fay W. Boozman College of Public Health (COPH) of the University of Arkansas for Medical Sciences (UAMS), with a goal of involving those faculty in collaborative research projects as appropriate. These faculty can be a primary resource for the fellow in completion of projects throughout the period.
4. Becoming familiar with the *surveillance systems* (*PRAMS and BRFSS*) and other health-related databases. This will involve learning about the different survey methodologies, sample selection, interviewing techniques, data collection with WebCati, weighting, quality control measures, data linkage, and HIPAA regulations.
5. *Evaluating the surveillance* systems for flaws, weaknesses, and biases.
6. Conducting *research* related to MCH and chronic disease.

Anticipated Projects

Anticipated projects for the fellow include (but may not be limited to) the following:

Surveillance system evaluation

1. Evaluation of the quality, completeness, and representativeness of the **PRAMS** and **BRFSS** datasets for flaws and biases.

Analyzing surveillance and other health-related data

2. Developing a portfolio of proposed studies of interest to fellow and ADH partners.
3. Designing and implementing analysis of a topic(s) of interest to both the fellow and the ADH. Regardless of study topic, the PRAMS and BRFSS datasets will be the *primary* datasets used. However, there are other datasets available in the Health Statistics Branch that complement these two datasets, and *data linkage* of PRAMS with these other datasets is possible. Topics of interest from the PRAMS and BRFSS data include the following:
 - Trends in the prevalence of smoking, intimate partner violence, obesity, and pregnancy intent by sociodemographic characteristics, geography, and birthweight of infant.
 - The effects of smoking, intimate partner violence, obesity, and pregnancy intent on pregnancy outcomes.
 - Research on *preconception health* using the MCH (PRAMS) and Chronic Disease (BRFSS) databases is of particular interest.
 - Health characteristics of rural vs. urban residents (BRFSS and PRAMS)
 - Socioeconomic and demographic disparities in health status and pregnancy outcomes (PRAMS and BRFSS)
4. Develop a study protocol for the Institutional Review Board.

Developing collaborative projects

5. Strengthen the relationships among the Health Statistics, Epidemiology, Chronic Disease, and Family Health branches. The research to be conducted will require working on an *interdisciplinary* team. The Health Statistics Branch conducts the PRAMS and BRFSS surveys and has access to a number of other databases; however, the Branch does not have the subject matter expertise to conduct research on the data and is working on developing collaborative projects with other branches in order to accomplish this. The Health Statistics Branch has made significant progress in developing these collaborative efforts, and the fellow will have an opportunity to continue and strengthen them.

Preparing analytical reports

6. Prepare newsletter(s) on topic(s) of interest to both fellow and ADH partners.
7. Prepare and submit article(s) for peer-reviewed journals such as *Maternal and Child Health, AJPH*, etc.
8. Prepare news release(s) summarizing findings of research for local newspaper.

Making presentations

9. Present results of research to the Arkansas Department of Health Science Advisory Committee. This presentation is required and serves to engage in the research process the various perspectives and expertise represented by the members of the committee.
10. Present research results within the weekly ADH Public Health Grand Rounds series.
11. Make presentation on BRFSS and PRAMS to women's health class at UAMS COPH and to interested community groups.

ASSIGNMENT LOCATION:	LITTLE ROCK, ARKANSAS
PRIMARY MENTOR:	MARY MCGEHEE, PHD, MA SECTION CHIEF SURVEY UNIT HEALTH STATISTICS BRANCH CENTER FOR PUBLIC HEALTH PRACTICE
ADVANCED DEGREES:	PHD, TEXAS A&M UNIVERSITY (2001) MA, UNIVERSITY OF ARKANSAS (1993)
SECONDARY MENTOR:	GORDON REEVE, PHD, MPH BRANCH CHIEF, EPIDEMIOLOGY ARKANSAS DEPARTMENT OF HEALTH
ADVANCED DEGREES:	PHD, UNIVERSITY OF TEXAS (1982) MPH, UNIVERSITY OF TEXAS (1975)