Injury-Drug Overdose, Infectious Diseases

Ingham County Health Department, Community Health Planning and Partnerships

Lansing, Michigan

Assignment Description

The Fellow’s assignment would be in the Community Health Assessment section (led by Dr. Chandra, who will be the primary mentor) which is part of the Community Health Planning and Partnerships division (CHPP) under Deputy Health Officer, Joel Murr. CHPP works to power data-informed decision-making and to address social determinants of health, while developing partnerships and engaging in planning to promote wellness and health equity throughout Ingham County. Programs include: Community Health Assessment (CHA), Public Health Emergency Preparedness, Environmental Justice, Health Equity and Social Justice, Healthy Communities and AmeriCorps. This branch also oversees ICHD’s Public Information, Grants administration, and Information Technology programs that are supported by a team of Analysts and Electronic Health Records trainers.

Day-to-Day Activities

The Fellow may expect to allocate time across the following activities:

- Research into best practices for public health data visualization.
- Familiarity with ICHDs opioid surveillance system as background for the evaluation activity to be designed by the Fellow and mentor.
- Cross-sector meetings with public health professionals in the field. These might include One-on-one meetings with the Regional Epidemiologist who is also a CSTE post-doctoral fellow and also the Director of our Communicable Disease division.
- Active participation in our monthly opioids meetings as well as our monthly outbreak response team meeting.
- Networking with health professionals in our Community Health Centers, as well as with Epidemiologists at the state level.
- Participation and on occasion presentations in our CHA monthly data team meetings.
- Activities supporting HIV and Hepatitis C data collection and analysis.

Additionally, there will be opportunities to attend local/state sponsored conferences such as the MIDS/MDHHS among others.

Potential Projects

Surveillance Activity  Analyzing the Prevalence & Incidence of HIV and Hepatitis C in Ingham County

ICHD’s HIV/STI program is a comprehensive, integrated, and multifaceted program focused on preventing the transmission of sexually transmitted infections (STIs), particularly HIV. Primary prevention, education, individual risk reduction, counseling, and testing are provided at no cost to county residents. Ongoing STI education is provided to department staff, schools, college students, health care workers, faith-based groups, and employees at worksites. The Fellow will be responsible for
the collection and analysis of data on HIV and Hepatitis C in the community and will potentially also engage in exploration of the interconnections between HIV and opioid use under the aegis of Dr. Shoyinka, Medical Director at ICHD. The fellow will also be involved in the ongoing quality improvement projects for the County’s HIV/STI program.

**Surveillance Evaluation**  
**Evaluating the Ingham Opioid Abuse Prevention Initiative**

First convened in early 2015, the Ingham Opioid Abuse Prevention Initiative (IOAPI) came together in the wake of a sharp spike in opioid-related deaths in the Greater Lansing area. Specifically, Ingham County has seen an eight-fold increase in opioid-related deaths since 2006. This group includes law enforcement, emergency medical services, local hospitals, treatment facilities, and community groups. It aims to increase cross-sector collaboration and understanding of the growing problem of opioid abuse, and ultimately, to decrease the number of overdoses and opioid-related deaths in the community. The Fellow would work under the guidance of Dr. Chandra, Sr. Epidemiologist and lead of CHA, to evaluate ICHDs monthly opioid surveillance system and make recommendations to reduce opioid-related overdoses and deaths.

**Major Project**  
**Epidemiological Data Visualization for Overdose Prevention**

Information is a critical resource in public health, serving as an initial step in the large-scale analysis of diseases. Furthermore, research indicates that contextual actionable data provided to decision makers is often best conveyed visually. When applied to public health, data visualization and informatics can be effectively used to enable monitoring and surveillance, data-driven decision making, and better population health. The Fellow will work with Dr. Chandra and the IT team to develop a pilot dashboard that will display overdose trends and other pertinent information from the Ingham monthly opioid overdose reports. Key elements of the project will include the following:

- Research into best practices on data visualization for local health departments (LHDs).
- Creation of a pilot dashboard to display data on opioid overdoses in Ingham County via graphs/maps/charts.
- The design and conduct of an internal qualitative survey to assess the utility and efficacy of the pilot data visualization project and to provide recommendations for scale-up of the pilot.

**Secondary Project**  
**Communicable Diseases**

The Fellow will analyze an epidemiological database on HIV and hepatitis C for Ingham county residents to evaluate patterns in racial, ethnic and sexual minorities with particular emphasis on social and clinical outcomes. ICHD hosts the second largest Ryan White clinic in Michigan. The database includes information from 2012 through 2017, with a sample size of approximately 600 individuals. Additionally, the project will include updating data points for 2019 to reflect current trends in HIV care.
**Preparedness Role**

The Fellow will work on updating ICHD protocols for addressing a food borne outbreak in consultation with the Communicable Disease Director, Sr. Epidemiologist, Environmental Health Director and the Emergency Preparedness Coordinator. Additionally, the fellow may be assigned certain FEMA emergency preparedness courses to complete.

**Additional Activities**

Additional activities that the Fellow will be part of include the following:

- Conference participation
- Presentations to local stakeholders and ICHD staff.
- Trainings (need based)
- Networking events/seminars – including but not restricted to meeting other CSTE fellows at MDHHS.

**Mentors**

**Primary**

Madhur Chandra, MPA, PhD  
Senior Community Epidemiologist

**Secondary**

Adenike Shoyinka, MPH, MD  
Medical Director