Host site: Hamilton County Public Health Epidemiology

Assignment Location: Cincinnati, OH

Primary Mentor: David Carlson MPH | Epidemiology

Secondary Mentor: Anne Arble, MPH | Epidemiology

Agency Description:

Hamilton County Public Health (HCPH) is a diverse, inclusive, and data driven agency, which is committed to educating, serving, and protecting our community for healthier futures. HCPH consists of two main branches: Community Health Services and Environmental Health Services. Epidemiology and assessment falls under the Community Health Services branch. Leadership is as follows: Greg Kesterman is the Health Commissioner and oversees the entire HCPH agency. Dr. Jennifer Mooney is the Assistant Health Commissioner for the Community Health Services Department. David Carlson, MPH is the epidemiology division director and is responsible for oversight of staff activities. The epidemiology division consists of three main program areas: infectious disease, maternal and child health, and injury surveillance. The injury surveillance program is led by Anne Arble, MPH, a senior epidemiologist. Anne and David will provide administrative support to the project as well as technical assistance.

HCPH is committed to innovation by providing training and certifications for employee growth and staying up to date with advancing technologies and communications systems. Within the epidemiology division, epidemiologists are encouraged to pursue taking certifications in SAS, Tableau, and other programs. The epidemiology division collaborates between program areas and work together in various ways to improve processes, programs, and reporting. If an epidemiologist has a greater understanding of SAS for example, anyone in the division can approach them to ask for assistance.

The physical space is an open office with twelve tall cubicles, two offices, and a storage/specimen room. After a sixth month probationary period, each employee receives two work from home days and are required to be in the office three days a week. Work from home days are requested by the employee according to their comfort level of working from home or in office, but they still must work at least three days in office. Each division manages their own work from home schedule to ensure proper distancing of employees and desk space. Each month we hold a division meeting and luncheon to communicate successes and opportunities within each program area.

Assignment Description:
The fellow will work with the injury surveillance team under the senior epidemiologist, Anne Arble. All epidemiology staff are given three yearly goals, which the fellow will also have. Their day-to-day activities will revolve around goals that are given for specific projects.

Daily activities include, but are not limited to:

Conducting, building, maintaining, and revision of systems around harm reduction in Hamilton County.

Building automations around the coroner office data sent daily.

Day to day downloading data, using statistical software (SAS) to clean and analyze data, and updating surveillance Tableau dashboards.

Assistance in building future surveillance projects such as EMS surveillance integrations with hospital emergency room data.

Preferred Background & Skills:

The preferred background would include an individual with knowledge of collecting, process, and analyzing public health data using tools such as SAS, Tableau, SQL, and/or other data management software; assisting with the management of statistical databases. With the specific understanding of data automation.

What can the fellow expect to gain from 2 years at this host site?

During this experience at HCPH the fellow will have the opportunity to manage large datasets, build automation code from the ground up, learn to collaborate with a variety of organizations and other local health departments, work with all program areas in epidemiology (injury, maternal and child health, and infectious disease), and they will have the opportunity to receive several certifications in epidemiology related programs.

Potential Projects include:

Host sites have listed up to 5 projects

Project 1: Automation of Coroner Preliminary Laboratory Data

Project objectives include: To build an automation process around coroner preliminary death, preliminary (ELISA) toxicology data, and drug seizure data; assist in building a robust data sharing process between HCPH and the coroner’s office; and conduct trainings on automation processes and assisting other program areas in epidemiology with data automation. Expected deliverables include, but
are not limited to: Reduction of time on daily overdose surveillance process, which includes the coroner preliminary data; integration of cleaning codes with automation codes (SAS and SQL/Python) to create passive process (Specifically for the coroner preliminary data, Syringe Services Program, Overdose Fatality Review, Narcan Distribution, EasterSeals workforce development program, and other harm reduction programs.); creation of Tableau dashboard/s utilizing project data; and creation of a standard operating guideline for automation processes.

The purpose of preliminary coroner data collection is to decrease overdose deaths in Hamilton County. Timely data collection and analysis for ongoing surveillance helps to predict emerging substances and trends. These data will inform policies, emergency action, and programming (i.e., where supplies like Narcan are needed.) for the safety of our community.

Project 2: Suicide Surveillance Data Project

Project objectives include: To build an automation process around suicide data; assist in building a robust preliminary suicide data sharing process between HCPH and the coroner’s office; and conduct trainings on automation processes and assisting other program areas in epidemiology with data automation. Expected deliverables include, but not limited to: Integration of cleaning codes with automation codes (SAS and SQL/Python) to create passive process; creation of Tableau dashboard/s utilizing project data; and creation of a standard operating guideline for automation processes.

The purpose of confirmed and preliminary suicide data collection is to identify characteristics and patterns of suicidal behavior to decrease suicide deaths in Hamilton County. This proposed project will also provide awareness of the issue in our community. Timely data collection and analysis for ongoing surveillance helps to predict differences among demographics and regions. These data will inform policies, emergency action, and programming for the safety of our community.

Additional information about the placement:

There will be opportunities to assist building future surveillance projects such as EMS surveillance integrations with hospital emergency room data.