

ID: 46766781

Infectious Diseases - Host Site Description

Arizona Department of Health Services

Assignment Location: Phoenix, US-AZ
Arizona Department of Health Services
Public Health Preparedness

Primary Mentor: Arlis Jenkins, MPH
Hepatitis C Epidemiology Program Manager
Arizona Department of Health Services

Secondary Mentor: Ricardo Fernandez, MD
Senior Hepatitis C Epidemiologist
Arizona Department of Health Services

Work Environment

Hybrid

Assignment Description

The CSTE fellow will be placed within the Hepatitis C Program under the supervision of the Hepatitis C Epidemiology Program Manager. The Hepatitis C Program is housed in the Office of HIV and Hepatitis C Services, within the Bureau of Infectious Disease and Services. The Office is the primary focus of HIV and hep C surveillance and care and services activities for the Arizona Department of Health Services and is responsible for integrated planning efforts among HIV, hep C and STI programs.

The Program carries out a range of investigative and analytical epidemiological activities related to the surveillance, detection, and prevention of hepatitis C transmission. Activities range from the collection of hepatitis C epidemiological data, completion of case investigations and the development of data visualizations and data summaries. The team also co-facilitates Hep Free AZ, a statewide hepatitis C elimination planning coalition and coordinates with local community partners to boost prevention and treatment efforts through patient navigation, education and outreach. In total there are seven (7) staff dedicated to these activities including: (1) epidemiology manager, two (2) epidemiologists, two (2) communicable disease investigators/navigators, one (1) community liaison and one (1) data entry specialist.

On a day-to-day basis, the fellow will work closely with the epidemiology manager and epidemiologists to manage hep C data within the state-wide electronic disease surveillance system, MEDSIS to support the development and maintenance of a statewide hep C care continuum. The fellow will have a cubicle with an existing computer and epidemiologic software including, SAS. Additionally, there are also two (2) epis in the program and an additional eight (8) epidemiologists within the office who can assist with cross-training and epidemiologic support and one (1) data entry specialist in the office available to assist with data entry and retrieving infectious disease reports.

The Arizona Department of Health Services will supply all necessary office and computer equipment for the fellow. The fellow will be invited to attend all conferences and training relating to infectious diseases. In addition, the fellow will be able to travel to and/or virtually attend meetings directly related to their specific activities or projects.

Describe Statistical and Data Analysis Support, Such as Databases, Software, and Surveillance Systems Available to the Fellow

ADHS has an IT department that would be available to assist the fellow with computer and database issues. In addition to MS Office, Adobe Suite and Tableau software, the fellow would have access to SAS for statistical analysis.

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Epidemiologists within the Office routinely use the state-wide electronic disease surveillance system (MEDSIS), the state immunization registry (ASIS), vital records datasets (birth and death data), and the hospital discharge database (HDD). In addition, the fellow can request access to several other databases, including population-based survey results, such as BRFSS, and HIV/STD data.

Projects

Surveillance Activity Title: Routine Perinatal Hepatitis C Surveillance and Investigations in Arizona

Surveillance Activity Description:

In the State of Arizona, diagnosed cases of hepatitis C are reported to the local health agencies by healthcare providers, per the Arizona Administrative Code (A.A.C.) R9-6-202. Likewise, laboratory reports indicative of a hepatitis infection must be reported to the Arizona Department of Health Services, per A.A.C. 204. Due to a loss of funding and resources to be able to continue a hepatitis C surveillance program, after 2008 ADHS was unable to sustain entering, counting, and ensuring de-duplication of all reported HCV cases. In 2009, ADHS began on-boarding commercial and hospital laboratories to submit reportable infectious disease testing results electronically, and by mid-2012, more than half of all laboratory reports were being submitted through this method. However, with new resources, hepatitis C case investigations were re-implemented in July 2022 for a subset of cases using a prioritization matrix adapted from the COVID-19 response to prioritize high-risk populations as indicated in the latest CDC hepatitis C surveillance guidance. Furthermore, perinatal hepatitis C case investigations will be implemented in the first half of 2023 as part of CDC's Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET) Program for a retrospective cohort of reports.

The goal of this project is to update the hepatitis C case report form to better collect real-time data on perinatal reports and educate current and prospective parents on available testing and treatment options for themselves and their families. The fellow will work with existing perinatal surveillance programs and local agencies to determine the best adaptations to incorporate within the surveillance system while also working to routinize case ascertainment through enhanced cross-matching protocols using vital records, immunization records, the Health Information Exchange and the Hospital Discharge Database.

Fellow Activities:

- Review current literature on perinatal hepatitis C trends and case investigation, including information on perinatal hepatitis C case management
- Query current perinatal programs to identify existing variables along with applicable barriers and challenges
- Create online proposed updates for the case report form
- Compile a report summarizing findings:

Report should include:

- Estimates for perinatal hepatitis C reports
- Create a proposed case report form with variables that will help classify cases and identify education gaps/linkage to care opportunities
- Make recommendations for improved perinatal hepatitis C case investigation for future years by developing an updated case report form that can be used weekly to compile data

Surveillance Activity Objectives:

- Expanded volume for case investigations and patient navigation services
- Enhanced identification of education needs

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Surveillance Activity Impact:

- Improved understanding of risk factors, barriers and challenges that people living with hep C face within the State of Arizona

Surveillance System Evaluation Title: The Evaluation of a Hepatitis C Patient Navigation Database

Surveillance System Evaluation Description:

In Arizona, recent developments have drastically changed the hepatitis C landscape. Following the update of national screening recommendations by CDC and USPSTF, syringe service programs (SSPs) were legalized in the State of Arizona in Fall of 2020. This was followed by the removal of all prior authorization requirements for first time treatment for hepatitis C among Medicaid recipients in Fall of 2022. These changes allow for greater access to meaningful linkage to hepatitis C treatment and indicate optimal timing for resources to be dedicated to patient engagement and re-engagement.

The Maricopa County Department of Public Health (MCDPH) STI Clinic implemented hepatitis C screening in Fall of 2020 and patient navigation in Spring of 2021. Patients are identified and contacted via phone for linkage to care to a hepatitis C treatment provider and data has been maintained within a dedicated REDCap database that now houses data from around a dozen other subcontractors.

In preparation for patient navigation services to begin within the Arizona Department of Health Services Program, the fellow will assist in evaluating REDCap data to determine both the test positivity and SVR rate among subcontractors and share any recommendations to improve linkage to care with other groups across the state also looking to implement services. This information will assist the Arizona Department of Health Services in assessing the overall effectiveness of patient navigation services and the need for educational campaigns, or other interventions to encourage linkage to care and retention.

Fellow Activities:

- Review current literature on hepatitis C positivity rates and patient navigation programs
- Obtain access to all reports within the hepatitis C REDCap database and begin review
- Conduct medical record reviews, when applicable to determine if patients within the database have received hepatitis C treatment
- Determine the positivity rate based on aggregate estimates from subcontractors and the SVR rate using information from the REDCap database and separate review
- Create a report summarizing findings of the evaluation and recommendations for implementing improvements
- Develop a hepatitis C patient navigation collaborative to maintain info sharing among stakeholders across the state

Surveillance System Objectives:

- Literature review on hepatitis C testing and patient navigation
- Development of recommendations for program improvement

Surveillance System Impact:

More individuals successfully linked to care through the provision of enhanced guidance and TA

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Major Project Title: Hepatitis C Care Cascade Development

Major Project Description:

As of December 2022, the State of Arizona has a dedicated hepatitis C elimination plan. With the guidance of the Hep Free AZ Coalition, the Hepatitis C Program at ADHS will look to begin implementation throughout 2023. Another important role that the Program will take on is monitoring the impact of designated public health interventions and identifying opportunities for improvement and as such, the development of a hepatitis C care cascade will be heavily prioritized.

Under the guidance and support of ADHS staff, the fellow will focus on developing and implementing a hepatitis C care cascade for the State of Arizona to expand understanding of the hepatitis C care landscape and existing opportunities for intervention. The fellow will work with the Program to increase negative reporting from Arizona laboratories and incorporate CDC's laboratory-based hepatitis C virus clearance cascade model. Once developed, the hepatitis C clearance cascade will be regularly updated to monitor changes over time and track progress toward established goals. Further analysis of the hepatitis C clearance cascade can help identify disparities in progression through the cascade by population or geography.

Major Project Objectives:

- Finalized hep C care cascade and associated dashboard

Major Project Impact:

- Information on opportunities where stakeholders can improve hep C linkage and retainment in care

Additional Project #1 Title: Cluster/Outbreak Investigation

Project #1 Type: Surveillance Activity

Project #1 Description:

The fellow will assist with the development, implementation and maintenance of a hepatitis C outbreak plan. The plan will be finalized in Spring of 2024 at which time the fellow will help with outbreak investigations and surveillance activities to support cluster detection and monitoring with support from epidemiologists on the HIV team.

Project #1 Objectives and Expected Deliverables:

- Finalization of statewide hepatitis C outbreak plan

Project #1 Impact:

- Improved monitoring and public health response

Please Describe the Fellow's Anticipated Role in Preparedness and Response Efforts – Include Activities and Time Allocation (Required Competency of Fellowship)

The fellow will work in the Division of Public Health Preparedness, which is responsible for leading epidemiologic activities under the Public Health Emergency Preparedness Cooperative Agreement. All staff in the Program are required to receive training on incident command structure and to attend training on the Health Emergency Operation Center (HEOC). The fellow will complete training on the HEOC Operational Plan and the following incident command systems (ICS) training: ICS-100, ICS -200, and ICS-700. However, it is not expected that the fellow will participate in the COVID-19 response.

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Please Describe the Fellow's Anticipated Role in Cluster and Outbreak Investigations – Include Activities and Time Allocation (Required Competency of Fellowship)

Knowledge and training on HEOC and ICS but these can be provided by ADHS at the start of their fellowship.

Please Describe the Fellow's Anticipated Role in the COVID-19 Response – Include Activities and Time Allocation

It is highly unlikely that the fellow will be assigned to the COVID-19 public health response.

Please Describe Opportunities for Fellows to Work in Health Equity as well as Incorporating Diversity, Equity, and Inclusion into their Work

Hepatitis C intersects with a lot of areas that touch on health equity topics. A lot of our hepatitis C programs work in particular to address health inequities among persons who use injection drugs and persons of color who are disproportionately impacted by hepatitis C in Arizona.