

THE TIME IS

NOW

END THE EPIDEMICS

CARE COORDINATION AND OPPORTUNITIES FOR REFERRAL: TENNESSEE'S PERINATAL HEPATITIS C (HCV) PROGRAM



TARGET POPULATION

Cisgender Women Living with HCV with a Recent Live Birth



LOCATION

Knoxville, TN, and 15 Surrounding Counties



PROGRAM DESIGN

Data to Care, Patient Navigation, Harm Reduction, Family Planning



ESTIMATED COST

\$250,000



FUNDING SOURCE

Centers for Disease Control and Prevention (CDC)

SUMMARY

In response to having a confirmed HCV case rate higher than twice the national case rate, the Tennessee Department of Health launched the Perinatal Hepatitis C Program. The Perinatal Hepatitis C Program addresses the disproportionate impact of HCV on cisgender women of reproductive age by treating mothers for HCV before subsequent pregnancies, linking mothers to harm reduction and other supportive services, and increasing provider education on HCV testing and treatment.

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BACKGROUND

Despite underdiagnosis, hepatitis C remains the most common bloodborne pathogen reported in the U.S. In Tennessee, the rates of acute, confirmed HCV have consistently ranked among the highest in the U.S., with a case rate high than twice the national case rate (in 2017 2.1 per 100,000 population in TN and 1.0 per 100,000 population in the U.S., respectively). Beginning in mid-2015, the Tennessee Department of Health initiated enhanced surveillance of chronic HCV through the consumption of reportable HCV laboratory data. Of the 69,010 newly reported chronic (confirmed and probable) HCV cases from July 1, 2015, to December 31, 2018, 43% (n=29,383) were women, and, of these, 70% (n=20,436) were persons of reproductive age (11–50 years). High numbers of reported HCV cases among reproductive-aged cisgender women results in high rates of perinatal exposure to HCV among live-born infants. A meta-analysis of perinatal HCV exposure demonstrated a 6% transmission rate, and this rate increased to 11% among mothers also living with HIV.

CORE ACTIVITIES

Core activities of Tennessee's Perinatal Hepatitis C Program include:

- **Identification:** The Perinatal Hepatitis C Coordinator (PHC) educates individuals living with HCV who have given birth on or after January 1, 2019, identified weekly from established routine, passive surveillance efforts.
- **Engagement:** Identified clients are contacted through a variety of avenues, including phone or mail. The PHC describes their role to the client and provides support, education, and referrals that connect clients to necessary services for themselves and their child.
- **Referral:** Clients are provided with a list of HCV treatment and harm reduction referrals based on insurance status and client-centered goals. To increase provider education on HCV screening recommendations, a handout is given to the mother to share with their child's pediatrician.

The handout details current pediatric HCV testing recommendations.

- **Documentation:** Identified mother/baby pairs are followed longitudinally from infant birth to 36 months of age.

DATA

Given the high rates of pregnancy reported among cisgender women with newly diagnosed HCV, and the release of the CDC perinatal HCV case definition on January 1, 2018, the Tennessee Department of Health began conducting routine, passive perinatal HCV surveillance in early 2018. This case definition defines a confirmed perinatal HCV case as a positive HCV RNA, genotype, or antigen test result for infants ≥ 2 months of age and ≤ 36 months of age, and not known to have been exposed to HCV via a mechanism other than perinatal. In 2018, 428 of 12,965 (3%) of all live births in the catchment area (Knoxville and the surrounding 15 rural counties) had perinatal exposure to HCV, and this region accounted for 38% of all perinatal HCV exposures statewide. While the statewide average was 1.5%, some Eastern TN counties suggested 5% to 14% of all live births were vertically exposed to HCV, mirroring trends observed in neonatal abstinence syndrome surveillance data. Exposed infants in Tennessee are not being tested for HCV. Of the 428 perinatal HCV exposures in the calendar year 2018, only two were tested appropriately (both non-reactive), and 426 had an unknown HCV status (n=425 not tested and n=1 inappropriately tested before two months of age). This suggests a need to increase pediatrician awareness, as infants are either 1) not being tested for HCV, 2) being inappropriately tested for HCV, or 3) being tested and not being reported to Tennessee Department of Health.

EVALUATION

The Perinatal Hepatitis C Coordinator (PHC) has worked alongside the Knox County Health Department and rural East Tennessee regional staff since August 1, 2019. She has leveraged the existing Harm Reduction Resource Team (HRRT) nurses and Viral Hepatitis Case

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Navigators (VHCNs) relationships with community partners to create comprehensive provider directories for un- or under-insured populations for HCV treatment, substance use services, mental health services, family planning, and harm reduction resources (syringe service programs, access to naloxone, etc.). HRRTs focus on linking individuals with indications of past or present drug use to harm reduction services, while VHCNs focus on linking individuals living with HCV tested in the health department to HCV treatment. This project has built upon the infrastructure that was established during the last funding cycle for Zika surveillance to conduct outreach and longitudinal mother and infant outcomes by expanding personnel and Information Technology systems to perinatal HCV infection. Specifically, the PHC previously worked in the Division of Family Health and Wellness within the context of Zika surveillance. This project is utilizing the surveillance systems established throughout that project, as well as information from vital statistics (birth certificates) and the HCV registry. All longitudinal data for this project are being housed in a project-specific REDCap database to facilitate tracking and reporting of required metrics.

FUNDING AND COST

In 2019, the CDC received \$10 million for their Surveillance for Emerging Threats to Mothers and Babies program, which detects the effects of new health inequities for pregnant women and babies by collecting data from pregnancy through childhood and uses real-time, evidence-based, actionable information to help save and improve families lives. Through this effort, state, local, and territorial health departments work with the CDC to identify the impact of emerging health inequities for pregnant women and their infants. It is hoped this funding will continue for at least five years. The estimated cost for Tennessee's Perinatal Hepatitis C Program is \$250,000.

STRENGTHS

This type of routine maternal surveillance offers unique outreach opportunities to ensure that cisgender mothers

living with HCV receive important information regarding appropriate infant testing, as well as referrals to services that could improve their health. Another program strength is that local health departments treating HCV in catchment areas utilizing patient assistance plans permit perinatal hepatitis C coordinators to provide medical case management for uninsured clients. The women contacted to date also expressed gratitude for the education and assistance received while navigating the healthcare system.

LIMITATIONS

While barriers to appropriate testing by pediatric providers are still being assessed, they likely include a lack of awareness of appropriate testing options and phlebotomy challenges. Additionally, not all clients identified for follow-up can be reached by phone to engage in conversations and provide resources.

STAKEHOLDERS

Partners for this initiative include the Tennessee Department of Health Viral Hepatitis Program; Tennessee Department of Health Division of Family Health and Wellness; Local Health Departments; Regional Health Departments; Community Health Services; Tennessee State Public Health Laboratory; University of Tennessee – Knoxville; Federally Qualified Health Centers; Community-Based Organizations; Syringe Service Programs; Southeast AIDS Education Training Center; Tennessee Department of Mental Health and Substance Abuse Services, and the Department of Children and Family Services.

PROGRAM CONTACT

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