

Hepatitis C and the Opioid Crisis

Agenda

- At the end of this presentation, participants will be able to:
 - Describe what HCV is, how HCV is transmitted in the community, and which treatment options are available
 - Identify barriers to accessing HCV care and protective strategies
 - Encourage and increase HCV testing among PWUD
 - Explain the connection between HCV and harm reduction
 - Describe available HCV and harm reduction resources in Tennessee



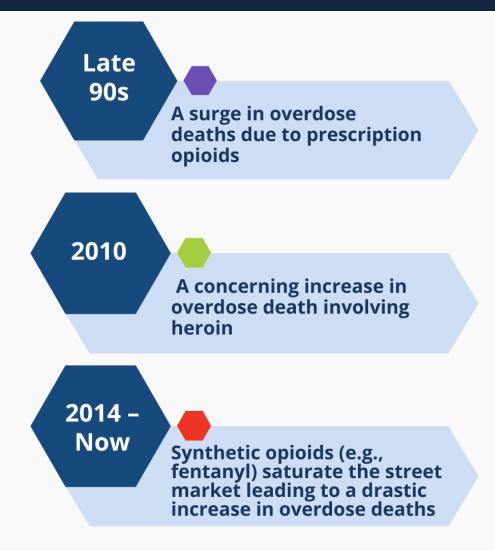


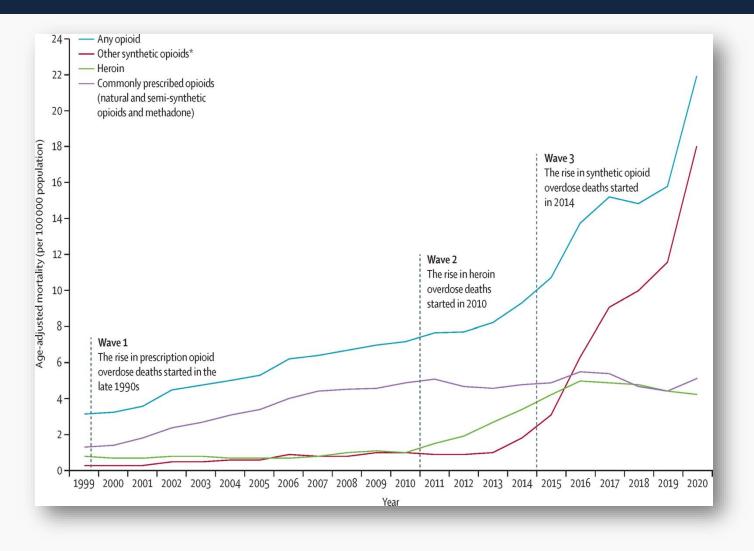
True or False?

- Hepatitis C is the most common blood-borne pathogen in the United States.
 - True!
- Persons who share needles, syringes, or other equipment used to prepare or inject drugs are vulnerable to acquiring HIV and HCV.
 - True!
- There is a vaccine for HCV.
 - False!
- HCV can live on environmental surfaces or outside of the body for up to 6 weeks.
 - True!
- Most people with HCV do not experience symptoms.
 - True!



Rise In Overdose Deaths

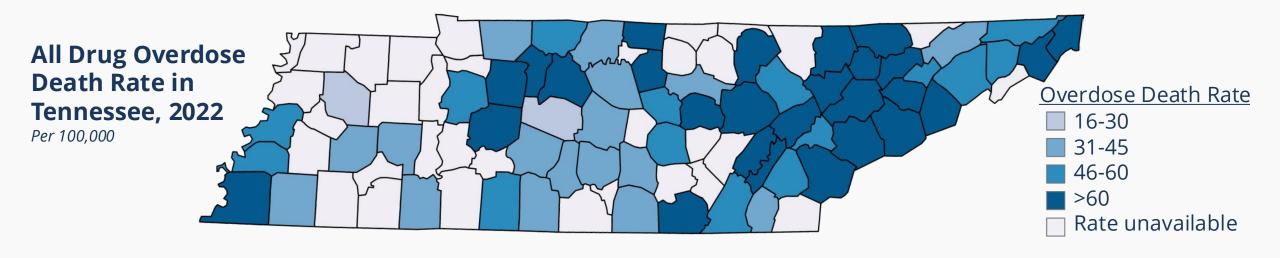






Source: The Lancet

Vulnerability in Tennessee



TN has the 2nd highest overdose death rate in US 2022 Overdose Death Rate in TN

56 per 100,000 residents

Over 3,800 overdose deaths statewide in 2022



Sources: CDC; TN Office of Informatics and Analytics

Scott County, Indiana



Similar to many rural small towns in America



Population of approx. 24,000 people



Typically saw 1 or 2 new HIV diagnoses per year



Elevated unemployment and poverty



Suppressed educational attainment and life expectancy

Between 2014-2015

181

people newly diagnosed with HIV

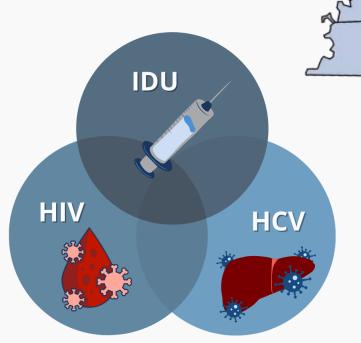
92% also diagnosed with hepatitis C





Vulnerability in Tennessee

Vulnerability to HIV & HCV Outbreaks Due to Injection Drug Use Tennessee, 2021



In TN, all counties are vulnerable to an HIV/HCV outbreak due to injection drug use. The darker the shade of blue, the more vulnerable the county is.

Vulnerable

Moderately Vulnerable

Highly Vulnerable

This map shows that the majority of highly vulnerable counties are in East TN.



Sources: TDH HIV/HCV Vulnerability Assessment; PLOS One



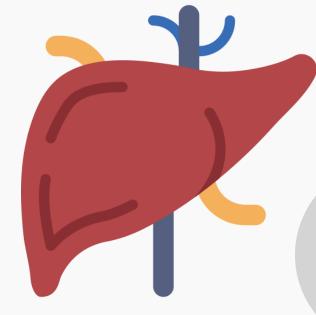
Hepatitis

Functions of the Liver

Removes
potentially
toxic
byproducts
of certain
medications

Metabolizes or breaks down nutrients from food to produce energy when needed

Helps your body fight infection by removing bacteria from the blood



Produces most of the substances that regulate blood clotting Prevents shortages of nutrients by storing vitamins, minerals, and sugar

Produces bile, a compound needed to digest fat and absorb vitamins A, D, E, and K

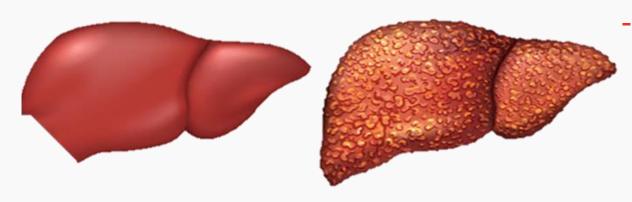
> Produces most proteins needed by the body



Liver Damage and Assessment

Liver Scarring (Cirrhosis)

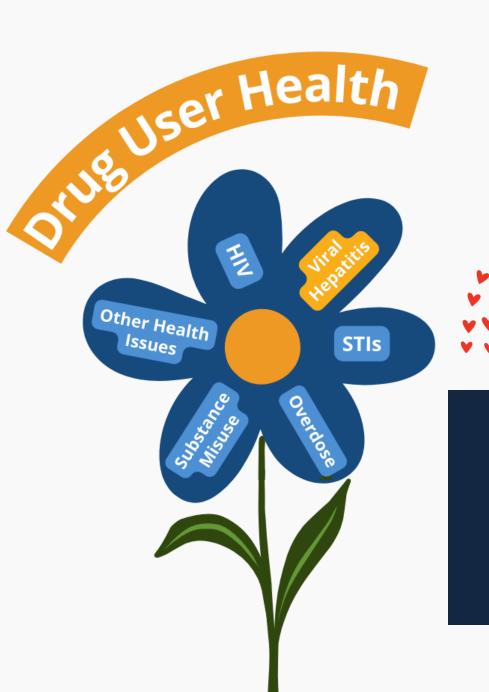
Liver Decompensation (Failure)



Assessment of Liver Damage

- Biopsy (gold standard, invasive)
- Laboratory tests
 (simple, non-invasive)
 - Imaging or radiology
 - Elastography
 - Magnetic Resonance Elastography (MRE)
 - Ultrasound
 - FibroScan







Viral Hepatitis

Hepatitis and Viral Hepatitis

Definition of the Term Hepatitis

- "Inflammation of the liver" which can be caused by
 - Excessive alcohol use
 - Drugs and toxins
 - Chemicals
 - Exposure to a virus

Definition of Viral Hepatitis

- "Inflammation of the liver due to a virus"
- Each type of viral hepatitis varies in transmission, treatment, and recovery
- Symptoms of each type of viral hepatitis can include nausea, vomiting, fever, fatigue, abdominal pain, joint pain, jaundice (yellow skin or eyes), gray-colored bowel movements, and loss of appetite
- Symptoms may or may not be present



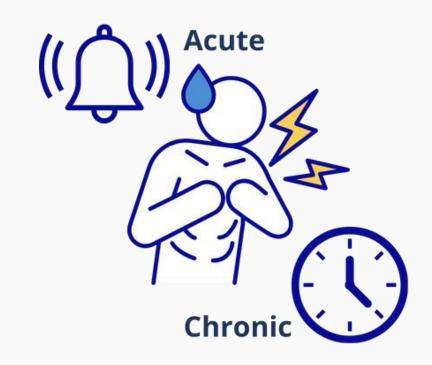
Acute and Chronic Viral Hepatitis

Acute Viral Hepatitis

- Early stage of viral hepatitis infection (usually within 6 months)
- Most visible symptoms will be during this phase

Chronic Viral Hepatitis

- Lifelong illness that occurs when virus remains in a person's body
- No chronic illness for HAV
- Persons with acute HBV, HCV, or HDV can clear the virus on their own
 - If it does not clear after 6 months, progresses to chronic viral hepatitis
- Chronic HBV, HCV, and HDV can lead to serious liver problems





Hepatitis C



HCV Symptoms

- Jaundice (yellowing of the skin/eyes)
- Loss of appetite
- Nausea, vomiting, abdominal pain
- Fatigue
- Dark urine
- Fever
- Grey-colored stools

Up to 80% of people living with HCV have NO symptoms!

Main Routes of Transmission

* If blood is present



Perinatal transmission



Sexual transmission



Receiving blood



Sharing drug equipment

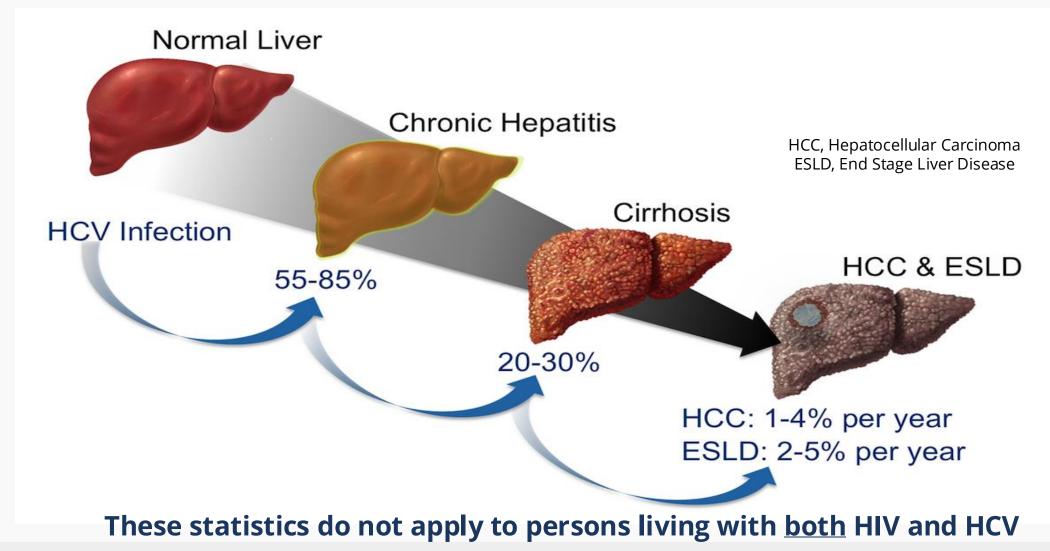
Inadequate sterilization of medical equipment

Getting pierced/ tattooed with contaminated instruments



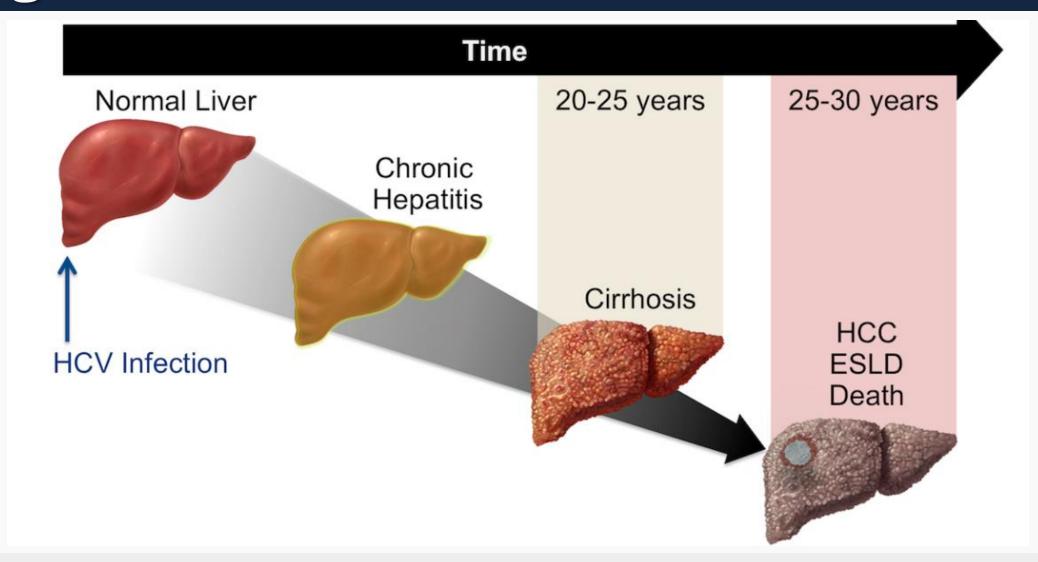
Source: CDC

Natural History of HCV



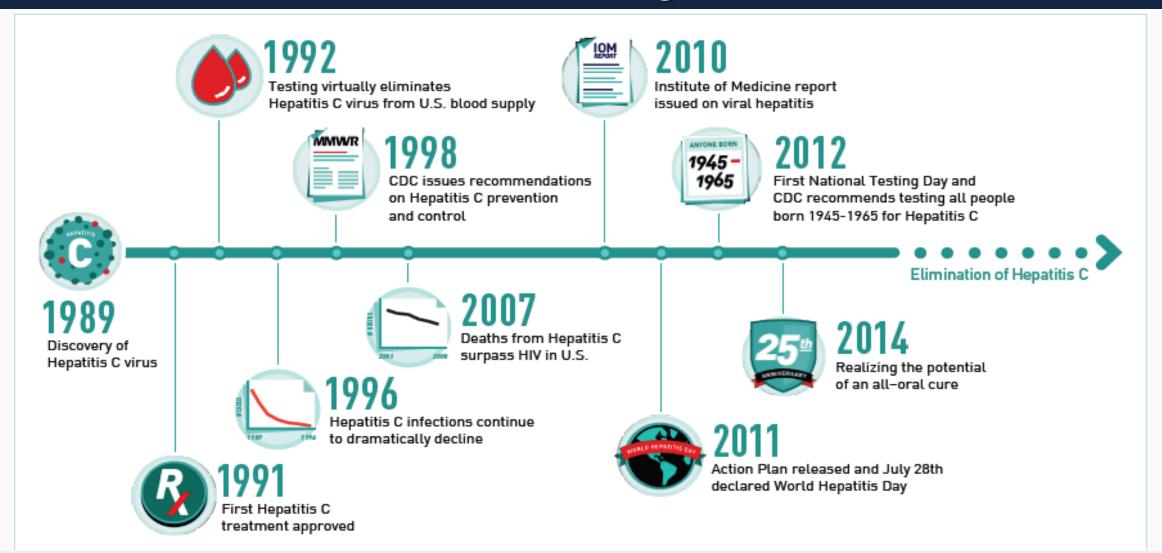


Progression of HCV Over Time





Timeline of HCV Discovery to Treatment





Hepatitis B & Hepatitis A



- A liver disease caused by the hepatitis B virus (HBV)
- Can be short (acute) or long-term (chronic)
- Spreads through contact with blood and body fluids that have HBV
- Sharing injection equipment is the most common transmission factor related to new HBV diagnoses in adults



- A liver disease caused by the hepatitis A virus (HAV)
- Spreads through fecal-oral route
 - such as close person-to-person contact or eating contaminated food/ drink
- Can result from unsanitary living conditions, specific sexual contact/ practices, or sharing injection equipment

Hepatitis A & B are vaccine preventable!



Source: CDC Hepatitis B Virus; CDC Hepatitis A Virus; CDC Viral Hepatitis Among PWUD



HCV Testing

HCV Testing Recommendations, 2020 (1)

Universal Screening

- For all persons aged 18 or older at least once in their lifetime
- For all pregnant persons during each pregnancy





HCV Testing Recommendations, 2020 (2)

One-Time Testing Regardless of Age Among Persons with Recognized Conditions or Exposures

- Persons with HIV
- Persons who ever injected drugs and shared needles, syringes or other drug preparation equipment
- Persons with selected medical conditions (e.g., received hemodialysis, persistently abnormal ALT levels)
- Prior recipients of transfusions or organ transplants
- Healthcare, emergency medical, and public safety personnel after needle sticks, sharps, or mucosal exposures to HCV-positive blood
- Children born to a birthing parent living with HCV



HCV Testing Recommendations, 2020 (3)

Routine Periodic Testing for Persons with Ongoing Exposure(s)

- Persons who currently inject drugs and share needles, syringes, or other drug preparation equipment
- Persons with selected medical conditions (e.g., received hemodialysis)

Any Person Who Requests Testing

- Regardless of disclosing likelihood of acquiring HCV
 - Many persons may be reluctant to disclose certain behavior(s)





Understanding HCV Testing Results (1)

HCV Antibody Test

Checks to see if a person has ever been exposed to HCV

Positive Result

Person has been exposed to HCV

 Need to have confirmatory HCV RNA testing to determine if the person is currently living with HCV

Note: once you test antibody positive for HCV, you will always test antibody positive for HCV even if you get cured.



Negative Result

Person has not been exposed to HCV

- Provide education on HCV transmission and prevention
- Encourage periodic testing for those with ongoing exposure, including PWUD
- Link to prevention resources:
 - SSP/sterile drug use supplies
 - Condoms
 - Encourage routine testing recommendation

Recent exposure? 6-month window period



Understanding HCV Testing Results (2)

HCV RNA Test

Checks to see if a person <u>currently</u> has HCV

Positive Result

Person is currently living with HCV

- Refer to/start treatment
- Provide encouraging nonstigmatizing treatment education
- Be a support to help with adherence

Emphasize that treatment is safe, effective, and completed in as little as 8 weeks with one pill per day!



Negative Result

Person no longer has HCV, cleared either naturally or through treatment

- Provide education on HCV transmission and prevention
- Link to prevention resources such as:
 - SSP/sterile drug use supplies
 - Condoms
 - Encourage routine testing recommendation



Intersection of HCV and HIV

Approximately 21% of people living with HIV in the US also have HCV

HCV is 10 times more concentrated in blood than HIV

HCV can be transmitted more easily than HIV

HCV progresses more rapidly in persons who are living with both HIV and HCV





HCV and HIV

Hepatitis C and HIV

are often-overlooked consequences of America's opioid crisis.

EIGHT IN TEN

new Hepatitis C infections in the U.S. are transmitted through injection drug use.



Nearly

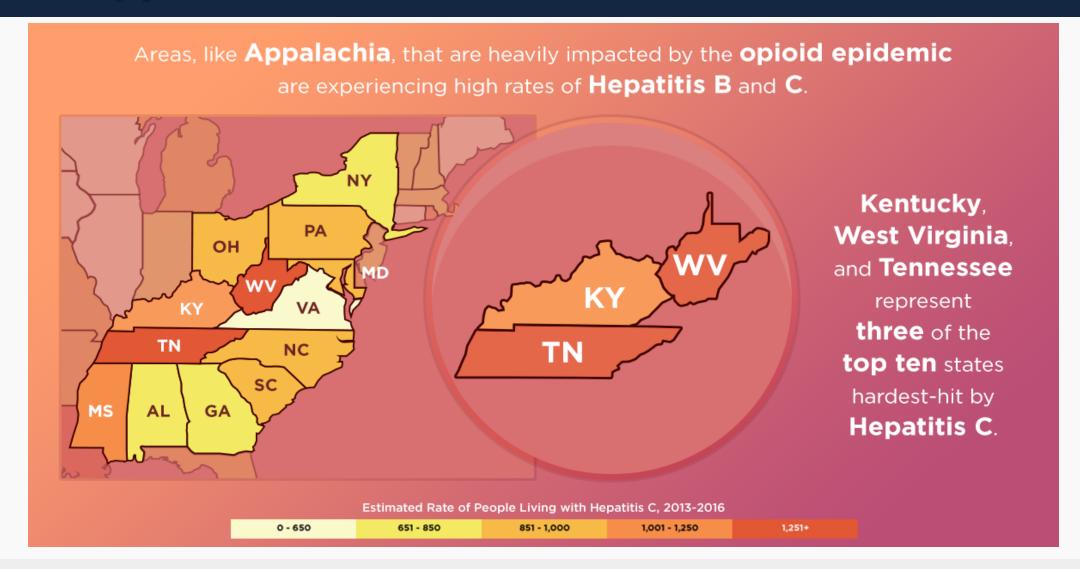
ONE IN TEN

new HIV infections

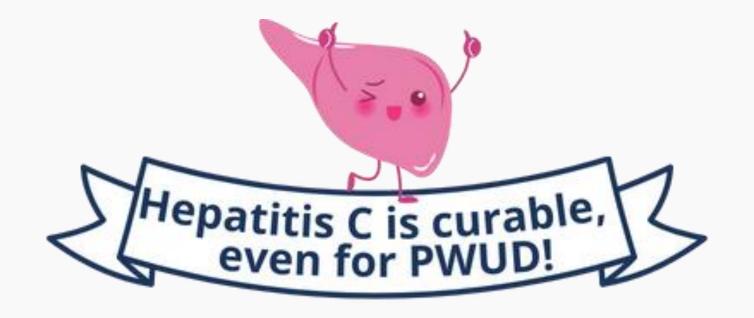
in 2015 were due to **injection drug use**.



HCV in Appalachia









HCV Treatment

HCV Treatment

- Antiviral medications
- Pills, often just once a day
- Treatment is often 8-12 weeks
- Minimal side effects
- Highly effective for people living with HIV

95-98% success rate



Treatment is recommended for all patients with chronic or acute infection.

Did you know that more than 50% of TN local health departments treat HCV!







Source: CDC

Common DAAs and Dosing Information

Epclusa (Sofosbuvir-Velpatasvir)

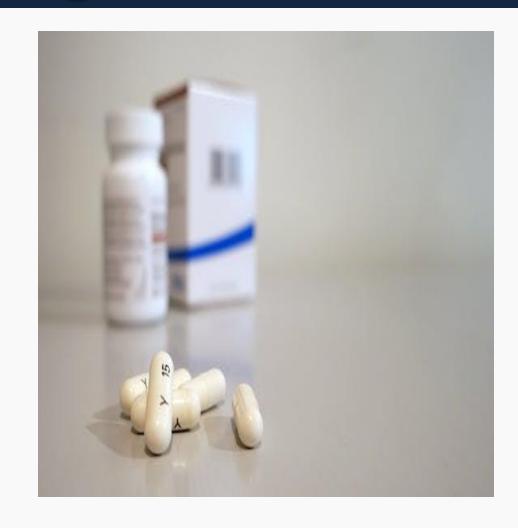
- One pill, once a day
- With or without food

Mavyret (Glecaprevir-Pibrentasvir)

- Three pills taken at the same time once daily
- With food

Harvoni (Ledipasvir-Sofobuvir)

- One pill, once a day
- With or without food





Goals of HCV Treatment

1. Achieve sustained virologic response (SVR), or the absence of detectable HCV

 HCV is not detected in the blood 12 weeks or more after completing treatment

2. Mitigate progression to cirrhosis, decompensated cirrhosis, and hepatocellular carcinoma (liver cancer)





Barriers to HCV Treatment

In a recent needs assessment report,

- 30% of people who used drugs (PWUD) reported having lived or living experience with hepatitis C
- About 28% of PWUD reported needing HCV treatment with 45% not receiving it
- Top barriers included:
 - discrimination and stigma from providers and community
 - concerns about cost
 - not knowing where to access services



Other barriers:

- Testing
- Pre-treatment Screening
- Cost of Medications
- On-treatment Labs
- Insurance
 - Lack of insurance
 - Strict eligibility criteria
 - High co-pays
- Transportation Issues
- Treatment not routine part of primary care
- Lack of access to phones or communication devices



TDH HCV Project ECHO

Our Project ECHO aims to build HCV treatment capacity for



- All adults among Primary Care Providers
- Children among Pediatricians,
 Family Physicians, Nurse
 Practitioners, and other Providers
- Postpartum individuals among interested OB-GYNs and Family Physicians who provide obstetric care

Registration Link: https://endthesyndemictn.org/echo/



Get Involved

Learn More!

https://endthesyndemictn.org/echo/



https://redcap.link/echo.tn

Share With Your Colleagues

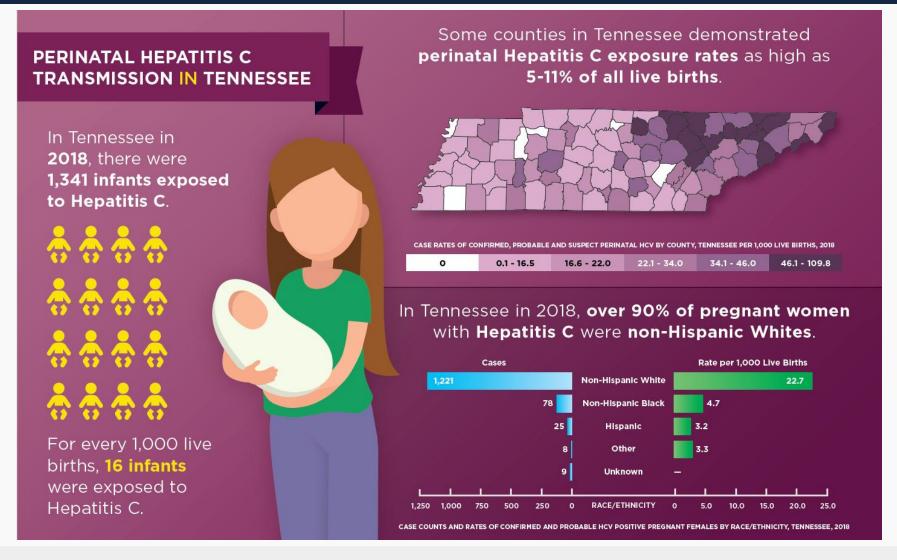
- Forward email communications
- Download and share <u>TDH HCV Project ECHO Flyer</u> from website
- Talk about it!





Perinatal HCV

Perinatal HCV







TDH HCV Resources

Viral Hepatitis Program Navigators

Navigator Types

- 1. Viral Hepatitis Case Navigator (VHCN)*
- 2. Viral Hepatitis Prevention Navigator (VHPN)
- 3. Perinatal Hepatitis C Navigator (PHCN)



| HCV Antibody | HCV RNA | Special circumstance | Navigator Type |
|---------------------|---------|---|----------------|
| - | N/A | Client reports history of drug use and/or incarceration | VHPN |
| + | - | | |
| + | + | Pregnancy Status Unknown | VHCN |
| + | + | Recent Live Birth (in 2022 or later) | PHCN |

^{*} Individuals recently released from prison and living with both HIV and HCV are provided VHCN contact information upon release by the Ryan White Corrections Navigators



Source: TDH Hepatitis C Virus

Viral Hepatitis Program Navigators



Memphis Shelby Region

VHCN/VHPN/PHCN:

Laverne Taylor

Laverne.Taylor@shelbycounty.gov

O: 901-222-9226

Jackson Madison Region

VHCN/VHPN/PHCN:

Laverne Taylor

Laverne.Taylor@shelbycounty.gov

0:901-222-9226

West Tennessee Region

VHCN:

Jennifer Byrd

Jennifer.Byrd@tn.gov

0: 731-421-6794

PHCN/VHPN:

Carla Ray

Carla.Ray@tn.gov

0: 731-991-3887





Syringe Services Programs (SSPs)

What Is Harm Reduction?

A set of practical strategies to empower people who use drugs (and their families) with the choice to live healthy, self-directed, and purpose-filled lives.

A movement built on a belief in, and respect for, the rights of people who use drugs.

Incorporates a spectrum of strategies that includes safer use, managed use, abstinence, addressing health conditions associated with use, and meeting people who use drugs "where they're at."





Source: National Harm Reduction Coalition

"Any Positive Change"

- Making positive movements as defined by the individual person
 - Increases self efficacy and leads to other positive changes
- Shift to evaluating quality of life rather than focusing on abstinence as an outcome
- Individuals identify their own goals/positive movement:
 - Safer use
 - Reduced use
 - Abstinence
 - Something unrelated to use





What are Syringe Services Programs (SSPs)?

A community-based, evidence-based public health program that provides comprehensive harm reduction services such as:

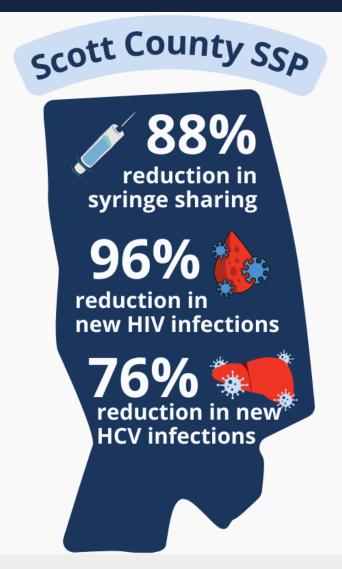




SSPs Improve Health

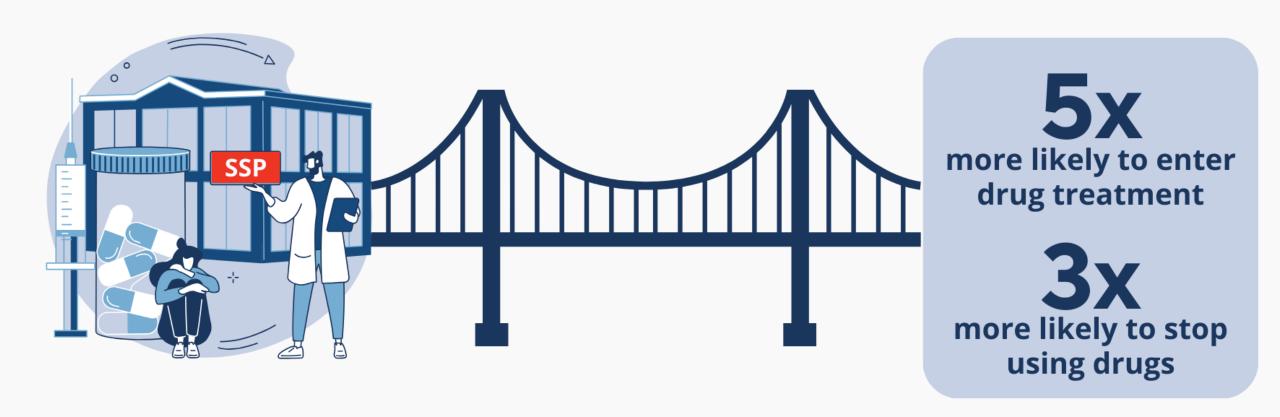








Addressing Misconceptions about SSPs





Common Consumption & Vulnerabilities

Injection

- aka "slamming"
- Using a needle and syringe to administer substances into the bloodstream
- HIV, HCV
- Skin infections (abscesses, endocarditis, sepsis, etc.)
- Vein damage

Snorting

 Consuming a substance through the nose



 Bloodborne pathogens through small cuts in nostrils → e.g. HCV

Smoking

 Inhaling a substance into the lungs through the mouth

- Lung damage
- Bloodborne pathogens through open wounds/burns on lips or inside the mouth → e.g. HCV

Ingesting

- aka "bombing"
- Swallowing, digesting, or drinking substances



- Gum disease, tooth damage and decay
- Liver and kidney issues
- Ulcers or perforations

Rectal Administration

- aka "plugging," "boofing," "booty bumping"When a substance enters the bloodstream via capillaries in the mucus membrane lining the rectum and colon



- HIV, STIs, HCV (if blood is present)
- Damage to rectum and anal cavity tearing & burning if substance is not mixed with water or water-based lubricant

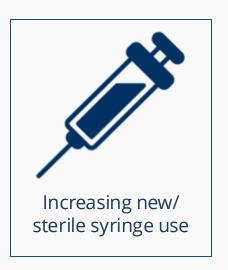
Any method of consumption has the potential to lead to an overdose.



Sources: AIDS United; NASTAD; SubstanceMisuseResources

Harm Reduction is Infectious Disease Prevention

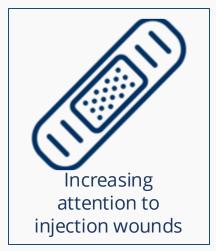


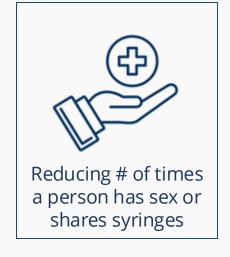


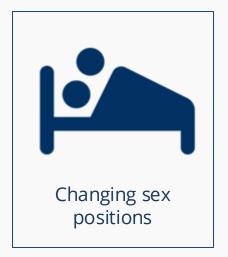




















SSPs in Tennessee

TN SSP Legislation

- Signed into law in 2017 (2018 and 2023 amendments)
- Who: Non-governmental organizations & local health departments,
 following TDH approval
- Where: 1,000 feet from any school or public park
 - 2,000 feet from any school or public park in municipalities with a population between 55,440–55,450 according to the 2020 census
- What: free unused needles/syringes; disposal of needles/syringes; access/referrals to naloxone; referrals to mental health and substance use disorder treatment (including MAT/MOUD); and prevention education



Scan here to read the legislation



Source: Tennessee Syringe Services Program Legislation

Tennessee SSP Locations (October 2024)

- A Betor Way
- Choice Health Network
- DART Program/ Nashville CARES
- Hellbender Harm Reduction
- G• HOPE/ Meharry Medical College
- Live Free Claiborne
- Northeast Tennessee Change Works
- Partnership to End AIDS Status (PEAS)

- Safe Point/ Memphis Area Prevention Coalition
- SisterReach
- STEP TN/ Cempa Community Care
- STIX Exchange/ Children & Family Services
- Street Works
- Tennessee Recovery Alliance
- Vanderbilt Comprehensive Care Clinic
- WeCareTN

* in Memphis

* in West TN







Source: TN SSP Information



Build a community of practice among TN SSPs

Support emerging SSPs

Ongoing support to SSPs

Data Monitoring and Evaluation





Conclusion

How can YOU decrease the spread of HCV?

- Educate the community on HCV transmission
- Break barriers to HCV testing and treatment
- Provide harm reduction services to the community
- More providers treating individuals with HCV
- Offer all services free from stigma and discrimination!





That most people, if they took the time to speak to, they're just as nice as your neighbor next door.

They may have a drug issue and a lot of people do, they're still human. They still need human contact, they need kindness, they need just a little support or just a kind word makes all the difference.

Just don't judge. Don't judge.



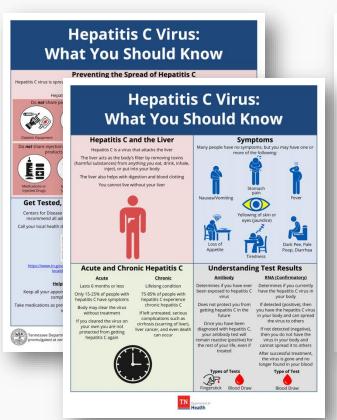
PLWH, PWUD & Experiencing Homelessness

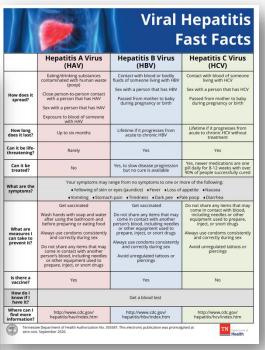




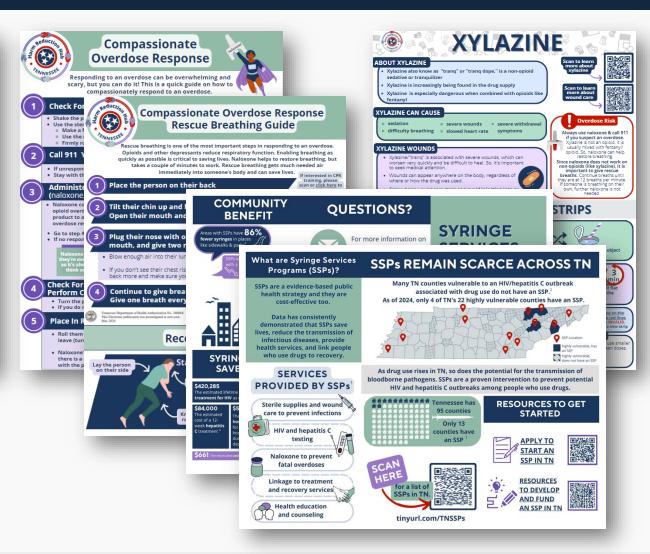
Resources

Resources











TDH HCV Project ECHO

Our Project ECHO aims to build HCV treatment capacity for



- All adults among Primary Care Providers
- Children among Pediatricians, Family Physicians, Nurse Practitioners, and other Providers
- Postpartum individuals among interested OB-GYNs and Family
 Physicians who provide obstetric care

Registration Link: https://endthesyndemictn.org/echo/



Rapid HCV Testing Partnership

- Partnership provides:
 - Rapid HCV Test Kits and Controls
 - In-person Rapid HCV Testing Training for staff and volunteers
 - Support and technical assistance with rapid HCV testing
- Know of agencies interested in becoming a rapid HCV testing partner?
 - https://redcap.link/vh_rapid_testing_interest





Contact Information

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Amber Coyne, MPH, Syndemic Coordination Director amber.coyne@tn.gov

SSP Team: ssp.health@tn.gov



Hepatitis C and the Opioid Crisis QR Code for CEUs



