

What is Hepatitis C Elimination?

Michigan Premier Public Health Conference

10/15/24



Introductions



Presentation Objectives



- Identify current partnerships between the Michigan Department of Health and Human Services (MDHHS), health care providers, local health departments (LHDs) and other community-based organizations vital to hepatitis C elimination efforts in Michigan.
- Describe strategies for increasing access to hepatitis C prevention, testing and treatment among all populations, including disproportionately affected populations.
- Identify resources available at the MDHHS for local health departments and other community organizations interested in hepatitis C prevention, testing and treatment.
- Participants will be able to identify the steps in implementing treatment processes for hepatitis C in a local health department setting by the end of this presentation.

LET'S TAKE A
LOOK AT THE
CATEGORIES...

POTENT

POTABLES

POTPOURRI

BEFORE &
AFTER

WORD ORIGINS

HEPATITIS C ELIMINATION

\$2000

HEPATITIS C CAN LEAD TO THIS
OTHER SERIOUS “C” CONDITION,
SCARRING & HARDENING OF THE
LIVER

WHAT IS
CIRRHOSIS?

Hepatitis C Basics

Hepatitis C is a liver infection caused by the hepatitis C virus (HCV) and transmitted through contact with blood from an infected person.

- Common modes of transmission include:
 - Sharing of drug injection or preparation equipment (e.g., needles, syringes, snorting straws, cottons, cookers, etc.)
 - Blood transfusions or organ transplants before 1992.
 - Occupational exposures to HCV-positive blood.
 - Children born to persons with HCV infection.

HCV infection can range from an acute, mild illness, lasting a few weeks, to a serious, lifelong chronic infection.

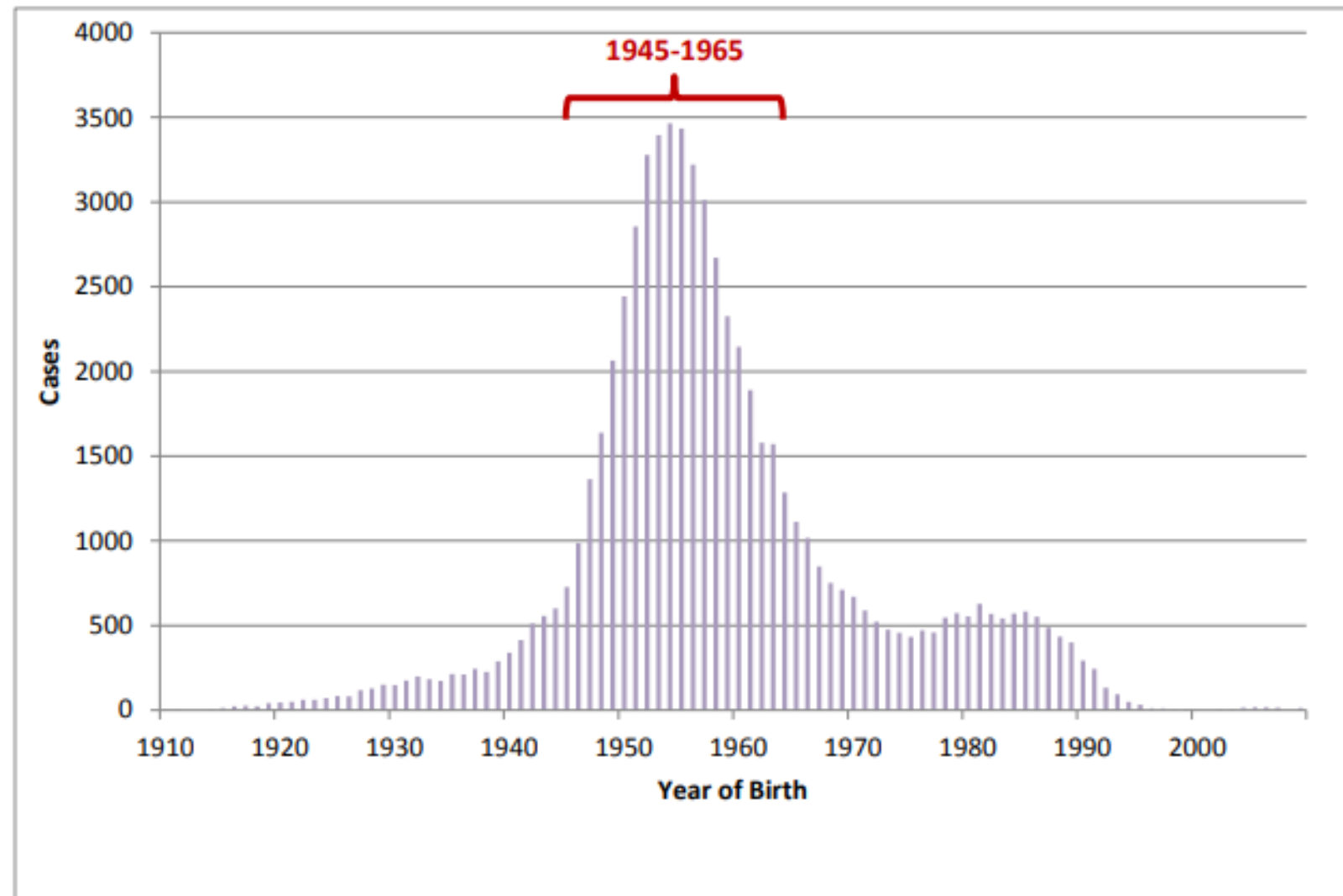
ACUTE: defined as the 6-month period following acquisition of HCV virus.

- Signs and symptoms of acute HCV include jaundice, elevated liver enzymes (ALT > 200 IU/L), fever, headache, malaise, anorexia, nausea, vomiting, diarrhea, and abdominal pain.
 - > 70% of acutely infected persons are asymptomatic.
 - In the acute phase HCV infection can spontaneously clear in about 25% of people. Approximately 75% of individuals will develop chronic HCV.

CHRONIC HCV infection is long-term infection and can result in serious, even life-threatening health problems such as cirrhosis (severe liver scarring/damage) and liver cancer.

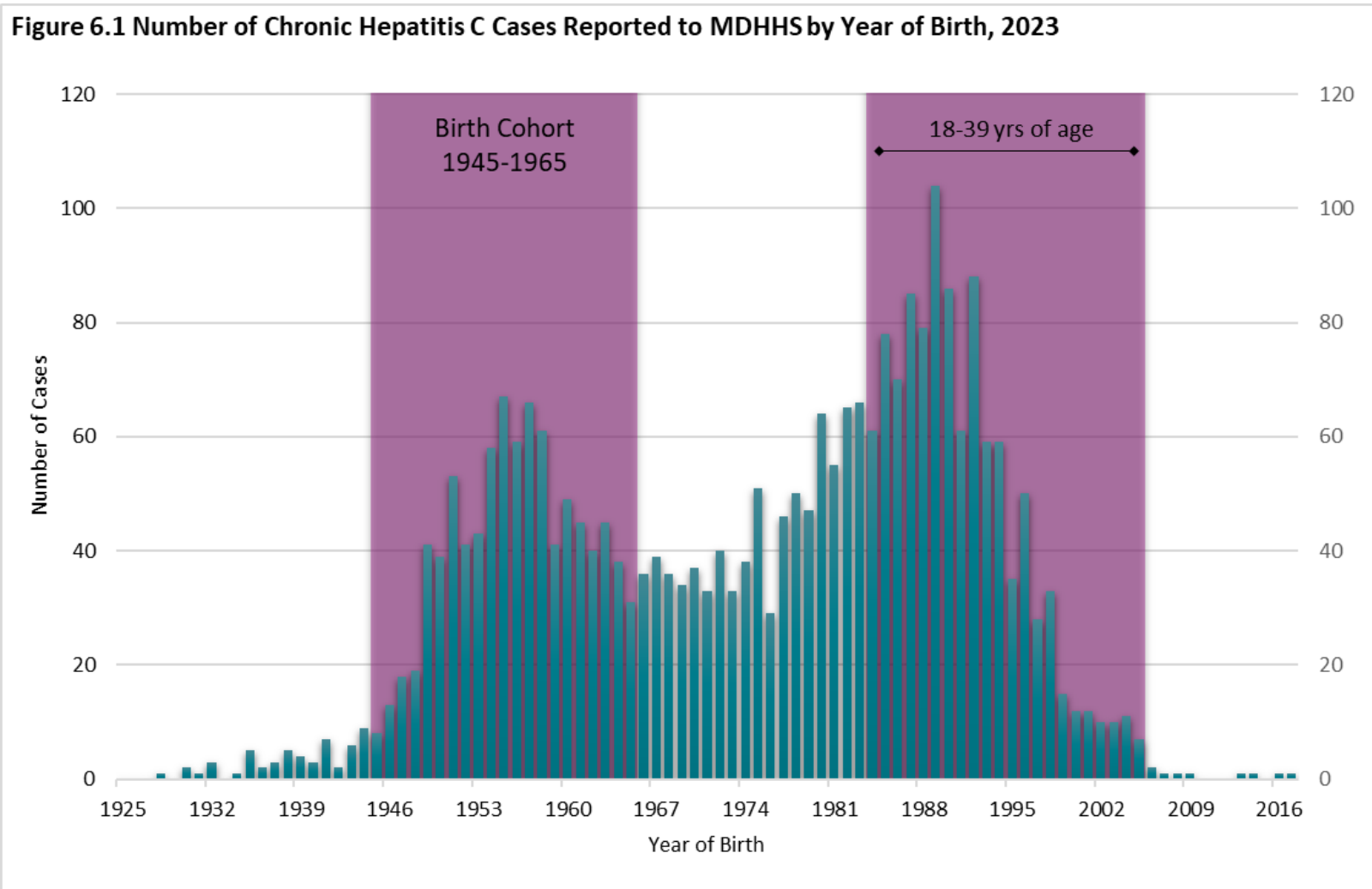
Hepatitis C infection previously highest in “Baby Boomer” birth cohort

Figure 4.4. Number of Chronic Hepatitis C Cases Reported to MDCH by Year of Birth, 2004-2012



Source: Michigan Disease Surveillance System

More hepatitis C observed in adults under 40



Source: Michigan Disease Surveillance System

Injection drug use highest reported risk factor among hepatitis C cases

Table 4.4b Response of Completed Chronic Hepatitis C Reports* by Risk Behavior, Michigan, 2023

Risk Behavior	Yes*	No*
Received Blood Transfusion Prior to 1992	6%	94%
Received an Organ Transplant Prior to 1992	0%	100%
Received Clotting Factor Concentrates Prior to 1992	0%	100%
Hemodialysis	4%	96%
Injection Drug User	52%	48%
Incarcerated in Lifetime	42%	58%
Treated for a Sexually Transmitted Disease in Lifetime	20%	80%
Contact of Person with Hepatitis C	41%	59%
Employed in Medical Field	8%	92%

* Percentages calculated based upon those who completed the field; excludes missing/unknown data

Rate of hepatitis C infections have decreased since 2017, but many still living with hepatitis C

Figure 4.1 Chronic Hepatitis C Cases per 100,000 Persons in Michigan 2014-2023

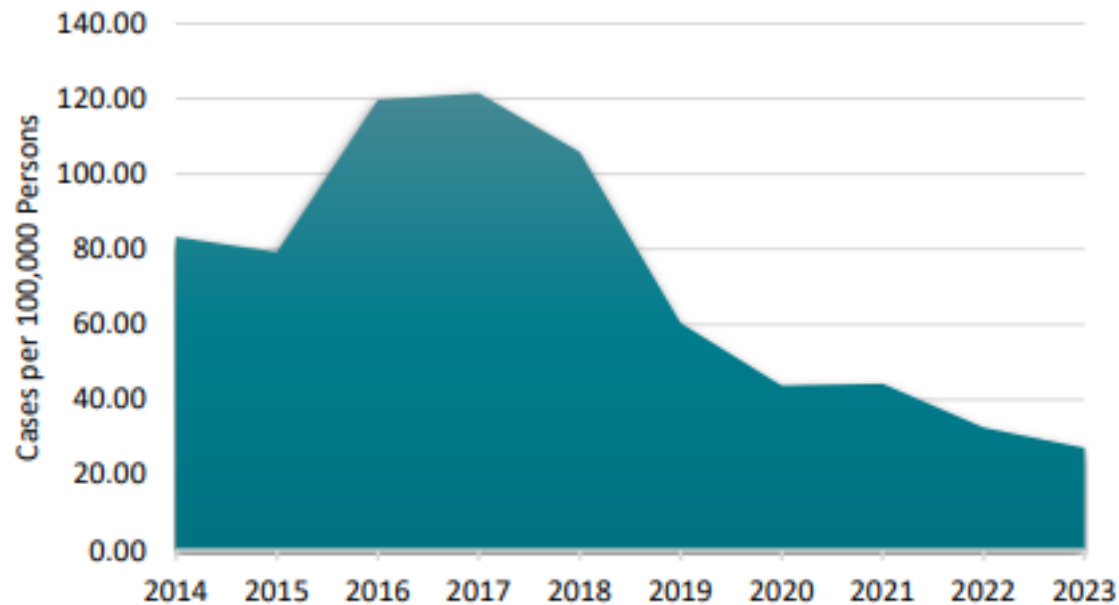
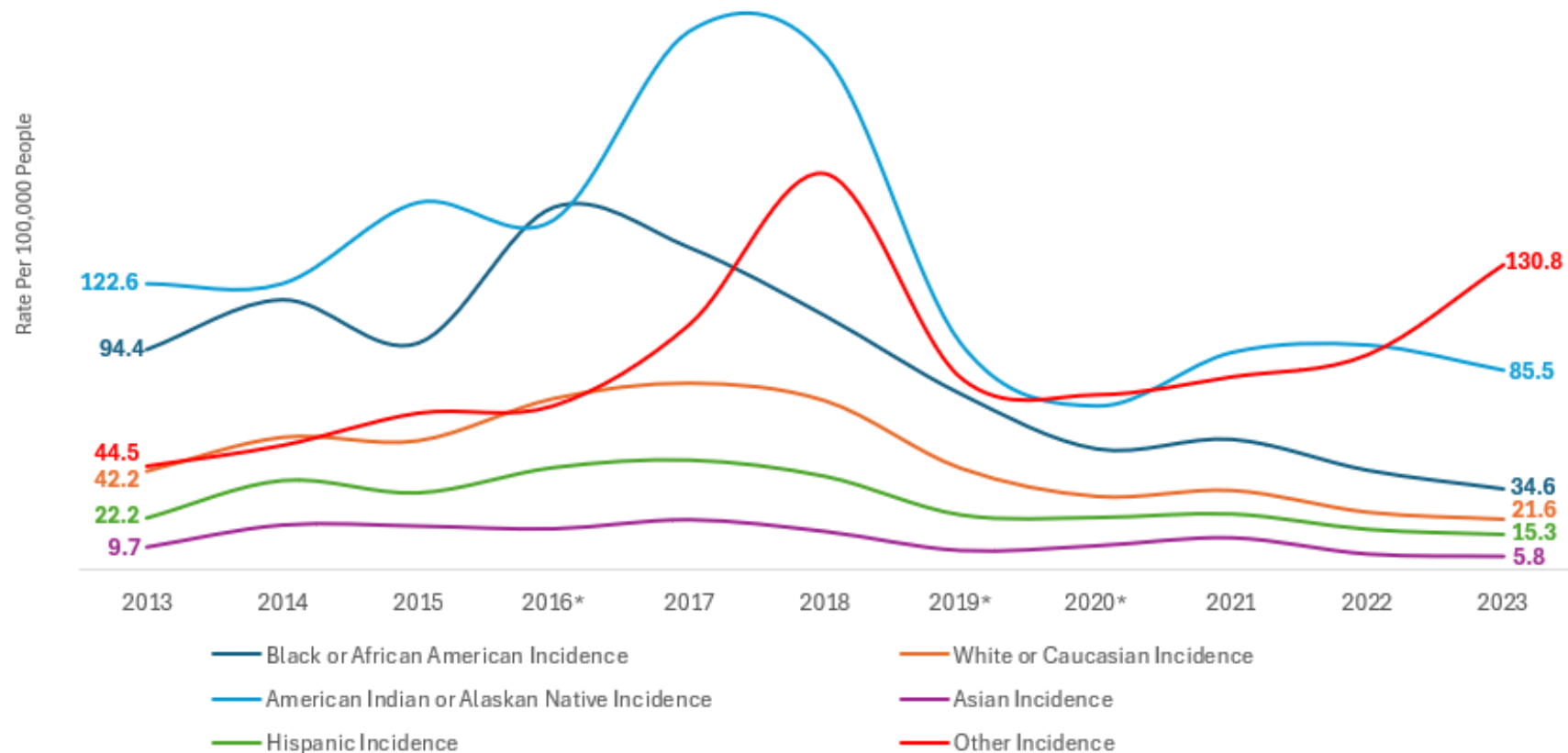


Table 4.1 Chronic Hepatitis C Cases per 100,000 Population in Michigan, 2019-2023

Year	Michigan Cases	Rate per 100,000
2019	6,038	60.4
2020	4,356	43.7
2021	4,412	44.2
2022	3,278	32.6
2023	2,729	27.1

Higher rates of hepatitis C among American Indian or Alaska Native and Black or African American populations

CHRONIC HEPATITIS C CASES PER 100,000 BY RACE AND ETHNICITY IN MICHIGAN, 2013-2023



\$400

THESE ORGANIZATIONS PROVIDE
STERILE INJECTION EQUIPMENT AND
RESOURCES TO HELP PREVENT
OVERDOSE DEATHS AND THE SPREAD
OF INFECTIOUS DISEASES

WHAT ARE
SYRINGE SERVICE
PROGRAMS?

What are syringe service programs (SSPs)?

- Access to sterile syringes and injection equipment.
- Naloxone distribution.
- Drug testing and checking.
- Links to substance use disorder treatment.
- Testing and linkage to care for infectious diseases.
- Provide resources needed to reduce harms related to substance use.
- Meeting people who use drugs where they are at.
- Trust.

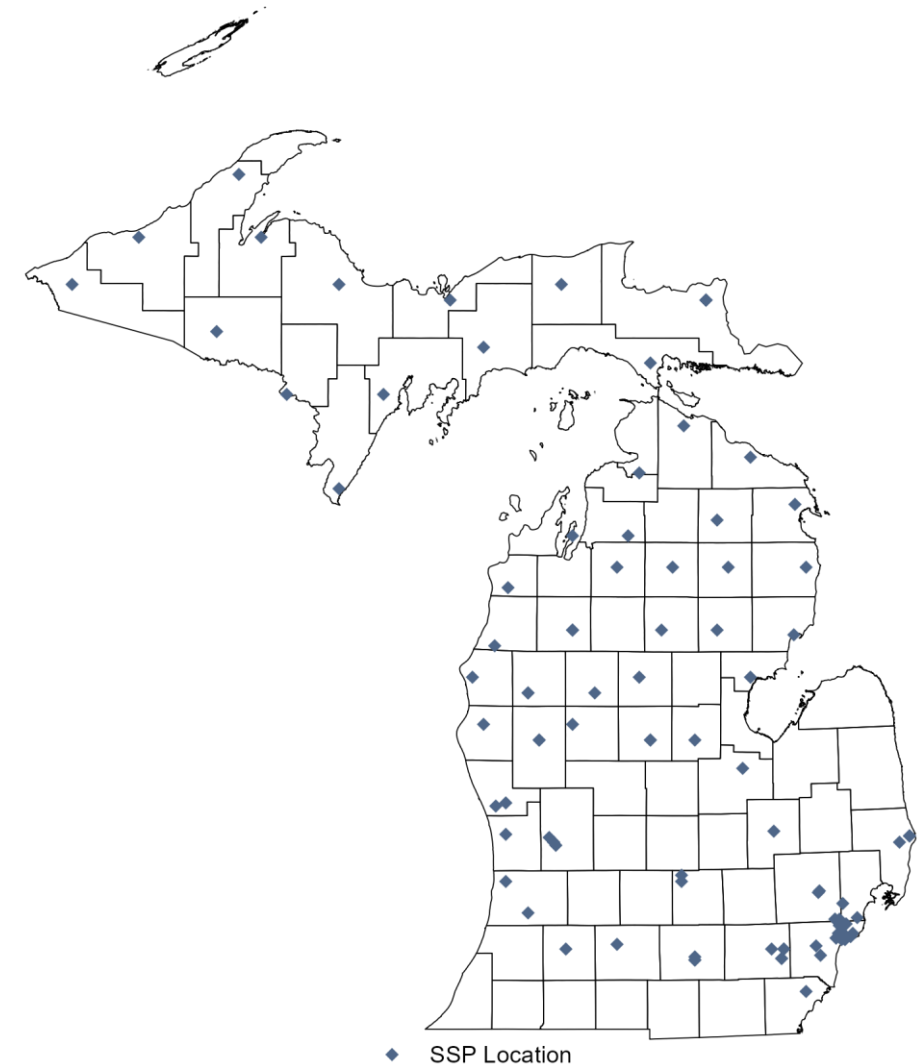
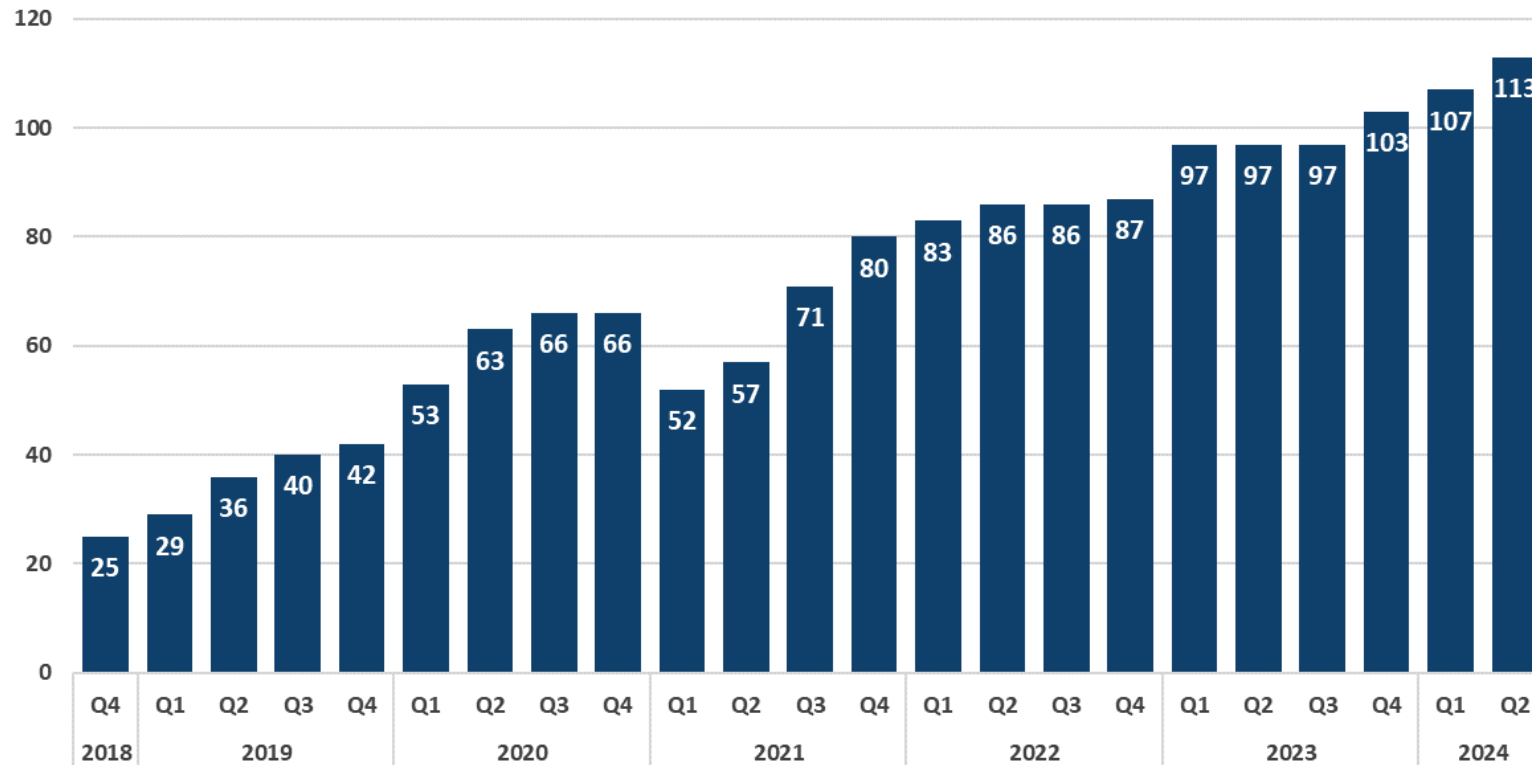
WE SHOULD BAN LIFE JACKETS & OTHER FLOTATION DEVICES

THEY ONLY ENCOURAGE RISKY BEHAVIOR. THE ONLY
100% EFFECTIVE WAY TO PREVENT DROWNING IS
TOTAL ABSTINENCE FROM GOING IN THE WATER.



SSPs locations have increased over time in Michigan

Operational SSP locations by Quarter, 2018-2024



HCV testing in syringe service programs

- SSPs have historically performed hepatitis C testing and linkage to care.
 - Moreso with dedicated funding.
- In 2024, there are three SSPs that are being funded specifically for hepatitis C testing and linkage to care.
 - One is through supplemental funding from CDC operating in Southeast Michigan.
 - Two are through opioid settlement funding (one in West Michigan and one in Southeast Michigan).

HCV testing in syringe service programs

Hepatitis C Testing and Linkage to Care at funded SSPs, January-June 2024

	Count
Total HCV antibody tests administered	434
Total HCV antibody positive results	39 (9%)
Total attending first medical appointment for treatment	19
Total participants treated for HCV	12

\$600

AN AGREEMENT BETWEEN MDHHS
AND THE BIOPHARMACEUTICAL
COMPANY ABBVIE TO PROVIDE THE
ANTIVIRAL MAVYRET™ AS THE
PREFERRED DIRECT ACTING
ANTIVIRAL TO ALL MICHIGAN
MEDCAID BENEFICIARIES AT LITTLE
TO NO COST

WHAT IS THE WE
TREAT HEP C
INITIATIVE?

Common strategies to curtailing costs for treating hepatitis C

- **Prior Authorization:** Before medications can be prescribed, a provider must submit paperwork to gain approval for writing the script.
- **Fibrosis Restrictions:** Limiting prescriptions to only those patients with severe liver damage (e.g., F3 or F4 fibrosis score).
- **Provider Restrictions:** Prescription must be written by, or in consultation with, a specialist (e.g., gastroenterologist, hepatologist, or infectious disease specialist).
- **Sobriety Restrictions:** Patient must be sober from drugs or alcohol for 6 months to be eligible for treatment.

History of Michigan Medicaid HCV treatment coverage



- **2013** – The first HCV DAA receives FDA approval.
- **2015** – Medicaid covers HCV DAAs on a case-by-case basis.
- **2016** – Initiated formal coverage of HCV DAAs in January of 2016.
 - F3/F4 Fibrosis.
 - Prescription must be written by, or in consultation with, a gastroenterologist, hepatologist, or infectious disease specialist.
 - Patient must demonstrate 6 months of sobriety.
- **2017** – Fibrosis score lowered to F2.
- **2018** – Fibrosis score lowered to F1.
- **2019** – Fibrosis score lowered to F0, thereby removing fibrosis score requirement.

Solution for Existing Treatment Requirements

- In 2019, after removal of fibrosis score restrictions, three treatment requirements still remained:
 - Prior authorization
 - Sobriety restrictions
 - Provider restrictions
- **Solution:**
- Subscription Model
 - State enters into an agreement with HCV treatment manufacturer to pay a set price for access to an unlimited supply of the company's HCV medication over a period of several years
 - Beneficial tool for increasing availability and cost-effectiveness of treatment

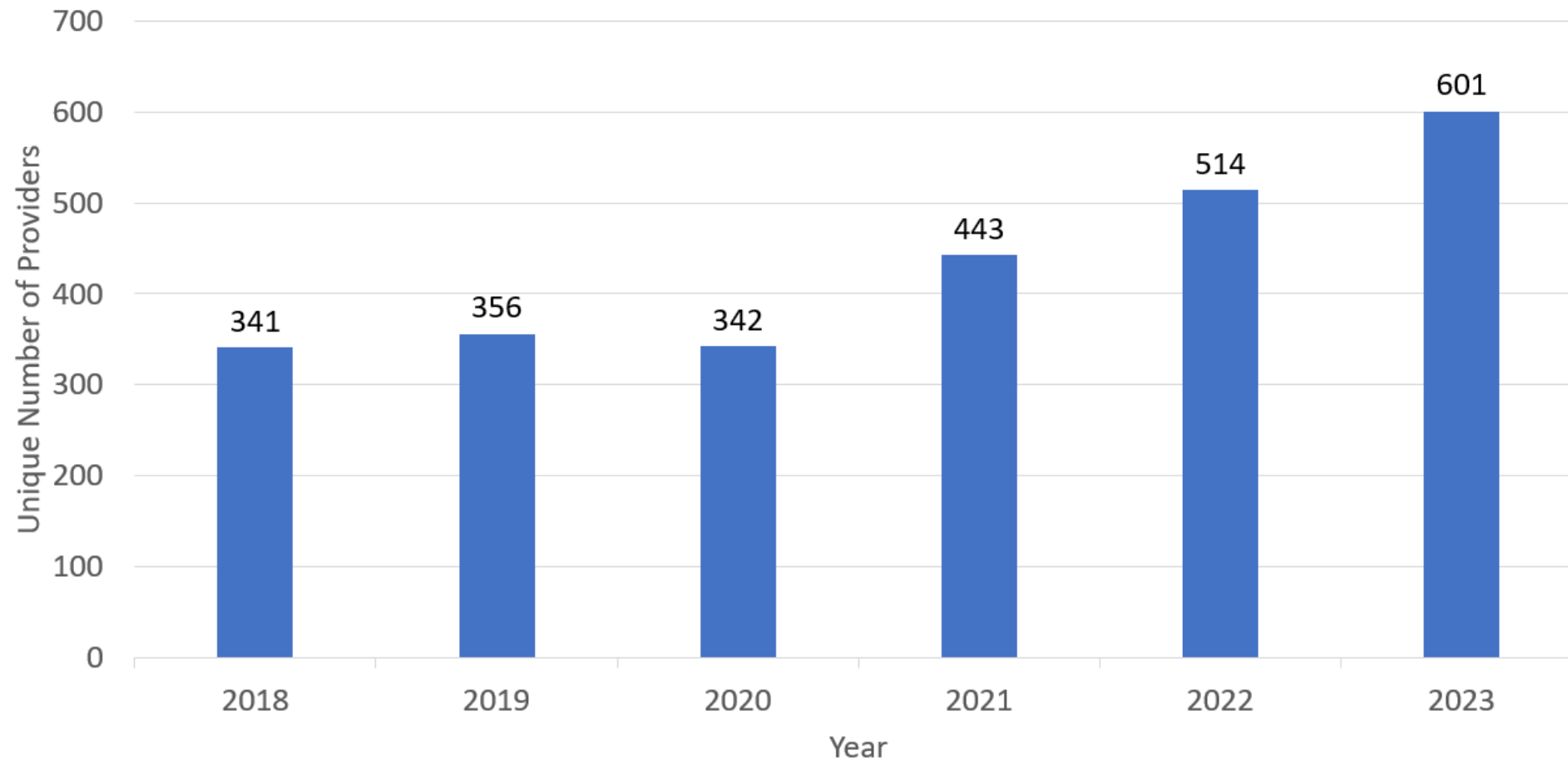
We Treat Hep C Initiative



- MDHHS launched the **We Treat Hep C Initiative** on April 1, 2021, as a strategy to increase access to HCV treatment and eliminate HCV in Michigan
- Treatment with MAVYRET® is available to all Medicaid (\$1 copay) and Healthy Michigan Plan (no copay) beneficiaries at little to no cost
- Other direct acting antivirals (\$3 copay) will require prior authorization and is approved when MAVYRET® is not clinically appropriate
- Any prescriber with prescriptive authority can cure HCV
 - However, many providers do not have experience treating HCV due to historical prior authorization requirements limiting treatment to specialists
 - Program's success is dependent on getting more providers to test and cure HCV

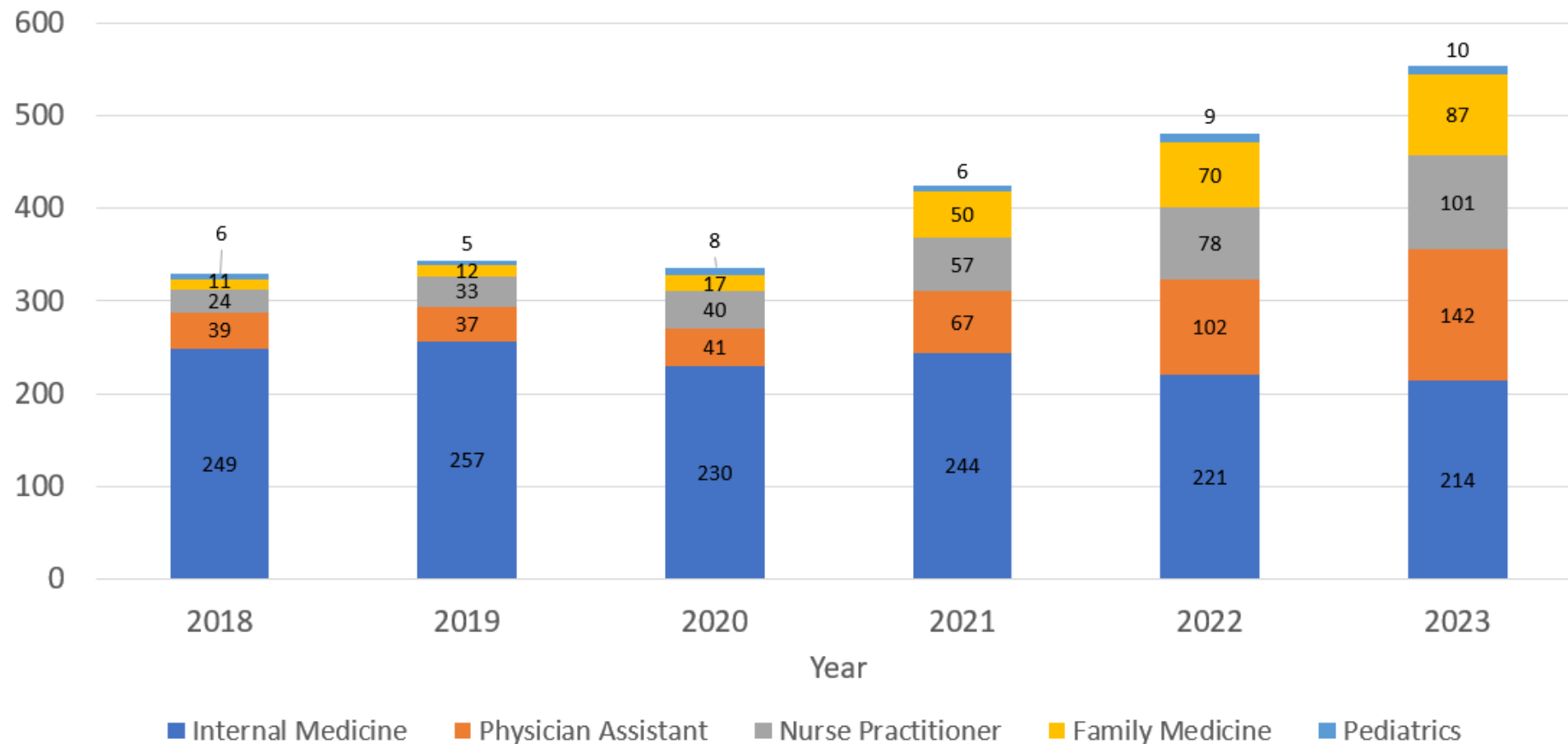
More unique providers treating Medicaid beneficiaries for HCV

Unique Providers Prescribing HCV Treatment to Medicaid Beneficiaries Identified Each Year, 2018-2023



More family medicine physicians, nurse practitioners and physician assistants are treating Medicaid beneficiaries for hepatitis C

Top 5 Provider Classifications for Prescribing Hepatitis C Treatment to Medicaid Beneficiaries, 2019-2023



MDHHS Disease Intervention Specialist (DIS) Unit partners with LHDs and providers to treat patients with HCV



- **Unit created October 1, 2021**
 - Eight hepatitis C disease intervention specialists
- **Mission:** Identify and link Michigan residents at risk or living with hepatitis C to medical care
- **Goal:** Have cases opt-in to the DIS case management services: follow a case through the entire HCV continuum of care
- **DIS roles:** educators, community resource navigators, harm reduction advocates, MI Bridges navigators & case managers
 - Assist LHDs in case investigation and case management

From October 1, 2021 – September 12, 2024

- Contacted **5,208** cases
- Interviewed and educated **2,054** cases
 - Linked to Care: **541** cases
 - HCV treatment starts: **295** cases
 - SVR-12: **255** cases

Emerging Threats MDHHS/LHD Partnership



- Funded through state appropriations, beginning in 2019, with the goal to increase testing and linkage to care in local health jurisdictions with high burdens of HCV
- Funding to LHDs for HCV patient navigators, HCV education, and HCV testing supplies
 - From January 2019 through August 2024, Emerging Threats sites have attempted to contact over 10,000 probable and confirmed cases to link them to confirmatory testing or treatment, and over 2000 patients have been started on curative hepatitis C virus therapies
- Funding to MDHHS Bureau of Laboratories (BOL) for HCV reflex testing
 - From January 2019 through August 2024, ET sites have submitted over 33,000 specimens to the BOL for testing
- Funding to OraSure for HCV Rapid Test Kits
 - Between April 2019 and September 2024, 10,450 OraSure HCV antibody rapid test kits have been provided to LHDs and CBOs to support community-based testing for people at high risk for contracting HCV

Wayne County Jail project collaboration



- MDHHS Hepatitis and TB Section partners with MDHHS Bureau of HIV/STI Programs on the Ending the HIV Epidemic (EHE) initiative in Wayne County
- Implementing opt-out testing upon intake for inmates for HIV, HCV, and syphilis at Wayne County Jail in November 2021 (testing began November 10th, 2021)
- Specimens collected and sent to the MDHHS BOL for HCV reflex testing
- Routine meetings held between MDHHS, Wayne County Jail, Wayne County Healthy Communities, MDHHS BOL and NaphCare staff
- Individuals who are HCV-positive can be linked to care and treatment upon release through HCV DIS Unit

Wayne County Jail hepatitis C testing



Hepatitis C Testing at Wayne County Jail, November 2021-September 2024

# Ab Tests Collected	3396
# Ab Positive	194 (6% positivity)
# RNA Positive	89 (50% positivity)
# of New Detections (not previously reported in MDSS prior to WCJ testing)	28

HCV detailing helps educate providers on hepatitis C treatment best practices



- **HCV Detailing:**
 - Supports HCV elimination by increasing capacity to test and treat
 - Normalizes HCV testing/treatment in non-specialist settings
 - Connects providers with expert clinical consultation
- **Broad/statewide outreach**
 - Collaboration with health care provider professional organizations
 - Conferences
 - MDHHS HCV website utility & accuracy
 - Promotional materials for We Treat Hep C
 - Coordination/collaboration with other MDHHS bureaus & with Henry Ford Health System and Midwest AIDS Training and Education Centers (MATEC) consult programs
- **Practice-based/tailored**
 - In-person cold calls (showing up to clinical sites)
 - WTHC provider calls

\$8000

THEY'RE GR-R-REAT AT TREATING
PATIENTS LIVING WITH HEPATITIS C
AT THIS LOCAL HEALTH DEPARTMENT
IN THE COUNTY KNOWN FOR
KELLOGG'S AND THE BATTLE CREEK
SANITARIUM

WHAT IS CALHOUN
COUNTY PUBLIC
HEALTH
DEPARTMENT?

Why Did We Go There?

HCV

- Significant HCV infection rates
- Increasing IDU rates
- Increasing HIV infection rates
- Lack of PrEP Providers in county

Care Linkage

- Lack of Specialists in county
- Greater than 30-minute drive

1 NP & MA started building the program in 2020 and in less than one year had 13 in care for HCV treatment.



It's As Easy As 1,2,3!

1

- DIAGNOSE

2

- TREAT

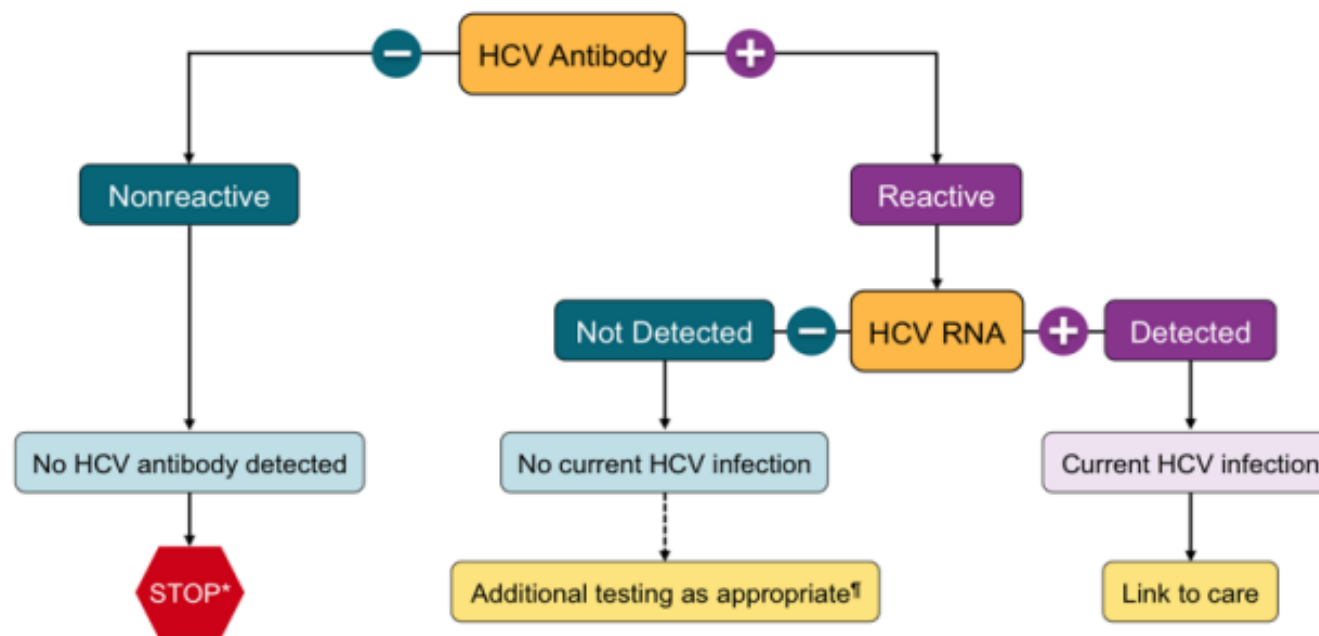
3

- PREVENT
- CURE

Hepatitis C—Testing and Genotype Data

Figure 6.1 CDC Recommended Testing Algorithm for Hepatitis C Virus Infection

Recommended Testing Sequence for Identifying Current HCV Infection



* For persons who might have been exposed to HCV within the past 6 months, testing for HCV RNA or follow-up testing for HCV antibody is recommended. For persons who are immunocompromised, testing for HCV RNA can be considered.

†To differentiate past, resolved HCV infection from biologic false positivity for HCV antibody, testing with another HCV antibody assay can be considered. Repeat HCV RNA testing if the person tested is suspected to have had HCV exposure within the past 6 months or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.





Consultation Request for Initiation of Hepatitis C Treatment

Requesting Clinician

Name Michelle Thorne Profession FNP

Specialty FNP, Public Health Practice Site Calhoun County Public health Dept

Email Address mthorne@calhouncountymi.gov Phone 269.969.6334

Patient Information

Age/year of Birth _____ Sex _____ Gender Identity _____

Health Insurance: Medicaid Medicare Private Insurance No insurance

Year of HCV diagnosis: _____ Chronic (at least 6 months) Acute

Liver Status:

Calculated FIB-4 result: _____ (>3.25 considered evidence of cirrhosis)

Or prior diagnosis of cirrhosis made by: _____

[FIB-4>3.25 or prior cirrhosis requires confirmation and/or staging of cirrhosis]

If another test for liver fibrosis performed (may be needed by some insurance):

~~Metavir~~ Fibrosis score F0-F4: _____

Circle which commercial blood test was used and attach report with test result

~~FibroSpect II~~; ~~HCV Fibrosure~~; ~~FibroMetric~~; other _____

OR

~~Elastography~~ result: _____ kPa

If cirrhosis is present:

Ascites: Not present Mild, controlled medically Moderate, poorly controlled

Encephalopathy: Not present Mild, precipitant induced Chronic

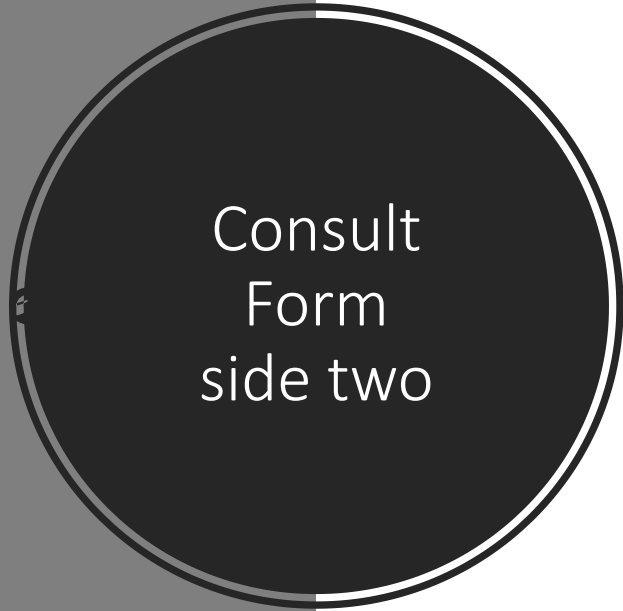
Result of liver ultrasound or other imaging (CT, MRI): _____

Laboratory Results: (Attach copy of all test results with PHI removed)

- HCV RNA viral load (within the past year)
- AST/ALT
- Bilirubin
- Albumin
- Creatinine and calculated eGFR (within the past six months)
- Hemoglobin
- Platelet count
- Hepatitis A antibody (not IgM)
- Hepatitis B surface antibody
- Hepatitis core antibody total (not IgM)
- Hepatitis B surface antigen
- HIV diagnostic test results (HIV1/2AgAb Combo)
- PT/INR (needed for classification of cirrhosis)
- HCV genotype (needed for some insurance and medications other than ~~Mavyret~~ or Eplusa)

Questions? Call: 313-408-3483 OR Email: MATECmichigan@wayne.edu

Consult
Form
side one



HCV Treatment History

- HCV treatment naïve
- HCV treatment experienced:
- Interferon Ribavirin [DAA _____]

Current Medications (prescription, herbal, OTC, recreational): Attach list.

Potential drug-drug interactions? Yes, list potential interactions below No
[Drug-drug interaction references include: hcvguidelines.org or www.hep-druginteractions.org]

Is patient currently using illegal drugs or abusing alcohol? Yes (consider MAT, SSP referral) No

What is your primary clinical question regarding the care of this patient?

HCV Treatment Plan

I plan to prescribe ____ ~~Mavvret~~ Mavvret 100mg/40mg3 tabs once daily x8 weeks with food _____

- I understand that my patient must be tested for HCV RNA at least 12 weeks after completing treatment to determine outcome
- My patient has documented their commitment to adherence to the planned course of treatment and monitoring
- I have counseled my patient on how to reduce their risks for re-infection

Declaration by General Practitioner

I declare all of the information provided above is true and correct

Signature
Michelle Thorne, FNP
Name

Date

Declaration by Specialist Experienced in the Treatment of HCV

I agree with the decision to treat this patient, based on the information provided above

Signature
Name

Date

Email completed form and any supplementary documents to MATEcmichigan@wayne.edu by 5:00PM on Tuesday the week of the call.

- Michigan Medicaid no longer requires a prior authorization for HCV treatment
- Any provider with prescriptive authority can treat and cure HCV
- Submission of prescriber specialty, fibrosis score or substance use cessation is no longer required
- Safe and effective direct acting antivirals can cure HCV infection in 8-12 weeks
- Simplified treatment guidelines for those without cirrhosis that have not been treated previously
- Assistance from consultation programs can help guide treatment with abnormal lab results or medication interactions



Table 3. AASLD-IDSA HCV Simplified Guidance for All Genotypes: Initial Treatment
Simplified HCV Treatment for Treatment-Naive Adults Without Cirrhosis

Regimens listed alphabetically

Recommended

Glecaprevir-Pibrentasvir

*Fixed-dose combination of glecaprevir (300 mg)-pibrentasvir (120 mg): 3 tablets once daily for 8 weeks

Note: *Take with food

or

Sofosbuvir-Velpatasvir

*Fixed-dose combination of sofosbuvir (400 mg)-velpatasvir (100 mg): one tablet once daily for 12 weeks

Note: *Take with or without food

PREVENT

- Educate on transmission of HCV and prevention options
- Refer to Syringe exchange services as needed
- Refer to Medication Assisted Treatment programs
- Ensure return for 3-month HCV sustained virologic response for official CURE
- Explain the difference between HCV antibody positive and HCV RNA viral load positive to client
- Discuss HCV re-infection is possible after treatment and cure





RESOURCES

- **Clinician Scholars Program** – Multifaceted program designed for front-line clinicians who are interested in expanding their capacity to provide HIV/AIDS & HCV care, aiming to increase the number of clinicians that provide care to underserved or disproportionately affected populations.
- Henry Ford Health System **Hepatitis C Clinical Consult Program** - a free consultation line is available Monday-Friday 8am-5pm for all health care professionals with questions about HCV & HIV disease management and treatment (313) 575-0332.
- **MATEC Clinical Decision support** – Participants submit clinical case information, which is reviewed by expert ID physician and discussed with provider during the session.
- Completion of **online learning modules** of Hepatitis C Online developed by the University of Washington
- **Pharmaceutical Representatives** – Provide medication samples, up-to-date information on treatment regimens and patient assistance programs.

Clinic Structure & Funding

FUNDING

- CHOICES CLINIC - STI & FP SERVICES & FUNDING
- MEDICAID, PRIVATE INSURANCE & SELF-PAY, MEDICARE

STAFF

- NURSE PRACTITIONER
- MEDICAL ASSISTANT

SUPPLIES

- MEDICATIONS
- LAB TESTS

CHALLENGES

HARD
VENIPUNCTURES

FAILURE TO FOLLOW
THROUGH

INSURANCE RED TAPE

REIMBURSEMENT

SUCCESSSES

HCV CURES

CLIENT SELF-RESPECT

RELATIONSHIPS WITH
RESOURCES

REIMBURSEMENT

This person has successfully completed treatment for Hepatitis C and has attained SVR. They will always have a positive Hepatitis C antibody lab test. If screening for Hepatitis C re-infection, please perform the Hepatitis C RNA detection and quantification by PCR lab test for an accurate diagnosis.

Name: _____ DOB: _____

Hepatitis C Treatment Start Date: _____

Medication: _____ for _____ weeks.

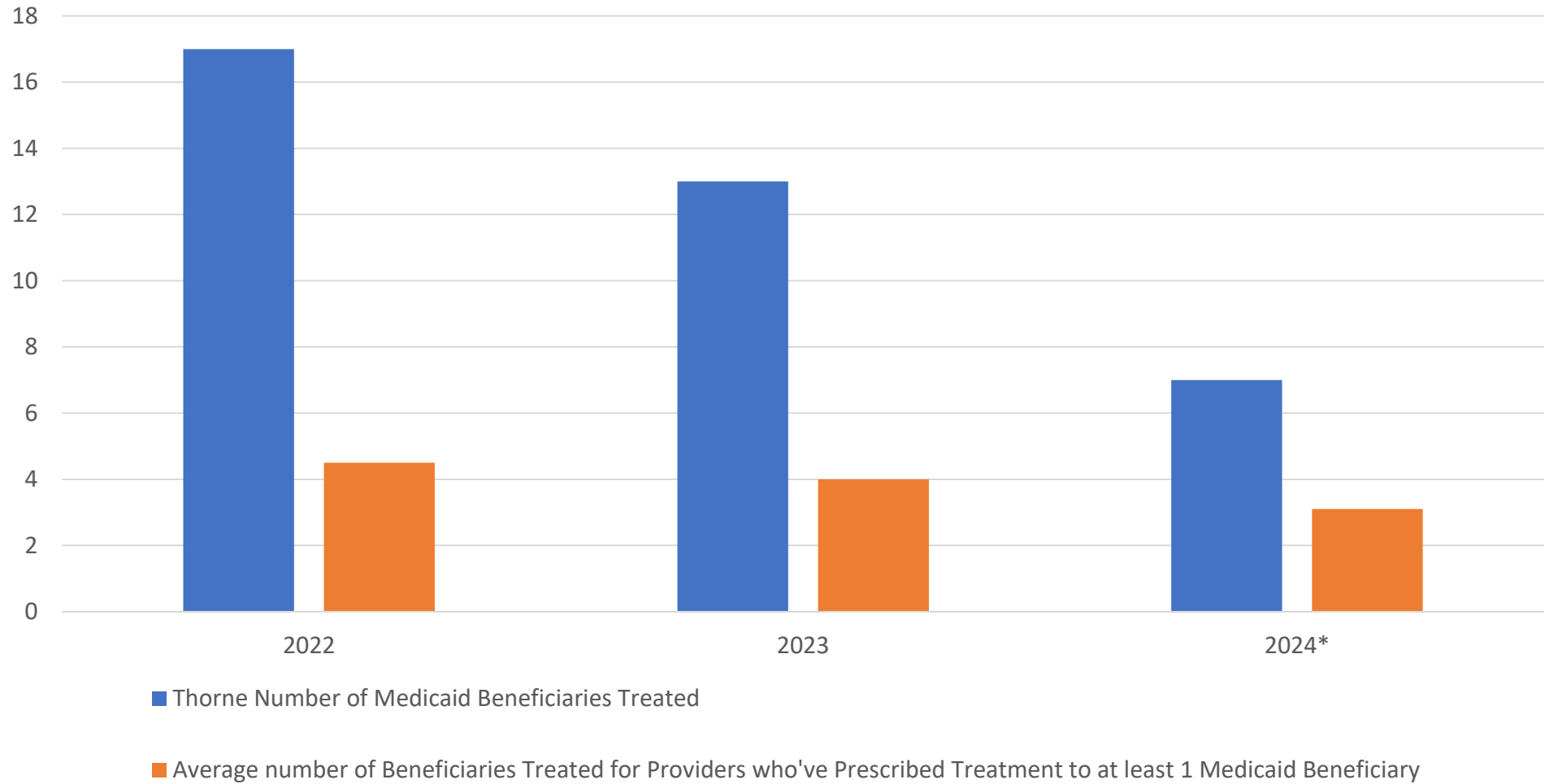
Sustained Virologic Response (SVR) Date: _____



Calhoun County Public Health Department
190 E. Michigan Ave.
Battle Creek, MI 49014
269-969-6383



MI MEDICAID BENEFICIARIES TREATED FOR HCV



Support is available

- [Henry Ford Health System Hepatitis C Clinical Consult Program](#) - a free consultation line is available Monday-Friday 8am-5pm for all health care professionals with questions about HCV & HIV disease management and treatment (313) 575-0332.
- [Midwest AIDS Training + Education Center \(MATEC\) Michigan](#) - offers free HCV & HIV clinical decision support and consultation to all health care professionals. For all other consultation, technical assistance, or training requests, call 313-962-2000, or e-mail MATECMichigan@wayne.edu.
- Overdose Prevention Engagement Network (OPEN) - provides HCV provider consultations for substance use related cases and education.
- [Michigan State University and Michigan Center for Rural Health](#) - assist providers and members of the health care team throughout northern Michigan and the Upper Peninsula manage HCV patients more effectively and confidently through Project ECHO.

REFERENCES/RESOURCES

Henry Ford Health Hepatitis C Consultation Program:

<https://www.henryford.com/hcp/academic/medicine/divisions/id/hep-c-consult>

Hepatitis C Online: <https://www.hepatitisc.uw.edu/>

Michigan Department of Health & Human Services; We Treat Hep C:

<https://www.michigan.gov/mdhhs/keep-mi-healthy/chronicdiseases/hepatitis/hep-c/we-treat-hep-c>

Michigan State University & Michigan Center for Rural Health:

<https://mcrh.msu.edu/education/project-echo/infectious-diseases>

Midwest AIDS Education & Training Center Program: Clinician Scholars

Program: <https://aidsetc.org/resource/clinician-scholars-program>

\$10000

THIS PUBLIC HEALTH PROFESSIONAL
IS ESSENTIAL IN ADVANCING
HEPATITIS C ELIMINATION EFFORTS
IN MICHIGAN

WHAT IS
YOU?

QUESTIONS?

ANSWERS?

THANK YOU!