

Louisiana's Hepatitis C Subscription Model and Elimination Program

Louisiana is facing a public health crisis caused by the Hepatitis C virus (HCV), the deadliest infectious disease in the US (excluding SARS-CoV-2). This crisis can be addressed by screening all persons and providing curative treatment to those who are infected. Unfortunately, the majority of Louisianans infected with HCV go untreated for a variety of reasons, including not being aware of their infection, the prohibitive cost of treatment, and the small number of providers in largely urban areas treating HCV. Faced with one of the nation's worst epidemics and significant State budget limitations, the Louisiana Department of Health (LDH) has implemented an innovative plan to eliminate HCV through the combination of a first-in-nation Modified Subscription Model for HCV treatment and a public health-based community-to-clinic care support model. Through these strategies, LDH plans to treat 80% of Medicaid and incarcerated individuals living with HCV, with the goal of eliminating HCV as a public health threat statewide within the next 5 years.

BACKGROUND

HCV is a deadly virus transmitted through blood and causing severe inflammation and scarring in the liver, often resulting in chronic liver disease, cirrhosis, liver cancer, and death. A disproportionate number of Louisianans are chronically infected with HCV, many of whom are low income, Medicaid enrollees and/or incarcerated. Moreover, the rate of new infections is growing dramatically as a result of injection drug use associated with the opioid epidemic.

Hepatitis C kills more Americans than the next 59 infectious diseases combined – CDC, 2016

The introduction and continued development of direct-acting antivirals (DAAs) has revolutionized the treatment of HCV. DAAs achieve cures at rates as high as 99%. However, the high cost of treatment prohibited the State from providing this cure to many patients, including those in Medicaid. Last year, despite the State spending roughly \$60 million on DAAs in these two populations, very few people in either population were able to receive this life-saving treatment.

THE MODIFIED SUBSCRIPTION MODEL

Under the Modified Subscription Model, LDH and the Department of Corrections have entered into an agreement with Asegua Therapeutics to use the authorized generic of Epclusa (sofosbuvir/velpatasvir) for the treatment of HCV in these populations. This arrangement provides unrestricted access to the drug for five years for all Louisianans enrolled in Medicaid or incarcerated while effectively capping the

Sofosbuvir/Velpatasvir is more than 90% effective against all Hepatitis C genotypes and can be used in individuals with or without cirrhosis

State's spending on HCV drugs. The Model creates an incentive for the State to treat as many infected people as possible, regardless of disease progression. For the drug manufacturer, this model guarantees revenue for the term of the contract, protects market share against an increasingly competitive landscape, and enables the manufacturer to expand their reach into new populations.

LOUISIANA HEPATITIS C ELIMINATION PROGRAM

This innovative Model alone cannot meet the State's goal of curing more than 10,000 Louisianans by the end of 2020, much less achieve our ambitious 2024 elimination targets. In order to fully leverage the Model, LDH convened national and local experts in May of 2019 to address screening and treatment barriers for a population level elimination program. The result of that panel's work is a streamlined test and treat algorithm that is being released to providers as part of our provider training modules, now being offered through our Provider Network Team, Dr. Frederic McCall, Dr. Brandon Mizroch, and Dr. Gia Tyson. This algorithm streamlines the existing care model with a single therapy, one pill/once-a-day for twelve weeks regimen and ensures we are positioned to screen, link and treat as many patients as possible.

To ensure we meet our targets, LDH is also implementing complementary strategies in parallel with the Model to ensure this unrestricted supply of DAAs reaches the intended populations:

- **Expand Provider Capacity to Treat Hepatitis C**
Train primary care providers to diagnose and treat HCV and refer for advanced liver disease, cancer, and substance use disorders;
- **Educate Public on Availability of Cure and Mobilize Priority Populations for Screenings**
Mobilize high-risk populations for screening and treatment through media campaign;
- **Expand HCV Screening and Expedited Linkage to HCV Cure**
Partner with health care providers across the State to screen high-risk populations and ensure individuals with HCV are linked to treating providers;
- **Strengthen HCV Surveillance to Link Persons Previously Diagnosed to Treatment**
Upgrade LDH's HCV surveillance system to support timely identification of infected individuals;
- **Implement Harm Reduction and Complementary Treatment Strategies**
Prevent new or reinfections through syringe service programs and treatment for opioid use disorder;
- **Extend Elimination Efforts to All Populations within the State**
Work with partners—commercial insurers, health systems, and entities serving the uninsured—to reach all Louisianans and achieve truly statewide elimination.

If you are a prescriber and are interested in adding screening, linkage to care, and/or treatment for Hepatitis C, or expanding your current services, we offer several free educational training opportunities that may be of help. Please reach out to our clinical team: Dr. Frederic McCall, Frederic.McCall@LA.gov, Dr. Mizroch, Brandon.Mizroch@LA.gov, or Dr. Gia Tyson, GTyson@Ochsner.org.

The HCV Clinician Warm line is available for clinical support via cell phone, (919) 920-6707, or by contacting our clinical team via email. (Please see contact information above)

ACTION ITEMS FOR PRESCRIBERS

According to the CDC, the Hepatitis C Virus (HCV) kills more Americans than the next 59 reportable diseases combined (CDC, 2016). Hepatitis C can be treated and cured in almost all patients in 12 weeks, which can prevent liver disease progression, cancer and premature death. Unfortunately, most people are unaware of their Hepatitis status. Hepatitis C can be prevented through harm reduction and substance use services and proper infection control in health care. To aid in Louisiana's HCV elimination efforts, we are asking all providers to:

- **Implement screening for all persons through Universal Opt-Out Testing** - The United States Preventative Services Task Force recommendation endorses screening for HCV infection in all adults ages 18 to 79 years (Grade B). Universal HCV screening is an important component in comprehensive HCV elimination strategies.
 - **Screening is especially important in people at highest risk for HCV infection**, including persons born in 1945 to 1965 (Baby Boomer Cohort), pregnant women, and anyone with risk factors for HCV. The most significant risk factor for HCV is past or current injection drug use.
- **Conduct RNA confirmatory testing, preferably through reflex RNA testing**, on all persons who screen Hepatitis C antibody positive. Automatic confirmatory reflex testing is available from all major laboratories. Call your lab for specific ordering and specimen requirements.
- **Link to care.** People who are found to be living with Hepatitis C should be linked to care immediately. If you are not already treating HCV in your practice, participate in provider trainings by reaching out to our provider network team of clinicians to start curing Hepatitis C. For referral information visit the Louisiana Health Hub at <https://www.louisianahealthhub.org/sexual-health-and-stds/hepatitis/testing-treatment/>.
- **Expand Hepatitis C clinical care capacity.** Get trained on Direct Acting Antiviral (DAA) curative treatment. Free Training is offered for any prescriber interested in joining the Louisiana Hepatitis C Elimination Strategy. Live training from our Provider Network Coordinators, Dr. Frederic McCall, Frederic.McCall@la.gov, or Dr. Brandon Mizroch, Brandon.Mizroch@LA.gov, can be scheduled for interested providers. More Information is also available at LouisianaHealthhub.org.
- **Evaluate and treat HCV in all infected patients**, including people with alcohol or drug use disorders.
- **Screen cirrhotic patients for hepatocellular carcinoma** according to AASLD guidelines, even after they have been cured of Hepatitis C.
- **Provide reinfection prevention education and support.** Request patient educational materials and visit <https://www.louisianahealthhub.org/> to connect people to reinfection prevention services such as harm reduction and syringe exchange programs.

HEPATITIS C SCREENING RECOMMENDATIONS

The United States Preventative Services Task Force recommendation endorses screening for HCV infection in all adults ages 18 to 79 years (Grade B).

Universal HCV screening is an important component in comprehensive HCV elimination strategies, and opt-out testing is preferred. All patients aged 18-79 should be tested for HCV and their HCV status recorded in their medical record. Most adults need to only be screened once in their life. Patients with continued risk factors for HCV infection should be screened periodically.

Clinicians may want to consider HCV screening in adolescents younger than 18 years and in adults older than 79 years who are at increased risk.

Pregnant adults should be screened. Because of the increasing prevalence of HCV in women aged 15 to 44 years and in infants born to HCV-infected mothers, clinicians may want to consider screening pregnant persons younger than 18 years.

HCV risk is increased in the following persons:

- Inject drugs, including those who only injected once
- Use intranasal cocaine and other non-injection drugs
- Persons with a history of tattooing or body piercing
- Have certain medical conditions, including persons:
 - who received clotting factor concentrates produced before 1987
 - who were ever on long-term hemodialysis
 - with persistently abnormal alanine aminotransferase levels (ALT)
 - with HIV
 - who received transplanted tissue (e.g., corneal, musculoskeletal, skin, ova, sperm)
- Were prior recipients of transfusions or organ transplants, including persons who:
 - were notified that they received blood from a donor who later tested positive for HCV
 - received a transfusion of blood, blood components, or an organ transplant before July 1992
- Experience a recognized HCV exposure:
 - Healthcare, emergency medical, and public safety workers after needle sticks, sharps, or mucosal exposures to HCV-positive blood
 - Children born to HCV-positive women
- Persons with a history of multiple sex partners or sexually transmitted diseases
- Long-term steady sex partners of HCV-positive persons

Note: 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.

Sources:

<https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/hepatitis-c-screening>

<https://www.cdc.gov/hepatitis/hcv/guidelinesc.htm>

PRESCRIBER TRAINING OPPORTUNITIES

The Louisiana Department of Health is committed to eliminating HCV in our state. To accomplish this goal, we need your help! To improve access to patients state-wide, we have removed restrictions surrounding who can prescribe HCV medications and are training more primary care providers to cure Hepatitis C in persons living with the disease. Our free trainings are for all prescribers (MDs, DOs, NPs, PAs) and clinical staff who would like to be a part of our elimination efforts.

The Louisiana Department of Health's (LDH) Office of Public Health (OPH) and the Louisiana Department of Corrections (DOC) has launched a comprehensive, evidence-based, and action-oriented plan to achieve the elimination of hepatitis C virus (HCV) as a public health threat in Louisiana by the end of 2024. The plan is composed of seven strategies leveraging mutually reinforcing efforts across public health, health care, industry, and community partners throughout the state working towards the common goal of state-wide elimination of hepatitis C infection, defined by the World Health Organization as diagnosing 90% and treating 80% of Louisiana residents. Our vision is a "Hep C Free Louisiana" where Hepatitis C is no longer a threat to public health, the quality of life for our citizens is improved, and health inequities related to hepatitis C are eliminated. This vision is only possible with the expansion of our provider network through the effort and collaboration of individuals, agencies, organizations, and health systems at all levels in each of Louisiana's 64 parishes.

To learn more, go to: <https://louisianahealthhub.org/hepatitis-c-for-providers/>

LOUISIANA DEPARTMENT OF HEALTH'S EVENTBRITE PAGE

Visit our online Eventbrite page for the most up-to-date listing of our upcoming events at: [LDH.Eventbrite.com](https://louisianahealthhub.org/hepatitis-c-for-providers/). All of our sessions are free to join and offer CME at no cost to you.

If you are a prescriber and are interested in additional trainings to add screening, linkage to care, and/or treatment for Hepatitis C to your clinical services or expanding your current services, **reach out to Dr. Frederic McCall via email, Frederic.McCall@LA.gov, or via cell phone: (919) 920-6707** to schedule trainings. If you are interested in custom training opportunities for yourself or your colleagues, please reach out to our team with your specific training needs.

ONE-HOUR HCV TREATMENT PRESCRIBER TRAINING

Our first step in training consists of a single, one-hour HCV Provider Training to prepare prescribers to identify and treat people living with HCV. These trainings provide a background on the Hepatitis C epidemic facing our community, an introduction to the Hep C Free Louisiana plan, and a walk-through of the streamlined screening and treatment algorithm so all prescribers can feel confident providing the cure for Hepatitis C to their clients. HCV Prescriber Training is available to any medical provider in the state of Louisiana and can be scheduled with our academic detailing team at your convenience. The training is ideal for one-on-one or small groups to directly address individual questions or concerns from prescribers.

[HEPATITIS, ADDICTION, AND HARM REDUCTION IN MEDICINE \(HARM.\) PROJECT ECHO SERIES](#)

The ongoing opioid epidemic in America fuels the hepatitis epidemic ravaging our country. HCV elimination efforts are unlikely to succeed without co-addressing substance use. We launched the HARM project Echo series to help Louisiana address the HCV and Opioid syndemic. This monthly lunch and learn series focuses on destigmatizing drug use while integrating Harm Reduction services in medical care. Join us on the third Wednesday of the month, at 12-noon central time. Sign up at: <https://ldhharm.eventbrite.com>

[HCV PROJECT ECHO SERIES](#)

These lunch and learn sessions will be a short 15-minute didactic lesson followed by clinical case discussions. The majority of the time is really for YOU! Please come with cases you would like to discuss and any questions we can answer for you. Anyone can join the Project Echo meeting, but remember, if you want to be an HCV Champion, you MUST attend one of the HCV Champions half-day trainings, attend 8 of these Project Echo sessions (presenting at least 5 cases) and complete a culminating exam. Then you are awarded a certificate acknowledging your hard work to become a proficient HCV provider. Sign up at: <https://hcvecho.eventbrite.com>

[HCV CHAMPIONS TRAINING](#)

For those that would like to become more experienced providers, we have a more intensive class called HCV Champions Training. This provides a more in-depth analysis of more complicated HCV care and consists of a half-day didactic, followed by weekly online case review sessions (typically at lunch) to improve provider comfort in treating more advanced cases. These trainings will be held throughout the state in the coming months and allow for a deeper dive into the principles behind the state's streamlined HCV treatment algorithm. Sign up at: <https://ldhhcvchamp.eventbrite.com>

[HCV CHAMPION RECOGNITION](#)

For those that would like to be recognized as an HCV Champion Prescriber in Louisiana, we offer a combined course of study and collaboration with prescribers throughout the state through a combined HCV Champion Training and the 12-week HCV Project Echo Series. To be recognized as an HCV Champion Prescriber in Louisiana, attend an HCV Champion Training, at least 8 out of 12 HCV Project Echo Series, present at least five clinical cases for discussion, and pass a culminating examination to demonstrate mastery of HCV screening and treatment topics. Upon successful completion of the program, prescribers will be recognized by the Louisiana Department of Health as a Champion Prescriber in the State's HCV Elimination efforts.

HCV PRESCRIBER WARM LINE

To access HCV related clinical support services, please contact Dr. McCall or Dr. Mizroch via email, text, or telephone. Dr. Gia Tyson can also provide clinical support through email.

Frederic McCall MD/MBBS, MPH&TM(c)

Pronouns: He/Him/His

Provider Network Coordinator

Frederic.McCall@LA.gov

Ph: (919) 920-6707

Or

Brandon Mizroch, MD/MBBS

Pronouns: He/Him/His

Provider Network Supervisor

Brandon.Miroch@LA.gov

Ph: (202) 321-4045

Or

Gia Tyson, MD, MPH

Transplant Hepatologist, Ochsner

Head of Hepatology, Ochsner Baton Rouge

Clinical Assistant Professor of Medicine, LSU Baton Rouge

Clinical Network Specialist, Louisiana Department of Health

GTyson@Ochsner.org

STREAMLINED POPULATION HEALTH SCREEN & TREAT ALGORITHM

SCREENING FOR ADULT PATIENTS*

HX, PE, Labs
(CMP, CBC, HIV, HepBs Ag, HepBc Ab total, HepBs Ab, HepA IgG, urine pregnancy test)
No genotyping

do not treat →

TO SPECIALIST IF:

- Prior DAAs*
- HIV(+)*, HBV(+), Pregnant
- Decompensated cirrhosis CTP B or C or MELD ≥ 15

SCREEN FOR CIRRHOSIS

TRANSIENT ELASTOGRAPHY (IF AVAILABLE, IF NOT... PROCEED!)

kPa < (12.5)

not available

kPa ≥ (12.5)
cirrhosis

APRI < (2), and
FIB-4 < (3.25)

APRI ≥ (2), or
FIB-4 ≥ (3.25)

(no cirrhosis)

(cirrhosis, non-decomp)

HCC SCREENING → (N/A)

Screen For HCC - U/S + AFP
(if not avail, do not delay treatment)

(-) HCC
(or no U/S)

(+)HCC

TREAT

Treat with generic eplusa
sofosbuvir/velpatasvir 400mg/100mg x 12 weeks

Treat with generic eplusa
sofosbuvir/velpatasvir 400 mg/100 mg

Specialist

SVR12

SVR12

HCC SURVEILLANCE → (N/A)

Post-treatment HCC Surveillance
every 6 months

- **U/S:** Ultrasound
- **HCC:** Hepatocellular Carcinoma
- **HX:** Patient History
- **kPa:** kilopascal

- **SVR12:** Sustained Virologic Resistance
- **PE:** Physical Exam
- **CTP:** Child-Turcotte-Pugh
- **DAA:** Direct Acting Antiviral

- **HBV:** Hepatitis B
- **AFP:** Alpha-Fetoprotein
- **MELD:** Model For End Stage Liver Disease

* Generic Eplusa is not indicated for pediatric patients who should be referred to ID/GI/hepatologist.

* Prior DAA use applies to exclusively oral regimens only.

* HIV+ patients may be referred to ID or experienced HCV provider.

PRE TREATMENT ALGORITHM

HCV confirmed with HCV viral load

No restrictions related to:
 • Alcohol or drug use
 • Fibrosis stage

Baseline history, physical and lab testing:

CMP, CBC, HIV, HepBs Ag, HepBc Ab total, HepBs Ab, Hep A IgG, urine pregnancy test

Fibrosis staging (in order of preferred):

Fibroscan

APRI & Fib-4

Fibrosure

Clinical evidence of cirrhosis

Decompensated cirrhosis refer to GI/hepatologist or MELD of ≥ 15

HIV + refer to ID or experienced HCV provider

HBsAg+ check HBV DNA and refer to ID/GI/hepatologist

If pregnant refer to ID/GI/hepatologist

*Prior DAA use refer to ID/GI/hepatologist

Liver lesion or decompensated cirrhosis refer to GI/hepatologist

If cirrhotic:

U/S and AFP every 6 months for HCC surveillance

(not required for starting treatment)

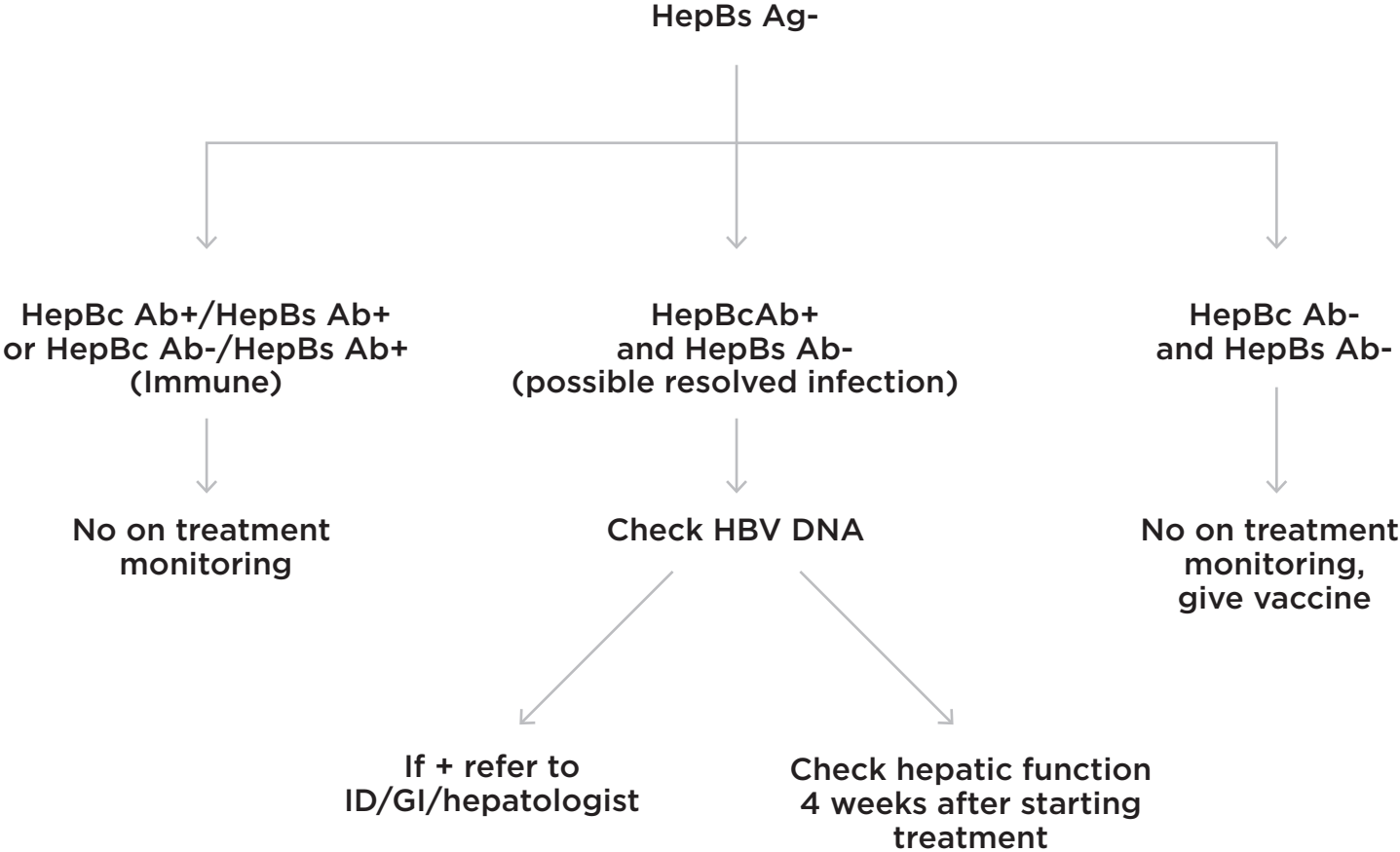
High suspicion for cirrhosis-refer to GI/hepatologist (not required for the starting treatment)

- Total billrubin elevated
- Platelet count <150K
- Cirrhosis on imaging
- Ascites
- Fibroscan ≥ 12.5
- APRI > 2
- Fib-4 > 3.25
- Fibosure ≥ 0.75

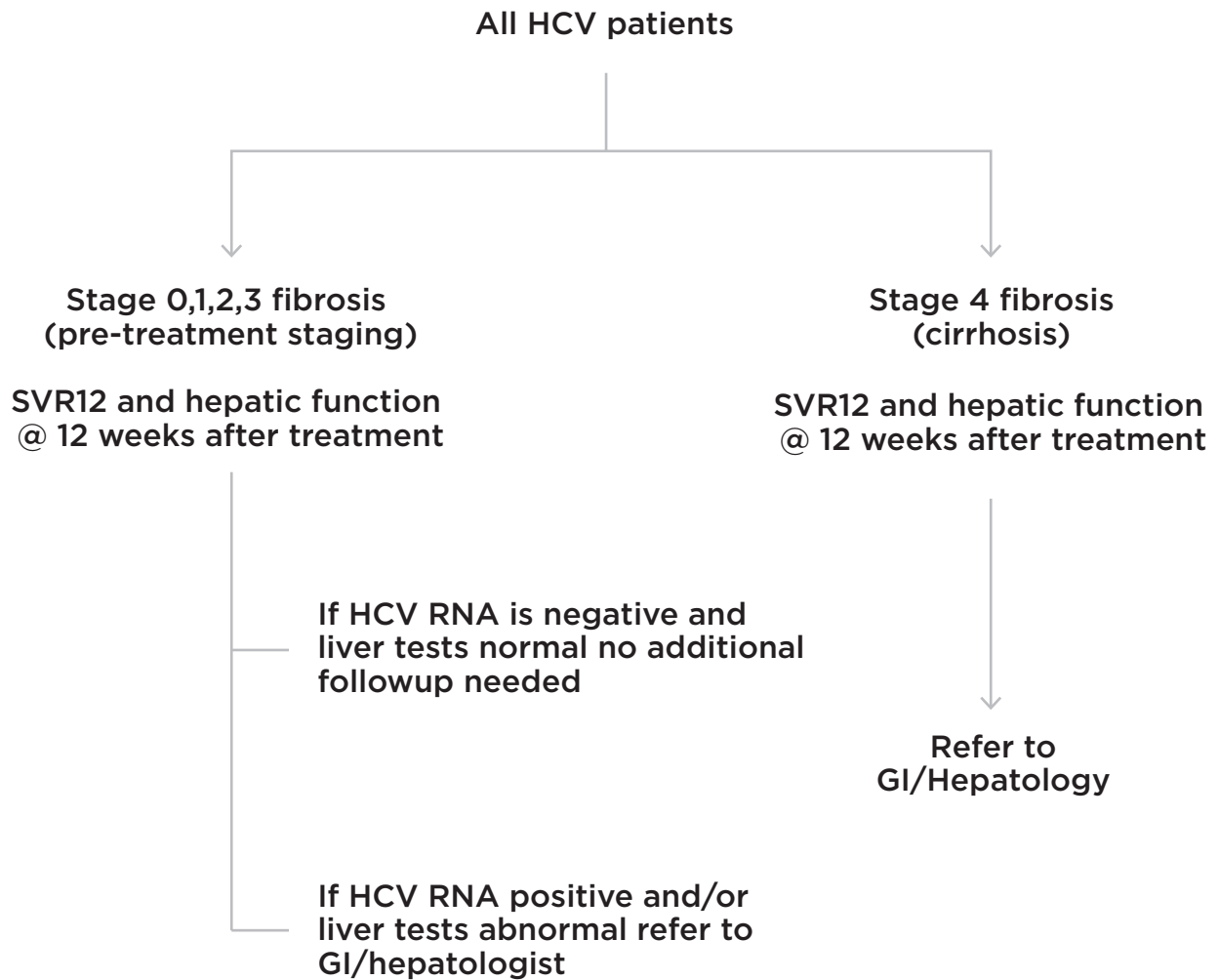
Prevention - not required for starting treatment

- HAV vaccination if Hep A Ab-
- HBV vaccination if Hep Bs Ab-

ON TREATMENT ALGORITHM



POST TREATMENT ALGORITHM



SVR12= HCV viral load negative 12 weeks after treatment; patient is considered cured.

HEPATITIS VACCINATIONS

Hepatitis A and B vaccination can be initiated at any time before, during or after Hepatitis C treatment. There is no need to delay Hepatitis C treatment for Hepatitis A and/or Hepatitis B vaccinations

HEPATITIS A & B COMBINED VACINATIONS

Adult Twinrix vaccination allows for coverage for both Hepatitis A and B on two different vaccination schedules:

Standard dosing is Day 0, 1 month, and 6 months.

Accelerated dosing is Day 0, 7, and 28 days with a booster at 1 year.

HEPATITIS A VACCINATIONS

Hepatitis A vaccinations include Havrix and Vaqta. Hepatitis A vaccines were recommended in the United States beginning in 1996. Dosing is:

Standard dosing is Day 0 and 6 months.

There is no need for HAV booster vaccination after completion of the primary two-dose vaccination series.

If the immunization schedule is interrupted, the second dose can be given without restarting the series. It is good practice to use the same brand of vaccine to complete a course. If this is not possible, products for booster dose are interchangeable (e.g., VAQTA can be used for booster dose following primary dose of HAVRIX and vice versa).

HEPATITIS B VACCINATIONS

Hepatitis B vaccinations include Engerix-B and Recombivax HB. Hepatitis B vaccines were recommended in the United States beginning in 1991. Dosing is:

Standard dosing is Day 0, 1 month, and 6 months.

- 1st Shot - Any time
- 2nd Shot - At least one month (or 28 days) after the 1st shot
- 3rd Shot - At least 4 months (16 weeks) after the 1st shot (and at least 2 months (8 weeks) after the 2nd shot).

There is also a newly FDA approved 2 shot Hepatitis B vaccination: Heplisav-B (Dynavax). The vaccine is administered as two doses given one month (at least 28 days) apart.

HEPATITIS B VACCINATION CONSIDERATIONS

There is no need to restart the series if a patient has missed a dose. If the series is interrupted after the first dose, the second dose should be given as soon as possible, and the third dose at least 2 months after the second. If only the third dose is delayed, it should be given as soon as possible.

Persons who do not respond to the primary hepatitis B vaccine series (i.e., anti-HBs <10 mIU/mL) should complete a second 3-dose vaccine series or be evaluated to determine if they are HBsAg-positive. Persons should be retested at the completion of the second vaccine series, 1-2 months following the last shot of the series.

For patients that have completed the vaccination series many years ago, HBV surface antibody blood test can be used to confirm protection. A positive anti-HBs or HBsAb test result greater than 10 mIU/mL is considered protective. If anti-HBs or HBsAb are less than 10 mIU/mL, a booster dose is recommended with a recheck of anti-HBs or HBsAb titers in 1-2 months. If titers are still less than 10, then complete the remaining two-doses of the vaccine series and recheck the levels again after 1-2 months.

HEPATITIS C

There are no current vaccinations for Hepatitis C. Circulating Hepatitis C antibodies do not confer protections from future Hepatitis C infections. For patients that have circulating Hepatitis C antibodies but are not Hepatitis C RNA positive, (resolved HCV infection) it is important to educate patients about risk for reinfection if they have ongoing risk factors. Patients should also be educated that they will have lifetime HCV antibodies in their blood stream and should not be screened with antibody tests. Patients who have resolved HCV infection, but have risk factors for re-infection, should be screened using HCV RNA testing.

HCV ICD-10 CODES

HCV codes	ICD-10
Carrier of unspecified viral hepatitis	Z22.50
Carrier of viral hepatitis C	Z22.52
Carrier of other viral hepatitis	Z22.59
Personal history of other infectious and parasitic diseases	Z86.19
Chronic viral hepatitis C	B18.2
Unspecified viral hepatitis C without hepatic coma	B19.20
Unspecified viral hepatitis C with hepatic coma	B19.21
Other specified acute viral hepatitis	B17.8

Codes related to liver transplant	ICD-10
Liver transplant status	Z94.4
Awaiting organ transplant status	Z76.82
Presence of functional implant, unspecified	Z96.9

Other hepatitis-related codes	ICD-10
Contact with and (suspected) exposure to viral hepatitis	Z20.5
Contact with and (suspected) exposure to other viral communicable diseases	Z20.828
Other chronic viral hepatitis	B18.8
Chronic viral hepatitis, unspecified	B18.9
Unspecified viral hepatitis with hepatic coma	B19.0
Unspecified viral hepatitis without hepatic coma	B19.9
Chronic persistent hepatitis, not elsewhere classified	K73.0
Other chronic hepatitis, not elsewhere classified	K73.8
Unspecified cirrhosis of liver	K74.60
Other specified diseases of liver	K76.89
Liver disease, unspecified	K76.9
Liver disorders in diseases classified elsewhere	K77
Personal history of other infectious and parasitic diseases	Z86.19

Additional codes that may be used in HCV management	ICD-10
Encounter for screening for other viral diseases	Z11.59
Encounter for screening for infectious and parasitic diseases, unspecified	Z11.9
Encounter for immunization	Z23
Asymptomatic human immunodeficiency virus (HIV) infection status	Z21
High-risk heterosexual behavior	Z72.51
Encounter for screening for other disorder	Z13.89
Human immunodeficiency virus (HIV) disease	B20
Alcohol abuse, uncomplicated	F10.10

Other	ICD-10
Pregnant state, incidental	Z33.1
Vasectomy status	Z98.52

OPT-OUT UNIVERSAL HCV SCREENING GUIDELINES FOR PRESCRIBERS

The United States Preventative Services Task Force recommendation endorses screening for HCV infection in all adults ages 18 to 79 years (Grade B). [1]. Universal HCV screening is an important component in comprehensive HCV elimination strategies. Non-targeted, opt-out testing for Hepatitis C virus (HCV) can be added to routine screenings in most care settings without increasing length of stay. Implementing routine testing in all clinical settings can help identify HCV cases outside of traditional risk groups or those who do not self-identify in a risk group.

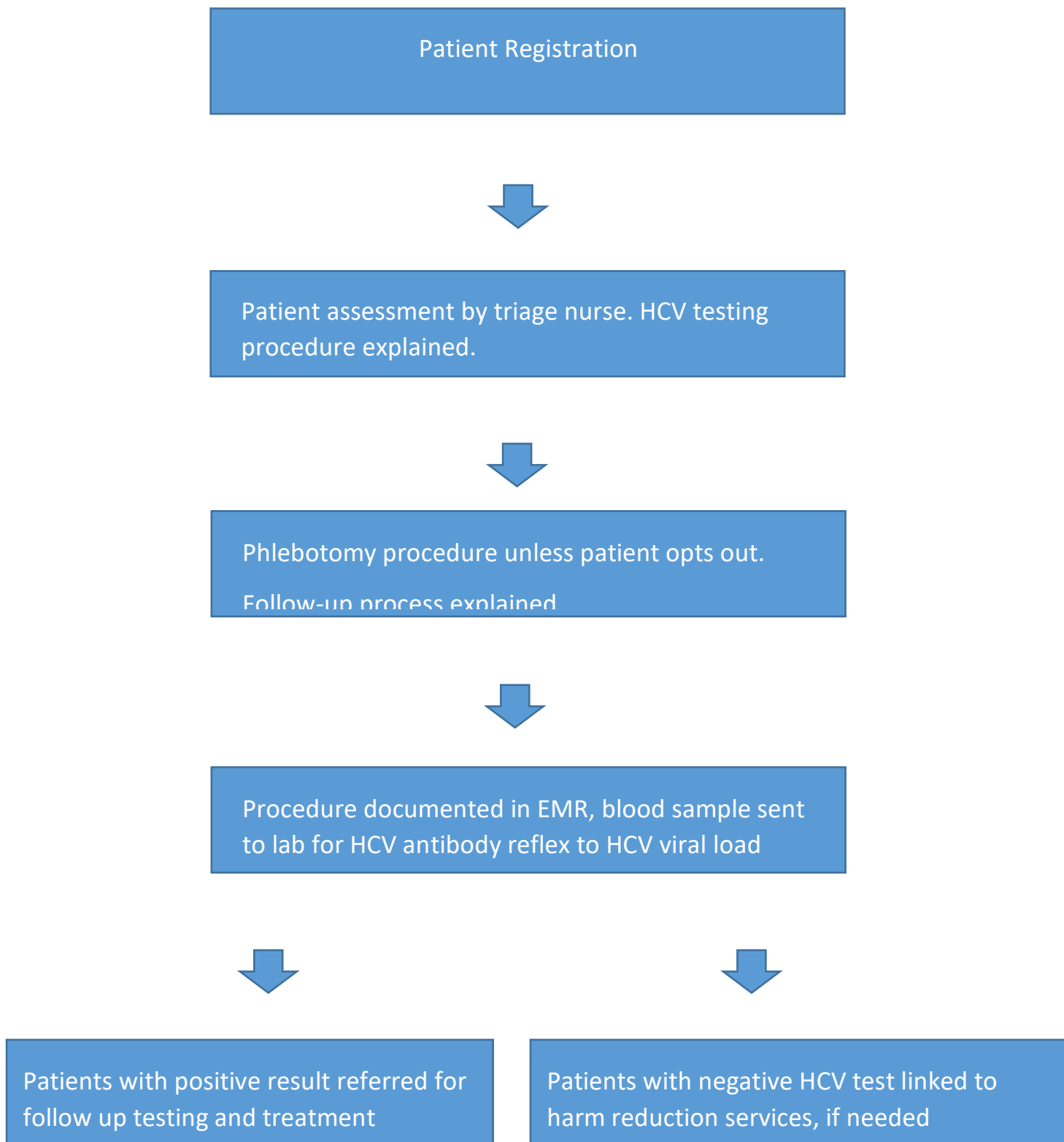
Ideally, HCV antibody testing with reflex HCV RNA should be utilized for screening with confirmatory testing. This is especially important in the ED setting when patient follow-up may be difficult for confirmatory testing.

In one study in a metropolitan ED setting, opt-out testing increased HCV screening in the ED by 6950% with 13.2% of HCV antibody tests returning positive. Of those patients who were antibody positive for HCV, 97.8% had follow up RNA test, with an overall HCV confirmed case rate of 7.7%. [2]

Among patients undergoing other laboratory testing, HCV screening did not increase length of stay compared to those that did not undergo HCV testing. Among visits in which a CBC was performed there was no significant difference in median LOS between the visits that also included HCV screening (249 minutes, IQR 182 to 345) and the visits that did not (246 minutes, IQR 175 to 352) ($P = 0.590$). [3]

Universal screening for HCV can be a lifesaving tool for early detection, and is critical for linkage to the lifesaving cure.

1. Recommendation Statement Hepatitis C Virus Infection in Adolescents and Adults: Screening." *Hepatitis C Virus Infection in Adolescents and Adults: Screening - US Preventive Services Task Force*, United States Preventative Services Task Force, March. 2020, <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/hepatitis-c-screening>
2. Schechter-Perkins EM, Miller NS, Hall J, Hartman JJ, Dorfman DH, Andry C, Linas BP. [Implementation and Preliminary Results of an Emergency Department Nontargeted, Opt-out Hepatitis C Virus Screening Program](#). *Acad Emerg Med*. 2018 Nov;25(11):1216-1226. doi: 10.1111/acem.13484. Epub 2018 Jul 20. PubMed PMID: 29851238.
3. White DA, Anderson ES, Pfeil SK, Deering LJ, Todorovic T, Trivedi TK. [Hepatitis C Virus Screening and Emergency Department Length of Stay](#). *PLoS One*. 2016;11(10):e0164831. doi: 10.1371/journal.pone.0164831. eCollection 2016. PubMed PMID: 27760176; PubMed Central PMCID: PMC5070782.



Contact the HCV Prescriber Warm Line with any questions by contacting Dr. Frederic McCall via email, Frederic.McCall@LA.gov or cell phone: (919) 920-6707.

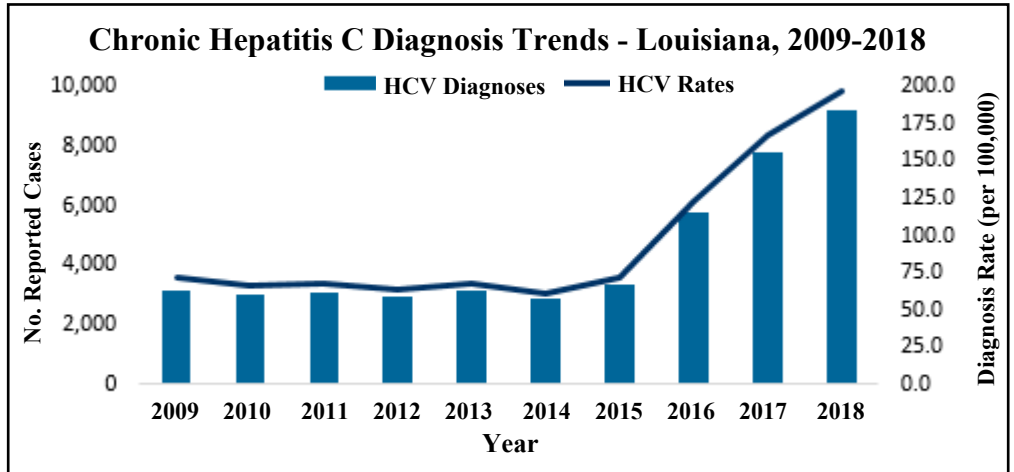
FOR REFERENCE PURPOSES ONLY: It is the prescriber’s responsibility to remain up to date with the latest guidelines and recommendations regarding hepatitis, screening for hepatitides, treatment recommendations, and prescriber information for any medications used. Questions or concerns from providers can be directed to the HCV Prescriber Warm Line for any clinical questions that may arise.

Last Reviewed: September 09th 2022



Louisiana 2018 Chronic Hepatitis C Update

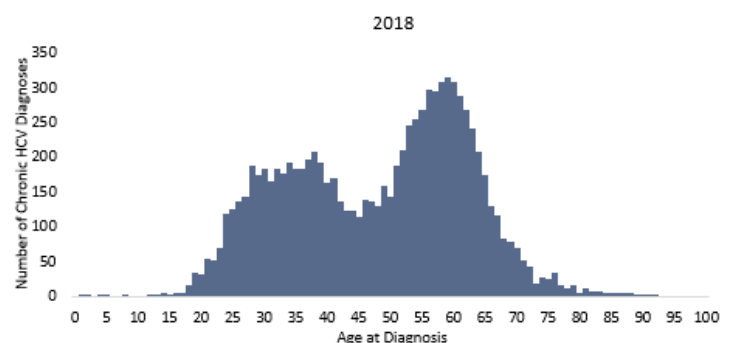
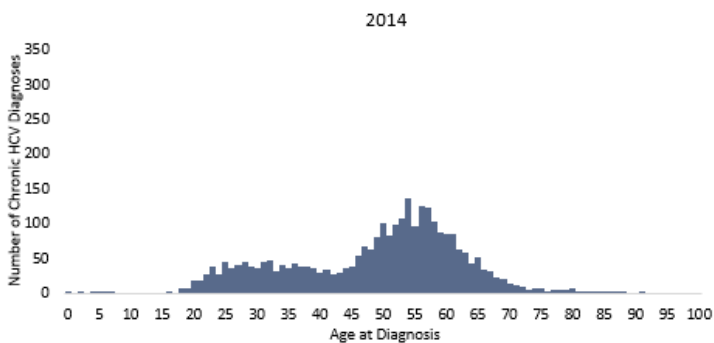
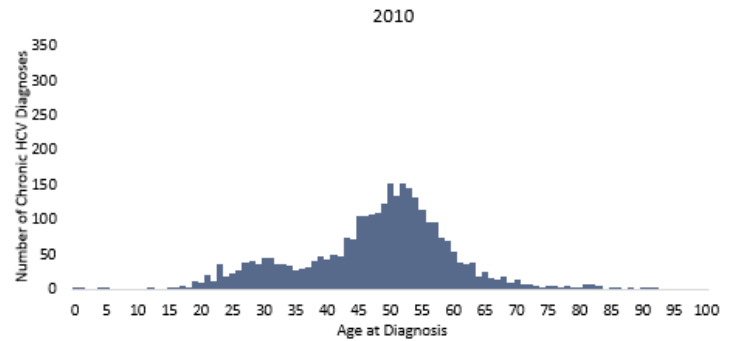
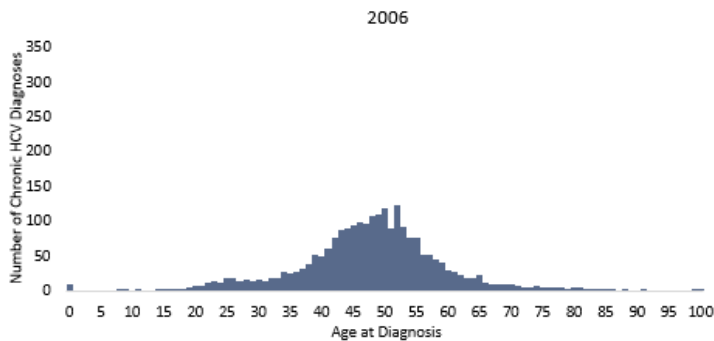
Reports of newly diagnosed chronic hepatitis C (HCV) have increased dramatically in recent years. In 2018, there were 9,202 chronic HCV cases reported (197.5 cases per 100,000 population). Since 2014, the rate of reported cases has increased 222% (61.4 cases per 100,000 compared to 197.5 cases per 100,000). Reasons



for this change include increased incidence, enhanced case reporting, increased awareness and screening, and an official change in the case definition in 2016.

The majority of new chronic HCV diagnoses are in Baby Boomers (persons born between 1945 and 1965). However, recent years have seen an increase in new diagnoses in person under 40 years of age mainly due to injection drug use. In 2006, only 18% (420/2,303) of newly reported chronic HCV diagnoses were in persons under 40 years of age, while Baby Boomers accounted for 71% (1,637/2,303). The percentage of diagnoses in persons under 40 has increased each year. In 2018, persons under 40 years of age accounted for 33% (3,025/9,202) of chronic HCV diagnoses, while Baby Boomers accounted for 45% (4,172/9,202).

Chronic Hepatitis C Diagnoses by Year of Diagnosis and Age - Louisiana, 2006, 2010, 2014, and 2018





Louisiana 2018 Chronic Hepatitis C Update

The demographics of chronic HCV diagnoses in persons under 40 years of age and Baby Boomers are different. In persons under 40 years, the majority of chronic HCV diagnoses were White and male, but there was a greater proportion of diagnoses among females when compared to Baby Boomers (45% compared to 29%). Baby Boomers were mostly male and Black.

In persons under 40 and among Baby Boomers, the majority of diagnoses were among males, 55% (n=1,663) of diagnoses for persons under 40 and 71% (n=2,969) of diagnoses among Baby Boomers.

For persons under 40, 79% (n=1,828) of diagnoses occurred in Whites and 18% (n=425) of diagnoses occurred in Blacks. For Baby Boomers, 55% (n=1,516) of diagnoses occurred in Blacks and 43% (n=1,192) of diagnoses occurred in Whites.

The majority of chronic HCV diagnoses reside in the New Orleans Region (31%, n=2,892), Baton Rouge Region (18%, n=1,639), and Hammond/Slidell Region (13%, n=1,230). A larger proportion of persons under 40 years of age reside in the New Orleans and Hammond/Slidell Regions compared to Baby Boomers.

A total of 3% (n=268) of chronic HCV diagnoses were co-infected with HIV.

Chronic Hepatitis C Diagnoses for Persons Under 40 Years and Baby Boomers - Louisiana, 2018

	Total		Under 40 Years		Baby Boomers*	
	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent
TOTAL	9,202	100%	3,025	100%	4,172	100%
Gender						
Female	3,326	36%	1,362	45%	1,203	29%
Male	5,876	64%	1,663	55%	2,969	71%
Race/Ethnicity						
Asian	50	1%	7	0%	29	1%
Black	2,470	38%	425	18%	1,516	55%
Hispanic/Latinx	77	1%	35	2%	20	1%
White	3,828	59%	1,828	79%	1,192	43%
Other	50	1%	12	1%	23	1%
Unknown	2,727	-	718	-	1,392	-
Region						
Region 1: New Orleans	2,892	31%	1,017	34%	1,231	30%
Region 2: Baton Rouge	1,639	18%	482	16%	819	20%
Region 3: Houma	741	8%	244	8%	362	9%
Region 4: Lafayette	639	7%	197	7%	322	8%
Region 5: Lake Charles	531	6%	152	5%	250	6%
Region 6: Alexandria	583	6%	186	6%	241	6%
Region 7: Shreveport	495	5%	81	3%	320	8%
Region 8: Monroe	452	5%	148	5%	196	5%
Region 9: Hammond/Slidell	1,230	13%	518	17%	431	10%
Co-infection						
HIV	268	3%	89	3%	108	3%

* Includes persons born between 1945 and 1965.