U.S. HCV Therapy Guidelines

HEPATITIS C VIRUS TREATMENTS

Hepatitis C virus (HCV) infection affects millions of people around the world and many people with HCV are also infected with HIV. In recent years, new treatments that directly target HCV have revolutionized care and can cure HCV in many cases. Current HCV treatments work very well in people with both HIV and HCV. These treatments work by making it difficult for HCV to multiply. Read more about the HCV life cycle.

Guidelines for testing, managing, and treating HCV were written by the American Association for the Study of Liver Diseases (AASLD) and the Infectious Diseases Society of America (IDSA). The panel released the latest guidelines in January 2021.

Though only recently approved for use for treating HCV, the HCV protease inhibitors telapravir and boceprevir are no longer recommended.

There are different strains (or genotypes) of HCV. Treatment recommendations may be different for each strain. In people with prior HCV treatment failure, different regimens are sometimes recommended.

NOTE: These are guidelines, not rules. People should receive individualized care from a healthcare provider with experience treating HCV infection.

WHO IS AT RISK?

The following activities, exposures, conditions, and circumstances place people at higher risk of getting or transmitting HCV. Anyone with any of these should be tested more frequently for HCV.

Risk Activities

- People who inject drugs (PWID) (current or ever, including those who injected only once)
- Intranasal illicit drug use
- Men who have sex with men (MSM)

Risk Exposures

- People on long-term hemodialysis (ever)
- People with percutaneous/parenteral exposures in an unregulated setting
- Healthcare, emergency medical, and public safety workers after needlestick, sharps, or mucosal exposure to HCV-infected blood

- Children born to birthing parents with HCV
- Recipients of a prior transfusion or organ transplant, including persons who:
    - Were notified that they received blood from a donor who later tested positive for HCV
    - Received a transfusion of blood or blood components, or underwent an organ transplant before July 1992
    - Received clotting factor concentrates produced before 1987
- People who were ever incarcerated

Other Conditions and Circumstances

- HIV infection
- Sexually active persons about to start pre-exposure prophylaxis (PrEP) for HIV
- Chronic liver disease and/or chronic hepatitis, including unexplained elevated alanine aminotransferase (ALT) levels
- Solid organ donors (living and deceased) and solid organ transplant recipients

HCV TESTING RECOMMENDATIONS

HCV screening is recommended because of the known benefits of care and treatment in reducing the risk of cancer and all-cause mortality and the potential public health benefit of reducing transmission through early treatment, viral clearance, and reduced risk behaviors. Recommendations for HCV testing include:

- One-time, routine, opt out HCV testing is recommended for all individuals aged 18 years or older. One-time HCV testing should be performed for all people less than 18 years old with activities, exposures, conditions, or circumstances associated with an increased risk of HCV infection (see above).
- Prenatal HCV testing as part of routine prenatal care is recommended with each pregnancy.
- Periodic repeat HCV testing should be offered to all persons with activities, exposures, conditions, or circumstances associated with an increased risk of HCV exposure (see above).
- Annual HCV testing is recommended for all PWID, MSM with HIV, and MSM taking pre-exposure prophylaxis (PrEP).

A positive HCV antibody result should be followed by a HCV viral load test to see if there is current infection. With the advent of pangenotypic HCV treatment regimens, HCV genotyping is no longer required prior to treatment initiation for all individuals. In those with evidence of cirrhosis and/or past unsuccessful HCV treatment, treatment regimens may differ by genotype and thus pretreatment genotyping is recommended. For noncirrhotic treatment-naive patients, although genotyping may impact the preferred treatment approach, it is not required if a pangenotypic regimen is used.

All persons with active HCV infection should be linked to a healthcare provider who is knowledgeable in and prepared to provide comprehensive management.

Read more about HCV laboratory tests.

HCV TREATMENT RECOMMENDATIONS

All oral direct-acting antiviral (DAA) regimens for HCV infection are associated with higher rates of virological cure and are better tolerated than older, interferon-based antiviral therapies. HCV includes six different genotypes (genetic strains) of the virus. Pangenotypic treatment regimens cover all genotypes. Treatment

with pangenotypic regimens, including sofosbuvir/velpatasvir or glecaprevir/pibrentasvir, can be initiated without knowledge of the genotype and subtype with a high probability of success.

Simplified HCV Treatment For Treatment-Naive Adults Without Cirrhosis (Source: AASLD and IDSA)

Who is eligible	
Adults with chronic HCV (any genotype) who do not have cirrhosis and have not previously received HCV treatment	
Who is not eligible	
People who have any of the following: • ◦ Prior HCV treatment ◦ Cirrhosis (see simplified treatment for treatment-naive adults with compensated cirrhosis) ◦ HIV or HBsAg positive ◦ Current pregnancy ◦ Known or suspected hepatocellular carcinoma ◦ Prior liver transplantation	
Recommended Treatment	
MAVYRET glecaprevir (300 mg) / pibrentasvir (120 mg) taken with food for a duration of 8 weeks	EPCLUSA sofosbuvir (400 mg) / velpatasvir (100 mg) for a duration of 12 weeks

Simplified HCV Treatment For Treatment-Naive Adults With Compensated Cirrhosis (Source: AASLD and IDSA)

Who is eligible	
• ◦ Adults with chronic HCV (any genotype) who have compensated cirrhosis (Child-Pugh A) and have not previously received HCV treatment ◦ Liver biopsy is not required ◦ Noninvasive serologic tests (e.g., FibroSure, Enhanced Liver Fibrosis Test) ◦ Clinical evidence of cirrhosis (e.g., liver nodularity and/or splenomegaly on imaging, platelet count < 150,000/mm^3) ◦ Prior liver biopsy showing cirrhosis	
Who is not eligible	
People who have any of the following: • ◦ Current or prior episode of decompensated cirrhosis ◦ Prior HCV treatment ◦ End-stage kidney disease ◦ HIV or HBsAg positive ◦ Current pregnancy ◦ Known or suspected hepatocellular cancer ◦ Prior liver transplantation	
Recommended Treatment	
MAVYRET glecaprevir (300 mg) / pibrentasvir (120 mg) taken with food for a duration of 8 weeks	EPCLUSA sofosbuvir (400 mg) / velpatasvir (100 mg) for a duration of 12 weeks (not for people with Genotype 3)

TREATMENT MONITORING

The following laboratory tests are recommended within 6 months prior to starting DAA therapy:

- Complete blood count (CBC)
- International normalized ratio (INR)
- Liver function panel (ie, albumin, total and direct bilirubin, alanine aminotransferase [ALT], aspartate aminotransferase [AST], and alkaline phosphatase levels)

- Calculated glomerular filtration rate (eGFR)

The following laboratory tests are recommended anytime prior to starting DAA therapy:

- Quantitative HCV RNA (HCV viral load)
- If a non-pan–genotypic DAA will be prescribed, then test for HCV genotype and subtype.

Clinic visits or telephone contact are recommended as clinically indicated during treatment to ensure medication adherence, and to monitor for adverse events and potential drug-drug interactions especially with newly prescribed medications.

Quantitative HCV viral load testing is recommended 12 or more weeks after completion of therapy to document sustained virological response (SVR) (virologic cure).

For people in whom treatment did not result in SVR, retreatment for chronic HCV is recommended utilizing several recommended regimens. Disease progression assessment should be done every 6-12 months with a liver function panel, CBC, and INR.

For noncirrhotic people in whom treatment did result in SVR, recommended follow-up is the same as if they were never infected with HCV. Assessment for HCV recurrence is recommended only if the person develops unexplained liver dysfunction or if they have ongoing risk factors for HCV infection. In such cases, a quantitative HCV RNA test, rather than an HCV antibody test, is recommended to assess for HCV recurrence. Surveillance for hepatocellular carcinoma is recommended for people with cirrhosis.

REDUCING DISEASE RISK

People with HCV should:

- Abstain from alcohol
- Be evaluated for liver disease and cirrhosis
- Get vaccinated against hepatitis A virus (HAV) and hepatitis B virus (BHV)

THE BOTTOM LINE

Hepatitis C virus (HCV) infection affects millions of people around the world and many people with HCV are also infected with HIV. In recent years, new treatments that directly target HCV have revolutionized care and can cure HCV in many cases. Current HCV treatments work very well in people with both HIV and HCV. These treatments work by making it difficult for HCV to multiply.

HCV screening is recommended because of the known benefits of care and treatment in reducing the risk of cancer and all-cause mortality and the potential public health benefit of reducing transmission through early treatment, viral clearance, and reduced risk behaviors. Certain activities, exposures, conditions, and circumstances place people at higher risk of getting or transmitting HCV. Anyone with risk factors should be tested more frequently for HCV.

Direct-acting antiviral (DAA) regimens for HCV infection are associated with higher rates of virological cure and are better tolerated than older, interferon-based antiviral therapies. HCV includes six different genotypes (genetic strains) of the virus. Pangenotypic treatment regimens cover all genotypes.

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MORE INFORMATION

American Association for the Study of Liver Diseases (AASLD) and the Infectious Diseases Society of America (IDSA): Guidelines for testing, managing, and treating HCV

Reviewed July 2024