



# Fight hepatitis with **comprehensive A–E testing**

Viral hepatitis testing from Quest helps you manage every stage of your patient's care

# We're here to help you **diagnose, treat, and manage viral hepatitis**

Viral hepatitis remains highly prevalent in the US overall. Quest Diagnostics offers unmatched viral hepatitis resources, including extensive diagnostic and prognostic screening options, seamless results reporting, and clinical expertise—all designed to help you ensure the best treatment outcomes for your patients and to support you in managing hepatitis at every stage.

Screening and diagnostic support	Liver surveillance	Monitoring
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## The testing you need to cure and prevent

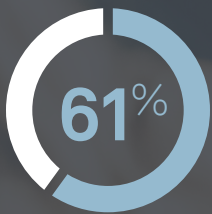
Highly preventable or treatable, viral hepatitis can lead to poor outcomes, including cirrhosis and liver cancer, if undetected and untreated. Quest offers comprehensive tests and panels for viral hepatitis that enable you to screen, diagnose, treat, and manage your patients faster and more effectively for improved hepatitis outcomes as well as reduced disease transmission.

### Hepatitis A–E: understanding hepatitis signs and symptoms

Whether it's A, B, C, D, or E, different forms of hepatitis share similar signs and symptoms, underscoring the importance of comprehensive screening.

Fever	Vomiting	Clay-colored stool
Fatigue	Abdominal pain	Joint pain
Loss of appetite	Dark urine	Jaundice
Nausea	Diarrhea (hepatitis A only)	





61% of HAV-positive people hospitalized, 2020<sup>2</sup>

~34K

estimated HAV cases, 2020<sup>2</sup>

## Hepatitis A: experiencing a resurgence

Hepatitis A virus (HAV) typically spreads through contaminated food and water but in the US is more commonly spread from person to person. Although HAV incidence declined rapidly after 1995, when a vaccine became available, reported cases in the US have increased dramatically since 2016, when large person-to-person outbreaks began occurring due to injected drug use and homelessness.

### Who's at increased risk for HAV?

- People experiencing unstable housing or homelessness
- People who use drugs (injection or non-injection)
- Men who have sex with men
- People who are currently or were recently incarcerated
- People with chronic liver disease, including cirrhosis, hepatitis B, or hepatitis C

Test Name	Clinical Application	Test Code	CPT Code(s)
Hepatitis A Antibody (IgM)	First-line diagnostic test for acute HAV infection.	512(X)	86709
Hepatitis A Antibody, Total	Screens for evidence of an immune response to HAV.	508(X)	86708
Hepatitis A Antibody, Total with Reflex to IgM	Indicates prior or acute infection with, or immunization to, HAV.	36504(X)a,b	86708

# Hepatitis B: highly prevalent but difficult to diagnose

Hepatitis B virus (HBV) is a highly prevalent infection that, left untreated, can cause serious health problems, including liver damage, cirrhosis, liver cancer, and even death.

## HBV Screen Panel with interpretive results provides clarity

Knowing your patient's HBV status is important, but screening and diagnosis can be complex. Our comprehensive panel features the testing needed to answer three key questions about a patient's HBV status, with an easy-to-understand interpretive result:

- Is the patient currently infected with HBV?
- Has the patient ever been infected with HBV?
- Is the patient immune to HBV?

**With this insight, you can counsel your patients and plan appropriate HBV treatment without delay.**

Patient Information		Specimen Information	Client Information
<b>TEST: HBV PANEL</b>		Specimen: EB05041V	Client #: 9750248
DOB: 8/18/1975	AGE: 45	Requisition: 0059045	COLUMBIANA, ANTONIO
Gender: F	Height: 5'	Lab Ref #: 12345	TEST CLIENT (NAME)
Phone: 11.222.3333		Collected: 09/04/2020 / 13:00 EDT	ARR: TEST DEPARTMENT
Patient ID: 1111111A		Received: 09/04/2020 / 11:42 EDT	1201 S COLLEGEVILLE RD
		Reported: 09/04/2020 / 11:53 EDT	COLLEGEVILLE, PA, 19326

**HBV SCREEN PANEL WITH REFLEXES**

**INTERPRETATION** Lab: TCV

Consistent with acute HBV infection.

For additional information, please refer to <http://laboratory.questdiagnostics.com/qa2014> (This link is being provided for informational/educational purposes only.)

RESULTS	Test	Result	Reference Range
<b>HEPATITIS B SURFACE ANTIGEN WITH REFLEX CONFIRMATION</b>			
HEPATITIS B SURFACE ANTIGEN		REACTIVE	NON-REACTIVE
CONFIRMATION		REACTIVE	NON-REACTIVE
<b>HEPATITIS B CORE ANTIBODY, TOTAL WITH REFLEX TO IGM</b>			
HEPATITIS B CORE AB TOTAL		REACTIVE	NON-REACTIVE
HEPATITIS B CORE AB (IGM)		REACTIVE	NON-REACTIVE
<b>HEPATITIS B SURFACE ANTIBODY, QUANTITATIVE</b>			
HEPATITIS B SURFACE AB, QN		<2	> OR = 10e6IU/mL

PERFORMING SITE:  
TCV Q2014 09/04/2020 - MERITOR BREAST/ABT ADVISORS WITH ADMINSTRATIVE REG. ENHARWOOD CO 0112

**2M+** Americans are chronically infected<sup>3</sup>

**80K** Americans are newly infected each year<sup>3</sup>

Test Name	Clinical Application	Test Code	CPT Code(s)
<b>Hepatitis B Surface Antigen with Reflex Confirmation</b>	First-line test for current HBV infection. Indicates chronic HBV infection when still positive 6 months after initial diagnosis.	498	87340
<b>Hepatitis B Core Antibody, Total, with Reflex to IgM</b>	Indicates prior, current, or acute infection with HBV.	37676	86704
<b>Hepatitis B Surface Antibody Immunity, Quantitative</b>	Indicates whether a person has immunity to HBV.	8475	86317
<b>Hepatitis B Surface Antigen, Quantitative, Monitoring</b>	Used on persons previously diagnosed with HBV infection. Confirms ongoing HBV replication and monitors response to antiviral therapy.	94333(X)	83520
<b>Hepatitis B Virus DNA, Quantitative, Real-Time PCR</b>	Determines need to treat chronic HBV infection. Indicates chronic HBV infection when still positive 6 months after diagnosis. Monitors response to therapy. Demonstrates viral replication in patients with mutant HBV (eg, HBeAg- and HBeAb+ individuals). Predicts likelihood of response to therapy.	8369(X)c	87517
<b>Hepatitis Be Antibody</b>	Appears in the early convalescence of HBV infection.	556(X)	86707
<b>Hepatitis Be Antigen</b>	Indicates active viral replication and high infectivity. Assesses likelihood of chronic hepatitis and HBV carriage.	555(X)	87350
<b>Hepatitis Be Panel</b> Includes Hepatitis Be Antigen (555); Hepatitis Be Antibody (556)	Indicates likelihood of chronic infection. Indicates response to therapy and level of infectivity (disappearance of HBeAg and appearance of HBeAb).	27(X)a	86707, 87350
<b>HBV Screen with Reflexes</b> Includes Hepatitis B Surface Antigen with Reflex Confirmation (498); Hepatitis B Core Antibody, Total, with Reflex to IgM (37676); Hepatitis B Surface Antibody Immunity, Quantitative (8475)	Indicates current and/or past HBV infection. Detects the presence of antibodies to find immunity after HBV infection or vaccination.	39170	

# Hepatitis C: guidelines recommend universal screening

Early detection of hepatitis C virus (HCV) infection can help decrease and even minimize its impact on patients. Together with today's highly effective drug therapies, universal screening can lead the charge to eradicate HCV.



# 20–39

Age range with highest rates of new HCV cases<sup>1</sup>

## The US Preventive Services Task Force and Centers for Disease Control and Prevention (CDC) recommend HCV screening at least once for all adults 18 years and older.\*<sup>4,5</sup>

The CDC also recommends:<sup>4</sup>

- One-time testing for people with conditions or exposures
- Routine testing for people with ongoing risk factors, including injection drug use and hemodialysis
- HCV screening for all pregnant women\*
- HCV testing for any person who requests it

### Younger people are now at **highest risk**

The incidence of new hepatitis C cases is now 4 times as high as it was 10 years ago.<sup>6</sup> Today, most people become infected with HCV by sharing needles to inject drugs, and the latest data shows dramatic increases in HCV infection, particularly among younger people.<sup>7</sup>

### Quest can help you put **universal HCV screening** to work, effectively

Quest offers the full complement of guideline-based HCV testing. We also offer reflex options to perform all testing from just one sample, enabling earlier time to diagnosis and treatment with fewer patient visits.

Test Name	Clinical Application	Test Code	CPT Code(s)
<b>Hepatitis C Antibody with Reflex to HCV, RNA, Quantitative, Real-Time PCR</b>	Diagnoses HCV infection. Establishes baseline viral load for treatment monitoring.	8472(X)b	86803
<b>Hepatitis C Antibody with Reflex to HCV Virus RNA, Quantitative, Real-Time PCR with Reflex to Genotype, LiPA®</b>	Detects HCV antibody and confirms active HCV infection. Establishes baseline viral load for treatment monitoring. Identifies HCV genotype to guide treatment selection and duration of treatment.	94345(X)	86803
<b>Hepatitis C Antibody and HIV-1/2, Screen and Diagnostic Panel with Reflexes</b>	Diagnoses HCV and HIV infection. Differentiates between HIV-1 and HIV-2. Establishes baseline HCV viral load and HCV genotype to guide treatment approach.	36646(X)	86803, 87389
<b>Hepatitis C-Infected Patient, Baseline Panel 1</b> Includes Hepatic Function Panel (10256); CBC (Includes Differential and Platelets) (6399); Creatinine (375); Hepatitis A Antibody, Total (508); Hepatitis B Surface Antibody, Qualitative (499); Hepatitis B Surface Antigen with Reflex Confirmation (498); Hepatitis B Core Antibody, Total (501); Hepatitis C Viral RNA, Genotype, LiPA (37811); HIV-1/2 Antigen and Antibodies, Fourth Generation, with Reflexes (91431)	Assesses risk from underlying medical conditions and comorbid infections prior to initiation of HCV therapy. Establishes baseline laboratory parameters to define changes during therapy. Determines HCV genotype to guide treatment selection and duration of therapy. Hepatitis B Surface Antigen: Positive samples will be confirmed based on the manufacturer's FDA-approved recommendations at an additional charge (CPT code: 87341). If HIV Antigen and Antibody, Fourth Generation Screen is repeatedly reactive, then HIV-1/2 Antibody Differentiation will be performed at an additional charge (CPT codes: 86701, 86702). If HIV-1/2 Antibody Differentiation is indeterminate or negative, then HIV-1 RNA, Qualitative, TMA will be performed at an additional charge (CPT code: 87535).	91704(X)a,c	80076, 85025, 82565, 86708, 87340, 86704, 87389, 87902, 86706
<b>Hepatitis C Viral RNA, Quantitative, Real-Time PCR</b>	Confirms active HCV infection and establishes baseline viral load. Assesses prognosis (prior to the initiation of therapy). Monitors response to therapy. Tests for recurrence or reinfection. Linear range: 15–100,000,000 IU/mL. LOD: 10–13 IU/mL.	35645(X)	87522
<b>Liver Fibrosis, FibroTest-ActiTest Panel</b>	Assists with noninvasive evaluation of liver fibrosis in patients with HCV infection.	92688(X)g	81596

\*Except in settings where the prevalence of HCV infection is less than 0.1%



# Hepatitis D: the importance of screening

Hepatitis D virus (HDV) only occurs in people already infected with HBV, so the HBV vaccine can help prevent HDV. People with chronic HDV superinfection are at elevated risk for cirrhosis and liver failure.<sup>8</sup> Signs and symptoms of HDV are indistinguishable from those of other forms of hepatitis, and diagnosis can be confirmed only by testing. Because symptoms can be severe, early detection is critical.

## 2 types of HDV infection

<b>Coinfection</b> HBV and HDV infection occur at the same time	<b>Superinfection</b> Development of HDV after being infected with HBV
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## Underdiagnosed in the US

HDV is underdiagnosed in the US, where most cases occur among people who migrate or travel to the US from countries with high HDV infection rates.<sup>8</sup>

### Who's at increased risk for HDV?

- People chronically infected with HBV
- Infants born to mothers infected with HDV
- Sex partners of persons infected with HDV
- Men who have sex with men
- People who inject drugs
- Household contacts of people with HDV infection
- Health care and public safety workers
- Hemodialysis patients

Test Name	Clinical Application	Test Code	CPT Code(s)
<b>Hepatitis D Virus (HDV) Antibody, Total</b>	Diagnoses HDV infection in patients with fulminant hepatic failure or known previous HBV infection.	4990(X)d	86692
<b>Hepatitis D Virus (HDV) IgM Antibody, EIA</b>	Detects HDV infection in patients with fulminant hepatic failure or known previous HBV infection, including those with reactive HDV total antibody results and suggestive clinical features but negative HDV RNA results.	35664(X)	86692
<b>Hepatitis D Virus RNA, Qualitative, Real-Time PCR</b>	Confirms HDV infection in individuals with reactive HDV antibody results. Diagnoses HDV infection in symptomatic, HBsAg-positive, HDV antibody-negative individuals with suggestive clinical features. Tests for resolution.	34469(X)d	87798
<b>Hepatic Function Panel</b> Includes Total Protein (754[X]), Albumin (223[X]), Globulin (calculated), Albumin Globulin Ratio (calculated), Total Bilirubin (287[X]), Direct Bilirubin (285[X]), Indirect Bilirubin (calculated), Alkaline Phosphatase (234[X]), AST (822[X]), ALT (823[X])	Assesses risk from underlying medical conditions and comorbid infections prior to, during, and after treatment of HDV.	10256(X)	80076

## Hepatitis E: remains very rare

Hepatitis E virus (HEV) is considered very rare in the US. Sporadic cases in the US are caused primarily by HEV genotype 3 and largely affect older men (those >40 years of age).<sup>9</sup>

- Usually results in an acute infection
- Most patients recover fully
- Can be serious for pregnant women in their third trimester, people with preexisting chronic liver disease, and organ-transplant recipients on immunosuppressive therapy

## Diagnosing HEV

Hepatitis E diagnosis can be supported by tests for HEV antibodies (IgG, IgM).<sup>9</sup>

Test Name	Clinical Application	Test Code	CPT Code(s)
Hepatitis E Virus (HEV) Antibody (IgG)	Confirms an immune response to HEV.	36583(X)	86790
Hepatitis E Virus (HEV) Antibody (IgM)	Confirms an acute/recent HEV infection.	36582(X)	86790
Hepatitis E Virus (HEV) Antibodies (IgG/IgM)	Confirms an acute/recent/prior HEV infection.	15085(X)	86790(X2)

## Quest is here to support you in viral hepatitis diagnosis and management

Quest's extensive services at every stage of viral hepatitis care help you ensure the best treatment outcomes for your patients. We offer:

- Seamless results reporting with fast turnaround times
- Patient education resources to support adherence
- Quantum® Lab Services Manager, which saves time managing testing and billing
- Access to test results for patients via MyQuest™
- Our dedicated medical and technical team of MDs, PhDs, and science liaisons available for consultations
- Our nationwide network of 2,250 Patient Service Centers

# Rely on **comprehensive viral hepatitis testing** from Quest

Our extensive diagnostic and prognostic screening options and services are designed to help you manage hepatitis at every stage and ensure the best treatment outcomes for your patients.

Test Name	Clinical Application	Test Code	CPT Code(s)
<b>Hepatitis Panel, Acute with Reflex to Confirmation</b> Includes Hepatitis A IgM Antibody (512); Hepatitis B Surface Antigen with Reflex Confirmation (498); Hepatitis B Core Antibody IgM (4848); Hepatitis C Antibody with Reflex to HCV, RNA, Quantitative, Real-Time PCR (8472)	Screens for acute hepatitis caused by hepatitis A, B, or C viruses.	10306(X)a,b	80074
<b>Hepatitis Panel, General</b> Hepatitis A Antibody, Total (508); Hepatitis B Surface Antibody, Qualitative (499); Hepatitis B Surface Antigen with Reflex Confirmation (498); Hepatitis B Core Antibody, Total (501); Hepatitis C Antibody with Reflex to HCV, RNA, Quantitative, Real-Time PCR (8472)	Detects hepatitis caused by hepatitis A, B, or C viruses.	6462(X)a,b	86704, 86706, 86708, 86803, 87340



**Diagnose, treat, and beat hepatitis.** Contact your Quest Diagnostics sales representative to learn more.

The CPT codes provided are based on American Medical Association guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.

#### References

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