

The Burden of Hepatitis C Infection-Related Liver Fibrosis in the United States

Article Publication

Background

- HCV infection is the leading cause of progressive liver fibrosis, which can lead to cirrhosis and hepatocellular carcinoma.¹
- Early identification and treatment of HCV-infected patients is estimated to prevent over 320,000 HCV-related deaths between 2010 and 2060.²
- Thus, the Centers for Disease Control and Prevention (CDC) and the US Preventive Services Task Force (USPSTF) recommend a one-time screening of all people born from 1945 to 1965.^{3,4}
- The prevalence of advanced HCV-related liver disease can help evaluate the impact of HCV screening recommendations. It can also guide the planning of healthcare resources for infected individuals.
- **Objective:** The investigators determined the prevalence of stages of liver fibrosis among persons with chronic HCV infection and the stage of fibrosis at first HCV diagnosis; they also described persons in care and those evaluated for HCV treatment.

Methods

- De-identified laboratory data from Quest Diagnostics (2010-2013) were analyzed to determine HCV-infection status.
- Laboratory data included a person's age and results for the following tests: hepatitis C antibody, HCV RNA nucleic acid, HCV genotype, liver function, and platelet counts.
- Using laboratory data, patients were categorized by:
 - Status of infection (eg, currently infected)
 - Status of care (eg, currently in care)
 - Stage of liver disease (eg, advanced fibrosis or cirrhosis)
 - Evaluation for treatment (eg, had a genotype test)
- Results for over 5.6 million unique persons were included. Data for identifying liver disease were available for approximately 2.6 million patients.

Results

- The prevalence of HCV infection was approximately 5% among the 5.6 million patients included.
 - 54% of infected patients were in care
- Advanced fibrosis or cirrhosis was observed in 23% of infected patients and 27% of infected patients born from 1945 to 1965.
 - 51% of infected patients with advanced fibrosis or cirrhosis were evaluated for treatment.

Conclusions

- A large proportion of persons infected with HCV do not receive care and only half of those with advanced fibrosis or cirrhosis are evaluated for treatment.
- These results support the CDC and USPSTF recommendations for HCV testing and the reduction of barriers to care for HCV-infected individuals.

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Webpage

[NCBI.NLM.NIH.gov/pubmed/27506688](https://pubmed.ncbi.nlm.nih.gov/27506688)

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