

Hepatitis C Virus Infection Among Reproductive-Aged Women and Children in the United States, 2006-2014

Background

- The detection rate of hepatitis C virus (HCV) among women of reproductive age in the United States increased between 2009 and 2014.¹ This trend is especially concerning because HCV is transmissible from mothers to infants.
- However, the prevalence of HCV infection among pregnant women and their children is not well understood.
- Analysis of HCV status in large populations can reveal infection rates and trends, which may inform HCV screening practices.
- **Objective:** Investigators examined the trends in HCV infection rates in women of reproductive age and children; they also estimated the number of HCV-infected infants and women who gave birth.

Methods

- HCV infection data were obtained from 2 large databases: the Centers for Disease Control and Prevention National Notifiable Diseases Surveillance System (NNDSS, 2006-2014), and the Quest Diagnostics Health Trends™ database (2011-2014).
 - NNDSS: Patients who had an acute or past/present HCV infection were identified based on standard case definitions.
 - Quest Diagnostics Health Trends database: Patients who had a current HCV infection were identified based on a positive HCV RNA test result or an ordered HCV genotyping test; patients who had a past/present HCV infection were identified based on a positive HCV antibody test result.
- The number and proportions of HCV-infected women (aged 15-44 years) and children (aged 2-13 years) were calculated from each data source.

Results

- Based on NNDSS data, the number of HCV-infected (acute and past/present) women of reproductive age doubled from 15,550 in 2006 to 31,039 in 2014. In contrast, the number of HCV-infected children remained fairly constant: 188 in 2006 and 195 in 2014 (range of 175 to 265 during that time).
- Based on Quest Diagnostics data, HCV infection occurred at rates of:
 - 1.34% (28,693 of 2,140,807) in tested women of reproductive age
 - 0.73% (4,232 of 581,255) in tested pregnant women
 - 0.76% (432 of 57,136) in tested children
- An estimated 29,000 HCV-infected women gave birth to 1,700 HCV-infected infants per year from 2011 through 2014.
 - This estimate was based on 1) the percentage of women who tested positive for HCV at Quest Diagnostics (0.73%), 2) the number of annual live births from 2011 to 2014,² and 3) the likelihood of transmission.³

Conclusions

- In the United States, HCV infection has increased substantially in women but been consistent in children in recent years.
- The infection rate of pregnant women was similar to that of children.
- These findings may inform HCV screening needs for pregnant women.

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Webpage

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