



Hepatitis C and HIV Co-Infection

Hepatitis C is a liver infection that is caused by the Hepatitis C virus (HCV), primarily spread through the sharing of infected needles or the use of infected equipment used to inject drugs.¹ Although it is possible for people to spontaneously clear the virus from the bodies without treatment, it is estimated that 70-85% of persons infected with HCV develop a long-term, chronic infection.² Most persons with acute HCV infection do not display symptoms; however, some do show symptoms that range from mild (fever, nausea, loss of appetite) to severe (abdominal pain, jaundice). Those infected with chronic HCV typically do not display symptoms unless severe liver problems develop.³ Acute and chronic HCV infection are treated with same antiviral medications.⁴ However, there is no vaccine for HCV, and preventive measures are important to stop the spread of the disease.¹

HEPATITIS C IN THE UNITED STATES

There are approximately 2.7 to 3.9 million people living with chronic HCV in the United States, with an estimated 30,500 acute cases in 2014.⁵ HCV is twice as prevalent in Black persons compared to White persons.⁶

HEPATITIS C IN VIRGINIA

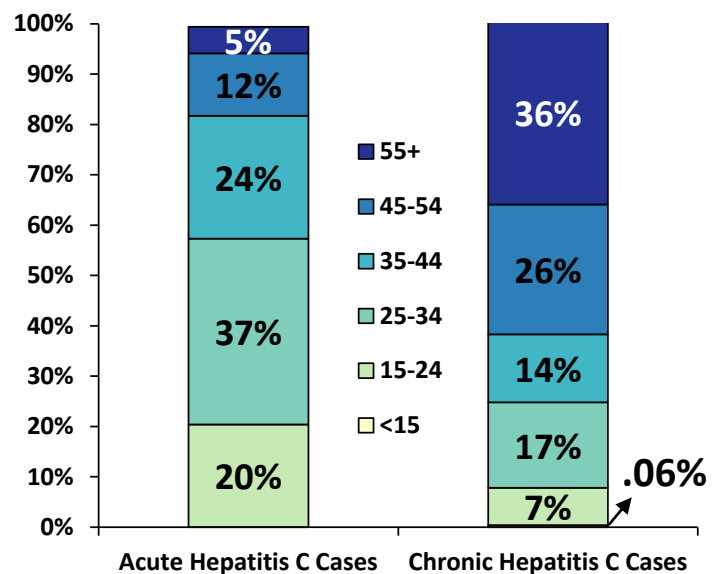
There were 27,805 cases of HCV in Virginia from 2012 to 2015, with an average of 6,952 cases per year. In this time period, less than 1% of the cases were acute. While the number of acute HCV cases appears to be decreasing, the number of chronic HCV cases is increasing.

Fifty-five percent of the acute cases were female, while 58% of the chronic HCV cases were male. Thirty-six percent of the chronic HCV cases were over the age of 55, while 37% of the acute HCV cases were between the ages of 25-34 (Figure 1). The Southwest health region of Virginia has the highest incidence of chronic and acute HCV cases in the Commonwealth.⁷

Acute vs. Chronic HCV Infection

- **Acute HCV infection** occurs within the first six months of being exposed to HCV. Acute HCV infection frequently leads to chronic HCV infection².
- **Chronic HCV infection** occurs when HCV remains in the body for a long period of time. The infection is long-term and can cause liver problems such as cirrhosis or liver cancer².

Figure 1: Comparison of Acute and Chronic HCV Cases by Age at Diagnosis in Virginia, 2012-2015



HEPATITIS C-HIV CO-INFECTION

Both HCV and HIV can be transmitted through injection drug use (IDU); approximately 50% to 90% of persons infected with HIV through IDU will become co-infected with HCV.⁸ According to the Centers for Disease Control and Prevention (CDC), having an HIV co-infection can more than triple the risk for developing liver disease, failure, and liver-related death caused by HCV infection.⁶ In addition, HCV infection can complicate the treatment and management of HIV.^{6,8}

HEPATITIS C-HIV CO-INFECTION IN VIRGINIA

From 2012 to 2015, 544 cases of HCV were co-infected with HIV. Figure 2 shows the trend of HCV only and HIV co-infection cases from 2012 to 2015. Forty percent of these cases were over the age of 55, and 36% were between the ages of 45 and 54. Unlike the demographic profile of those infected with only HCV, 75% of the HIV co-infection cases were male. The majority of co-infections reported IDU as their transmission category for HIV infection.⁷ Among PLWH, the Southwest region had the highest rate of HCV and HIV co-infection cases in 2015. (Figure 3).

Figure 2: Comparison of HCV Only and HIV Co-infection Cases by Year in Virginia, 2012-2015

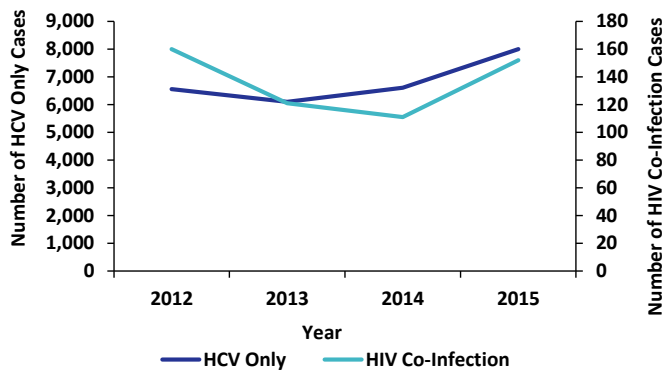
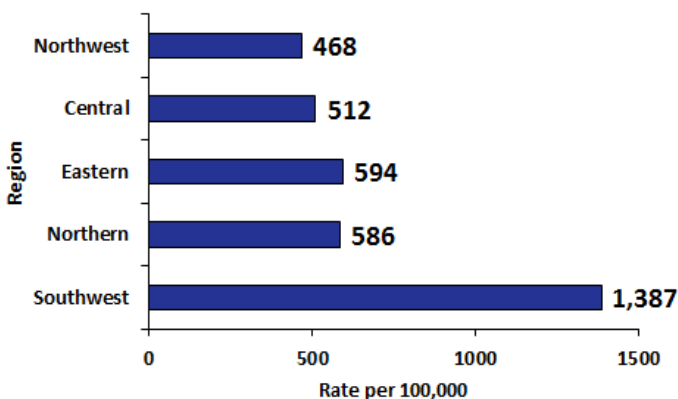


Figure 3: Rate of HCV -HIV Co-Infection Cases among PLWH by Health Region in Virginia, 2015



In 2015, 1 in every 163 PLWH in Virginia was co-infected with HCV

PREVENTION OF HEPATITIS C AND HIV CO-INFECTION

HCV transmission can be prevented by using sterile needles, not sharing drug injection equipment, or ceasing IDU.⁶ Those infected with HCV should not consume alcohol due to the risk of increased liver damage. They should also use prescription pills and over-the-counter medications with the guidance of their health provider, as these substances could also damage the liver.⁴ The CDC recommends that all HIV-infected individuals get tested for HCV infection. Those with HIV-HCV co-infection should seek care from a health provider who is well-versed in management and treatment of both HIV and HCV.⁶

REFERENCES

1. CDC (2015). "Viral Hepatitis—Hepatitis C Information" Accessed April 22, 2016: <http://www.cdc.gov/hepatitis/hcv/>.
2. CDC (2016). "Hepatitis C FAQs for Health Professionals—Overview and Statistics." Accessed July 21, 2016: <http://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section1>.
3. CDC (2016). "Hepatitis C FAQs for Health Professionals—Transmission and Symptoms." Accessed July 21, 2016: <http://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section2>.
4. CDC (2016). "Hepatitis C FAQs for the Public—Treatment." Accessed July 21, 2016: <http://www.cdc.gov/hepatitis/hcv/cfaq.htm#cFAQ61>.
5. CDC (2016). "Hepatitis C FAQs for the Public—Statistics." Accessed July 21, 2016: <http://www.cdc.gov/hepatitis/hcv/cfaq.htm#statistics>.
6. CDC (2014). "HIV and Viral Hepatitis." Accessed July 21, 2016: http://www.cdc.gov/hiv/pdf/library_factsheets_hiv_and_viral_hepatitis.pdf.
7. Virginia Hepatitis C Epidemiologic Profile (2016). Virginia Department of Health, Office of Epidemiology. Available online at: <http://www.vdh.virginia.gov/disease-prevention/disease-prevention/viral-hepatitis/hepatitis-data-statistics/>.
8. CDC (2015). "HIV/AIDS and Viral Hepatitis." Accessed July 20, 2016: <http://www.cdc.gov/hepatitis/Populations/hiv.htm>