New CDC Data Show Rapid Rises in Hepatitis A and C

Efforts to control viral hepatitis are falling behind, in part because of the growing opioid epidemic and homelessness crisis.

September 21, 2019 By Liz Highleyman

New cases of hepatitis C are increasing and moving into younger age groups, while hepatitis A outbreaks have occurred among homeless people in several cities, according to new viral hepatitis surveillance data from the Centers for Disease Control and Prevention (CDC). The hepatitis B rate, however, has been holding steady.

The CDC's latest National Viral Hepatitis Progress Report shows that while there has been progress in expanding infant hepatitis B virus (HBV) vaccination and reducing deaths related to hepatitis B and C, the United States is not on track to reach its goals for bringing down new hepatitis A, B or C infections.

Hepatitis A

Each week, health departments across the country report cases of hepatitis A, B and C to the CDC through the National Notifiable Diseases Surveillance System.

According to the new surveillance figures released this month, there were 3,366 reported cases of hepatitis A, for a rate of 1.0 per 100,000 population in 2017, the most recent year with complete data. However, the CDC estimates that the actual number is probably twice as high (6,700) after adjusting for missed cases and underreporting. This represents a steep increase over the 2,007 reported cases (0.6 per 100,000) in 2016 and 1,390 cases (0.4 per 100,000) in 2015. Men were about twice as likely as women to acquire hepatitis A.

While some states have seen relatively stable rates and a few have seen declines during this period, others have had large increases, including California (from 229 cases in 2016 to 947 in 2017), Florida (from 115 to 261 cases), Michigan (from 112 to 670 cases), New York (from 99 to 218 cases) and Utah (from 12 to 159 cases).

Hepatitis A virus (HAV) is transmitted through the fecal-oral route, for example via food and water contaminated with feces. It may also be transmitted sexually and among people in a shared household. HAV causes acute illness that typically resolves on its own without treatment and does not become chronic. The illness can be severe however; hospitalization is common, and in 2017,

there were 91 U.S. death certificates that listed hepatitis A as a cause.

Hepatitis A can be prevented with a vaccine. HAV incidence decreased from 1995, when the vaccine became available, to 2011, but then it rose by 140% from 2011 to 2017. Before 2017, hepatitis A usually occurred in occasional local clusters linked to contaminated food, but since that time, large person-to-person outbreaks have been reported among people who use drugs and homeless people. The most recent such outbreaks do not yet show up in the surveillance report. According to the latest data from the CDC, since these outbreaks were first identified in 2016, 30 states have reported 25,783 cases and 259 deaths.

The National Viral Hepatitis Progress Report shows that the twin goals of increasing the proportion of children vaccinated against hepatitis A to 85% and reducing the rate of reported HAV infections to 0.30 per 100,000 by 2020 are not likely to be met. As of 2017, only 60% of children had received at least two doses of the vaccine.

Hepatitis B

The new surveillance figures show 3,407 reported cases of acute, or newly acquired, hepatitis B, for a rate of 1.1 per 100,000 population in 2017. This is a bit of an increase over the 3,218 cases (1.0 per 100,000) in 2016 but similar to the 3,370 cases (1.1 per 100,000) reported in 2015. The CDC estimates that the actual number of acute infections, after adjusting for missed cases and underreporting, may exceed 22,000. Most states had relatively stable rates.

HBV is transmitted through blood, and it is readily spread through syringes and other drug-injection equipment. It may also be transmitted sexually and from mother to child during pregnancy or delivery. HBV is endemic, or widespread, in many Asian and African countries, and hepatitis B rates are highest among Asians Americans and Pacific Islanders in the United States.

Most children and around 10% of adults who acquire HBV will develop chronic infection. In 2017, 41 states reported 14,106 cases of chronic hepatitis B, according to the report. Over time, chronic infection can lead to severe liver disease including cirrhosis, liver cancer and liver failure necessitating a transplant. In 2017, there were 1,727 death certificates that listed hepatitis B as the underlying or a contributing cause. Antiviral treatment can control HBV replication, but it rarely leads to a cure.

HBV can also be prevented with a vaccine, which has been a recommended immunization for infants since the early 1990s. For the first time, adults ages 40 to 49 had the highest rate of acute hepatitis B in 2017. Young adults ages 20 to 29 saw a decrease, likely because this is the first age cohort who were vaccinated as children or offered catch-up vaccines as adolescents, according to the report. This may explain why the overall infection rate remained roughly stable even as older age groups saw an increase.

The national progress report shows mixed results for hepatitis B. The country is on track to increase the proportion of vaccinated infants to 85% by 2020, having reached 74% in 2017. But the goal of reducing the rate of reported acute HBV infections among people age 19 or older to

0.50 per 100,000 appears out of reach, as this rate stood at 1.38 per 100,000 in 2017, and incidence rate has increased 19% since 2014.

“This is a disappointing reversal of three decades of decreasing rates of acute hepatitis B,” Hepatitis B Foundation senior program director Kate Moraras, MPH, said in a press release. “This report demonstrates an urgent need to dedicate more resources to preventing hepatitis B among adults in order to meet 2020 goals. Currently, only 25% of adults have been vaccinated and hepatitis B is often not included in efforts to address infections related to the opioid crisis.”

The good news is that the target for reducing HBV-related deaths to 0.48 per 100,000 has already been met, with a rate of 0.46 in 2017. However, HBV-related mortality is nearly 10 times higher among Asian Americans and Pacific Islanders, and nearly three times higher among African-Americans compared with white and Latino people. Thus, the organization “calls on the CDC, as they develop future viral hepatitis goals, to include the elimination of mortality-related disparities among highly impacted groups.”

Hepatitis C

The latest surveillance figures show 3,186 reported cases of acute hepatitis C, for a rate of 1.0 per 100,000 population in 2017. This 8% jump since the prior year continues a steady rise in new cases over the past decade. However, experts estimate that fewer than 10% of acute HCV infections are diagnosed, so the actual number likely exceeds 44,000. West Virginia and Massachusetts had the highest rates.

Although baby boomers born between 1945 and 1965 have historically had the highest HCV rates, numbers of acute infections are rising rapidly among people ages 20 to 29 and 30 to 39—the age groups most affected by the opioid crisis, according to the report. For the first time since 2014, adults ages 40 to 49 saw a decrease in 2017. Men and women, and white, African-American and Latino people all saw increases in new infections.

HCV, like HBV, is transmitted through blood. Shared injection equipment is the most common route of infection, but there is a growing recognition that HCV can also be sexually transmitted, especially among men who have sex with men.

Although around 20% of people who acquire HCV will clear the virus naturally without treatment, the rest will develop chronic infection that can lead to serious long-term liver complications. The surveillance report states that in 2017, 40 states reported 144,513 cases of chronic hepatitis C, and 17,253 death certificates listed hepatitis C as a cause. There is no vaccine for HCV, but new direct-acting antivirals can cure almost everyone of the virus with eight to 12 weeks of treatment.

According to the national progress report, the goal of reducing the rate of reported acute HCV infections to 0.25 per 100,000 by 2020 is unlikely to be met, given that the 2017 rate was 1.04 per 100,000 and rising. But the target of reducing HCV-related deaths to 4.17 per 100,000 has already been met (4.13 per 100,000 in 2017), thanks in part to the new treatments.

“We’ve now experienced a 375% increase in new [HCV] cases since 2010,” Frank Hood, senior policy associate at the AIDS Institute said in a press release. “If we want to stop the hepatitis C epidemic, CDC needs resources to expand education, testing and linkage to hepatitis C cures….With data showing that the crisis is worsening, we are calling upon the administration and the Congress to commit the necessary resources until hepatitis C is eliminated in the country.”

Click here to see the 2017 surveillance data.
