State of Alaska Epidemiology Bulletin

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Hepatitis C Overview and Treatment Update

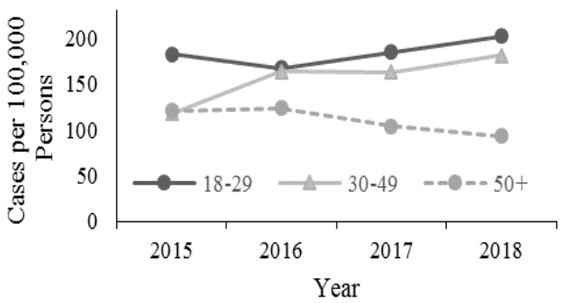
Overview

The most common chronic bloodborne infection in the United States, hepatitis C, kills more Americans than any other infectious disease.[1] The Centers for Disease Control and Prevention (CDC) estimates that 2.4 million persons are currently infected with the hepatitis C virus (HCV) in the U.S., and most infected persons are unaware of their infection status.[1]

Prior to 2010, about 75% of HCV-infected persons in the U.S. were "Baby Boomers" (born during 1945–1965).[1] The high prevalence of hepatitis C in this cohort is due in large part to unsafe medical procedures and limited HCV screening at the time.[2] Since 2010, the national incidence of acute hepatitis C has risen sharply, particularly in younger adults, due to increases in injection drug use.[3] About half (range: 38%–68%) of people who inject drugs (PWID) in the U.S. are estimated to be HCV-infected.[1]

In Alaska, hepatitis C is a reportable condition. During 2015–2018, the average annual incidence of newly reported hepatitis C in Alaska was 107 cases per 100,000 persons (this includes both acute and chronic cases). In recent years, rates have been highest among younger adults (Figure).

Figure. Rate of Newly Reported Confirmed Hepatitis C Cases, by Age Group (in Years) and Year — Alaska, 2015–2018



HCV is primarily spread through contact with infected blood. As such, PWID and share needles are at high risk for acquiring HCV. Since there is no vaccine for hepatitis C, the way to decrease incidence rates is by decreasing transmission. This can be achieved through increased testing and treatment,[4] increased availability of community syringe service programs, and decreased transmission in healthcare settings (e.g., screening blood and preventing sharps injuries).

People with acute hepatitis C are typically either asymptomatic or have only mild symptoms. When symptoms do occur, they can include fever, fatigue, dark urine, clay-colored stool, abdominal pain, nausea, vomiting, joint pain, and jaundice (yellow skin or eyes) arising 2–12 weeks after exposure. Approximately 75%–85% of infected persons develop chronic hepatitis C, which is also frequently asymptomatic. Persons with untreated chronic hepatitis C and those who have been cured but still have advanced HCV-associated disease are at risk for hepatic fibrosis, cirrhosis, hepatocellular carcinoma, and liver transplantation. In 2016, nearly 20,000 people in the U.S. were determined to have died from hepatitis C.[1]

HCV Antiviral Therapy

Direct-acting antiviral (DAA) therapy has greatly improved hepatitis C cure rates over previous treatment modalities.[5] DAA treatment regimens effectively treat multiple HCV genotypes, are better tolerated, and are shorter in duration. Access to these therapies, however, is compromised by the high proportion of HCV-infected persons who are unaware of their infection status and, for those who have been diagnosed, treatment barriers due to the high cost of the DAA medications.[5] Estimated wholesale acquisition costs for common DAA treatment regimens can range from around $25,000–$100,000 for the course.[5] Although pharmaceutical companies offer limited medication assistance programs, many patients are not able to easily access or qualify for this assistance. Despite the high cost of treatment, several studies have demonstrated that hepatitis C therapy is cost-effective, especially given the costs of long-term complications of hepatitis C that can be averted with successful treatment.[5]

Alaska Medicaid has actively sought to address hepatitis C by saving both lives and money through numerous initiatives.[6] During the 2018 fiscal year, Alaska Medicaid's Drug Utilization Review Committee approved a new, equally efficacious, less costly, shorter-course hepatitis C treatment. This decision allowed for the savings of $3.6M while treating 60 percent more individuals than in the prior period.

Because the prevalence of HCV infection is particularly high among justice-involved persons, the Alaska Department of Corrections is also helping address hepatitis C by improving efforts to test and treat inmates during incarceration.

Recommendations

1. All persons born during 1945–1965 and those with hepatitis C risk factors should be screened per the CDC guidelines,[1] and all patients with risk factors should be educated about risk and harm reduction.
2. Prior to initiation of treatment, HCV-infected patients should be screened for ongoing alcohol and injection drug use, human immunodeficiency virus infection, and hepatitis B, and offered appropriate intervention services. However, substance use should not preclude hepatitis C treatment.
3. HCV-positive patients should be evaluated for the presence (and severity) of chronic liver disease and vaccinated against hepatitis A and B if they are not already immune.
4. Primary care providers should consider incorporating hepatitis C screening and treatment into their practice to improve patient access and reduce barriers to care.[3]
5. Clinicians should become familiar with the American Association for the Study of Liver Diseases (AASLD) and the Infectious Diseases Society of America (IDSA) HCV treatment guidelines (see: http://www.hcvguidelines.org).
6. Clinicians should report confirmed and suspected hepatitis C cases to SOE via fax and complete a brief form on all patients with a positive HCV antibody test. Return completed forms to SOE via fax at 907-561-4239.
7. See the SOE hepatitis C webpage for more information: http://dhss.alaska.gov/dph/Epi/id/Pages/hepatitis/c.aspx

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