Increase in Hepatitis C Cases among Young Adults — Alaska, 2011–2015

Background
Hepatitis C virus infection (HCV) is the most common chronic bloodborne infection in the United States, and injection drug use is an important risk factor for HCV acquisition. The Centers for Disease Control and Prevention (CDC) estimates that there are at least 3.5 million persons in the United States that are currently infected with HCV. While many of these people were born during 1945–1964 and became infected during the 1970s and 1980s, a rising proportion of HCV-infected persons nationally are young adults with a history of injection drug use (IDU). This Bulletin explores the changing epidemiology of HCV infection in Alaska.

Methods
Cases reported and entered into the Section of Epidemiology (SOE) reportable conditions database during 2011–2015 were reviewed. By convention, cases were attributed to the year of the patient’s first positive HCV test. Because HCV patients are not routinely interviewed by SOE staff, additional risk factor and treatment data were not available. Rates were calculated using Alaska Department of Labor and Workforce Development data.

Results
SOE recorded a total of 5,888 HCV cases during 2011–2015; the average annual number of reported HCV cases was 1,178 (range: 993–1,511). The number of HCV cases rose considerably for all age groups over the 5-year period; the increase was proportionally highest among persons aged 18–29 years (from 228 to 459, a 100% increase), compared to a 26% increase in the two other age groups (Table 1). As such, persons aged 18–29 years rose from representing 22% of all newly reported HCV cases in 2011 to 31% of all newly reported cases in 2015. Overall, most cases (55%) were in males; however, among persons aged 18–29 years, most cases (53%) were in females.

Table 1. Number and Proportion of Newly Reported HCV Cases, by Age Group and Year — Alaska, 2011–2015

<table>
<thead>
<tr>
<th>Region</th>
<th>18–29 years</th>
<th>30–49 years</th>
<th>50+ years</th>
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</thead>
<tbody>
<tr>
<td>N (% of all cases that year)</td>
<td>N (% of all cases that year)</td>
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<tr>
<td>2011</td>
<td>228 (22%)</td>
<td>376 (35%)</td>
<td>471 (44%)</td>
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<tr>
<td>2012</td>
<td>226 (24%)</td>
<td>345 (35%)</td>
<td>408 (41%)</td>
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<tr>
<td>2013</td>
<td>272 (26%)</td>
<td>350 (34%)</td>
<td>412 (40%)</td>
</tr>
<tr>
<td>2014</td>
<td>294 (24%)</td>
<td>437 (35%)</td>
<td>511 (41%)</td>
</tr>
<tr>
<td>2015</td>
<td>459 (31%)</td>
<td>461 (31%)</td>
<td>566 (38%)</td>
</tr>
</tbody>
</table>

From 2011–2014, HCV rates for all age groups ranged from 170 to 250 cases per 100,000 persons (Figure). In 2015, the HCV rate among persons aged 18–29 years spiked to 355 cases per 100,000 persons, which represented a doubling of the rate for this age-group from 2011–2015 (Figure).

Discussion
During 2011–2015, persons aged 18–29 years accounted for the largest increase by age group of HCV cases reported to SOE. Among persons aged 18–29 years, rates were particularly high in the Southeast, Southwest, and Northern regions. Note that the HCV rates reported here are not a reliable marker for annual HCV incidence, as diagnoses often occur years after patients’ initial acquisition of infection. Nevertheless, the rates are useful for estimating the prevalence of HCV in the population and for monitoring trends. Moreover, in light of the heightened attention to the current heroin epidemic, health care providers might be diagnosing HCV infection more timely in some persons (e.g., young adults) if they suspect or elicit a recent history of IDU.

Previous Alaska data on HCV prevalence demonstrated the majority of HCV cases reported were among “baby-boomers”. The recent increase in HCV among young adults follows national HCV trends and we presume that our HCV-infected young adults share similar IDU risk factors. As such, efforts to decrease IDU, such as syringe exchange programs (SEPs), are needed. Operating SEPs across Alaska offering sterile supplies and support services include the Alaskan Aids Assistance Association Syringe Access Program in Anchorage and Juneau, Northern Exchange at Interior Aids Assistance in Fairbanks, and The Exchange in Homer.

Recommendations
1. All persons born during 1945–1964, and those with risk factors for HCV infection, should be screened for HCV. Persons at risk for HCV should routinely be tested for HCV.

2. HCV-infected patients should be evaluated for treatment with direct-acting antiviral drugs, screened for substance use disorder, and offered supported treatment/intervention services.

3. Health care providers and laboratories should report HCV infections to SOE via fax at 907-561-4239.

4. All persons with HCV infection should be vaccinated against hepatitis A and B, if they are not already immune.

5. See SOE’s Viral Hepatitis webpage for additional resources: http://dhss.alaska.gov/dph/Epi/pages/hepatitis/default.aspx

6. Learn more about Alaska’s heroin and opioid epidemic at: http://dhss.alaska.gov/dph/Director/Pages/heroin-opioids/default.aspx

References
2. CDC. Hepatitis C virus infection among adolescents and young adults — Massachusetts, 2002–2009. MMWR 2011;60(17):537–41. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6017a1.htm
5. CDC. Risk factors for hepatitis C virus infections among young adults — Massachusetts, 2010. MMWR 2011;60(42):1457–58. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6042a5.htm

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