Hepatitis C in Alaska’s Prisons and Jails

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“All these institutions seemed purposely invented for the production of depravity and vice, condensed to such a degree that no other conditions could produce it, and for the spreading of this condensed depravity and vice broadcast among the whole population.”

- Leo Tolstoy, Resurrection
Prisoners retain three basic health care rights:

1. Access to health care
2. Right to receive care ordered by a health care provider
3. Professional medical judgement
Total Admissions by Year
2010 - 2015

Admissions

Year

2010: 36,108
2011: 38,085
2012: 36,784
2013: 35,140
2014: 36,696
2015: 35,012

2015 Offender Profile. Alaska Dept. of Corrections.
Approx. 1%-1.5% of Americans have chronic hepatitis C (HCV)

CDC Correctional Facilities and Viral Hepatitis Jan. 23, 2014

HCV prevalence among inmates nationally is reported as 17% to 29%


HCV in the United States
AK Prison Population with Chronic HCV

State of Alaska Dept. of Corrections data. 2016.
US Population

HCV Free Individuals  HCV Positive Individuals
Prevalence of HCV in General U.S. Population
Prevalence of HCV in the Prison Population

- HCV Free Individuals
- HCV Positive Individuals
Prevalence of HCV in All Alaska Facilities

- HCV Free Individuals
- HCV Positive Individuals
HCV cases in correctional populations represent about 1/3 of total US HCV cases

Annual Reported Cases of HCV 2015

Reported HCV cases from Alaska Dept. of Corrections
392

Reported HCV cases to Section of Epidemiology in Alaska
1511


HCV Cases increasing among Young Adults

HCV Cases increasing among Young Adults

The incidence of HCV is lower in prison than the community, but the transmission risk is over 2 fold higher among recently released persons who inject drugs.
“The concentration of a deadly infectious disease in the prison system has wide public health ramifications because detainees are not a static population, often transferring to multiple facilities within the prison system and back and forth to the outside community.”

Percent of Offenders by Length of Stay from Admission

As of June 30, 2002

- 6 months or less: 44.35%
- 7 months - 12 months: 13.84%
- 13 months - 24 months: 22.71%
- 25 months - 36 months: 8.95%
- 37 months or more: 10.15%

As of June 30, 2014

- 6 months or less: 37.79%
- 7 months - 12 months: 15.06%
- 13 months - 24 months: 13.83%
- 25 months - 36 months: 6.30%
- 37 months or more: 24.68%

Alaska Department of Corrections
28.5% - 32.8% of seropositive HCV cases are in the corrections system on any given day.

Hepatitis C Virus in Alaska

Approx. 75% of Alaska’s inmates will return to the community within three years; eventually 95% return to the community.
“Since over 90% of prisoners will be released, providing HCV testing, treatment, and linkage to care services to people while they are incarcerated can improve the health of our everyday communities by saving lives, reducing disease transmission, and reducing costs related to rising HCV mortality.”

Cost to treat all offenders with chronic HCV in custody on any given day

$16,380,000
Time Course of Progression with Chronic Hepatitis C Infection

This graphic shows the time course for the natural history of chronic hepatitis C infection. Following initial HCV infection, there is typically a lag of 20 to 25 years before cirrhosis develops.
Following initial infection with HCV, approximately 75 to 85% of persons develop chronic infection. Among those with chronic infection, approximately 20 to 30% will eventually develop cirrhosis. Patients who have HCV-related cirrhosis have a 2 to 7% per year risk of developing either end-stage liver disease or hepatocellular carcinoma. Abbreviations: ESLD = end stage liver disease HCC = hepatocellular carcinoma
Natural History Following Initial Infection with HCV

Following initial infection with HCV, approximately 75 to 85% of persons develop chronic infection. Among those with chronic infection, approximately 20 to 30% will eventually develop cirrhosis. Patients who have HCV-related cirrhosis have a 2 to 7% per year risk of developing either end-stage liver disease or hepatocellular carcinoma. Abbreviations: ESLD = end stage liver disease HCC = hepatocellular carcinoma
Cost of Cure

What is the cost of cure?
<table>
<thead>
<tr>
<th>Brand</th>
<th>Generic</th>
<th>Genotype</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sovaldi / RBV</strong></td>
<td>Sofosbuvir / RBV</td>
<td>Genotype 2, 3</td>
<td>$78,322* (12 weeks)</td>
</tr>
<tr>
<td><strong>Harvoni</strong></td>
<td>Sofosbuvir / Ledipasvir</td>
<td>Genotype 1</td>
<td>$22,680* (8 weeks)</td>
</tr>
<tr>
<td><strong>Mavyret</strong></td>
<td>Glecaprevir / Pibrentasvir</td>
<td>Genotype 1-6</td>
<td>$26,399* (8 weeks)</td>
</tr>
<tr>
<td><strong>Epclusa</strong></td>
<td>Velpatasvir / Sofosbuvir</td>
<td>Genotype 1-6</td>
<td>$26,166* (12 weeks)</td>
</tr>
<tr>
<td><strong>Vosevi</strong></td>
<td>Velpatasvir / Sofosbuvir / Voxilaprevir</td>
<td>Genotype 1-6</td>
<td>$62,798* (12 weeks)</td>
</tr>
</tbody>
</table>

* AK DOC price 2018

**Cost of Treatment in DOC**
Figure 1. Estimated price per course of hepatitis C treatment in prisons, direct-acting agents for hepatitis C. 
Source: Authors’ analysis as outlined in Method section, based on data supplied by Georgia Department of 
Figure 2. Number of persons with chronic hepatitis C hypothetically treated and missed under three pricing strategies. The total amount of $15,280,287 can treat 219 people when cost is AWP ($69,773), 400 people when treated under 340B pricing ($38,186), and 3820 people when nominally priced ($4,000). Source: Georgia Department of Corrections, fiscal year 2017 to 2018.
States are now being sued for not treating everyone with an HCV infection.

“So what are you in for?”

“I robbed Peter to pay Paul.”
Budget Impact Analysis

“Corrections have inherited an important public health opportunity to address the HCV epidemic. It is unrealistic, however, to expect correctional facilities to attempt widespread HCV treatment with the currently available budgets.”

Corrections Departments are Progressing through a Step-Wise Response

1. Reactionary treatment only
2. Screen and document prevalence
3. Screen broadly but prioritize treatment
4. Screen broadly and treat broadly
5. Communicate with stakeholders (Public health, IHS, Medicaid, insurance companies, state officials)
6. Comprehensive public health test, treat, educate, and prevent spread of HCV