

State of California—Health and Human Services Agency California Department of Public Health



EDMUND G. BROWN JR. Governor

#### Issue Brief: Hepatitis C Treatment Among People Who Inject Drugs

The California Department of Public Health (CDPH) advises health care professionals to follow evidence-based guidelines when making clinical decisions regarding hepatitis C treatment for people who use drugs, including injection drugs.

Substance use, including active injection drug use, should not be considered an absolute contraindication for hepatitis C treatment.

This recommendation is consistent with American Association for the Study of Liver Diseases (AASLD)/Infectious Diseases Society of America (IDSA) hepatitis C treatment guidelines.

## Issue

Hepatitis C virus (HCV) infection is a leading cause of liver disease, liver cancer, and liver transplantation in the United States. The U.S. Centers for Disease Control and Prevention (CDC) reports that since 2013, HCV-related deaths have outnumbered those due to all other 60 nationally notifiable infectious diseases combined, including HIV and tuberculosis.<sup>1</sup> California has seen increasing rates of newly reported cases of chronic hepatitis C among young adults ages 20-29 in recent years, with a 55 percent increase among males ages 20-29 and a 37 percent increase among females ages 20-29 (between 2007 and 2015).<sup>2</sup>

CDC estimates suggest that approximately two-thirds of new HCV infections nationwide are injection drug use-related; the same is likely true of newly reported cases of HCV infection among young adults in California.

## **Evidence for Hepatitis C Treatment Among People Who Inject Drugs**

Mathematical modeling studies demonstrate that the following strategies, when implemented in combination for people who inject drugs, have the potential to significantly reduce the incidence and prevalence of HCV infection at the population level:<sup>3</sup>

- 1) Syringe services programs;
- 2) Medication assisted treatment (MAT) for opioid use disorder, and;
- 3) Hepatitis C clinical management and treatment.

A cohort study of young people (under 30 years of age) who inject drugs in San Francisco found that maintenance opioid agonist therapy (methadone or buprenorphine) for opioid use disorders was associated with more than a 60% reduction in the incidence of HCV infection over time compared with no treatment.<sup>4</sup> Recent federal funding for MAT expansion in California may provide a valuable resource in addressing increases in HCV infection among young adults in California.<sup>5,6</sup>

An emerging body of evidence demonstrates that treatment with HCV direct-acting antivirals yields consistently high (more than 90 percent) rates of sustained virologic response (cure), including among people on MAT for opioid use disorder, people actively using drugs, and individuals experiencing homelessness.<sup>7,8,9</sup>

According to AASLD/IDSA HCV treatment guidelines, last updated on September 21, 2017 *(emphasis added)*:

Regardless of treatment setting, *recent and active [injection drug use] should not be seen as an absolute contraindication to HCV therapy*. There is strong evidence from various settings in which persons who inject drugs have demonstrated adherence to treatment and low rates of reinfection, countering arguments that have been commonly used to limit access to this patient population. [...] Conversely, there are no data to support the utility of pretreatment screening for illicit drug or alcohol use in identifying a population more likely to successfully complete HCV therapy.<sup>10</sup>

The California Department of Health Care Services Treatment Policy for the Management of Hepatitis C (effective July 1, 2015), applicable to all Medi-Cal beneficiaries, lists "active injection drug users" among the clinical states that identify "candidates for treatment."<sup>11</sup>

Since March 2016, CDPH has been funding five hepatitis C testing and linkage to care demonstration projects statewide, and has found that persons who inject drugs can be effectively treated for hepatitis C in primary care and safety net settings, including by family physicians and mid-level practitioners with training from experienced providers.<sup>12</sup>

## Conclusion

Scientific evidence indicates that people who inject drugs achieve high rates of virologic cure, high rates of medication adherence, and low rates of reinfection. Treating HCV among people who inject drugs is also critical for lowering overall prevalence and reducing secondary transmission. People who inject drugs living with HCV infection should be offered both treatment for hepatitis C and substance use disorder; however, HCV infection can be effectively cured for active drug users not in drug treatment.

# **CDPH recommends:**

- Following AASLD/IDSA's evidence-based clinical guidelines regarding HCV treatment for people who use alcohol and other substances, particularly those who actively inject drugs
- Syringe services programs for people who inject drugs to prevent primary and secondary HCV infection transmission
- Medication-assisted treatment for people with opioid use disorder to reduce injection frequency and/or to reduce or cease opioid use

#### **Additional Resources**

- <u>HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C</u> (Up-to-date guidelines on hepatitis C clinical management; AASLD/IDSA: <u>https://www.hcvguidelines.org/</u>)
- <u>Hepatitis C & Injection Drug Use</u> (Fact sheet; CDC: <u>https://www.cdc.gov/hepatitis/hcv/pdfs/factsheet-pwid.pdf</u>)
- <u>Needle and Syringe Access</u> (Information on syringe exchange programs and pharmacy nonprescription syringe sales in California; CDPH Office of AIDS: <u>https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OA\_prev\_needle\_exchange\_syring</u> <u>e.aspx</u>)
- <u>Hepatitis C Online</u> (Free online continuing medical education regarding hepatitis C diagnosis, monitoring, and clinical management; University of Washington: <u>https://www.hepatitisc.uw.edu/</u>)
- <u>HCV Project ECHO</u> (Free biweekly tele-mentoring for primary care providers in rural Northern California on how to manage and treat hepatitis C infection; University of California, San Francisco: <u>http://echo.ucsfhealth.org/</u>)
- <u>Buprenorphine Project ECHO</u> (Free monthly tele-mentoring opportunity for buprenorphine providers in California; Weitzman Institute: <u>https://www.weitzmaninstitute.org/project-echo</u>)

## References

- <sup>2</sup> California Department of Public Health. Chronic Hepatitis C in California, 2015 Executive Summary. Accessed September 15, 2017 at
- https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ChronicHCV\_SurvRpt\_ExecSum.pdf

<sup>3</sup> Martin NK, Hickman M, Hutchinson SJ, Goldberg DJ, Vickerman P. Combination Interventions to Prevent HCV Transmission Among People Who Inject Drugs: Modeling the Impact of Antiviral Treatment, Needle and Syringe Programs, and Opiate Substitution Therapy. *Clin Infect Dis.* 2014 Apr; 58(8):1203. <u>https://www.ncbi.nlm.nih.gov/pubmed/23884064</u>

<sup>4</sup> Tsui JI; et al. Association of Opioid Agonist Therapy With Lower Incidence of Hepatitis C Virus Infection in Young Adult Injection Drug Users. *JAMA Intern Med.* 2014 Dec; 174(12):1974-1981.

http://jamanetwork.com/journals/jamainternalmedicine/fullarticle/1918926

<sup>5</sup>California Department of Health Care Services. Substance Abuse and Mental Health Services Administration Opioid State Targeted Response. Accessed online September 15, 2017 at <u>http://www.dhcs.ca.gov/individuals/Pages/State-Targeted-Response-to-Opioid-Crisis-Grant.aspx</u>

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5575839/pdf/nihms899370.pdf

<sup>&</sup>lt;sup>1</sup> U.S. Centers for Disease Control and Prevention Newsroom. Hepatitis C Kills More Americans than Any Other Infectious Disease. Accessed November 12, 2017 at <u>https://www.cdc.gov/media/releases/2016/p0504-hepc-mortality.html</u>

<sup>&</sup>lt;sup>6</sup> California Department of Health Care Services. Drug Medi-Cal Organized Delivery System. Accessed online November 15, 2017 at <u>http://www.dhcs.ca.gov/provgovpart/Pages/Drug-Medi-Cal-Organized-Delivery-System.aspx</u>

<sup>&</sup>lt;sup>7</sup> Litwin AH; et al.. Successful Treatment of Chronic Hepatitis C with Triple Therapy in an Opioid Agonist Treatment Program. Int J Drug Policy. 2015 Oct;26(10):1014-9. <u>https://www.ncbi.nlm.nih.gov/pubmed/26341685</u>

 <sup>&</sup>lt;sup>8</sup> Aspinall EJ; et al. Treatment of Hepatitis C Virus Infection Among People Who Are Actively Injecting Drugs: A Systematic Review and Meta-Analysis. *Clin Infect Dis.* 2013 Aug; 57(S2):S80-9. <a href="http://www.ncbi.nlm.nih.gov/pubmed/23884071">http://www.ncbi.nlm.nih.gov/pubmed/23884071</a>
<sup>9</sup> Barocas JA; et al. Experience and Outcomes of Hepatitis C Treatment in a Cohort of Homeless and Marginally Housed Adults. *JAMA Intern Med.* 2017 Jun; 177(6):880-882.

<sup>&</sup>lt;sup>10</sup> American Association for the Study of Liver Diseases and Infectious Diseases Society of America. When and In Whom to Initiate HCV Therapy. HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C. Last updated September 21, 2017; accessed online December 20, 2017 at <u>http://www.hcvguidelines.org/evaluate/when-whom</u>.

<sup>&</sup>lt;sup>11</sup> California Department of Health Care Services. Treatment Policy for the Management of Hepatitis C (Effective July 1, 2015). Accessed online September 15, 2017 at <u>http://www.dhcs.ca.gov/Documents/Hepatitis%20C%20Policy.pdf</u>.

<sup>&</sup>lt;sup>12</sup> California Department of Public Health. Hepatitis C Testing and Linkage to Care Demonstration Projects. Personal communication with grantee staff Katie Burk, MPH, San Francisco Department of Public Health, and Christian Ramers, MD, MPH, AAHIVS, Family Health Centers of San Diego.