Integrating Hepatitis C into Drug Treatment Settings

Substance Use Disorders Statewide Conference
August 24, 2017 | Pomona, CA
Christine Rodriguez, MPH
California Department of Public Health
Overview

1. Hepatitis C Basics
2. State Epidemiology
   • A Note on Syphilis
4. Service Integration
5. Resources
6. Q&A
Hepatitis C Basics
Hepatitis C in the United States

- Most common blood-borne virus in the U.S.
- ~3-5 million living with hepatitis C infection
- Up to 75% DO NOT KNOW THEY ARE INFECTED
- #1 cause of liver disease, liver cancer, and transplantations
- 19,629 HCV-related deaths in 2015
Hepatitis C Basics

- Bloodborne virus that replicates in the liver
- Stable enough to live outside the body
- *Curative* treatment, but not yet vaccine-preventable
- ~75% develop chronic infection
- Often asymptomatic
- ~10x more infectious than HIV
Hepatitis C Transmission

Primary Modes of Transmission (US):
- Sharing drug injection equipment**
- Healthcare exposures
- Mother-to-Child
- Tattoos and/or piercings in jail/prisons, by unregulated artists
- Sexual – HIV+, “Traumatic” sex

Less Common and/or Theoretical Modes of Transmission:
- Sharing drug snorting equipment
- Sexual
Hepatitis = “Inflammation of the Liver”

- Possible complications and/or extrahepatic (non-liver) manifestations:
  - Severe fatigue
  - Ascites (accumulation of fluid in the abdomen)
  - Encephalopathy (confusion due to buildup of ammonia in brain)
  - End stage liver disease (decompensated cirrhosis)
  - Hepatocellular carcinoma (liver cancer), fatal without a transplant
Natural History of HCV over 10-25 Years

- **Acute Infection**
  - 100% (100 people)
    - **Resolved** 20% (20)
    - **Chronic** 80% (80)
      - **Stable** 35% (28)
      - **Slowly Progressive Disease** (some symptoms) 65% (52)
        - 70% (36) **Some liver damage, no cirrhosis**
        - 30% (16) **Cirrhosis**
          - 75% (12) **Slowly progressive cirrhosis**
          - 25% (4) **Liver failure, cancer, transplant, death**

Factors: Alcohol, Chronic HBV, HIV+, Male
Epidemiology of Chronic Hepatitis C in California
Chronic Hepatitis C – Rates of Newly Reported Cases by County, Excluding Cases in State Prisons, California, 2011 and 2015

2011

2015

Notes:
* No cases reported or statistically unstable rates for five local health jurisdictions in 2011, including Alpine, Colusa, Inyo, Mono, and Sierra counties; and two local health jurisdictions in 2015, including Alpine and Sierra counties.
• State prisons cases were removed from local health jurisdiction totals and attributed to the state prison system as a whole.
Chronic Hepatitis C – Age Distribution of Newly Reported Cases, California, 2007 and 2015

2007*

2015†

*N = 41,037; excludes 547 cases with missing age or sex information.
†N = 33,454; excludes 294 cases with missing age or sex information.
Chronic Hepatitis C – Rates of Newly Reported Cases by Gender and Age, California, 2011-2015

**Female**

**Male**

Rate per 100,000 population

Year

2011 2012 2013 2014 2015
Chronic Hepatitis C – Cases and Percentages of Newly Reported Cases for Which Race/Ethnicity is Known, by Race/Ethnicity, California, 2011-2015

Notes:
- W=White, H/L=Hispanic/Latino, AA/B=African American/Black, API=Asian/Pacific Islander, AI/AN=American Indian/Alaska Native
- Rates are per 100,000 population
- Percent calculations for race/ethnicity exclude individuals for whom race/ethnicity was "Not Specified" from the denominator. Caution should be used when interpreting percentages by race/ethnicity, since race/ethnicity information was not reported for the majority of chronic viral hepatitis cases.
A Brief Interlude: Syphilis & Congenital Syphilis
Congenital Syphilis — Rates of Reported Cases by Region, United States, 2011–2015

Rate per 100,000 live births

California
Cases/rate have quadrupled since 2012

Slide courtesy Dr. Kidd, CDC

Note: The Modified Kaufman Criteria were used through 1989. The CDC Case Definition (MMWR 1989; 48: 828) was used effective January 1, 1990. California data prior to 1985 include all cases of congenital syphilis, regardless of age.
Early Syphilis*, Incidence Rates by County and Gender
California, 2016

* Includes primary, secondary, and early latent syphilis.
Congenital Syphilis Cases versus Female Syphilis* Cases by Pregnancy Status
California, 2007–2016

Cases of Congenital Syphilis (n)

Cases of Syphilis among Females (n)

Year

Pregnant    Not Pregnant    Unknown    Congenital Syphilis

2007  233    85    187    166    140    120    186    277    368    494
2008  174    67    166    140    120    186    277    368    494
2009  61    47    46    33    58    102    145    207
2010  102    145    207
2011  277    368    494
2012  186
2013  102
2014  145
2015  207
2016

* Includes primary, secondary, early latent, and late latent/unknown duration syphilis.

MSM=Men who have sex w/men, MSW=Men who have sex w/women, MSM&W=Men who have sex with men & women

* Includes primary, secondary, and early latent syphilis.
Why Bother?
Transmission, Engagement, & Cure
Hepatitis C Transmission Risk – It’s All About the Blood
Opportunities for Bloodborne Virus Transmission during Injection Drug Use
Structural Barriers to Prevention: Limited Access to Syringe Exchange Programs

Note: Nonprescription syringe sales at pharmacies are allowed statewide.
Hepatitis C Prevention for People Who Inject Drugs

Multicomponent interventions that include...

– Health education on safer injection practices, AND
– Sterile injection equipment access, AND
– Medication-assisted drug treatment

...reduce hepatitis C risk by 75%

**Modeling indicates potential for addition of hepatitis C treatment to best reduce population prevalence**


Living with Hep C?
New treatments have changed the game

Direct-Acting Antivirals!

There is new hope for people with Hep C
Come visit us to talk about the new cure

Glide Harm Reduction Program - 5th floor
330 Ellis Street (between Taylor & Jones)
San Francisco, CA 94102
(415) 674-5188 / hepc@glide.org
For more info, visit www.endhepcsf.org

STD Control Branch
Hepatitis C Can Be CURED in 12 Weeks

Key:
IFN = Interferon
RBV = Ribavirin
PEG = Pegylated
PI = Protease Inhibitor (e.g., boceprevir / telaprevir)
DAA = Direct Acting Antivirals (e.g., sofosbuvir, ledipasvir, simeprevir, daclatasvir)

Non-Medical Benefits of Cure

Cure is Motivating
• Patients have become more engaged in addressing other health needs

Cure is Facilitating
• Ending severe, chronic fatigue provides an opportunity to make other life changes

Cure is Caring
• After being told for years, sometimes decades, that hepatitis C could not be cured / not to worry about it, successful cure can open the question of what obstacles might be overcome

Cure is Compassionate
• Many people who inject drugs internalize stigma; curing their hep C can send a message that they matter and are deserving of care
Non-Medical Benefits of Cure

Cure is Motivating
- Patients have become more engaged in addressing other health needs

Cure is Facilitating
- Ending severe, chronic fatigue provides an opportunity to make other life changes

Cure is Caring
- After being told for years, sometimes decades, that hepatitis C could not be cured / not to worry about it, successful cure can open the question of what obstacles might be overcome

Cure is Compassionate
- Many people who inject drugs internalize stigma; curing their hep C can send a message that they matter and are deserving of care
Service Integration
Opportunities for Service Integration

- Patient Education on Hepatitis C, HIV, STDs
- Hepatitis C Screening & Diagnostic Testing
- Syphilis Screening
  - + HIV, other STDs
- Referrals and Linkage to Medical Care
- Hepatitis C Medication Dispensation for Methadone Patients
- Develop New / Deeper Partnerships
  - e.g. FQHCs for treatment, syringe services programs to prevent (re)infection
- Hepatitis A and Hepatitis B Vaccination
CDC Testing Recommendations for Hepatitis C Virus Infection

Persons for Whom HCV Testing Is Recommended

- **Adults born from 1945 through 1965** should be tested once (without prior ascertainment of HCV risk factors)
- HCV testing is recommended for those who:
  - Currently injecting drugs
  - Ever injected drugs, including those who injected once or a few times many years ago
  - Have certain medical conditions, including persons:
    - who received clotting factor concentrates produced before 1987
    - who were ever on long-term hemodialysis
    - with persistently abnormal alanine aminotransferase levels (ALT)
    - who have HIV infection
  - Were prior recipients of transfusions or organ transplants, including persons who:
    - were notified that they received blood from a donor who later tested positive for HCV infection
    - received a transfusion of blood, blood components, or an organ transplant before July 1992
- HCV- testing based on a recognized exposure is recommended for:
  - Healthcare, emergency medical, and public safety workers after needle sticks, sharps, or mucosal exposures to HCV-positive blood
  - Children born to HCV-positive women

Note: For persons who might have been exposed to HCV within the past 6 months, testing for HCV RNA or follow-up testing for HCV antibody is recommended.

Source: [https://www.cdc.gov/hepatitis/hcv/guidelinesc.htm](https://www.cdc.gov/hepatitis/hcv/guidelinesc.htm)
CDC Testing Recommendations for Hepatitis C Virus Infection

Persons for Whom Routine HCV Testing Is of Uncertain Need

- Recipients of transplanted tissue (e.g., corneal, musculoskeletal, skin, ova, sperm)
- Intranasal cocaine and other non-injecting illegal drug users
- Persons with a history of tattooing or body piercing
- Persons with a history of multiple sex partners or sexually transmitted diseases
- Long-term steady sex partners of HCV-positive persons

Persons for Whom Routine HCV Testing Is Not Recommended
(Unless they have risk factors for infection):

- Health-care, emergency medical, and public safety workers
- Pregnant women
- Household (nonsexual) contacts of HCV-positive persons
- General population

Source: [https://www.cdc.gov/hepatitis/hcv/guidelinesc.htm](https://www.cdc.gov/hepatitis/hcv/guidelinesc.htm)
Screening & Testing for HCV

Diagnosing hepatitis C infection: 2 step process

1) Anti-HCV (antibody)
   - Non-reactive (negative)
   - Reactive (positive)
   - "Have you ever had hep C?"

2) HCV RNA (viral load)
   - Not detected
   - Detected
   - "Do you have hep C now?"

DHCS HCV Treatment Guidelines, July 2015

HCV treatment is covered for people with...

• Evidence of liver disease:
  – Stage 2 or higher fibrosis (F2+), serious extrahepatic manifestations, liver cancer or post liver transplant

• Comorbidities:
  – HIV, HBV, liver disease, diabetes, debilitating fatigue

• Likelihood of transmitting HCV to others:
  – Men who have sex with men and have high risk sexual practices, **active injection drug users**, women of childbearing age who wish to get pregnant, health care workers who perform exposure prone procedures, people on hemodialysis

Source: http://www.dhcs.ca.gov/Pages/HepatitisC.aspx
Hepatitis C Treatment for People Who Inject Drugs

- Research has shown high (83.4%) adherence rates with PEG/IFN, which had serious side effects, including depression, anemia, and rash
- Reinfection rates among PWID following treatment are low (2.36 per 100 person-years)
- Treatment for PWID should be delivered in a multidisciplinary care setting
- IDU should not be an absolute contraindication

Take Home Messages

• People who have ever injected drugs, even once, should be tested for hepatitis C
• SUD programs are ideal settings for hepatitis C (& syphilis!) screening, testing, and linkages to care
• HCV can now be cured in ~3 months and people who inject drugs can be treated and cured
• Medication-assisted drug treatment is a critical component of hepatitis C prevention
• Resources are available to support integration of HCV services in SUD settings
Resources

• Counties funded by CDPH Office of AIDS for HIV testing may use funds for HCV testing also + seek to partner
• DHCS “Hub & Spokes” grants require HCV testing
• 2018 HCV rapid test kits from CDPH OVHP

CDPH Point of Contact
Rachel McLean, MPH
Chief, Office of Viral Hepatitis Prevention/
California State Viral Hepatitis Prevention Coordinator
Rachel.McLean@cdph.ca.gov
Resources

- CDC, Division of Viral Hepatitis
  www.cdc.gov/hepatitis
- CalHEP viral hepatitis services referral guide
  http://calhep.org/referralguide.asp
- CDPH Office of Viral Hepatitis Prevention
  www.cdph.ca.gov/programs/pages/ovhp.aspx
- DHCS Hepatitis C Treatment Policy
  http://www.dhcs.ca.gov/Pages/HepatitisC.aspx
- HCV Current – training for health professionals
  http://www.attcnetwork.org/Projects/HCV_Products.aspx
- Providers’ Support System for Medication Assisted Treatment
  http://pcssmat.org/
- TIP 53: Addressing Viral Hepatitis in People with Substance Use Disorders
  http://store.samhsa.gov/home
- University of Washington, Hepatitis C Online
  http://www.hepatitisc.uw.edu/
Contact Information

Christine Rodriguez, MPH
Program Advisor
STD Control Branch
California Department of Public Health
Phone: 510-620-9433
Email: ChristineM.Rodriguez@cdph.ca.gov
Website: www.cdph.ca.gov/programs/pages/ovhp.aspx
Thank You!

Questions?