

# Hepatitis C

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**Tim Candela, BSW**

Community Engagement Drug User Health Consultant

**Natalie Linton, MPH**

CDC/CSTE Applied Epidemiology Fellow

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**HEALTHIER COMMUNITY**



# Outline

- The hepatitis C virus
- The burden of hepatitis C
- Responding to hepatitis C

# Hepatitis C virus

- One of many viruses causing hepatitis (inflammation of the liver)
- Only humans are infected
- Spread mainly through blood:
  - Injection drug use (shared equipment)
  - Medical/dental infection control errors
  - Less commonly sexual, shared personal items (e.g., razor), tattoo, piercing



# Spectrum of hepatitis C

- Acute infection
  - About 1/4 have symptoms
  - About 4/5 stay infected (chronic case)
- Chronic infection is lifelong and can be diagnosed at any point
  - Scarring (cirrhosis) after 25-30 years causes liver failure and liver cancer

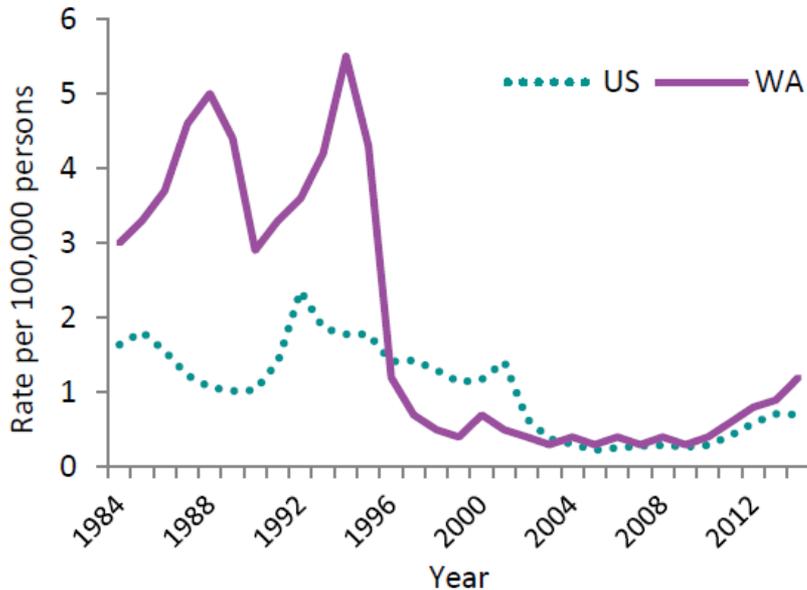
# Cases of acute hepatitis C

- Most acute cases are not recognized
- Acute case reports were highest in the 1980s
- There is a recent increase in acute cases throughout the United States
- Prevent infections by blood transfusion screening, safe drug injection, and medical/dental infection control

# Acute hepatitis C in Washington

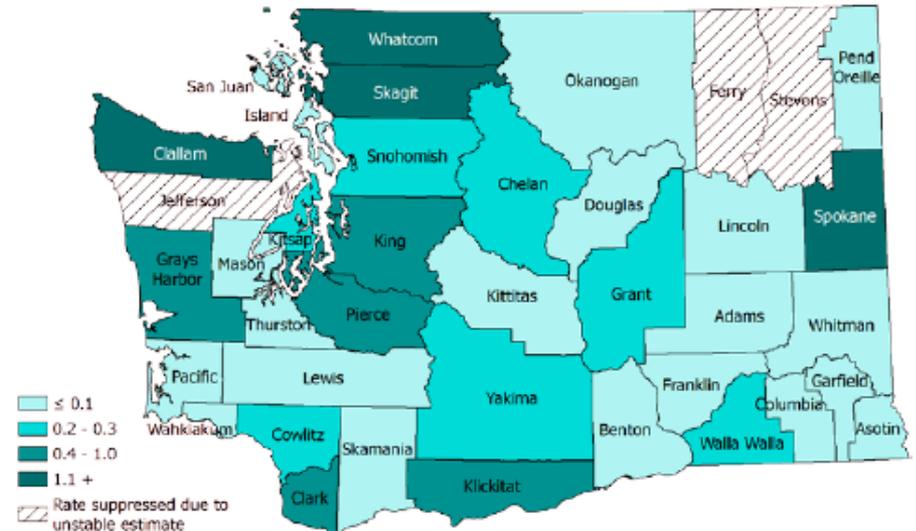
**Figure 13. Incidence rate of reports of acute hepatitis C infections—United States and Washington State, 1984–2014**

Source: Public Health Issues Management System (PHIMS) and the Centers for Disease Control and Prevention (CDC)



**Figure 14. Five-year rate of acute hepatitis C infections per 100,000 persons—Washington State, 2010–2014**

Source: Public Health Issues Management System (PHIMS)



# Chronic hepatitis C

- At least half of those chronically infected with hepatitis C are unaware of their infection
- Estimated 2.7-3.5 million cases nationally (54,000 to 70,000 Washington cases)
- Treatment can greatly reduce risk of complications like liver cancer

Recommendations for the Identification of  
Chronic Hepatitis C Virus Infection Among  
Persons Born During 1945–1965



# Chronic hepatitis C

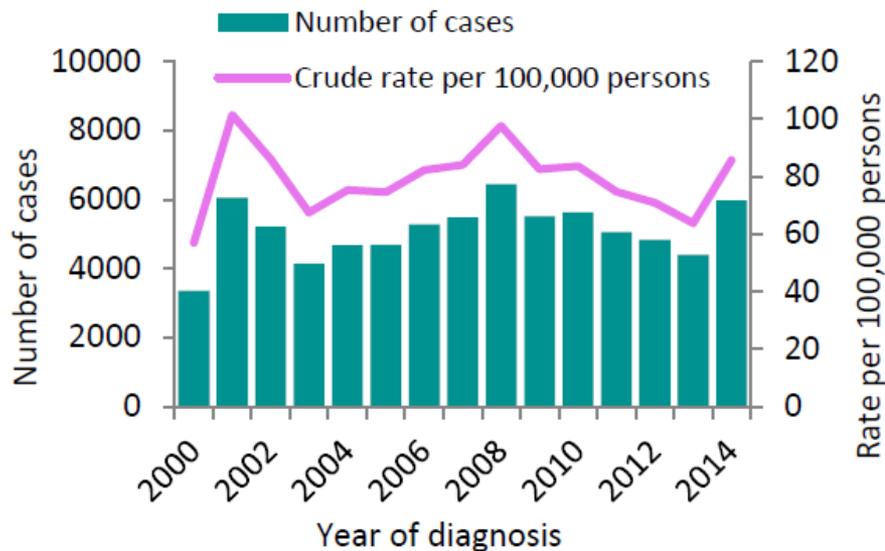
## Risk groups

- Born 1945-1965 (drugs, transfusions)
- Ever injected drugs
- Received unscreened blood product (before 1992)
- Long term kidney dialysis
- Abnormal liver function tests
- HIV-infected
- Child born to HCV-infected woman

# Chronic hepatitis C in Washington

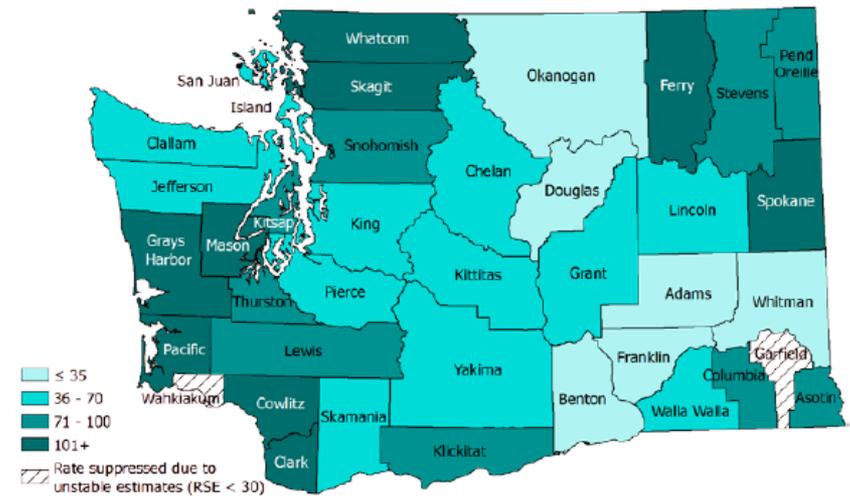
**Figure 15. Number and rate of reports of chronic hepatitis C infections per 100,000 persons—Washington State, 2000–2014**

Source: Chronic Hepatitis Surveillance Records (CHSR)



**Figure 16. Five-year rate of chronic hepatitis C infections per 100,000 persons among non-incarcerated residents—Washington State, 2010–2014**

Source: Chronic Hepatitis Surveillance Records (CHSR)



\*Rates do not include cases from the Department of Corrections.

Reported chronic cases are by year of first testing.  
Cases reported are at most 1/2 of the actual cases

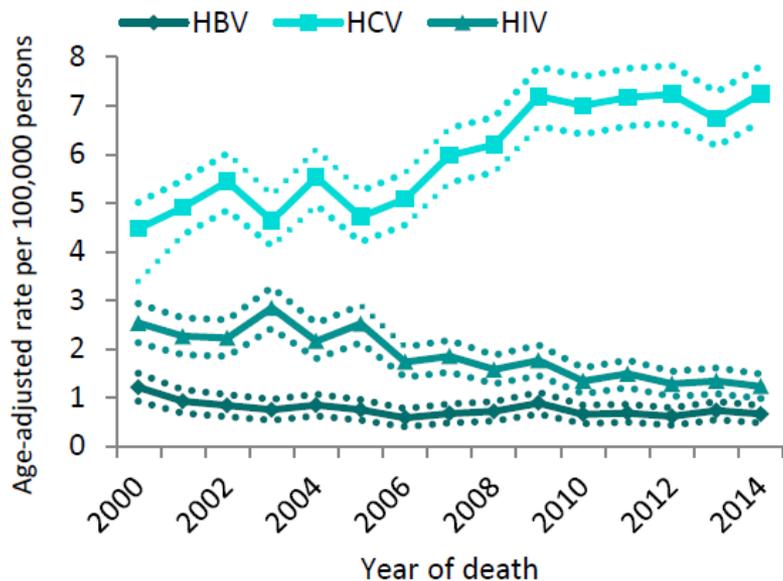
# Untreated HCV: burden of disease

- Healthcare costs
- Lost work productivity
- Reduced quality of life
- Premature death
- All are increasing because it is 25-30 years until complications occur and peak risk of infection was for those born 1945-1965 (baby boomers)

# Deaths due to hepatitis C

**Figure 26. Age-adjusted rate with hepatitis C, hepatitis B, or HIV infection documented as an underlying or multiple cause of death—Washington State, 2000–2014**

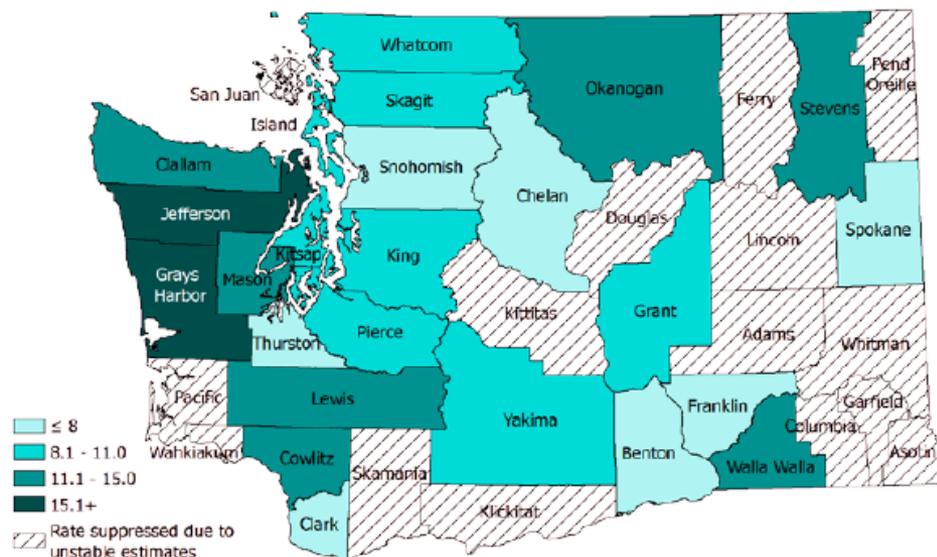
Source: Washington State death records



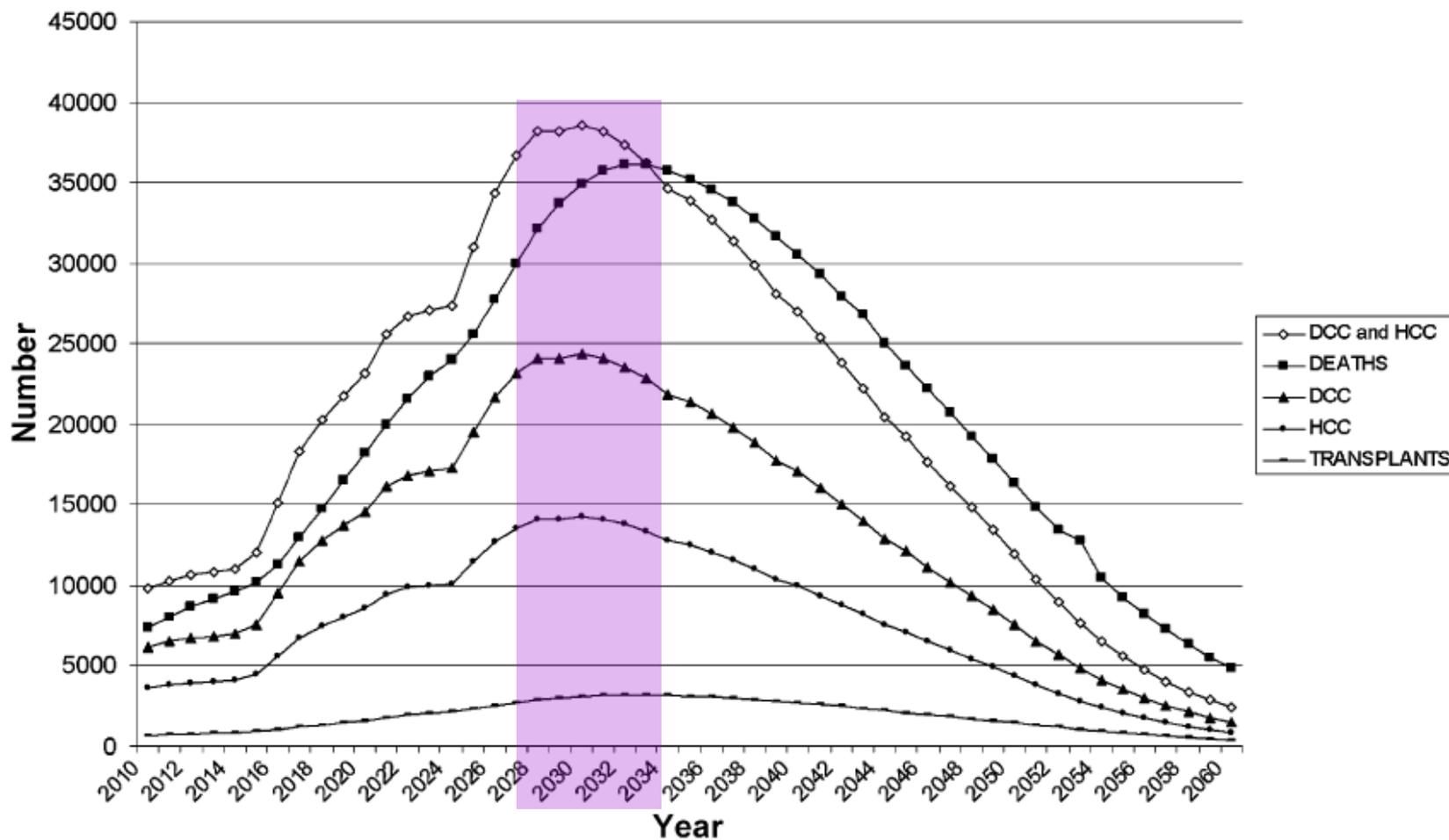
Note: The dotted lines represent 95% confidence intervals.

**Figure 28. Five-year rate of hepatitis C-related deaths per 100,000 persons—Washington State, 2010–2014**

Source: Washington State death records



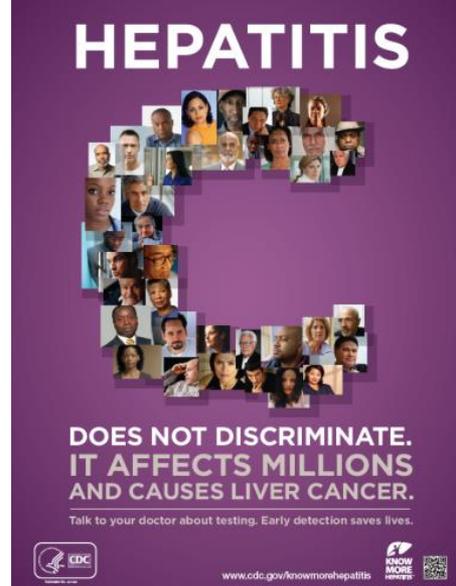
# Future hepatitis C complications



Forecasted cirrhosis complications (DCC), liver cancer (HCC), liver transplants, and deaths will peak around 2030

# Case interventions

- 1) Identify those infected
- 2) Educate
  - No alcohol use
  - Get hep A and hep B vaccines if needed
  - Avoid spread to others
- 3) Link to care
  - Specialist evaluation for treatment
  - Alcohol and drug treatment as needed
- 4) Prevent further spread



# Hepatitis C treatment

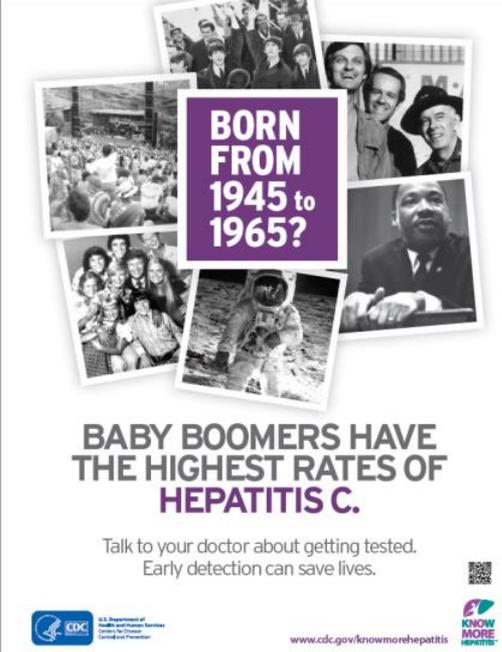
- Newer medications are highly effective
- Goal is to achieve no virus detected for 6 months after treatment
- Successful treatment greatly reduces the risk of complications like cirrhosis and cancer
- Medicaid now covers treatment for those without significant liver scarring or other complications

# Hepatitis C treatment

- Treatment is costly, complicated, and lengthy
- The disease can be viewed as a result of personal choices, resulting in stigmatization
- These are also true for conditions that are routinely and successfully treated:
  - HIV/AIDS
  - Lung cancer
  - Tuberculosis

# Community interventions

- Inform and test those at risk
- Provide syringe exchange programs
- Decriminalize possession of drug-related paraphernalia
- Increase treatment options



**BORN FROM 1945 to 1965?**

**BABY BOOMERS HAVE THE HIGHEST RATES OF HEPATITIS C.**

Talk to your doctor about getting tested.  
Early detection can save lives.

 U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

[www.cdc.gov/knowmorehepatitis](http://www.cdc.gov/knowmorehepatitis)



The poster features a collage of black and white photographs showing various groups of people, including a crowd, a family, and an astronaut, surrounding a central purple text box. The text is in white and purple, with the main message in bold. Logos for the CDC and the 'Know More Hepatitis' campaign are at the bottom.

# Epidemiologic profile of hepatitis C

- **Washington data:**
  - Acute and chronic hepatitis C reports
  - eHARS (HIV surveillance system)
  - Hospitalizations
  - Cancer registry (liver/bile duct cancers)
  - Death certificates
  - National and external data sources (DOC, VA)
- **Data also presented by Accountable Community of Health (ACH) region**
- Available at: <http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/ChronicHepatitisSurveillance>

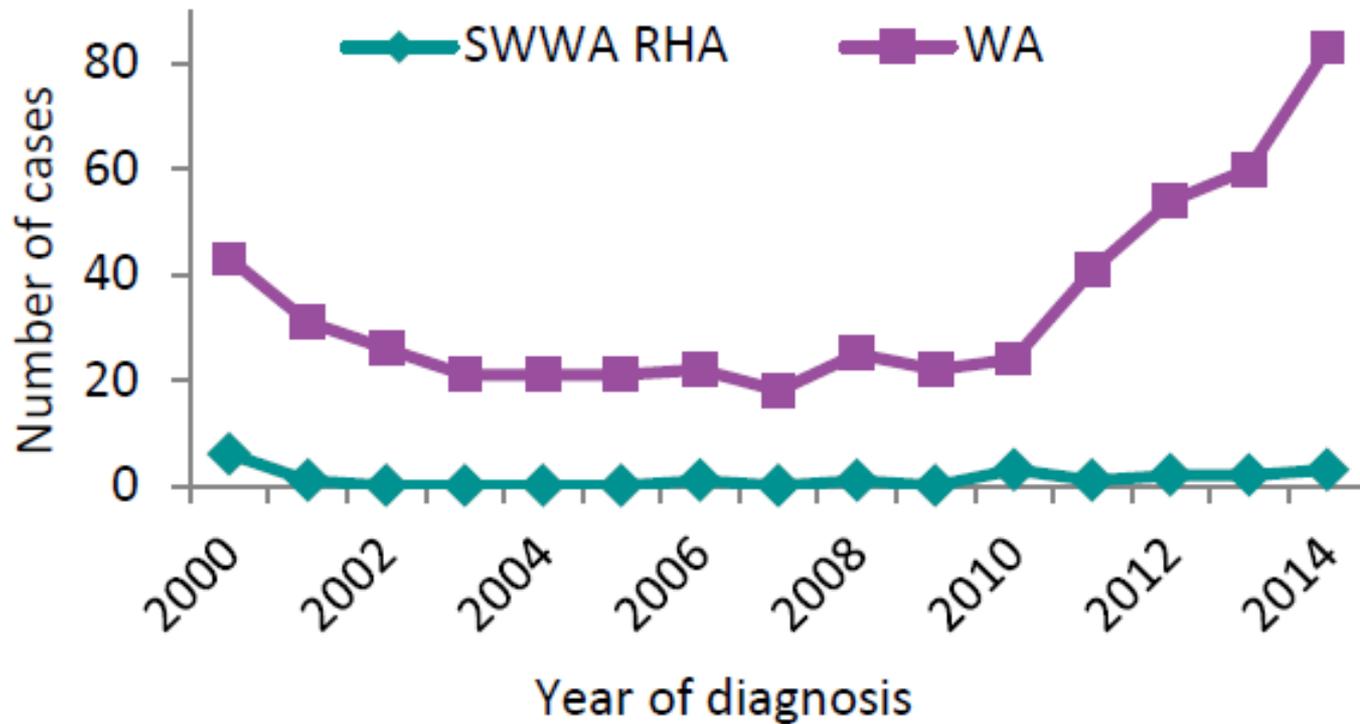


# Hepatitis C in numbers

Years 2010-2014	Washington	SWWA RHA	Clark	Skamania
Population (2014)	6,968,170	454,170 (6.5%)	442,800	11,370
Acute HCV	267	11 (4.1%)	11	0
Chronic HCV	24,613	2,370 (9.6%)	2,347	23
Hospitalizations with primary diagnosis of HCV	2,714	238 (8.8%)	232	6
Total hospitalization charges	\$114 mil	\$8.27 mil (7.2%)	\$8.14 mil	\$0.13 mil
Hepatitis C related....				
Liver and bile duct cancers	1,144	49 (4.3%)	48	1
Liver transplants	190	5 (2.6%)	5	0
Deaths	2,973	171 (5.6%)	165	6

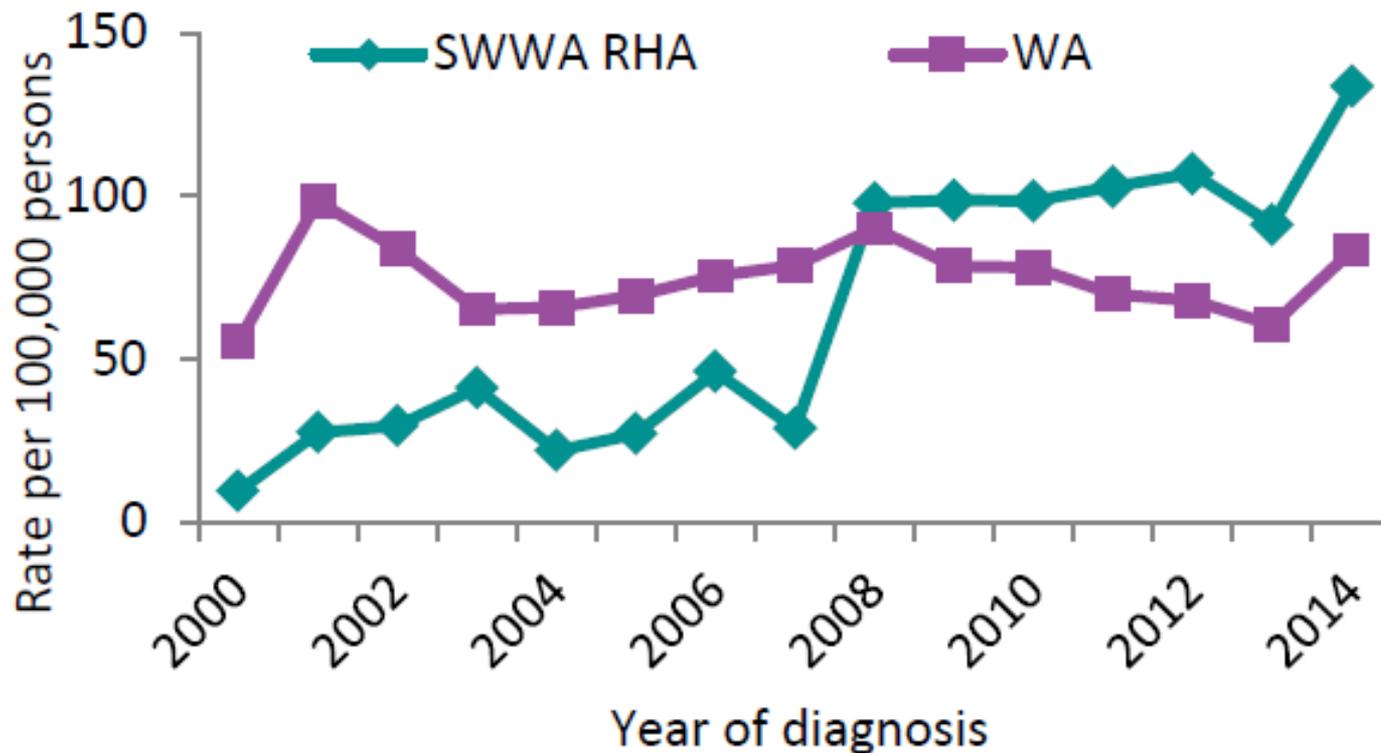
# Figure 1. Number of acute hepatitis C infections in the SWWA RHA region, 2000–2014

Source: Public Health Issues Management System (PHIMS)



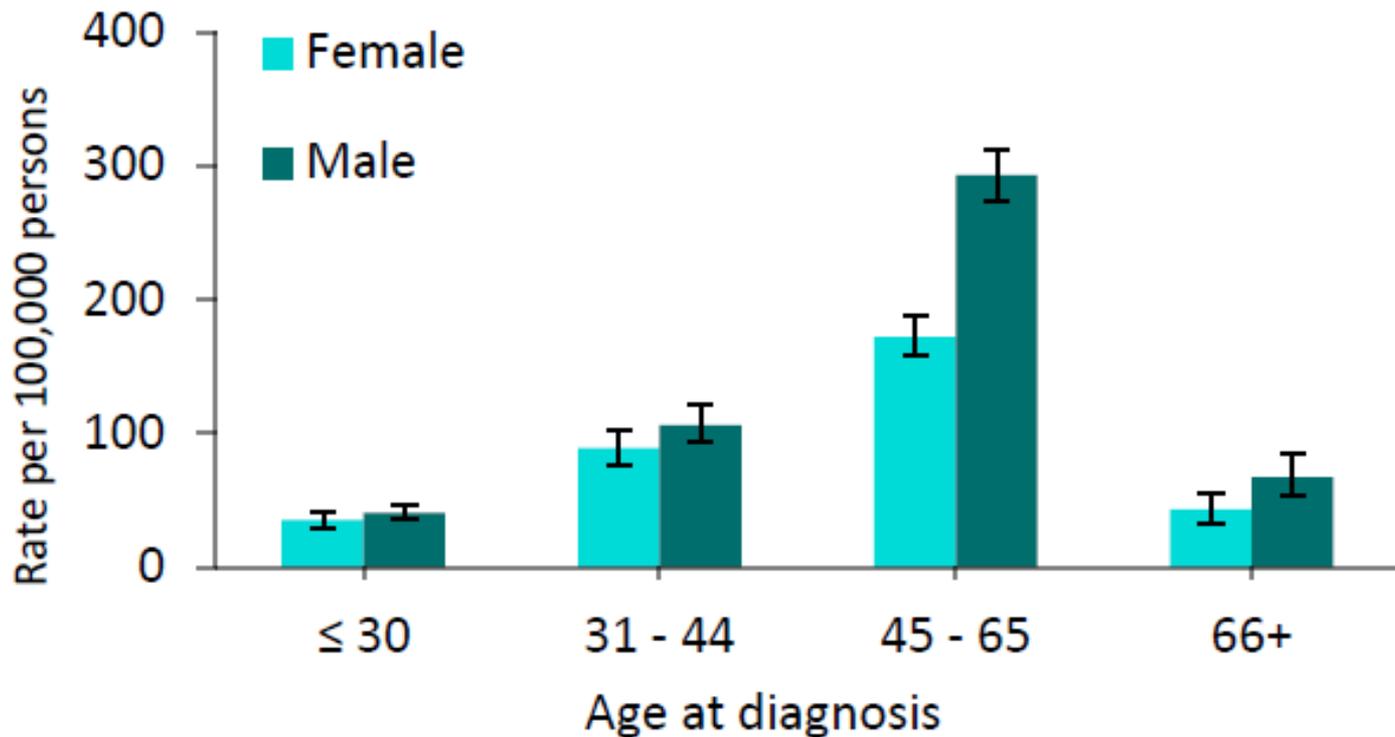
## Figure 2. Rate of diagnosis of chronic hepatitis C infection in the SWWA RHA region, 2000–2014

Source: Chronic Hepatitis Surveillance Records (CHSR)



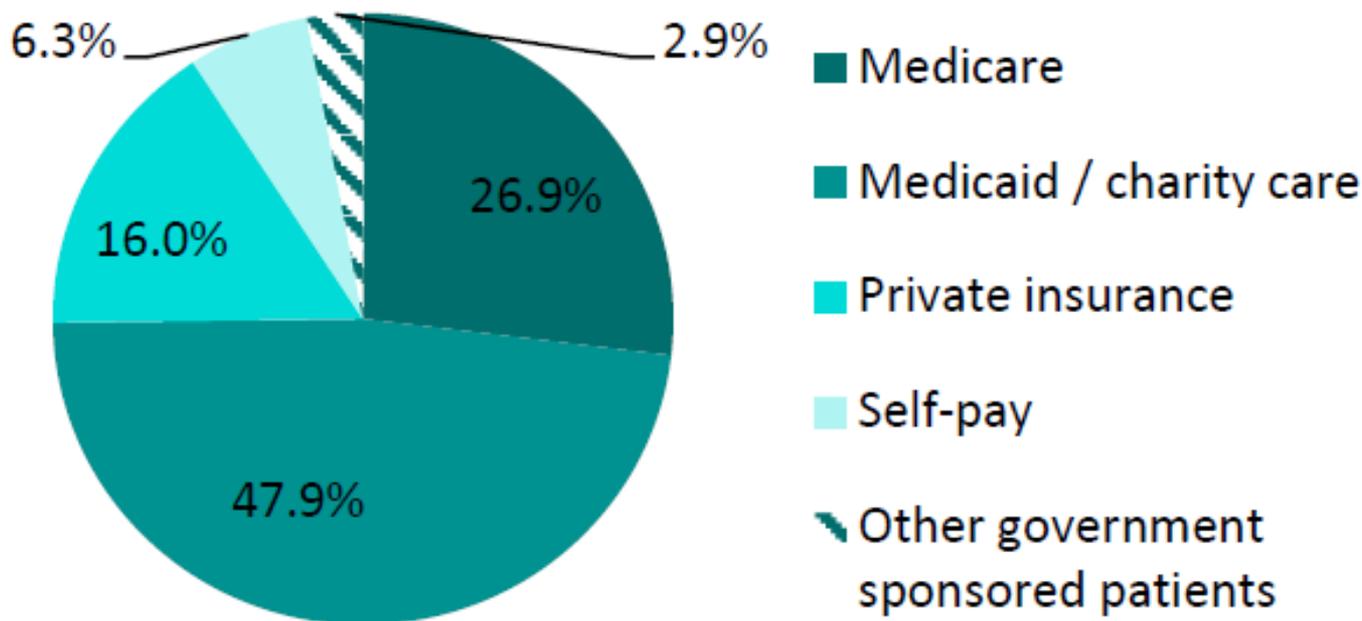
### Figure 3. Rate of chronic hepatitis C infection by gender and age at diagnosis in the SWWA RHA region, 2010–2014

Source: Chronic Hepatitis Surveillance Records (CHSR)



## Figure 5. Primary payer for hospitalizations with a primary diagnosis of hepatitis C in the SWWA RHA region, 2010–2014

Source: Chronic Hepatitis Surveillance Records (CHSR)



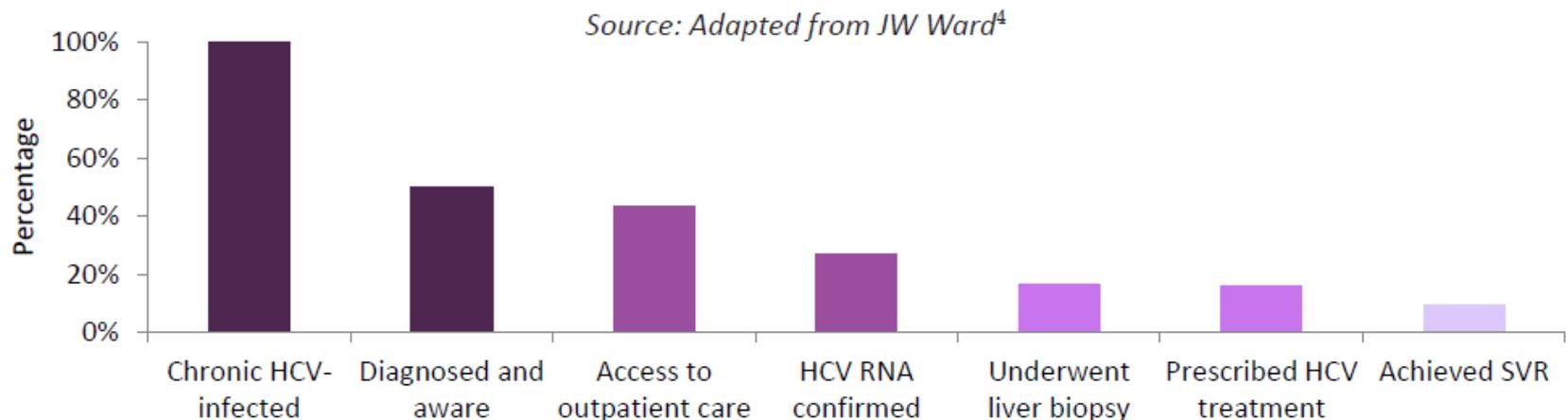
# Emerging trends and new opportunities

- Growing trends of hepatitis C infection among young persons who inject drugs (PWID)
- Important **advances in hepatitis C treatment**
- Advances in hepatitis C testing technology
- Opportunities from implementation of the Affordable Care Act
- Revised screening recommendations
- Revised payer policy (Apple Health)

# Now what?

- How do you combat a silent epidemic?
  - Educate providers and communities to reduce health disparities
  - Improve testing, care, and treatment
  - Strengthen surveillance to detect hepatitis transmission
  - Reduce viral hepatitis cases caused by drug-use behaviors

Figure 10. Treatment cascade for people with chronic hepatitis C infection



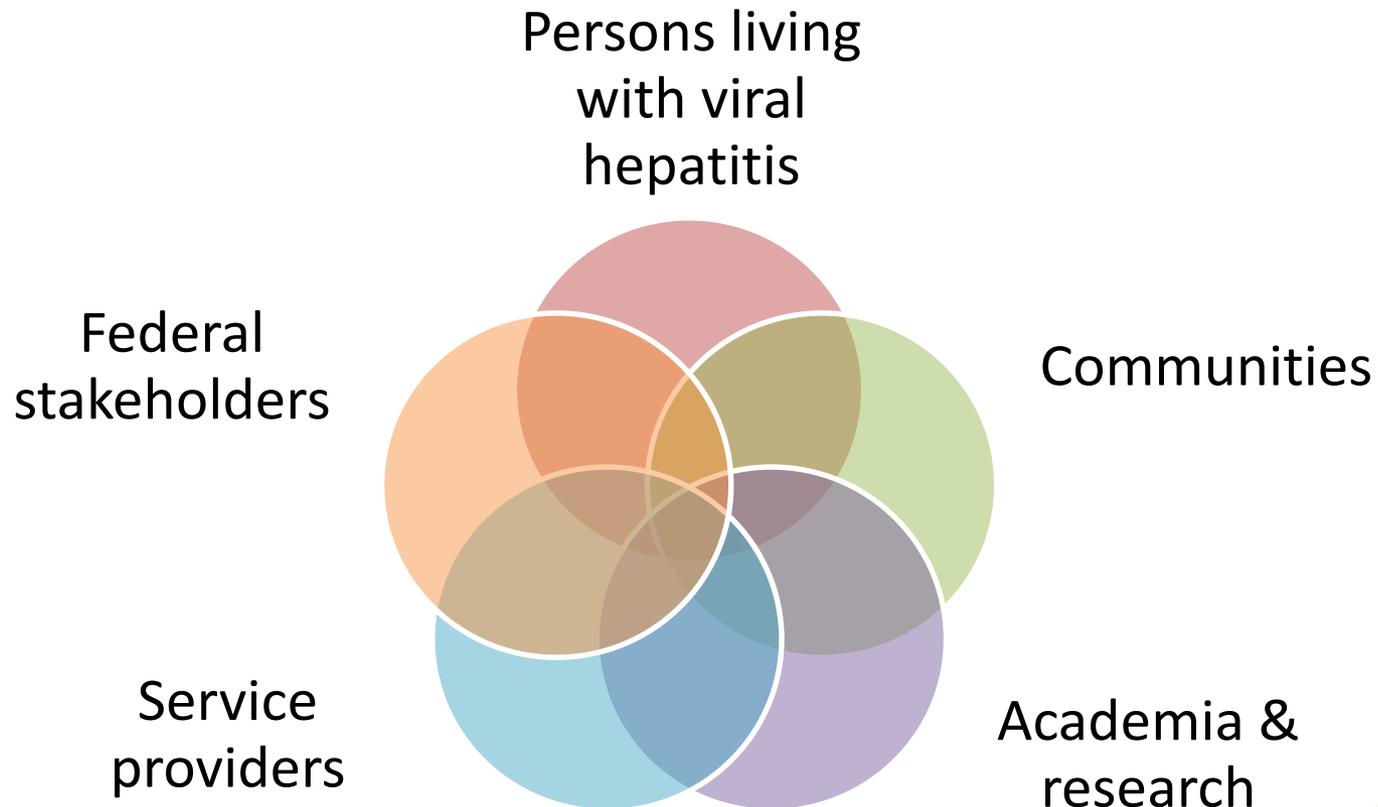
# Priority area

- Identify people with hepatitis C, link them to care and get them to a cure
  - Build a health care workforce prepared to diagnose, care for, treat, and cure people infected with hepatitis C
  - Educate communities about risk factors for hepatitis C, how to reduce risk, and the availability of prevention, testing, and treatment services
  - Improve testing, care, and treatment to raise the bars along the continuum

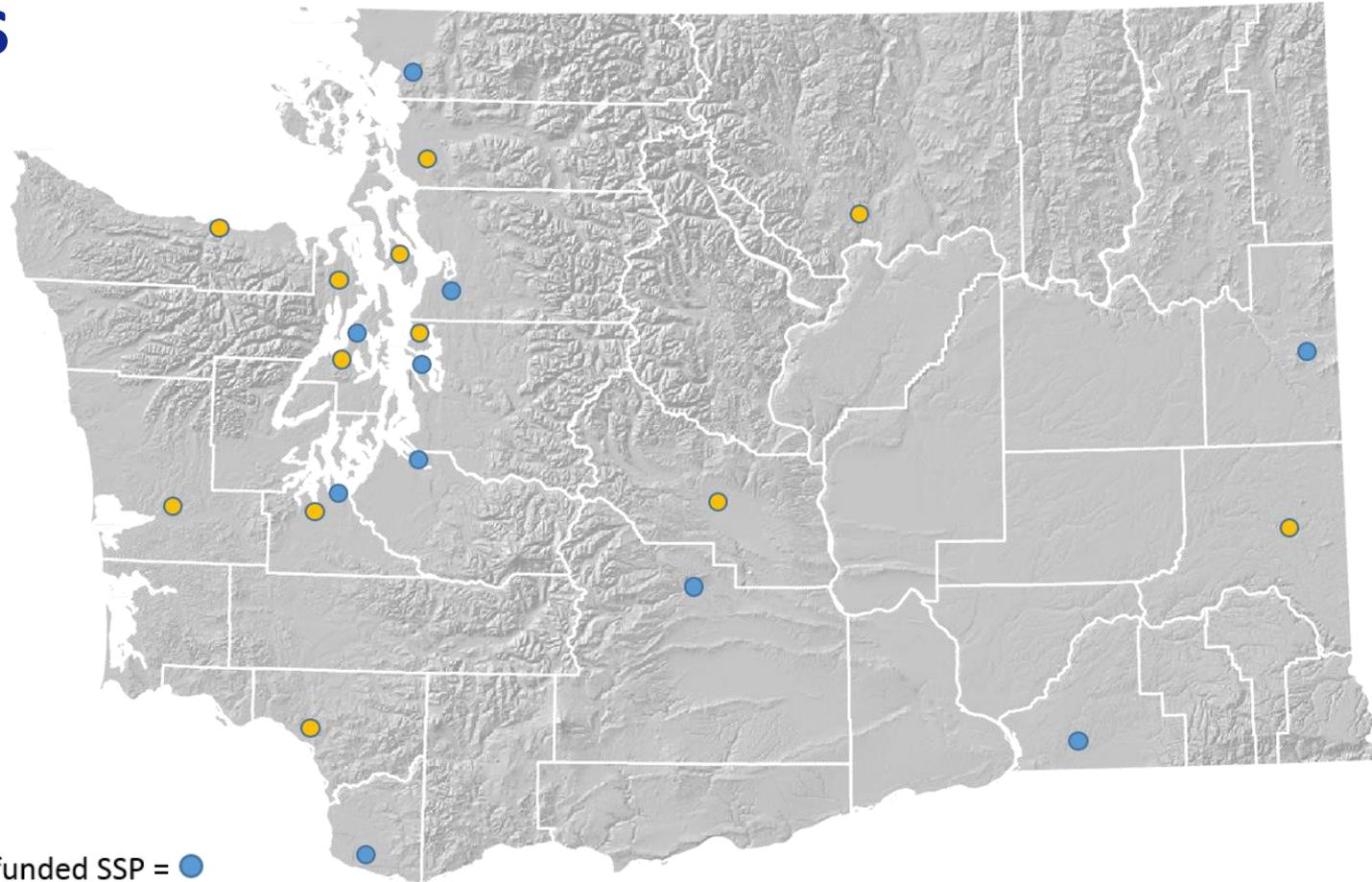
**What is needed to accomplish this?**

# What's the catalyst for change?

- Recognizing the importance of a full spectrum of partners needed to address hepatitis C



# Syringe Service Providers (SSPs)



DOH funded SSP = ●

Non-DOH funded SSP = ●

DOH provides injection equipment to ALL SSPs in Washington State

# Promising strategies nationally and locally

- Screening interventions
  - Primary care setting (EHR platform)
  - Community setting (syringe service programs)
  - Non-traditional partners (pharmacies)
- Building provider capacity
  - Project ECHO
- Utilizing case management and linkage to care navigators/community health workers
- Elimination projects

# Promising practices reveal systematic issues

- Hepatitis generally has no symptoms
- Community engagement and education
- Access to prioritized populations is limited
- Structural barriers within healthcare
- Culturally competent providers
- Cost of medications
- Linkage to care and monitoring treatment outcomes
- Multiple stakeholders

# Opportunities for action—use existing tools

- **Early identification of viral hepatitis**
  - Full-scale implementation of screening recommendations
  - Meet populations where they are at (syringe exchanges, pharmacies)
- **Expand and improve linkage to care**
  - Educate patients on healthcare coverage options and how to sign up
  - Support providers in using existing tools and programs for linkage to care
  - Use community health workers/navigators to support work
- **Improve access to quality care and treatment**
  - Share current therapies with chronically infected persons
  - Project ECHO
  - Assess data on viral hepatitis continuum of care—data → improvement!
- **Support the work of regional Accountable Communities of Health**
- **Create a robust responsive system of care**

**“... few diseases of such morbidity and mortality in the United States have received so little public attention and funding as chronic viral hepatitis”**

**Ly et. al. Annals of Internal Medicine February 2012**



# Thank you

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