Public Health Response to HCV in Oregon: Need for Screening and Treatment

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Outline

I. Epidemiology of HCV in OR
   - acute HCV, chronic HCV in persons <30
   - chronic HCV, liver cancer and mortality

II. Public Health Response
   - Harm reduction approaches
   - Treatment as prevention
   - Lessons learned from HIV prevention

Estimates of number of Oregonians with HCV

- **75,090**
  - Number reported to Oregon's HCV registry by September 2018
- **100,000 +**
  - Actual number assuming that at least 50% of Oregonians with HCV are unaware of their diagnosis

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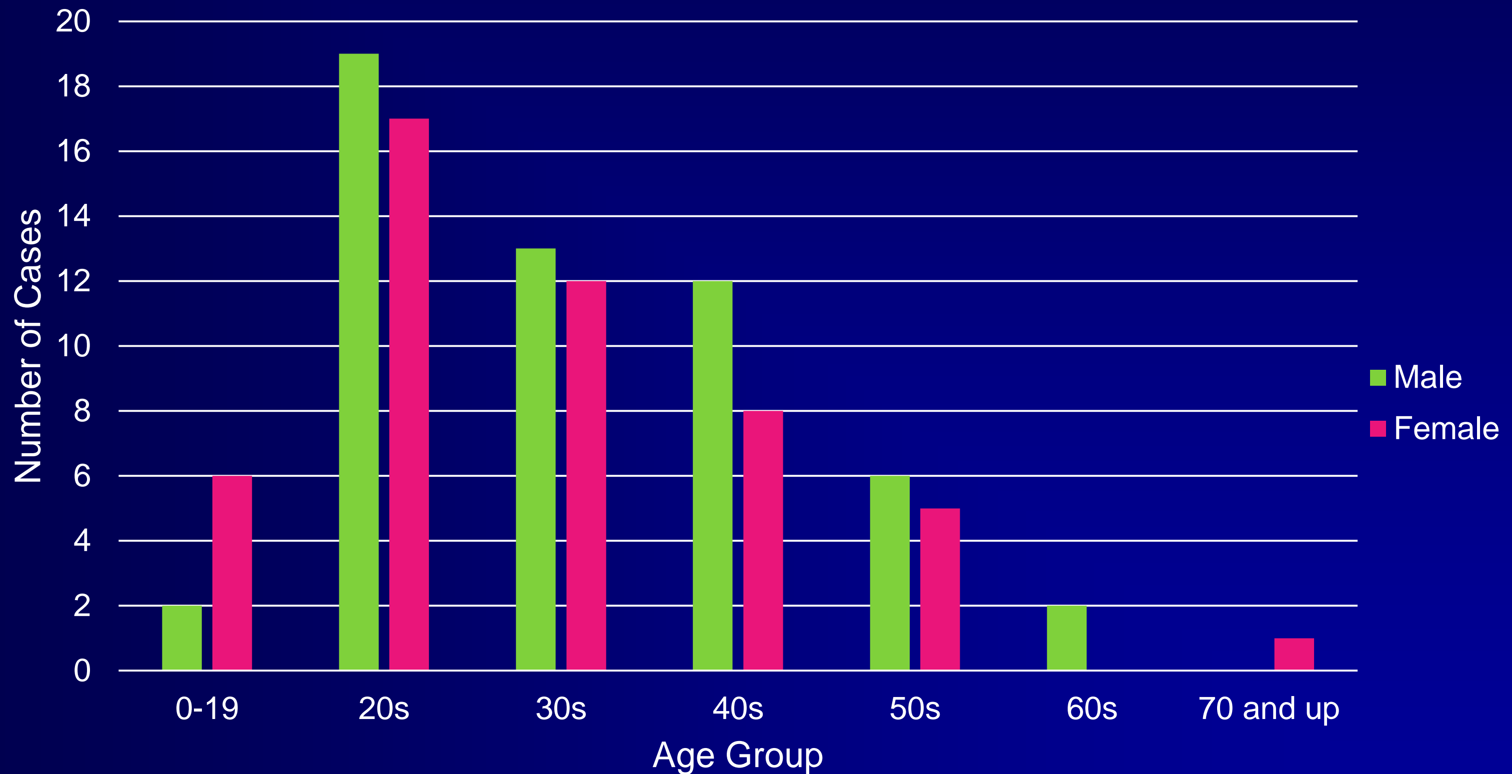
Acute HCV cases by sex and age, Oregon, 2012-2016 (n=103)



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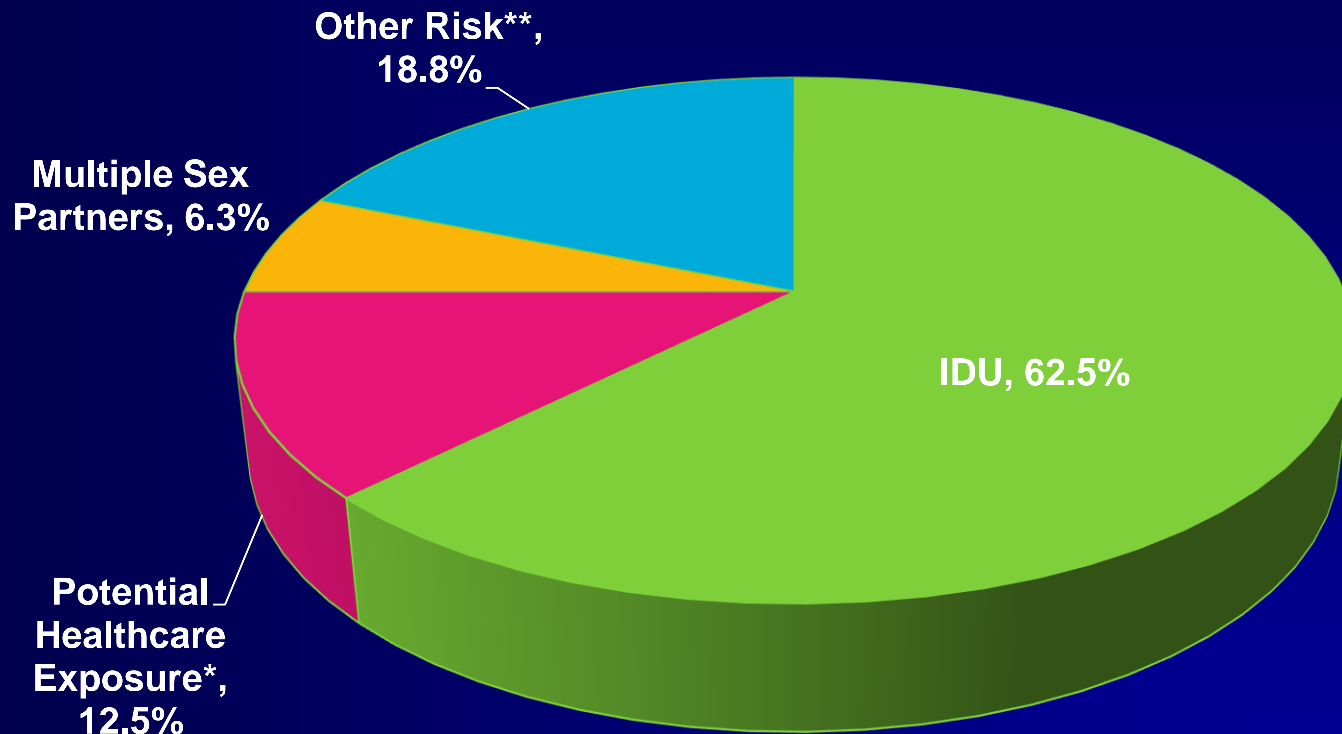
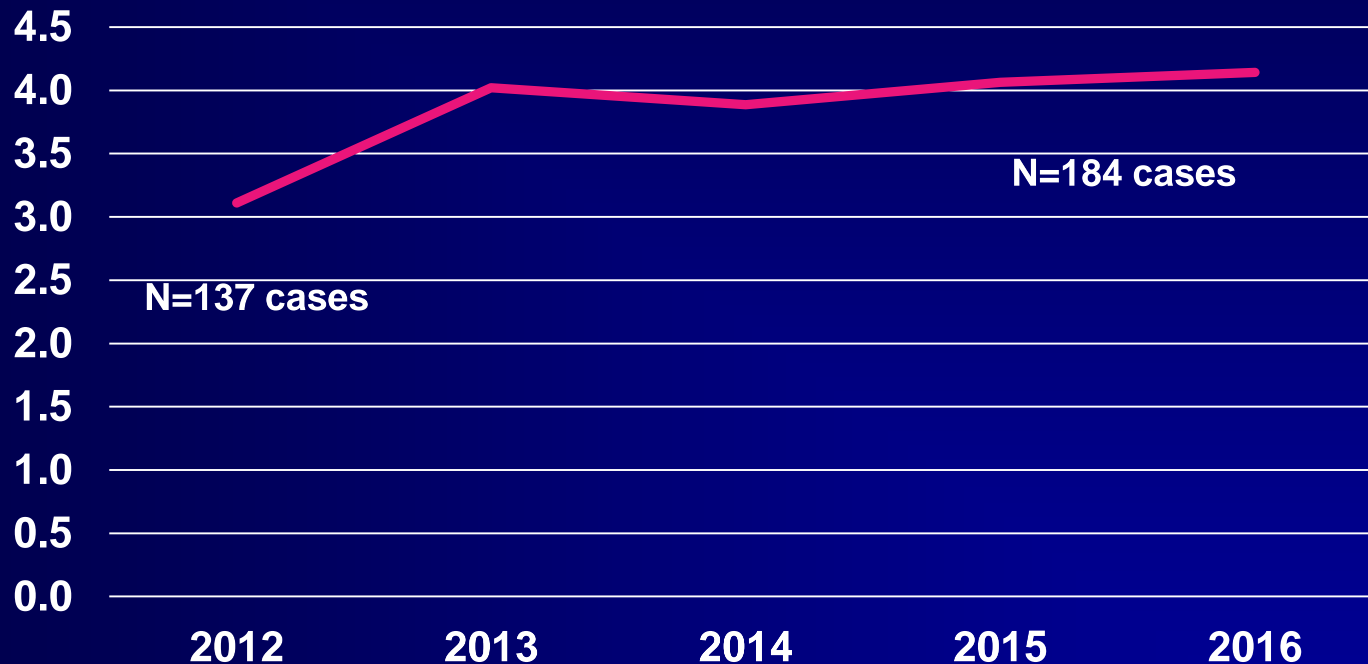
Reported Risk Factors for Acute Hepatitis C, Oregon, 2016



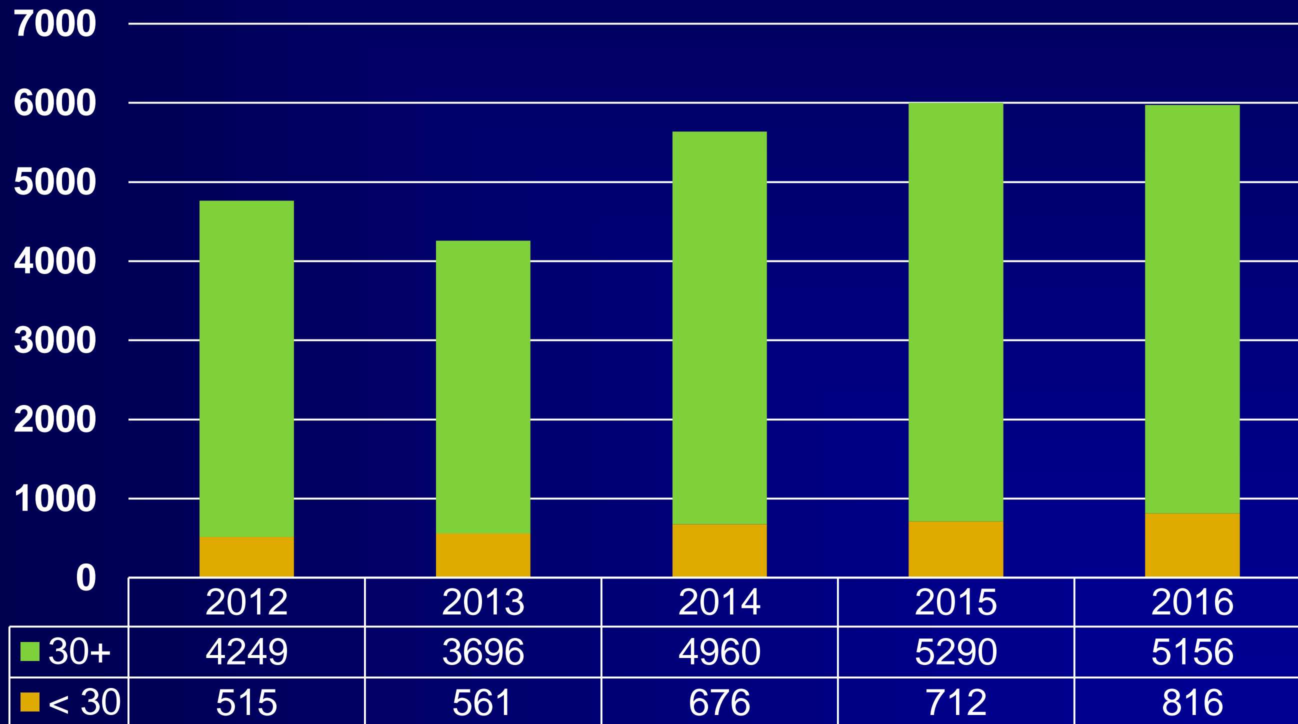
*Transfusion, infusions, dialysis and surgery
**street drugs, needle stick, tattoo, piercing, contact of a case, and other blood exposure

Rate of women who are HCV+, as reported on birth certificate (per 1,000 live births), Oregon 2012-2016



- **34% increase between 2012 and 2016**

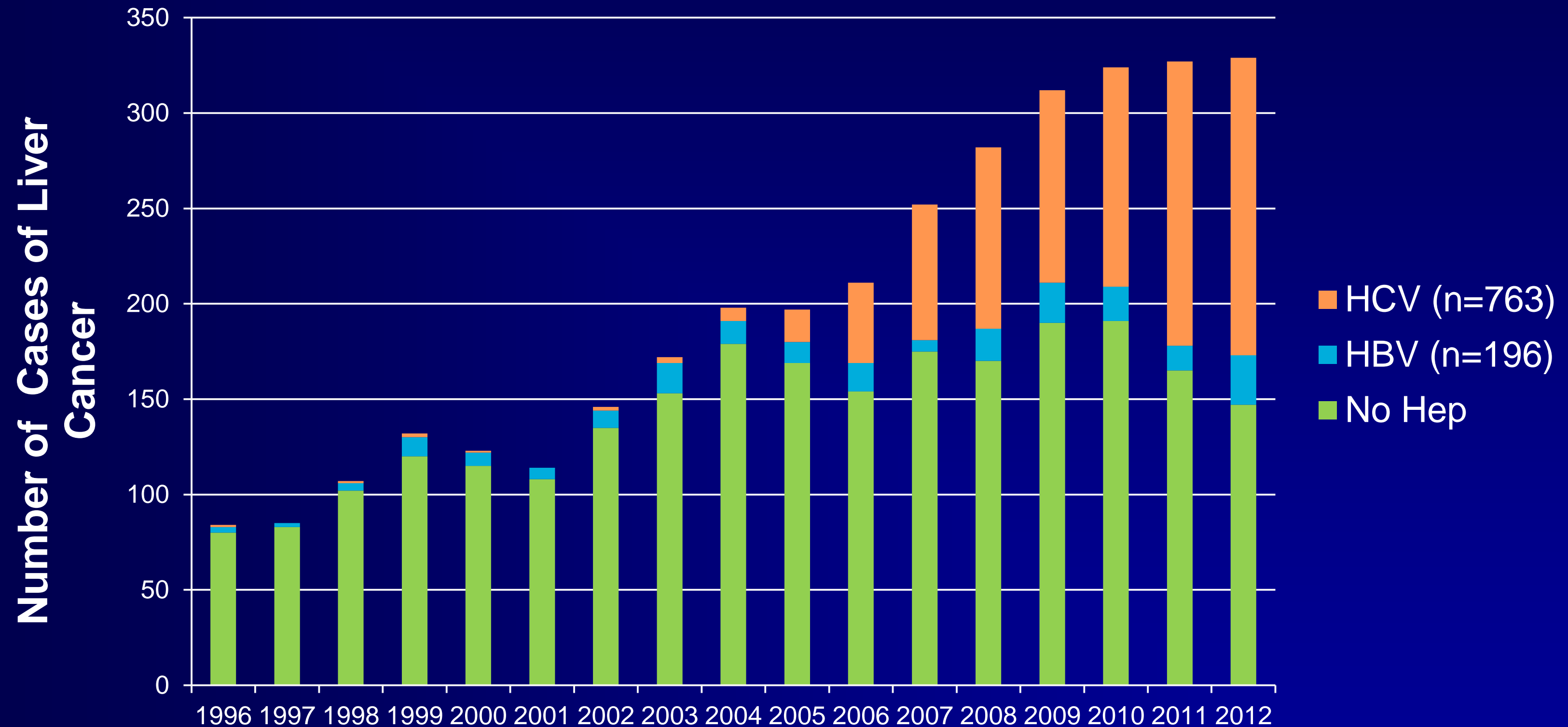
Number of Chronic HCV cases, Oregon, 2012-2016



	2012	2013	2014	2015	2016
30+	4249	3696	4960	5290	5156
< 30	515	561	676	712	816

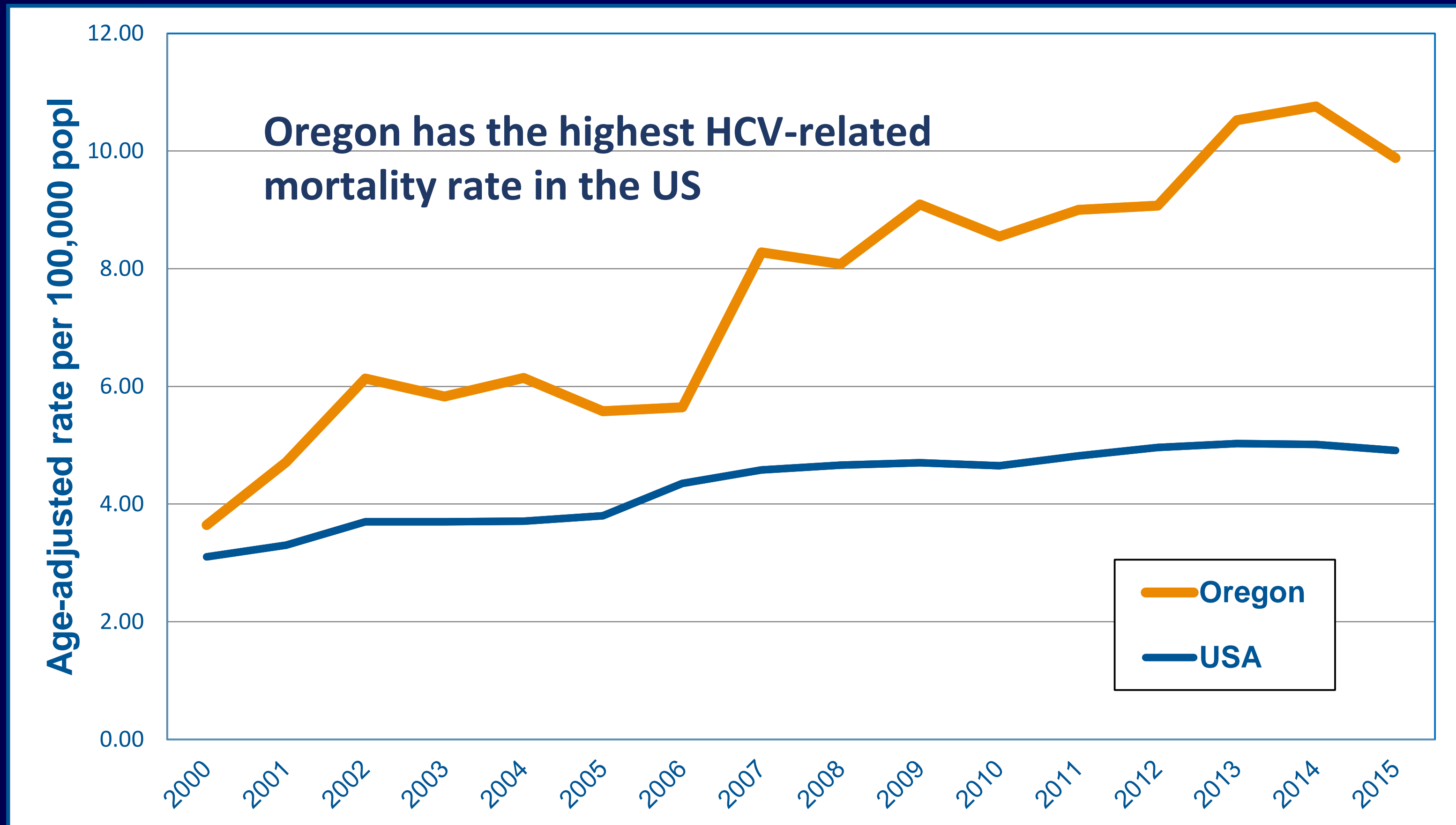
- **58% increase in cases < 30 years**

Cases of liver cancer with HBV and HCV Oregon, 1996-2012



- **In 2012, 47% of persons with liver cancer had chronic HCV**

Hepatitis C-related deaths in Oregon and US, 2000–2015



Source: Oregon Center for Health Statistics

Epidemiology Summary

- High prevalence (3rd highest in country according to CDC) and mortality of HCV in Oregon
- Most common in baby boomers, who bear biggest burden of sequelae of HCV-related liver cancer, death
- Increasing cases in younger Oregonians, more likely to be associated with injection drug use

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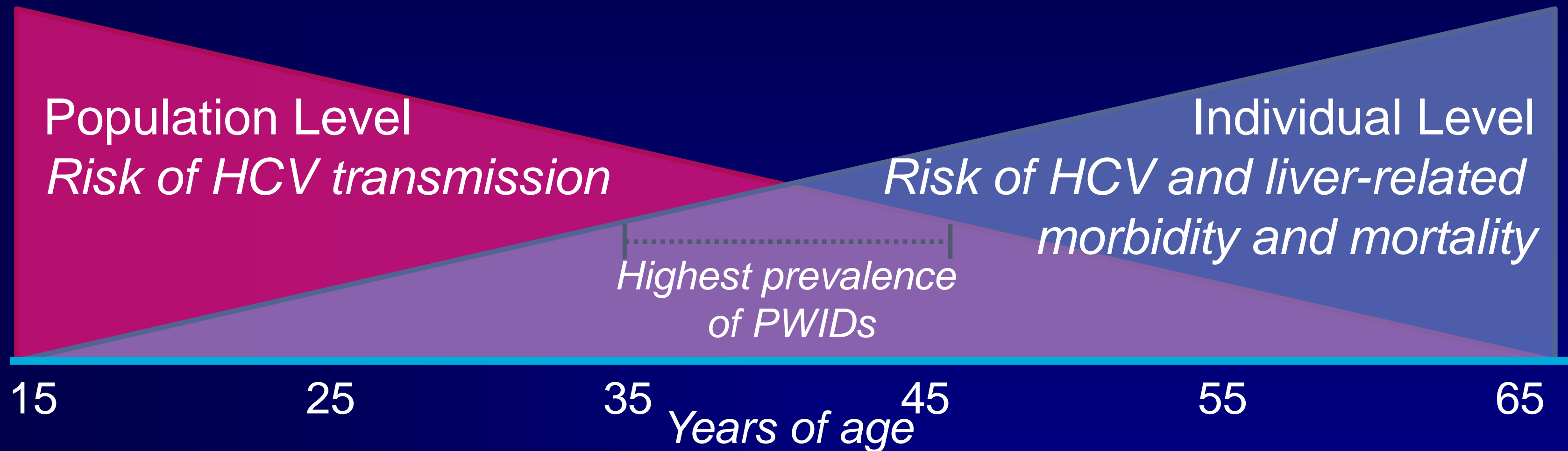
Public Health Perspective:

Risk of HCV Transmission and HCV Progression of Persons Who Inject Drugs (PWIDS)



- Highest risk of HCV transmission due to tendency of people new to injection drug use to share injection equipment

- Highest prevalence of PWIDs [2]
- Moderate risk of advanced liver disease
- Moderate risk of HCV transmission

- Highest prevalence and risk of advanced liver disease
- Lower risk of HCV transmission

Classic Public Health Approach

- **Primary Prevention (prevent new infections)**
  - Harm reduction, Medication Assisted Treatment, and Syringe Exchange Programs
  - Treat with DAAs to reduce transmission
- **Secondary Prevention (screen and treat before disease progresses)**
  - Screening of persons at risk and all persons born 1945-1965
  - Monitor for liver cancer
  - Treat with DAAs to reduce morbidity and mortality

HCV treatment as prevention

- Recent studies modeling the impact of DAAs on HCV transmission:
  1. Can eliminate HCV in 10 years by treating 12% of PWID population
  2. Treat 25% ***OR*** treat 15% plus MAT and SEP for 90% reduction in 15 years

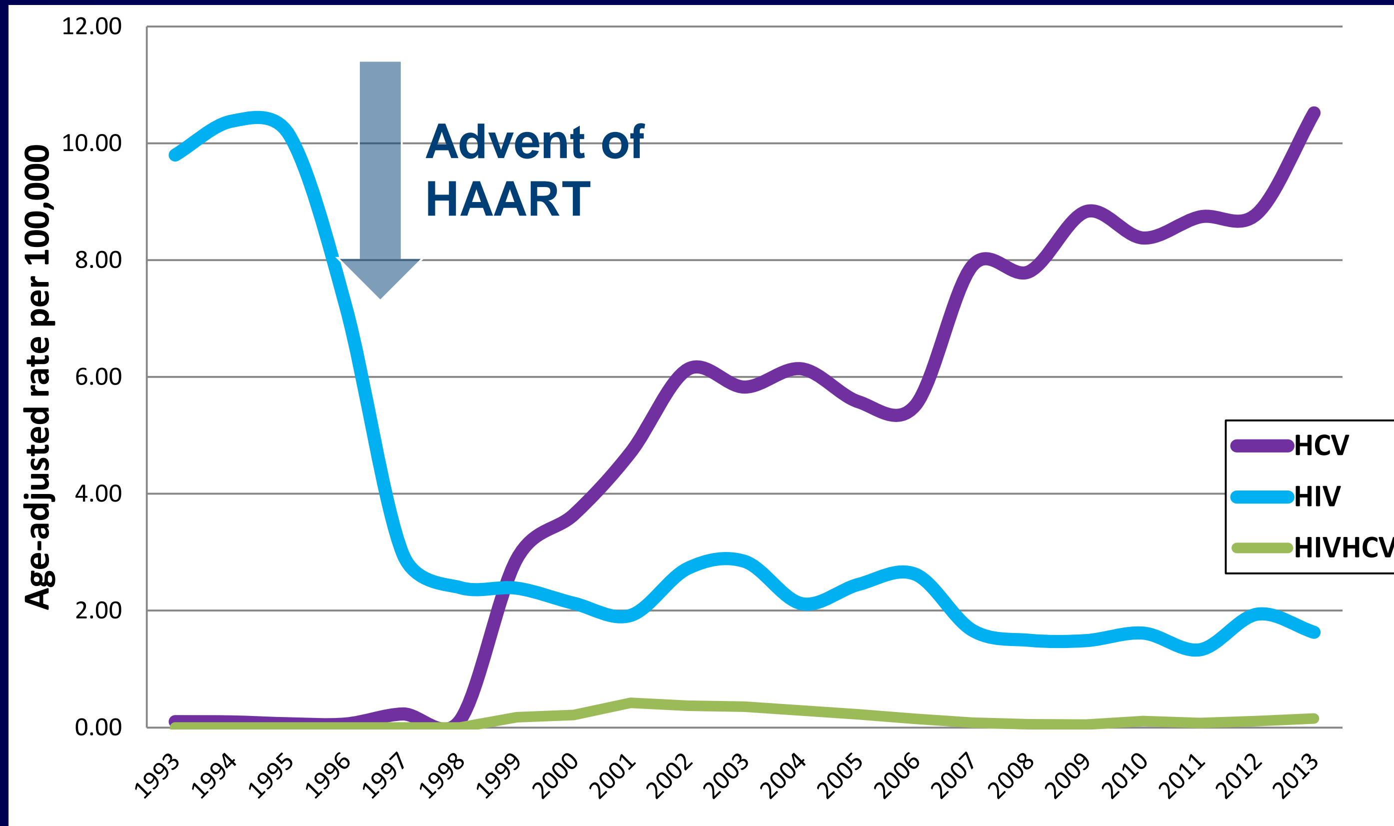
High impact on disease transmission with modest numbers needed to treat

1. Zelenev Lancet Infect Dis 2018;18:215; 2. Fraser Addiction 2018;113:173

Advantages of dropping fibrosis score requirements

- Lack of available treatment has been barrier to screening
- If fibrosis score not required, work-up is simplified
  - Can determine if cirrhosis present from serum fibrosis markers
  - No Fibroscan or ultrasound elastography needed
  - Easier for primary care clinicians to treat HCV

Age-adjusted Death Rates for HCV and HIV, Oregon, 1993–2013



How antiretroviral treatment changed the curve for HIV

Public Health Lessons for HCV from HIV

- Case management should be acuity-based
- Training and supporting primary care clinicians (ECHO, MAT training)

Questions

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Extra Slides

Resources

Clinic — Program Development and Management

- Clinic Consultation
- Quality Improvement
- Practice Transformation
- Guidelines and Toolkits (e.g. HRSA-AETC)

Provider — Education and Mentoring (HCV and HIV)

- Clinician Consultation Center (UCSF CCC "Warm line")
- Tele-education and mentoring
- 1 to 1 Clinician detailing
- Online self-paced study

Oregon Resources

- Oregon AIDS Education Training Center (OR -AETC)
  - Clinic consultation, quality improvement, public health detailing and practice transformation support (HIV/HCV)
  - Oregon HIV ECHO
  - Contact Dayna@oraetc.org

- Oregon ECHO Network (OEN)
  - Builds capacity of primary care clinicians and teams
  - Technology, Disease Management Model and Case Based Learning
  - Contact oen@ohsu.edu
- Oregon Hepatitis C Screening Initiative (OR-HCV)
  - Clinic consultation and quality improvement support
  - Small stiped: implement HCV EHR report and determine site's baseline HCV screening rate, share screening rates quarterly and implement at least one provider focused intervention.
  - Contact Judith.m.leahy@state.or.us