

Hepatitis C Virus (HCV)

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Who I am

- Originally from Maryland
- Graduated in 2011, with IHS ever since
- Residency with Eastern Band Cherokee Indians in Cherokee, NC
- At Sells IHS (outside of Tucson) for 2 years
- Pharmacist at Phoenix Indian Medical Center since 2014, treating HCV since 2016

What we will cover

- How HCV is transmitted
- Progression of untreated HCV
- How HCV is diagnosed and cured

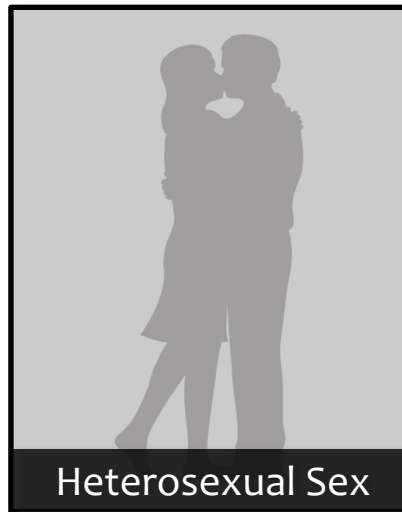
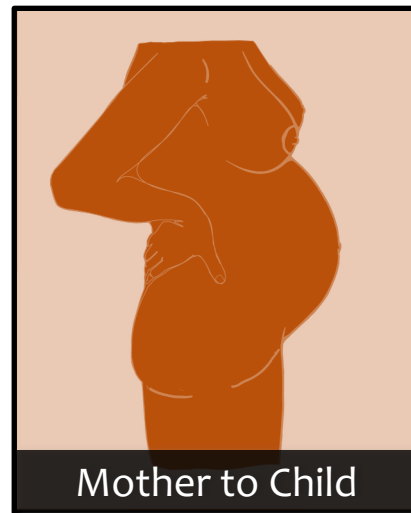
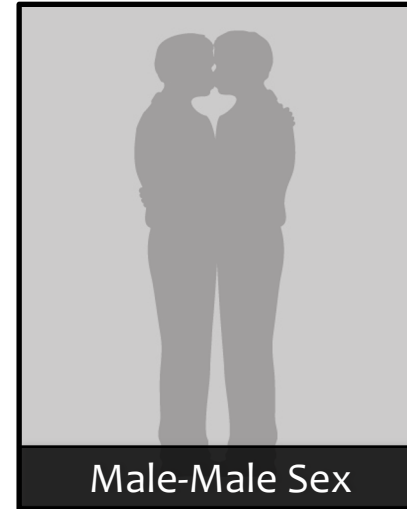
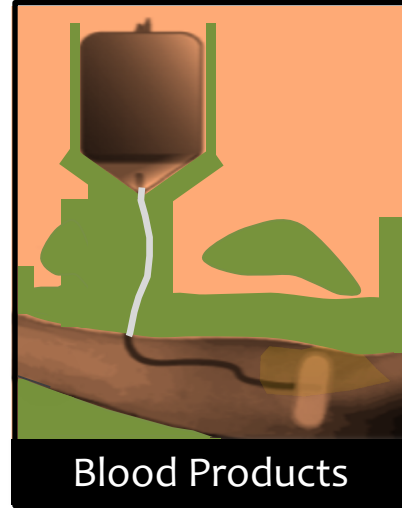
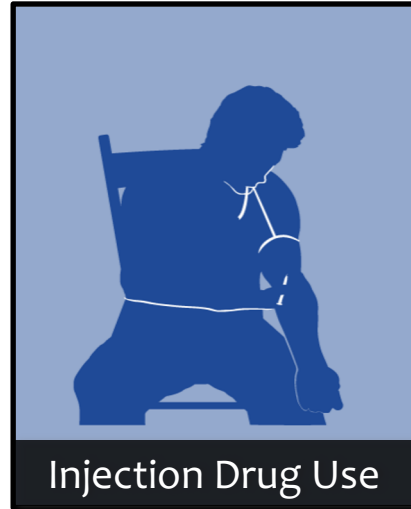
- Video
- <https://www.npaihb.org/hcv/#films>



HCV transmission

- Almost all bloodborne—blood exposure to virus
 - Before 1992 medical exposure, transfusion
 - Non professional tattoos, injecting drugs even one time
 - About 20% of persons have no known exposure to the virus
- This is only one type of ‘viral hepatitis,’ others include Hep A and Hep B, both of which are vaccine preventable

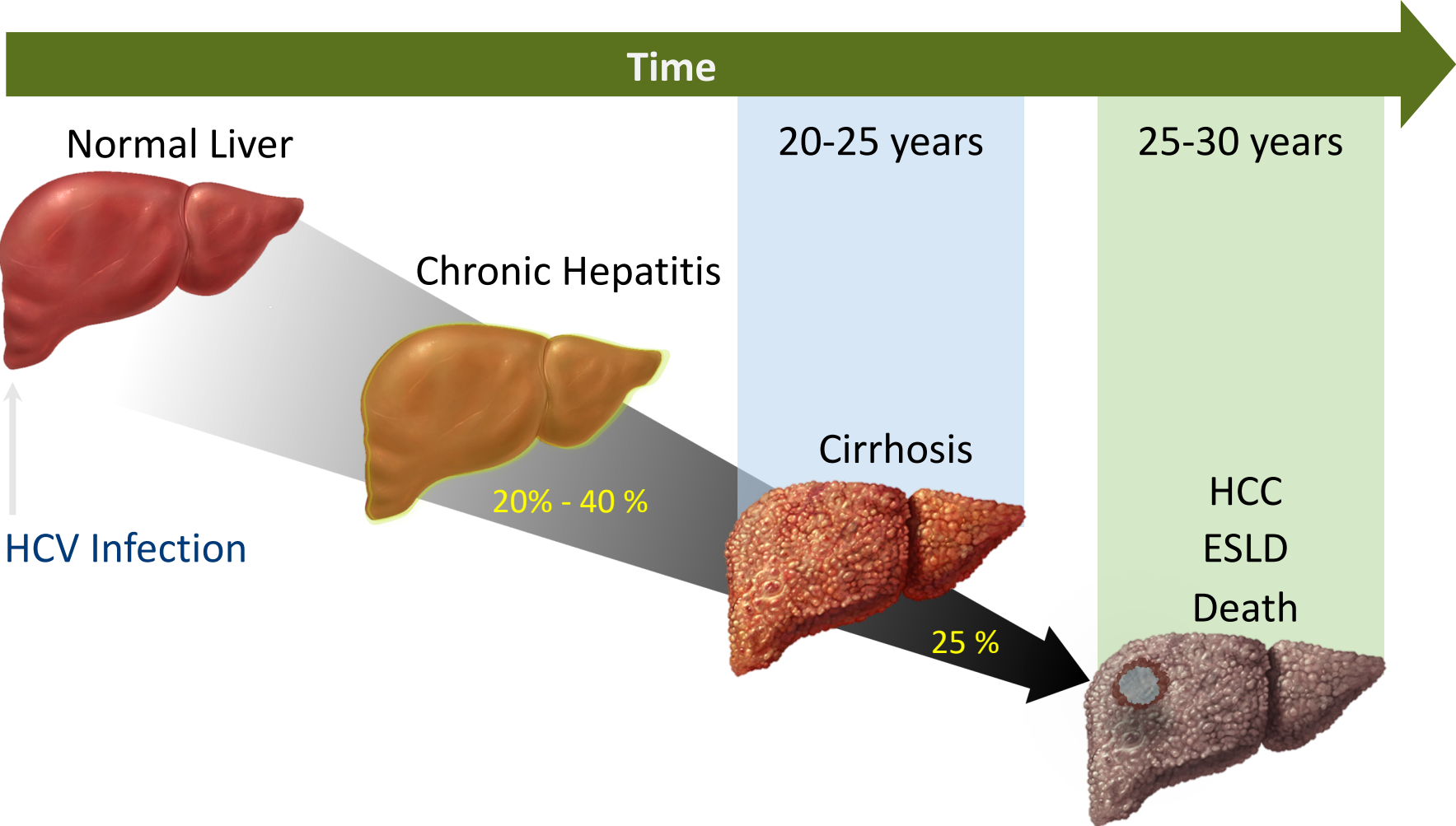
Risk Factors for Transmission of Hepatitis C



HCV disease: what it does

- About 25% of persons exposed to HCV will 'clear it' on their own, and don't need treatment
- About 75% will have chronic infection, usually with no signs or symptoms
- Over the next 10-30 years, damage to the liver can accumulate
- Damage can be accelerated by alcohol, diabetes, HIV, etc.
- Can lead to liver failure, liver cancer, other life threatening conditions

Hepatitis C: Progression of Disease

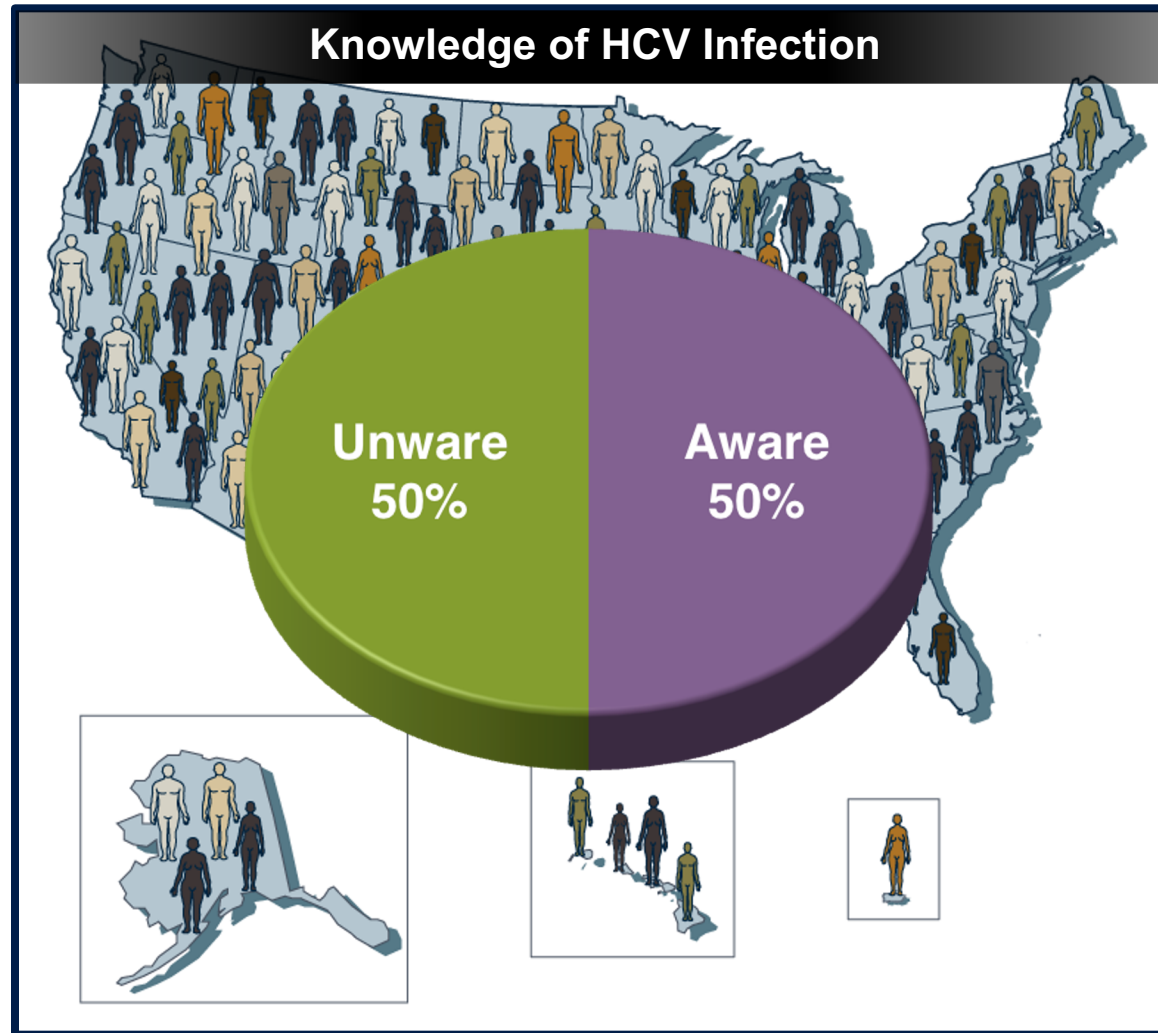


HCV is Common

- About 3.5 million persons in America have it
- About half of them do not know they have it
- Leading cause of liver cancer and liver transplants nationwide
- AI/AN have over twice the national rate of HCV related mortality

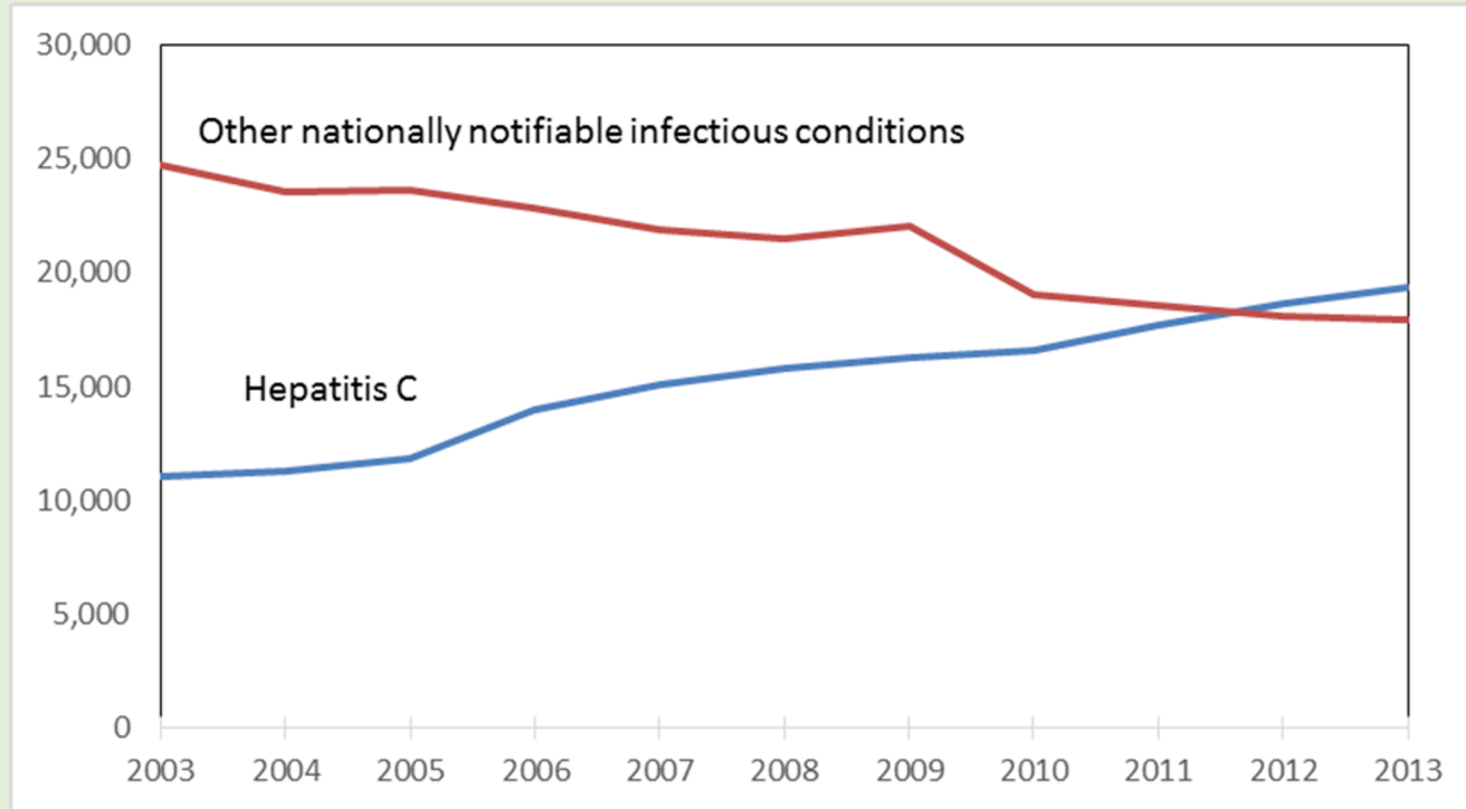
NHANES Survey, United States, 2001-2008

Awareness of HCV Infection Status



Source: Denniston M, et al. Hepatology. 2012;55:1652-61.

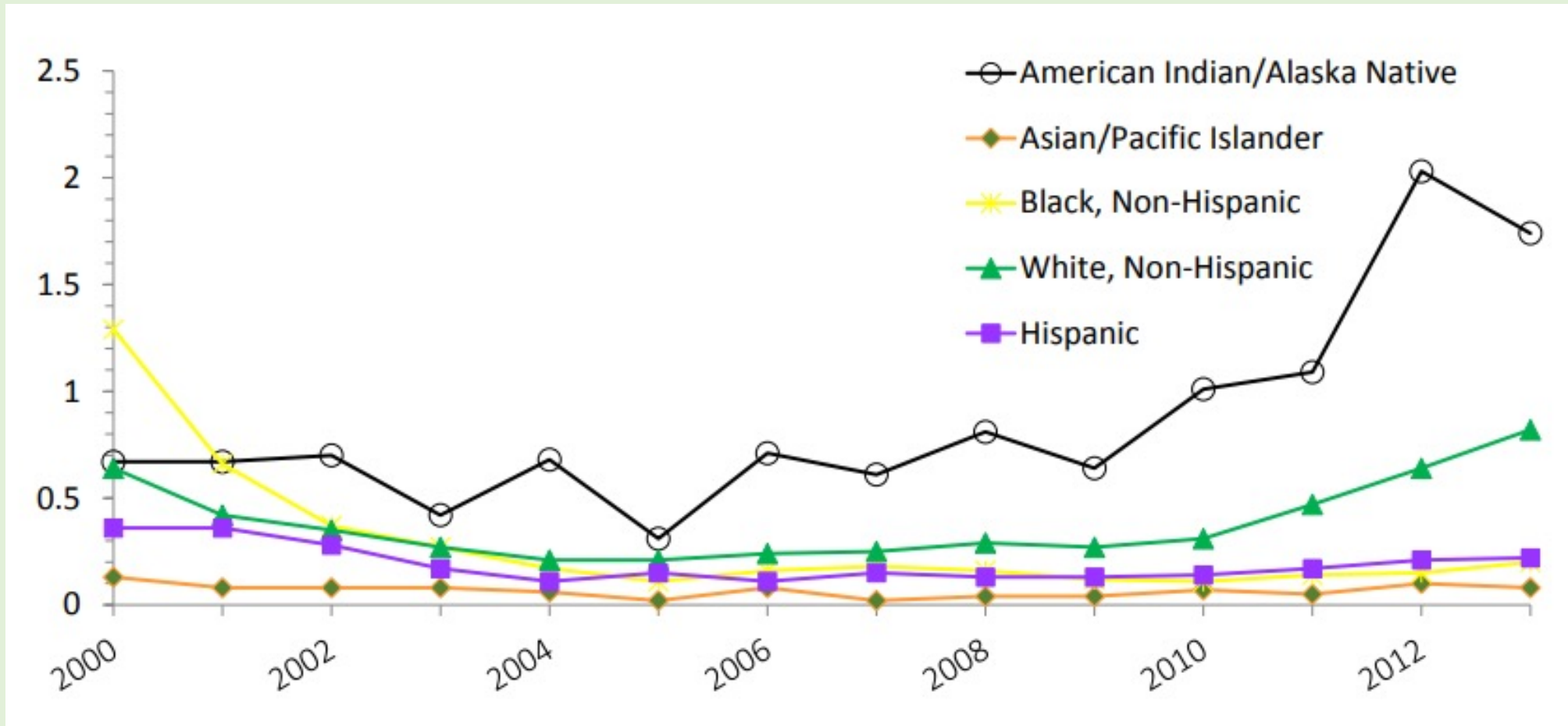
HCV Deaths and Deaths from Other Nationally Notifiable Infectious Diseases,* 2003- 2013



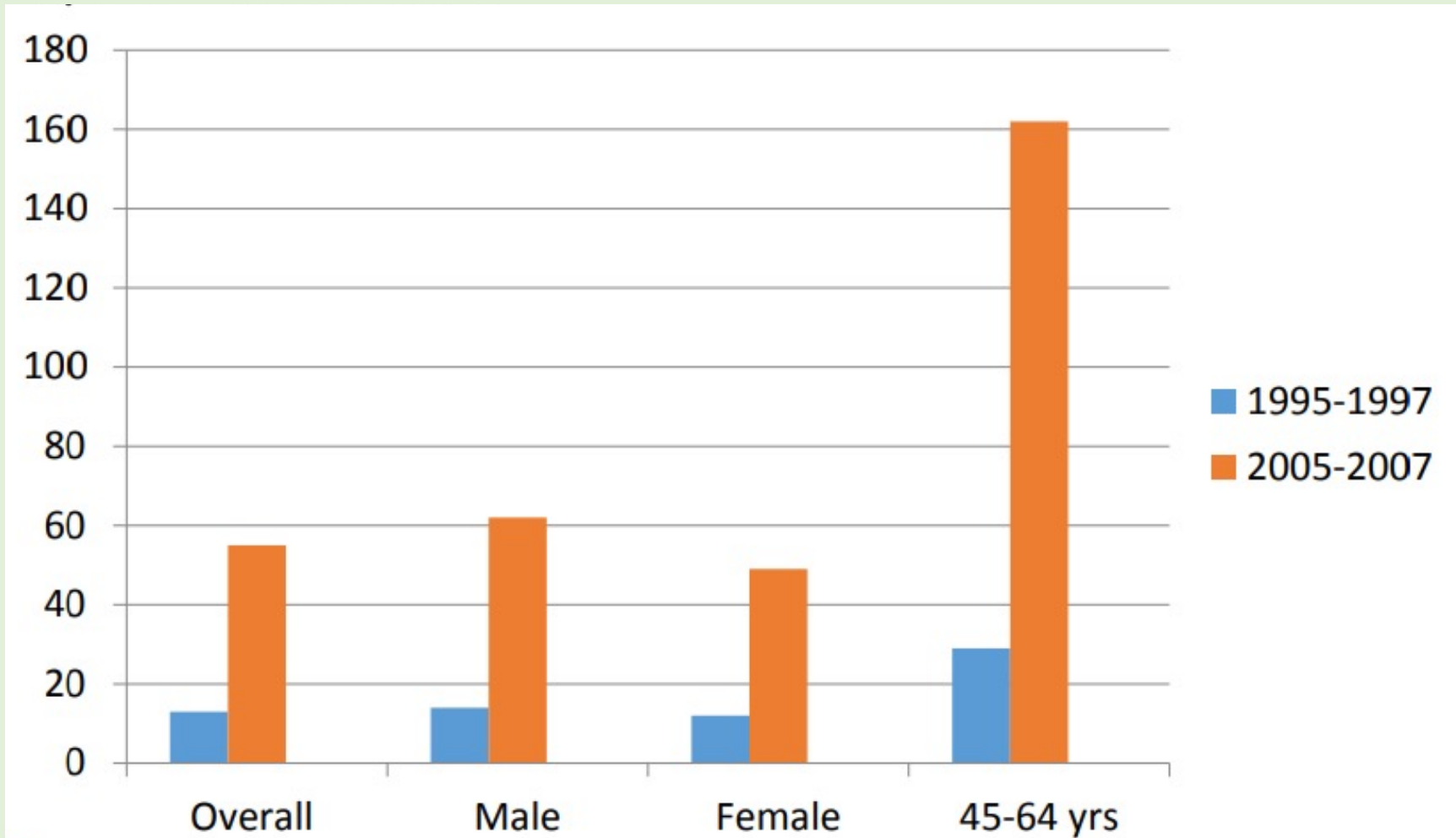
* TB, HIV, Hepatitis B and 57 other infectious conditions reported to CDC

Holmberg S, et al. "Continued Rising Mortality from Hepatitis C Virus in the United States, 2003-2013"
Presented at ID Week 2015, October 10, 2015, San Diego, CA

Incidence of Acute Hepatitis C, by Race/Ethnicity — United States, 2000–2013



A 300% Increase in Hepatitis C –related Hospitalization for AI/AN – 1995-2007



HCV: how do we diagnose it?

- Blood test, check for antibodies and confirm with viral load test
- Screening recommended for all adults and adolescents, and more frequently for persons at risk of disease (such as drug use/injection associated with national opioid and meth epidemics)

Patient Scenario

- 65 year old woman has bleeding in throat, goes to IHS emergency room
- Urgently transported by helicopter to more advanced hospital
- Diagnosed with esophageal varices and late-stage liver disease due to chronic HCV infection

Patient Scenario

- She had no known exposures to HCV, lived in remote location, did not drink or smoke and led a very healthy life
- Looking at her own history, she remembered she had experimented with drugs in her 20s for a short time with a boyfriend who used, including snorting and injecting

Patient Scenario

- Patient was successfully treated for HCV and cured
- Got well enough to travel to see grandchildren
- Will need ongoing follow up with liver specialist due to advanced liver damage

Hepatitis C screening recommendations

- Continue Risk based screening
 - h/o Injection and Inhaled Drug Use
 - HIV infected
 - Alcoholics
 - Unexplained hepatitis
- CDC recommendations: Screen all Baby Boomers born between 1945 and 1965 (inclusive)
 - Utilize EHR Reminders as a proven practice to enhance screening

Screening challenges

- Screening mainly population who have a primary care provider
- Community members who don't access care, or only go to the urgent care or emergency room don't get screened
- Behavioral health and other services generally do not screen

Testing and treating early saves lives

- Better treatment outcome (achieve SVR)
 - Decrease liver inflammation (improved aminotransferase)
 - Reduce rate of progression in liver fibrosis
 - Improvement in liver fibrosis, cirrhosis, portal HTN, splenomegaly and other manifestations of advance disease
 - Reduces hospitalizations and liver transplants (costing ~\$600,000), providing much needed healthcare cost savings.
 - Prevent spread of disease
 - Improves quality of life:
 - Physically
 - Emotionally
 - Socially

Treatment options: Then, and Now



HCV: How We Treat It

- Old days: long treatment, injections, side effects, didn't always work
 - Some patients have fears about treatment because they don't know it is different now
- Now: short treatment, almost no side effects, works almost 100%

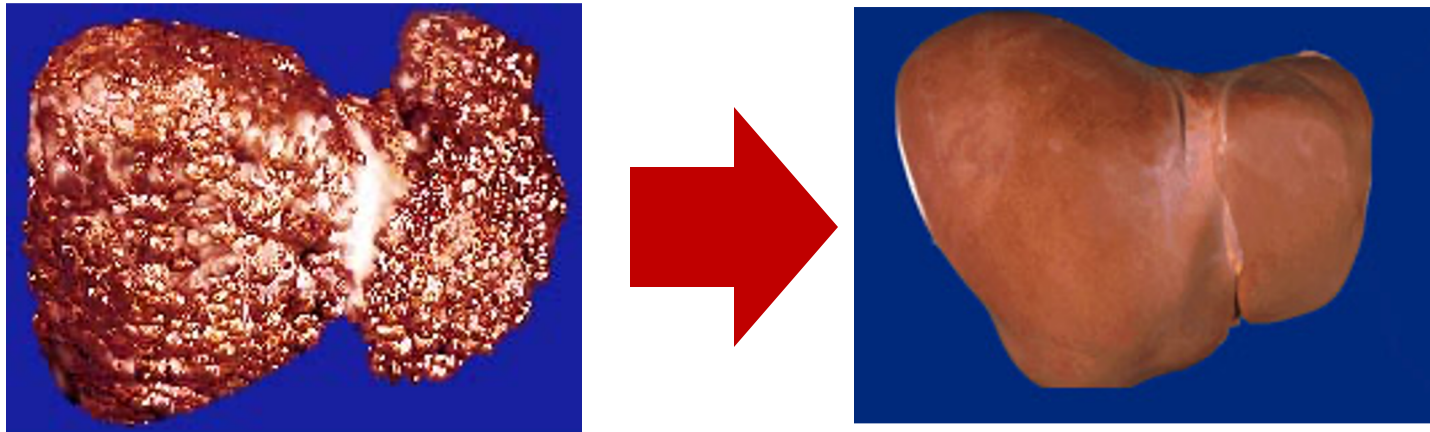
Cost is not a barrier! It is on IHS core formulary, we must treat

HCV who can get treated

- **Everyone** unless life expectancy is less than one year due to a non-HCV related reason
- A few state Medicaid programs have sobriety restrictions, but these are not medical restrictions, they are assumptions about adherence
- On the IHS National Core Formulary!

Goal of Treatment

- **SVR12 (cure) of HCV** is associated with:
 - 50% Reduction in All-cause Mortality
 - 70% Reduction of Liver Cancer
 - 90% Reduction in Liver Failure



SVR: Sustained Virological Response

Lok A. NEJM 2012; Ghany M. Hepatol 2009; Van der Meer AJ. JAMA 2012

Patient Education

- Encourage the patient
 - Chronic HCV is curable in the majority of cases
- Emphasize importance of patient responsibility
 - Medication adherence
 - Follow-up monitoring
- Encourage safe health practices: no needle sharing, unsafe tattooing, etc.
- Discuss preventative care

Key Take-Away Points

- Easy to diagnose
- Easy to treat
 - Few side effects
 - Usually only 8-12 weeks
- Important to confirm cure 12 weeks after end of medicine
- All IHS sites should be treating

HCV Cure

“I finally have a reason to stop drinking – I thought my hepatitis C was a death sentence, so I never saw a point.”

“This has changed my opinion of IHS. I am so thankful I am cured”

“I will get to have children without worrying I will infect them”

“Thank you so much”

Contact Info

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*Please reach out for questions about Hep C, HIV treatment or
HIV prevention*

THANK YOU FOR ALL YOU DO!