

Update on HCV Screening: new CDC and USPSTF Recommendations

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Disclosures

In the last year, I have served on an Advisory Board on hepatitis B for Gilead.

Objectives

- To list which patients should be screened for hepatitis C in the United States

Background and History

- 1998-2012
 - Risk based: Persons who have injected illicit drugs
 - Persons with high prevalence of HCV: HIV+, unexplained elevation in AST/ALT, hemodialysis, hemophiliacs who received products before 1987, sex partners of HCV+, organ transplant recipients before 1992, HCWs after needlestick, children born to HCV infected mothers
- 2012-2020
 - Baby Boomers (born between 1945-1965)
 - Above risk factors

Division of Viral Hepatitis. Recommendations for the identification of chronic hepatitis C virus infection among persons born during 1945-65. MMWR 2012;61(RR-4):1-32 Rein DB.

The cost-effectiveness of birth-cohort screening for hepatitis C antibody in U.S. primary care settings. Ann Intern Med 2012;156:263-70. CDC guidelines. MMWR 1998;47(RR-19):1-39



US Preventive Services Task Force Recommendations

JAMA | US Preventive Services Task Force | **RECOMMENDATION STATEMENT**

Screening for Hepatitis C Virus Infection in Adolescents and Adults
US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

Recommendation: The USPSTF recommends screening for HCV infection in adults aged 18 to 79 year (grade B recommendation)

USPSTF Key Considerations

- **Epidemiology:** Changing epidemic, skewing younger, male=female, more prevalent in Latinos and AI/ANs
- **Increased Risk Groups:** IDU ever <18 yo, >79 yo
- **Pregnant Adults:** all should be screened, including those <18 yo
- **Testing:** Ab with PCR for confirmation
- **Frequency:** Most adults can have just once. If IDU, more frequently.

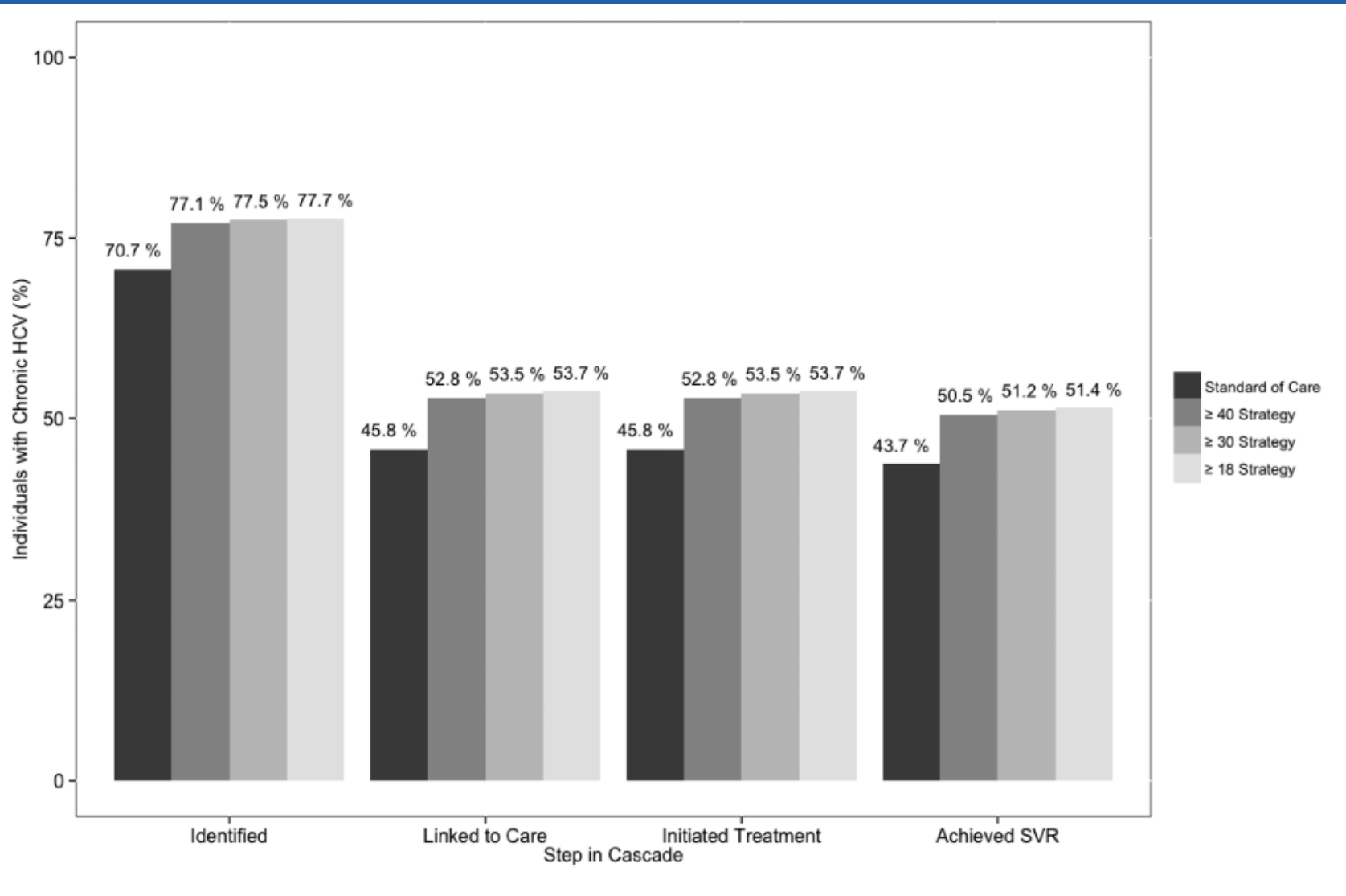
Screening Implementation: Best Practices

- Communicating to patients that screening is voluntary and undertaken with the patient's knowledge
- Informing patients about HCV infection, how it can and cannot be acquired, the meaning of positive and negative test results, and the benefits and harms of treatment
- Providing patients the opportunity to ask questions and to decline screening

Data Supporting Conclusions

- Benefit of DAAs and SVR12:
 - All cause mortality: 60% reduction (HR=0.40, 0.28-0.56)
 - Liver-related mortality: 89% reduction (HR=0.11, 0.04-0.27)
 - Cirrhosis: 64% reduction (HR=0.36, 0.33-0.40)
 - HCC: 71% reduction (HR=0.29, 0.23-0.38)
- Modeling:
 - Screening all adults would find an additional 256,000 HCV infected individuals, leading to 280,000 receiving curative therapy and avoiding 4400 HCC cases

Cost-effectiveness of Universal Screening



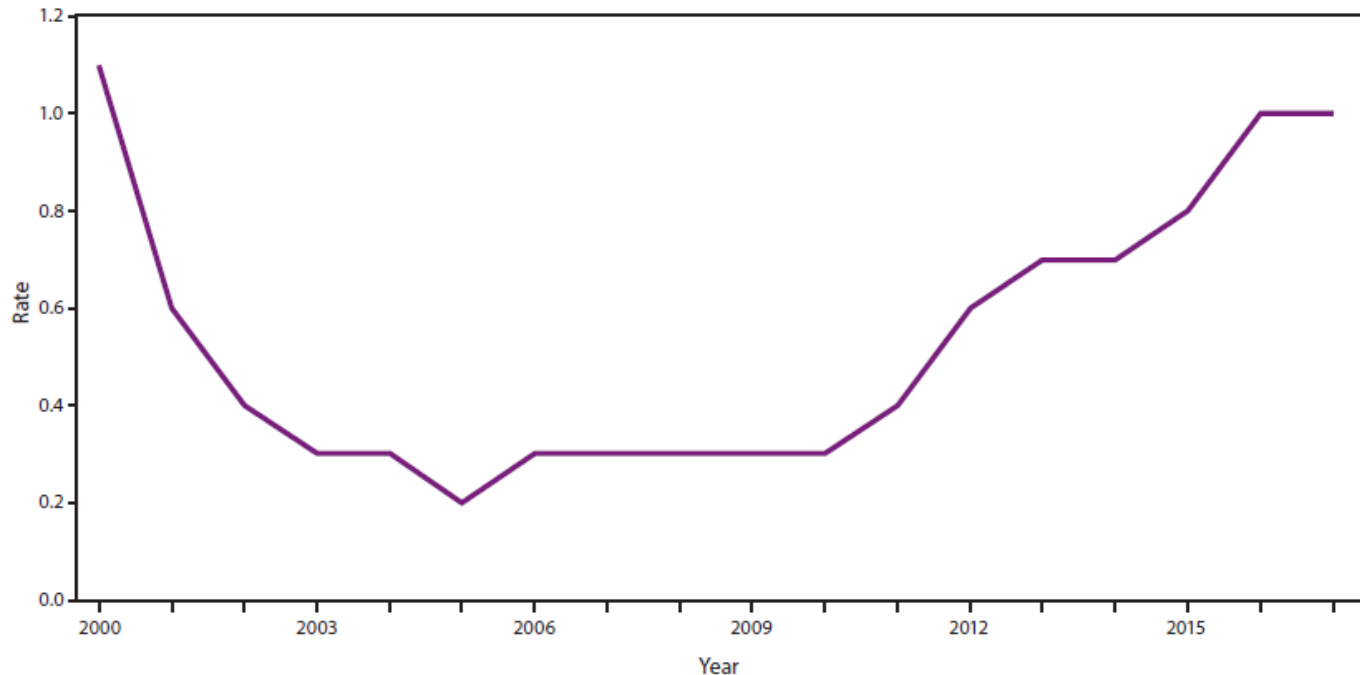
CDC Recommendations

New recommendations:

- 1) hepatitis C screening at least once in a lifetime for all adults aged ≥ 18 years, except in settings where the prevalence of HCV infection is $< 0.1\%$.
- 2) hepatitis C screening for all pregnant women during each pregnancy, except in settings where the prevalence of HCV infection is $< 0.1\%$.

Epidemiology

FIGURE 1. Incidence rates* of reported acute hepatitis C cases — United States, 2000–2017



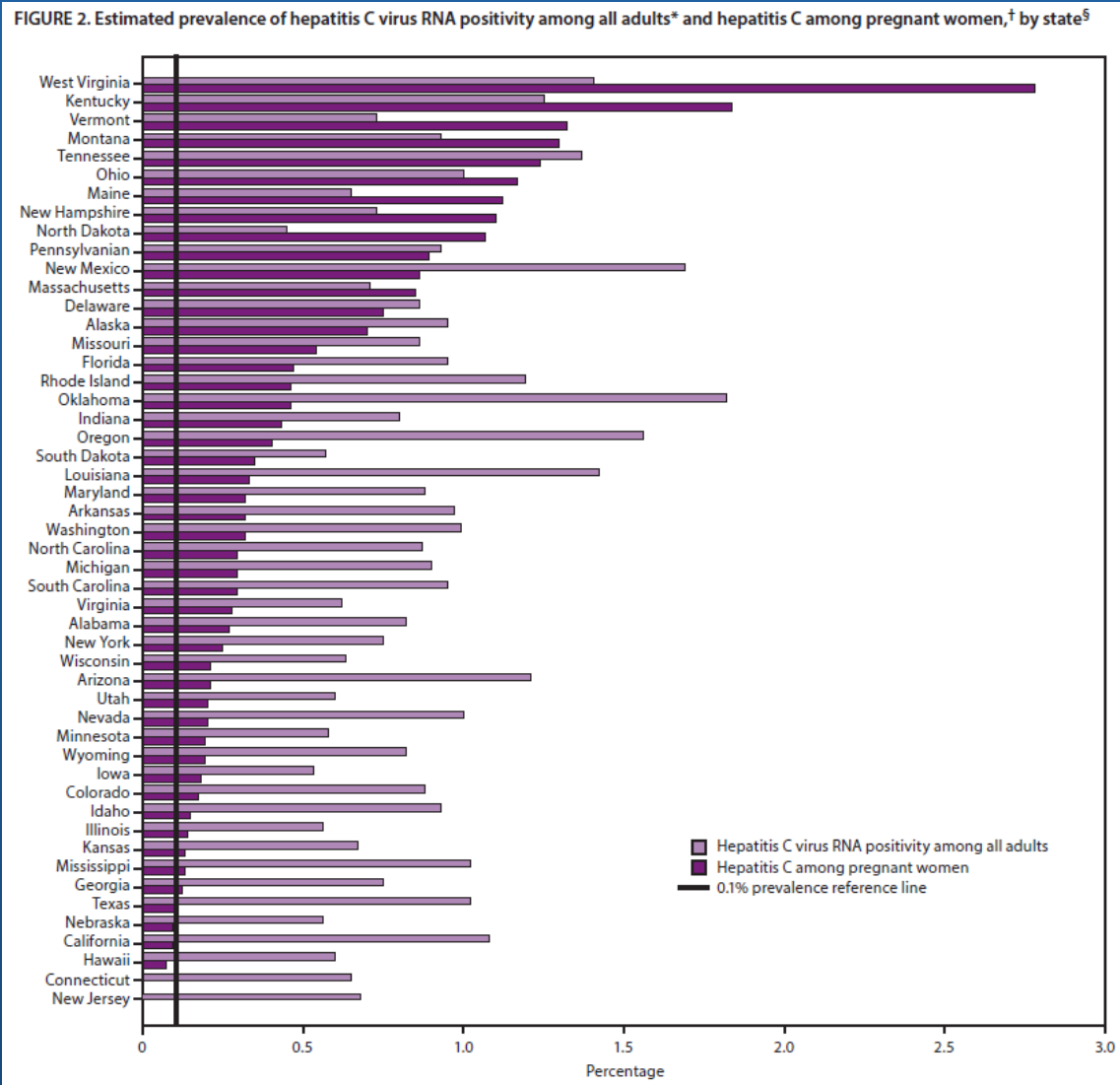
Source: CDC, National Notifiable Diseases Surveillance System.
* Per 100,000 population.

An estimated 44,700 new cases of HCV infection occurred in 2017.

Klevens RM, Liu S, Roberts H, Jiles RB, Holmberg SD. Estimating acute viral hepatitis infections from nationally reported cases. *Am J Public Health* 2014;104:482–7.



HCV Prevalence by State



Summary of Recommendations

Population	CDC	USPSTF	IDSA/AASLD	ACOG/SMFM
PWID	Yes, “routine”	Yes, incl. <18, >79 yo, but unclear on frequency	Yes and done annually for active IDU	n/a
All adults	Yes (once), if local prevalence over 0.1%	Yes, 18-79 yo (once if no other risk factors)	Yes (once if no other risk factors)	n/a
Pregnant women	Yes, each pregnancy	Yes, incl. <18 yo	Yes, but unclear about subsequent pregnancies	Only if risk factors present

Hughes BL, et al. Society for Maternal-Fetal Medicine (SMFM). Hepatitis C in pregnancy: screening, treatment, and management. *Am J Obstet Gynecol.* 2017;217(5):B2-B12. Chung RT, et al. Hepatitis C guidance 2018 update: AASLD-IDSA recommendations for testing, managing, and treating hepatitis C virus infection. *Clin Infect Dis* 2018; 67(10):1477-92.

<https://doi.org/10.1093/cid/civ585>.



Unresolved Issues and Challenges

- Testing pregnant women
 - When to test during pregnancy
 - Stigmatizing behavior
 - Interaction with child protective services
 - Antiviral treatment in pregnancy
 - Less invasive monitoring
 - Follow-up of infant testing
 - Only have insurance during pregnancy
- Logistics of operationalizing screening
 - Reflex testing for PCR confirmation
 - EMR prompts
 - Notification of results and linkage to care

Questions?

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