DISCLOSURES

This activity is jointly provided by Northwest Portland Area Indian Health Board and Cardea

Cardea Services is approved as a provider of continuing nursing education by Montana Nurses Association, an accredited approver with distinction by the American Nurses Credentialing Center's Commission on Accreditation.

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Institute for Medical Quality/California Medical Association (IMQ/CMA) through the joint providership of Cardea and Northwest Portland Area Indian Health Board. Cardea is accredited by the IMQ/CMA to provide continuing medical education for physicians.

Cardea designates this in-person training for a maximum of 6.75 *AMA PRA Category 1 Credit(s)™*. Physicians should claim credit commensurate with the extent of their participation in the activity.

NPAIHB
Indian Leadership for Indian Health

CARDEA
Training, Organizational Development and Research
SERVICES

DISCLOSURES

COMPLETING THIS ACTIVITY

Upon successful completion of this activity 6.75 contact hours will be awarded

Successful completion of this continuing education activity includes the following:

- Attending the entire CE activity;
- Completing the online evaluation;
- Submitting an online CE request.

Your certificate will be sent via email

If you have any questions about this CE activity, contact Michelle Daugherty at mdaugherty@cardeaservices.org or (206) 447-9538

CARDEA
Training, Organizational Development and Research
SERVICES

CONFLICT OF INTEREST

Lisa Townshend-Bulson is a principal co-investigator on a grant that is partially funded by Gilead.

None of the other planners or presenters of this CE activity have any relevant financial relationships with any commercial entities pertaining to this activity.

CARDEA
Training, Organizational Development and Research
SERVICES

Acknowledgement

This event is funded in part by:

The Indian Health Service HIV Program

and

The Secretary's Minority AIDS Initiative Fund

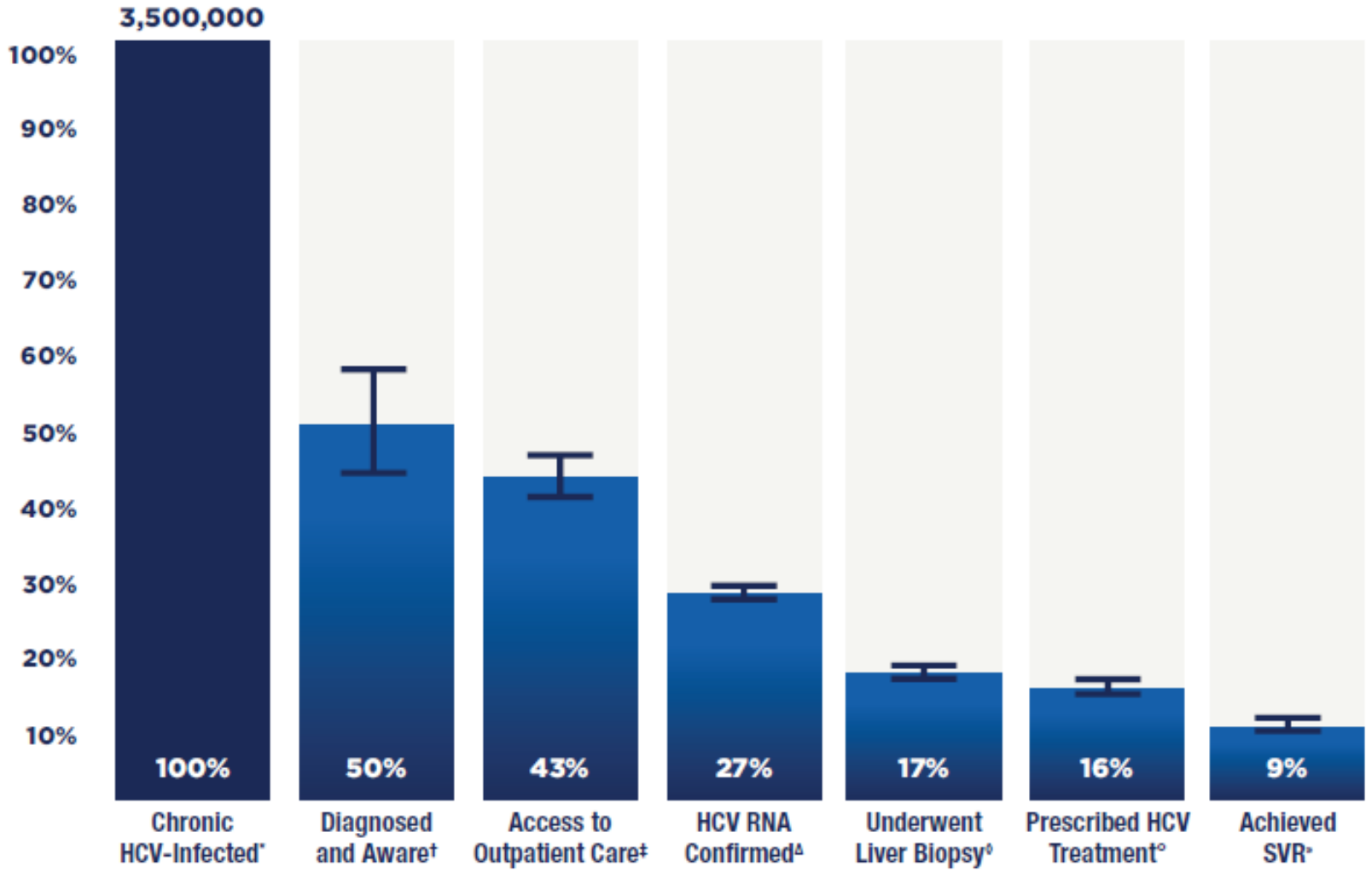
CARDEA

Training, Organizational Development and Research SERVICES

Hepatits C and Vulnerable Populations

Jay C. Butler, MD, FAAP, MACP, FIDSA
Chief Medical Officer
Alaska Dept of Health and Social Services

Why Are We Here Today?
Improving the Continuum of Care



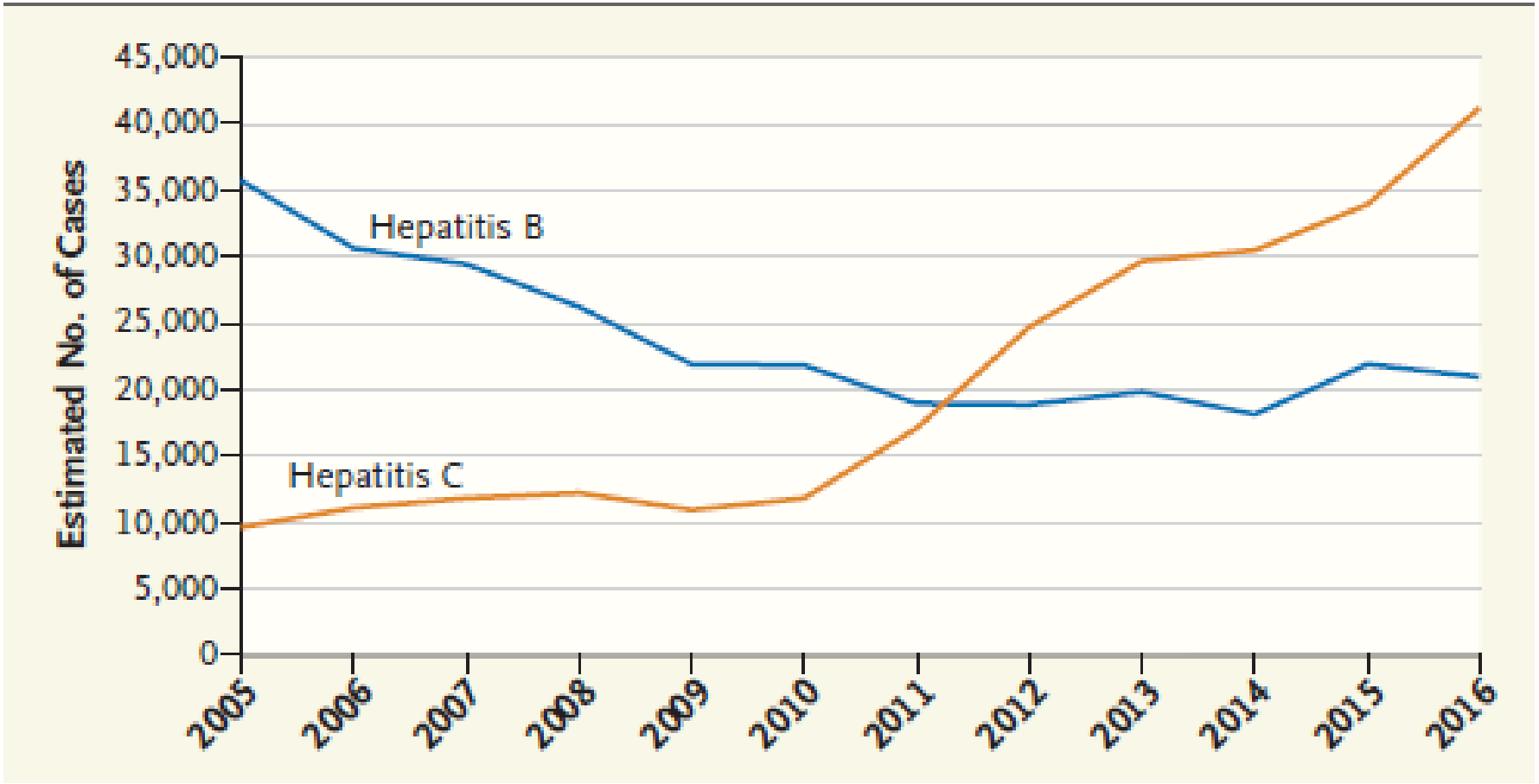
Yehia B, et al. *PLoS One* 2014; 9(7):e101554

CDC Recommendations for HCV Screening

- All born 1945-65 (1-time if no other risk factors)
- HIV-infected
- Ever self-injected drugs
- Received a blood transfusion or organ transplant before July 1992
- Received clotting factor concentrates before 1987
- Ever on chronic hemodialysis
- Follow-up to any needlestick or to mucosal exposure to HCV + blood
- Born to HCV + woman
- Persistent abnormal ALT

MMWR 2012;61(RR-4)

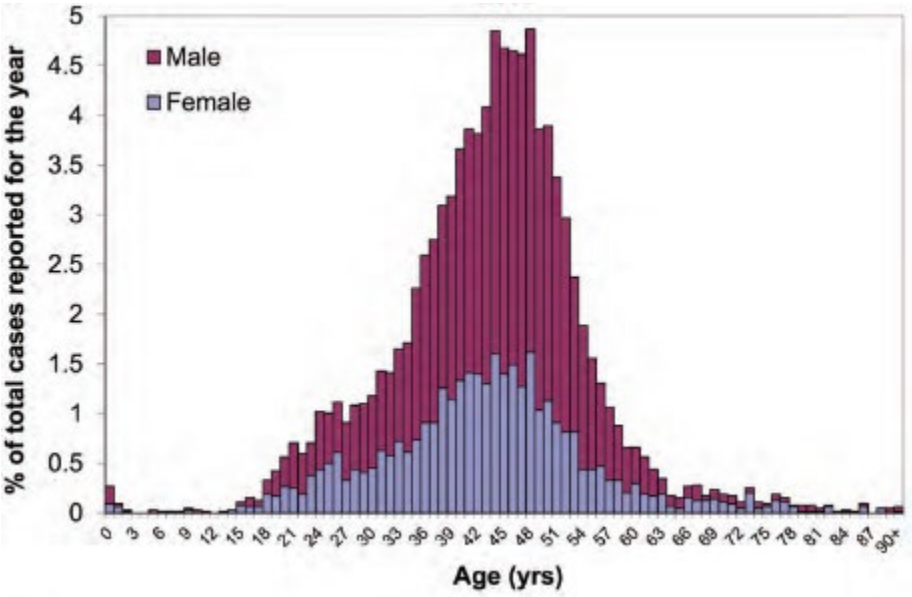
Estimated Number of New Hepatitis B and C Infections, US, 2005-2016



Liang TJ, Ward JW. *New Engl J Med* 2018; 378(13):1169-1171

Epidemiologic Trends in HCV: Newly Reported Confirmed HCV, Massachusetts, 2002 and 2011

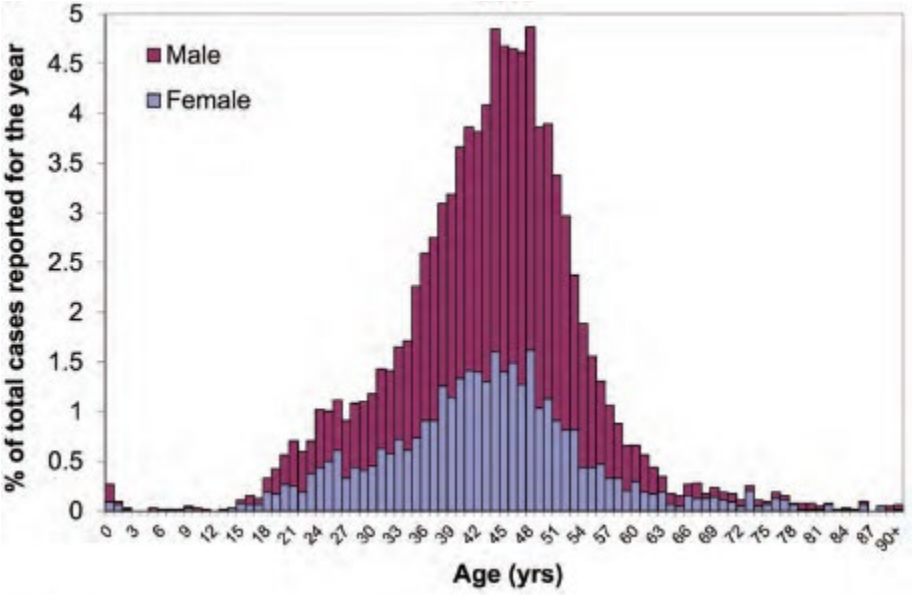
2002



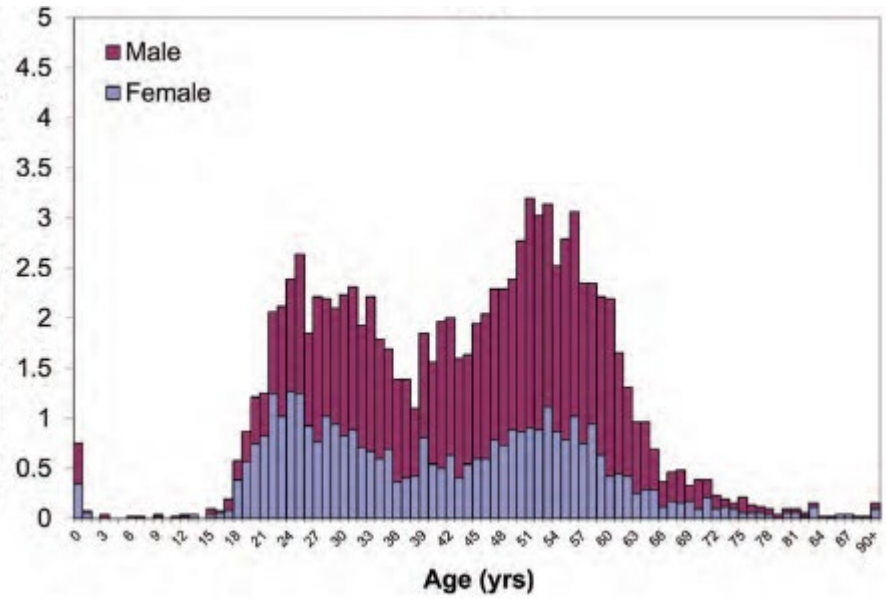
Kim AY, et al. *J Infect Dis* 2013; 207:S1-S6

Epidemiologic Trends in HCV: Newly Reported Confirmed HCV, Massachusetts, 2002 and 2011

2002

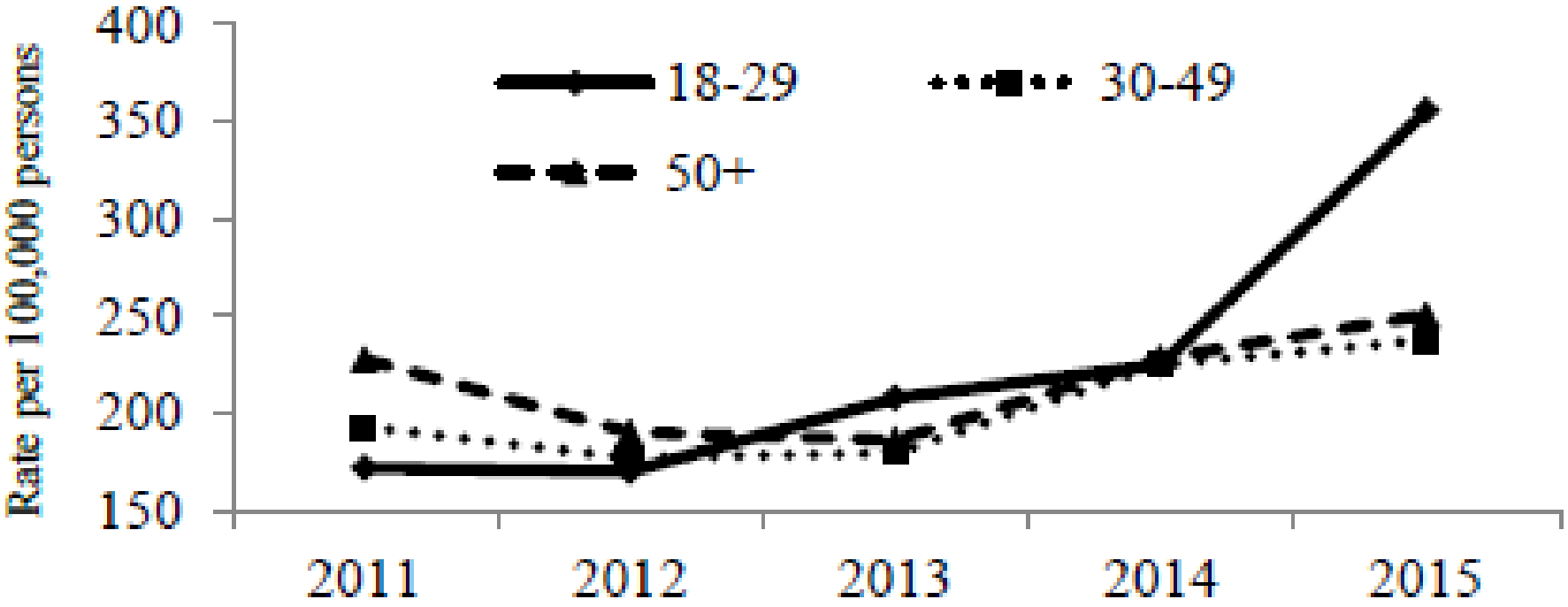


2011



Kim AY, et al. *J Infect Dis* 2013; 207:S1-S6

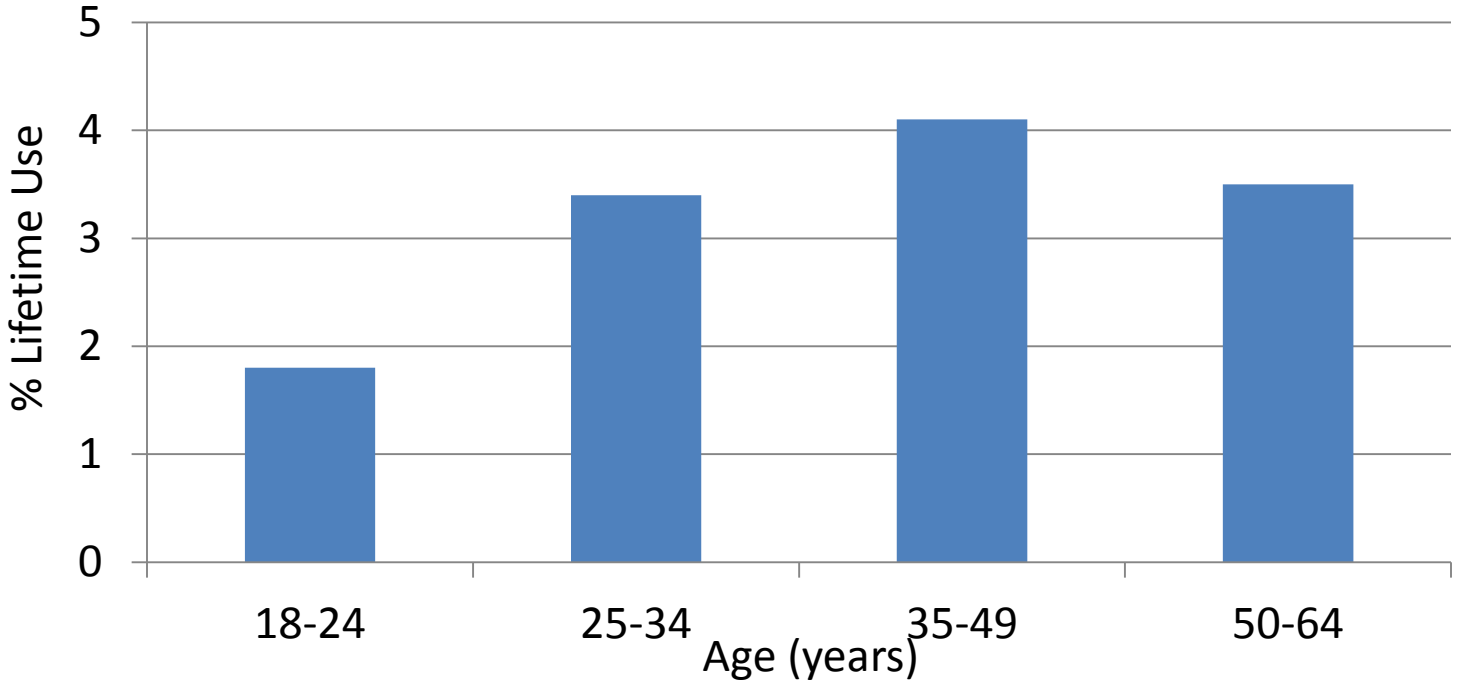
Rates of HCV *Diagnoses* in Alaska by Age, 2011-2015



Alaska Epidemiology Bulletin, Aug. 25, 2016

Self-Injection Drug Use, 2011, U.S.

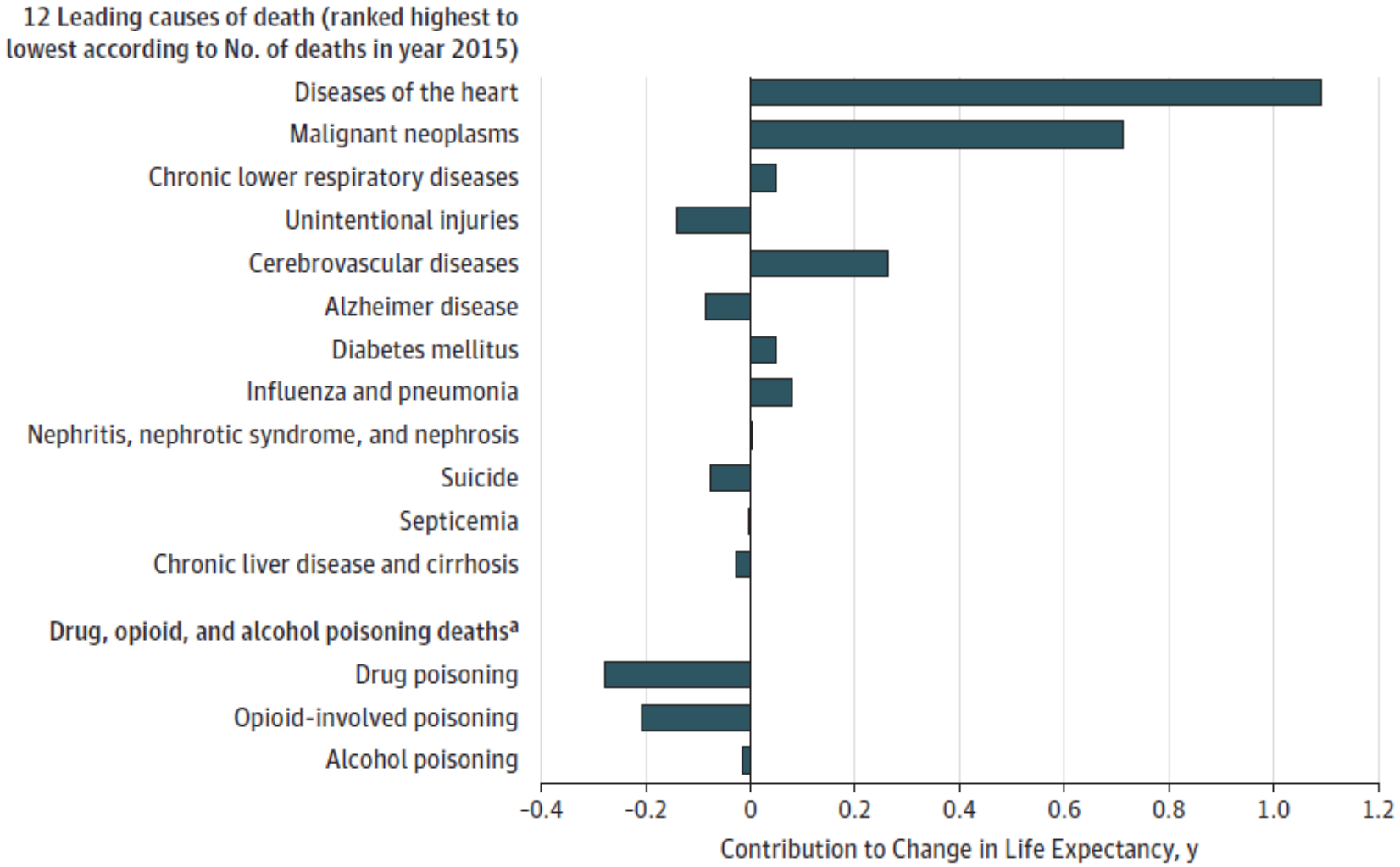
Meta-analysis of National Survey of Family Growth, National Survey of Drug Use and Health, National Health and Nutrition Examination Survey, General Social Survey



- 2.6% of population aged ≥13 years→ 6,612,488
  - 0.3% (774,434) injected during the past year
- **HCV infection rate among persons aged 40-65 years with lifetime use: 43%**

Lansky A, et al. *PLoS One* 2014;9(5):e97596

Drivers of Changes in Life Expectancy, US, From 2000 to 2015



Dowell D, et al. *JAMA* 2017; 318:1065-1067

HCV Treatment During MAT and Active Drug Misuse

- 301 treatment-naïve patients with HCV genotypes 1, 4, or 6 *and* receiving opioid agonist therapy
- Patients actively misusing drugs *not* excluded
- Received elbasvir/grazoprevir (Zepatier®) for 12 weeks (randomized to immediate or delayed Rx)
- SVR12: 89.5% to 91.5%
- Adherence (>95% of doses taken): >95%
- At 24 weeks: 6(2.2%) had evidence reinfection
  - 3 of these spontaneously cleared

Dore GJ, et al. *Ann Intern Med* 2016; 165(9):625-34

HCV Treatment During Active Drug Misuse

- Open-label phase 4 study (SIMPLIFY)
- 103 participants
  - 9 with cirrhosis
  - 36 GT-1, 5 GT-2, 50 GT-3, 2 GT-4
  - 76 injected in past month, 27 at least daily
- Sofosbuvir/velpatasvir (Epclusa®) daily for 12 weeks
- 100 completed treatment; 97 achieve SVR12

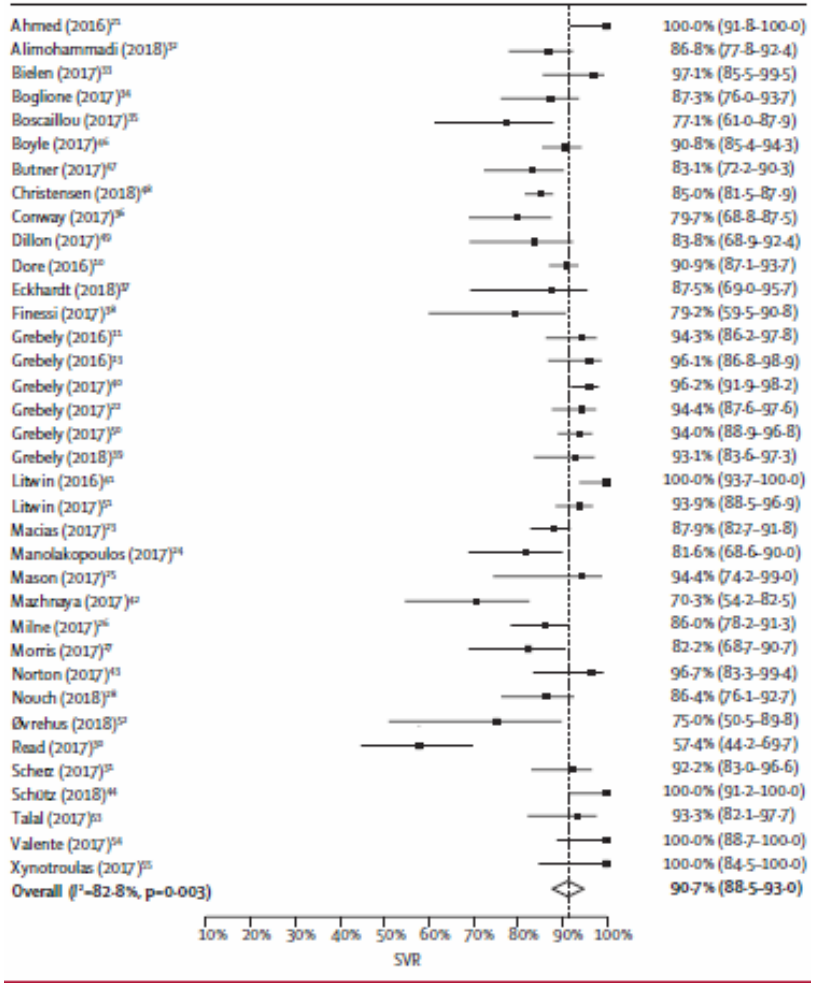
Grebely J, et al. *Lancet Gastroenterol Hepatol* 2018; 3(3):153-161

Direct-Acting Antivirals Among PWID and Receiving Opioid Agonist MAT: Meta-analysis

<u>36 studies, 2987 participants:</u>

Treatment completion:
97.4% (95% CI 96.5%, 98.3%)

SVR:
90.7% (95% CI 88.5%, 93.0%)



Hajarizadeh B, et al. *Lancet Gastroenterol Hepatol* 2018 *(in press);* published online Sept 20, 2018)

IDSA/AASLD Guideline, October 2017

"….no data to support the utility of pretreatment screening for illicit drug or alcohol use in identifying a population more likely to successfully complete HCV therapy. These requirements should be abandoned because they create barriers to treatment, add unnecessary cost and effort, and potentially exclude populations that are likely to obtain substantial benefit from therapy. Scaling up HCV treatment in persons who inject drugs is necessary to positively impact the HCV epidemic in the US and globally."

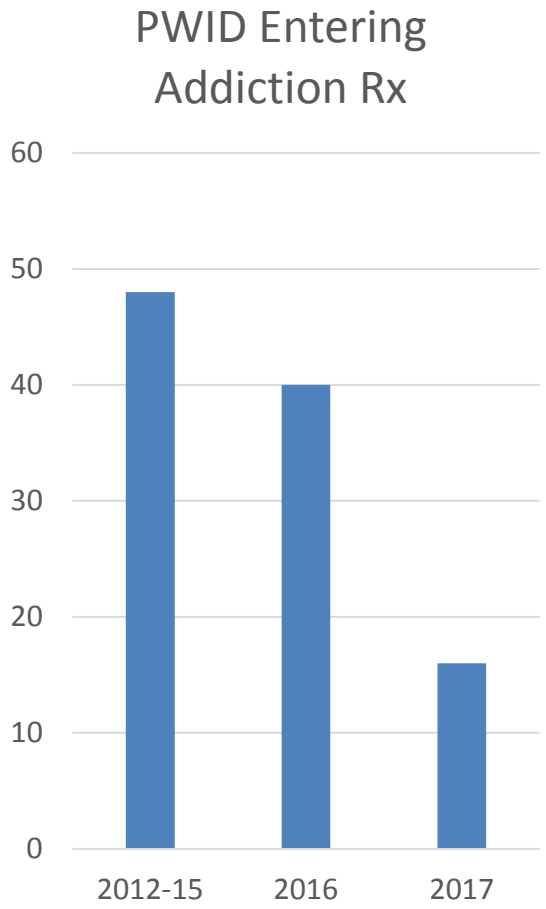
https://www.hcvguidelines.org/

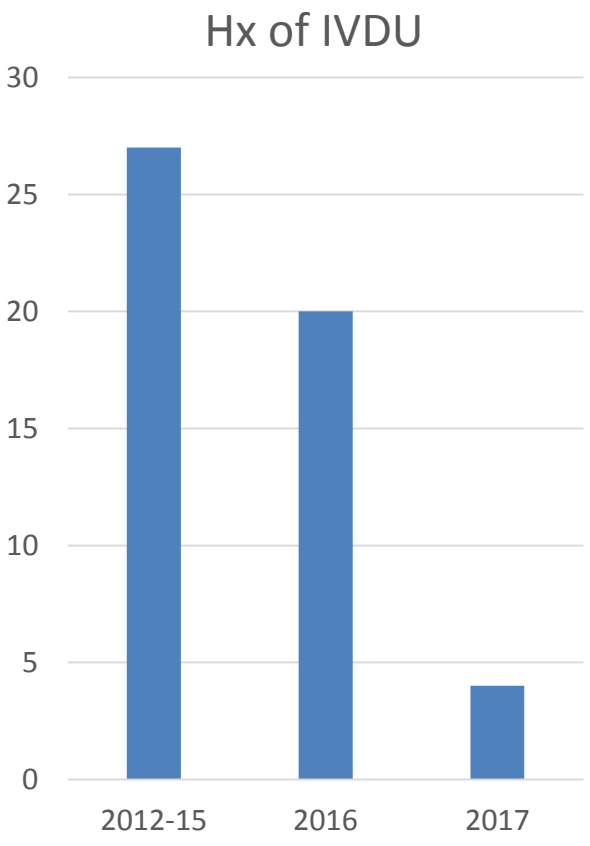
Treatment as Prevention for HCv (TraP HepC) Program, Iceland

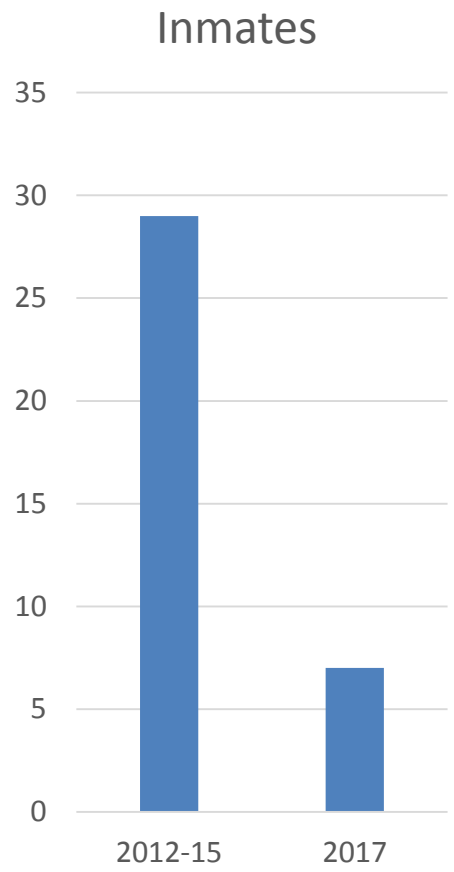
- Beginning in January 2016, 3 year program:
  - Aggressive promotion of HCV testing, emphasis on Vogur addiction hospital and penitentiary system
  - All patients with viremia offered DAA
- Results at 2 years:
  - 667 evaluated, 632 initiated treatment
  - Of those completing treatment, 95.5% SVR12
  - 91.8% completed; among those who dropped out, SVR12 >40%
- Outcome: prevalence of viremia

Gottfredsson M, et al. ID Week 2018, Oct 4, 2018. Abstract #928

Treatment as Prevention for HCv (TraP HepC) Program, Iceland Preliminary Results After 2 Years



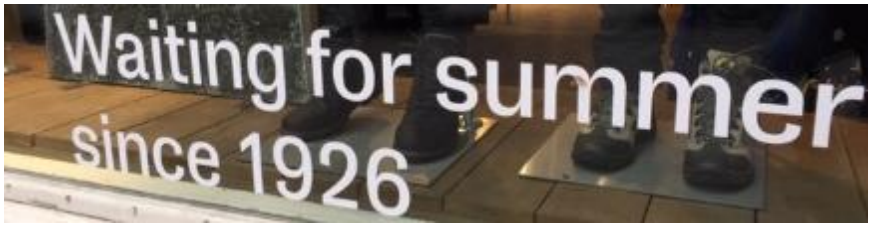




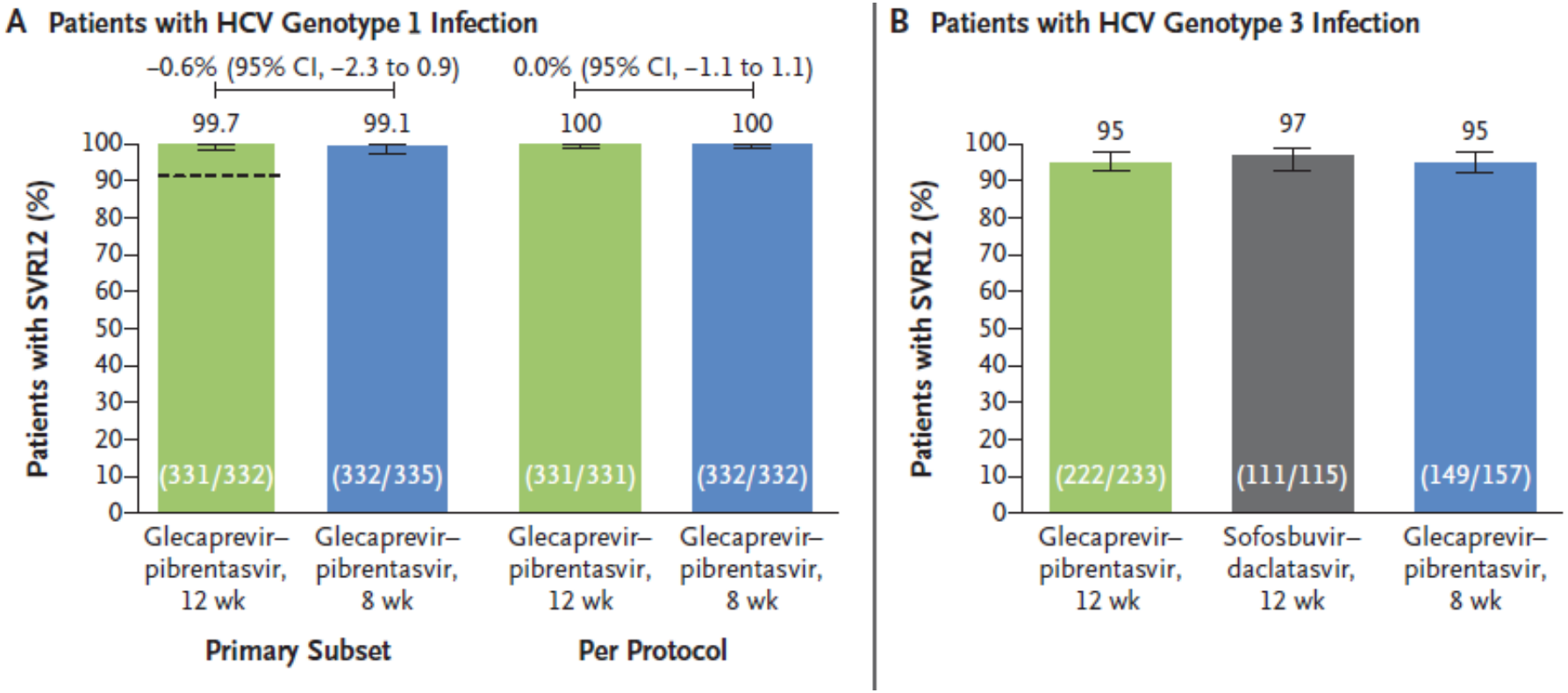
Gottfredsson M, et al. ID Week 2018, Oct 4, 2018. Abstract #928

Treatment as Prevention for HCv (TraP HepC) Program, Iceland

- Next Steps:
  - Intervention to continue into early 2019
  - Assessment of long-term impact through 2030:
    - HCV infection rates
    - Prevalence of cirrhosis and HCC



Glecaprevir/Pibrentasvir (Mayvret®): Preferred Drug in Alaska Medicaid

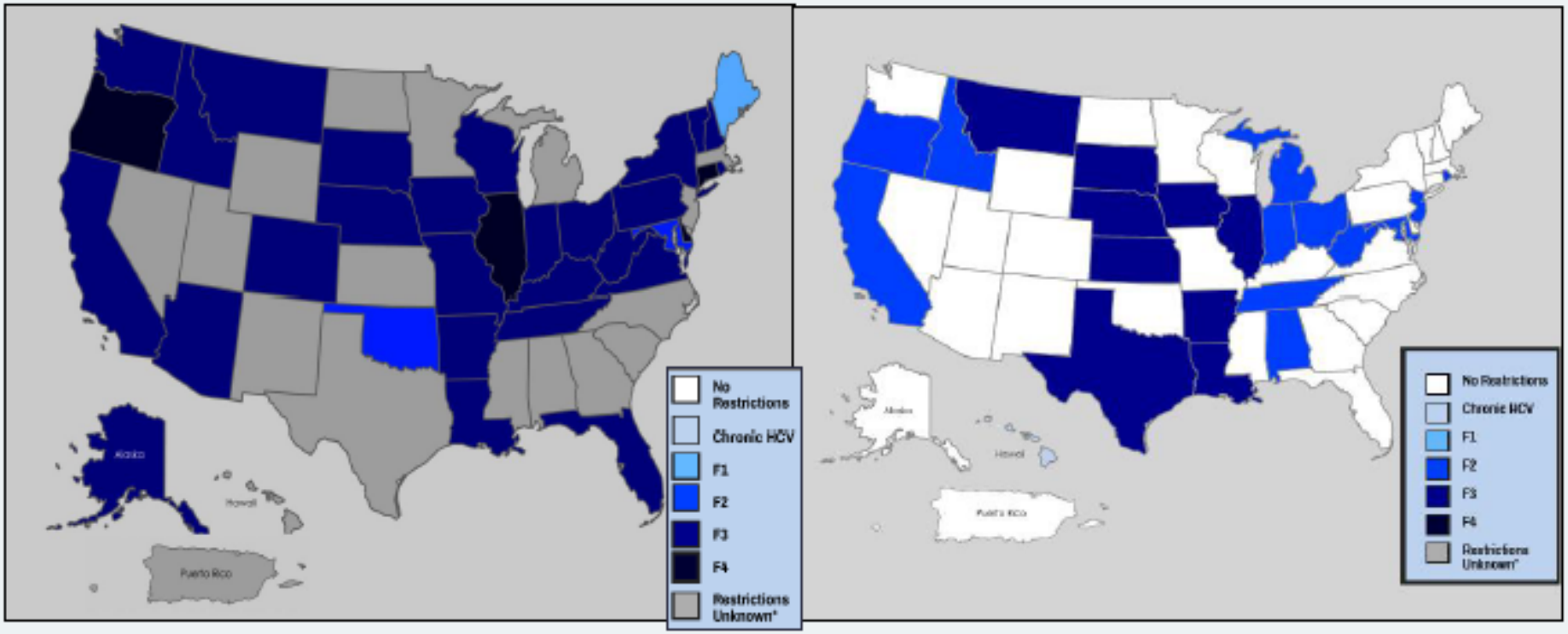


Zeuzem S, et al. *N Engl J Med* 2018; 378(4):354-369

Rochstroh J, et al. *ID Week 2018*; abstract 1965 (>98% SVF in HIV-1 coinfection)

State Medicaid Restrictions for HCV Treatment with Direct Acting Antivirals: Liver Damage

2014 **2018**

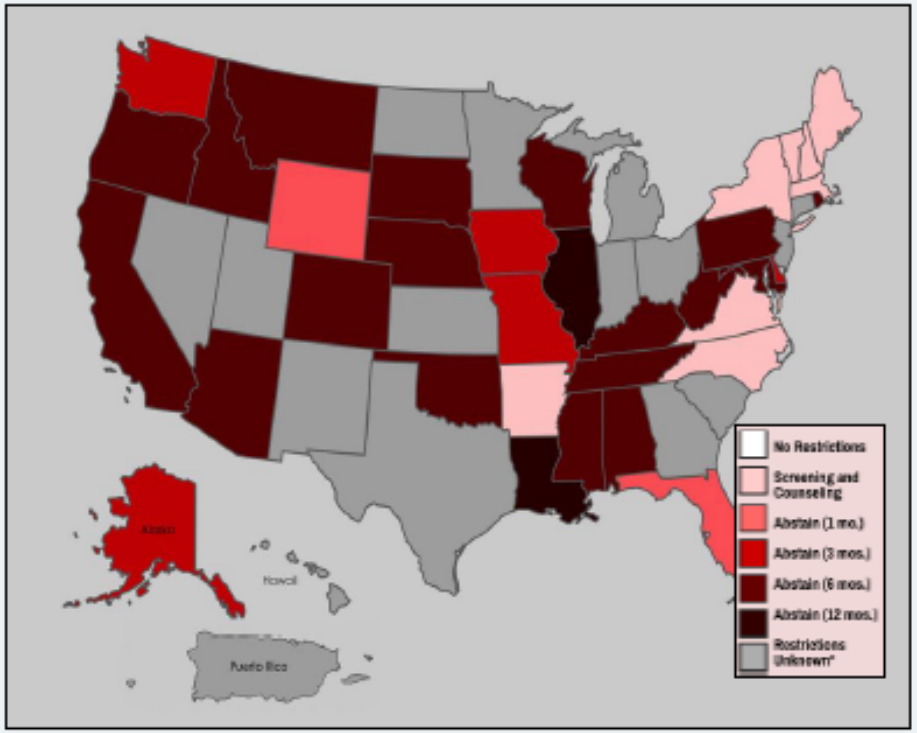


Data and figures presented here are current as of May 2018. CHLPI and NVHR at https://stateofhepc.org/.

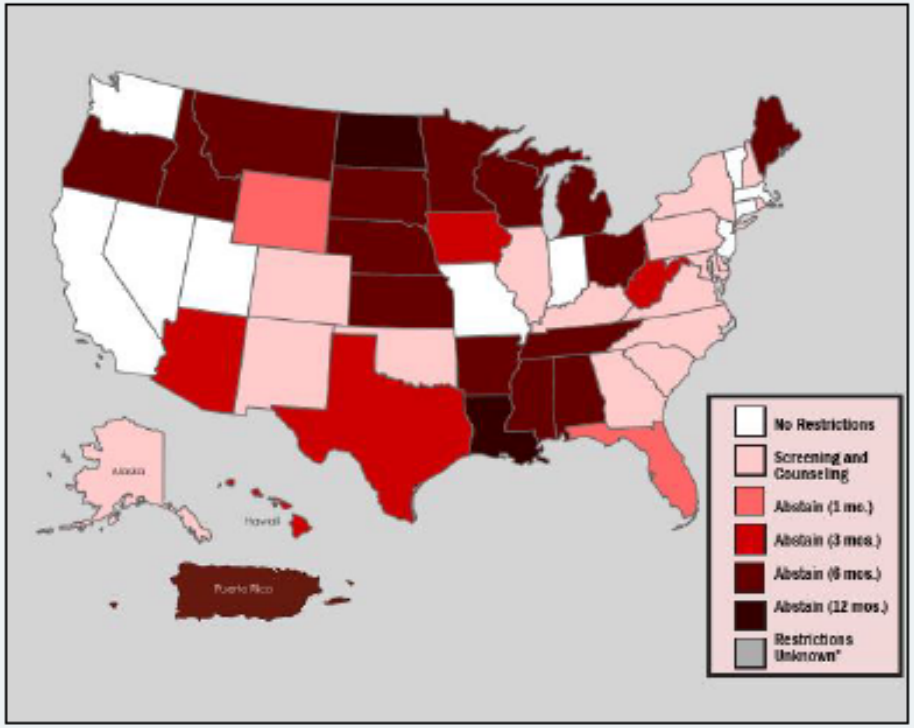
NVHR
National Viral Hepatitis Roundtable

State Medicaid Restrictions for HCV Treatment with Direct Acting Antivirals: Sobriety Requirements

2014



2018

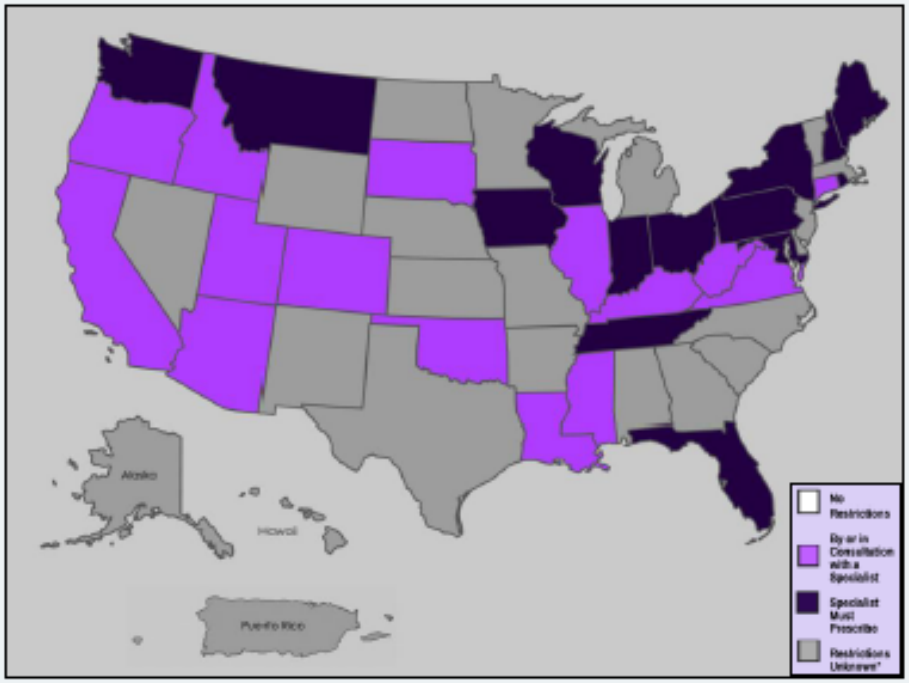


Data and figures presented here are current as of May 2018. CHLPI and NVHR at https://stateofhepc.org/.

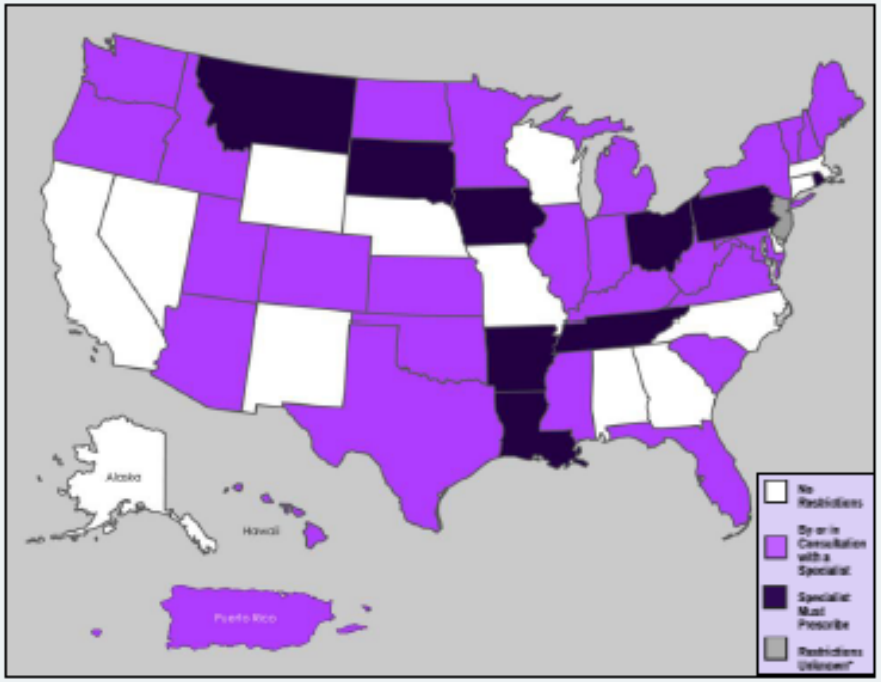
NVHR
National Viral Hepatitis Roundtable

Findings: Prescriber Restrictions

2014



2018



Data and figures presented here are current as of May 2018. CHLPI and NVHR at https://stateofhepc.org/.

NVHR
National Viral Hepatitis Roundtable

Why Treat HCV?

- Treatment is:
  - Well-tolerated
  - Highly effective
  - Increasingly covered by 3rd party payors
- Among PWID
  - Patients feel valued
  - It reduces the pool of infected persons who may infect others