

Engaging Department of Corrections to Improve Health Outcomes Amongst Justice Involved Populations

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Kentucky Harm Reduction Summit

June 2024



Kentucky Public Health
Prevent. Promote. Protect.



TEAM 
KENTUCKY®

CABINET FOR HEALTH
AND FAMILY SERVICES

Objectives

- 🛡️ Discuss the impact of hepatitis C (HCV) on individuals in correctional settings.
- 🛡️ Describe how KDPH Viral Hepatitis Program has engaged with Kentucky Department of Corrections (DOC) to improve capacity for HCV care and to advance positive health outcomes for incarcerated individuals

Intersecting Problem

Kentucky has an intersecting problem compounded by numerous issues.

High
incarceration
rates



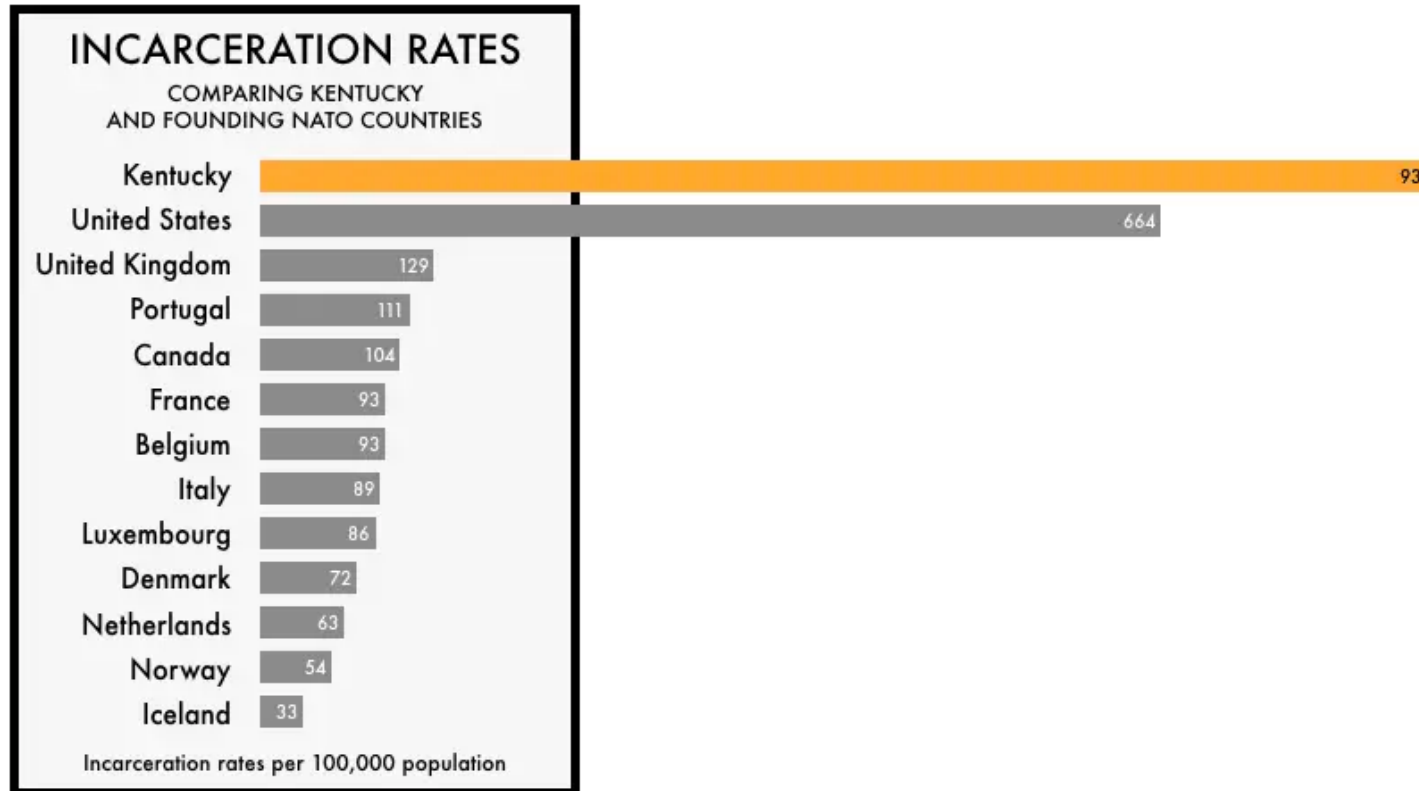
High
hepatitis C
rates



Major
public
health
problem for
Kentucky

Kentucky's Incarceration Rate

Today, Kentucky's incarceration rates stand out internationally



Source: <https://www.prisonpolicy.org/global/2021.html>

What's the Difference?

JAIL	VS	PRISON
1 Short term detention		1 Long-term incarceration (1+ year)
2 People awaiting trial or sentencing or who have committed minor crimes		2 Individuals convicted and sentenced to more serious offenses
3 Operated by local governments (sheriff's office, police departments)		3 Typically run by state or federal authorities. Can also be run by private companies
4 Tend to have fewer security measures when compared with prisons		4 Security measures vary greatly based on the facility - ranges from very low to extremely high

How many Kentucky residents are locked up and where?

37,000 of Kentucky's residents are locked up in various kinds of facilities



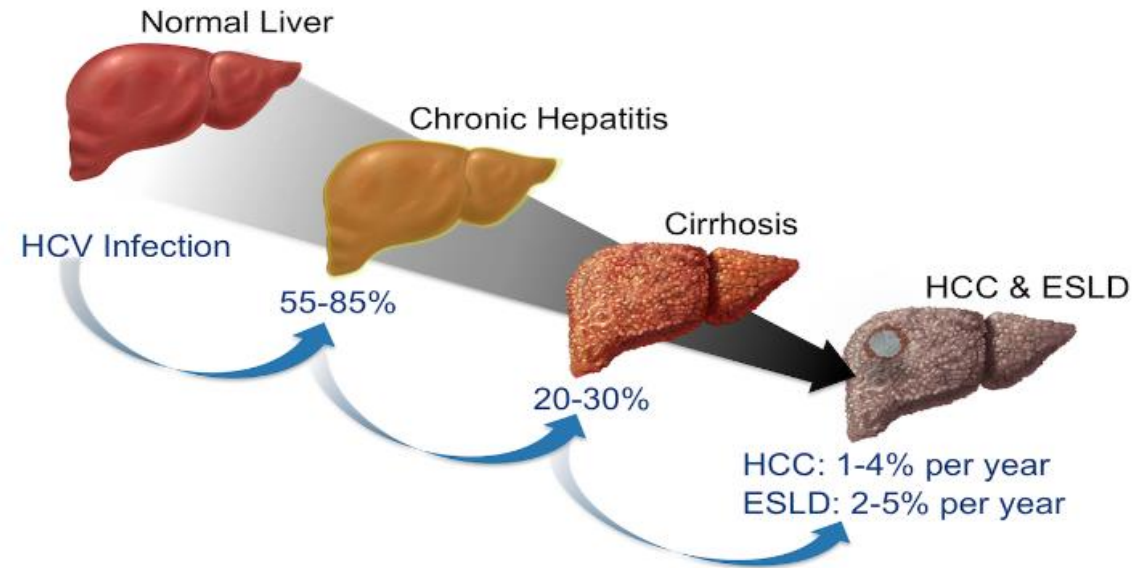
PRISON
POLICY INITIATIVE

Details may not add to total due to rounding.

Sources and data notes: See www.prisonpolicy.org/reports/correctionalcontrol2023.html

Hepatitis C

- Liver infection caused by the hepatitis C virus (HCV)
- Spread through contact with blood from an infected person
- Most common bloodborne infection; causes more deaths than any other infectious disease in the US
- Most people become infected by sharing needles or other equipment used to prepare and inject drugs

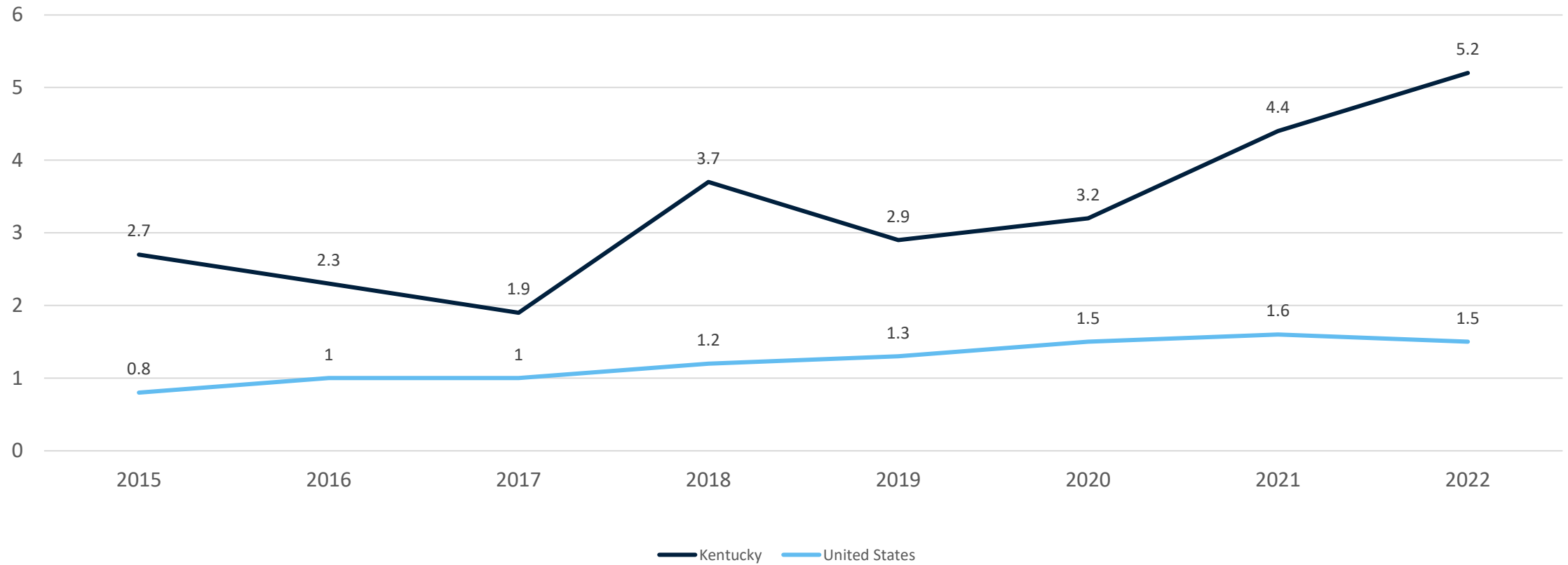


Natural History Following Initial Infection with HCV

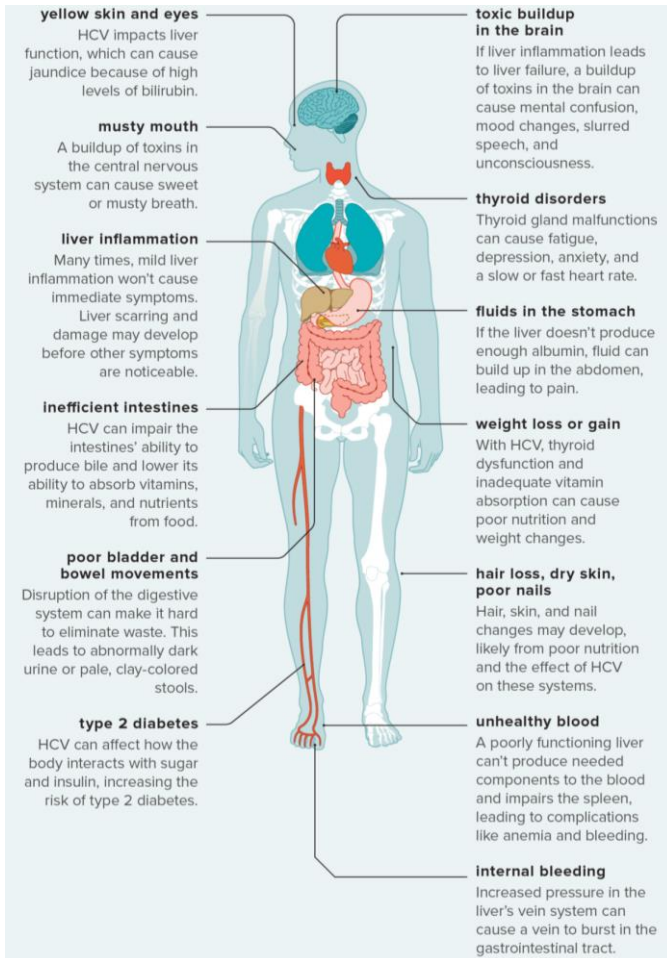
ESLD: end-stage liver disease; HCC: hepatocellular carcinoma

- Approximately 55-85% will develop chronic infection

Rates of Acute Hepatitis C, Kentucky and the United States, 2015-2022



Untreated HCV



Untreated hepatitis C can cause a host of problems including:

- Liver disease
- Liver cancer
- Death



<https://blog.scdhec.gov/2016/05/19/why-you-need-to-know-about-hepatitis/>

Hepatitis C Cure

- 🛡️ Highly-effective, well tolerated oral medications
- 🛡️ 8-12 week treatment
- 🛡️ **Cure rate: >95%**
- 🛡️ However, few are linked to care
- 🛡️ High cost



Cost-Effectiveness

Treatment for HCV saves patients money despite high up-front costs



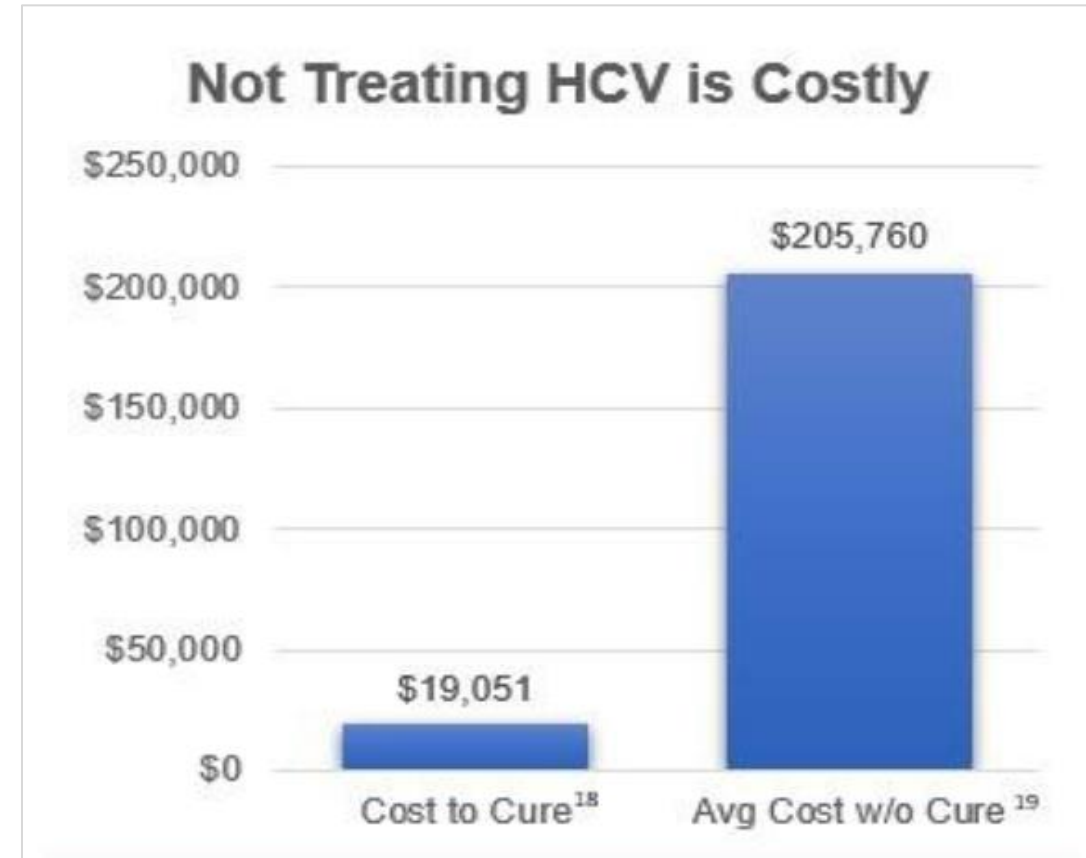
Projected reduction in HCV-related medical costs, per patient

Total costs vs. Savings over 10 years

	2021	2030
Non-Cirrhotic Disease (NCD)	\$12,739	(\$42,755)
Compensated Cirrhosis (CC)	\$13,354	(\$23,201)
End-Stage Liver Disease (ESLD)	\$9,479	(\$185,245)

Source: Milliman White Paper (Projected U.S. national Hepatitis C treatment costs and estimated reduction to medical costs)

<https://www.pbs.org/newshour/health/biden-wants-to-cure-hepatitis-c-by-2030-these-barriers-have-been-standing-in-the-way>



<https://aidsinstitute.net/documents/Fact-Sheet---Treating-Hepatitis-C-Saves-Lives-and-Money.pdf>

The Cost of Not Treating HCV

ADDITIONAL COSTS AND HEALTH RISKS CREATED BY NOT TREATING HCV

Chronic Disease	Increased Likelihood	Annual Cost/Person
Liver Cancer	17.0x	\$ 60,863
Liver Failure	6.6x	\$ 575,000
Renal Failure	2.9x	\$ 76,059
COPD	2.4x	\$ 9,800
Mood & Anxiety Conditions	2.2x	\$ 6,475
Rheumatoid Arthritis	2.0x	\$ 36,053
Type 2 Diabetes	1.3x	\$ 9,601
Asthma	1.3x	\$ 3,226

<https://aidsinstitute.net/documents/Fact-Sheet---Treating-Hepatitis-C-Saves-Lives-and-Money.pdf>

Kentucky Hepatitis C Elimination Plan

Released August 2022



KY HCV
Elimination
Plan

[HepatitisCEliminationPlan.pdf \(ky.gov\)](https://chfs.ky.gov/agencies/dph/dehp/idb/Documents/HepatitisCEliminationPlan.pdf)

<https://chfs.ky.gov/agencies/dph/dehp/idb/Documents/HepatitisCEliminationPlan.pdf>

Hepatitis C Elimination Plan



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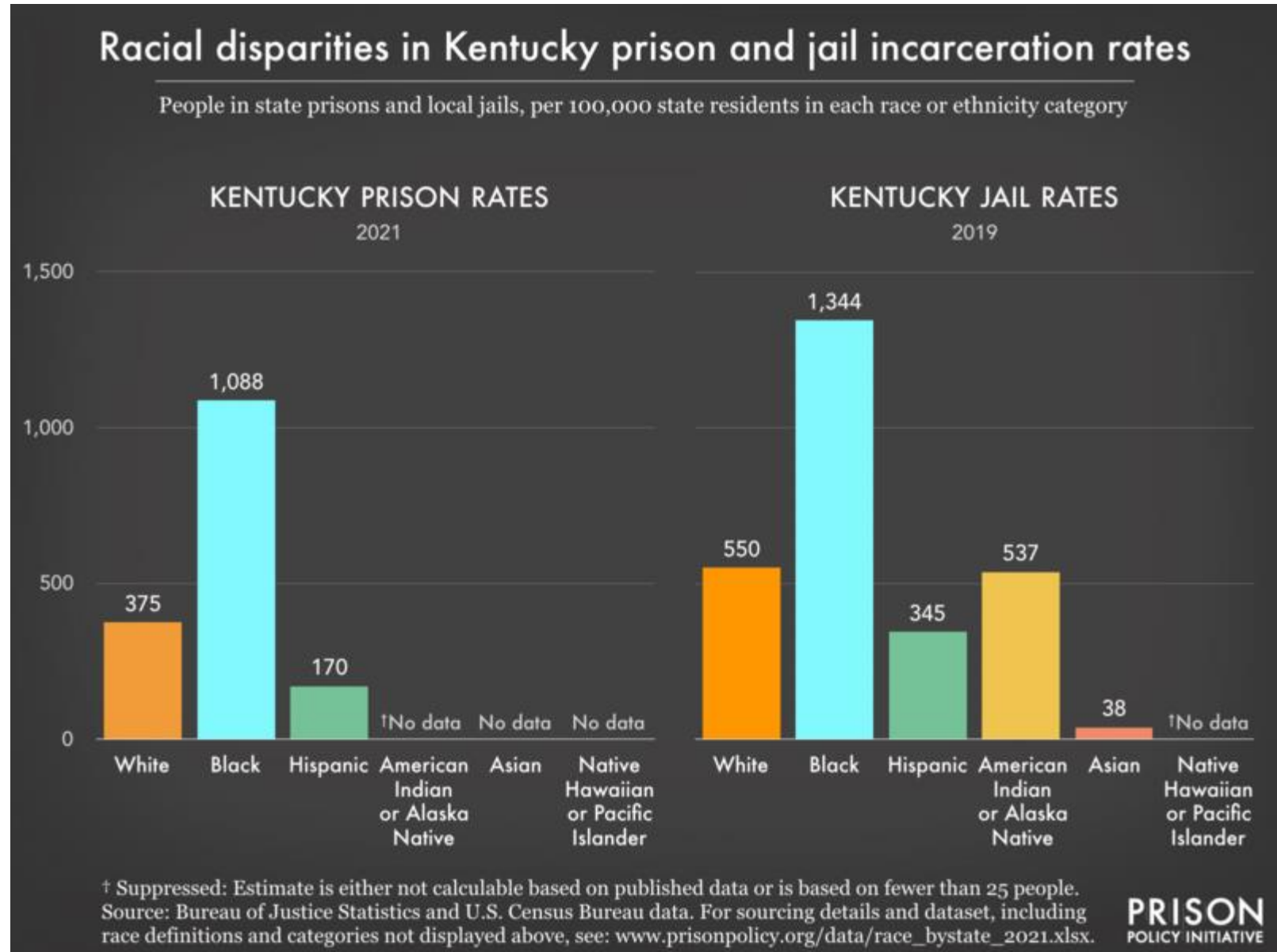
**Kentucky Department for
Public Health**

This is a governing document to guide statewide elimination efforts led by the Viral Hepatitis Program, developed in collaboration with community stakeholders and those with lived experience.

Equity Issues

Black people make up **8.6%** of the state's population, but **21%** of the prison population

<https://kypolicy.org/kentucky-incarceration/>



Equity Issues

According to the Centers for Disease Control and Prevention (CDC) and the Department of Health and Human Services (HHS):

- 🛡️ Black people are twice as likely to be infected with hepatitis C when compared to the general U.S. population.
- 🛡️ While Black people represent only 12% of the U.S. population, they make up around 22% of the 3.2 million people living with chronic hepatitis C.
- 🛡️ About 1 in 7 Black men in their 50s is living with chronic hepatitis C.
- 🛡️ Black people with hepatitis C are twice as likely to get liver and bile duct cancer than White people with hepatitis C.
- 🛡️ **Black people are twice as likely to die from hepatitis C than White people.**
- 🛡️ Hepatitis C today is the single leading cause of death among Black people aged 45 to 65.

[Hepatitis and African Americans | Office of Minority Health \(hhs.gov\)](#)
[Addressing Hepatitis C Disparities in the African American Community | HIV.gov](#)
[Facts-on-HCV-among-African-Americans-4-22-15.pdf \(hiv.gov\)](#)

Impact of Surveillance Limitations on Equity



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Race and ethnicity data missing/'unknown' for **30-60%** of HCV laboratory reporting data and case reports in Kentucky



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Without this data, we cannot know the full extent of disparities or accurately assess impact of HCV in our populations of color

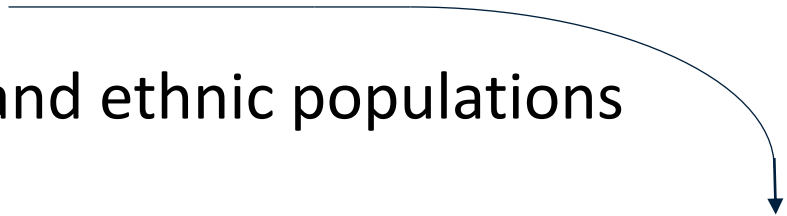


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Thus, we won't know how respond appropriately: putting resources (testing, treatment, linkage to care) where they are needed, tailoring educational campaigns, partnering with relevant organizations, etc.

Priority Populations

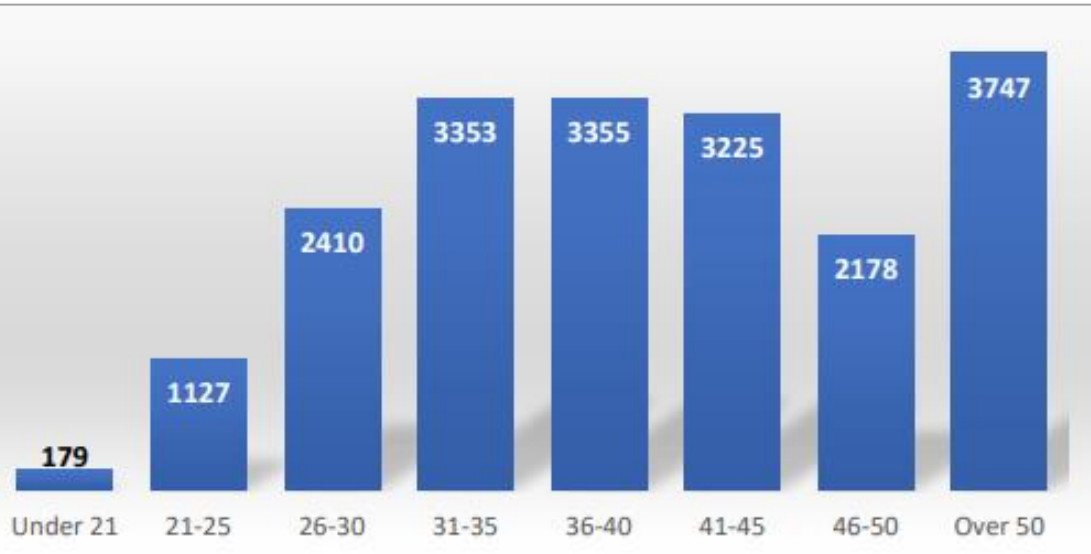
- People who use drugs (PWUD)
- **Incarcerated individuals**
- Historically excluded racial and ethnic populations
- Baby boomers
- Pregnant/parenting persons
- Children in foster care
- People with prior HCV infection
- Rural communities



Incorporating correctional settings into HCV elimination plans reduces the burden of HCV, both in those settings and in surrounding communities

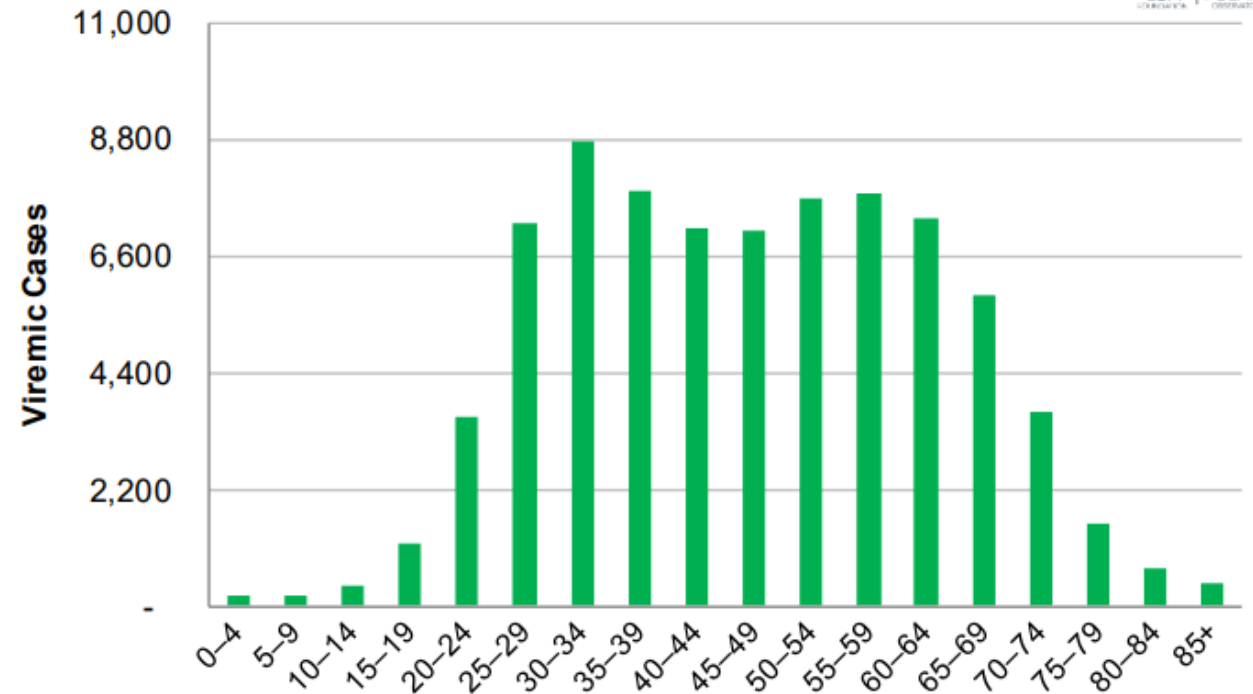
Corresponding Populations

Kentucky State Prison Inmate Count by Age, 2022



<https://corrections.ky.gov/About/researchandstats/Documents/Annual%20Reports/FINAL%2022%20Annual%20Report.pdf>

HCV-Infected Population by Age Group — Kentucky, 2018



<https://www.chfs.ky.gov/agencies/dph/dehp/idb/Documents/BurdenFinalReportCDAF.pdf>

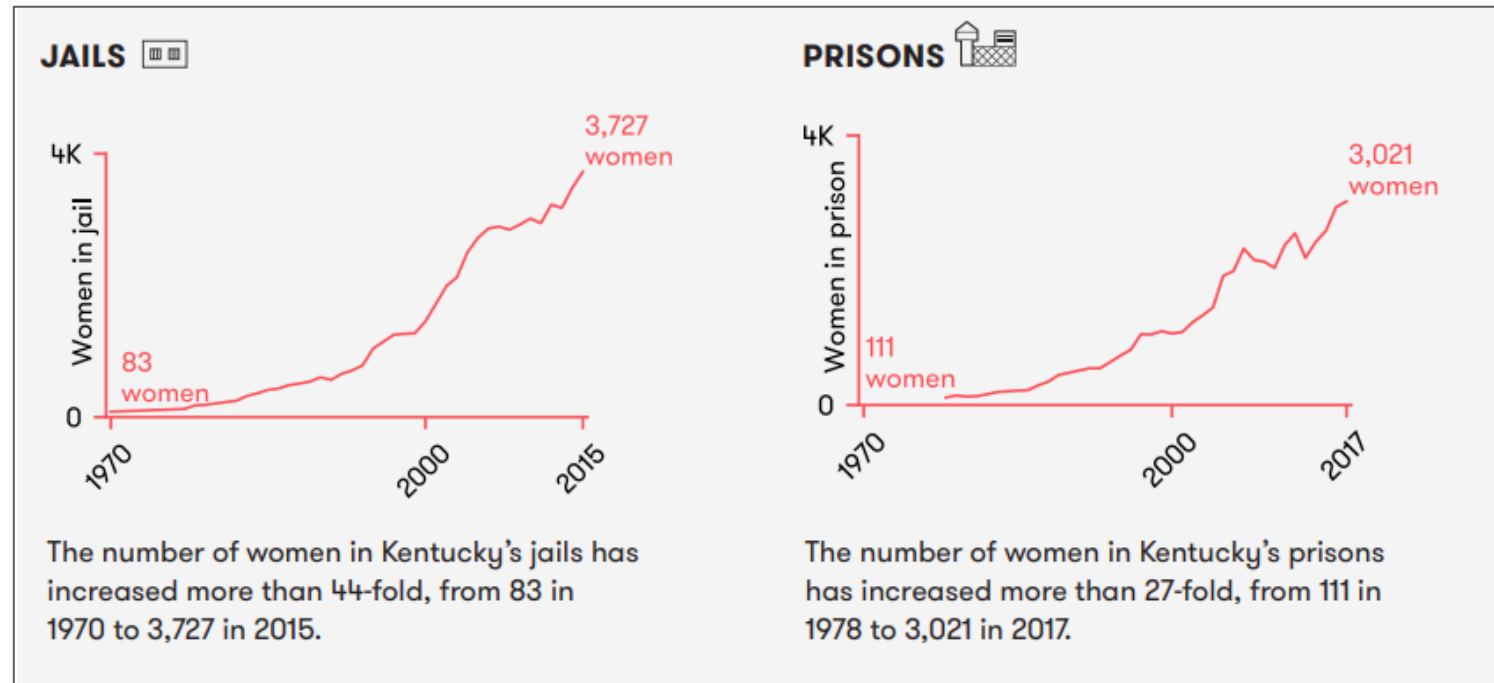
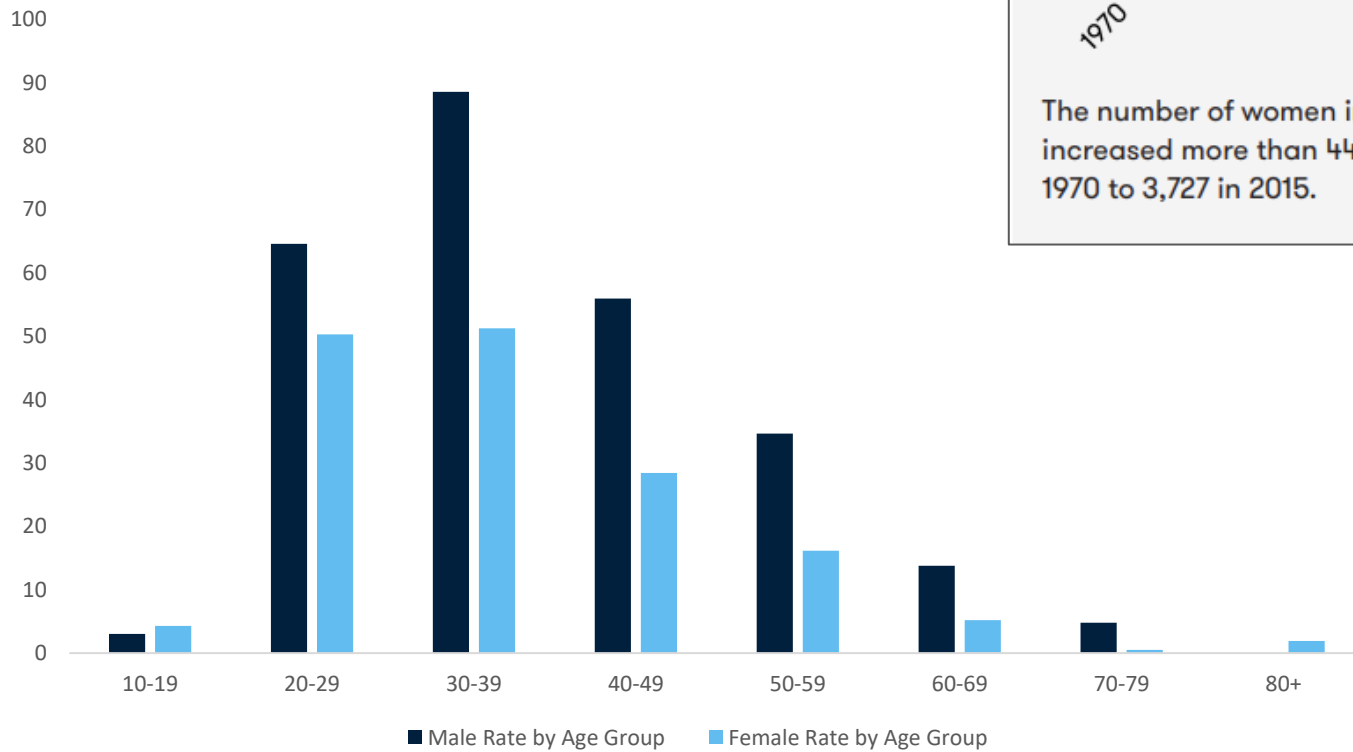
HCV in Carceral Settings

- 🛡️ Proportion of HCV much higher in correctional populations than the general population (10-50% vs 1%).
- 🛡️ Approximately 30% of all individuals living with HCV in US pass through correctional system in a given year.
 - Opportunity for engagement in care/treatment!
- 🛡️ At least 95% of all state prisoners will be released from prison at some point.
 - They will return to their communities.
 - If HCV+ and untreated = higher viral load in the community

References can be found on last slide.

Women

Acute Hepatitis C Case Rates by Age and Sex, Kentucky, 2015 - 2022

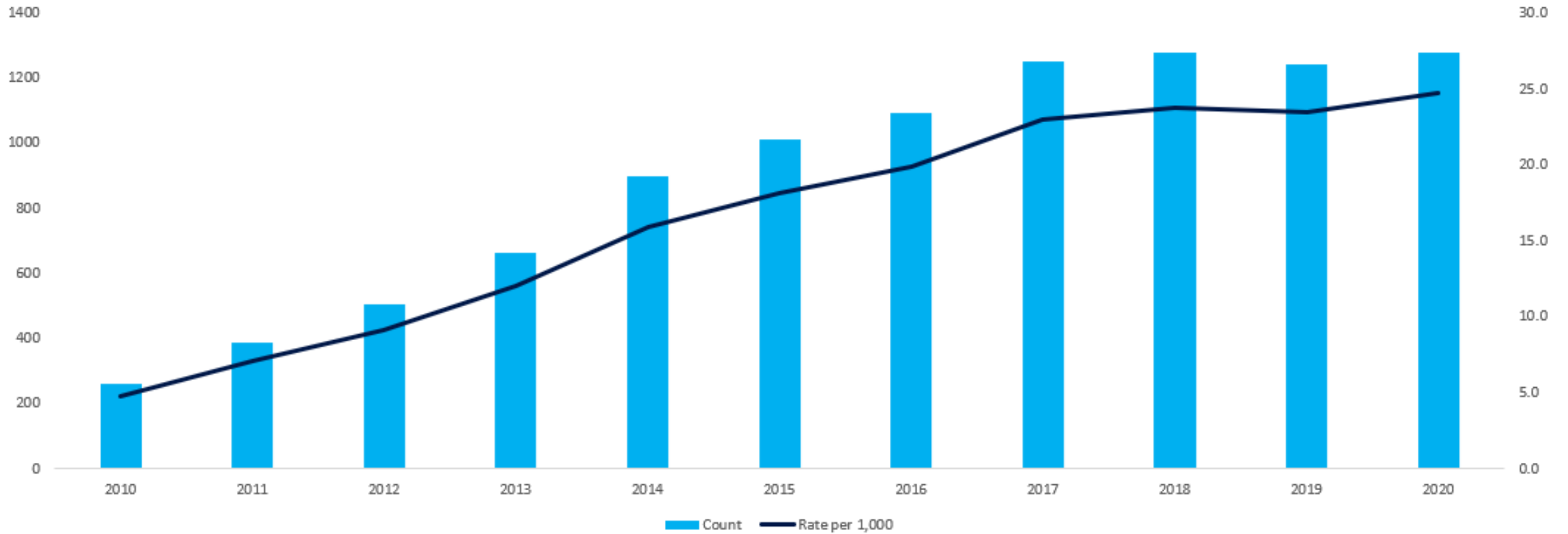


<https://www.vera.org/downloads/pdfdownloads/state-incarceration-trends-kentucky.pdf>

High HCV rates:
In addition to endangering health of women, perinatal exposure is elevated

Perinatal Exposure

Reported Hepatitis C Status of Mother among Kentucky Resident Births, 2010-2020



Increasing HCV Services in Correctional Settings

Implementation priority stemming from Kentucky Hepatitis C Elimination Plan

- Focus includes both state prisons and local detention centers
 - Distinct nature of these facilities necessitates different strategies at each level

For prisons: two-pronged approach

1. More affordable medications
2. Enhanced infrastructure: provider education on screening, testing, treatment and healthcare stigma/discrimination; widespread education on preventing reinfection/harm reduction strategies in correctional settings

Current Kentucky State Prison HCV Protocol

- 🛡️ HCV screening upon intake: universal, opt-out testing
- 🛡️ Further testing and evaluation performed to establish a priority level
 - Greater disease severity/co-morbidities/etc.= higher priority
- 🛡️ If not yet able to treat, patient is monitored: annual labs, etc.

- 🛡️ All incarcerated individuals not treated due to budget shortfalls

Our Task

How to increase Kentucky DOC's capacity to treat more incarcerated individuals within current funding levels?

What is 340B?

- 🛡️ A federal law that requires drug manufacturers to offer discounts on drugs sold to certain types of safety net providers for outpatient use.
- 🛡️ “340B” refers to the section of the Public Health Service Act where these requirements are found.
- 🛡️ Stretch scarce federal resources and extend discounts directly to patients.

340B to Expand HCV Treatment

The 340B Program is an instrumental tool in ending the viral hepatitis epidemic, enabling viral hepatitis programs to expand and improve services, address health equity, and reduce health disparities.

Can be used in correctional settings

340B Correctional Partnerships

- Alaska
- Arizona
- California
- Colorado
- Hawaii
- Indiana
- Iowa
- Louisiana
- Minnesota
- Mississippi
- Nevada
- New Hampshire
- New Mexico
- North Carolina
- North Dakota
- Ohio
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Utah
- Washington
- Wisconsin

Eligibility Requirements

- 🛡️ Receive funds from a designated grant (STD 318, Title X, Ryan White, FQHC)
- 🛡️ Register in 340B OPAIS
- 🛡️ Recertify annually
- 🛡️ Ongoing commitment to compliance

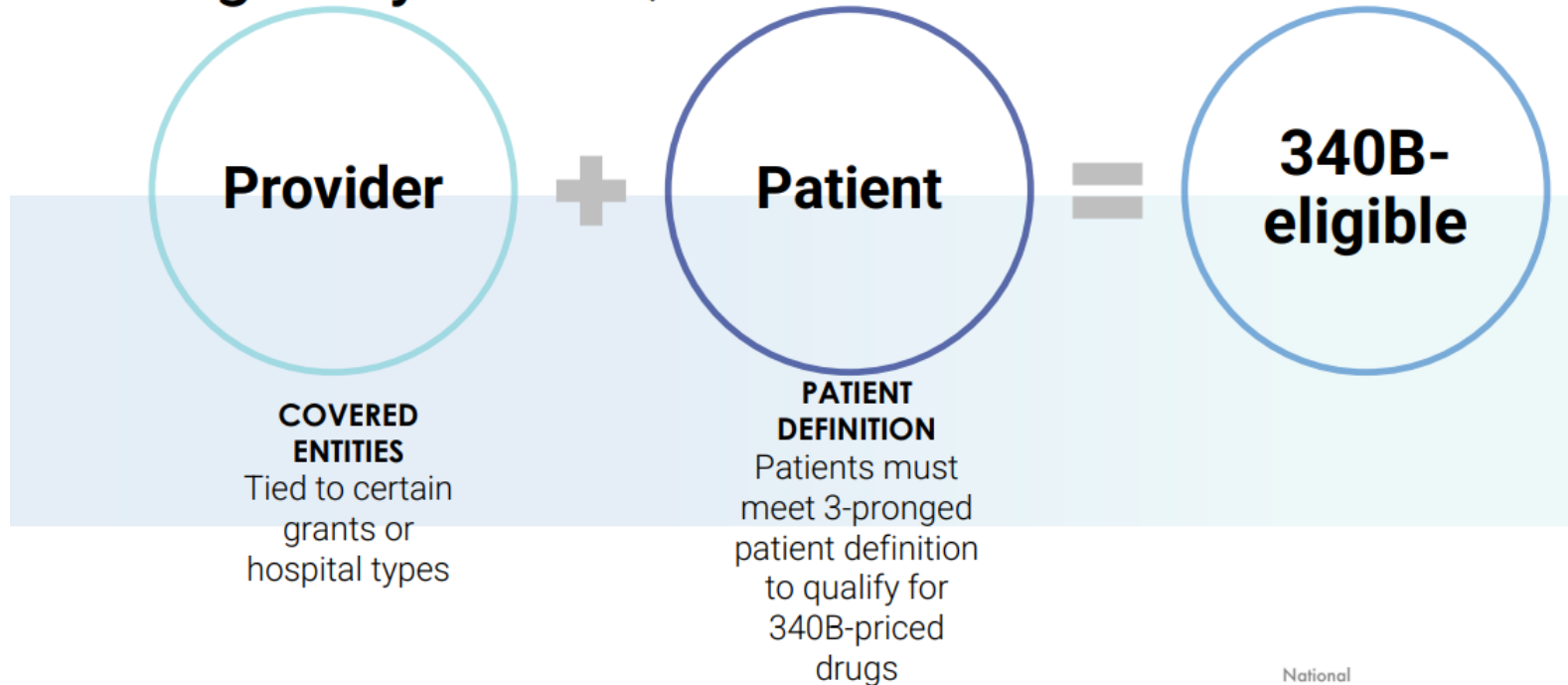
Eligibility Requirements Continued

- 1) Notice of Funding Opportunities authorized by Section 318 of the Public Health Service Act.
 - PS18-1802: Integrated HIV Surveillance Prevention Programs for Health Departments
 - PS19-1901: Strengthening STD Prevention and Control for Health Departments
 - PS-20-2010: Ending the HIV Epidemic
 - PS-21-2103: Integrated Viral Hepatitis Surveillance and Prevention Funding for Health Departments

- 2) Covered entities must have a financial relationship with a qualifying section 318 program that is eligible for 340B
 - 1) Financial relationship of some kind
 - In-kind contributions
 - Direct financial support
 - No minimum amount is specified (there is leeway here)

Eligibility Requirements Continued

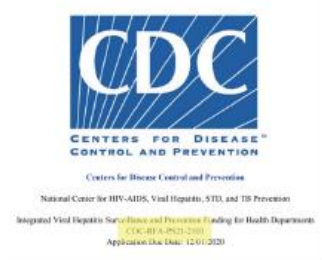
Eligibility: Who Qualifies?



National
Family Planning
& Reproductive Health Association

VHP Eligibility

- PS21-2103 Integrated Viral Hepatitis Funding for Health Departments
- This grant makes VHP a covered entity
- VHP can confer eligibility to another agency (DOC)



CDC
CENTERS FOR DISEASE
CONTROL AND PREVENTION
Centers for Disease Control and Prevention
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Integrated Viral Hepatitis Surveillance and Prevention Funding for Health Departments
CDC-RFA-PS21-2103
Application Due Date: 12/31/2020

b. Statutory Authorities
This program is authorized under Section 318 of the Public Health Service Act (42 U.S.C Section 247(c), as amended).

The statutory language under **Section 318** of the PHS Act (42 U.S.C. Sections 247c) provides CDC with the opportunity to provide project grants to the States and, in consultation with the State Health Authority, political subdivisions for,

1. Sexually transmitted diseases surveillance activities, including the reporting, screening, and follow-up of diagnostic tests for, and diagnosed cases of, sexually transmitted diseases;
2. Case finding and case follow-up activities regarding sexually transmitted diseases, including contact tracing of infectious case of sexually transmitted diseases and routine testing, including laboratory tests and follow-up systems;
3. Interstate epidemiologic referral and follow-up activities regarding sexually transmitted diseases; and,
4. Special studies or demonstrations to evaluate or test sexually transmitted disease prevention and control strategies and activities as may be prescribed by the Secretary.

As such this statutory language applies to viral hepatitis given the hepatitis B virus is transmitted when blood, semen, or another body fluid from a person infected with the virus enters the body of someone who is not infected. Although infrequent, hepatitis C can also spread through sex with an HCV infected person.

D. Agency Notice of Funding Opportunity Number:
CDC-RFA-PS21-2103

E. Assistance Listings (CFDA) Number:
93.270

Kentucky's 340B Partnership

- 🛡️ After educational/informational meetings, engaged in discussions
- 🛡️ DOC very interested in increasing number of incarcerated individuals treated
- 🛡️ MOU written
 - Approved by DOC legal team
 - Last stages of KDPH approval
- 🛡️ Participating Locations: 14 adult institutions
- 🛡️ October 2023-DOC registered all 14 facilities with Office of Pharmacy Affairs
- 🛡️ Eligibility began 1/1/2024

Examples:

340B Department of Corrections and Department of Health Partnerships

1. Alaska

In-Kind: bicillin to treatment syphilis, DIS and partner services, CDC treatment recommendations education and guidance, educational services to both medical staff and inmates on STD/HIV prevention. TA on 340B

2. Arizona

Direct Funding

In-kind: Testing support

3. California

In-Kind: condoms

4. Indiana

In-Kind: Data sharing and enhanced HCV surveillance, prevention, and education within the IDOC system

5. Iowa

In-Kind: STD test kits

6. Louisiana

In-Kind: HIV/syphilis/HCV testing support

Annual Hepatitis C Screening Questionnaire:

1. Do you want to be tested for Hepatitis C?

Yes No Decline to answer

2. Have you had possible exposure to someone else's blood which could occur through sex, tattoos or piercing, injection of drugs or other circumstances?

Yes No Decline to answer

3. Have you ever been diagnosed with a sexually transmitted infection (STI)?

Yes No Decline to answer

If the individual answers YES to one or more questions, the individual may need further testing and treatment.

Kentucky In-Kind Contributions

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graph TD; A[Kentucky In-Kind Contributions] --> B[Enhanced Surveillance]; A --> C[Educational Support]
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Enhanced
Surveillance

Educational
Support

Enhanced Surveillance for Incarcerated Populations

Epidemiology

Clearance Cascade

Chronic Surveillance Tool

Micro-elimination Monitoring

Outbreak

Rapid Detection

Prompt Response

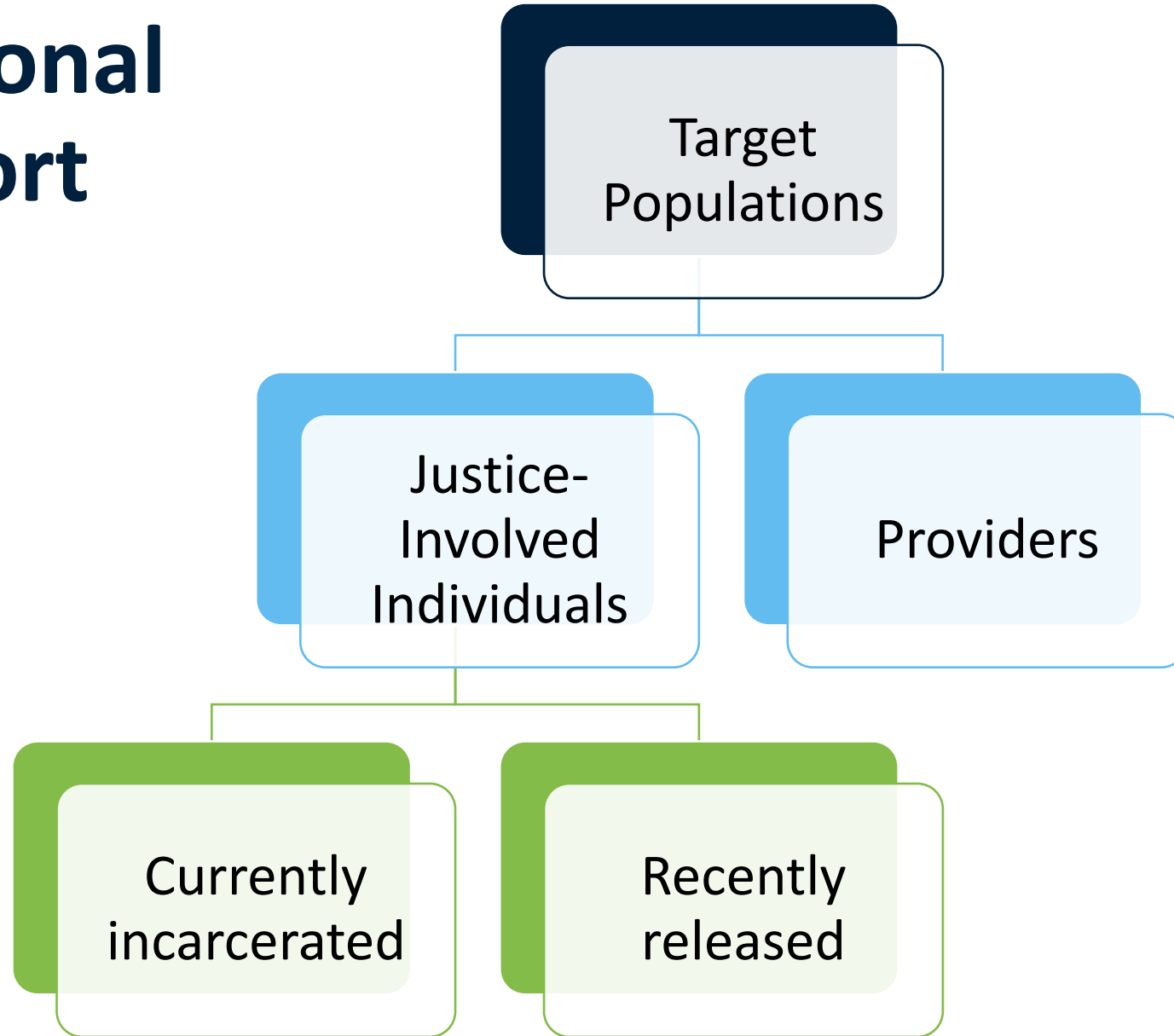
Regular Surveillance Meetings

Share Data Analysis

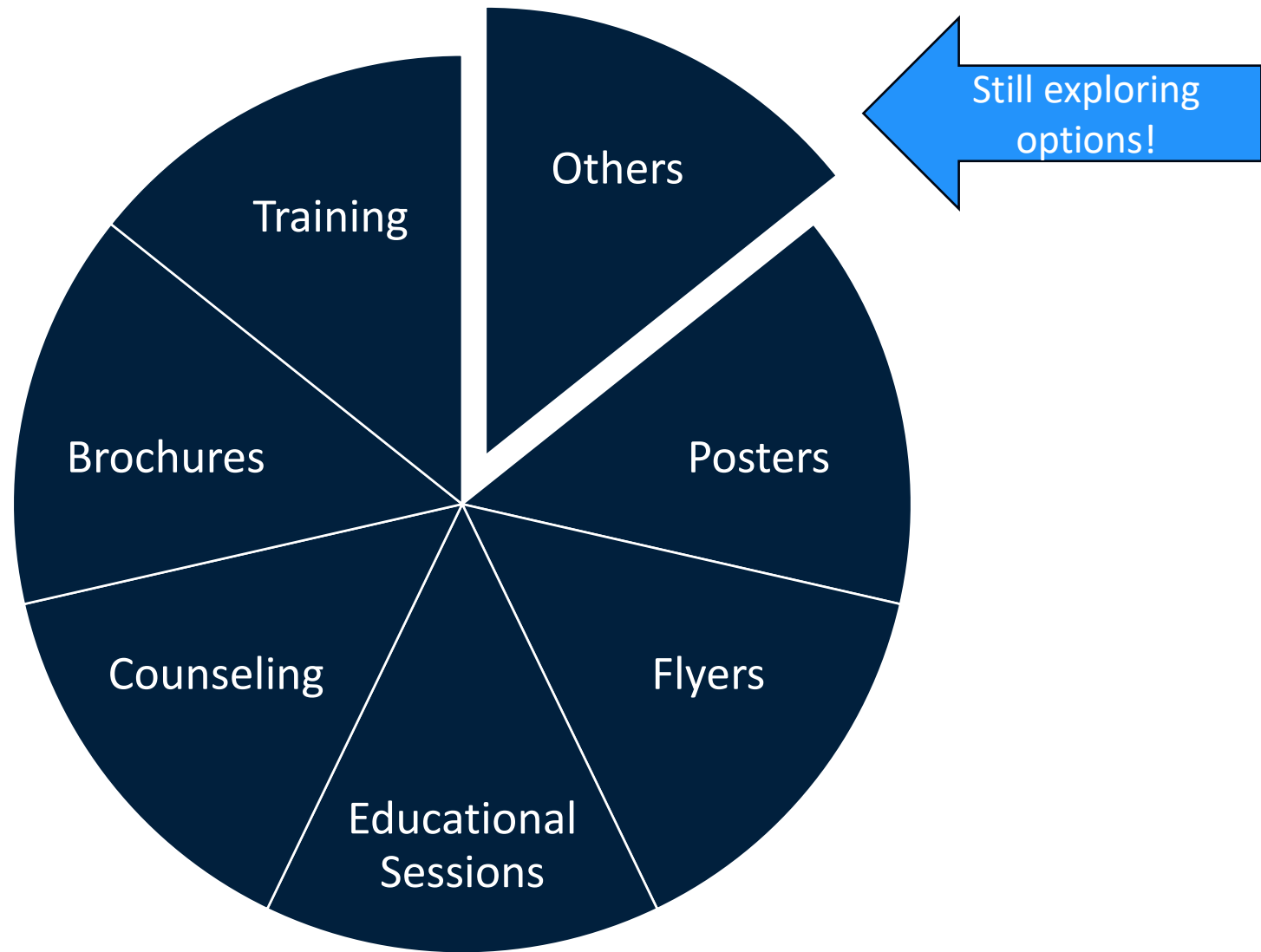
Troubleshoot challenges

Provide recommendations

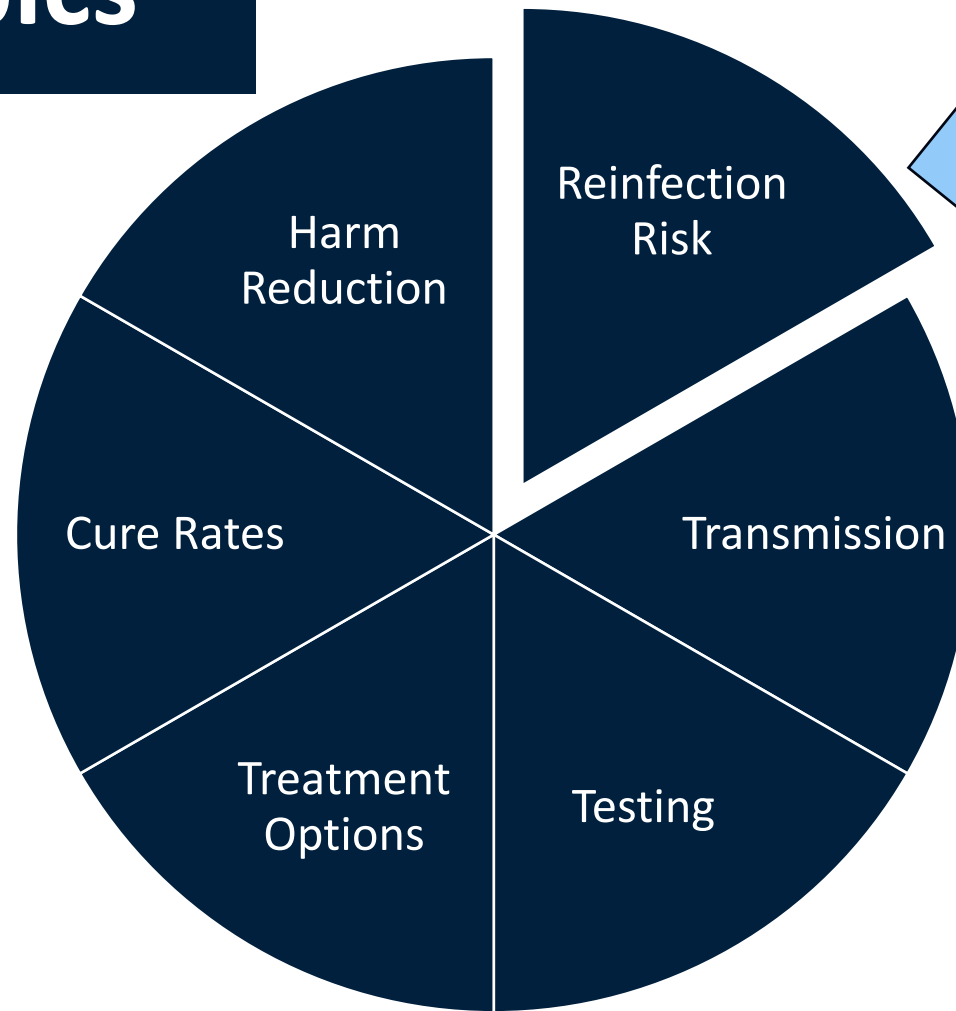
Educational Support



Educational Resources



Education Topics



Major reason for education:
Retreatment will be unlikely

Educational Resources



Currently Incarcerated

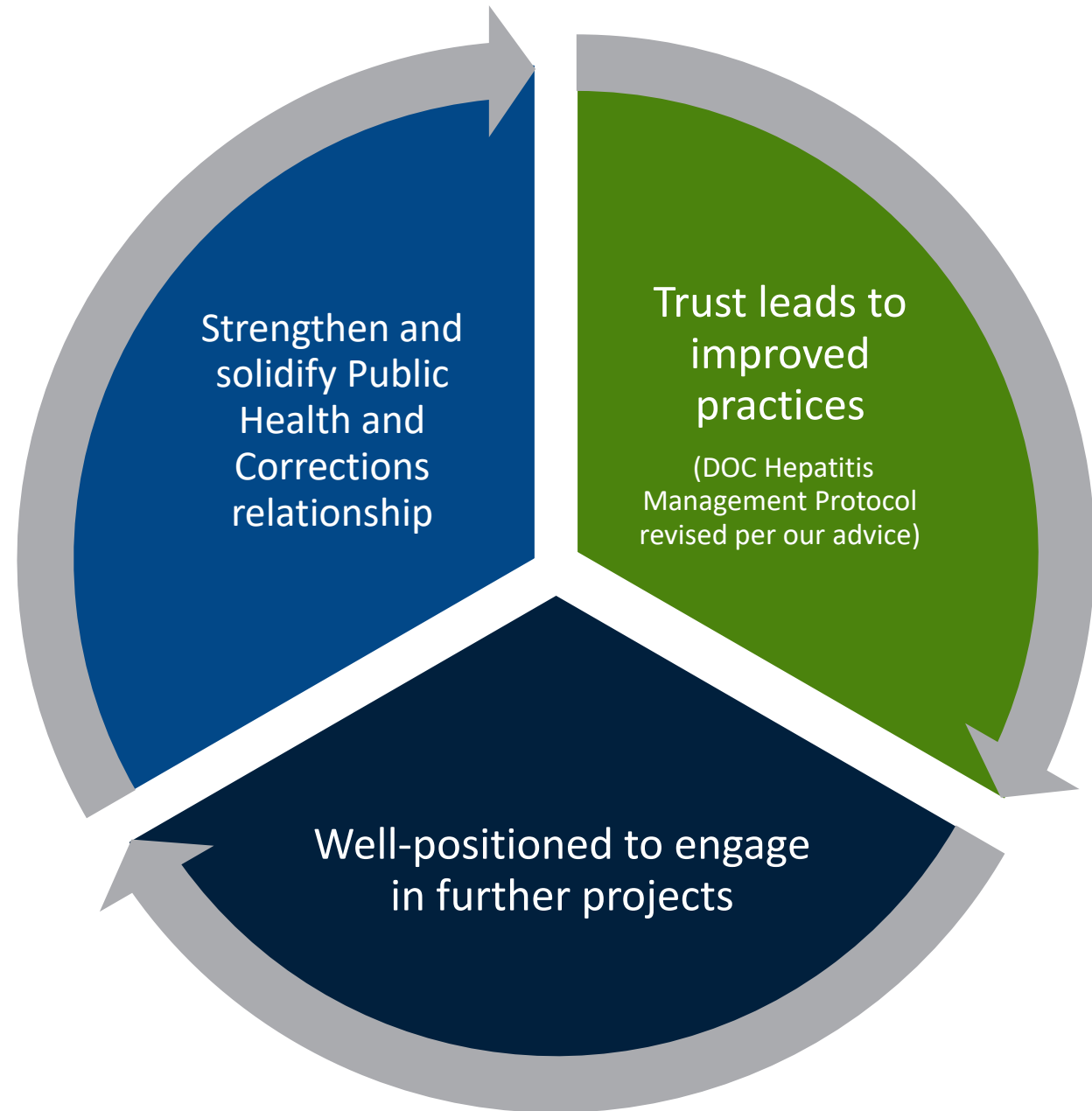
- We are in contact with several entities to develop materials that are specifically geared towards incarcerated populations
- Work towards Peer Health Education Programming



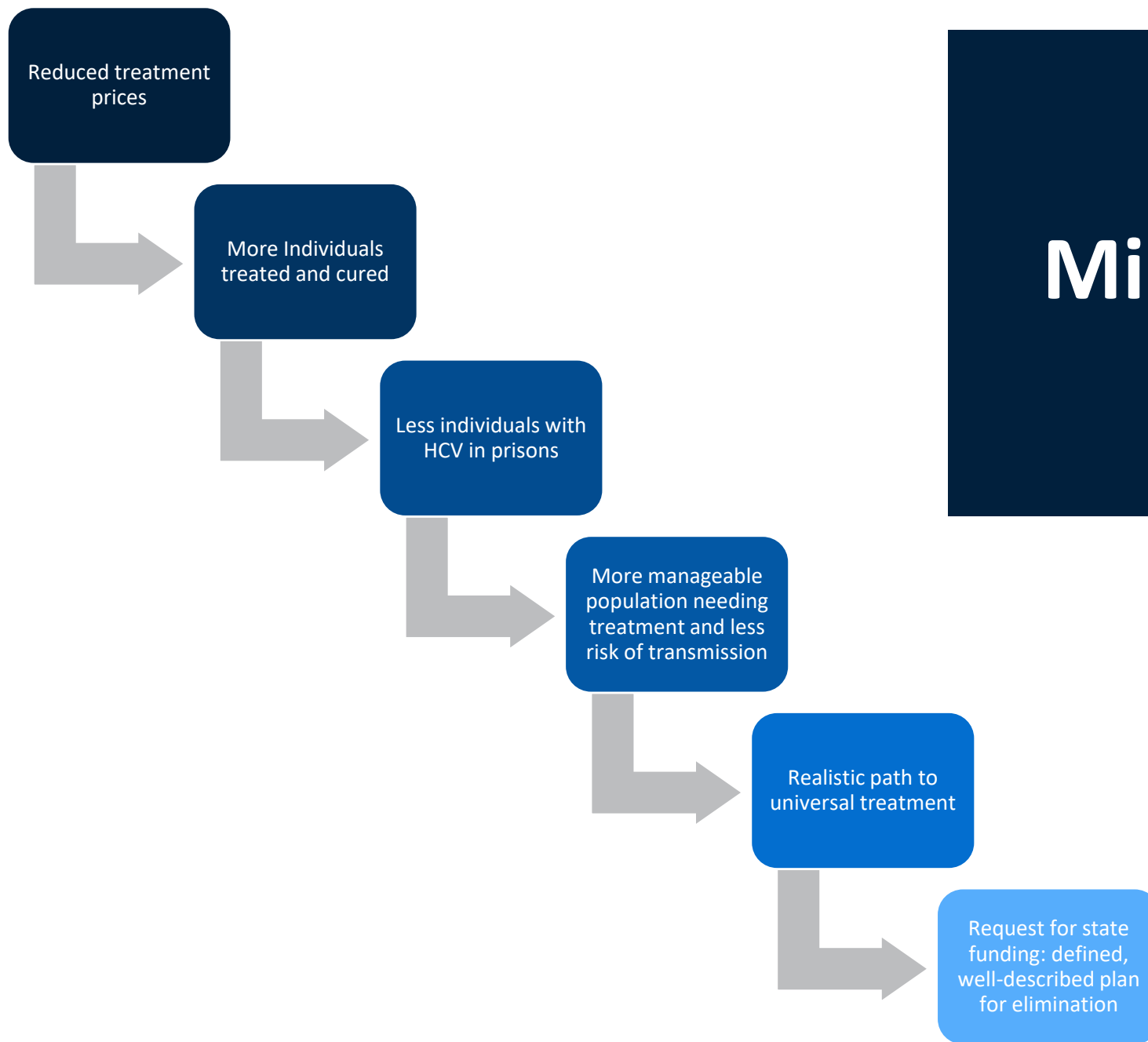
Recently Released

- Educational packets upon release
- Testing and treatment options (if not already done); reinfection prevention, harm reduction practices/resources

Value of Partnership



Prison Micro-Elimination Potential



Next Steps



Jails

- Quicker turnover makes testing & treating difficult, but not impossible
- Tremendous work (education, testing, linkage) already being done by LHD/SSP, community organizations, academic partnerships



One Option: Individual 340B partnerships - jail and FQHC or other local clinic

KDPH Viral Hepatitis Program

KY HCV Elimination Plan



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KDPH Viral Hepatitis Program Website:

[Viral Hepatitis Program - Cabinet for Health and Family Services \(ky.gov\)](https://chfs.ky.gov/agencies/dph/dehp/idb/Pages/vhp.aspx)
<https://chfs.ky.gov/agencies/dph/dehp/idb/Pages/vhp.aspx>

Kentucky Hepatitis C Elimination Plan: [HepatitisCEliminationPlan.pdf \(ky.gov\)](https://chfs.ky.gov/agencies/dph/dehp/idb/Documents/HepatitisCEliminationPlan.pdf)
<https://chfs.ky.gov/agencies/dph/dehp/idb/Documents/HepatitisCEliminationPlan.pdf>

Resources

-  340B Drug Pricing Program Guidance for Viral Hepatitis Programs: Addressing health equity by expanding treatment access and improving services [PDF-340B-Drug-Pricing-Viral-Hepatitis-042022.pdf \(nastad.org\)](https://www.nastad.org/files/2022/04/PDF-340B-Drug-Pricing-Viral-Hepatitis-042022.pdf)
-  A Syndemic Approach to STD 340B Correctional Facility Partnerships for Health Department Prevention Programs [PDF-340B-Syndemic-Approach-Fact-Sheet.pdf \(nastad.org\)](https://www.nastad.org/files/2022/04/PDF-340B-Syndemic-Approach-Fact-Sheet.pdf)
-  [Demystifying 340B: What Providers Need to Know \(chicago.gov\)](https://www.chicago.gov/city/en/depts/dph/special_sections/340B/Demystifying_340B_What_Providers_Need_to_Know.pdf)

References

- Weinbaum C, Lyerla R, Margolis HS; Centers for Disease Control and Prevention. Prevention and control of infections with hepatitis viruses in correctional settings. Centers for Disease Control and Prevention. MMWR Recomm Rep. 2003 Jan 24;52(RR-1):1-36; quiz CE1-4. Erratum in: MMWR Recomm Rep. 2003 Mar 14;52(10):205-14. PMID: 12562146.
- Varan AK, Mercer DW, Stein MS, Spaulding AC. Hepatitis C seroprevalence among prison inmates since 2001: still high but declining. Public Health Rep. 2014 Mar-Apr;129(2):187-95. doi: 10.1177/003335491412900213. PMID: 24587554; PMCID: PMC3904899.
- Edlin BR, Eckhardt BJ, Shu MA, Holmberg SD, Swan T. Toward a more accurate estimate of the prevalence of hepatitis C in the United States. Hepatology. 2015 Nov;62(5):1353-63. doi: 10.1002/hep.27978. Epub 2015 Aug 25. PMID: 26171595; PMCID: PMC4751870.
- He T, Li K, Roberts MS, Spaulding AC, Ayer T, Grefenstette JJ, Chhatwal J. Prevention of Hepatitis C by Screening and Treatment in U.S. Prisons. Ann Intern Med. 2016 Jan 19;164(2):84-92. doi: 10.7326/M15-0617. Epub 2015 Nov 24. PMID: 26595252; PMCID: PMC4854298.
- Spaulding AC, Adey MG, Lawrence RT, Chhatwal J, von Oehsen W. Five Questions Concerning Managing Hepatitis C in the Justice System: Finding Practical Solutions for Hepatitis C Virus Elimination. Infect Dis Clin North Am. 2018 Jun;32(2):323-345. doi: 10.1016/j.idc.2018.02.014. PMID: 29778259.
- Denniston MM, Jiles RB, Drobeniuc J, Klevens RM, Ward JW, McQuillan GM, Holmberg SD. Chronic hepatitis C virus infection in the United States, National Health and Nutrition Examination Survey 2003 to 2010. Ann Intern Med. 2014 Mar 4;160(5):293-300. doi: 10.7326/M13-1133. PMID: 24737271; PMCID: PMC4562398.
- Akiyama MJ, Kronfli N, Cabezas J, Sheehan Y, Thurairajah PH, Lines R, Lloyd AR; International Network on Health and Hepatitis in Substance Users—Prisons Network. Hepatitis C elimination among people incarcerated in prisons: challenges and recommendations for action within a health systems framework. Lancet Gastroenterol Hepatol. 2021 May;6(5):391-400. doi: 10.1016/S2468-1253(20)30365-4. PMID: 33857445; PMCID: PMC8118192.
- Jordan AE, Perlman DC, Cleland CM, Wyka K, Schackman BR, Nash D. Community viral load and hepatitis C virus infection: Community viral load measures to aid public health treatment efforts and program evaluation. J Clin Virol. 2020 Mar;124:104285. doi: 10.1016/j.jcv.2020.104285. Epub 2020 Jan 27. PMID: 32007842; PMCID: PMC7195813.
- [Reentry Trends in the United States \(ojp.gov\)](https://bjs.ojp.gov/content/pub/pdf/reentry.pdf) <https://bjs.ojp.gov/content/pub/pdf/reentry.pdf>