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BIGG ELIMINATION TRIBUTE PROJECT | MODULE 1

Building Provider Capacity for HCV Prevention Program Integration

Prevention & Education - Undx



Introductions

- Caring Ambassadors Program
- Jill Wolf, LCSW - Hepatitis C Program Director
- Co-created with Chicago Recovery Alliance (CRA) and adapted from a training conducted in October 2019



We are grateful to Abbvie and Gilead for their support of this training and education program. We are also thankful to the Chicago Department of Public Health by way of the Centers for Disease Control for supporting us with seed money that contributed to the initial curriculum development.

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In honor of Dan Bigg

- Executive Director of Chicago Recovery Alliance for 25 years
- Created system for Syringe Service Program access and Naloxone Distribution
- Awarded The Norman E. Zinberg Award for Achievement in the Field of Medicine
- Fierce HCV Elimination Advocate
- Awarded 2017 Chicagoan of the Year
- Known as the 'Godfather of Naloxone'



Photo Credit: Nigel Brunsdon



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Overall Project Goal

To build the capacity, confidence, and knowledge to integrate responsive hepatitis C (HCV) screening, testing, linkage-to-care/cure, and support programs into existing infrastructures.



Modules

Module 1 - Prevention & Education



Module 2 - Screening & Testing



Module 3 - Vaccination



Module 4 - Staging



Module 5 - Treatment



Module 6 - Cure

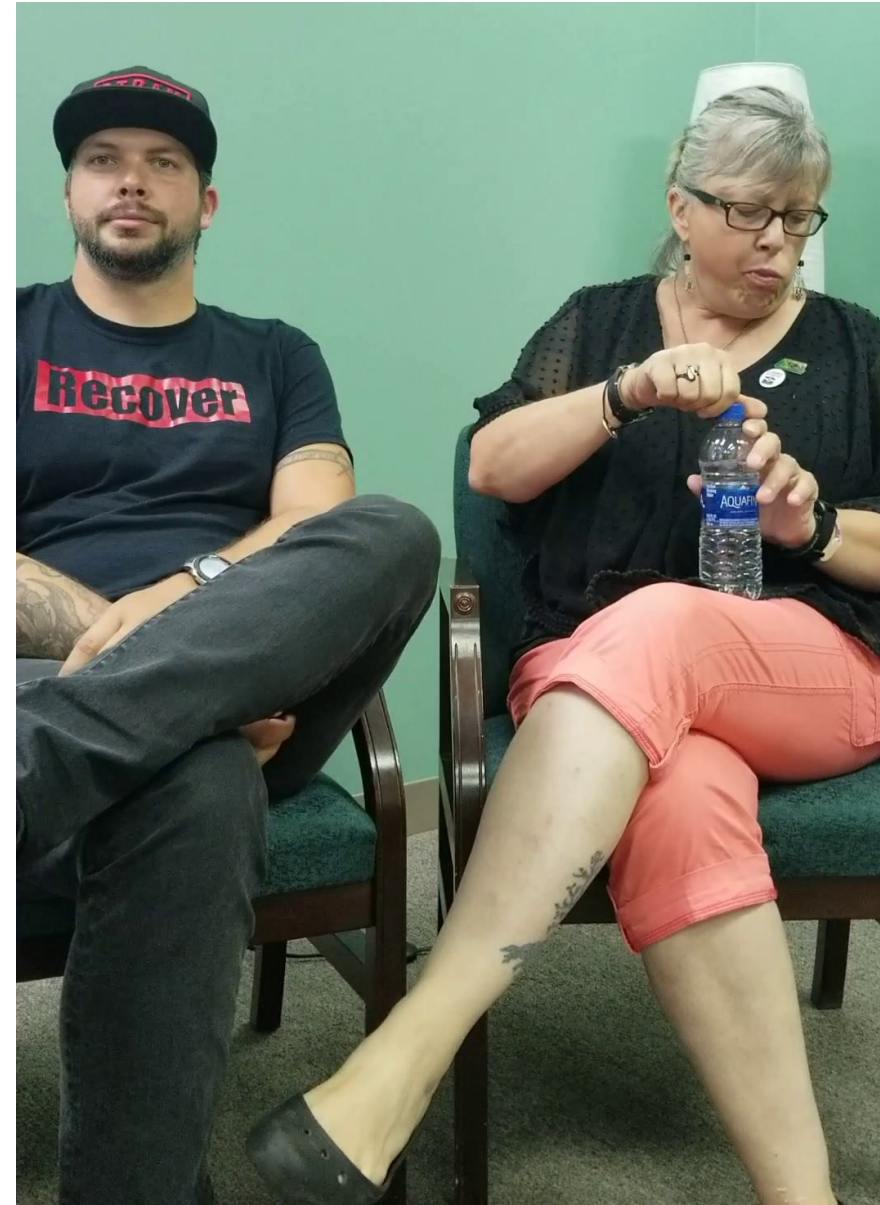


Module 7 - Wellness & Support



Nothing about us without us

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HCV Prevention & Education

The purpose of this module is to establish a replicable framework for HCV prevention and education programs including risk/harm reduction strategies



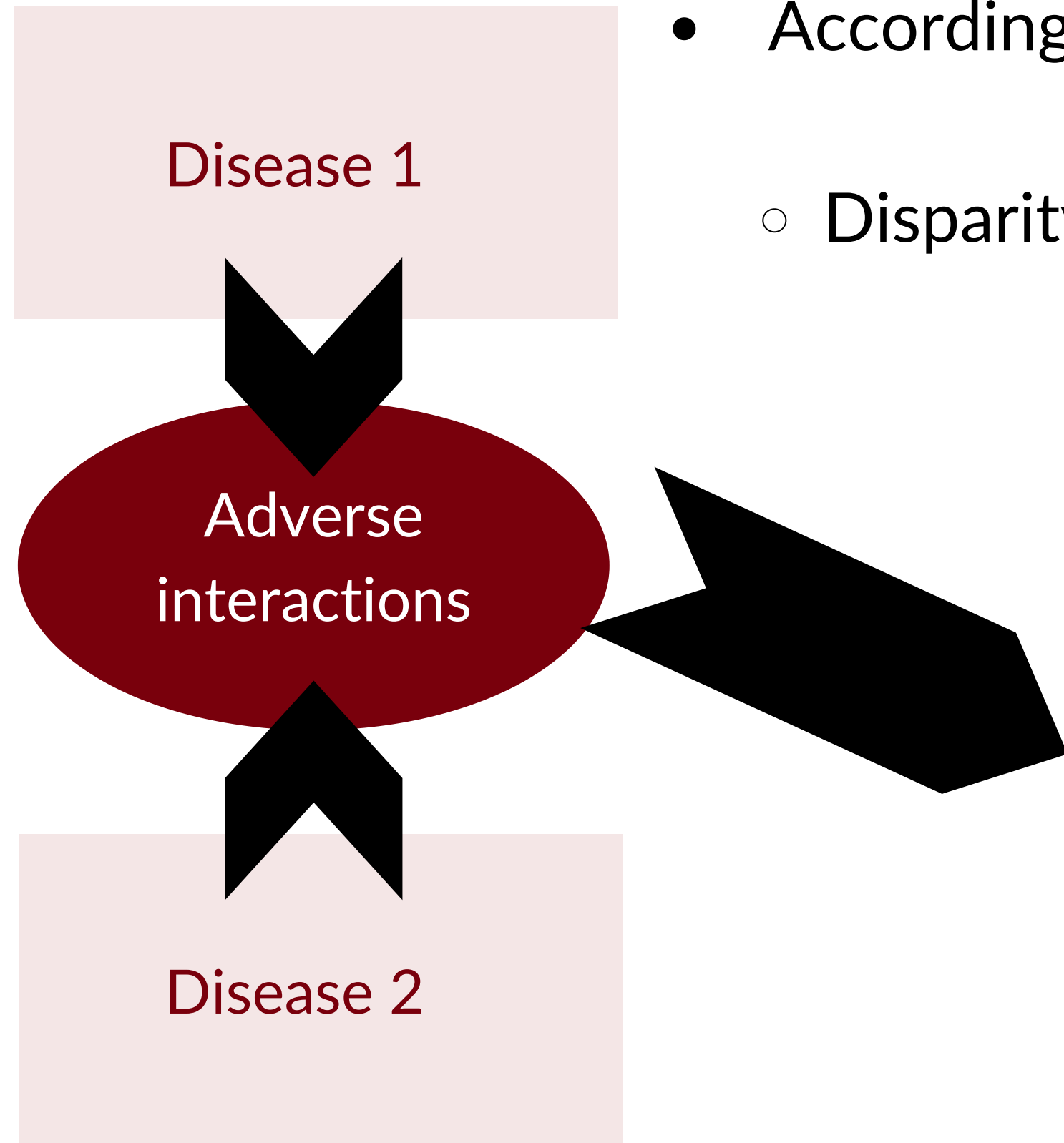
Prevention & Education Objectives

Participants will be able to:

- Define 'syndemic' and its relationship to HCV and opioids
- Interpret the similarities & differences between hepatitis A, B, C, and HIV
- Describe the impact of HCV including mortality, prevalence, and surveillance
- Identify opportunities to leverage existing tools, resources, and programs to include HCV prevention services
- Develop an action plan to amend current programs & services to include HCV prevention programming
- List programmatic action steps to address HCV prevention and drug-using behaviors using harm reduction strategies

Prevention & Education - Syndemics

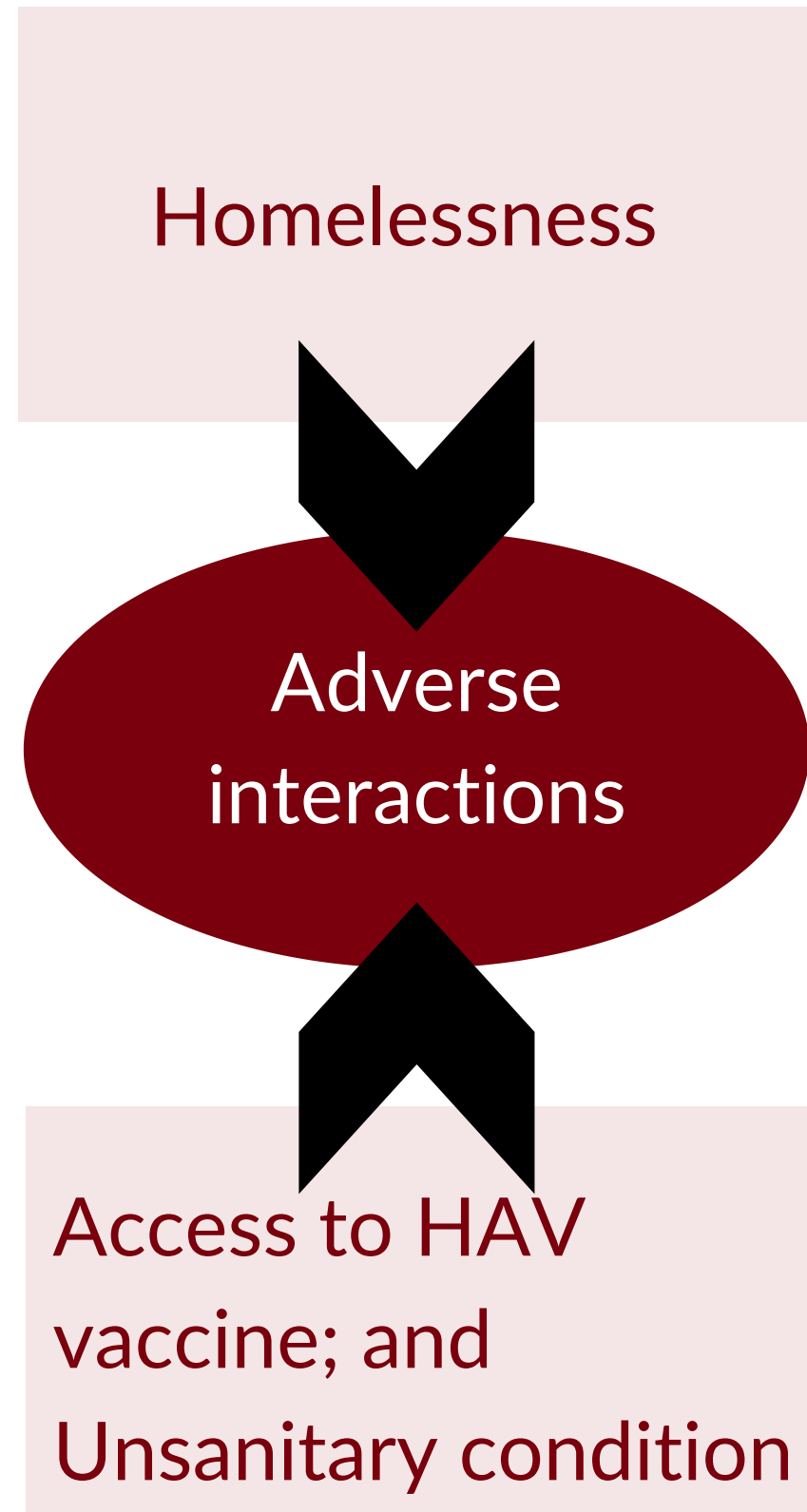
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- According to the CDC, a syndemic is a synergistically interacting epidemic
 - Disparity conditions that promote disease clustering

Prevention & Education - Syndemics Example - HAV

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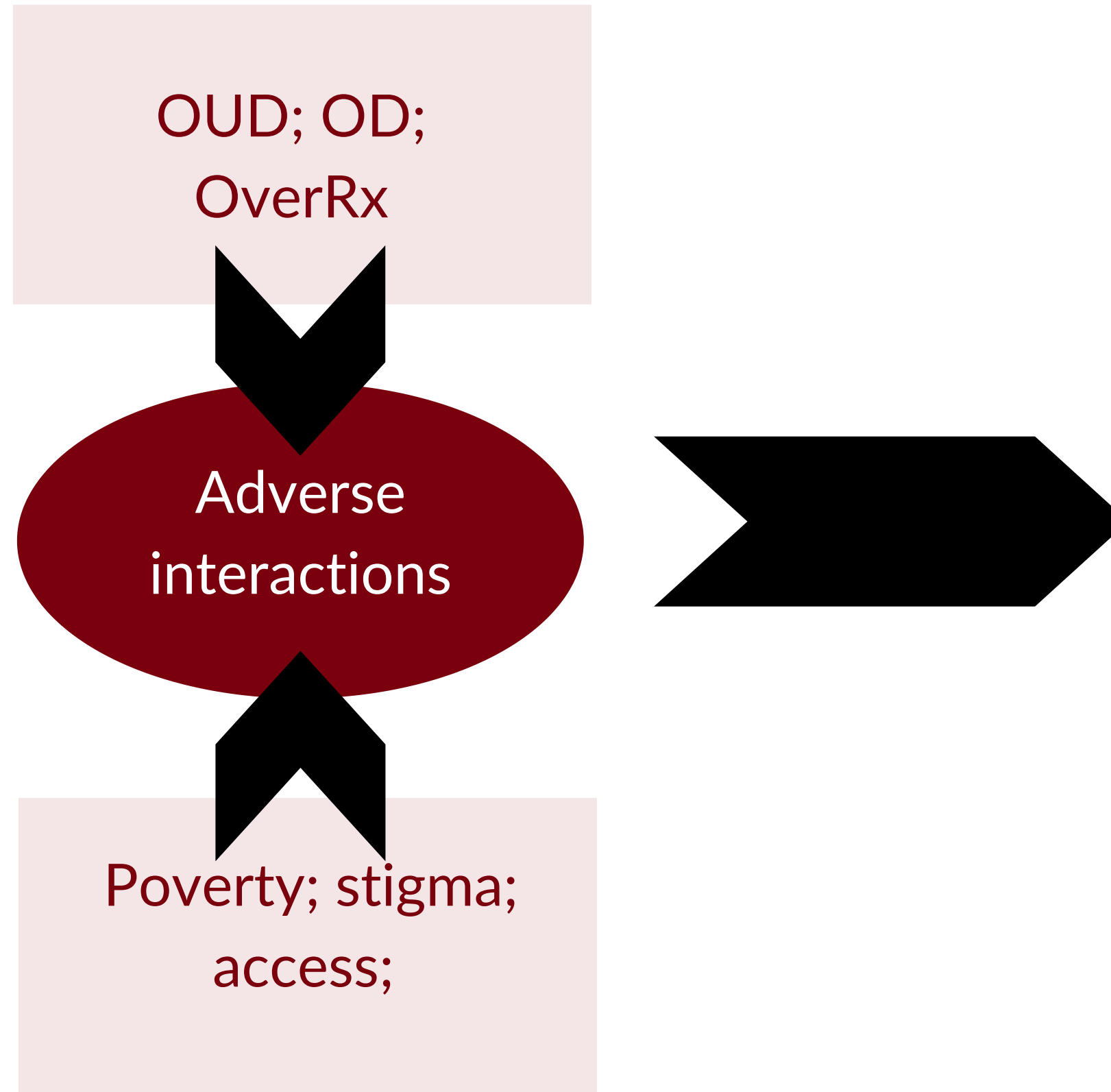


Hepatitis A Outbreak
"The cost of a single HAV outbreak (250 sick people) can be upwards of \$1.9 million - including lost revenue, lawsuits, legal fees, fines, and medical costs

<https://www.bioiq.com/curb-costly-outbreaks-hepatitis-a-vaccination/>

Prevention & Education - Syndemics Example - KY

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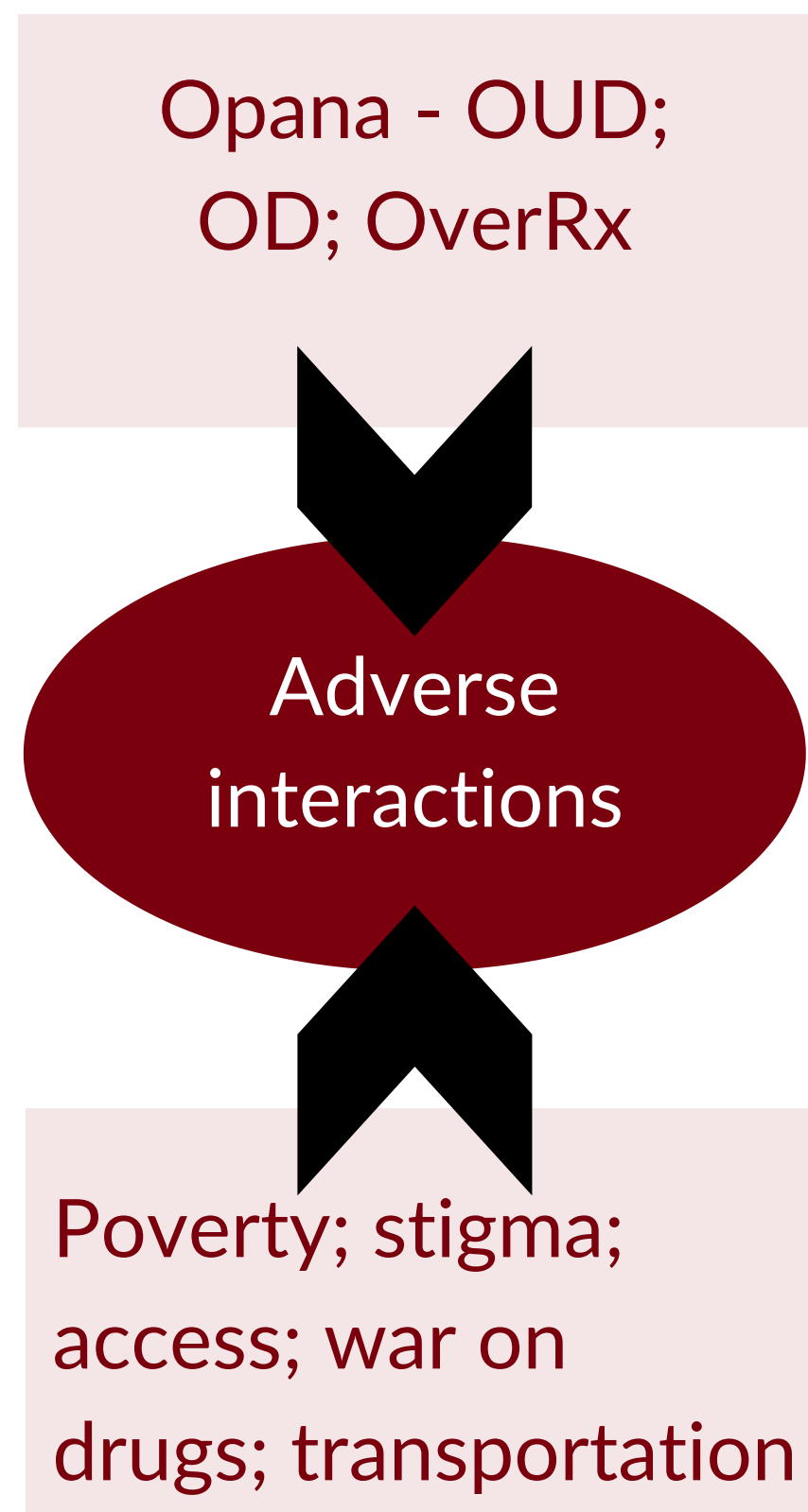
The rise in HCV among women of childbearing age:

- National Stats - 22%
- KY Stats - 213%

The rise in proportion of babies born to women with HCV:

- National Stats - 68%
- KY Stats - 124%

Prevention & Education - Syndemics Example - HIV



Scott County, IN

- 11 confirmed HIV cases sparked an investigation
- Identified 215 HIV+ w/in 4200 person county
- 92% co-infected HIV/HCV
- Indiana spent \$16M+ through August 2015 to stop the outbreak in 1 county!



Hepatitis = liver inflammation

Toxins,
meds,
alcohol

HAV

HBV

HCV

HDV

HEV

HGV



vaccine-preventable

Prevention & Education - Hepatitis ABC's

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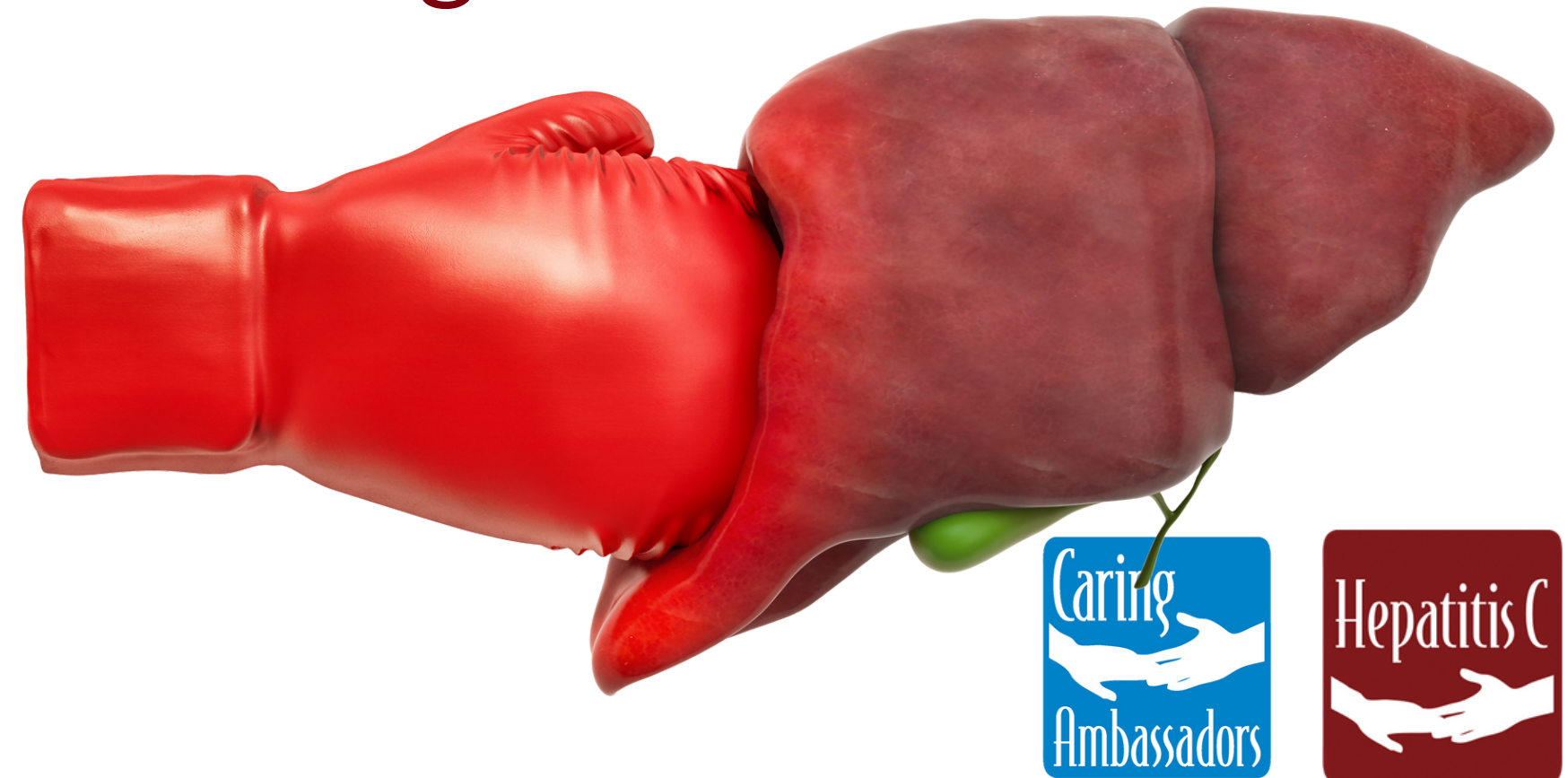
	HAV	HBV	HCV
Transmission	Fecal/Oral	Blood & Body Fluid	Blood
% develop chronic infection	0%	6-10%	75-85%
Immunity after infection?	Yes	Yes	No
Vaccine?	Yes	Yes	No
Cure?	Yes/self-limiting	No	Yes



Prevention & Education - What is hepatitis C?

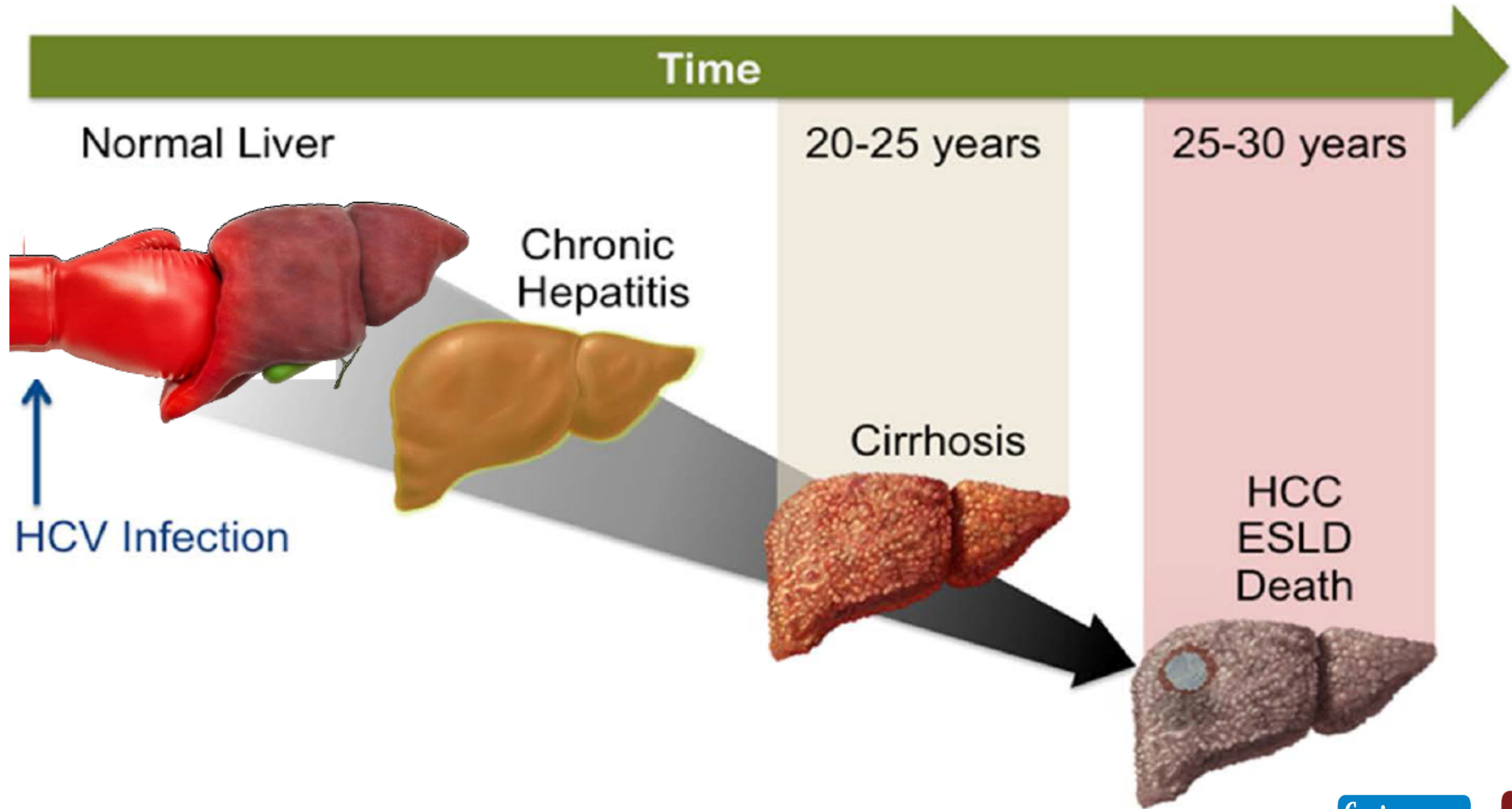
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- A blood-borne virus that affects the liver
- Largest, chronic infectious disease outbreak of our time
- Most don't know they're HCV+; there are few symptoms
- Easy, inexpensive diagnostic tests can identify HCV
- Over time, HCV causes liver damage and cancer
- Liver Cancer is on the rise
- There is a cure for HCV



Prevention & Education - HCV Over Time

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Prevention & Education - Who has HCV?

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Baby Boomers Born between 1945–1965

- Likely living with HCV for decades
- Possibly advanced fibrosis or cirrhosis
- Liver cancer risk - prevention
- Old treatment may not have worked or was REALLY hard
 - May be unaware that current treatment is different
- Was told one of the following things from Dr:
 - You're not sick enough
 - You're not sober enough

Young(er) Folks 18–39 Years Old

- Increased transmission in PWUD
- Impact on women of child-bearing age
- Relationship to opioids/heroin and SUDs
- Provider bias for diagnosis and testing
- Prevention



Prevention & Education - Compare HIV and HCV

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Comparative Viral Dynamic Features of HIV and HCV

Unlike HIV infection, HCV infection can be eradicated

	<u>HIV</u>	<u>HCV</u>
Genome	RNA	RNA
Mutation Rate	Very High	Very High
Virions per day	10 ¹⁰	10 ¹²
Drug Targets	Multiple	Multiple
Genetic Archives	Yes	No
Therapeutic Goal	Lifelong Suppression	Clearance from plasma/liver
Cure	No	Yes

Adapted from Soriano V, et al. J Antimicrob Chemother, 2005; 62:1-4



Prevention & Education - Virulence

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In one drop of blood with HBV, HCV, and HIV

HBV

HCV

HIV

30% chance of
transmission

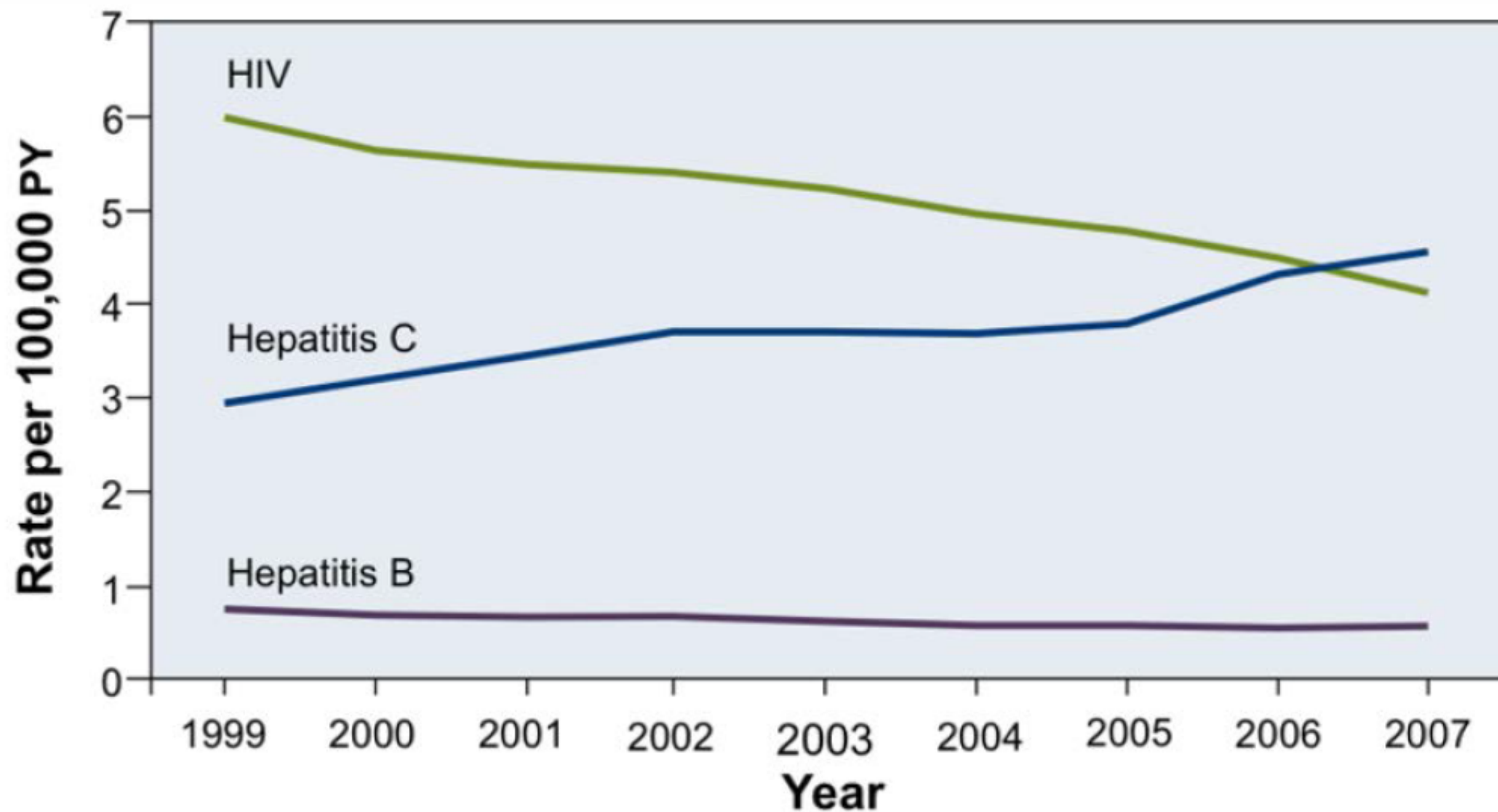
1.8% chance of
transmission

0.03% chance of
transmission

Beltrami, E. et al. Clin Microbiol Rev. 2000 July; 13 (3):385-407

Prevention & Education - Mortality

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*Mortality Rates = HBV, HCV, HIV listed as cause of death
Because of decedent can have multiple causes of death, a record listing more than 1 type of infection was counted for each type of infection

Source: Ly, KN., Xing, J., Levens, RM., Juiles, RB., Ward, JW., Holmberg, SD. The Increasing burden of mortality from viral hepatitis in the US between 1999 and 2007. Ann Intern Med

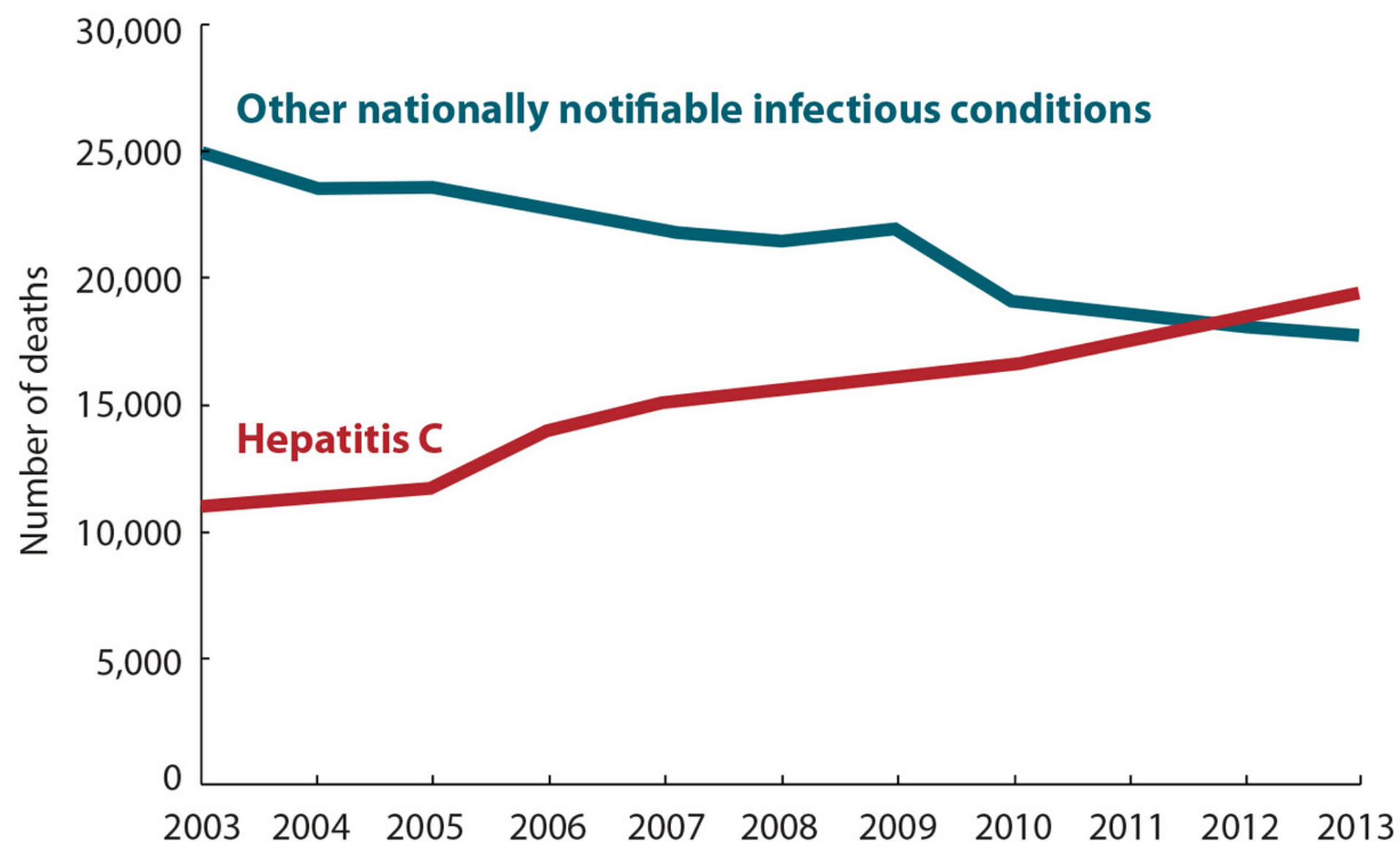
Prevention & Education - 2018 List - Notifiable Cond.

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Anthrax	• <i>Haemophilus influenzae</i> , invasive disease	• Rubella
Arboviral diseases, neuroinvasive and non-neuroinvasive	• Hansen's disease	• Rubella, congenital syndrome
California serogroup virus diseases	• Hantavirus infection, non-Hantavirus pulmonary syndrome	• Salmonellosis
Chikungunya virus disease	• Hantavirus pulmonary syndrome	• Severe acute respiratory syndrome-associated coronavirus disease
Eastern equine encephalitis virus disease	• Hemolytic uremic syndrome, post-diarrheal	• Shiga toxin-producing <i>Escherichia coli</i>
Powassan virus disease	• Hepatitis A, acute	• Shigellosis
St. Louis encephalitis virus disease	• Hepatitis B, acute	• Silicosis
West Nile virus disease	• Hepatitis B, chronic	• Smallpox
Western equine encephalitis virus disease	• Hepatitis B, perinatal virus infection	• Spotted fever rickettsiosis
Babesiosis	• Hepatitis C, acute	• Streptococcal toxic shock syndrome
Botulism	• Hepatitis C, chronic	• Syphilis
Brucellosis	• Hepatitis C, perinatal infection	• Tetanus
Campylobacteriosis	• HIV infection (AIDS has been reclassified as HIV Stage III)	• Toxic shock syndrome (other than streptococcal)
Cancer	• Influenza-associated pediatric mortality	• Trichinellosis
Carbapenemase Producing Carbapenem-Resistant Enterobacteriaceae (CP-CRE)	• Invasive pneumococcal disease	• Tuberculosis
Carbon monoxide poisoning	• Latent TB Infection (TB Infection)	• Tularemia
Chancroid	• Lead, elevated blood levels	• Typhoid fever
<i>Chlamydia trachomatis</i> infection	• Legionellosis	• Vancomycin-intermediate <i>Staphylococcus aureus</i> and Vancomycin-resistant <i>Staphylococcus aureus</i>
Cholera	• Leptospirosis	• Varicella
Coccidioidomycosis	• Listeriosis	• Varicella deaths
Congenital syphilis	• Lyme disease	• Vibriosis
Syphilitic stillbirth	• Malaria	• Viral hemorrhagic fever
Cryptosporidiosis	• Measles	• Crimean-Congo hemorrhagic fever virus
Cyclosporiasis	• Meningococcal disease	• Ebola virus
Dengue virus infections	• Mumps	• Lassa virus
Severe dengue	• Novel influenza A virus infections	• Lujo virus
Diphtheria	• Pertussis	• Marburg virus
Ehrlichiosis and anaplasmosis	• Pesticide-related illness and injury, acute	• New World arenavirus – Guanarito virus
<i>Anaplasma phagocytophilum</i> infection	• Plague	• New World arenavirus – Junin virus
<i>Ehrlichia chaffeensis</i> infection	• Poliomyelitis, paralytic	• New World arenavirus – Machupo virus
<i>Ehrlichia ewingii</i> infection	• Poliovirus infection, nonparalytic	• New World arenavirus – Sabia virus
Undetermined human ehrlichiosis/anaplasmosis	• Psittacosis	• Waterborne Disease Outbreak
Foodborne Disease Outbreak	• Q fever	• Yellow fever
Giardiasis	• Rabies, animal	• Zika virus disease and Zika virus infection
Gonorrhea	• Rabies, human	



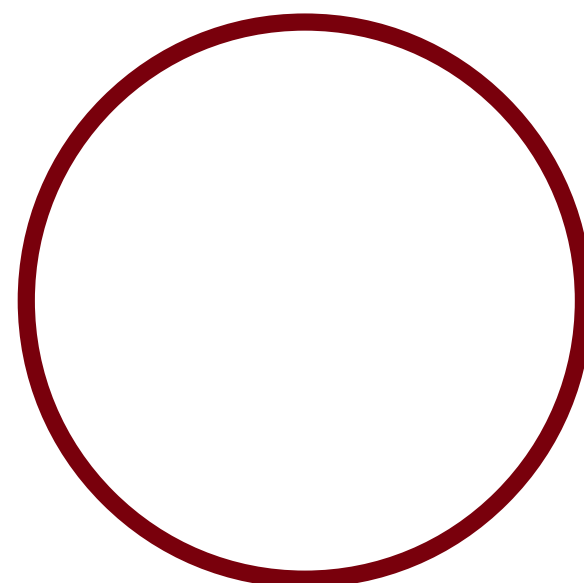
Annual number of hepatitis C-related deaths vs. other nationally notifiable infectious conditions in the US, 2003-2013



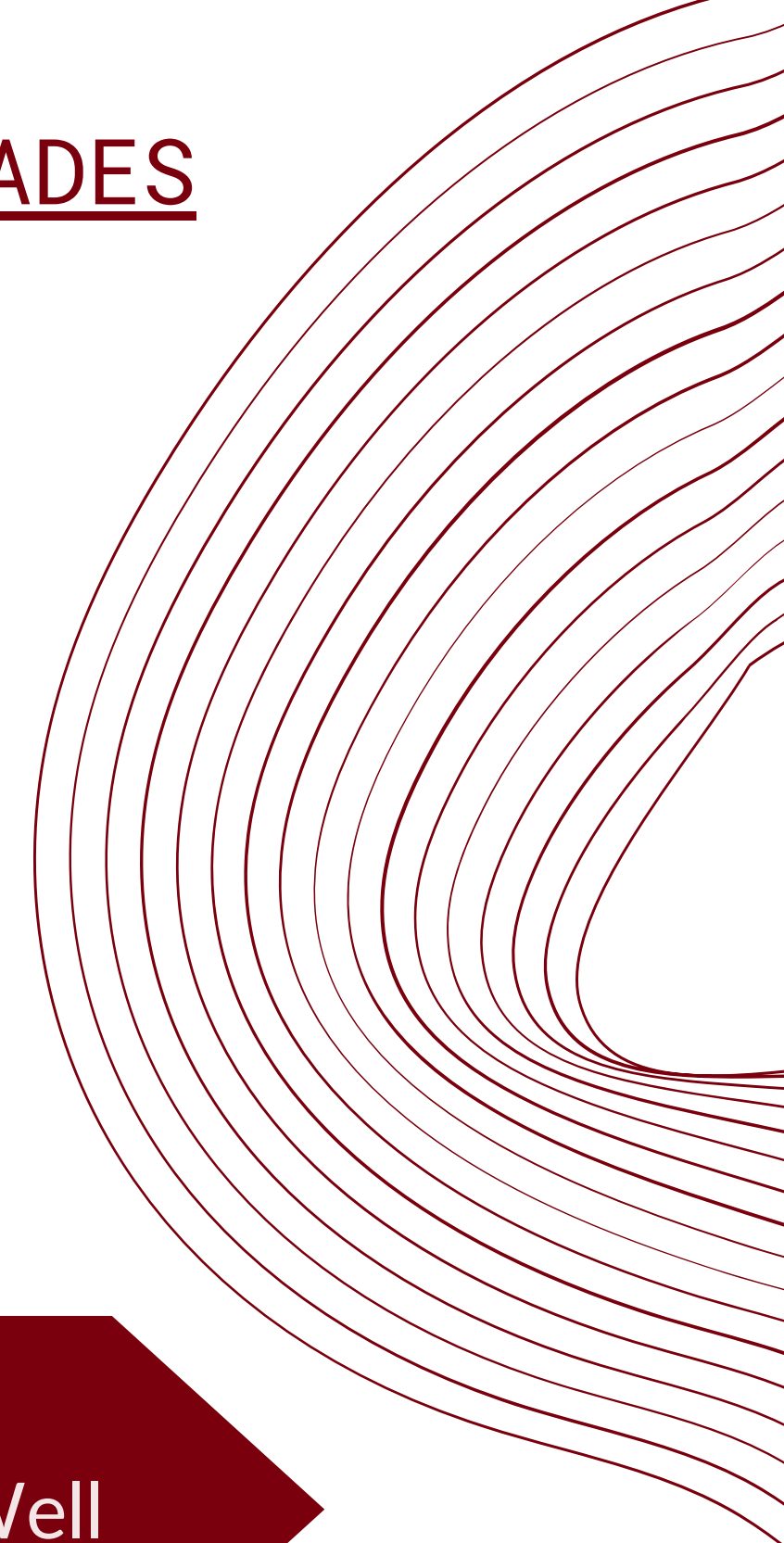
Source: Centers for Disease Control and Prevention

PREVENTION & EDUCATION – CONTINUUM & CASCADES

Continuum vs. Cascades



vs.

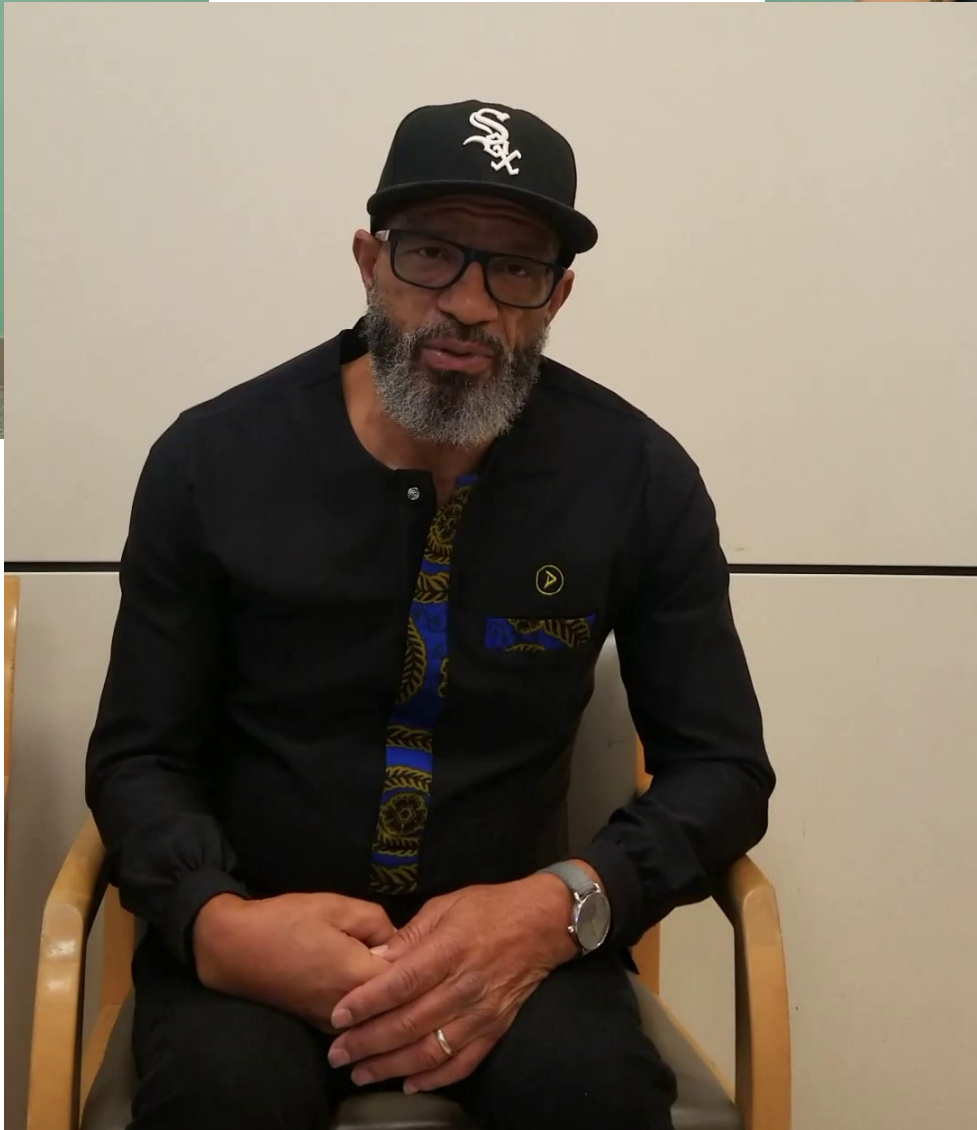


HCV Cure Cascade



PREVENTION & EDUCATION – WHAT IS HARM REDUCTION?

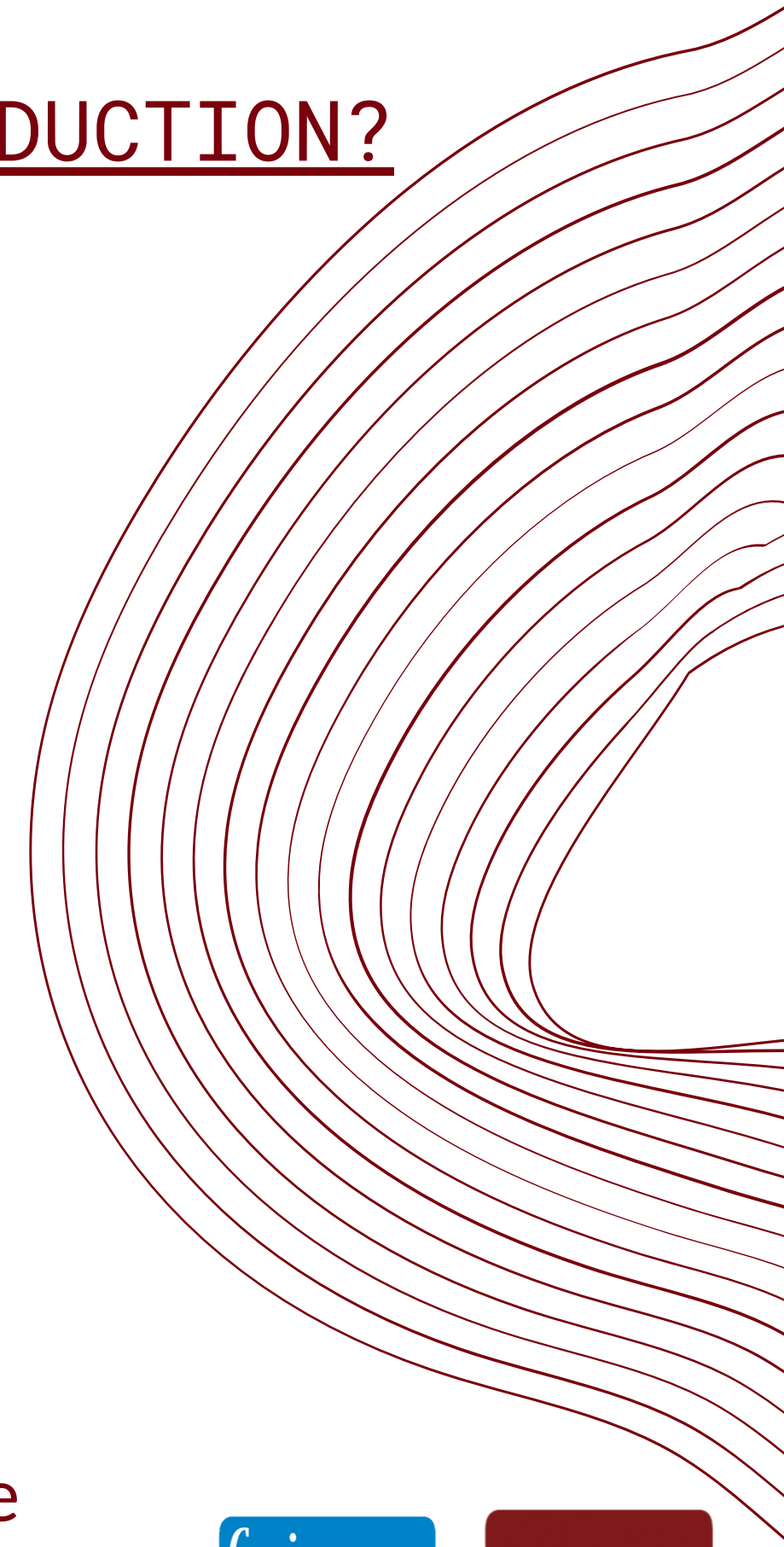
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PREVENTION & EDUCATION – WHAT IS HARM REDUCTION?

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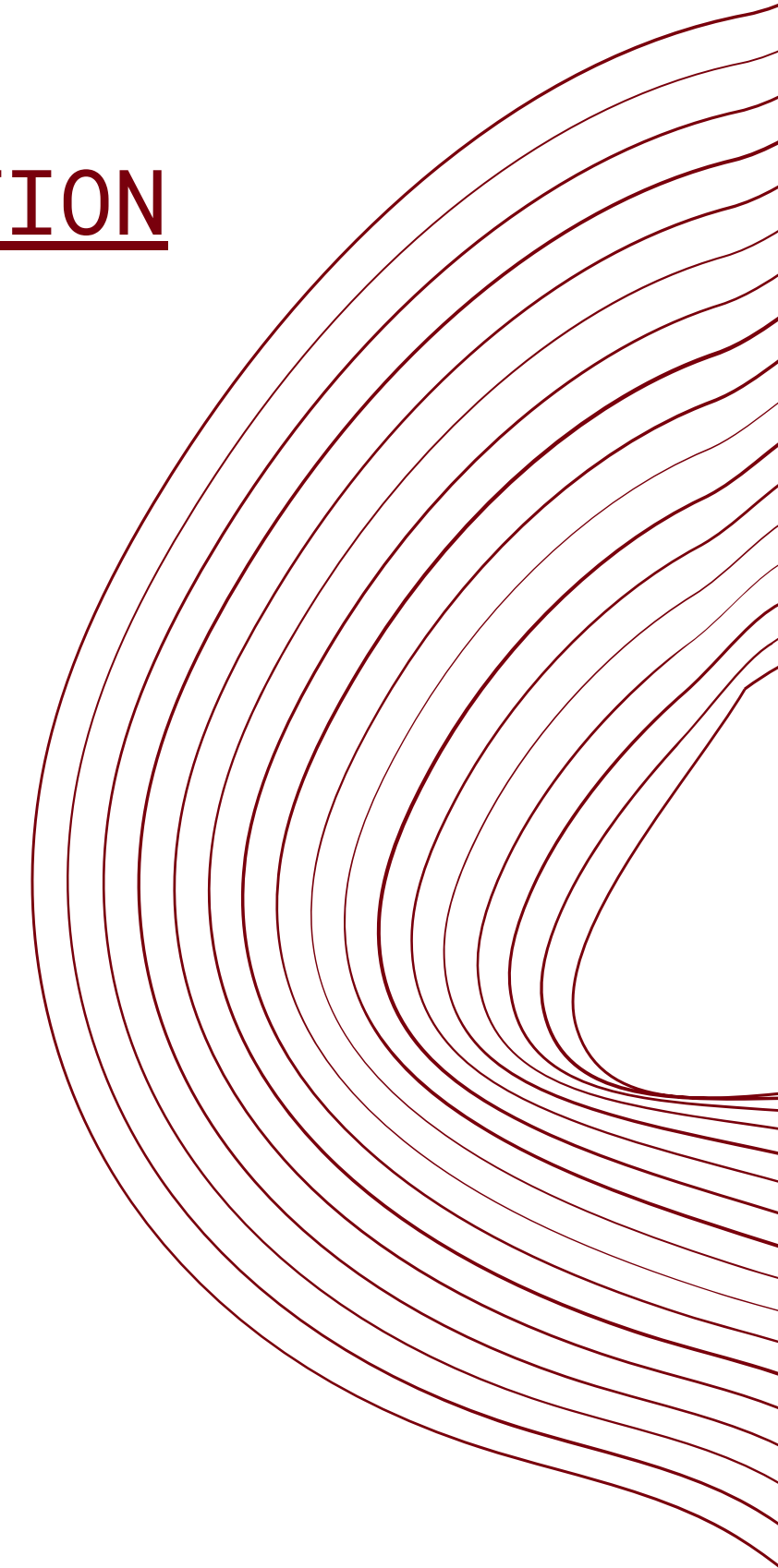
1. Any positive change
2. "Nothing about us without us"
3. Relationship at the center of harm reduction
 - a. Promotes relationship building with trust at the center
 - b. Client's priorities are more important than providers'
 - c. Providers do not dictate care
4. Conscious, 'person-first' language
 - a. non-stigmatizing & non-condemning
 - b. PEOPLE who use drugs; PERSON who once used heroin
5. Education and Empowerment
 - a. Provide information to help people make informed decisions
 - b. People use drugs; help them do so as safely/informed as possible
6. Promotes quality of life & provides a buffet of options



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PREVENTION & EDUCATION – THE LANGUAGE & ESSENCE OF HARM REDUCTION

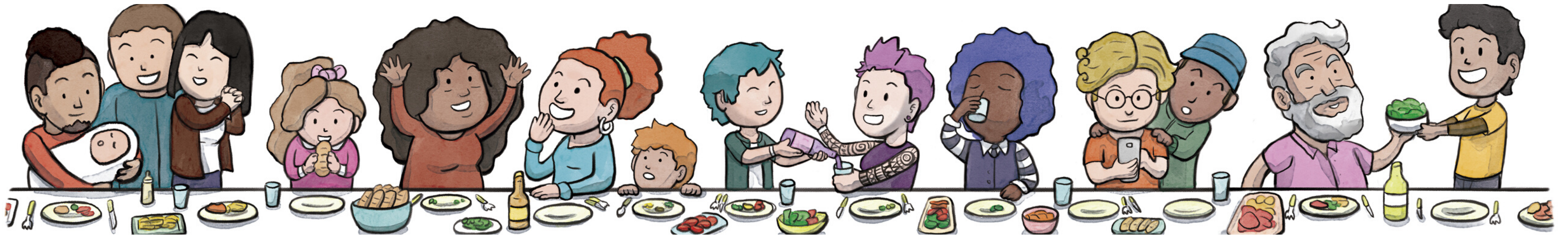
1. Removal or replacement of judgmental, value-based language
 - a. User/Abuser vs. person who uses drugs (PWUD)
 - b. Substance Use Management vs. Substance Use Disorder
 - c. Management vs. Abstinence - 'what does recovery look like for you?'
2. Safe & Safer Practices
3. Positive Reinforcement
 - a. "I am glad you came in today; How can I support you?"
4. Choose your language and avoid assumptions
 - a. use words that people understand
 - b. demonstrations are powerful
 - c. ask people to explain versus assuming you understand
 - d. avoid using 'junkie' when referring to PWUD even though your client may refer to themselves that way



Prevention & Education - Harm Reduction Buffet

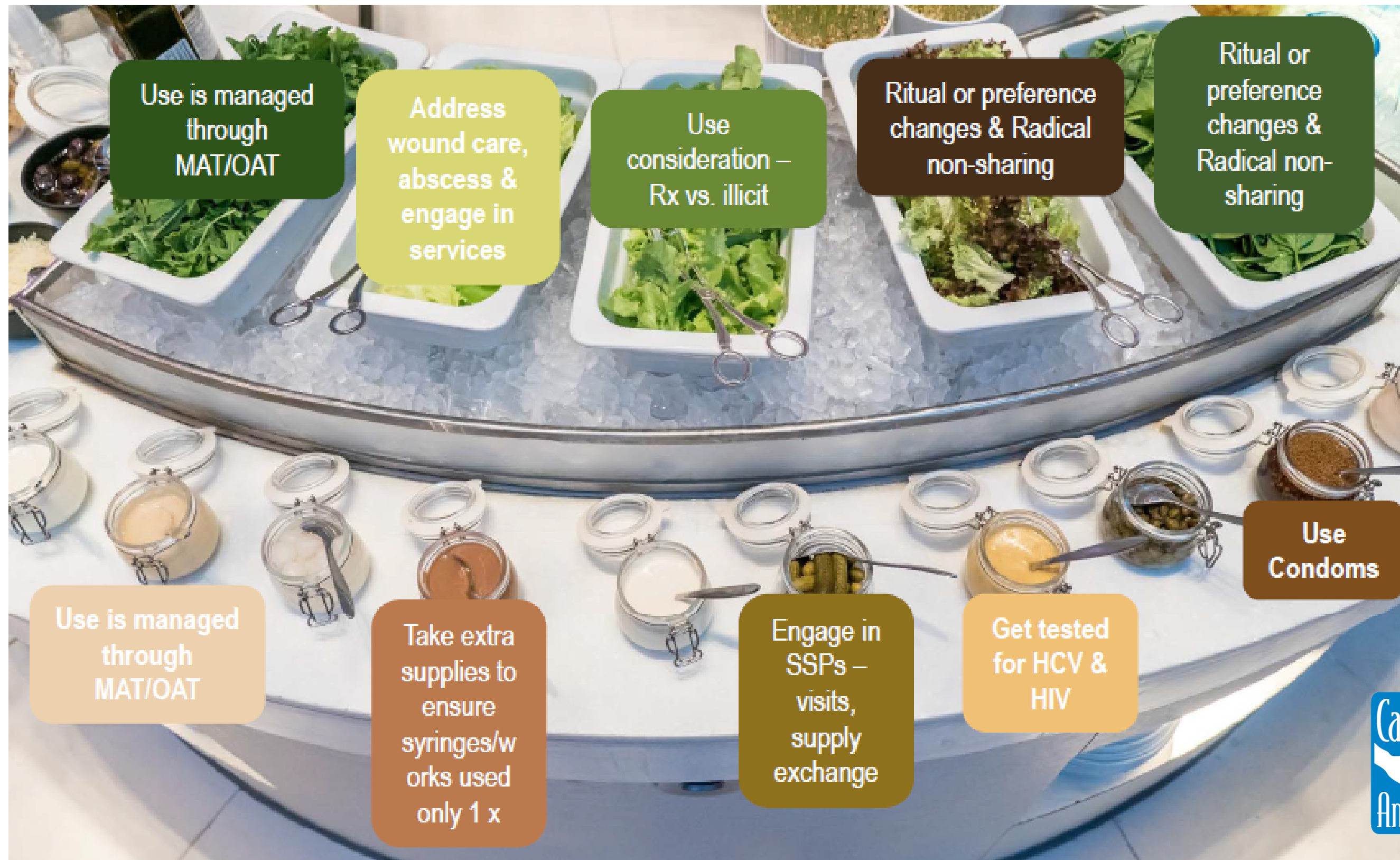
Harm Reduction (HR) uses a 'buffet-style' versus a one-size fits all approach.

'The essence of HR is not to have set of expectations, but to facilitate any number of positive changes in any other order, prioritized by the participant. People choose what they want, and it isn't about progression - just mutual respect, relationship-building, and choice of any positive change.' - Dr. Suzanne Carlberg-Racich



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Prevention & Education - Harm Reduction Buffet



1. Lack Boundaries

- a. Often there is a misconception that harm reduction providers have no boundaries and have an 'anything goes' attitude

2. Harm Reduction encourages drug use

- a. studies show that syringe service programs **do not** increase drug use

3. 'Drug users lie'

- a. System-level failure - we've created systems where PWUD need to lie in order to survive, or risk losing housing, work, family, etc.
- b. Build trust and rapport over time so people can be sure they're not being condemned, judged, or stigmatized

4. MAT/OAT just replaces one drug with another drug

- a. MAT gives a person their life (and brain) back so that they're not constantly working to fill their opioid receptors to avoid withdrawal
- b. is this any different than insulin for a diabetic patient or antidepressants?

PREVENTION & EDUCATION -
TIP 63, EXHIBIT 1.2 - COMPARISONS OF OUD
MEDICATIONS

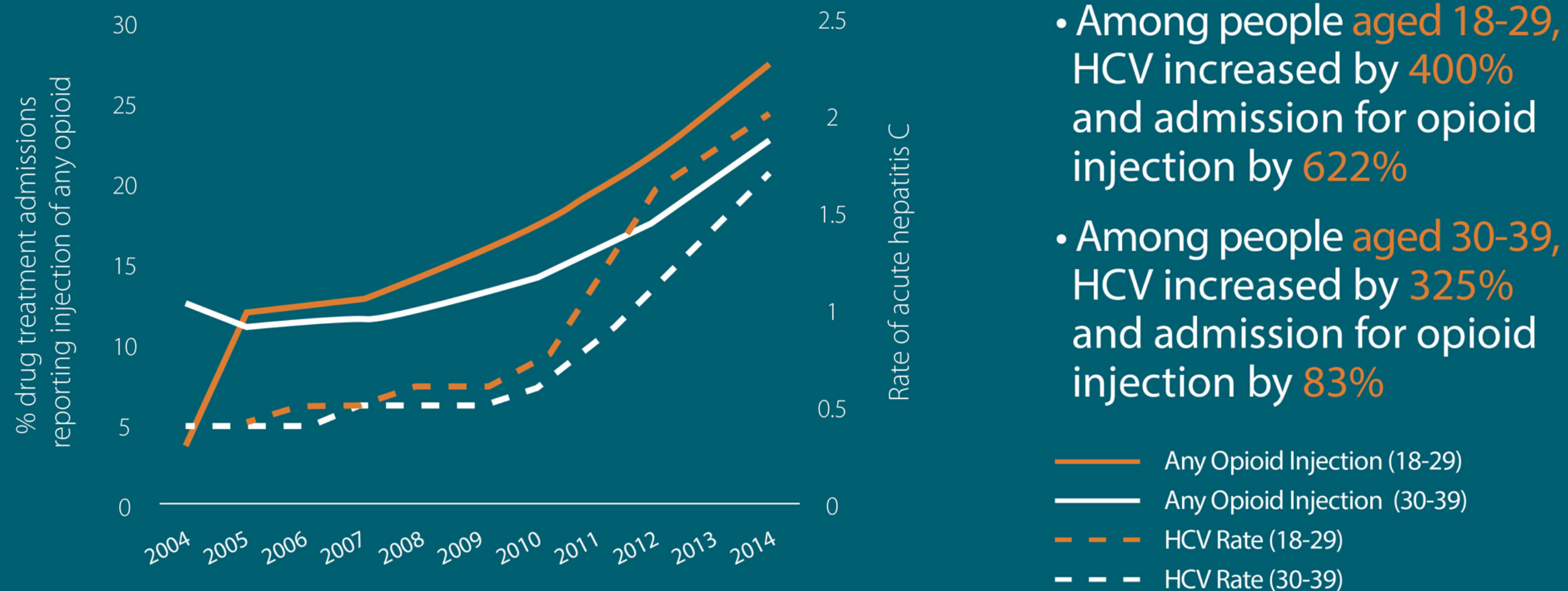
1. Medication-Assisted Treatment (MAT) & Opioid Agonist Therapy (OAT)
 - a. As taken from the SAMHSA TIP 63 on benefits of MAT/OUT
 - i. Reduces or eliminates withdrawal symptoms: methadone, buprenorphine
 - ii. blunts or blocks the effects of illicit opioids: methadone, naltrexone, buprenorphine
 - iii. reduces or eliminates cravings to use opioids: methadone, naltrexone, buprenorphine
 - a. MAT & OAT Impacts
 - i. Reduction in fatal overdose and all-cause mortality (NOT Naltrexone)

1. Addiction vs. Dependence - they're different!
 - a. babies are NOT born addicted to drugs!
2. The local story (in Chicago) is very different than the national story
3. Vein care & safer injection practices
4. Soap vs. alcohol pads vs. bleach (Heimer's Research)
5. Lotion & Lip Balm
6. 'Buddy system' & using in groups
7. Accountability if using alone - call someone
8. Check & reflect on personal biases that may influence professional practices

1. Syringe Service Program access - CDC Vulnerability Assessment
2. Increase in HCV, overdose, and fatal overdose
3. Attitudes towards PWUD
 - a. increase in treatment options
 - b. acceptance of HR models
4. Attitudes of PWUD
 - a. less stigmatizing environments encourages people to 'come out'
 - b. Story sharing & peer support
5. Naloxone
6. Increased commercialization of Methadone

PREVENTION & EDUCATION – WHAT'S CHANGED?

HEPATITIS C AND OPIOID INJECTION ROSE DRAMATICALLY IN YOUNGER AMERICANS FROM 2004-2014



- Among people **aged 18-29**, HCV increased by **400%** and admission for opioid injection by **622%**
- Among people **aged 30-39**, HCV increased by **325%** and admission for opioid injection by **83%**

Source: Centers for Disease Control and Prevention and Substance Abuse and Mental Health Services Administration

[HTTPS://WWW.CDC.GOV/NCHHSTP/NEWSROOM/2017/HEPATITIS-C-AND-OPIOID-INJECTION-PRESS-RELEASE.HTML](https://www.cdc.gov/nchhstp/newsroom/2017/hepatitis-c-and-opioid-injection-press-release.html)



PREVENTION & EDUCATION - WHAT'S CHANGED?

HEPATITIS C AND OPIOID INJECTION ROSE DRAMATICALLY AMONG WOMEN FROM 2004-2014



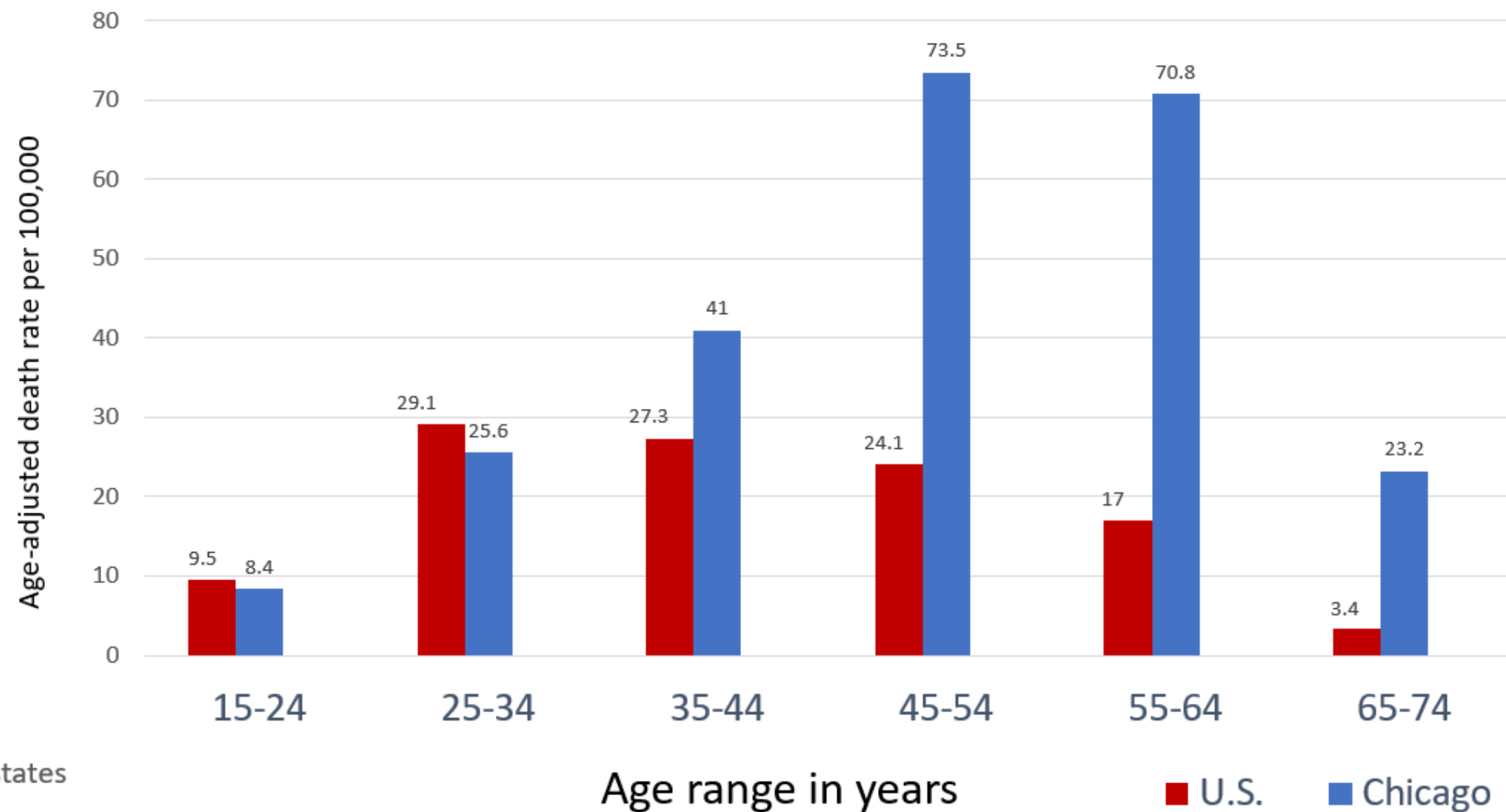
Source: Centers for Disease Control and Prevention and Substance Abuse and Mental Health Services Administration

[HTTPS://WWW.CDC.GOV/NCHHSTP/NEWSROOM/2017/HEPATITIS-C-AND-OPIOID-INJECTION-PRESS-RELEASE.HTML](https://www.cdc.gov/nchhstp/newsroom/2017/hepatitis-c-and-opioid-injection-press-release.html)



PREVENTION & EDUCATION - WHAT'S CHANGED?

Opioid Overdose Death Rate by Age in the United States* and Chicago, 2017

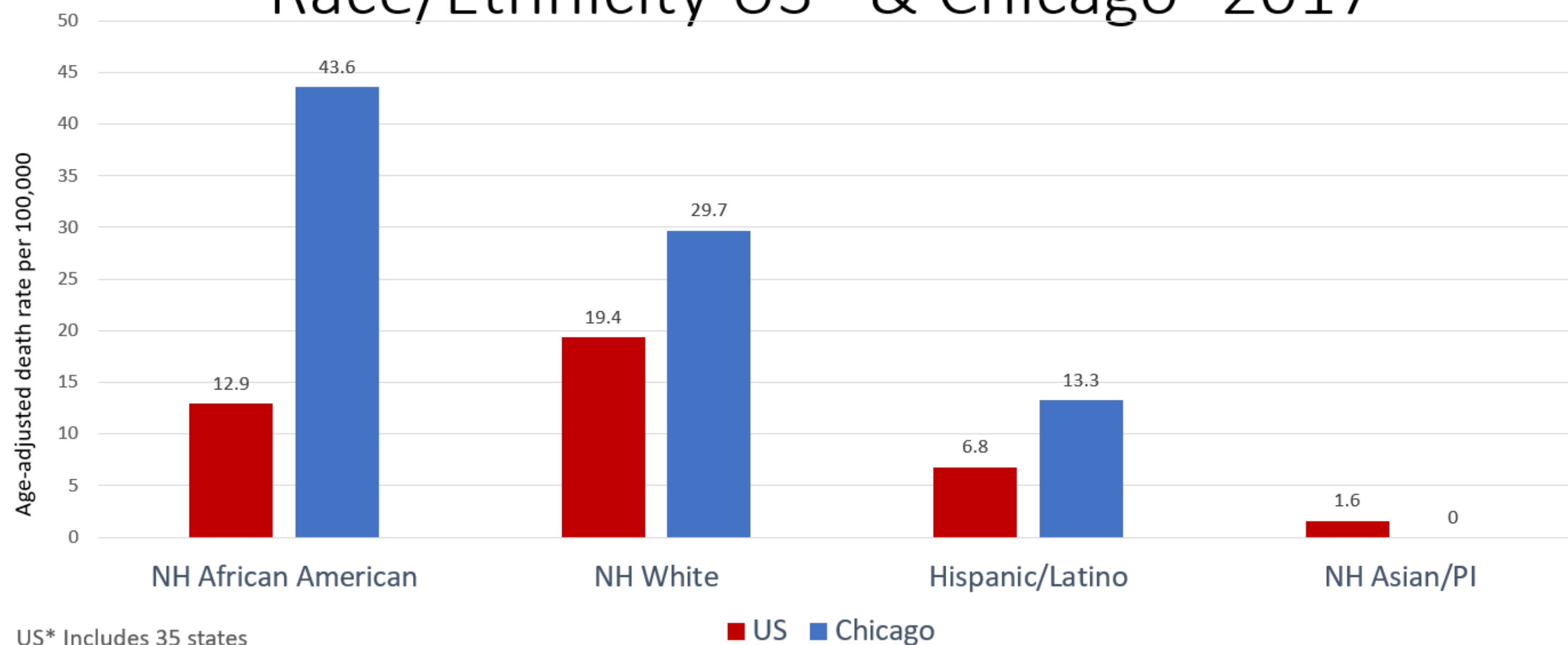


<http://hmprg.org/wp-content/uploads/2019/11/chicago-mortality-data-.ppx>

Scholl L, Seth P, et al. Drug and Opioid-Involved Overdose Deaths- United States, 2013-2017. MMWR Jan 4 2018;67(5152);1419-1427
Epidemiology Report: Increase in Overdose Deaths Involving Opioids, Chicago 2015-2016

PREVENTION & EDUCATION - WHAT'S CHANGED?

Opioid Overdose Death Rate by Race/Ethnicity US* & Chicago- 2017



<http://hmprg.org/wp-content/uploads/2019/11/chicago-mortality-data.ppx>

Scholl et al. Drug and Opioid-Involved Overdose Deaths- United States 2013-2017. MMWR Jan 4, 2019.
Rushovich et al. Annual Opioid Surveillance Report- Chicago 2017. City of Chicago, October 2018.

1. Outreach sites and locations - CRA, Live4Lali, etc.
2. Ryan White programs, funding, entitlements
3. SAMHSA TIP Manuals
4. State substance use treatment dollars (SUPRA, etc.)
5. FQHC's & HRSA - identify HCV treaters & MAT prescribers
6. Clinical trials
7. Harm Reduction Coalition toolkits
8. ECHO for HCV and OUD

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PREVENTION & EDUCATION – EXERCISE

Program Assessment Visioning Tool

Take Stock

Where do you want to go?

How will you get there?

Make a plan



UnDx

Dx

Stage

Treat

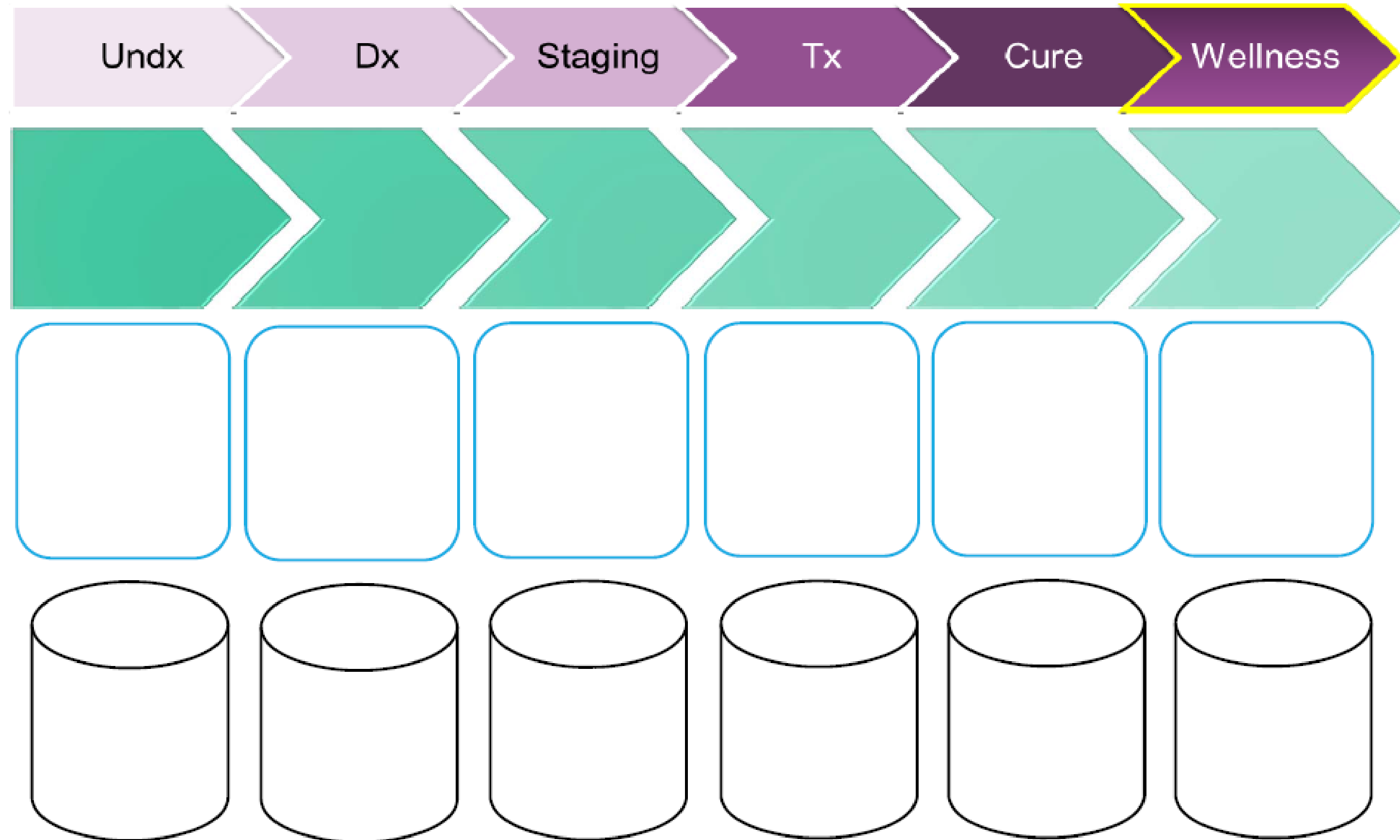
Cure

Well



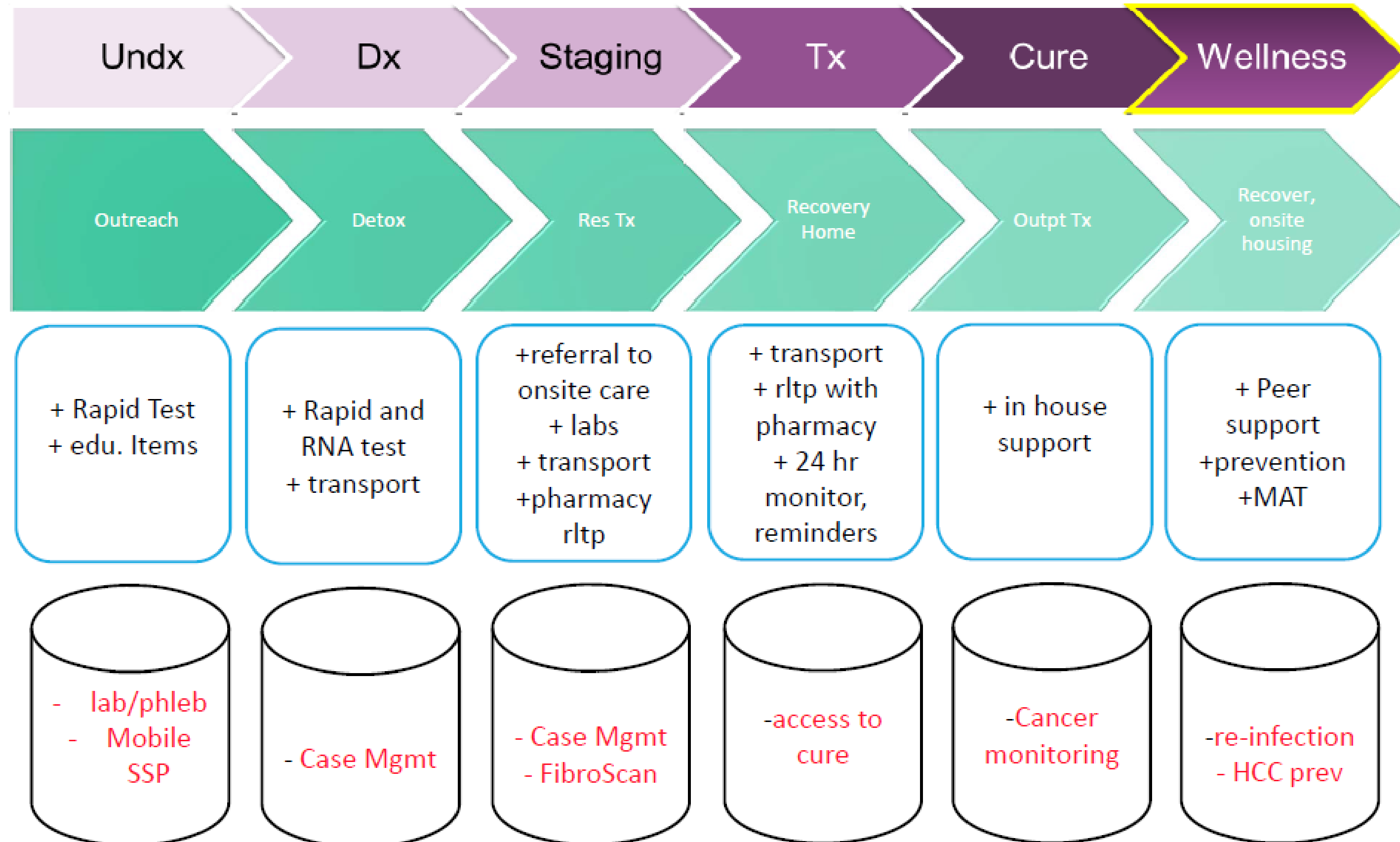
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PREVENTION & EDUCATION - EXERCISE - VISIONING TOOL



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PREVENTION & EDUCATION - EXERCISE - VISIONING TOOL



PREVENTION & EDUCATION -
EXERCISE - ACTION PLAN

	Action 1	Action 2	Action 3
What actions or changes do you want to see?			
Who will carry out these changes?			
By when will they take place and for how long?			
What resources are needed to carry out these changes?			
Communication – who should know what?			

In conclusion...

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What's Next?

- Next Module is:
Diagnosis - Screening & Testing
- About 1 hour/1 CEU
- The purpose of the next module will be to break down the various HCV testing options

Obtaining CEU's & Attendance Certificates

- *Don't forget* to take the pre and post-test surveys to receive CEU's or Certificates of Completion!

Access to Tools

Access to tools, resources, slides, and activities can all be found at
<https://hepcchallenge.org/bigg/>

Questions?

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