

CDC's Response to the Viral Hepatitis/Opioid Syndemic

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Caring Ambassadors Syndemic Roundtable
May 17, 2018

Presentation Outline

- Overview of CDC
- Addressing the syndemic
 - Surveillance & research
 - Build state, local, and tribal capacity
 - Support providers, health systems, and payers
 - Build partnerships
 - Empower consumers
- Public health policy

CDC

The Nation's Public Health Agency

CDC

- CDC is the nation's health protection agency, working 24/7 to protect America from health and safety threats, both foreign and domestic.
- CDC increases the health security of our nation.



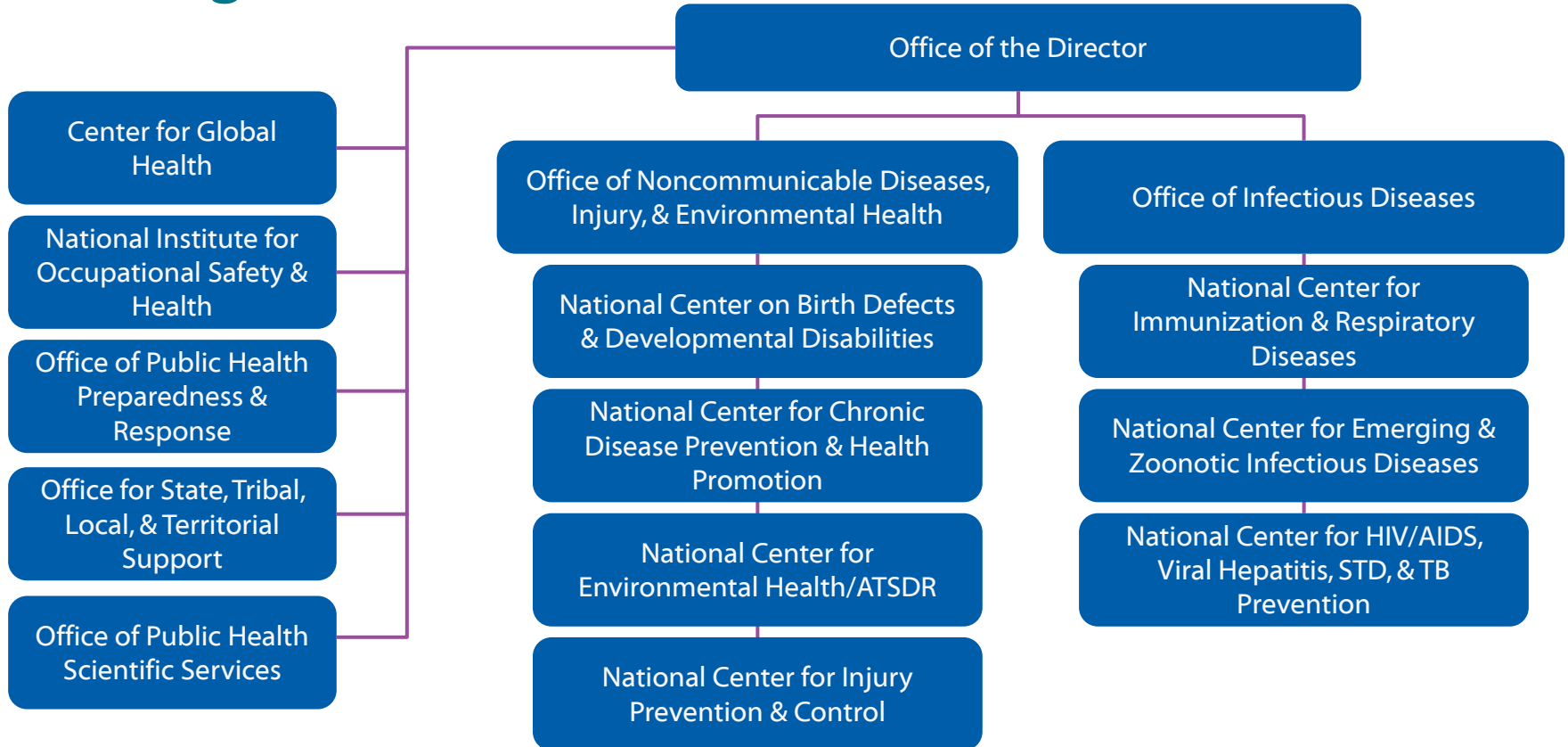
Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™



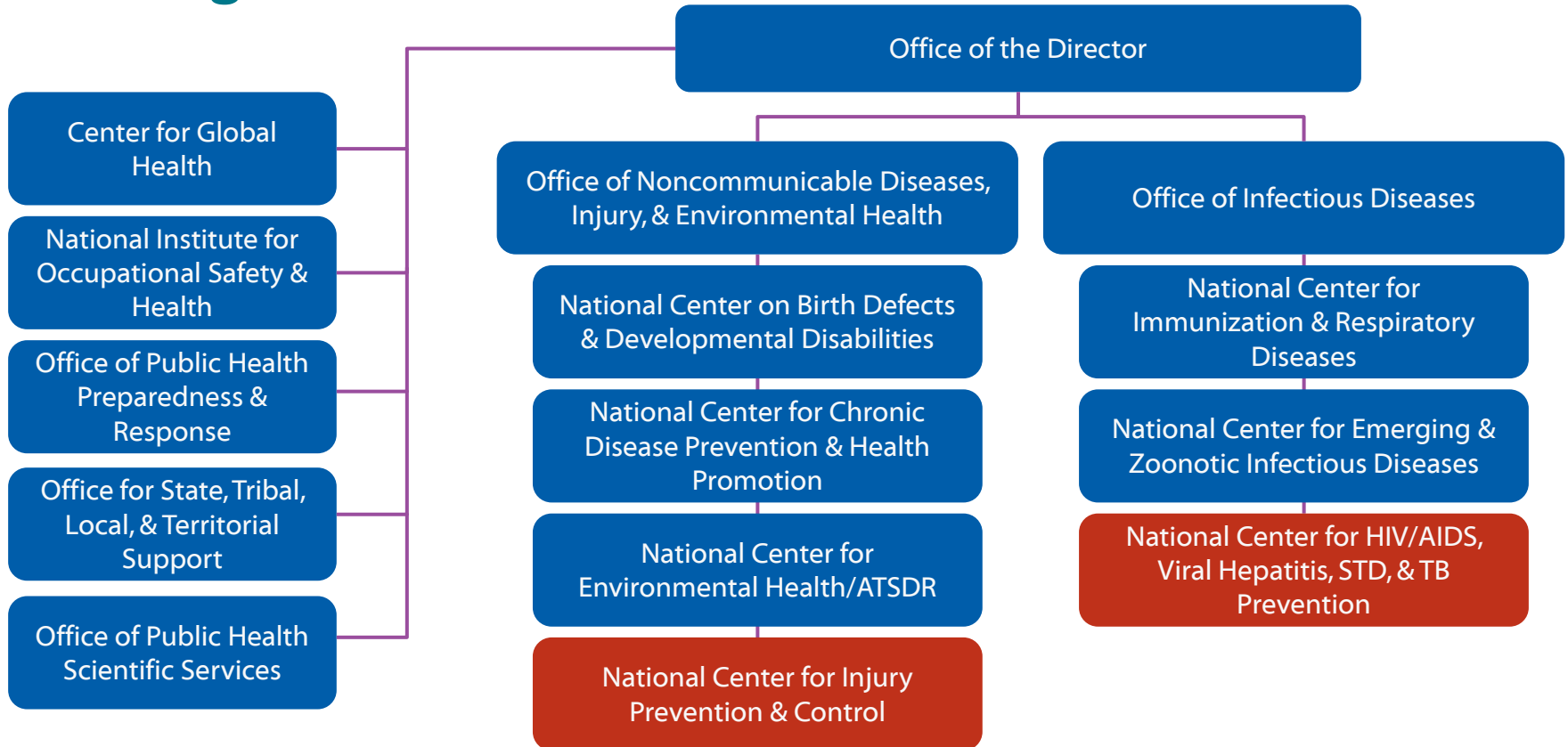
CDC's Role

- Detect and respond to new and emerging health threats
- Tackle big health problems causing death and disability
- Put science and technology into action to prevent disease
- Promote healthy and safe behaviors, communities, and environment
- Develop leaders and train the public health workforce
- Take the health pulse of our nation

CDC Organization



CDC Organization

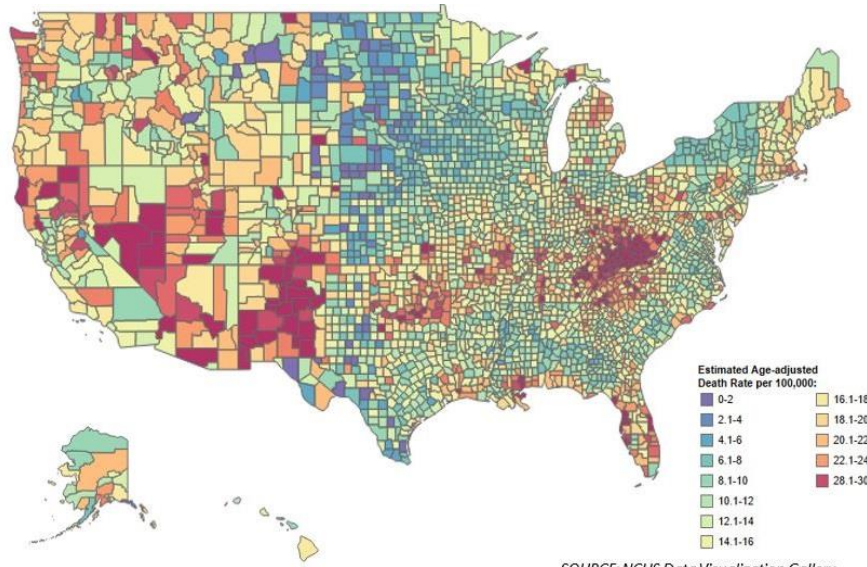


CDC's Response

Interconnected Viral Hepatitis/Opioid Epidemics

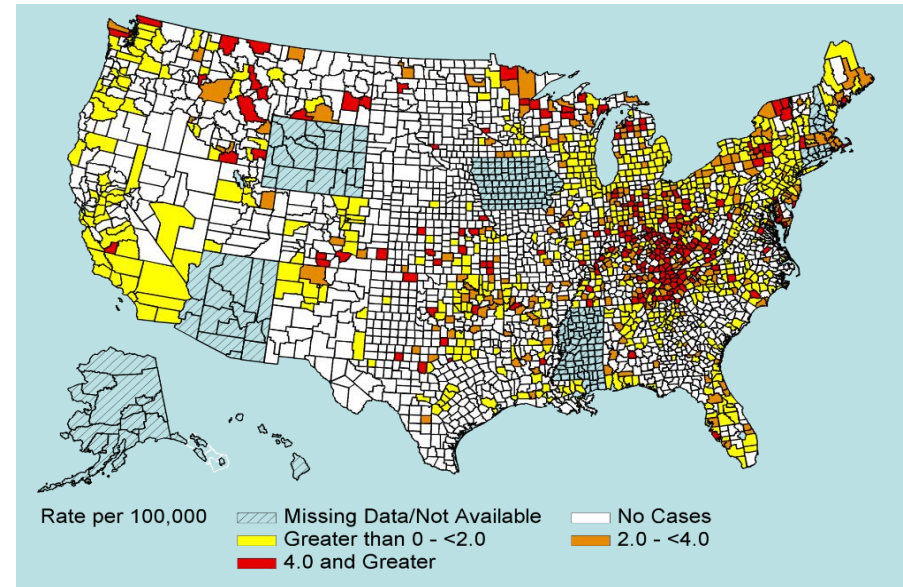
Interconnected Epidemics

Drug overdose death rates



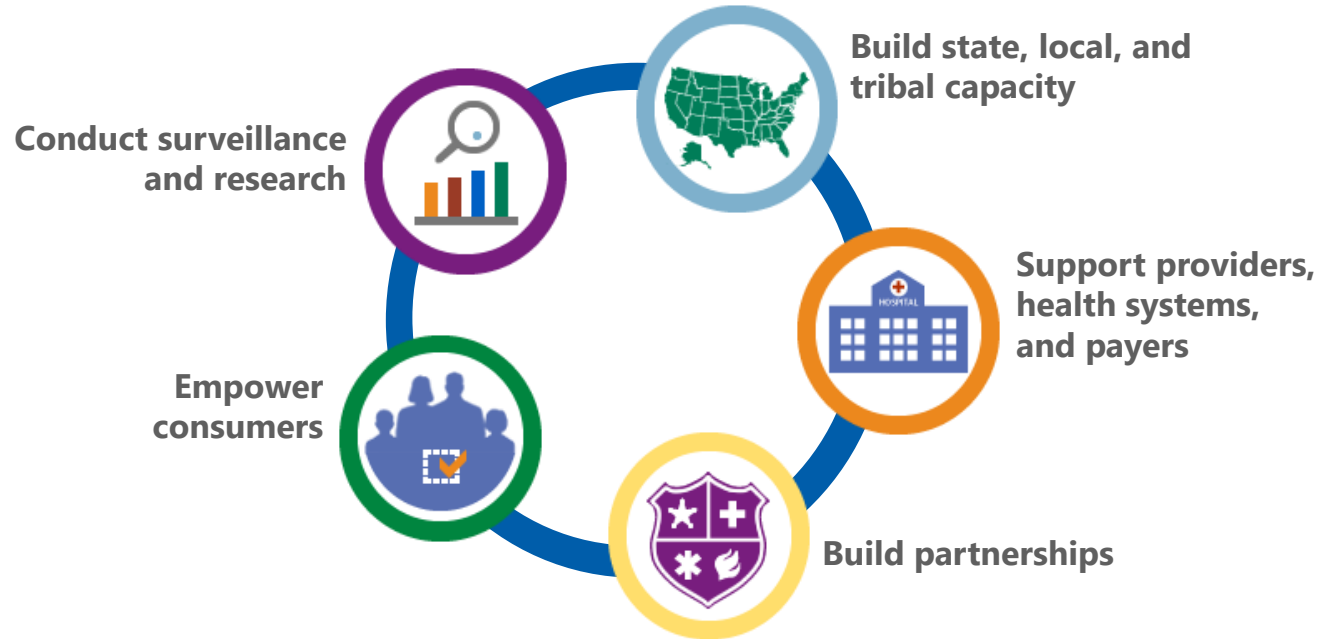
SOURCE: NCHS Data Visualization Gallery

Reported new HCV infections



Source: CDC, NCHS Data Visualization Gallery, 2015; CDC, National Notifiable Disease Surveillance System, 2013-2014

CDC Strategy



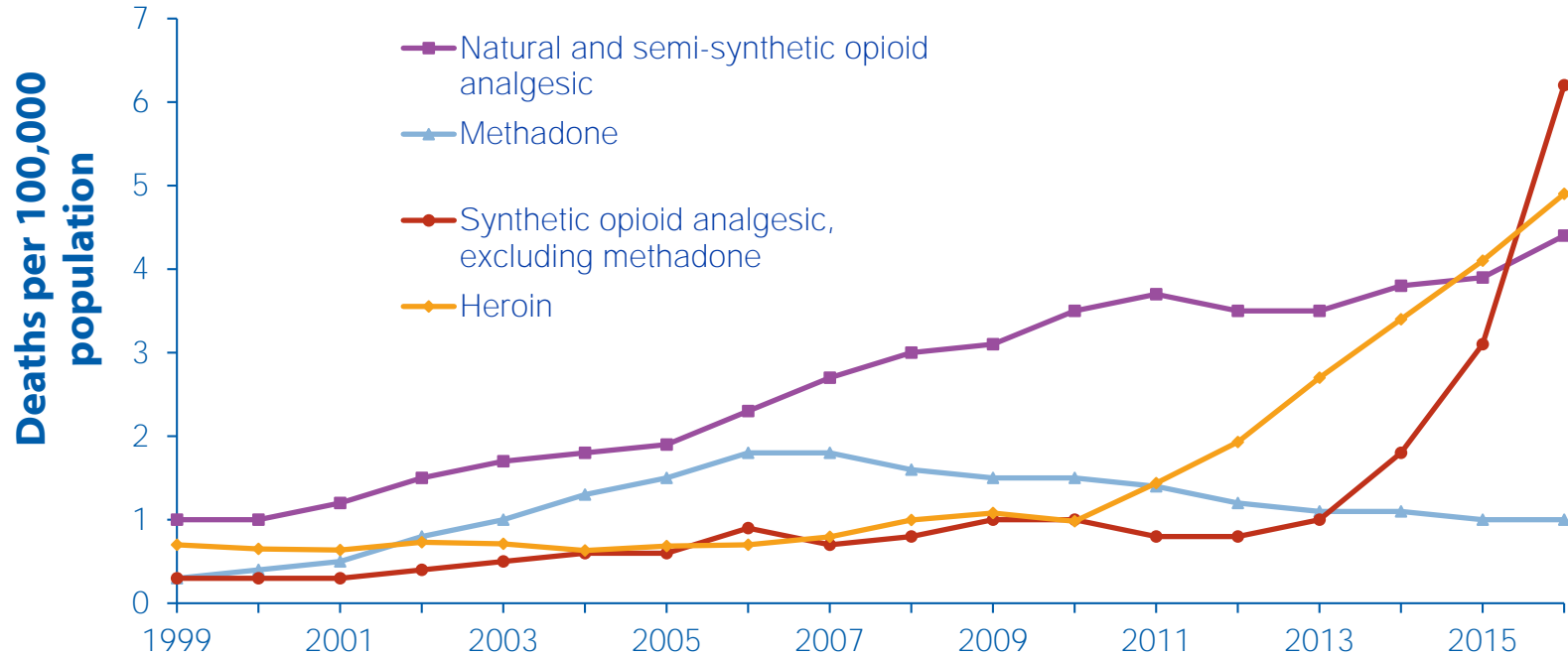
Surveillance & Research

Surveillance & Research

- Understand the viral hepatitis/opioid syndemic
- Collect timely, actionable data
- Focus prevention efforts



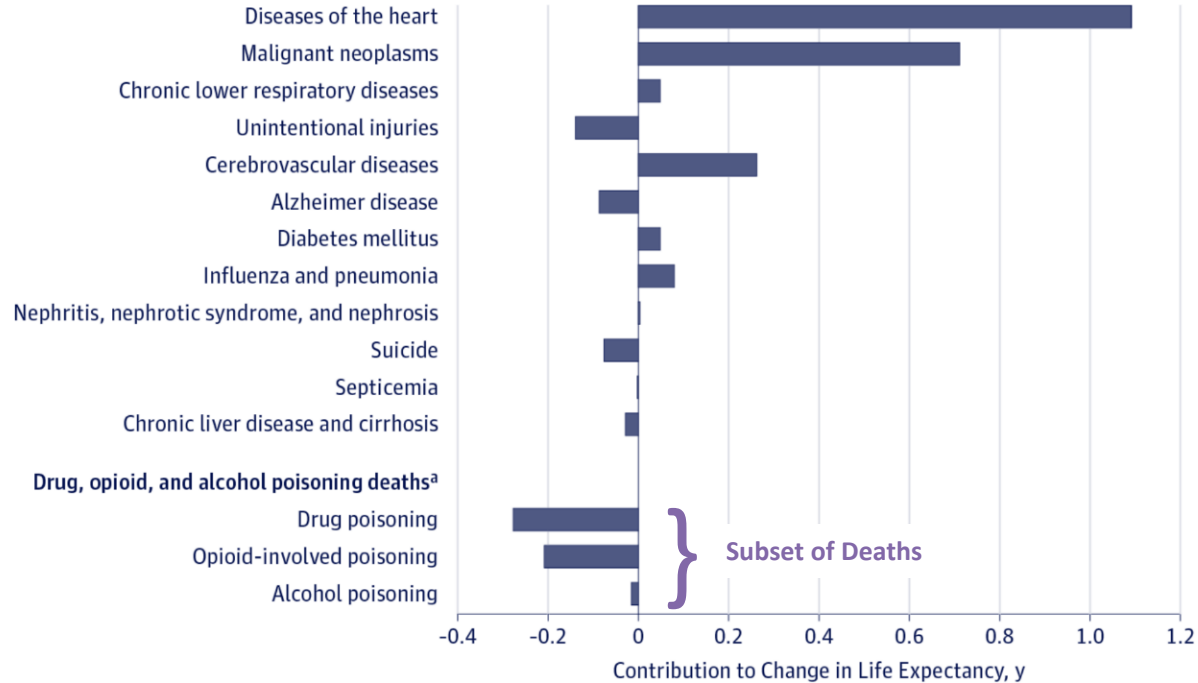
Rise in Opioid-Related Deaths



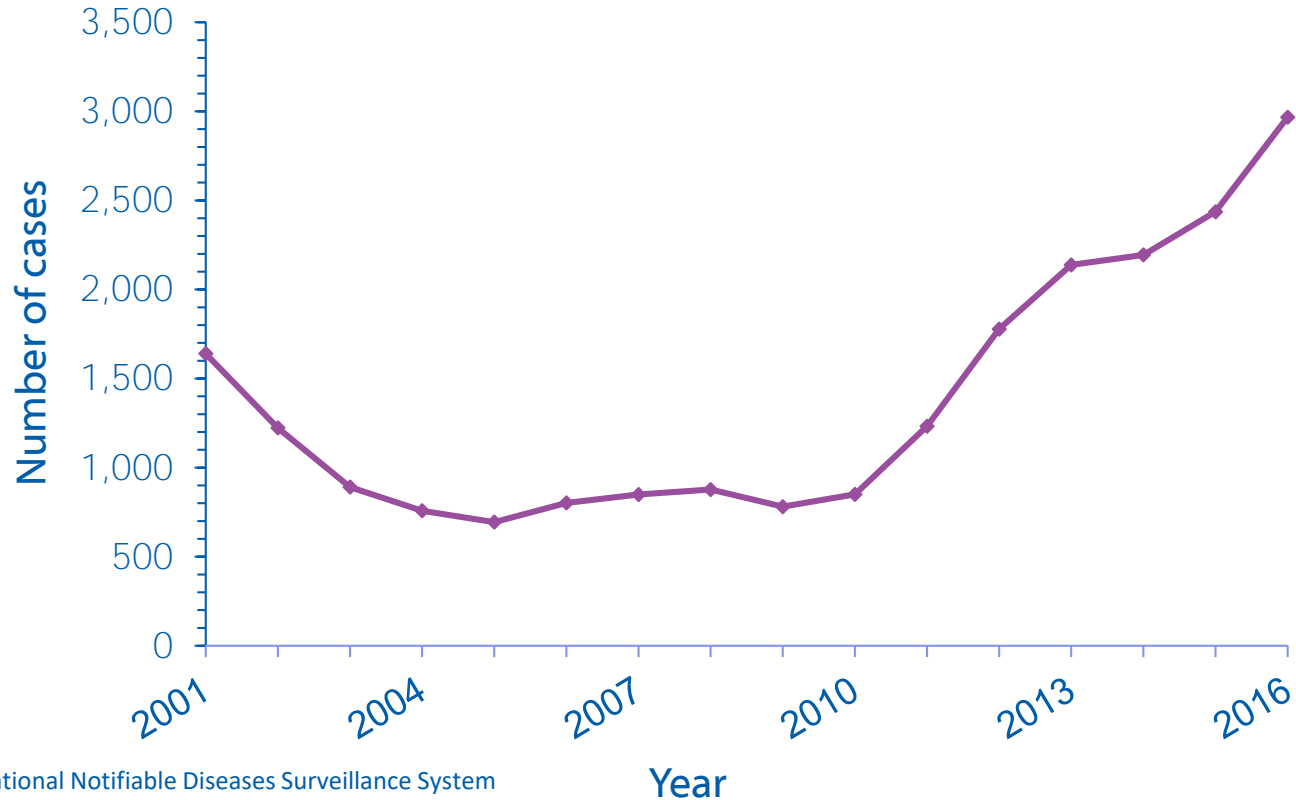
Source: National Vital Statistics System Mortality File

Lower U.S. Life Expectancy

12 Leading causes of death (ranked highest to lowest according to No. of deaths in year 2015)

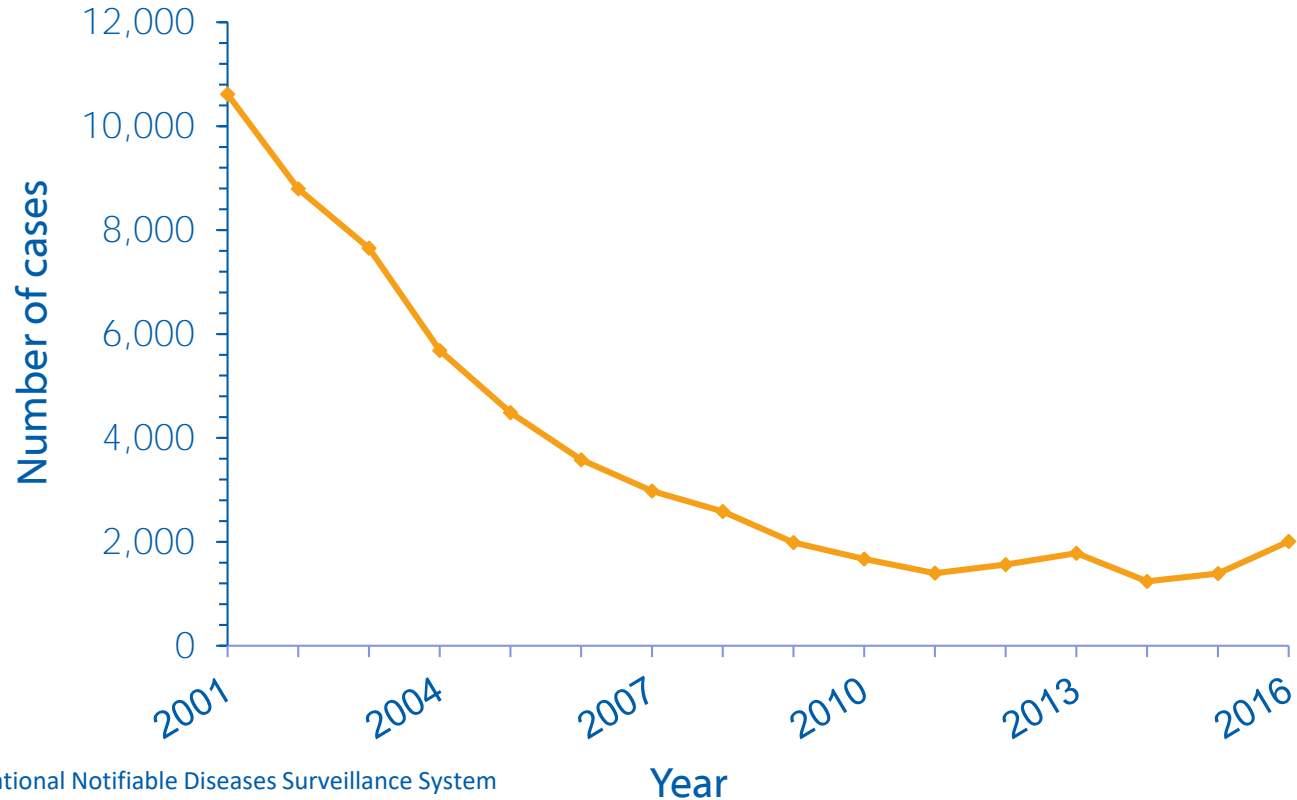


Acute Hepatitis C Infections Continue to Soar



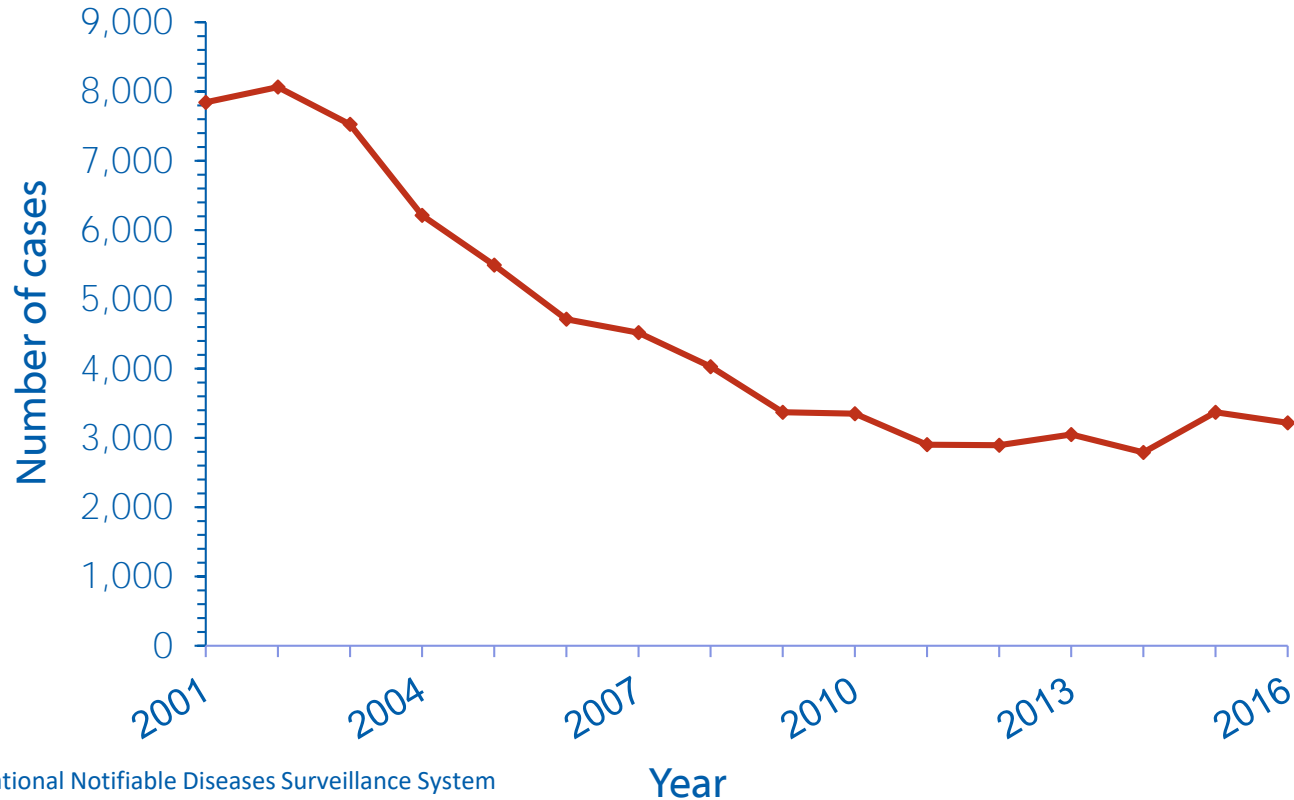
Source: CDC, National Notifiable Diseases Surveillance System

Hepatitis A Infections Recently on the Rise



Source: CDC, National Notifiable Diseases Surveillance System

Acute Hepatitis B Infections Slightly Decline



Source: CDC, National Notifiable Diseases Surveillance System

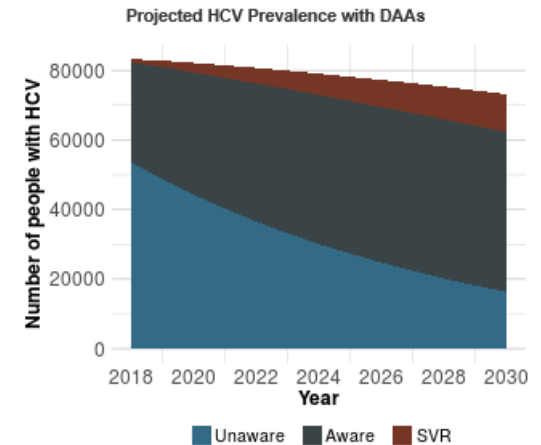
Prevention Research

- Study to reduce hepatitis infections by treatment and integrated prevention services (Hepatitis-TIPS) among non-urban persons who inject drugs (PWID)
- Collaboration with NIDA to fund new studies of opioid abuse in non-urban US and the risks for HBV, HCV, HIV, and STIs
- PCORI study of patient-centered modules or HCV care for PWID



Modeling

- Small-area estimates of HCV prevalence
- Estimating the impact of curative HCV treatment on transmission
- Cost effectiveness of syringe services programs (SSPs)
- Expected impact of prescription opioids on viral hepatitis prevalence
- Impact of selected interventions on projected rates of injection-drug use



Build State, Local, and Tribal Capacity

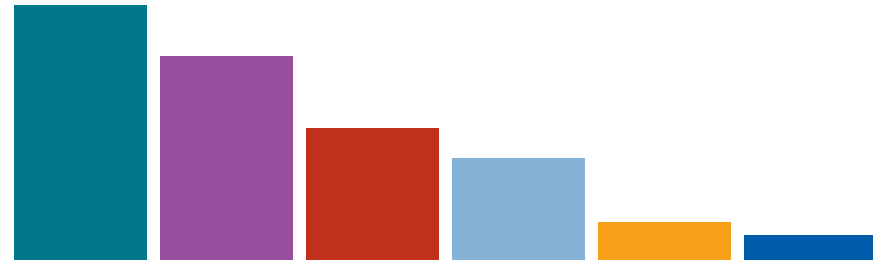
Build State, Local, & Tribal Capacity

- Implement evidence-based interventions
- Conduct community planning and capacity building
- Establish elimination programs
- Conduct Epi-Aid investigations

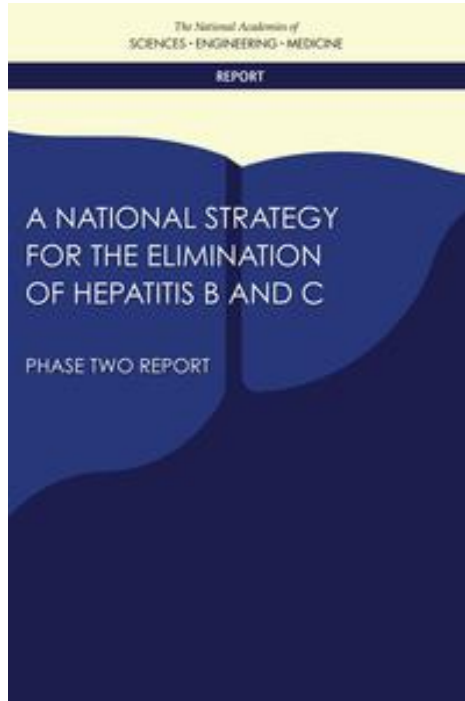


Improving Hepatitis B & C Care Cascades

- Funding 46 states and 4 jurisdictions
 - Jurisdiction-wide assessment of hepatitis B & C burden
 - Assessment of policies impacting testing, care, and treatment
 - Identify and describe high-burden areas
 - Identify partner sites/organizations for interventions to increase testing
 - Implementation of interventions in 3 priority partner sites



Viral Hepatitis Elimination as a Public Health Threat



- Hazard, KY
 - NIDA/NCI/CDC
 - Preparation phase
 - SSP start up (NIDA-funded)
 - Increase capacity to provide medication-assisted treatment (MAT)
 - Increase capacity to treat HCV

Community Planning and Capacity Building

- NACCHO-led work
 - **Lenowisco Health District, SW Virginia:** developed comprehensive outbreak response plan for viral hepatitis and/or HIV among PWID and establish state's first brick and mortar and mobile SSPs
 - **Kentucky River District:** engage community partners around HCV elimination
 - **Huntington, WV:** Re-build community support and buy-in for SSPs



Perinatal Hepatitis B Prevention Programs

- Fund GA, MI, NYC, Philly, and WI to:
 - Improve identification of HBsAg-positive pregnant women (baseline: 47%)
 - Improve rates of PVST among infants born to HBsAg-positive pregnant women (baseline: 63%)
 - Collect demographic and clinical data regarding HBsAg-positive pregnant women and their infants

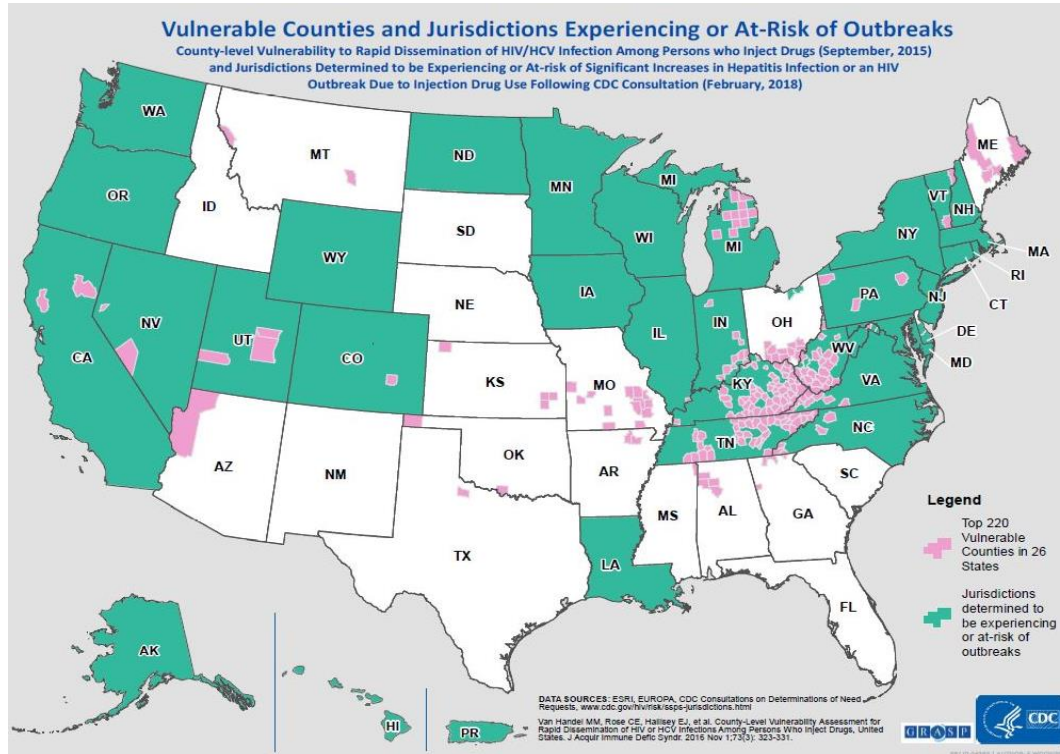


Outbreaks of hepatitis A in multiple states among people who use drugs and people who are homeless



- Since March 2017, CDC has been providing technical assistance for hepatitis A outbreaks in Kentucky, Michigan, Indiana, California, and Utah
 - Primarily among persons who use injection and non-injection drugs, homeless persons, and their close contacts
 - More than 2,300 cases and 51 deaths
- CDC has provided epidemiology and lab support, testing more than 1,600 specimens, and supporting vaccine policy development and supply

Determination of Need



Source: Van Handel et al., 2016

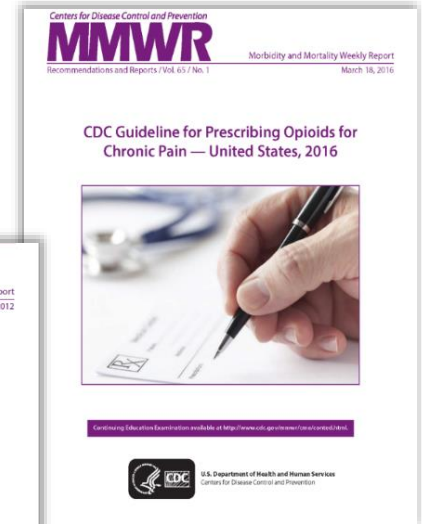
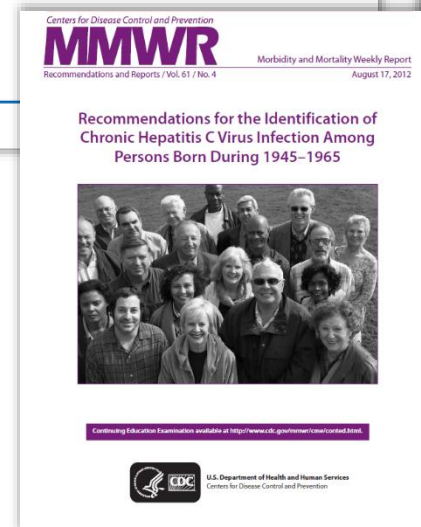
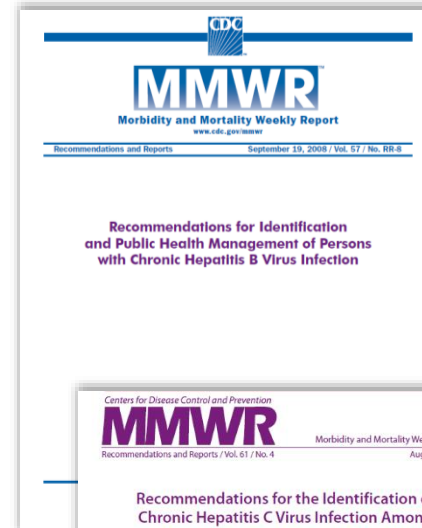
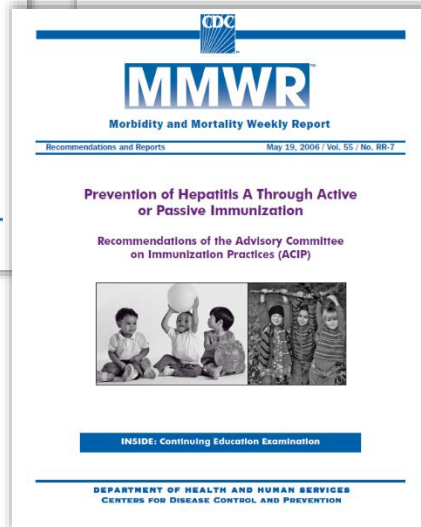
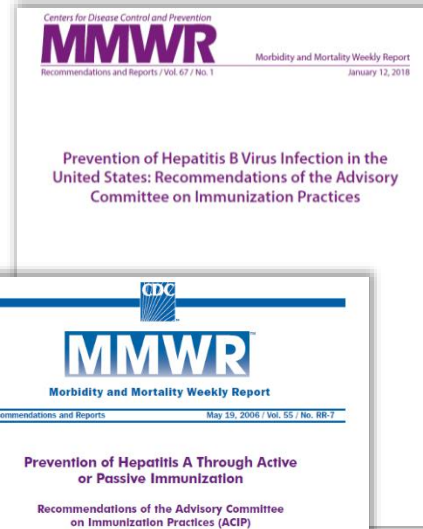
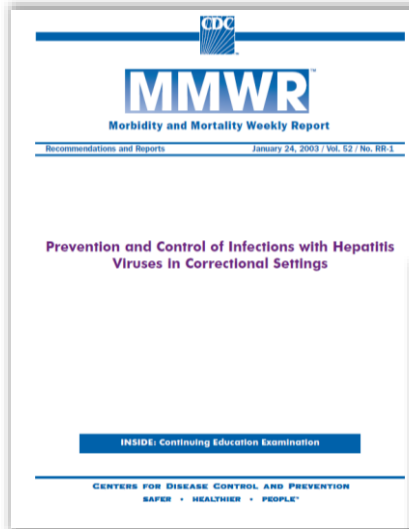
Support Providers, Health Systems, and Payers

Support Providers, Health Systems, & Payers

- Develop, implement, & evaluate clinical guidelines
- SSP implementation, training, and advocacy toolkit
 - Harm reduction coalition and webinar
 - Implementation plan, communications materials, and evaluation tools
- FOA 1702-Work with SSPs, FQHCs, correctional facilities, and other community-based organizations to identify, treat and engage PWID
- Testing algorithms



Clinical Guidelines



Clinical Tools

Interpretation of Results of Tests for Hepatitis C Virus (HCV) Infection and Further Actions



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Control and Prevention

TEST OUTCOME	INTERPRETATION	FURTHER ACTIONS
HCV antibody nonreactive	No HCV antibody detected	Sample can be reported as nonreactive for HCV antibody. No further action required. If recent exposure in person tested is suspected, test for HCV RNA.*
HCV antibody reactive	Presumptive HCV infection	A repeatedly reactive result is consistent with current HCV infection, or past HCV infection that has resolved, or biologic false positivity for HCV antibody. Test for HCV RNA to identify current infection.
HCV antibody reactive, HCV RNA detected	Current HCV infection	Provide person tested with appropriate counseling and link person tested to care and treatment. [†]
HCV antibody reactive, HCV RNA not detected	No current HCV infection	No further action required in most cases. If distinction between true positivity and biologic false positivity for HCV antibody is desired and if sample is repeatedly reactive in the initial test, test with another HCV antibody assay. In certain situations, [‡] follow up with HCV RNA testing and appropriate counseling.

* If HCV RNA testing is not feasible and person tested is not immunocompromised, do follow-up testing for HCV antibody to demonstrate seroconversion. If the person tested is immunocompromised, consider testing for HCV RNA.

[†] It is recommended before initiating antiviral therapy to retest for HCV RNA in a subsequent blood sample to confirm HCV RNA positivity.

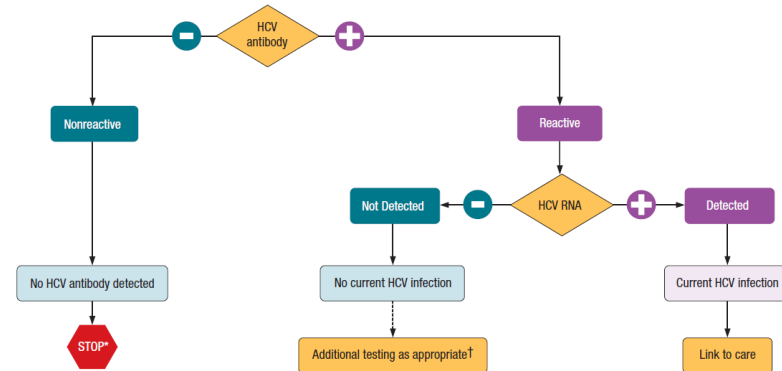
[‡] If the person tested is suspected of having HCV exposure within the past 6 months, or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.

Source: CDC. Testing for HCV infection: An update of guidance for clinicians and laboratorians. MMWR 2013;62(18).

Recommended Testing Sequence for Identifying Current Hepatitis C Virus (HCV) Infection



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* For persons who might have been exposed to HCV within the past 6 months, testing for HCV RNA or follow-up testing for HCV antibody is recommended. For persons who are immunocompromised, testing for HCV RNA can be considered.

[†] To differentiate past, resolved HCV infection from biologic false positivity for HCV antibody, testing with another HCV antibody assay can be considered. Repeat HCV RNA testing if the person tested is suspected to have had HCV exposure within the past 6 months or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.

Source: CDC. Testing for HCV infection: An update of guidance for clinicians and laboratorians. MMWR 2013;62(18).

Build Partnerships

Build partnerships

- Viral hepatitis partners
- Corrections
- Public safety



Traditional Viral Hepatitis Partners



Correctional Facilities – A Key Partnership

- Test to detect infections
 - PWID are concentrated in corrections due to legal penalties for IDU
 - HCV seroprevalence is estimated as high as 44% in some jurisdictions
 - Universal testing is needed
- Treat
 - Treatment as prevention in corrections and in community after release
- Prevent transmission
 - Syringe services, MAT, HCV cure
- Contribute to overall HCV elimination
 - Corrections accounts for ~1/3 of the HCV burden nationwide



Empower Consumers

Empower consumers

- Public education materials
- Public Service Announcements (PSAs)
- Patient education fact sheets
- Online risk assessment tools



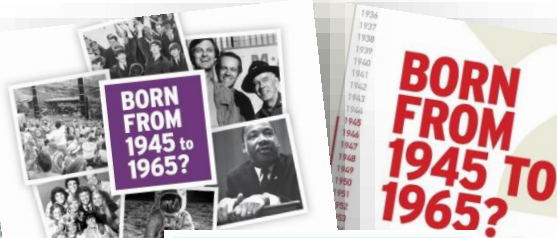
Public Education Materials

Prescription opioids can be **addictive** and **dangerous**.

It only takes a little to lose a lot.



cdc.gov/RxAwareness



HEPATITIS C

Why Baby Boomers Should Get Tested

BABY BOOM THE HIGHEST RATES OF HEPATITIS C

Why should baby boomers get tested for Hepatitis C?

While anyone can get Hepatitis C, more than 75% of adults infected are Baby Boomers, people born from 1945 through 1965. These people with Hepatitis C don't know they are infected.

* Baby boomers are five times more likely to have

Why do baby boomers have such high rates of Hepatitis C?

The reason that baby boomers have high rates of Hepatitis C has remained understood. Most boomers are believed to have been infected in the 1940s and 1950s when cases of Hepatitis C were the highest. Since people with Hepatitis C can live for decades without symptoms, many baby boomers are unknowingly living with an infection they got many years ago.

Hepatitis C is primarily spread through contact with blood from an infected person. Many baby boomers could have gotten infected from contaminated blood and blood products before widespread screening of the blood supply began in 1992 and universal precautions were adopted. Otherwise, there is no known reason for the high rates of Hepatitis C that exist in the past 100 years. Many baby boomers cannot know how or when they were infected.

What should baby boomers know about Hepatitis C?

Hepatitis C is a serious liver disease that results from infection with the Hepatitis C virus. Some people who get infected with Hepatitis C take it easy or get it off their mind, but most people will get infected. Hepatitis C can cause serious health problems including liver damage, cirrhosis, liver cancer and even death. In fact, Hepatitis C is a leading cause of liver cancer and the leading cause of liver transplants.

People with Hepatitis C:

- Often have no symptoms
- Can live with an infection for decades without feeling any symptoms
- Can be successfully treated with medications

Continued on next page



CDC Hepatitis @cdcshop

Did you know #hepatitisC is a leading cause of liver #cancer? Find out if you are at risk!
go.usa.gov/7cP [pic.twitter.com/2V94Nhak](https://twitter.com/2V94Nhak)



6 RETWEETS 2 FAVORITES

12:06 PM - 7 Dec 12 - Embed this Tweet

FIND OUT IF YOU HAVE HEPATITIS C
IT COULD SAVE YOUR LIFE

SOME PEOPLE DON'T KNOW HOW OR WHEN THEY WERE INFECTED

BORN FROM 1945-1965?

People born from 1945-1965 are **5X MORE LIKELY TO BE INFECTED WITH HEPATITIS C**

3 OUT OF EVERY 4 people with Hepatitis C were born between these years

Tip: 75% of people living with Hepatitis C **DO NOT** know they are infected

Many people can live with HEPATITIS C for **DECADES** with **NO SYMPTOMS**

CDC recommends anyone born from 1945-1965 GET TESTED

TESTED	NOT TESTED
<p>KNOWING YOU HAVE HEPATITIS C can help you make important decisions about your health</p> <p>Rx Many people can get LIFE-SAVING CARE AND TREATMENT</p> <p>Successful treatments can ELIMINATE the virus from this body</p>	<p>LEFT UNTREATED, HEPATITIS C can cause liver damage and LIVER FAILURE</p> <p>HEPATITIS C is the 1ST CAUSE OF LIVER TRANSPLANTS</p> <p>HEPATITIS C is a leading cause of LIVER CANCER</p>

Don't go down the wrong path, talk to your doctor about getting tested. It could save your life.

CDC U.S. Department of Health and Human Services **KNOW MORE HEPATITIS**

Hepatitis B Education Materials



HEPATITIS B

Are You At Risk?

What is Hepatitis B?
Hepatitis B is a liver disease caused by the hepatitis B virus (HBV). It is a blood-borne virus that can cause liver damage and even liver cancer. It is often spread through contact with infected blood or body fluids.

How do people know if they have Hepatitis B?
Many people do not know they have Hepatitis B until they have a blood test. Some people may experience symptoms such as fatigue, loss of appetite, and jaundice (yellowing of the skin and eyes).

How can you prevent Hepatitis B?
You can prevent Hepatitis B by getting vaccinated. The hepatitis B vaccine is safe and effective. It is recommended for all infants and children, and for adults who are at risk of infection.

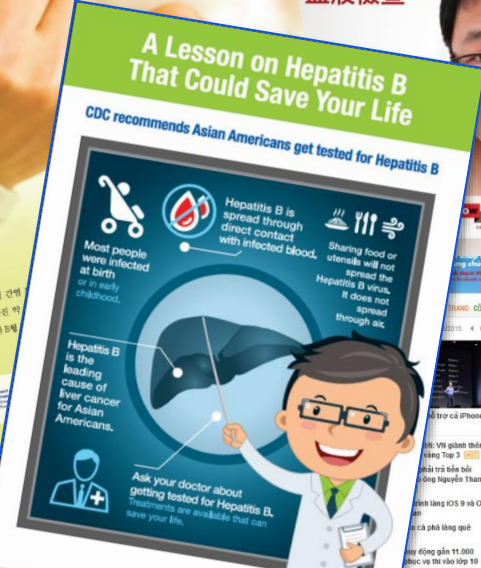
What are the symptoms of Hepatitis B?
Symptoms of Hepatitis B may include fatigue, loss of appetite, nausea, vomiting, and jaundice. Some people may not have any symptoms.



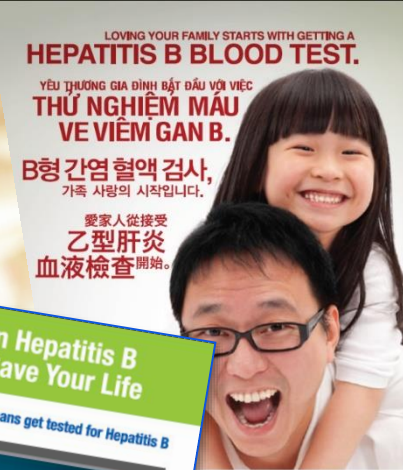
12 người Mỹ gốc Á bị nhiễm Bệnh Viêm Gan B là dấu hiệu đầu tiên của căn bệnh.

là 12 người Mỹ gốc Á bị nhiễm Bệnh Viêm Gan B là dấu hiệu đầu tiên của căn bệnh.

한국인들은 B형 간염
예방을 위한
오늘, 주치의와
CDC



저는 약속합니다,
B형 간염 혈액 검사를 받을 것을.



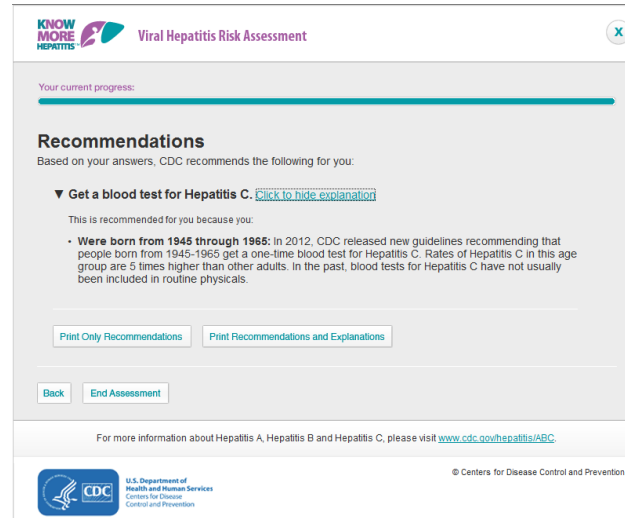
疾病防治中心建議您
接受乙肝檢查

點擊了解更多

CDC

Viral Hepatitis Online Risk Assessment Tool

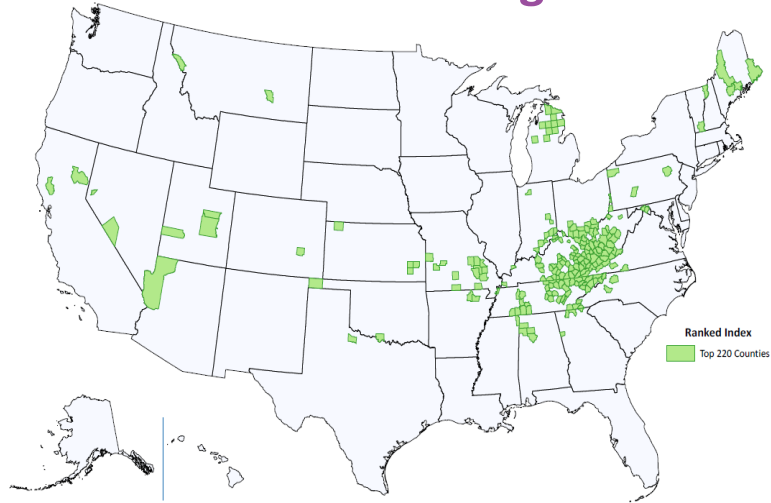
- Online tool to assess risk for hepatitis A, B, and/or C
- <http://www.cdc.gov/hepatitis/RiskAssessment/>



Intersection of Public Health and Policy

Harm reduction is vital to viral hepatitis prevention

Counties at risk for HIV & HCV outbreaks among PWID

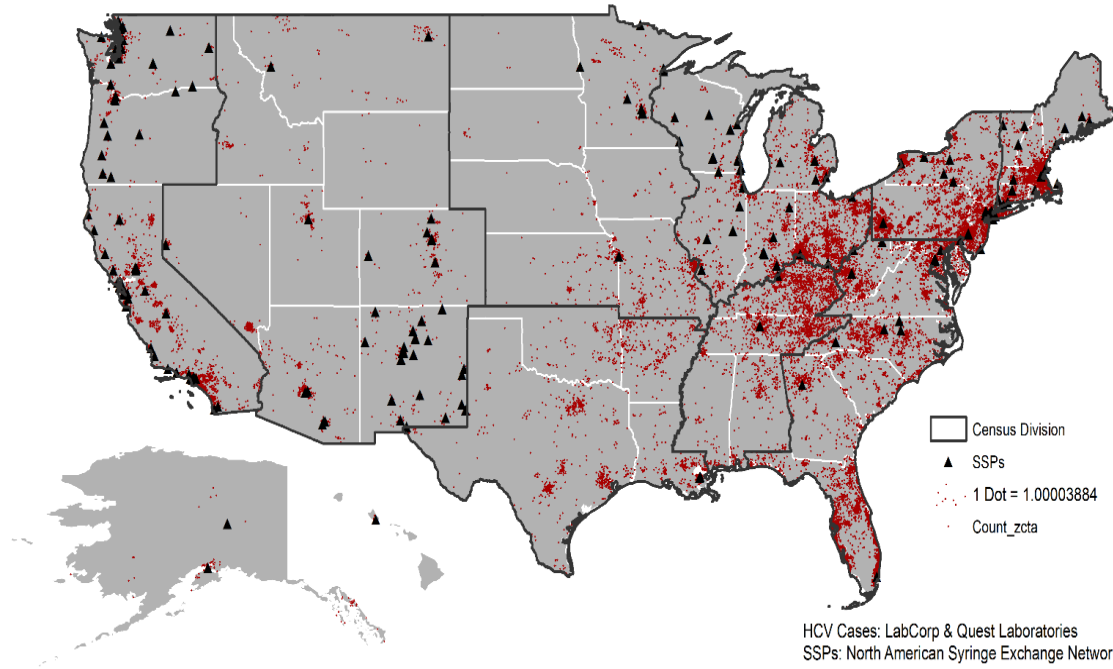


SSP coverage – June 2014



Harm reduction is vital to viral hepatitis prevention

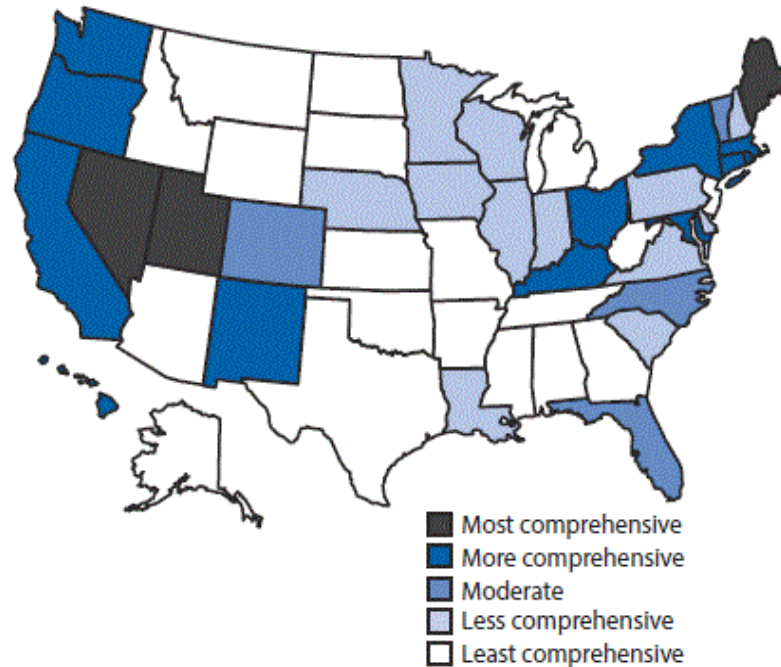
HCV cases among persons aged 15-29 years and
SSPs, July 2015-June 2016



Source: Canary et al., 2015

Harm reduction is vital to viral hepatitis prevention

Comprehensiveness of state laws pertinent to prevention of HCV infection among PWID; US, 2016



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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

