



AIDSVu and HepVu: Visualizing HIV and HCV To End The Epidemics

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CONFLICT OF INTEREST DISCLOSURE

HEATHER BRADLEY, Ph.D.

- No financial or commercial interests to disclose



AN INTRODUCTION TO Vu: AIDSVu AND HepVu

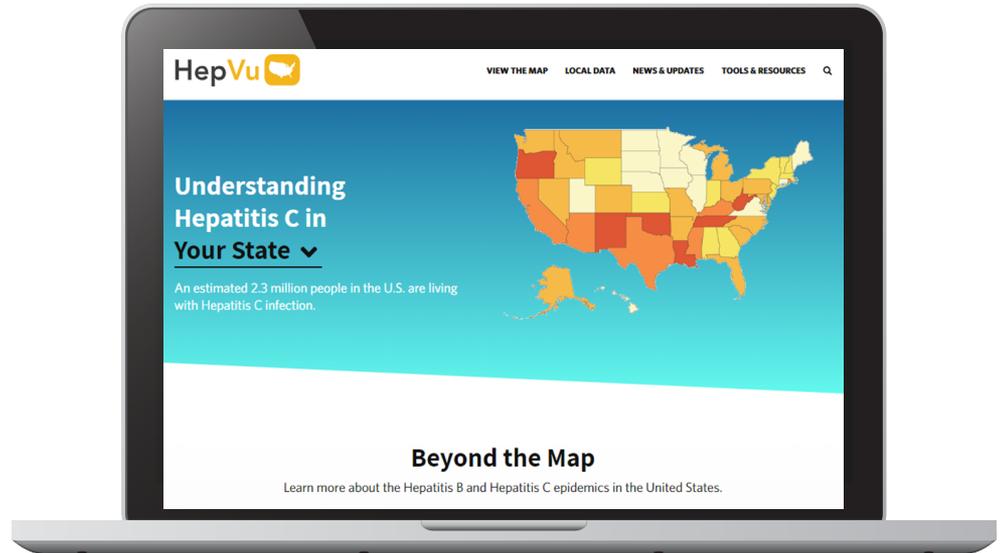


AIDSVu and HepVu Mission

**Making data widely available,
easily accessible and locally
relevant to inform public
health decision-making**

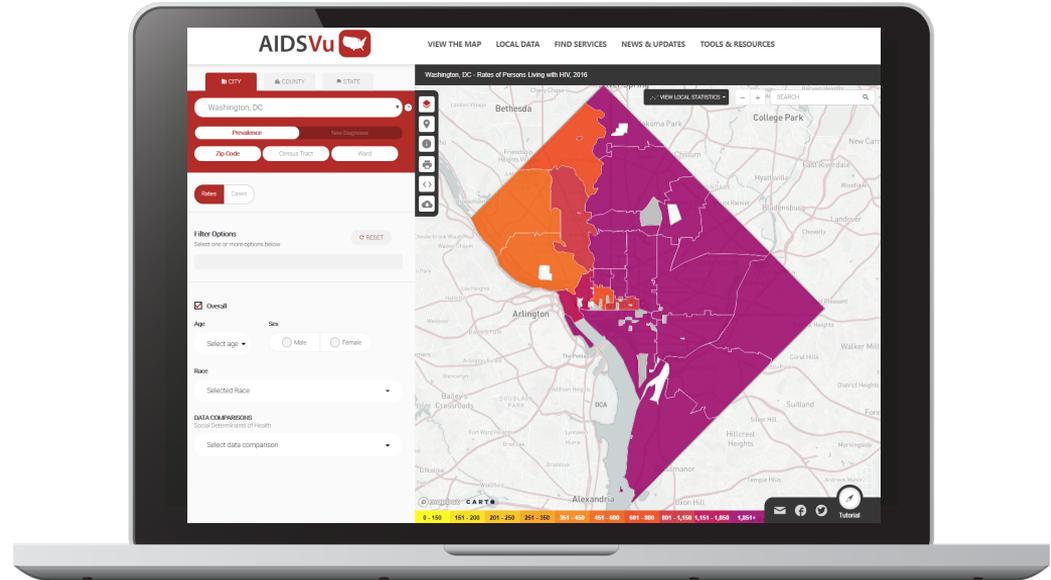


*Presented by the Rollins School
of Public Health at Emory
University in partnership with
Gilead Sciences*



AIDSVu Overview

- **AIDSVu maps state-, county-, and city-level HIV data, including:**
 - Prevalence and new diagnoses
 - Mortality
 - PrEP Use
- City and state profiles with HIV statistics
- Deeper Look at HIV in the South, PrEP
- Service locator tool for testing, PrEP and Care



AIDSVu.org



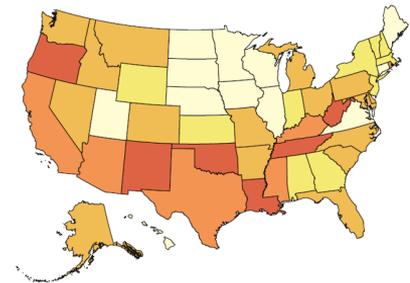


HepVu Overview

- Established in 2017 to **present the first standardized state-level estimates** of people living with Hepatitis C
- **Intersection of the Hepatitis C and opioid epidemics** to advance awareness, programs, and policies to address the syndemic
- A few of our HepVu Working Group Advisors:
 - amfAR
 - CDC
 - Massachusetts Department of Health
 - NASTAD
 - NIDA
 - UCSD



State	Population	Estimated Number of People Living with Hepatitis C	Estimated Number of People Living with Hepatitis C per 100,000
Alabama	4,900,000	100,000	20.4
Alaska	700,000	10,000	14.3
Arizona	7,100,000	150,000	21.1
Arkansas	3,000,000	60,000	20.0
California	39,000,000	800,000	20.5
Colorado	7,000,000	140,000	20.0
Connecticut	3,600,000	70,000	19.4
Delaware	1,000,000	20,000	20.0
District of Columbia	700,000	10,000	14.3
Florida	22,000,000	450,000	20.5
Georgia	11,000,000	220,000	20.0
Hawaii	1,400,000	20,000	14.3
Idaho	1,800,000	36,000	20.0
Illinois	13,000,000	260,000	20.0
Indiana	6,800,000	136,000	20.0
Iowa	3,200,000	64,000	20.0
Kansas	3,800,000	76,000	20.0
Kentucky	4,500,000	90,000	20.0
Louisiana	4,600,000	92,000	20.0
Maine	1,400,000	28,000	20.0
Maryland	6,100,000	122,000	20.0
Massachusetts	7,000,000	140,000	20.0
Michigan	10,000,000	200,000	20.0
Minnesota	5,700,000	114,000	20.0
Mississippi	3,000,000	60,000	20.0
Missouri	6,200,000	124,000	20.0
Montana	1,100,000	22,000	20.0
Nebraska	1,900,000	38,000	20.0
Nevada	3,100,000	62,000	20.0
New Hampshire	1,300,000	26,000	20.0
New Jersey	9,000,000	180,000	20.0
New Mexico	2,100,000	42,000	20.0
New York	20,000,000	400,000	20.0
North Carolina	10,500,000	210,000	20.0
North Dakota	750,000	15,000	20.0
Ohio	11,500,000	230,000	20.0
Oklahoma	4,000,000	80,000	20.0
Oregon	4,500,000	90,000	20.0
Pennsylvania	12,500,000	250,000	20.0
Rhode Island	1,100,000	22,000	20.0
South Carolina	5,300,000	106,000	20.0
South Dakota	1,000,000	20,000	20.0
Tennessee	6,500,000	130,000	20.0
Texas	29,000,000	580,000	20.0
Utah	3,300,000	66,000	20.0
Vermont	600,000	12,000	20.0
Virginia	8,000,000	160,000	20.0
Washington	7,500,000	150,000	20.0
West Virginia	1,800,000	36,000	20.0
Wisconsin	5,900,000	118,000	20.0
Wyoming	550,000	11,000	20.0



HepVu.org





THE STATE OF HEPATITIS IN AMERICA





Hepatitis C in America

- **Hepatitis C is a leading cause of liver-related morbidity and mortality in America**
 - Hepatitis C-related deaths were greater than deaths from 60 other infectious diseases combined in 2013
- **An estimated 2.3 million people were living with Hepatitis C between 2013 and 2016**
 - Three-fourths were Baby Boomers, or those born between 1945 and 1965
- **Hepatitis C and other infectious diseases are often-overlooked consequences of America's opioid crisis**
 - Hepatitis C infections have nearly tripled in recent years, with the largest increases among persons under 40, largely due to injection drug use



Eliminating Hepatitis C

- The public health surveillance system for Hepatitis C is **not as robust** as it is for other infectious diseases, such as HIV
- **Accurate estimates of the burden of Hepatitis C infection in each state are essential** to inform policy, programmatic, and resource planning for elimination strategies
- HepVu is a powerful tool to communicate the Hepatitis C epidemic in a clear and compelling way to **inform researchers and public health decision-makers' prevention and care efforts**




NATIONAL
VIRAL HEPATITIS
ACTION PLAN
2017-2020





HepVu DATA AND SITE OVERVIEW

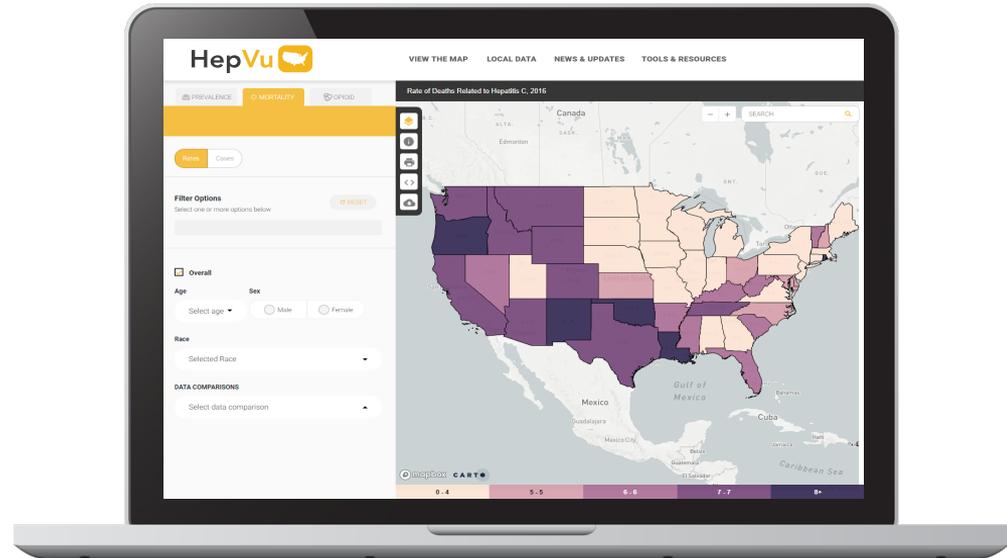


View data at the state-level, including:

- Hepatitis C prevalence estimates (2013-2016)
- Hepatitis C-related mortality data (2016)

Opioid maps:

- Opioid prescription rate (2017)
- Narcotic overdose mortality rate (2013-2016)
- Pain reliever misuse percent (2015-2016)





Hepatitis C Prevalence Estimation Data

- State-level burden of Hepatitis C infection informs policies, resource allocation, advocacy, and elimination efforts
- Prevalence of current infection (RNA)
 - Measured in nationally representative residential survey, National Health and Nutrition Examination Survey (NHANES)
 - In most states, it is challenging to measure directly from diagnoses reported to surveillance
- Statistical models allow combining national NHANES Hepatitis C prevalence with local information to yield state-level results
 - National Vital Statistics System (NVSS) mortality
 - American Community Survey (ACS) population sizes

Original Investigation | Public Health **JAMA Network Open**

December 21, 2018

Prevalence of Hepatitis C Virus Infection in US States and the District of Columbia, 2013 to 2016

Eli S. Rosenberg, PhD¹; Elizabeth M. Rosenthal, MPH¹; Eric W. Hall, MPH²; et al

[» Author Affiliations](#) | [Article Information](#)

JAMA Netw Open. 2018;1(8):e186371. doi:10.1001/jamanetworkopen.2018.6371

Key Points

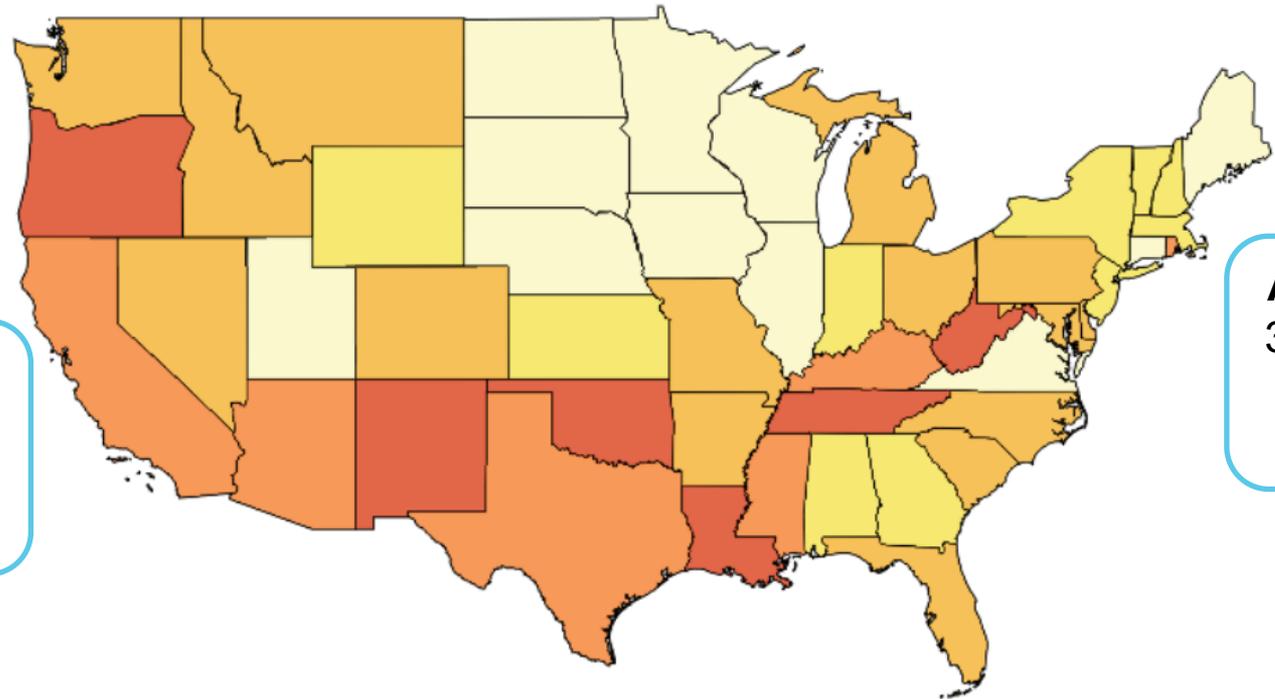
Question During 2013 to 2016, what proportion of adults were living with hepatitis C virus (HCV) infection in each US state?

Findings In this survey study, US national HCV prevalence during 2013 to 2016 was 0.93% and varied by jurisdiction between 0.45% and 2.34%. Three of the 10 states with the highest prevalence and 5 of the 9 states with the highest number of HCV infections were in the Appalachian region.





Hepatitis C Prevalence, 2013-2016



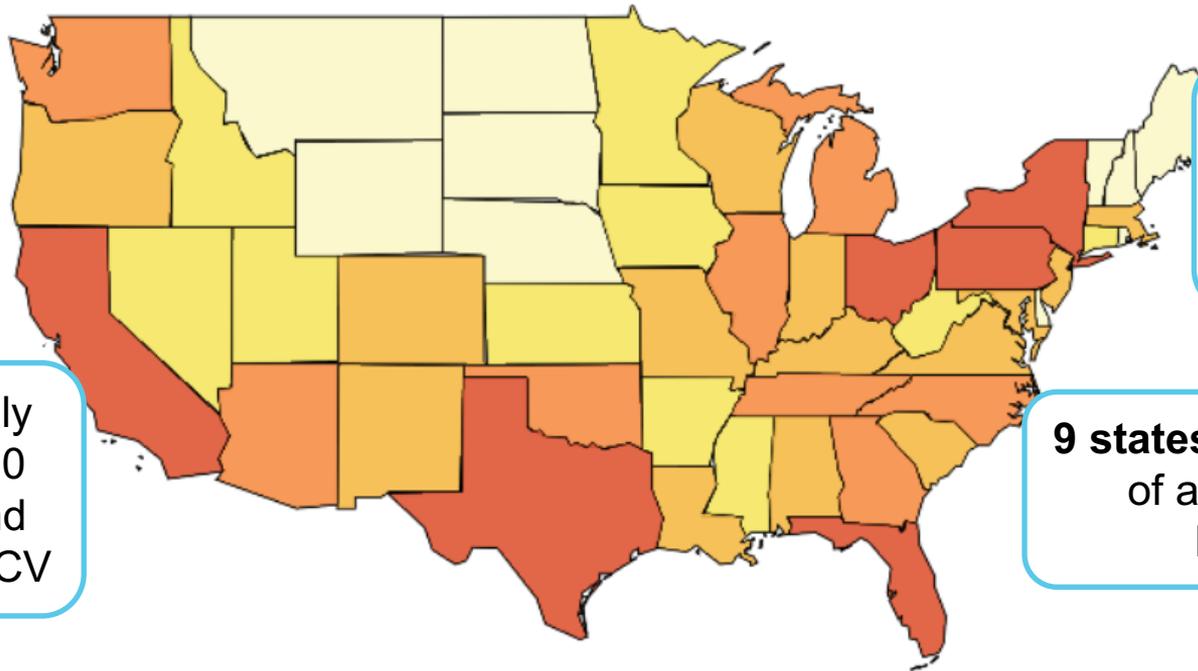
West
10/13 states
have prevalence
above median

Appalachia
3/10 highest
prevalence
states





Number of People with Hepatitis C, 2013-2016



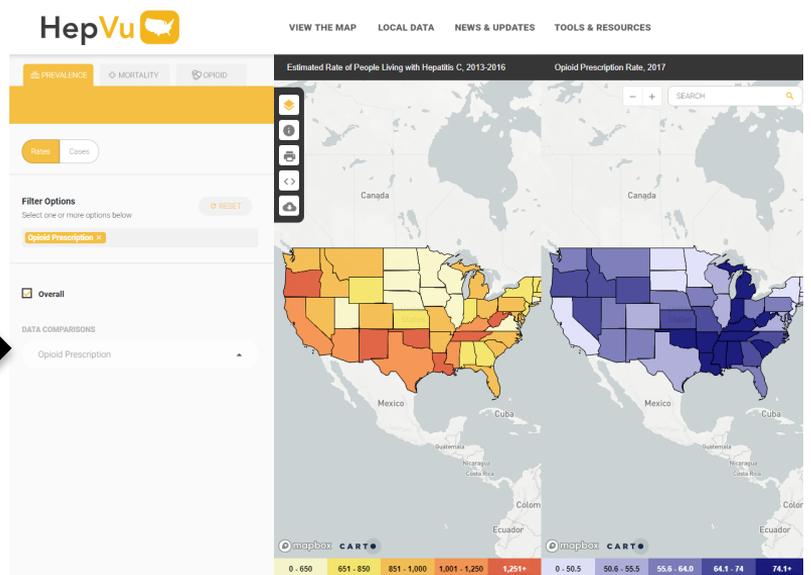
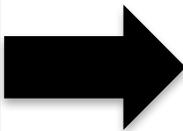
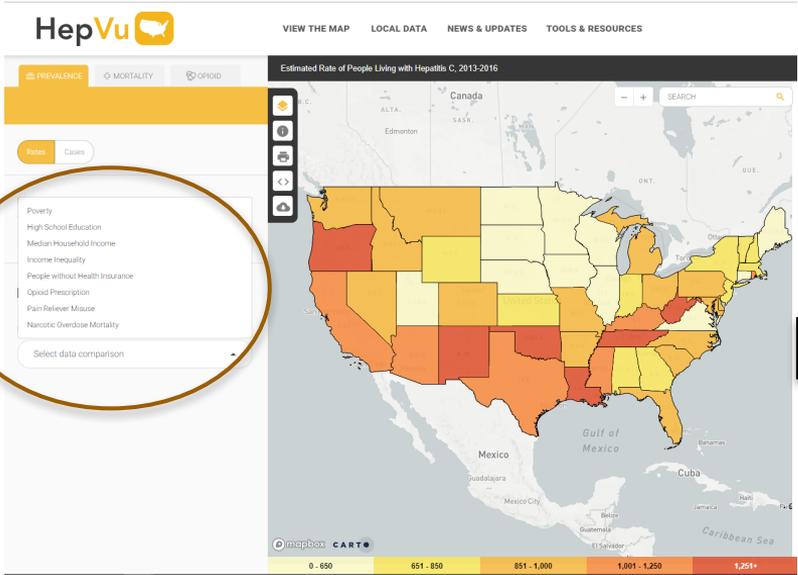
TN and AZ only states in top 10 prevalence and persons with HCV

Appalachia
5/10 states with highest number of infections

9 states comprise of 52% of all persons with Hepatitis C



Comparing Data





State Profiles



[VIEW THE MAP](#)



[NEWS & UPDATES](#)

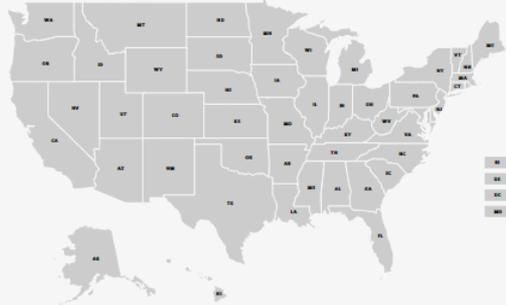
[TOOLS & RESOURCES](#)



Local Data

View state profiles with Hepatitis C statistics, downloadable charts and local resources.

Click on a state to begin.

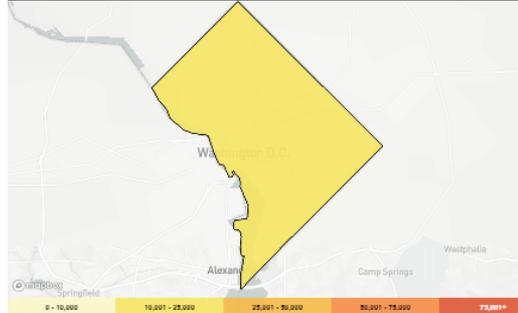


[HOME](#) > [LOCAL DATA](#) > [WASHINGTON, DC](#)

Local Data: Washington, DC

There are approximately 12,700 people living with Hepatitis C in Washington, DC.

Estimated Number of People Living with Hepatitis C, 2013-2016



Highlights

Regional

Sex

Race/Ethnicity

Age

Washington, DC Highlights

Estimated Prevalence of Hepatitis C

Estimated number of people living with Hepatitis C, 2013-2016:

12,700

Estimated rate of people living with Hepatitis C (per 100,000), 2013-2016:

2,340

Reported Hepatitis C Mortality

Number of deaths related to Hepatitis C in 2016:

95

Rate of deaths related to Hepatitis C in 2016 (per 100,000):

14



Deeper Look: Opioids

Deeper Look: Opioids

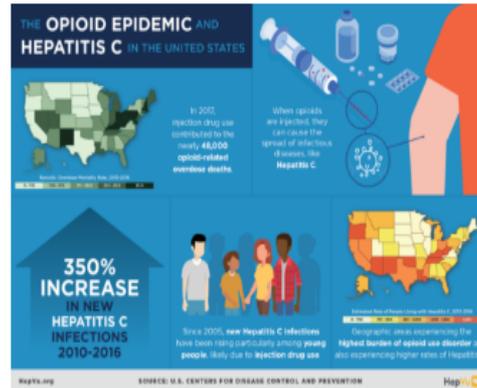
The opioid crisis is one of the greatest public health challenges facing the U.S., causing an unprecedented surge in drug overdose deaths, and fueling the rapid rise in new Hepatitis C infections from injection drug use in communities across the country.

As opioid abuse rates have skyrocketed, new Hepatitis C infections have also increased. Data on HepVu show that an estimated 2.3 million Americans were living with Hepatitis C between 2013 and 2016. Though the majority, or roughly three-fourths, of all infections were among Baby Boomers (those born between 1945 and 1965), there has been a spike in new Hepatitis C infections among younger Americans.

The number of new Hepatitis C infections [more than tripled](#) from 2010 to 2016, largely reflecting infections due to the rise in injection drug use. This has created a syndemic, in which the opioid and Hepatitis C epidemics are linked - with the burden of Hepatitis C being directly exacerbated by injection drug use.

The Opioid Epidemic

In 2017, the U.S. Department of Health and Human Services (HHS) declared a public health state of emergency due to the opioid epidemic. Opioids are highly addictive and [include](#) prescription pain relievers, synthetic compounds such as fentanyl, and illegal drugs such as heroin. From 2002 to 2017, the number of deaths due to opioid abuse have [more than quadrupled](#). The opioid epidemic's growth even contributed to a decrease in [annual U.S. life expectancy](#), which declined to 78.6 years in 2016 primarily due to increases in suicides and opioid-related overdose deaths.



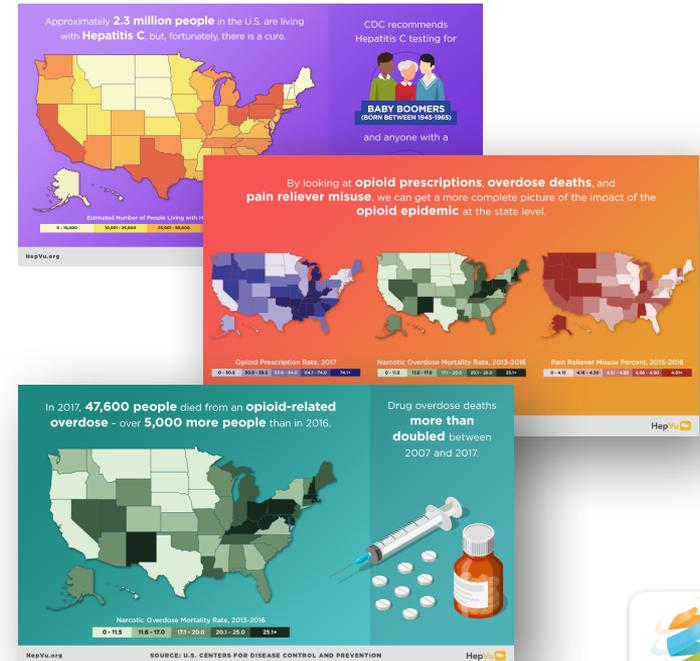
SHARE    

- **Deeper Look: Opioids** page presents an in-depth look at the opioid epidemic's impact on Hepatitis C in the U.S.
- Page includes resources, shareable infographics, related blogs, and a graphic illustrating the syndemic between Hepatitis C and injection drug use as a result of the opioid epidemic



Shareable Resources and Future Research

- **Share:**
 - Infographics on Hepatitis B and C, and the opioid syndemic
 - Blogs from viral hepatitis and opioid experts
- **2019:**
 - 2013-2016 Hepatitis C prevalence estimates, stratified by race, age, and sex
 - Additional opioid indicators
 - Hepatitis Awareness Month and Testing Day infographics (May)
 - Ongoing blog series with experts





QUESTIONS?

Learn more at HepVu.org

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