

# **Scott County HIV Outbreak: *Four Years Later***

Pam Pontones, MA  
Deputy Health Commissioner  
State Epidemiologist

Michigan Harm Reduction Conference  
Lansing, Michigan  
April 2, 2019



Indiana State  
Department of Health

# Geographic Distribution

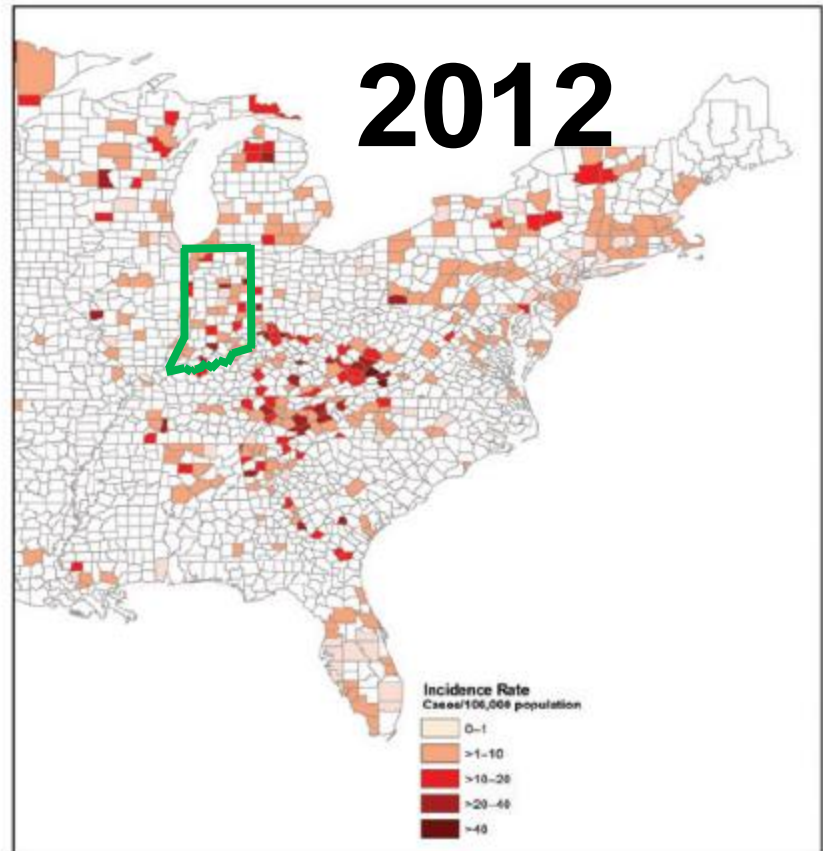
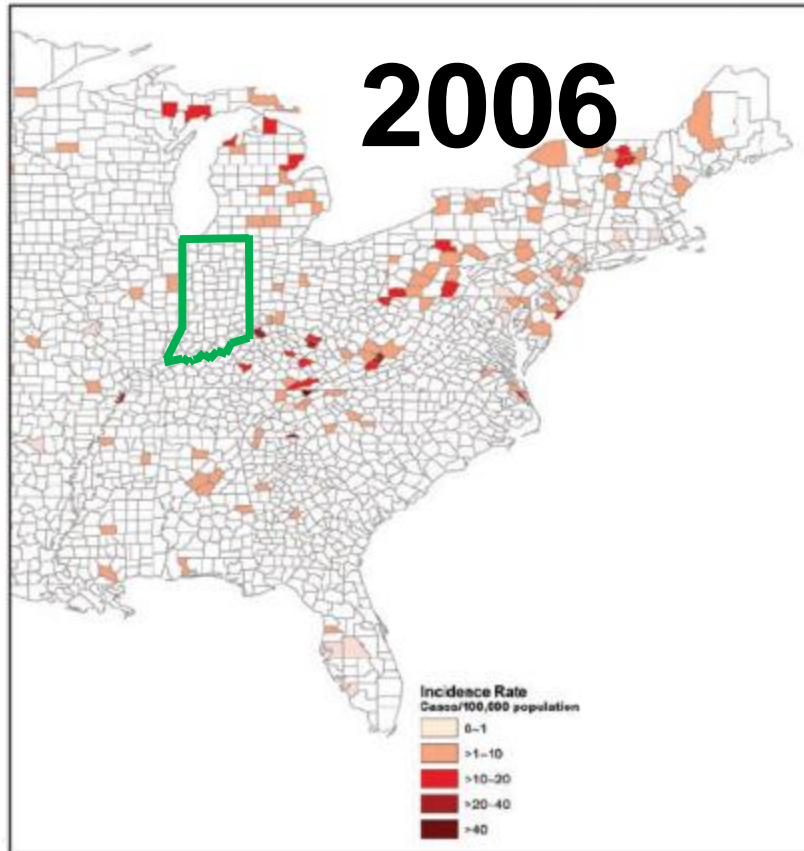
Scott County pop. 24,000; Austin pop. 4,200



Scott County: ranked 92<sup>nd</sup> in many health and social indicators among 92 counties, including life expectancy

# Why Austin?

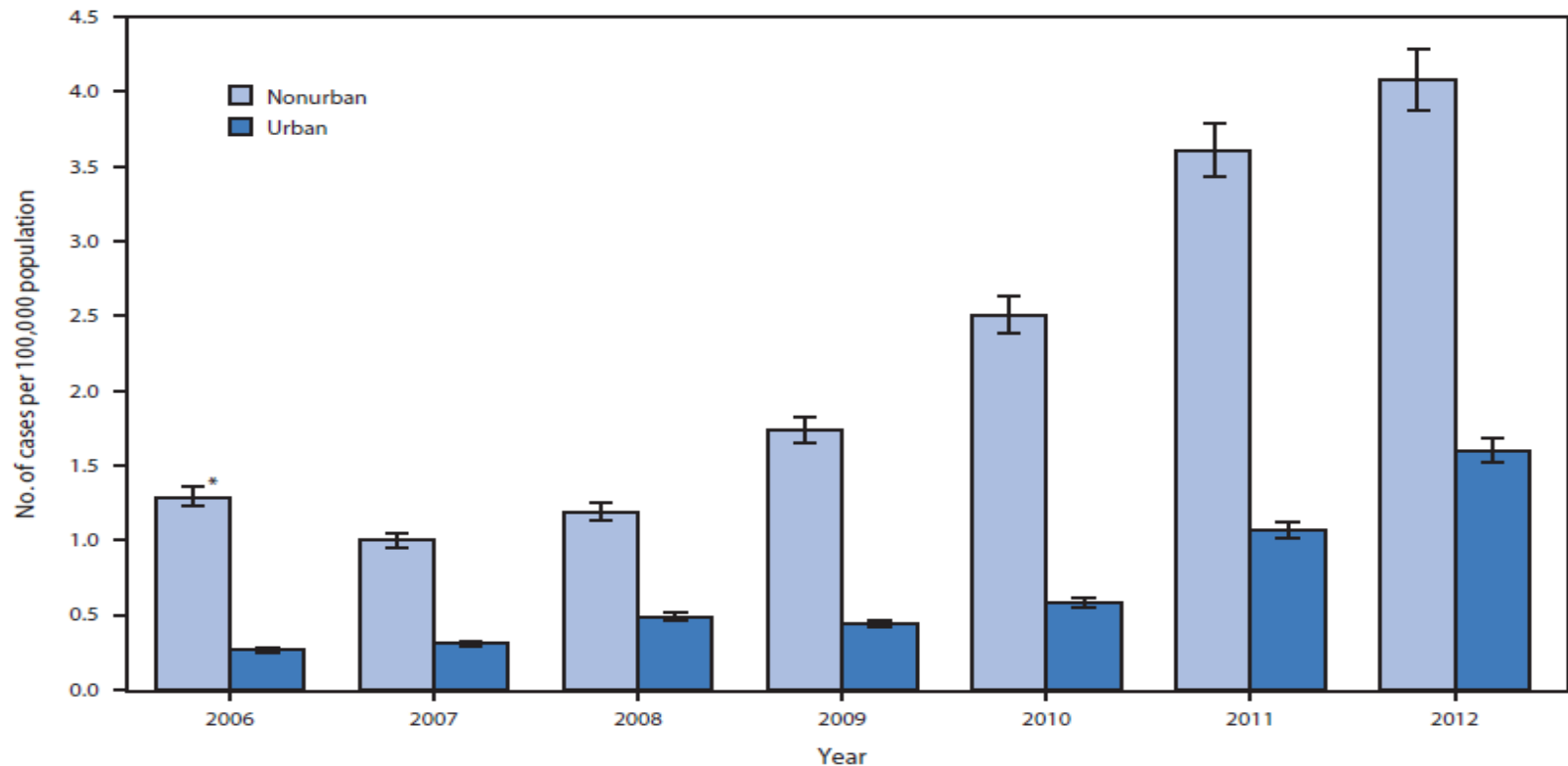
Expanding epidemic of injection drug use heralded by dramatic increase in acute HCV infections



# Just Austin?

Expanding epidemic of injection drug use heralded by dramatic increase in acute HCV infections

FIGURE 1. Incidence of acute hepatitis C among persons aged  $\leq 30$  years, by urbanicity and year — Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012



MMWR Morb Mortal Wkly Rep 2015, 64(17): 444-448, "Increases in Hepatitis C Virus Infection Related to Injection Drug Use Among Persons Aged  $\leq 30$  Years — Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012"

# Ingredients of an Outbreak







# Outbreak Notification

- Late 2014: 3 new HIV cases identified in SE IN
- DIS learned 2 had shared needles → contact tracing
- Identified 8 more new infections in jurisdiction with 5 new HIV infections from 2009-13—traced to Austin
- All cases report injection of the opioid analgesic oxymorphone (Opana® ER and generic ER)
- ISDH HIV/STD Division creates contact maps, determines cluster description and cause
- **Rural injection of oral opioid = largest HIV outbreak of its kind in the US**

# Drug Use Among HIV+ Cases

- Multigenerational sharing of injection equipment (insulin syringe)
- **Daily injections: 4-15**
- Number of partners: 1-6 per injection event

OPANA® ER – crush-resistant formulation: half-life 7-9 hours

Dosage Strength	OPANA® ER with INTAC® Tablet Images*	GENERIC oxymorphone ER Global Pharma (Impax) Tablet Images*
40 mg		
30 mg		

# Case Epidemiology

- Total cases: **237**
- 503 of 570 (88%) of named contacts linked to outbreak located and offered testing
- 541 total individuals tested
- Contacts remaining to trace: 0
- Positivity rate among tested contacts: 44%
- Average number of unique contacts per case: 8 (range: 0-80)
- **HCV co-infection: 222/237 (94%)**



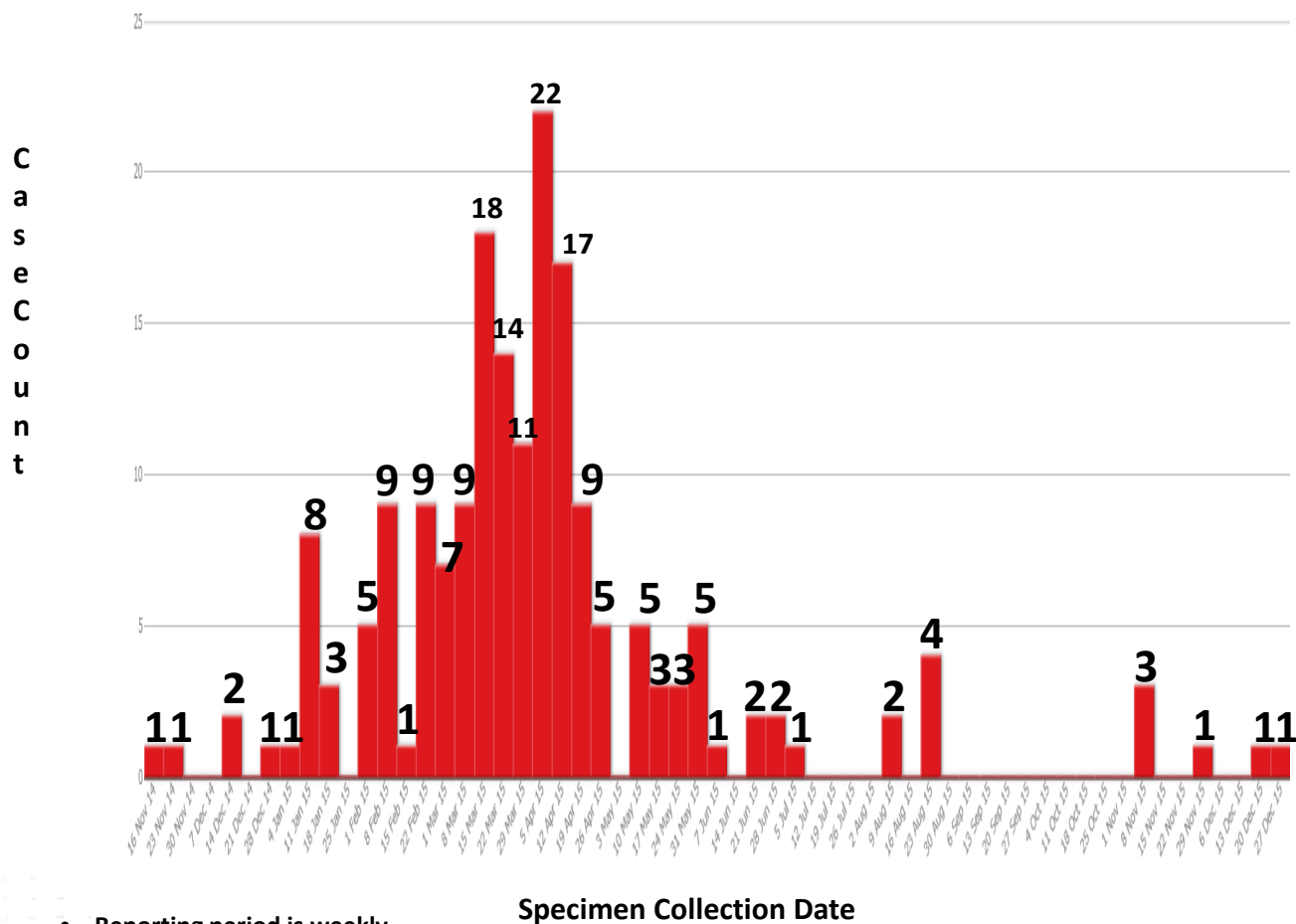
# HIV Case Demographics

- Median age: 34 years, range 18-60 years
- Male: 59%
- 99% non-Hispanic white
- Risk factors
  - 221 (93%) admitted injecting drugs: oxymorphone, meth, heroin
  - 27 (11%) admitted exchanging sex for drugs or money
- Socioeconomic factors
  - High poverty (19.0%) and unemployment (8.9%)
  - Low educational attainment (21.3% do not complete high school)
  - High proportion without health insurance and medical care access

# Phylogenetics

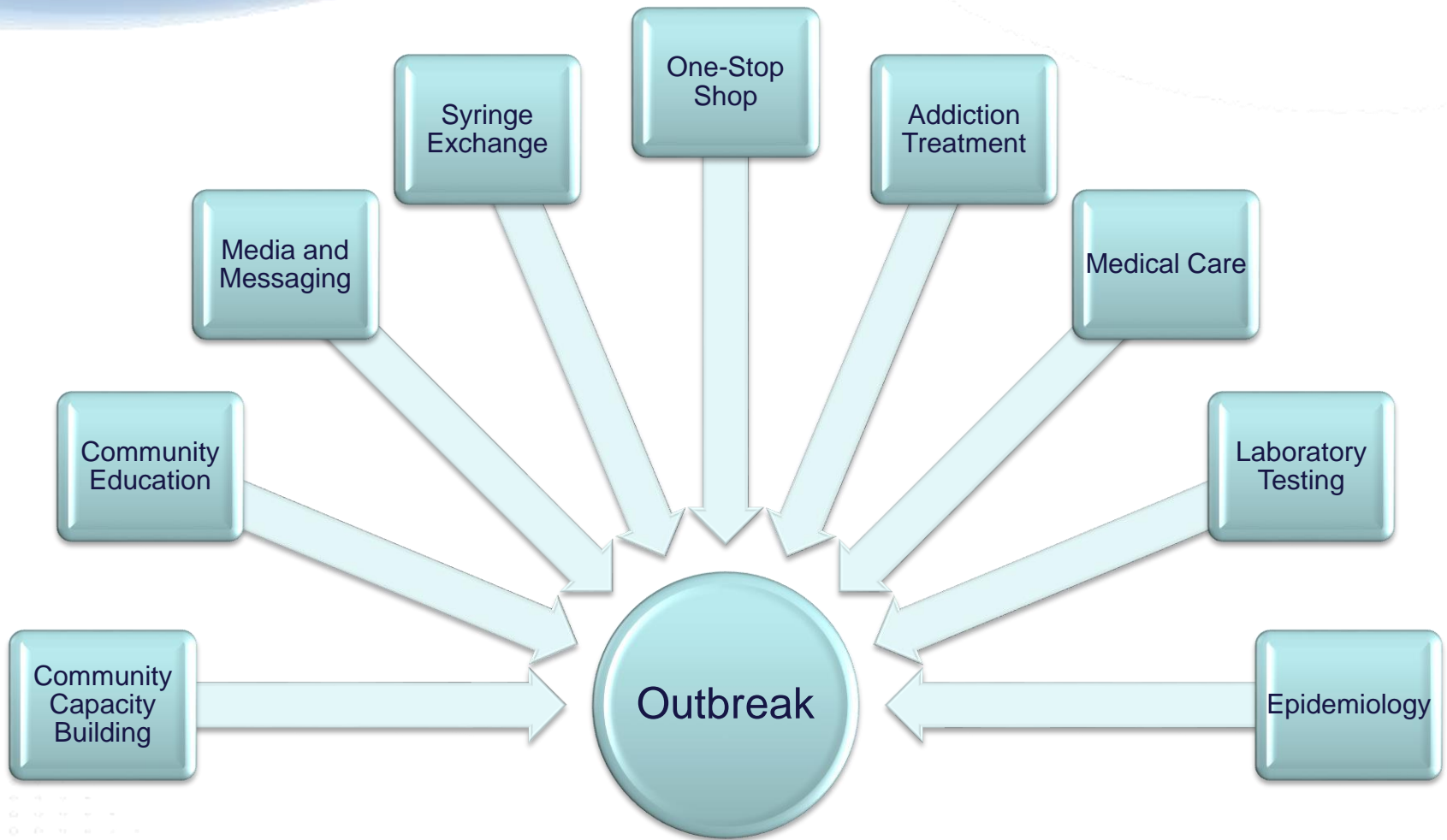
- HIV specimens
  - 96% of all analyzed specimens map to one cluster
  - Acquired within past six months
- HCV specimens
  - Multiple strains and clusters
  - HCV has been repeatedly introduced over years to decades
  - Many infections are recent, some older

# Epidemic Curve 12.31.2015



- Reporting period is weekly (7days) from November 16, 2014 – December 31, 2015

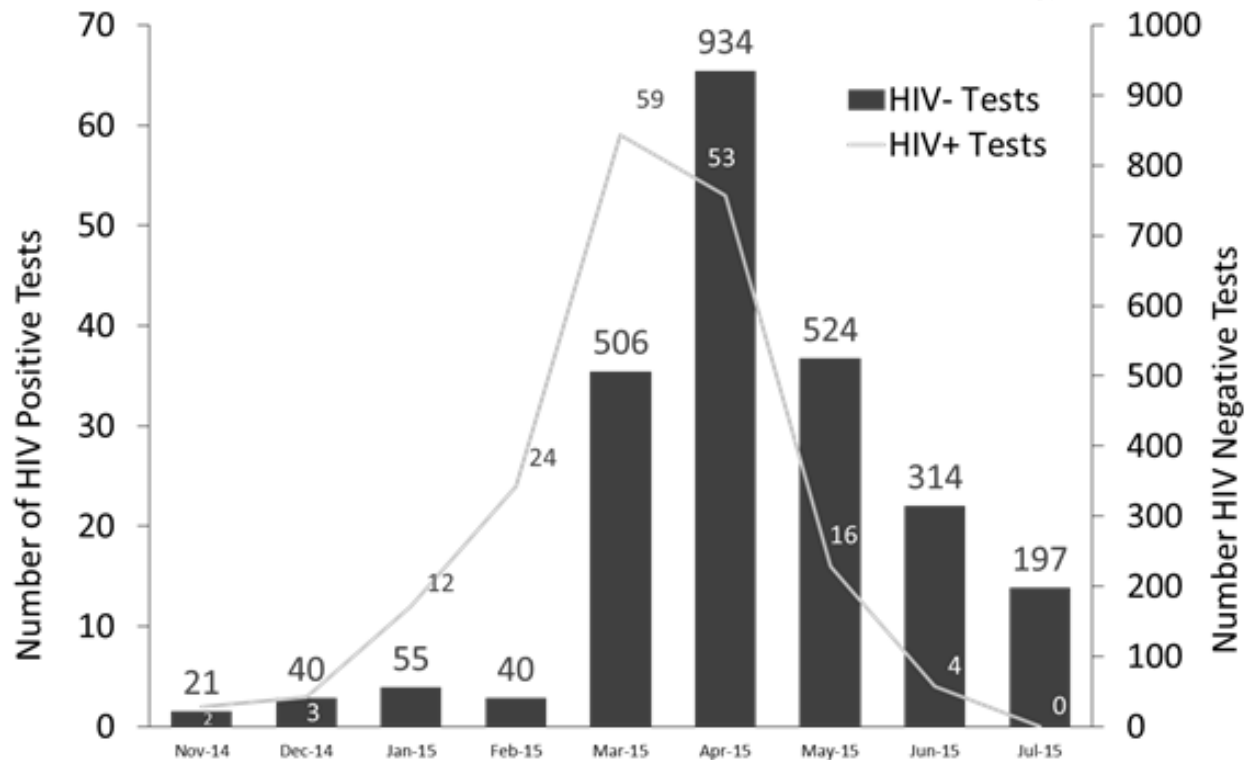
# Scope of Response



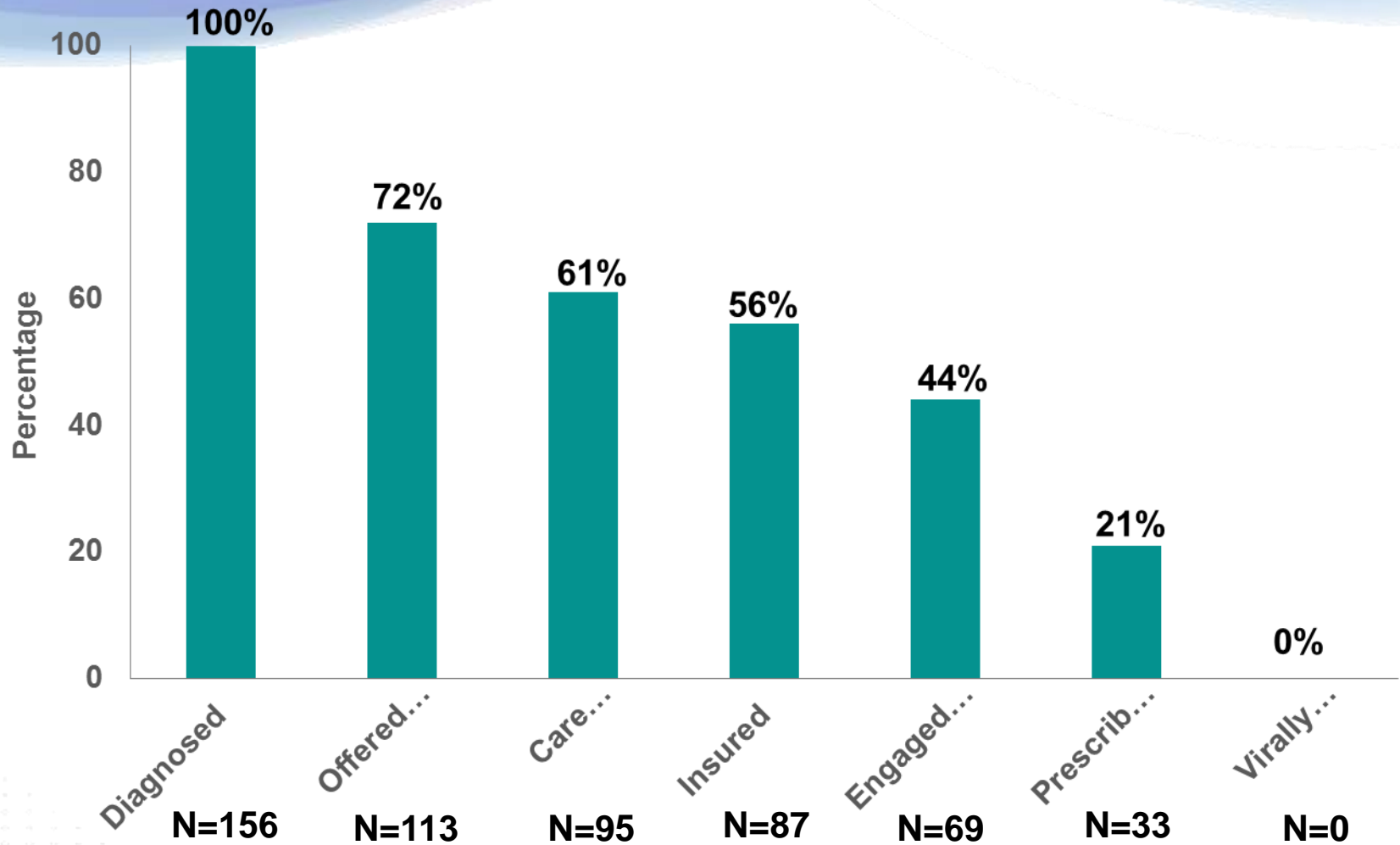
# Outbreak Interventions

Challenge	Intervention
Very few insured/limited access to services	One-stop shop: vaccines, testing, care coord, insurance, transportation
No HIV/HCV care	Assist local MD via IU, federal partners for care, testing, PrEP
Limited HIV awareness	You Are Not Alone campaign, infographics, press briefings, Jeannie White Ginder event at Austin HS
Syringe exchange illegal	Issue executive order and new law
Limited addiction services	Raise MAT awareness, training to prescribe Suboxone®, designate local mental health provider as FQHC, SAMHSA collaboration
Focus on HIV infection	HCV effort gaining momentum as HIV epidemic better controlled

# HIV Testing Performed

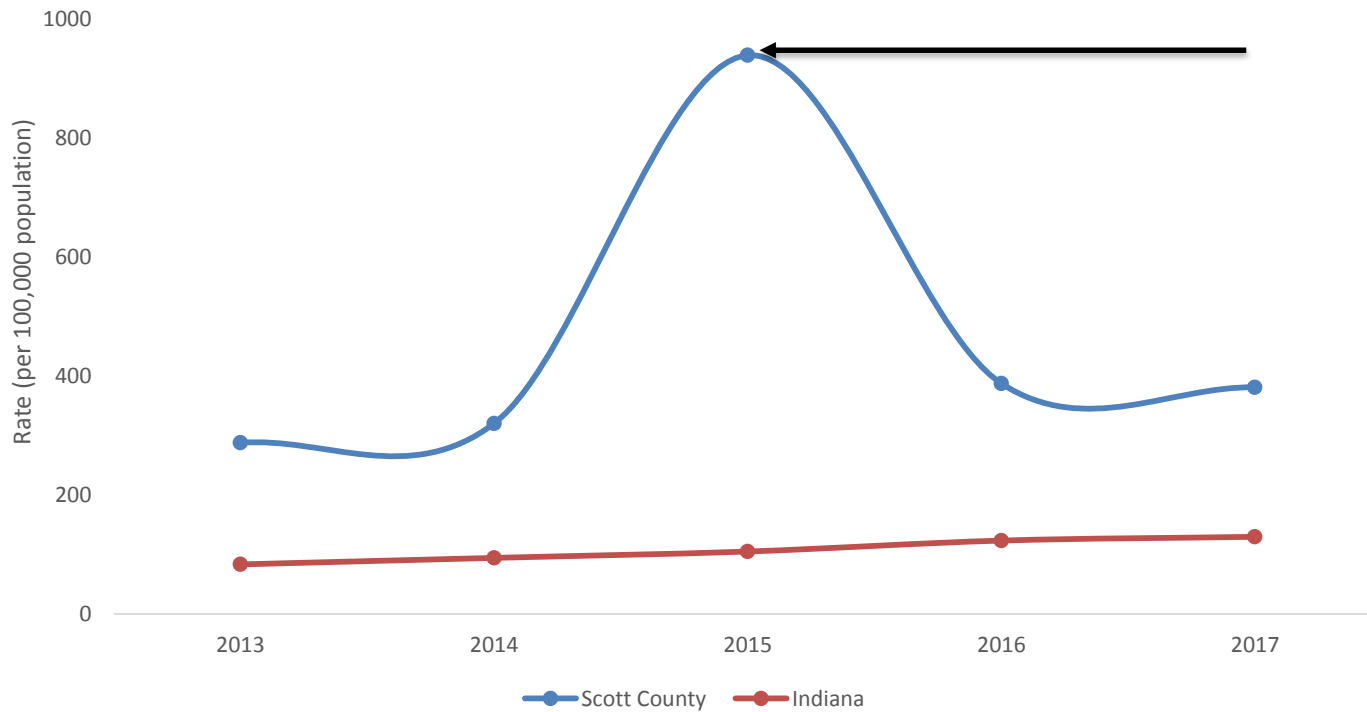


# Continuum of HIV Care--Austin, Indiana May 15, 2015



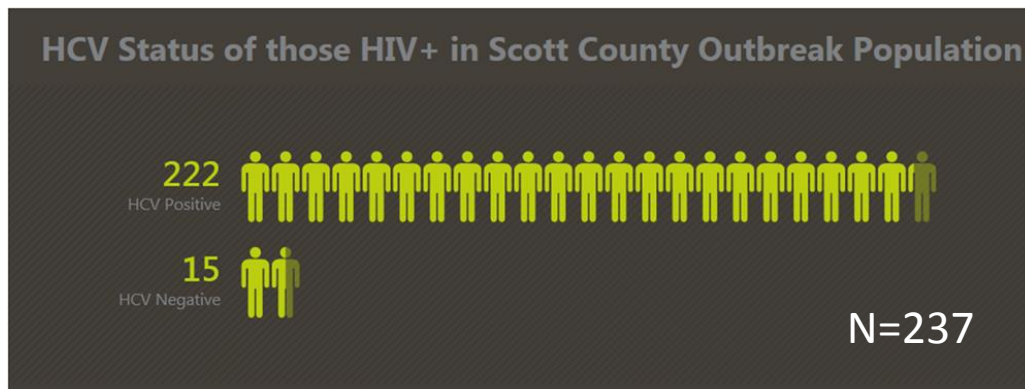
Mean VL: 431,836

# Acute and Chronic Hepatitis C Rates Scott County and Indiana, 2013-2017

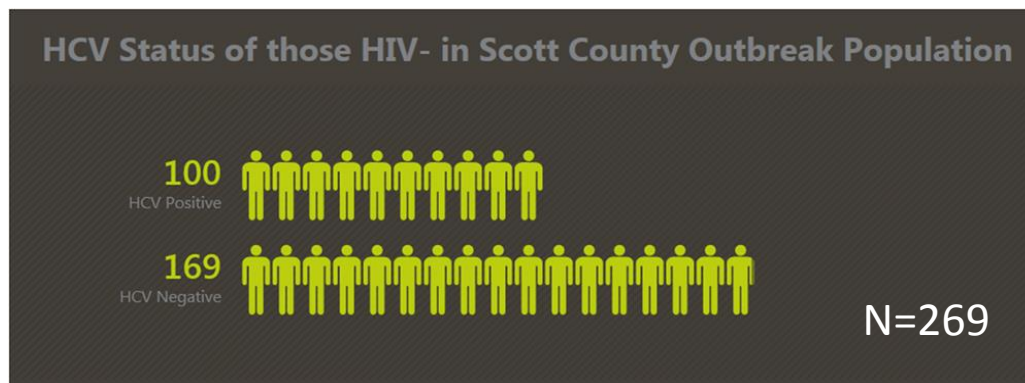




# Hepatitis C Screening Status Scott County Outbreak

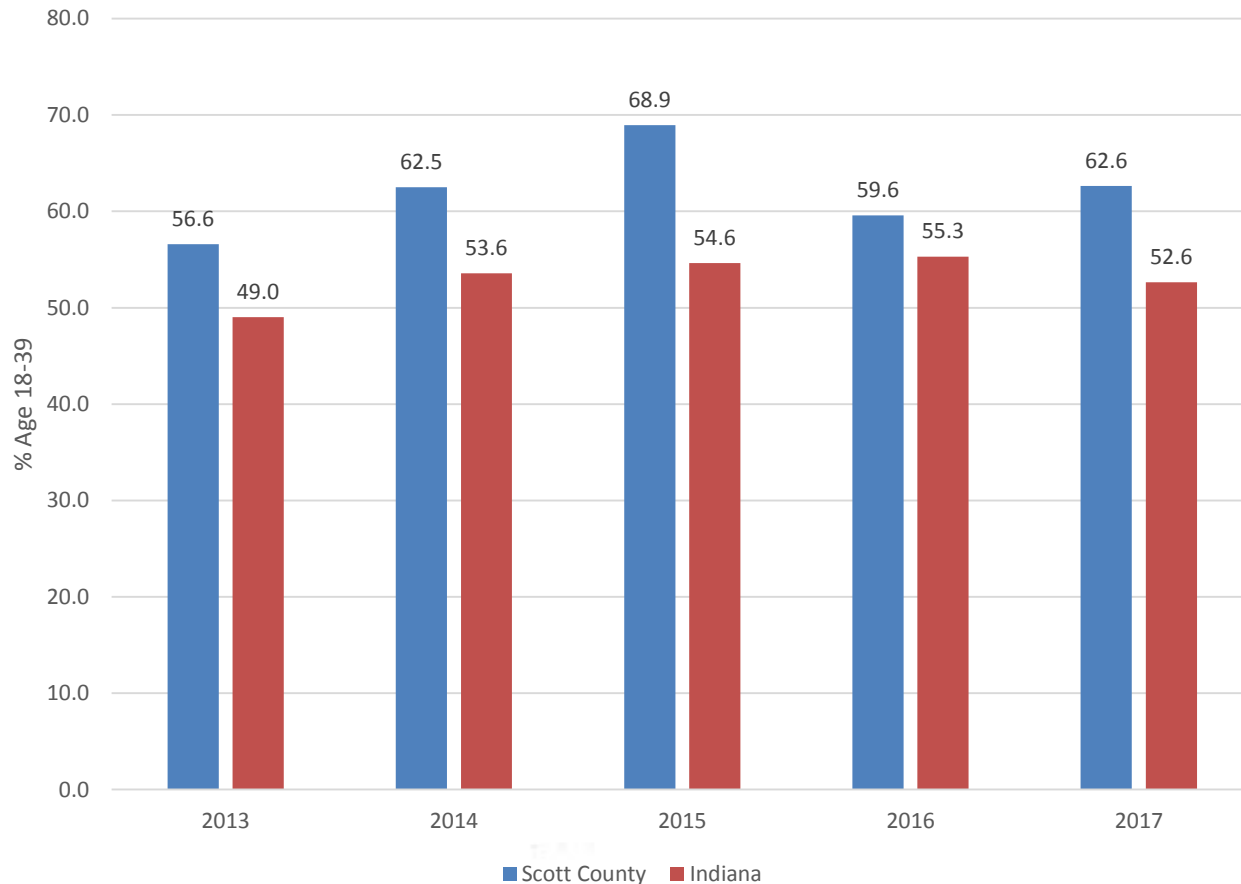


94% HCV  
positivity

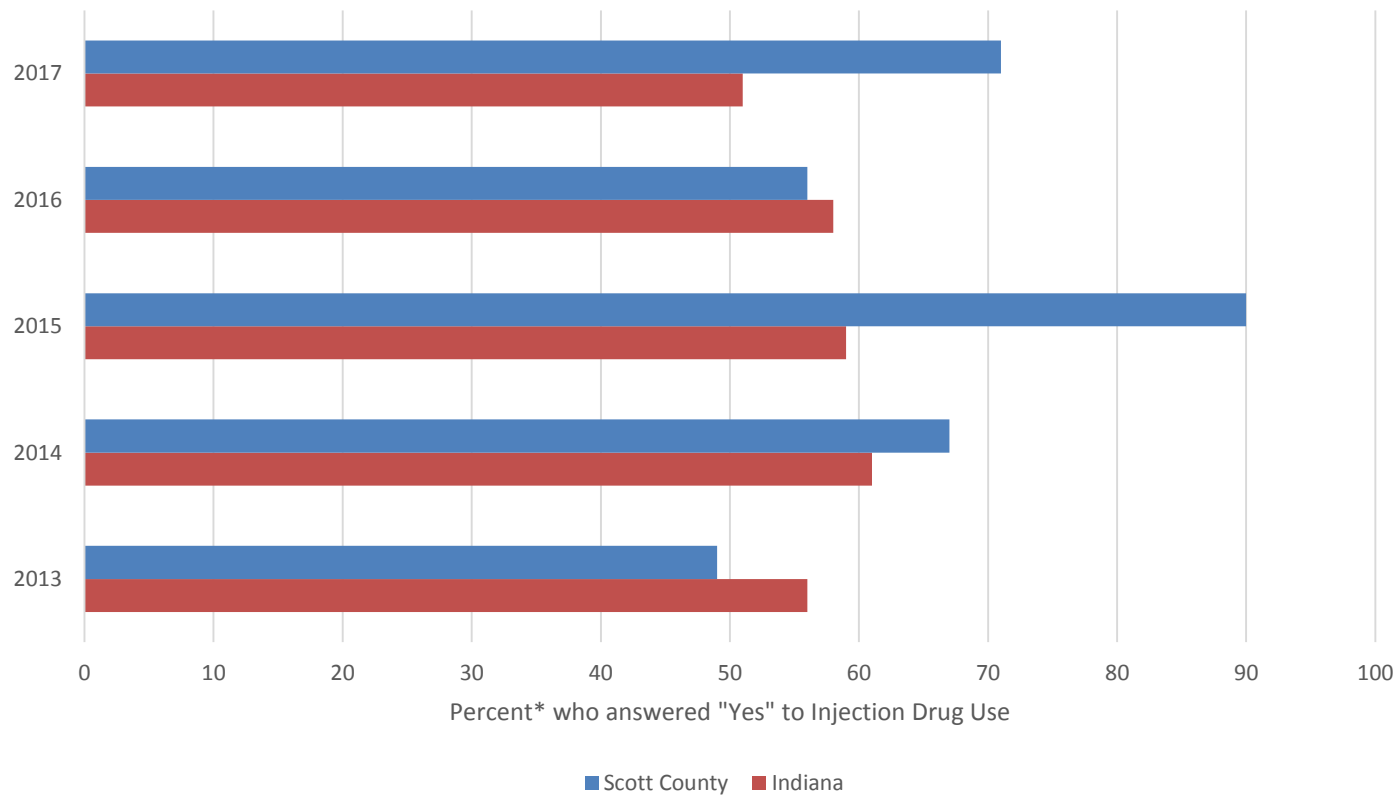


37% HCV  
positivity

# Acute and Chronic Hepatitis C Cases Ages 18-39 by Percent of Total, Scott County and Indiana, 2013-2017



# Percent of Acute and Chronic Hepatitis C Cases Answering “Yes” to Injection Drug Use, Scott County and Indiana, 2013-2017



\*"Yes"/"No" + "Yes" + "Unknown"

# Scott County SSP

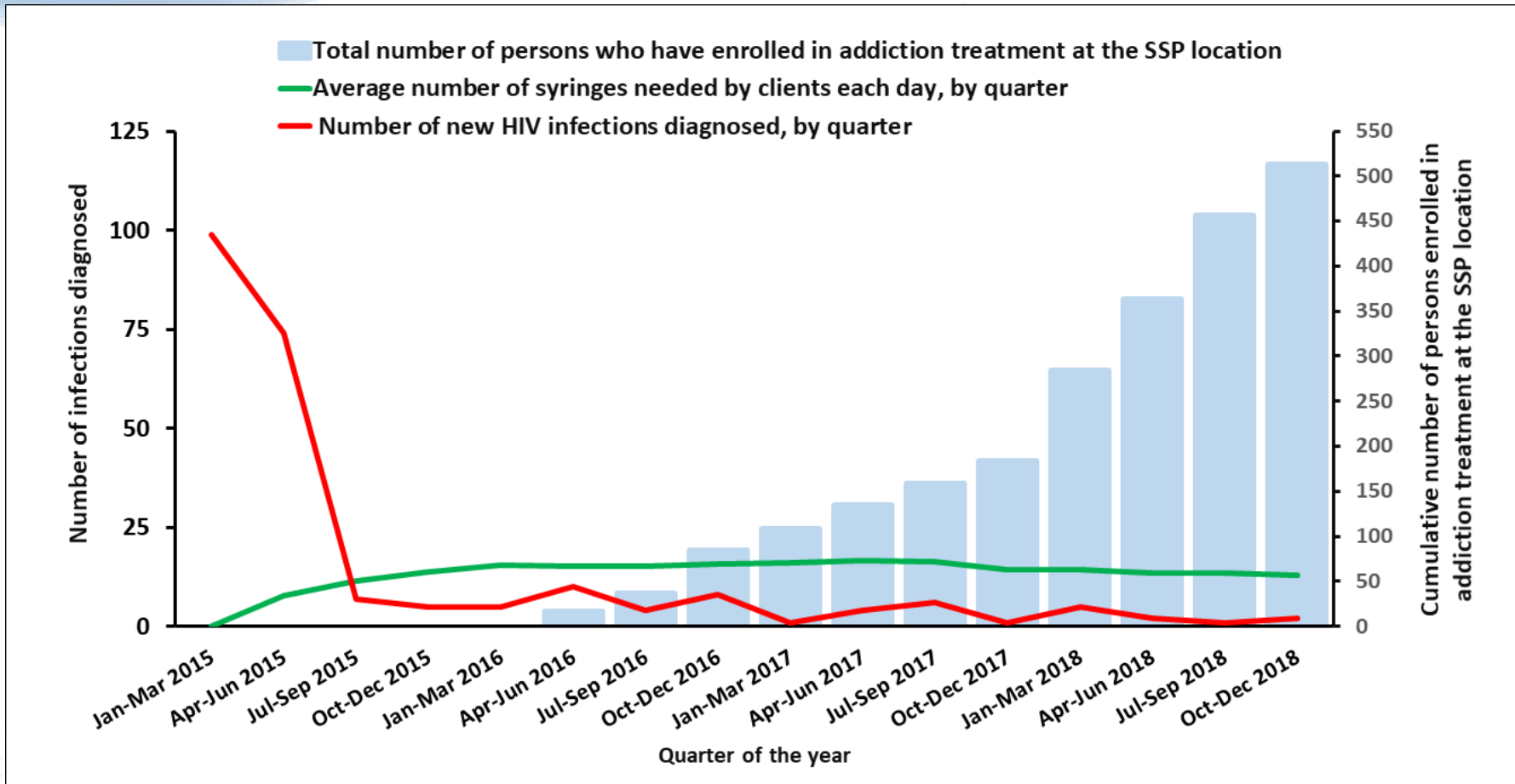
- Community Outreach Center and mobile unit
- Donations accepted for needles, supplies
- ID cards issued
- One-for-one plus model
- Partnership for disposal
- Connection to other services
- Renewed in May 2016, 2018



# Indiana Syringe Exchange Law

- Local health officer declares to county/municipality:
  - Epidemic of hepatitis C or HIV;
  - Primary mode of transmission is IV drug use;
  - Syringe exchange is medically appropriate as part of the comprehensive public health response.
- The executive/legislative body of county/municipality:
  - Conducts a public hearing
  - Votes to adopt the declaration of the local health officer

# SSP Statistics

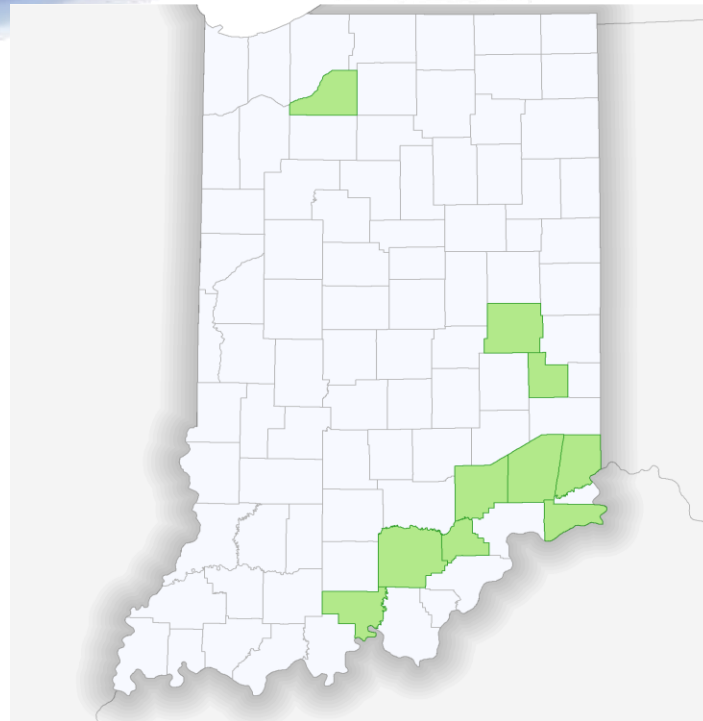


Source: CDC

# Other Policies and Models

- Better collection and use of RW rebate funds to expand capacity
- Blended funding between CDC/HRSA/Rebate/State funds to enhance programs
- Emphasis on one-stop shop models of care that eliminate barriers that have prevented successful health outcomes
- Aggressive linkage to care after initial diagnosis and outreach to HIV+ clients who have experienced a disruption in care
- Consultants to assist with building agency leadership capacity, expansion and policies/procedures
- HIV and HCV ECHO modules to link local physicians

## County-level Vulnerability to Rapid Dissemination of HIV/HCV Infection Among Persons Who Inject Drugs







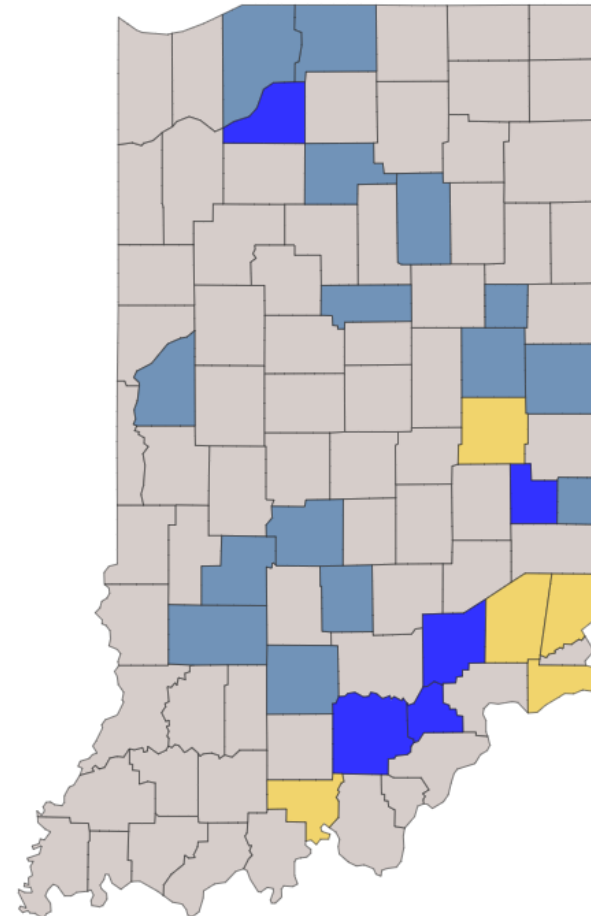
Notes: Map and Analysis provided by the Geospatial Research, Analysis, and Services Program (GRASP), Div of Toxicology and Human Health Sciences, ATSDR (2015). Data Sources: American Community Survey 2012-2013; DEA ARCOS 2013; NCHS/NVSS 2012- 2013; SAMHSA DATA 2000 Program Info 2014.

Vulnerable Counties and National Ranks (from 1-220)					
Scott	32	Switzerland	94	Ripley	195
Washington	57	Crawford	112	Dearborn	213
Starke	70	Henry	128		
Fayette	81	Jennings	158		

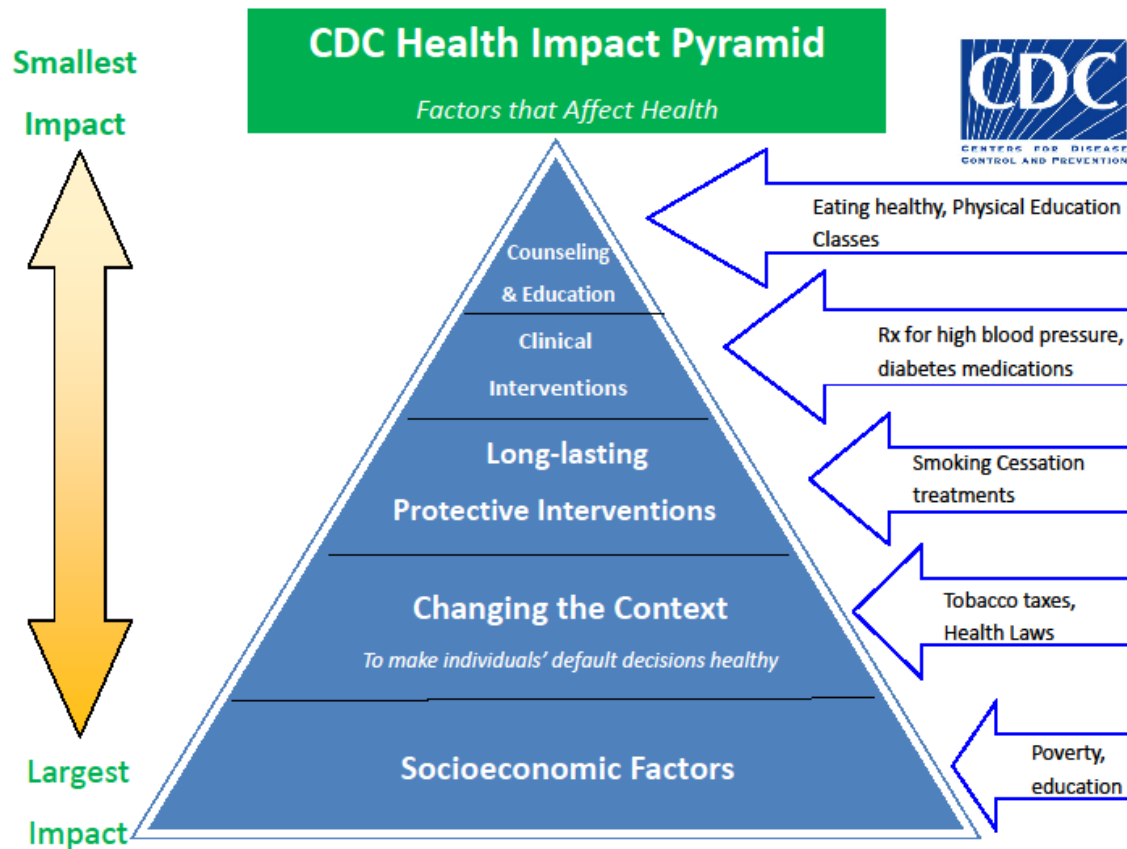


# County Vulnerability Index

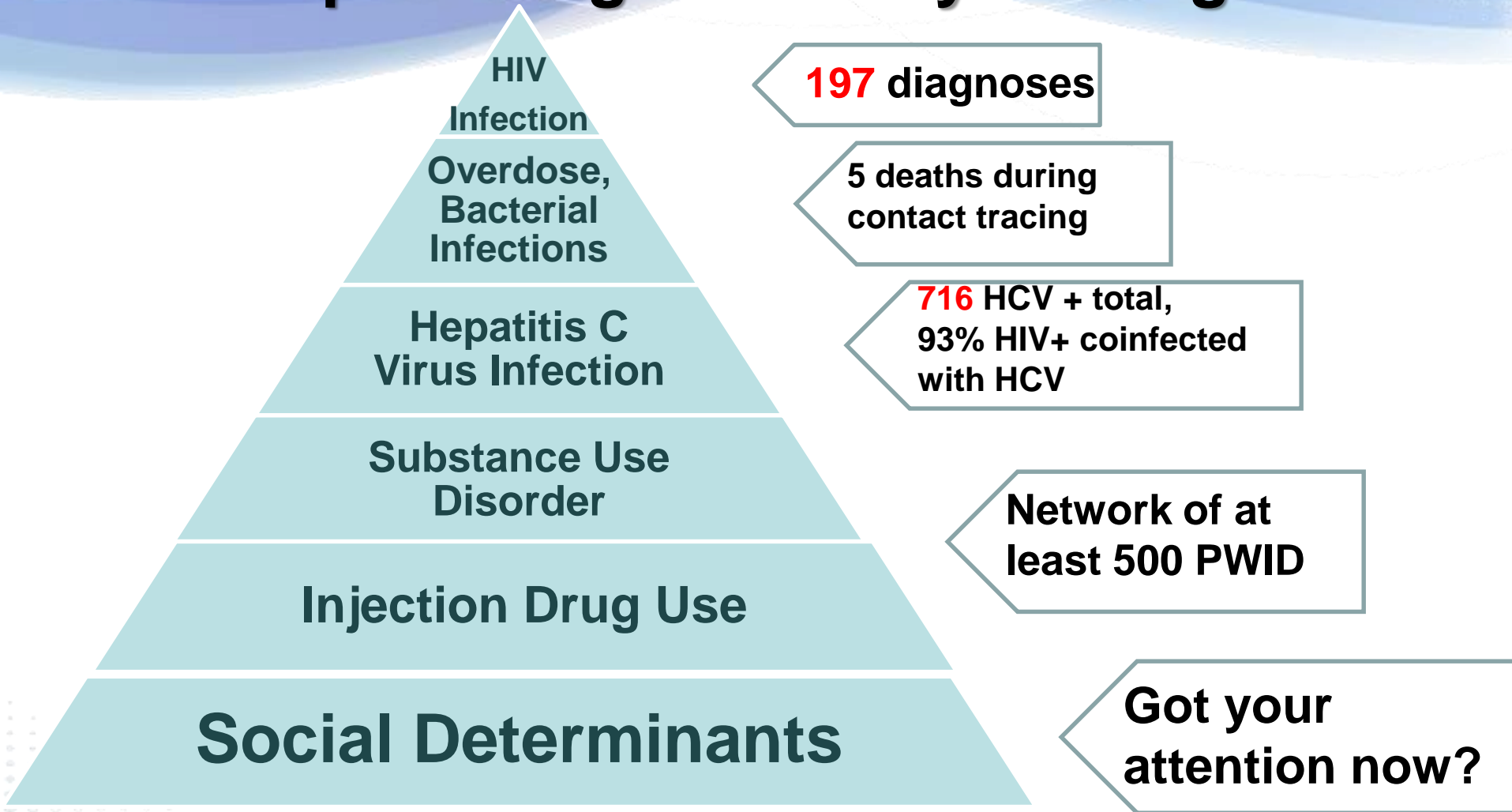
-  CDC Assessment Only
-  Identified by CDC & ISDH Assessment
-  ISDH Assessment Only
-  Not Identified by CDC or ISDH Assessment



# Health Impact Pyramid



# HIV Infection: Tip of a High-Mortality Iceberg



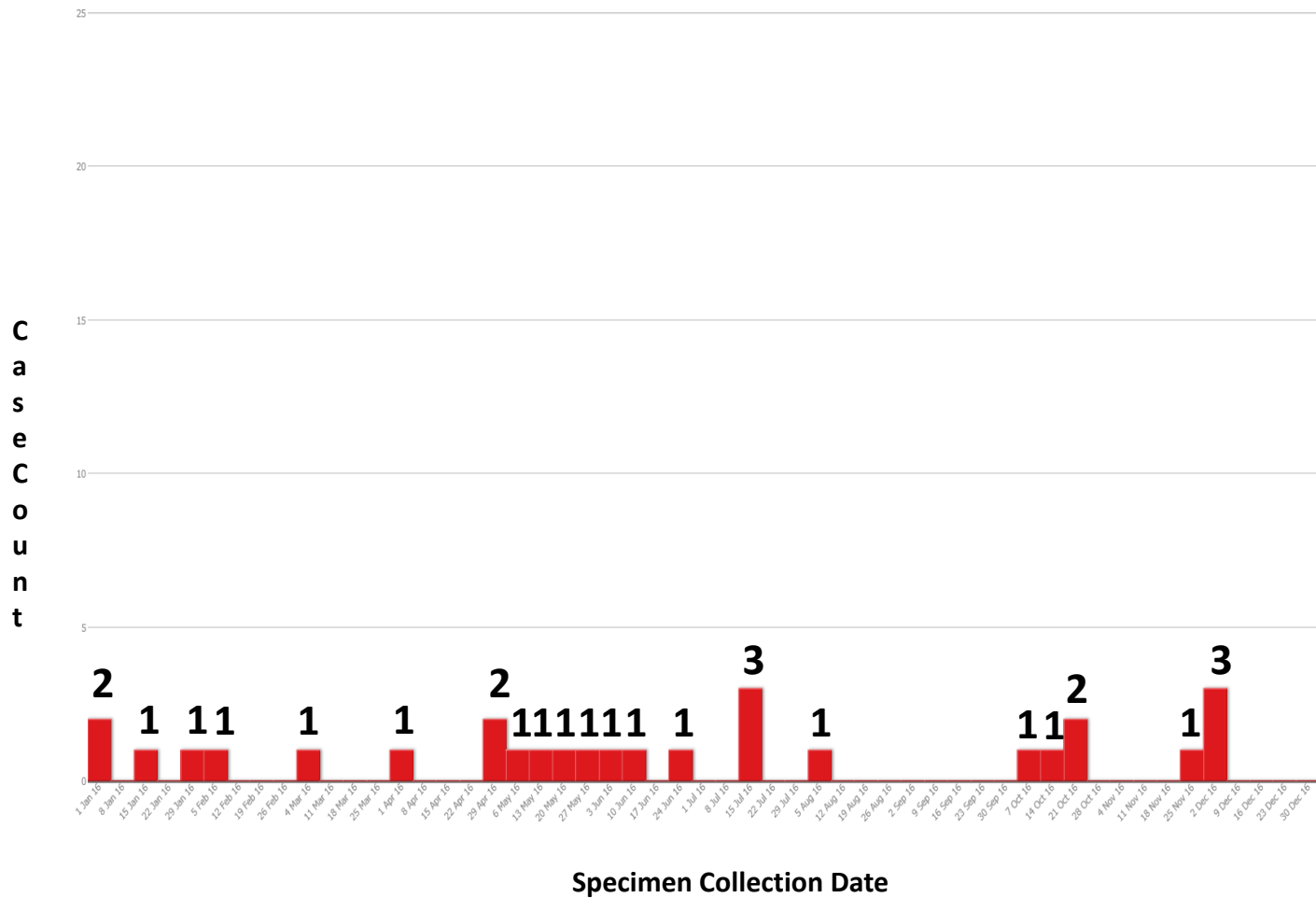
# Road to Recovery: First Steps

- Distribute Naloxone to first and lay responders
- Decrease opioid over-prescribing, increase addiction treatment services, including MAT
- Retest/educate high-risk persons
- Repeatedly refer high-risk persons to SSP and PrEP
- Expand HIV/HCV testing efforts at sensitive venues
- Conduct studies to gather additional risk factor data
- Continue to evaluate SSP
- Develop long-term, sustainable solutions to improve public health infrastructure and socioeconomic disparities

# Road to Recovery

- Expanded SSP to include diabetes syringe exchange
- 95% of participants are tested, 86% stop sharing
- Conflicting laws still problem: SSP v. paraphernalia
- Recovery is beautiful
  - Recovery groups increased from 4 in 2015 to 18 in 2018
  - Over 40 peer recovery coaches out of about 200 in Indiana located in Scott County
  - Three people in recovery staff the SSP
- RWJF: Scott County 91/92 on indicators
  - First time in 9 years not ranked 92

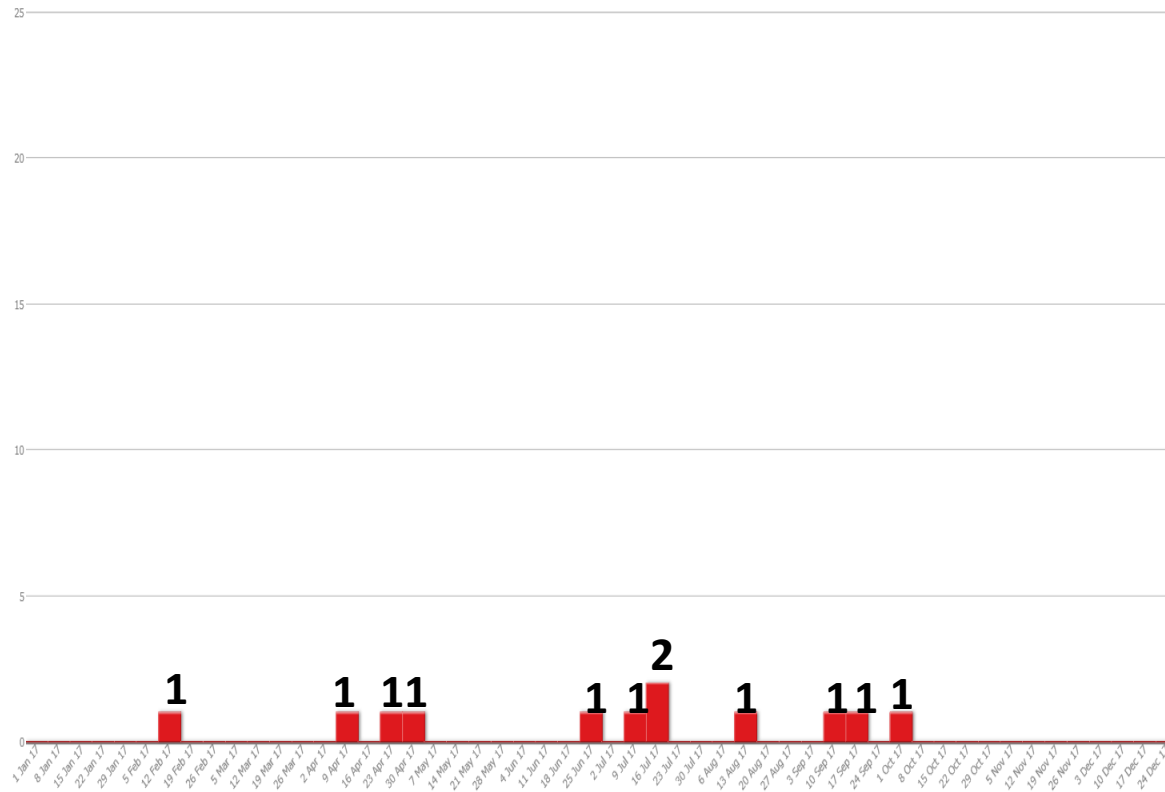
# Epidemic Curve 12.31.2016



Reporting period is weekly  
(7days) from January 1, 2016 –  
December 31, 2016

# Epidemic Curve 12.31.2017

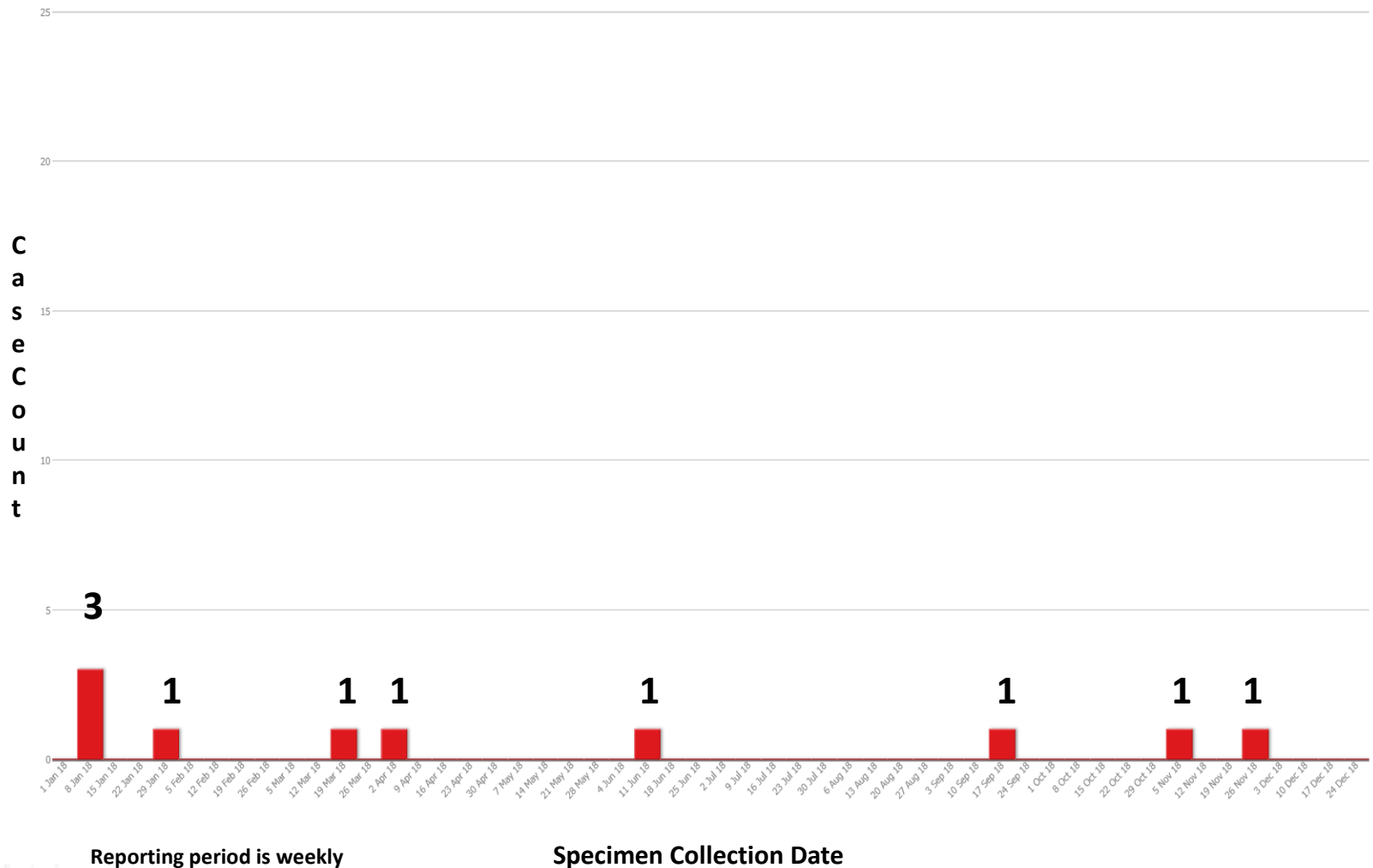
C  
a  
s  
e  
C  
o  
u  
n  
t



Specimen Collection Date

Reporting period is weekly  
(7days) from January 1, 2017 –  
December 31, 2017

# Epidemic Curve 12.31.2018



Reporting period is weekly  
(7days) from January 1, 2018 –  
December 31, 2018

Specimen Collection Date



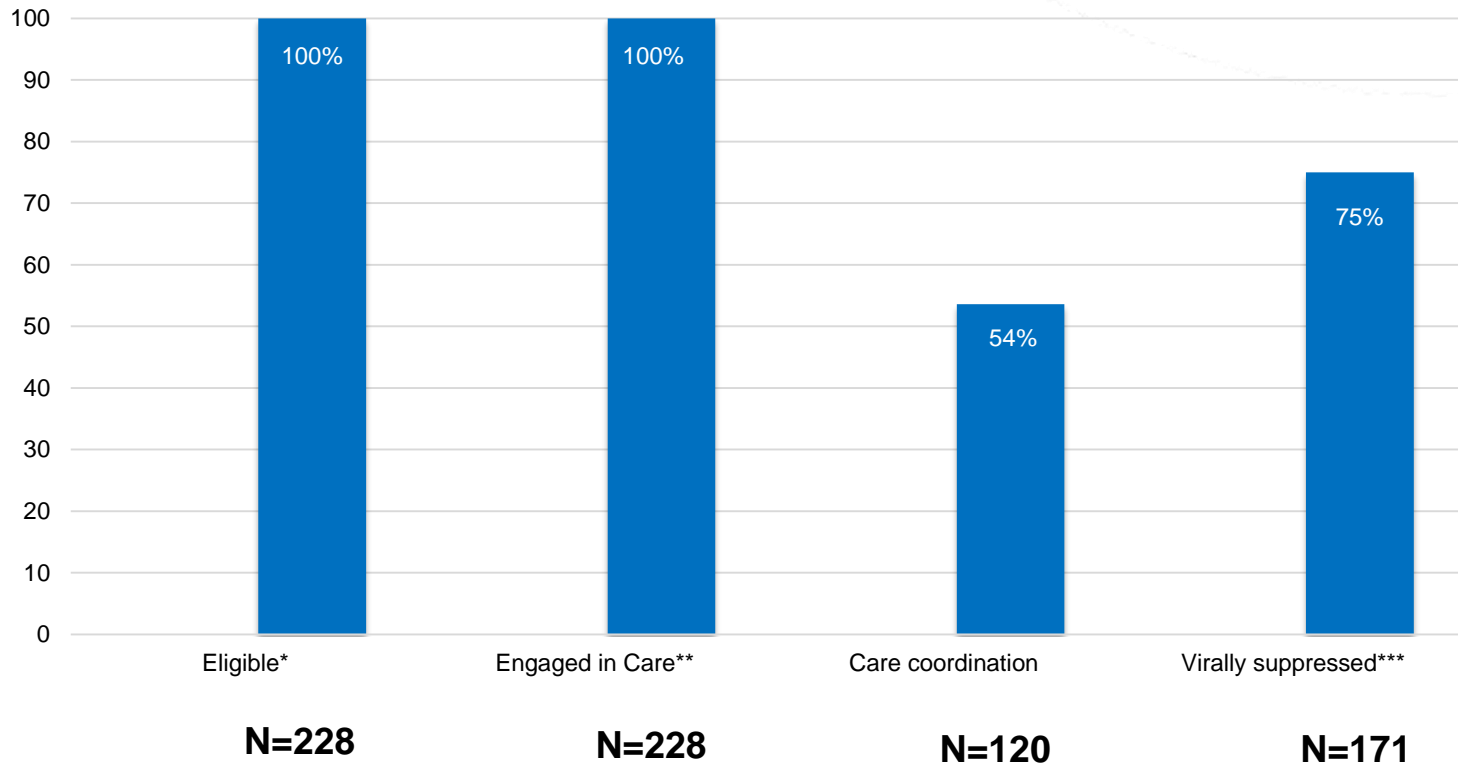
# Road to Recovery: Four Years Later



“There is hope in the community. Even the air is different here.”

*~~Beth Keeney, Lifespring Health Systems*

# Continuum of HIV Care--Austin, Indiana March 1, 2019



Total diagnosed = 237 (237 confirmed). Persons were ineligible if deceased (n=7) or outside of the jurisdiction (n=2); estimates are based on the number of eligible persons (n=228); \*\* Patients engaged in care if have at least one VL or CD4 \*\*\* Percent virally suppressed is stable at 75% when denominator changed to number engaged in care. Clinical services were initiated 3/31/15.



# Lessons Learned



# 1. Rural Differs from Urban

- Injection practices: repeated use of needles
- Limited knowledge of disease risk/transmission
- Lack of resources: monetary, SEPs
- Reduced access to physical and mental health care and recovery options

## 2. Know Your Risk Factors

- Outbreak potential for HIV is high in communities where HCV prevalence is high among persons who inject drugs
- Review CDC vulnerability assessment data
- Become familiar with local data so any increases are easily identified before an outbreak occurs
- Encourage health care providers to promptly report new HIV and HCV cases
- Look for clusters of HIV and HCV

# 3. Prepare In Advance

- Identify community partners and leadership for assistance, services, and potential response
- Determine who can provide HIV treatment and coordinate treatment with care resources (Ryan White, Medicaid)
- Increase HIV/HCV testing in high-risk communities
- Consider PrEP for high-risk, HIV negative individuals
- Increase awareness/availability of addiction recovery services, MAT, and naloxone
- Imperative to get input from stakeholders (health, law enforcement, community) in developing a comprehensive response that includes syringe exchange

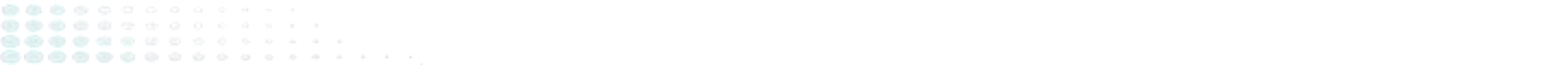
# 4. Be Ready to Escalate

- Activate incident command
- Identify mission, goals, indicators of success
- DIS critical to case investigations/contact tracing
- Keep everyone informed
- Involve local agencies from beginning
- Monitor resources carefully
- Plan de-escalation and long-term sustainability at beginning

# Acknowledgements

- Centers for Disease Control and Prevention (CDC)
  - Division of HIV, STD, TB, and Viral Hepatitis
- Scott County Health Department
- Foundations Family Medicine
- Indiana Family and Social Services Administration
  - Division of Mental Health and Addiction
- Indiana State Department of Health (ISDH)
  - Division of HIV, STD, and Viral Hepatitis





# Thank You

Pam Pontones  
Deputy Health Commissioner  
State Epidemiologist  
[ppontones@isdh.in.gov](mailto:ppontones@isdh.in.gov)  
317-233-7400

*The **health** of the people is really the foundation upon which all their happiness and all their powers as a state depend. ~Benjamin Disraeli*

*Indiana State Department of Health  
Promoting, protecting, and improving health of Hoosiers since 1881*



Indiana State  
Department of Health