

What can Happen when Harm Reduction Services are not Readily Available: A Case Study from Scott County, Indiana

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Disclosures

I have no relationships to disclose.

I will be describing illicit use of the prescription opioid,
OPANA® ER.

Indiana community's HIV outbreak a warning to rural America

Laura Ungar and Chris Kenning, USA TODAY 7:25 p.m. EDT May 17, 2015



(Photo: Darron Cummings, AP)

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AUSTIN, Ind. — This small, close-knit community is a picture of rural America, with stubble-filled cornfields and a Main Street lined by churches, shops and sidewalks. It's also the unlikely epicenter of the largest outbreak of HIV, the AIDS virus, in Indiana's history — and a warning to the rest of the

nation.

Public health experts say rural places everywhere contain the raw ingredients that led to Austin's tragedy. Many struggle with poverty, addiction and doctor shortages, and

The Washington Post

How an HIV outbreak hit rural Indiana — and why we should be paying attention

By Danielle Paquette March 30

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U.S.

Rural Indiana Struggles to Contend With H.I.V. Outbreak

By ABBY GOODENOUGH 2015.5.16



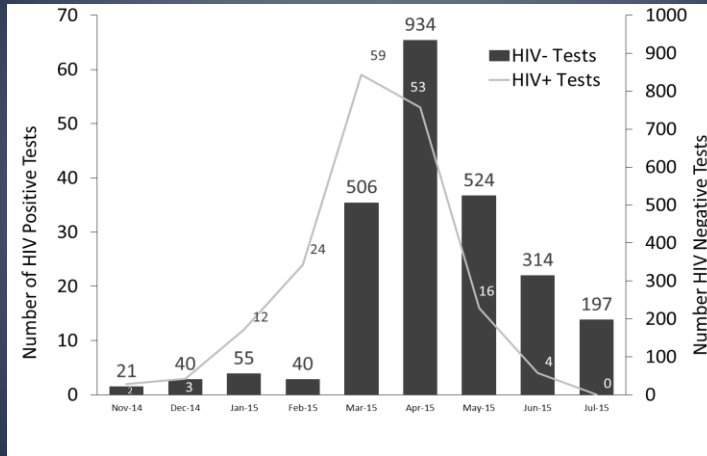
Containers holding discarded syringes as part of a needle exchange program in Austin, Ind. March 7. Reuters for The New York Times

AUSTIN, Ind. — She became addicted to painkillers over a decade ago, when a car wreck left her with a broken back and doctors prescribed OxyContin during her recovery. Then came a new prescription opioid, Opana, easily obtained on the street and more potent when crushed.

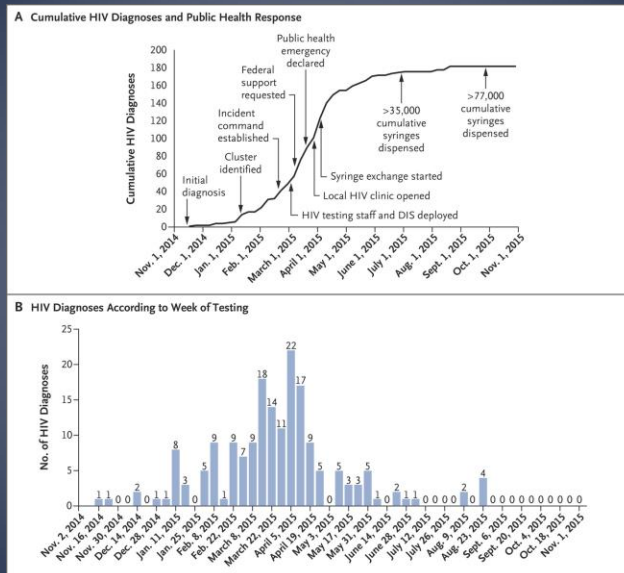
Indiana HIV Outbreak

- **Dec. 2014:** 3 individuals from Austin, IN diagnosed with HIV
 - DIS learned 2 had a common needle-sharing partner
 - Contact tracing → 8 additional infections by January 23
 - Only 5 HIV infections had been reported 2004-2013
- **August 17, 2017:** 223 individuals diagnosed with HIV
 - Linked to Austin, IN
 - Most are from a single strain of HIV
 - Nearly 94% co-infected with Hepatitis C
- **Source of HIV transmission:** injection of the prescription opioid, oxymorphone (**OPANA® ER**)

HIV testing performed in response to an HIV-1 outbreak associated with injection of prescription opioid oxymorphone by positivity, by month of test, Southeastern Indiana (n=2,804)



Outbreak of HIV Infection in Southeastern Indiana.



Epidemic Curve 8.17.2017

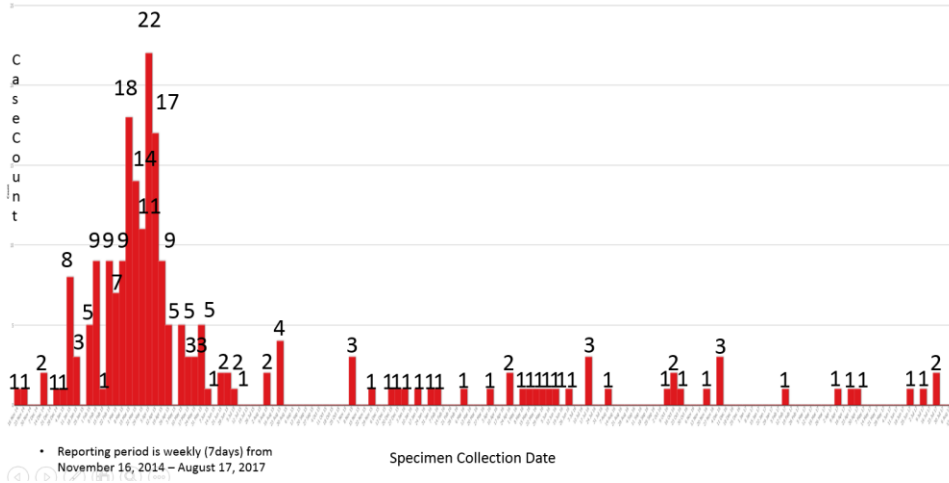
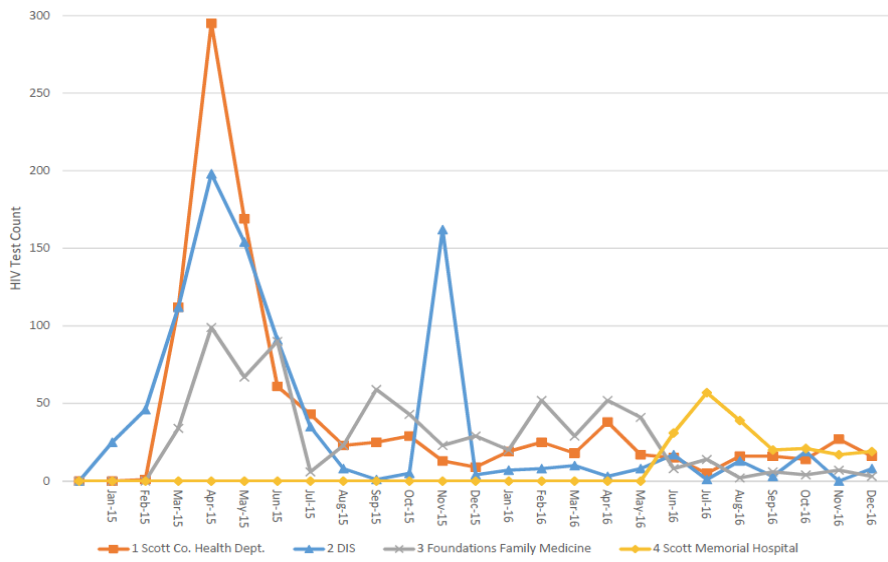


Figure 6: Total HIV Tests over Time for Scott County Test Sites from Luther EvaluationWeb Data – Jan. 2015 to Dec. 2016 (n = 2906 HIV Tests)



Amlung, JM. "A Retrospective View of the Scott County HIV Outbreak and Public Health Response", ISDH HIV/STD/Viral Hepatitis Division Internal Document: June 28, 2017

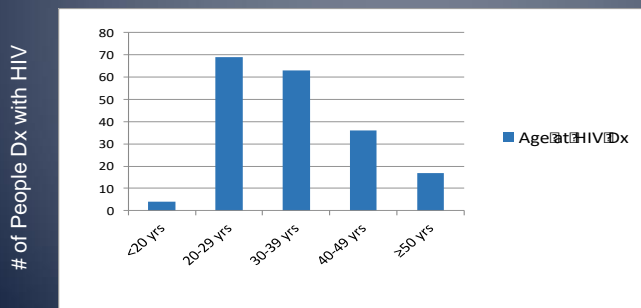
Contact Tracing and HIV Testing 8/17/2017

Named Contacts	554
Tested	491 (88.6%)
Refused testing	14 (2.5%)
Unable to locate	32 (5.8%)
Other	17 (3.1%)
Other Tested	38
Total Tested	529
HIV positive	223 (43.1%)
HCV positive	209 (93.7%)

Indiana State Department of Health Division of HIV/STD

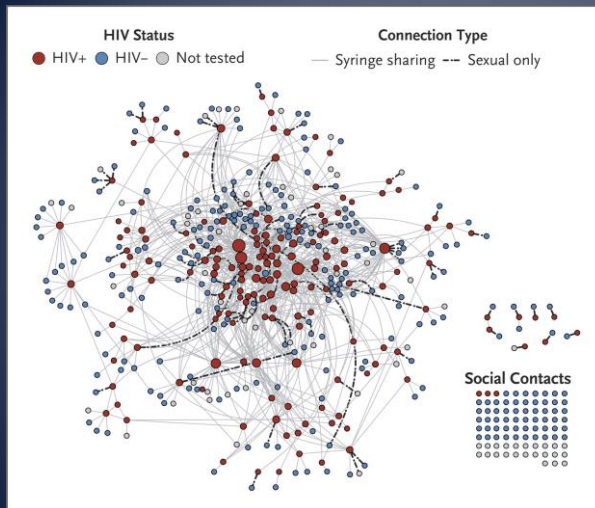
Demographics of Individuals Dx with HIV 11/18/2014 - 12/31/2015 (N=189)

- 58% male
- 98% non-Hispanic white
- Median age 33.5 years
- 95% reported injecting drugs
 - All oxymorphone, some methamphetamine and heroin as well



Indiana State Department of Health Division of HIV/STD

Syringe-Sharing Network of Persons with Newly Diagnosed HIV Infection.



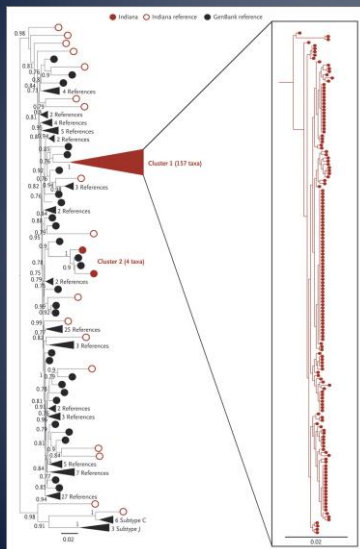
536 unique persons
1058 unique contacts

Contact Type (1-56)	Frequency
Syringe-sharing	841 (79.5%)
Sexual	81 (7.7%)
Syringe/Sexual	136 (12.8%)
Social Contact	83 (15.4%)

Peters PJ et al. N Engl J Med 2016;375:229-239.

The NEW ENGLAND JOURNAL of MEDICINE

Maximum-Likelihood Phylogenetic Tree of HIV-1 Polymerase Sequences — Southeastern Indiana, November 18, 2014, to November 1, 2015.



- Molecular analysis of the HIV-1 *pol* gene from 159 case patients with available specimens ●
- Two unique clusters of HIV-1 subtype B (>97% nucleotide identity)
 - Cluster 1, n= 157
 - Cluster 2, n=2
- Recency testing (N=125)
 - 90.4% infected within past 6 mos
 - 10 older infections
 - 2 invalid results
- HIV diagnosed in other Indiana counties ●
- GenBank reference sequences ●

Peters PJ et al. N Engl J Med 2016;375:229-239.

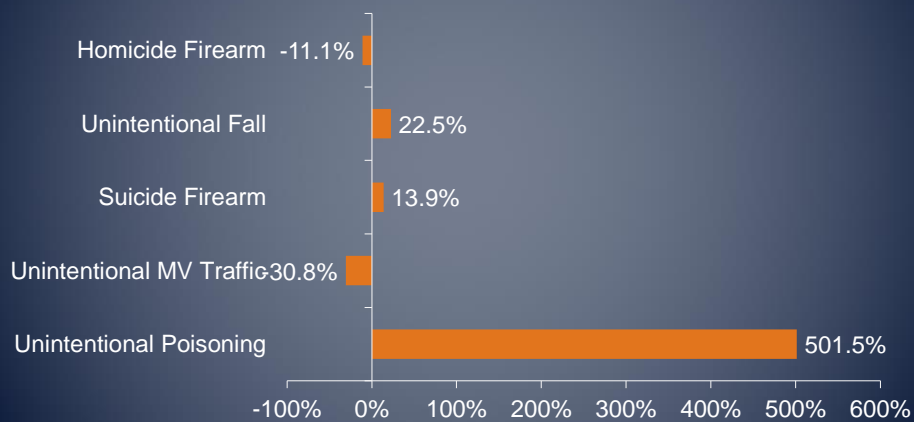
The NEW ENGLAND JOURNAL of MEDICINE

Newly Reported Indiana HIV Cases and AIDS Cases by Mode of Transmission, Reported January 1, 2015 – December 31, 2015

Mode of Transmission (Risk Factors)	HIV at First Diagnosis		AIDS at First Diagnosis	
	Count	%	Count	%
Men who have sex with men (MSM)	196	36%	31	40%
Injection Drug User (IDU)	175	32%	2	2%
MSM & IDU	11	2%	1	1%
Heterosexual	75	14%	16	21%
Mother diagnosed HIV+ or AIDS	2	0%	1	1%
Other (Pediatric Transfusion, MSM Heterosexual and Adult Transfusion/Hemophilia etc.)	31	6%	6	8%
Not Identified at This Time and/or No Reported Risk	53	10%	21	27%
Total	543	100%	78	100%

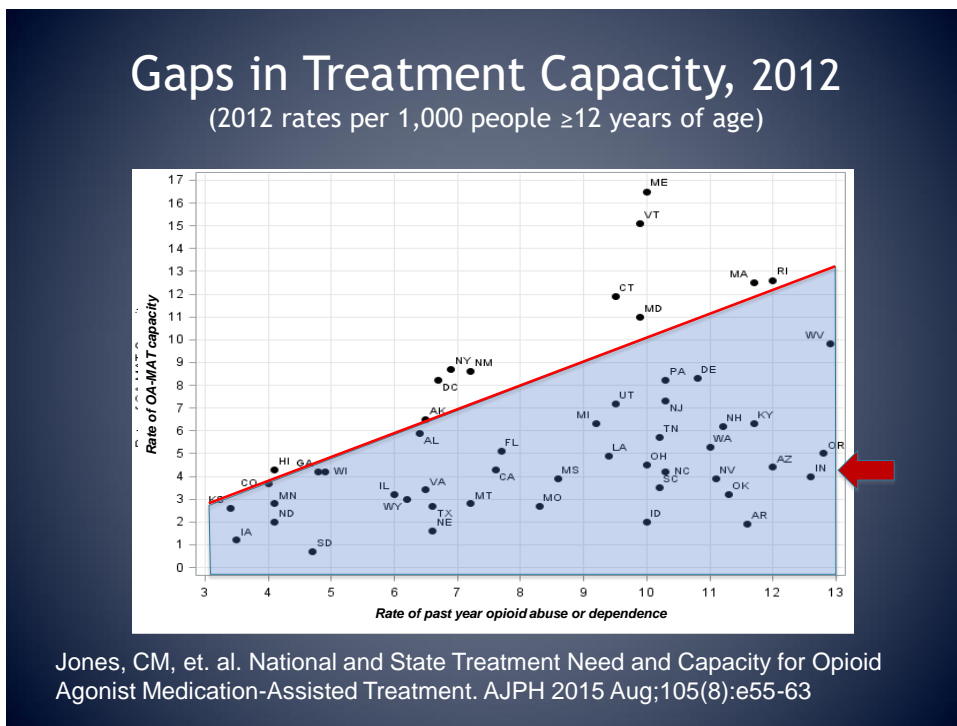
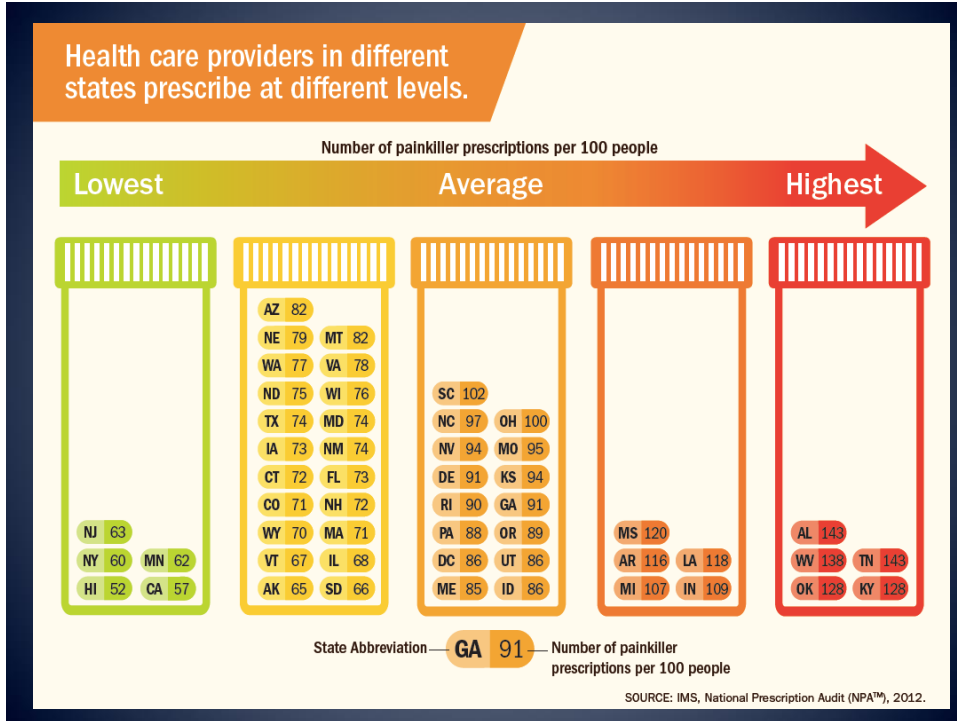
US 2014 PWID 5% of new HIV diagnoses
 IN 2014 PWID 2% of new HIV/AIDS diagnoses
 IN 2015 PWID 34% of new HIV/AIDS diagnoses

Percent Change in Leading Causes of Injury Death*— Indiana, 1999-2009

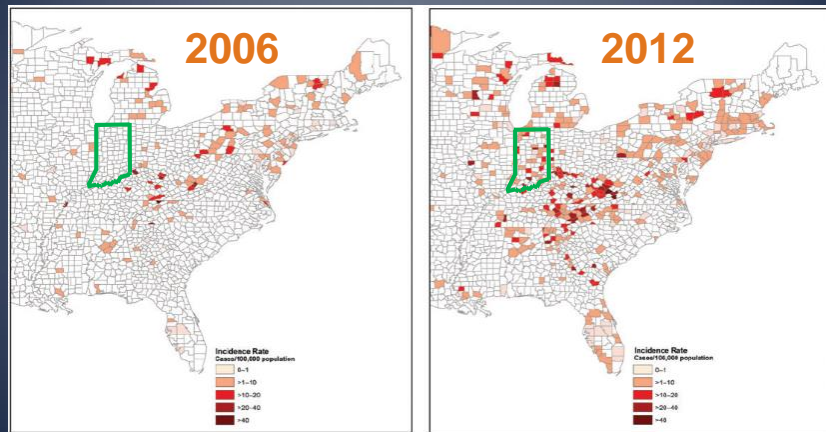


*Age-adjusted rates

Source: WISQARS



Emerging Epidemic of Hepatitis C Virus Infections Among Young Non-Urban Persons who Inject Drugs in the United States, 2006-2012

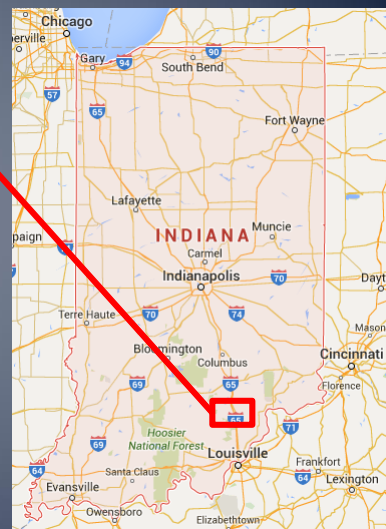


Suryaprasad *Clin Infect Dis*; 2014, 59(10):1411-1419



Scott County, Indiana

- Population: 24,000
- High poverty (19.0%)
- High unemployment (8.9%)
- Low educational attainment (21.3% no high school)
- Ranked last among 92 counties in a variety of health and social indicators, including life expectancy



Sources: U.S. Census <http://quickfacts.census.gov/qld/states/IN/0143.htm>; Indiana State Health Department <http://www.in.gov/isdh/17397.htm>

World | Tue Mar 27, 2012 2:48am EDT

Painkiller Opana, new scourge of rural America

AUSTIN, INDIANA | BY MARY WISNIEWSKI

Reuters







Melissa Himmelheber, 43, shows pictures of her son, C. J. Coomer, who died of an Opana overdose last July at the age of 24 in Austin, Indiana, at her home in Scottsburg, Indiana, March 19, 2012.

REUTERS/JOHN SOMMERS II

At least nine people have died so far this year from prescription drug overdoses in Scott County, Indiana. Most of the fatalities involved Opana, according to county coroner Kevin Collins.

Opana® ER

- ❑ 2010 - reformulation of Oxycontin®
- ❑ Opana® quickly replaced Oxycontin® - snorted, injected
- ❑ 2012 – Opana® ER reformulated, impossible to crush/snort
- ❑ Short half-life (3-4 hours) when injected = multiple injections/day
- ❑ Street cost \cong \$160/40 mg tablet = pill sharing
- ❑ Higher Morphine Equivalent Dose than heroin when injected
- ❑ You know what you're getting

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

The potency of oxymorphone was a factor in transitioning from OxyContin® to OPANA® ER

"I could not find any of the OxyContin and someone came to me with an Opana,...

I had a lot of people tell me 'Don't do Opana because a lot of people say you do it one time and you're hooked'...

And that's exactly what happened. I did one that night and the next morning I woke up and I just felt, I felt terrible. And so I had to get another one.

You get hooked on 'em really fast, the Opanas. Very fast." (DB08)

"And man it was so pure, I'd love to have one right now " (JZ02)

IUPUI/ISDH/CDC Focus Groups and Interviews, PWID, Scott County: Unpublished Findings Not for Distribution

Drug Use among people with HIV (N=108)*

- ❑ Multigenerational
- ❑ Sharing of injection equipment common
- ❑ Daily injections: 4-15
- ❑ Number of partners: 1-6 per injection event
- ❑ Average number of unique contacts per case: 8 (range: 0-80)

"I was living with my cousins and everybody would use the same needles... We'd put water in a cup, and everybody would use the same water and can... my boyfriend, friends, family, cousins, sister.

If I was sick, had a pill, and I didn't have a needle, I would use whoever's was there...

I've used needles before that the plungers were broke, and we'd melt them back together to use" (PI06)^

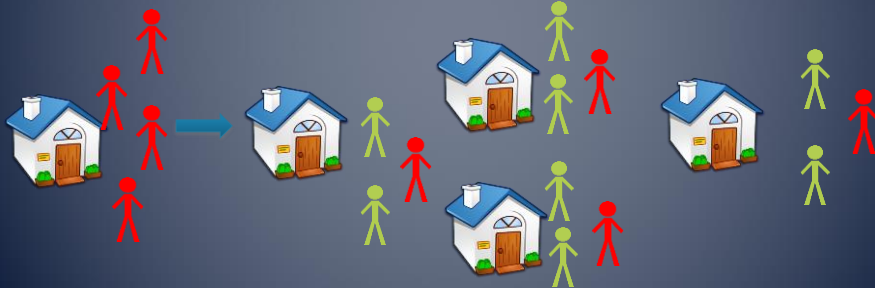
*Early Release, MMWR Morb Mortal Wkly Report 2015, April 24, 2015

^IUPUI/ISDH/CDC Focus Groups and Interviews, PWID, Scott County: Unpublished Findings Not for Distribution

High-Risk Injection Networks

Networks related to 'drug houses'

- >10 houses in a 1 sq. mile area where people go to inject
- Multiple people in each house injecting with each other at any time
- Commonly move from house to house to find drugs



"There could be different people using different houses. It doesn't matter what house. It's not that you would go to the same house all the time. You would just go to whatever house was available." (Male, 39 yrs)

High-Risk Injection Networks

- 89 individuals with HIV geomapped early in the response
- Nearly half lived within a ½ mile square area
- The estimated infection rate within this hotspot = 34/1,000



What We Needed to Control the Outbreak

- ❑ Get individuals with HIV and HCV into care and treatment
- ❑ Expand HIV/HCV testing and capacity for early detection
 - Jails, treatment providers, emergency departments
 - Active outreach and testing
- ❑ Develop systems to keep at-risk individuals uninfected
 - Systematic retesting and education of persons at risk
 - SSP and HIV PrEP
- ❑ Increase addiction treatment services and prevent overdose deaths
 - Medication-assisted treatment, naloxone distribution
- ❑ Decrease the stigma of HIV and Injection Drug Use
- ❑ Long-term solutions to improve public health infrastructure and socioeconomic disparities

Communications

YOU ARE NOT ALONE

If you are HIV+, you are not alone.

HIV Services Hotline 1-866-588-4948
Addiction Hotline 1-800-662-HELP(4357)
www.StateHealth.IN.gov

Indiana State Department of Health

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HELP PREVENT HIV

**DON'T SHARE THESE.
DON'T ABUSE THESE.**

Any drug can be abused. If you or a friend are abusing drugs, get help. Never share needles. It increases your risk of getting HIV.

HIV Services Hotline 1-866-588-4948
Addiction Hotline 1-800-662-HELP(4357)
www.StateHealth.IN.gov

YOU ARE NOT ALONE

Indiana State Department of Health

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**SATURDAY
SEPT. 12 TH**

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JAS

NEWS
#MYDUBOISCOUNTY
OBITUARIES
BUSINESS
BLOTTER
OPINION

Governor declares HIV outbreak in Southern Indiana a public health emergency

by Local Sources on March 26, 2015 in NEWS

Governor Mike Pence today declared a public health emergency in Scott County due to an outbreak of HIV that has reached epidemic proportions.

The declaration was issued in Executive Order 15-05, which orders the state to coordinate a multi-agency response, and provides additional resources and tools to tackle the outbreak.

Community Outreach Center: a One-Stop Shop

- ▣ **Community Outreach Center**
 - ▣ HIV and HCV/HBV testing
 - ▣ Care coordination for HIV medical care
 - ▣ Syringe exchange program
 - ▣ Substance use disorder treatment services
 - ▣ Routine immunizations
 - ▣ Insurance enrollment (e.g., birth certificates, driver's license)
 - ▣ Job training

- ▣ **Relocated to the Scott County Health Department Satellite Office in Austin**



Scott County SEP



PrEP

(Pre Exposure Prophylaxis)

What is PrEP? PrEP means taking medicine to lower your chance of getting HIV. You can only take PrEP if you do not have HIV.

Who may need PrEP? PrEP may be good for you if:

- You are in a relationship with someone who has HIV
- You inject drugs
- You do not use condoms all the time and you have sex with someone who may have HIV

Where can you get PrEP?

- You can talk to a doctor at the **Center Health Clinic (A Medical)**
- **Open Every Tuesday 1**
- For more information another time, call 812-1-866-588-4948.

For more information, please call Indiana State Health Department's HIV hotline at 1-866-588-4948.

Find out if you have HIV

• People with HIV may not look sick

• Many people do not know they have HIV

• The only way to know if you have HIV is to get an HIV test

• If you have HIV there are medicines you can take to keep you healthy

• If you do not have HIV, there is medicine to prevent you from getting it

• Talk to your doctor to see if this medicine is right for you

Protect yourself from HIV

If you have sex, use a condom

If you shoot drugs:

- Use new needles each time
- Do not share your works
- NEVER buy needles on the street, even if they look new

For more information, please call Indiana State Health Department's HIV hotline at 1-866-588-4948.

HIV FACTS

ANYONE CAN GET HIV

HIV is the virus that causes AIDS

How you CAN get HIV:

You can get HIV by having sex without a condom with someone who has HIV

That includes:

- Vaginal Sex
- Anal Sex
- Oral Sex

You can get HIV by sharing syringes, needles and other things used to inject drugs, with someone who has HIV

A woman who has HIV can give it to her baby when she is pregnant or breastfeeding

How you CAN NOT get HIV:

Touching

Food

Sneezing

Pets

Water

Hugging

Mosquitoes

Toilets

For more information, please call Indiana State Health Department's HIV hotline at 1-866-588-4948.

Naloxone Training for First Responders



Clinical HIV/HCV Prevention Efforts

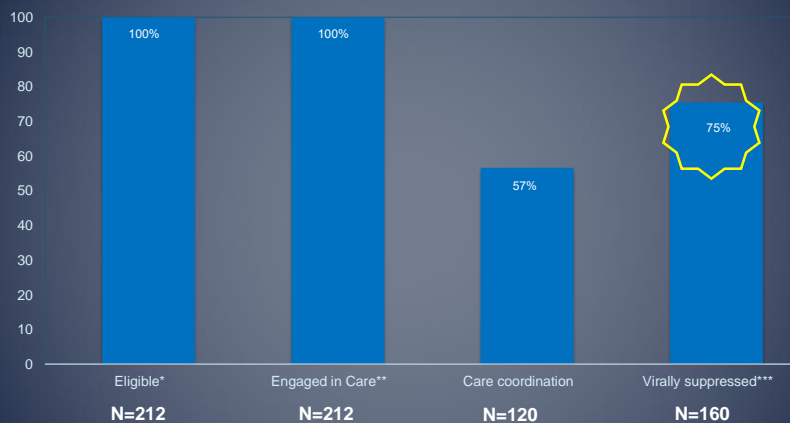
- **Collaborative effort**
 - Academic clinical partners (Indiana U., University of Louisville)
 - Local, state and federal agencies (Local Public Health, Indiana Dept. of Mental Health and Addiction, Indiana Medicaid, CDC, SAMHSA)
 - Private sector (LifeSpring, Aids Healthcare Foundation, Centerstone)
- **Focused on Local Health Dept, primary care provider, county jail, Community Mental Health Center, and Scott Memorial Hospital ED**
- **Increased capacity to provide:**
 - HIV/HCV testing (jail, community, ED, other “touchpoints”)
 - HIV/HCV care (Treat to Prevent)
 - PrEP
 - Medication-assisted therapy
 - Community discussions re: MAT
 - County jail naltrexone release program
 - Buprenorphine waiver training



Foundations Family Medicine Mobile Testing Unit



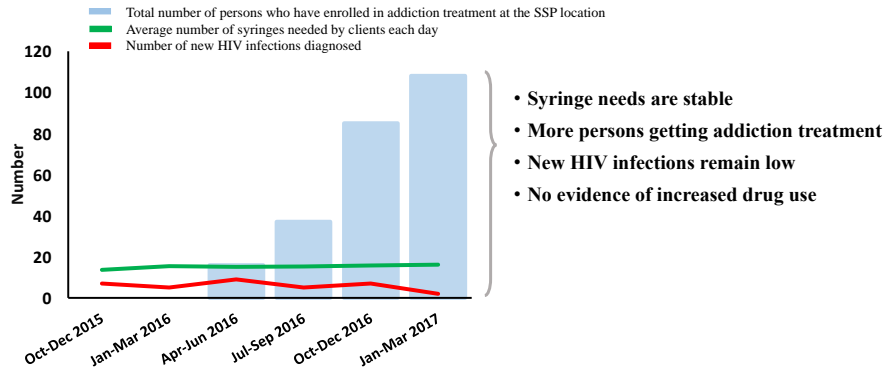
Continuum of HIV care in Austin, Indiana August 17, 2017



Total diagnosed=223 (223 confirmed). Persons were ineligible if deceased (n=7) or outside of the jurisdiction (n=4); estimates are based on the number of eligible persons (n=212); ** 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.

34

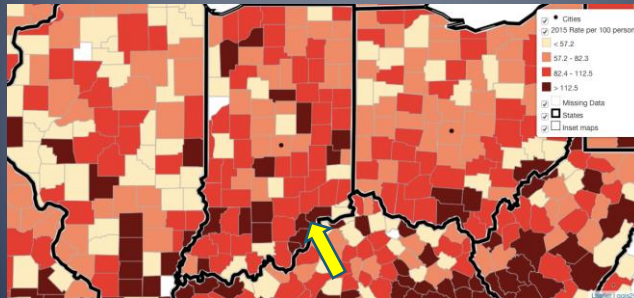
Major Progress in Scott County



Source: Indiana State Department of Health, Indiana Family and Social Services Administration, and IU Fairbanks School of Public Health

Moving Forward

- Continued focus on EVIDENCE-BASED OPIOID PRESCRIBING for acute and chronic pain



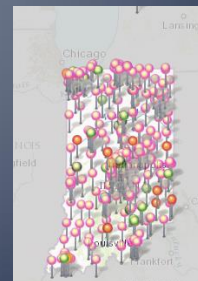
Moving Forward

- Increase ACCESS TO TREATMENT for HCV, HIV, and SUD



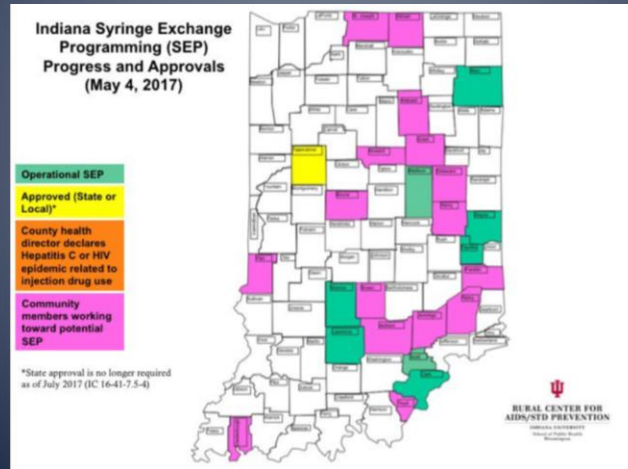
Moving Forward

- Decrease the STIGMA of addiction and HIV so people will seek care
- Increase ACCESS TO NALOXONE



Moving Forward

- Support requests from local government to establish harm reduction service programs



Acknowledgements

- Scott County Health Department
- Clark County Health Department
- Disease Intervention Specialists (EMAC states)
- Foundations Family Medicine
- Indiana University, Division of Infectious Diseases
- University of Louisville, Division of Infectious Diseases
- CDC
 - Division of STD Prevention
 - Division of HIV/AIDS Prevention (DHAP)
 - Division of Viral Hepatitis (DVH)
 - Epidemic Intelligence Service (EIS) Program Office
- Indiana Department of Mental Health and Addiction (DMHA)
- Indiana State Department of Health (ISDH)

Addictions ... started out like magical pets, pocket monsters.
They did extraordinary tricks, showed you things you hadn't seen,
were fun.

But came, through some gradual dire alchemy,
to make decisions for you.

Eventually, they were making your most crucial life-decisions.

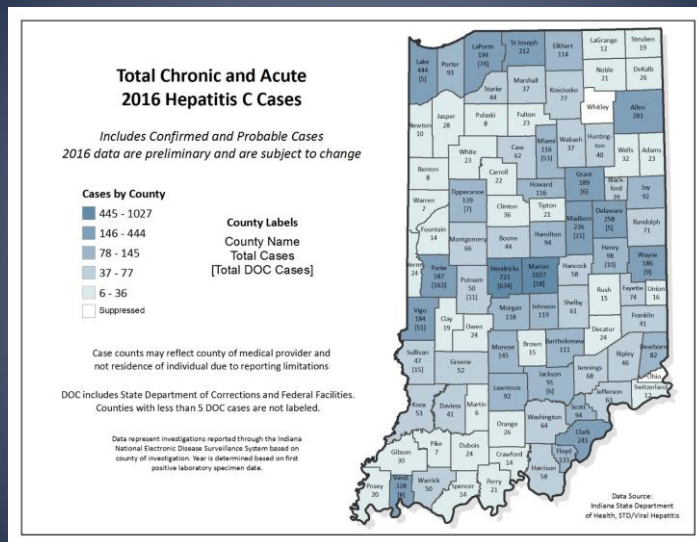
And they were ... less intelligent than goldfish.

WILLIAM GIBSON, *Zero History*

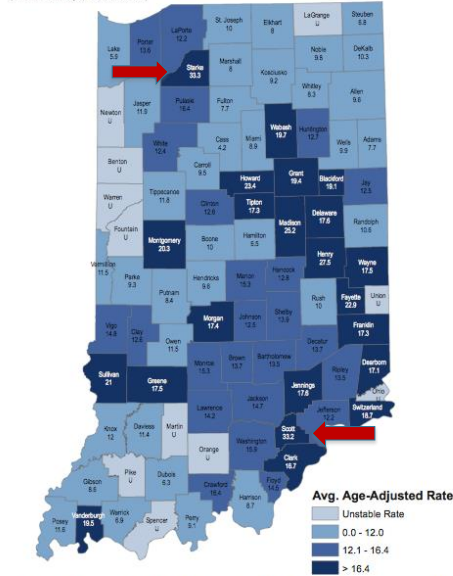
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Map 9.3 Average Age-Adjusted Prescription Drug Overdose Mortality Rate per 100,000 in Indiana, by County (Indiana Mortality Data, 2002-2014)

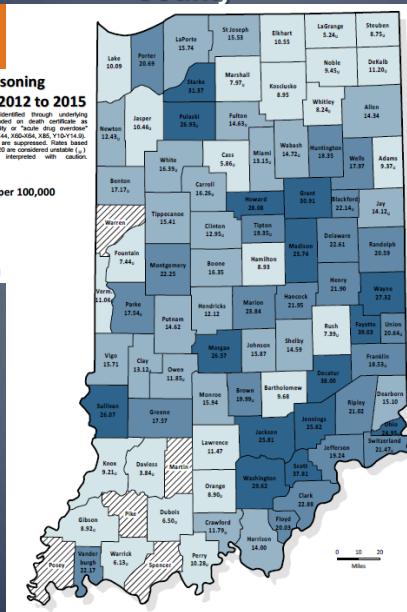
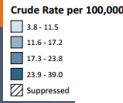


Note: Includes ICD-10 causes of death: X40, X41, X42, X43, X44, X60, X61, X62, X63, X64, Y10, Y11, Y12, Y13, and Y14.
 Rates based on number of deaths <20 are not computed, but marked unstable ("U").
 Source: CDC, 2016

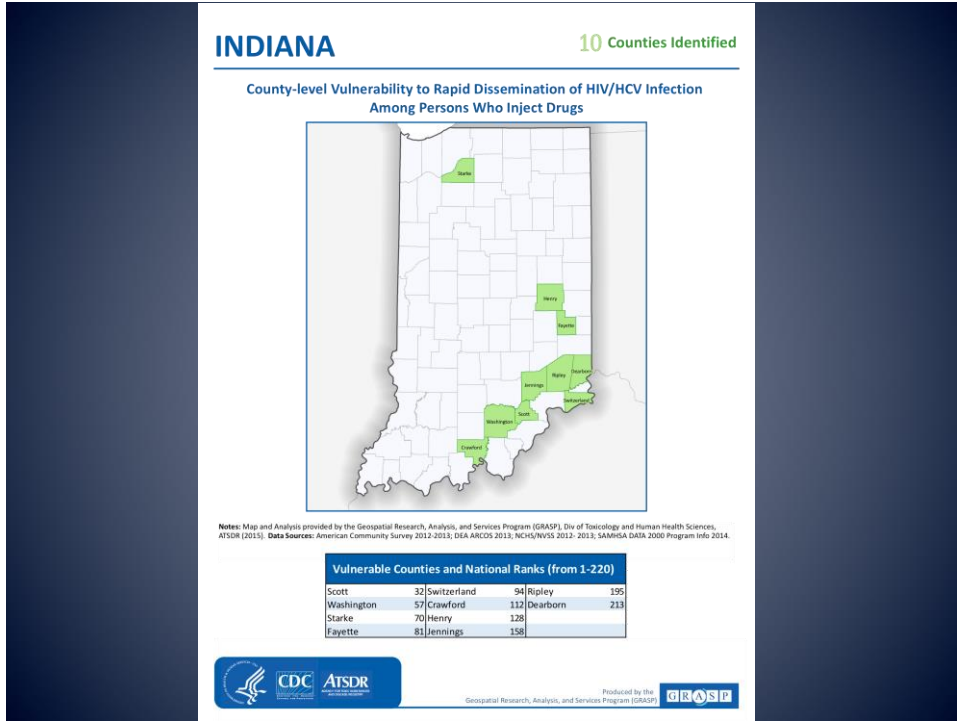
Drug Poisoning Death Rates by County

Drug Poisoning Deaths, 2012 to 2015

Overdose deaths identified through underlying cause of death coded on death certificate as drug overdose, identity of "toxin drug overdose" (ICD-10 codes T40.0X, T40.1X, T40.2X, T40.3X, T40.4X). Counts less than 10 are suppressed; rates based on counts less than 10 are considered unstable (U) and should be interpreted with caution.



ISDH ERC Data Analysis Team
<http://www.in.gov/isdh/26689.htm>



Health commissioner: Syringe exchanges not easy but save lives

Jerome Adams, For the Journal & Courier | Published 11:45 a.m. ET June 23, 2017 | Updated 11:46 a.m. ET June 23, 2017



(Photo: Getty Images/Stockphoto)

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The national opioid epidemic threatens to unravel two decades of progress toward reducing the spread of HIV. This is an outcome Indiana cannot afford.

Since 2015, 219 people in rural Scott County have been diagnosed with HIV, and nearly 95 percent of those individuals are co-infected with hepatitis C. These are staggering statistics that represent 219 lives and a community that are forever changed. Yet the toll would be much worse if not for the syringe service program, or syringe exchange, that has provided testing and connections to treatment and medical care.

\$6.7 MILLION

RETURNED TO MEMBERS IN 2016