Routine HIV and Hepatitic C Screening at a Syringe Access Program

Hansel Tookes, MD, MPH

Assistant Professor of Medicine

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U.S.

Florida Shutting 'Pill Mill' Clinics

By LIZETTE ALVAREZ AUG. 31, 2011

At an Aug. 15 news conference, Florida officials displayed prescription drugs that were surrendered to the state by pain clinics. Tim Chapman/Miami Herald, via Associated Press

NYTIMES

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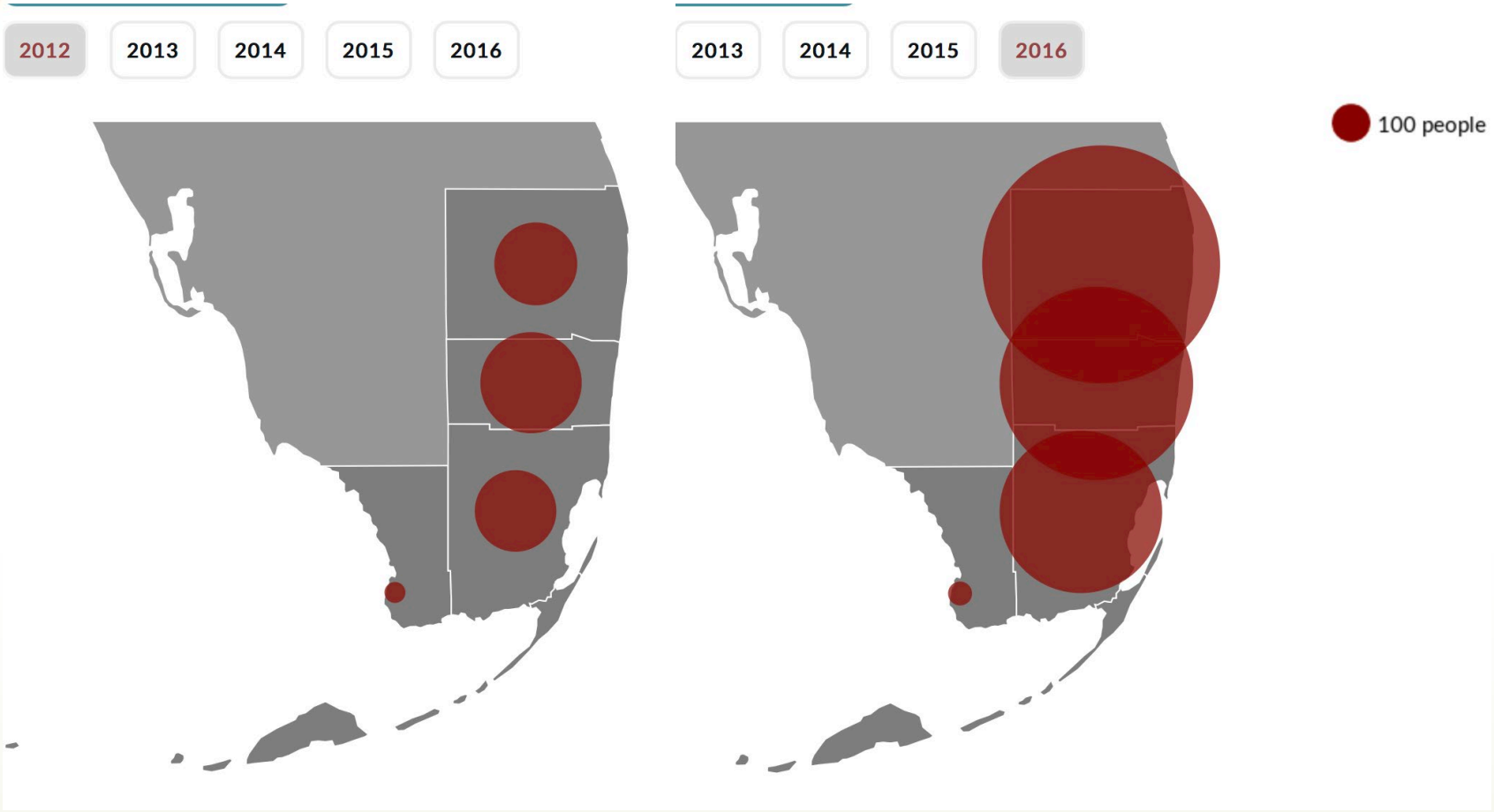
Welcome to South Florida

30,443 Deaths, 2012-2016



WLRN Miami

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Florida People Who Inject Drugs (PWID)

County	Total PLWHA Cases	Total IDU	Percent IDU
Miami-Dade	26,946	2,873	11%
Broward	20,020	2,188	11%
Orange	8,663	1,389	16%
Palm Beach	8,198	1,323	16%
Hillsborough	6,691	1,229	18%
Duval	6,199	981	16%
Pinellas	4,589	830	18%
Lee	2,238	333	15%
Volusia	1,698	410	24%
St. Lucie	1,610	284	18%
Brevard	1,566	307	20%
State Totals	**114,608**	**17,886**	**16%**

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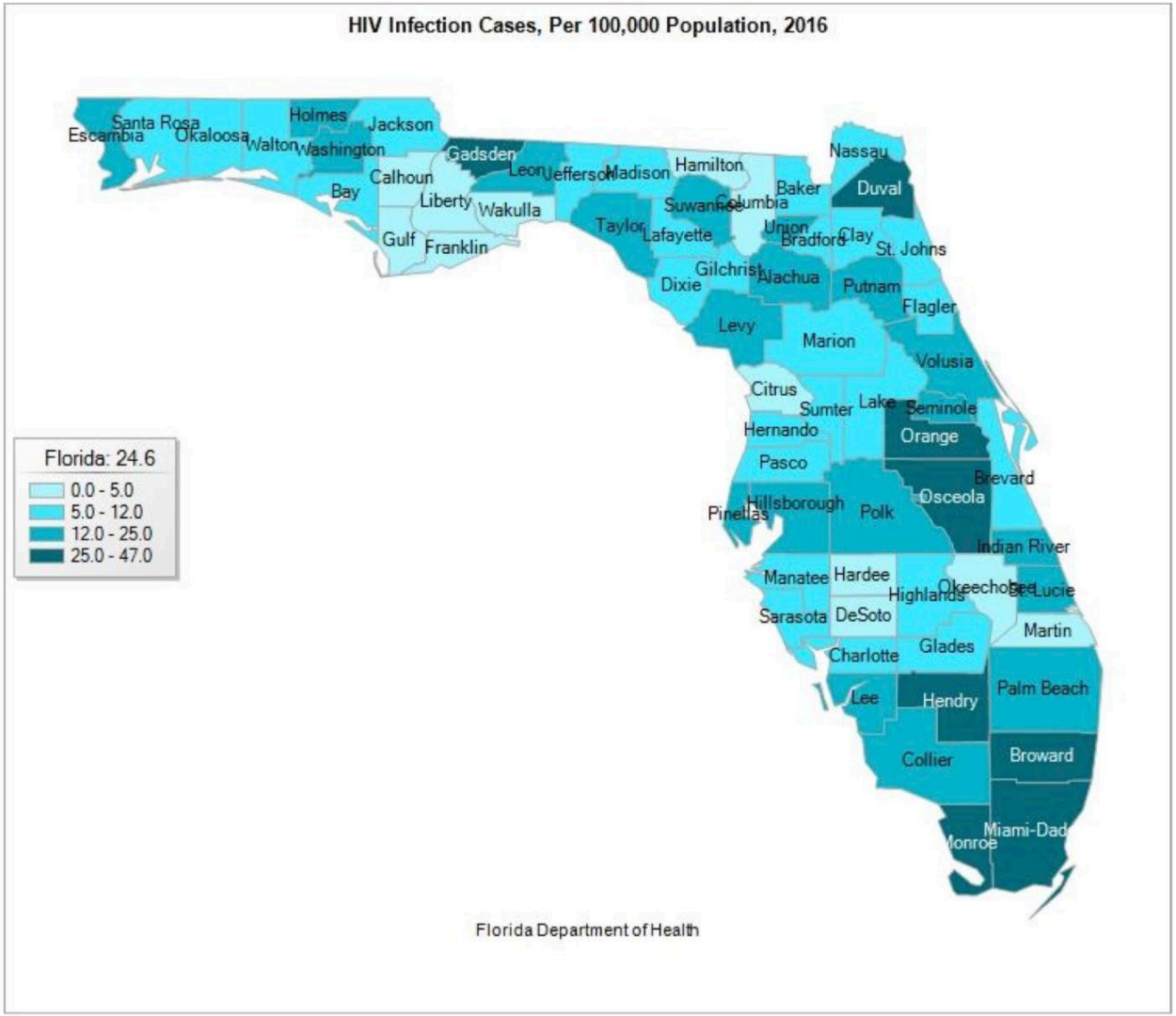
FLORIDA HIV Incidence



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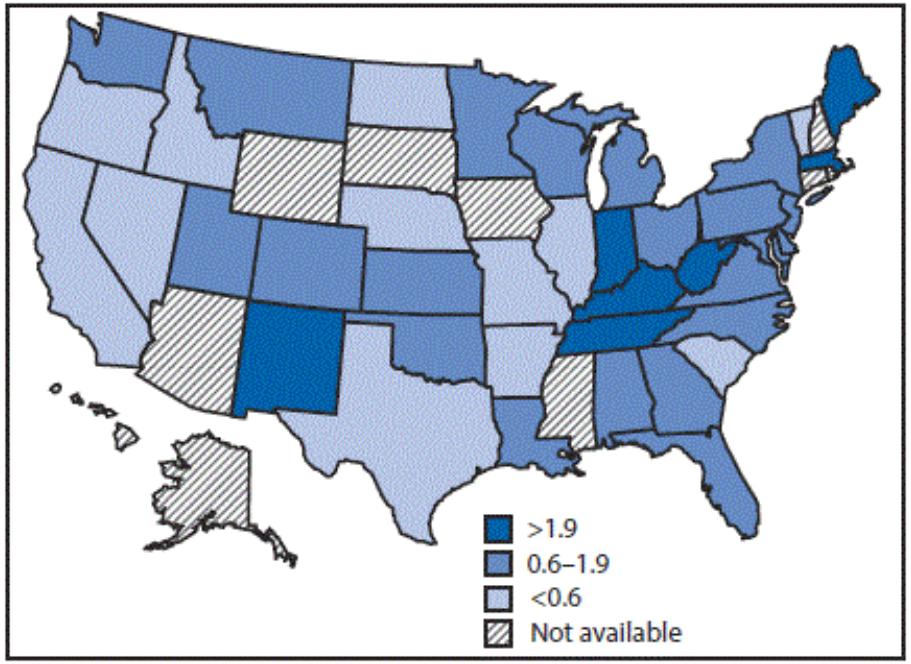
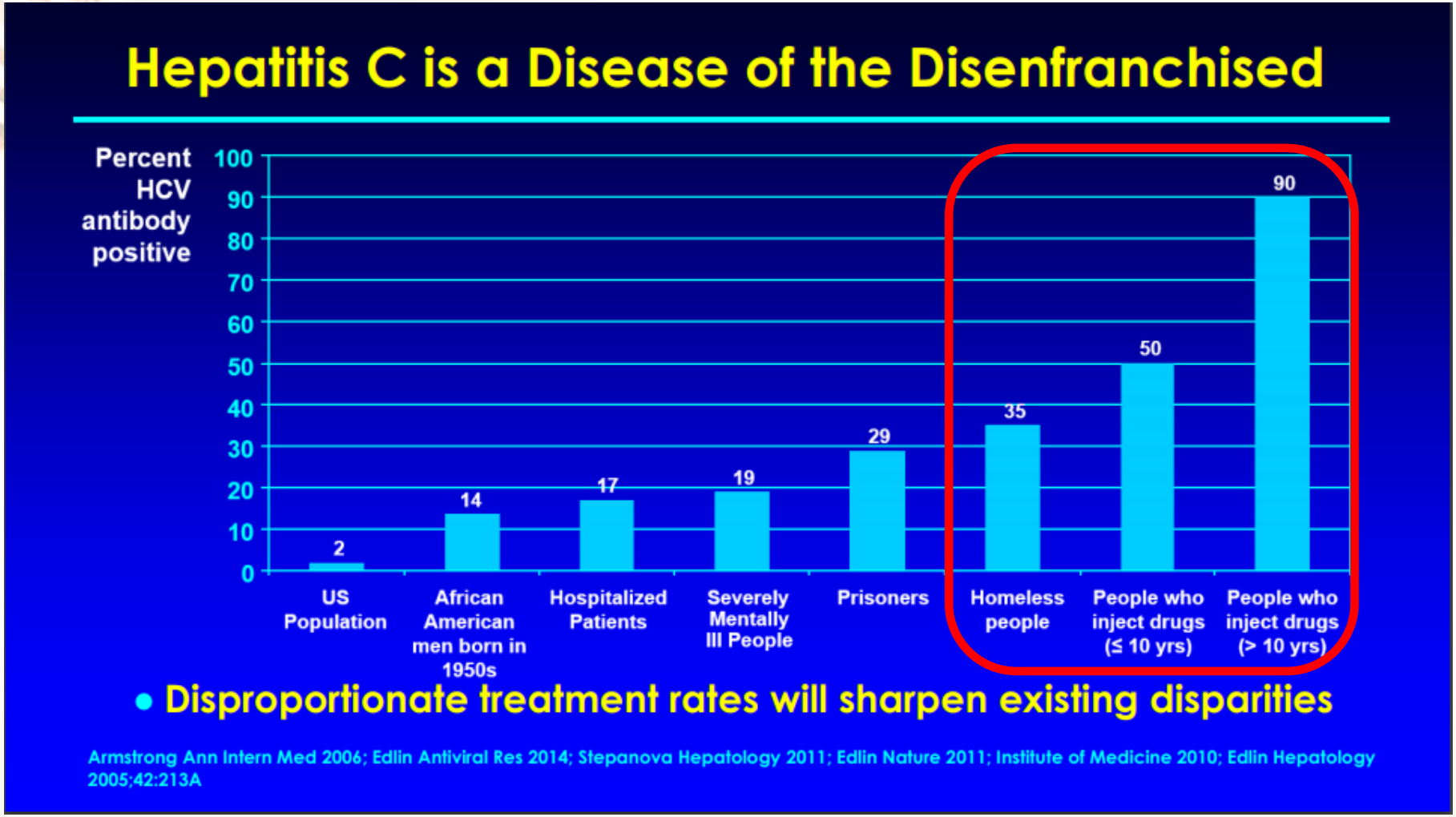
Acute HCV incidence

- HCV incidence has increased **294%** from 2010 to 2015, largely attributed to injection drug use.
- Incidence in 17 states exceeded the national average (0.8 per 100,000)



https://www.cdc.gov/mmwr/volumes/66/wr/mm6618a2.htm

New Cohort



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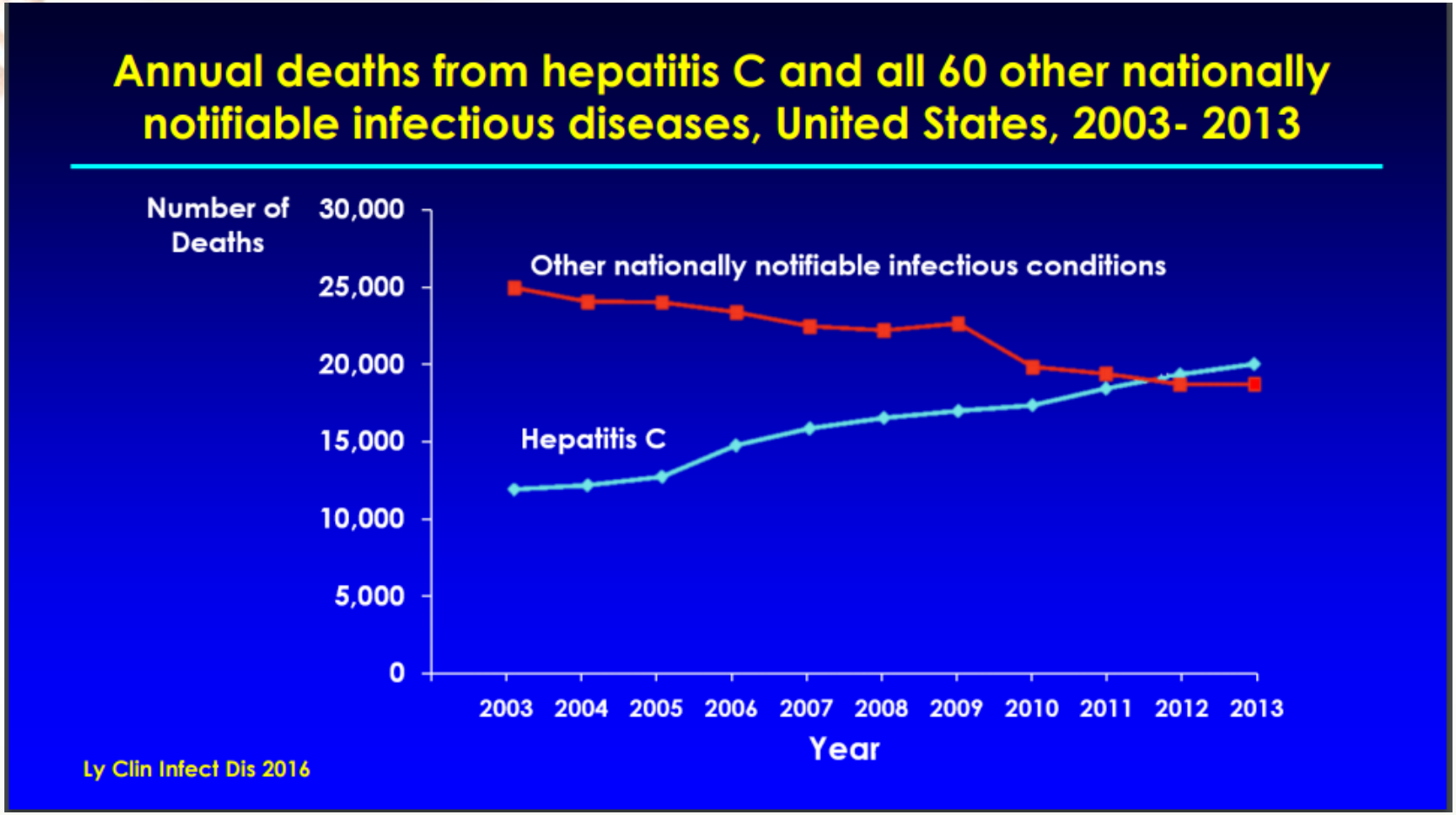
HCV Mortality



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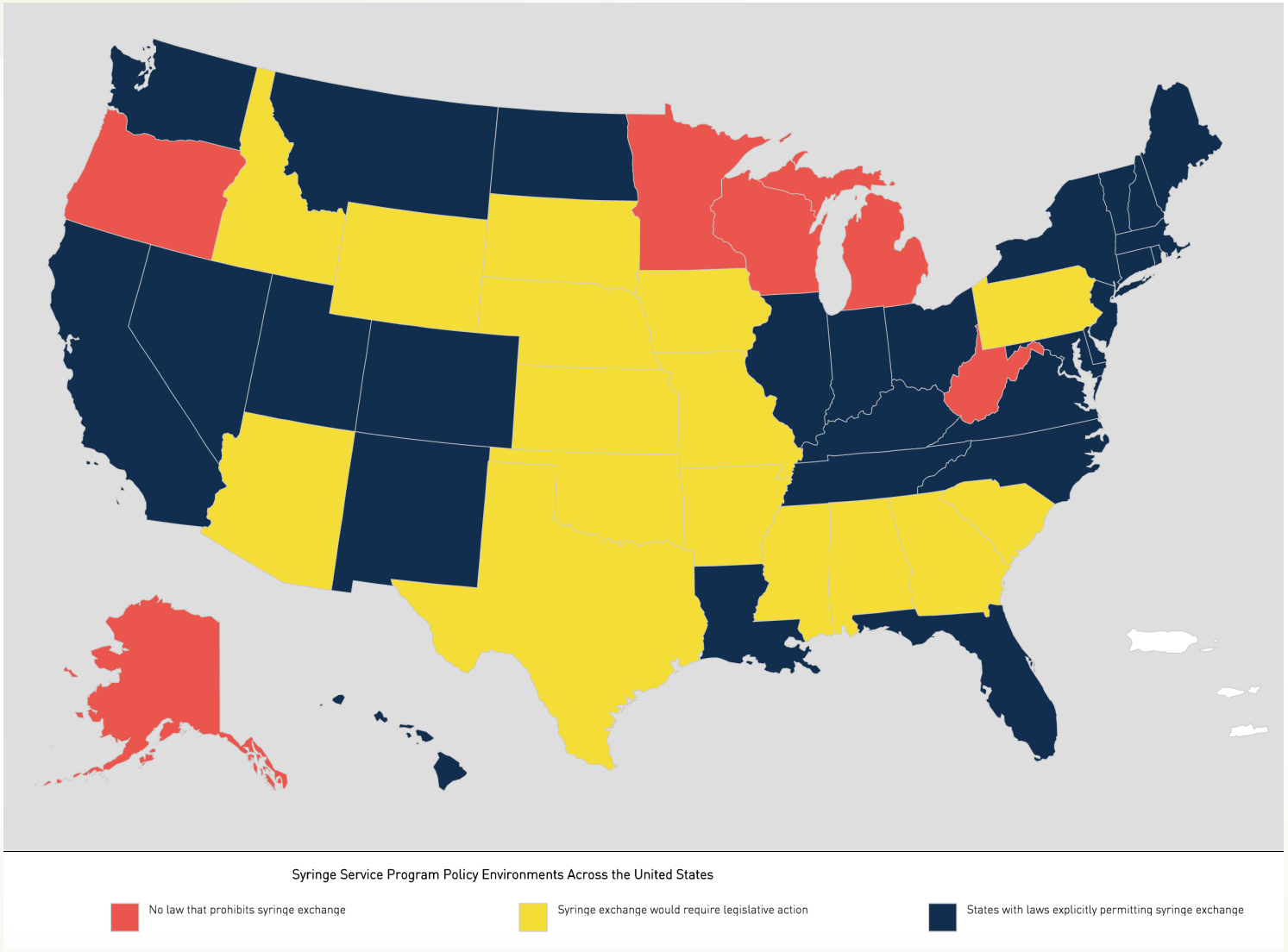

Source: NASTAD

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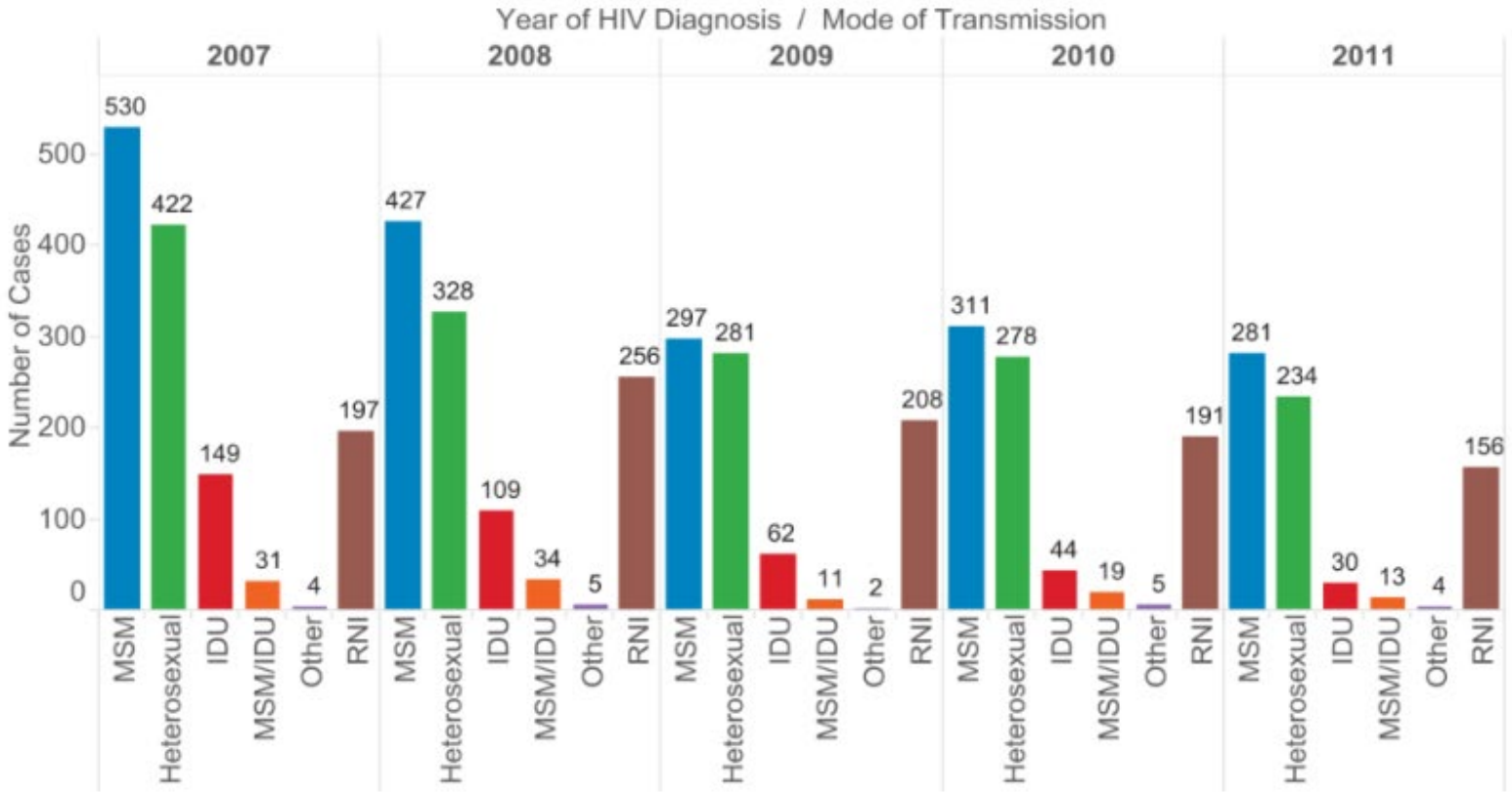
Washington DC Syringe Exchange

District of Columbia Department of Health

Figure 9. Newly Diagnosed HIV Cases by Year of Diagnosis and Mode of Transmission
District of Columbia, 2007-2011



*Other mode of transmission includes perinatal transmission, hemophilia, blood transfusion, and occupational exposure (healthcare workers).

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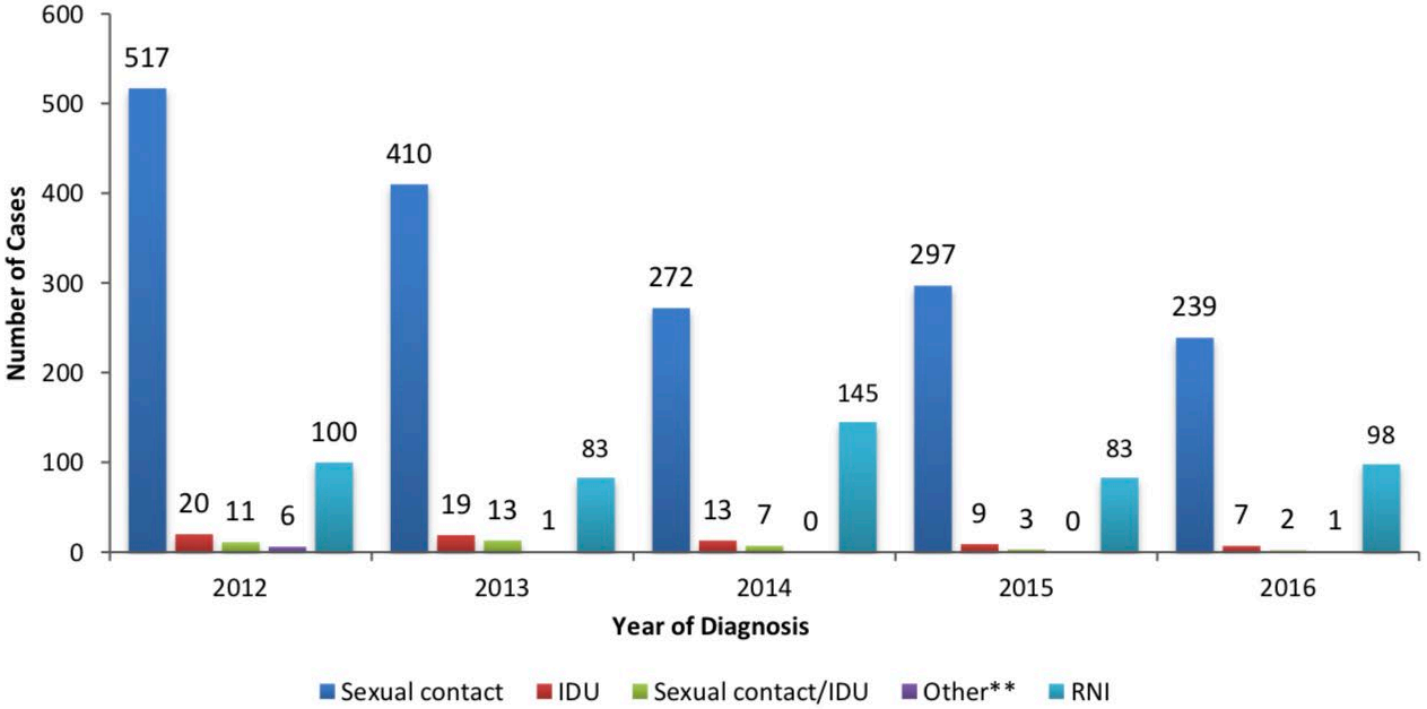
Washington DC

Figure 10. Newly Diagnosed HIV Cases by Year of Diagnosis and Mode of Transmission, District of Columbia, 2012-2016



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Review

A systematic review of injecting-related injury and disease among people who inject drugs

Sarah Larney[a,b,*], Amy Peacock[a,c], Bradley M. Mathers[d], Matthew Hickman[e], Louisa Degenhardt[a,f,g,h]

[a] National Drug and Alcohol Research Centre, UNSW Australia, Sydney, Australia
[b] Alpert Medical School, Brown University, Providence, RI, USA
[c] School of Medicine, University of Tasmania, Hobart, TAS, Australia
[d] The Kirby Institute, UNSW Australia, Sydney, Australia
[e] School of Social and Community Medicine, University of Bristol, UK
[f] School of Population and Global Health, University of Melbourne, Melbourne, VIC, Australia
[g] Murdoch Children's Research Institute, Melbourne, VIC, Australia
[h] Department of Global Health, School of Public Health, University of Washington, Seattle, WA, USA

ARTICLE INFO

Article history:
Received 20 September 2016
Received in revised form
11 November 2016
Accepted 21 November 2016
Available online 8 December 2016

Keywords:
Abscess
Endocarditis
Substance abuse
Intravenous
People who inject drugs

ABSTRACT

Background: Non-viral injecting-related injuries and diseases (IRID), such as abscesses and vascular damage, can result in significant morbidity and mortality if untreated. There has been no systematic assessment of the prevalence of non-viral IRID among people who inject drugs; this review aimed to address this gap, as well as identify risk factors for experience of specific IRID.
Methods: We searched MEDLINE, Embase and CINAHL databases to identify studies on the prevalence of, or risk factors for, IRID directly linked to injecting in samples of people who inject illicit drugs.
Results: We included 33 studies: 29 reported IRID prevalence in people who inject drugs, and 17 provided data on IRID risk factors. Skin and soft tissue infections at injecting sites were the most commonly reported IRID, with wide variation in lifetime prevalence (6–69%). Female sex, more frequent injecting, and intramuscular and subcutaneous injecting appear to be associated with skin and soft tissue infections at injecting sites. Cleaning injecting sites was protective against skin infections. Other IRID included infective endocarditis (lifetime prevalence ranging from 0.5–12%); sepsis (2–10%); bone and joint infections (0.5–2%); and thrombosis and emboli (3–27%).
Conclusions: There were significant gaps in the data, including a dearth of research on prevalence of IRID in low- and middle-income countries, and potential risk and protective factors for IRID. A consistent approach to measurement, including standardised definitions of IRID, is required for future research.

Effectiveness of needle and syringe Programmes in people who inject drugs – An overview of systematic reviews

Ricardo M Fernandes[1,3], Maria Cary[2], Gonçalo Duarte[1], Gonçalo Jesus[1], Joana Alarcão[1], Carla Torre[2], Suzete Costa[2], João Costa[1,3] and António Vaz Carneiro[1,3*]

Abstract

Background: Needle and syringe programmes (NSP) are a critical component of harm reduction interventions among people who inject drugs (PWID). Our primary objective was to summarize the evidence on the effectiveness of NSP for PWID in reducing blood-borne infection transmission and injecting risk behaviours (IRB).

Methods: We conducted an overview of systematic reviews that included PWID (excluding prisons and consumption rooms), addressed community-based NSP, and provided estimates of the effect regarding incidence/prevalence of Human Immunodeficiency Virus (HIV), Hepatitis C virus (HCV), Hepatitis B virus (HBV) and bacteremia/sepsis, and/or measures of IRB. Systematic literature searches were undertaken on relevant databases, including EMBASE, MEDLINE, and PsychINFO (up to May 2015). For each review we identified relevant studies and extracted data on methods, and findings, including risk of bias and quality of evidence assessed by review authors. We evaluated the risk of bias of each systematic review using the ROBIS tool. We categorized reviews by reported outcomes and use of meta-analysis; no additional statistical analysis was performed.

Results: We included thirteen systematic reviews with 133 relevant unique studies published between 1989 and 2012. Reported outcomes related to HIV ($n = 9$), HCV ($n = 8$) and IRB ($n = 6$). Methods used varied at all levels of design and conduct, with four reviews performing meta-analysis. Only two reviews were considered to have low risk of bias using the ROBIS tool, and most included studies were evaluated as having low methodological quality by review authors. We found that NSP was effective in reducing HIV transmission and IRB among PWID, while there were mixed results regarding a reduction of HCV infection. Full harm reduction interventions provided at structural level and in multi-component programmes, as well as high level of coverage, were more beneficial.

Conclusions: The heterogeneity and the overall low quality of evidence highlights the need for future community-level studies of adequate design to support these results.

Trial registration: The protocol of this systematic review was registered in Prospective Register of Systematic Reviews (PROSPERO 2015:CRD42015026145).

Keywords: Needle and syringe programmes, Harm reduction interventions, People who inject drugs, HIV/Aids-Hcv-Hbv

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Davis et al. Harm Reduction Journal (2017) 14:25
DOI 10.1186/s12954-017-0156-z

Harm Reduction Journal

RESEARCH Open Access

Needle exchange programs for the prevention of hepatitis C virus infection in people who inject drugs: a systematic review with meta-analysis

Stephen M. Davis[1*], Shay Daily[2], Alfgeir L. Kristjansson[2], George A. Kelley[3], Keith Zullig[2], Adam Baus[2], Danielle Davidov[1,2] and Melanie Fisher[4]

Abstract

Background: Previous research on the effectiveness of needle exchange programs (NEP) in preventing hepatitis C virus (HCV) in people who inject drugs (PWID) has shown mixed findings. The purpose of this study was to use the meta-analytic approach to examine the association between NEP use and HCV prevention in PWIDs.

Methods: Study inclusion criteria were (1) observational studies, (2) PWIDs, (3) NEP use, (4) HCV status ascertained by serological testing, (5) studies published in any language since January 1, 1989, and (6) data available for measures of association. Studies were located by searching four electronic databases and cross-referencing. Study quality was assessed using the Newcastle Ottawa (NOS) scale. A ratio measure of association was calculated for each result from cohort or case–control studies and pooled using a random effects model. Odds ratio (OR) and hazard ratio (HR) models were analyzed separately. Results were considered statistically significant if the 95% confidence interval (CI) did not cross 1. Heterogeneity was estimated using Q and I^2 with alpha values for $Q \leq 0.10$ considered statistically significant.

Results: Of the 555 citations reviewed, 6 studies containing 2437 participants were included. Studies had an average NOS score of 7 out of 9 (77.8%) stars. Concerns over participant representativeness, unclear adjustments for confounders, and bias from participant nonresponse and loss to follow-up were noted. Results were mixed with the odds ratio model indicating no consistent association (OR, 0.51, 95% CI, 0.05–5.15), and the hazard ratio model indicating a harmful effect (HR, 2.05, 95% CI, 1.39–3.03). Substantial heterogeneity ($p \leq 0.10$) and moderate to large inconsistency ($I^2 \geq 66\%$) were observed for both models.

Conclusions: The impact of NEPs on HCV prevention in PWIDs remains unclear. There is a need for well-designed research studies employing standardized criteria and measurements to clarify this issue.

Trial registration: PROSPERO CRD42016035315

Keywords: Needle exchange program, Meta-analysis, Systematic review, Hepatitis C, Injection drug use, Opioids, Heroin, Pain killers, Pain

By Brandon D. L. Marshall, Samuel R. Friedman, João F. G. Monteiro, Magdalena Paczkowski, Barbara Tempalski, Enrique R. Pouget, Mark N. Lurie, and Sandro Galea

Prevention And Treatment Produced Large Decreases In HIV Incidence In A Model Of People Who Inject Drugs

ABSTRACT In the United States, people who inject drugs continue to be at greatly increased risk of HIV infection. To estimate the effectiveness of various prevention scenarios, we modeled HIV transmission in a dynamic network of drug users and people who did not use drugs that was based on the New York Metropolitan Statistical Area population. We compared the projected HIV incidence in 2020 and 2040 if current approaches continue to be used to the incidence if one or more of the following hypothetical interventions were applied: increased HIV testing, improved access to substance abuse treatment, increased use of needle and syringe programs, scaled-up treatment as prevention, and a "high impact" combination scenario, consisting of all of the strategies listed above. No strategy completely eliminated HIV transmission. The high-impact combination strategy produced the largest decrease in HIV incidence—a 62 percent reduction compared to the status quo. Our results suggest that increased resources for and investments in multiple HIV prevention approaches will be required to eliminate HIV transmission among people who inject drugs.

SAN FRANCISCO STUDY

Syringe Disposal Among Injection Drug Users in San Francisco

Lynn D. Wenger, MSW, MPH, Alexis N. Martinez, PhD, Lisa Carpenter, BS, Dara Geckeler, MPH, Grant Colfax, MD, and Alex H. Kral, PhD

To assess the prevalence of improperly discarded syringes and to examine syringe disposal practices of injection drug users (IDUs) in San Francisco, we visually inspected 1000 random city blocks and conducted a survey of 602 IDUs. We found 20 syringes on the streets we inspected. IDUs reported disposing of 13% of syringes improperly. In multivariate analysis, obtaining syringes from syringe exchange programs was found to be protective against improper disposal, and injecting in public places was predictive of improper disposal. Few syringes posed a public health threat. (*Am J Public Health*. 2011; 101:484–486. doi:10.2105/AJPH.2009.179531)

improperly discarded syringes in San Francisco, and (2) examine syringe disposal practices of IDUs.

METHODS

We used geographic information system (GIS) software[20] to map city blocks in the 11 San Francisco neighborhoods most heavily trafficked by IDUs, as determined on the basis of drug treatment and arrest data. Of the 2114 total city blocks in these 11 neighborhoods, 1000 were randomly selected for visual inspection to look for improperly discarded syringes. We extrapolated from the number of syringes found in the 1000 randomly selected blocks to estimate the total number of syringes in these 11 neighborhoods. Half of Golden Gate Park was also randomized and inspected, along with all 20 operational public self-cleaning toilets in San Francisco. A research assistant walked through each selected geographic area once from February 2008 through June 2008, visually inspecting all publicly accessible areas, including sidewalks, gutters, and grassy areas, for evidence of discarded syringes.

To examine syringe disposal practices, we conducted a quantitative survey on syringe disposal practices with 602 IDUs from January 2008 through November 2008. We used targeted sampling methods to recruit the

Wenger et al., 2011

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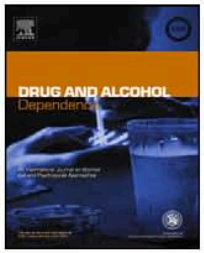
Contents lists available at SciVerse ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep



A comparison of syringe disposal practices among injection drug users in a city with versus a city without needle and syringe programs

Hansel E. Tookes [a], Alex H. Kral [b], Lynn D. Wenger [b], Gabriel A. Cardenas [a], Alexis N. Martinez [c], Recinda L. Sherman [a], Margaret Pereyra [a], David W. Forrest [a], Marlene LaLota [d], Lisa R. Metsch [a,*]

[a] Department of Epidemiology and Public Health, Miller School of Medicine, University of Miami, Miami, Florida, USA
[b] Urban Health Program, RTI International, San Francisco, CA, USA
[c] Department of Sociology, San Francisco State University, San Francisco, CA, USA
[d] Florida Department of Health, Bureau of HIV/AIDS, Tallahassee, FL, USA


The Miami Herald

MiamiHerald.com

SATURDAY, JANUARY 14, 2012

DECO FANS' DELIGHT

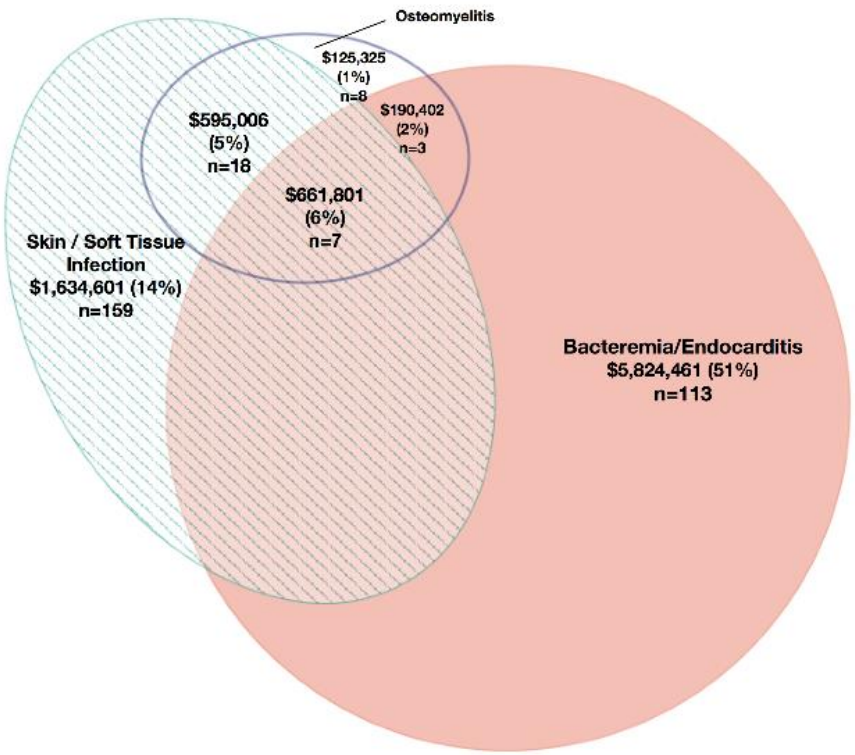
Chávez shuts down Miami consulate

Study: drug-users' needles pose risk

Suite deal: Want to clean the new stadium? Buy a skybox

New rule would ban imports of Burmese pythons

Cost of Infections related to injection drug use at a county safety-net hospital in Miami, FL



Seroprevalence	N	(%)
HIV	61	17
Hepatitis C Virus	52	15

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Scott County, Indiana

- 24,000 residents
- 181 new HIV diagnoses (15x rate in Miami)
- Close network of needle sharing
- March 2015: Executive Order for emergency needle exchange (30 days)
- May 2015: Pence signs bill that lifts ban on needle exchange

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Bill 242 – Infectious Disease Elimination Act, 2016

- Effective 07/01/2016
- UM pilot syringe access program
- possession, distribution, or exchange of needles and syringes under the pilot program is not a violation of Florida law.

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Launched World AIDS Day 2016

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Mobile Unit Services

- Launched May 2017

	Totals
Participants enrolled	922
Hispanic	37%
White non-Hispanic	52%
Black non-Hispanic	7%
Multiracial	3%
Native American	1%
Mean Age	37
Male	75%
Female	25%

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	Totals
Number of exchanges	7,868
Needles in	230,038
Needles out	217,586

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DOCS Wound Care Clinic

Launched 9/28

Internal Medicine, Surgery, Emergency Medicine, Dermatology

Wolfson Department of Community Service

Thursdays 4pm-8pm

Self-reported Drug Use	Totals
Heroin	**82%**
Prescription Opioids	**9%**
Fentanyl/Cartentanil	**10%**
Methamphetamine	**12%**
Cocaine	**26%**
Crack/Cocaine	**8%**
Speedball	**19%**

- **91%** of heroin injectors started using prescription opioids prior to their injection drug use.

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Overdose Prevention

- IDEA Exchange participants
- Family and friends of participants
- Law enforcement partners
- IDEA Staff and volunteers

Narcan distributed	1670
Narcan reversals	921

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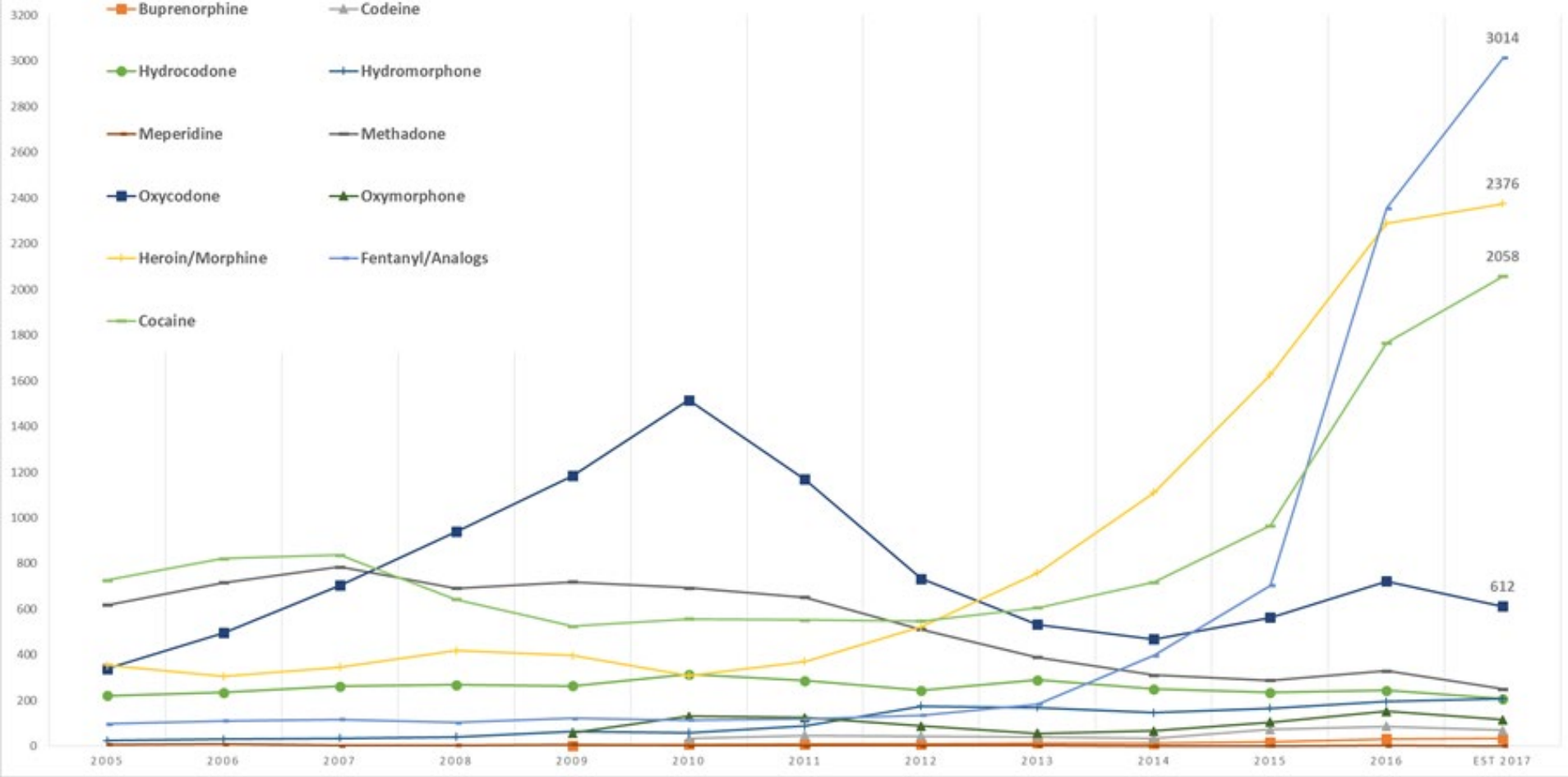
CAUSAL OCCURENCES OF OPIOIDS AND COCAINE AMONG DECENDENTS IN FLORIDA 2005-2017 (EST.)



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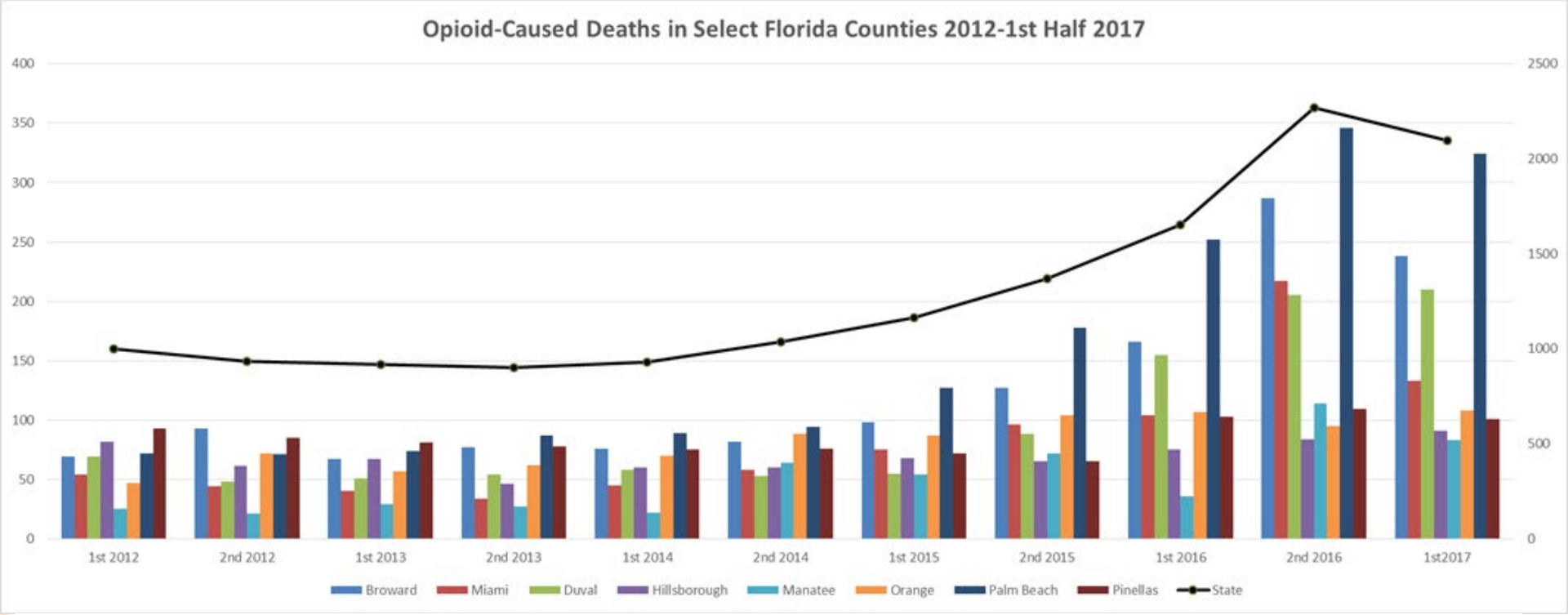

	1st 2012	2nd 2012	1st 2013	2nd 2013	1st 2014	2nd 2014	1st 2015	2nd 2015	1st 2016	2nd 2016	1st2017
Broward	69	93	67	77	76	82	98	127	166	287	238
Miami	54	44	40	34	45	58	75	96	104	217	133
Duval	69	48	51	54	58	53	55	88	155	205	210
Hillsborough	82	61	67	46	60	60	68	65	75	84	91
Manatee	25	21	29	27	22	64	54	72	36	114	83
Orange	47	72	57	62	70	88	87	104	107	95	108
Palm Beach	72	71	74	87	89	94	127	178	252	346	324
Pinellas	93	85	81	78	75	76	72	65	103	109	101
State	998	932	918	901	928	1036	1166	1368	1651	2271	2096

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Gilead FOCUS Program

Gilead's FOCUS Program

Increasing Routine HIV and HCV Screening and Linkage to Care

GILEAD

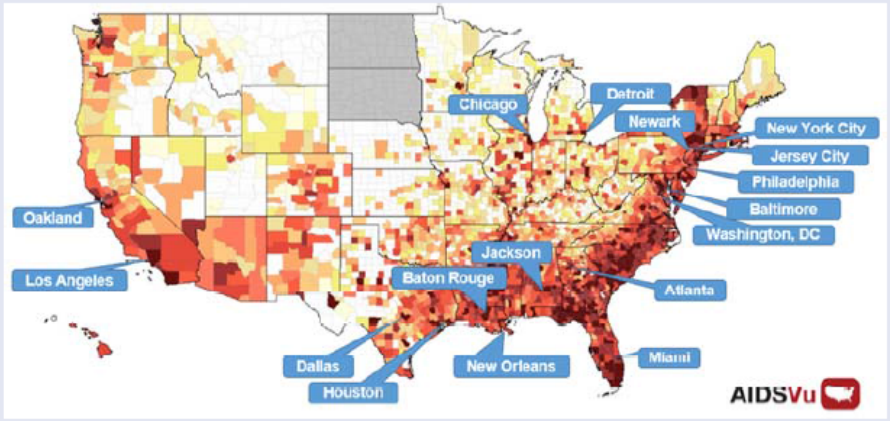
Gilead Sciences is a research-based biopharmaceutical company that discovers, develops and commercializes innovative medicines in areas of unmet need. As a leader in developing therapies for HIV and chronic hepatitis C virus (HCV) infection, Gilead is committed to helping ensure access to life-saving screening and care services for people who could benefit from them.

HIV

Routine HIV screening is the practice of offering HIV testing to adults and adolescents as part of regular care in clinics, hospitals and other health care settings. Experts believe that routine screening is essential to slowing and ultimately ending the HIV/AIDS epidemic in the United States by helping to identify undiagnosed infection, one of the major drivers of the disease. Nearly one in six HIV-positive Americans, approximately 180,900 people, does not know that he or she is infected.[1] It is estimated that these individuals are responsible for up to two-thirds of sexually transmitted HIV infections because they do not know that they are putting others at risk.[2]

Diagnosis also enables those who are infected to begin antiretroviral therapy, which lowers the amount of HIV in the body (viral load). In addition to improving the health of people with HIV, lowering viral load can significantly reduce

FOCUS Partnership Cities



Rate of Persons Living with an HIV or AIDS Diagnosis per 100,000 population, 2012

0 - 41	42 - 56	57 - 70	71 - 86	87 - 108	109 - 139	140 - 186	187 - 259	260 - 406	407+

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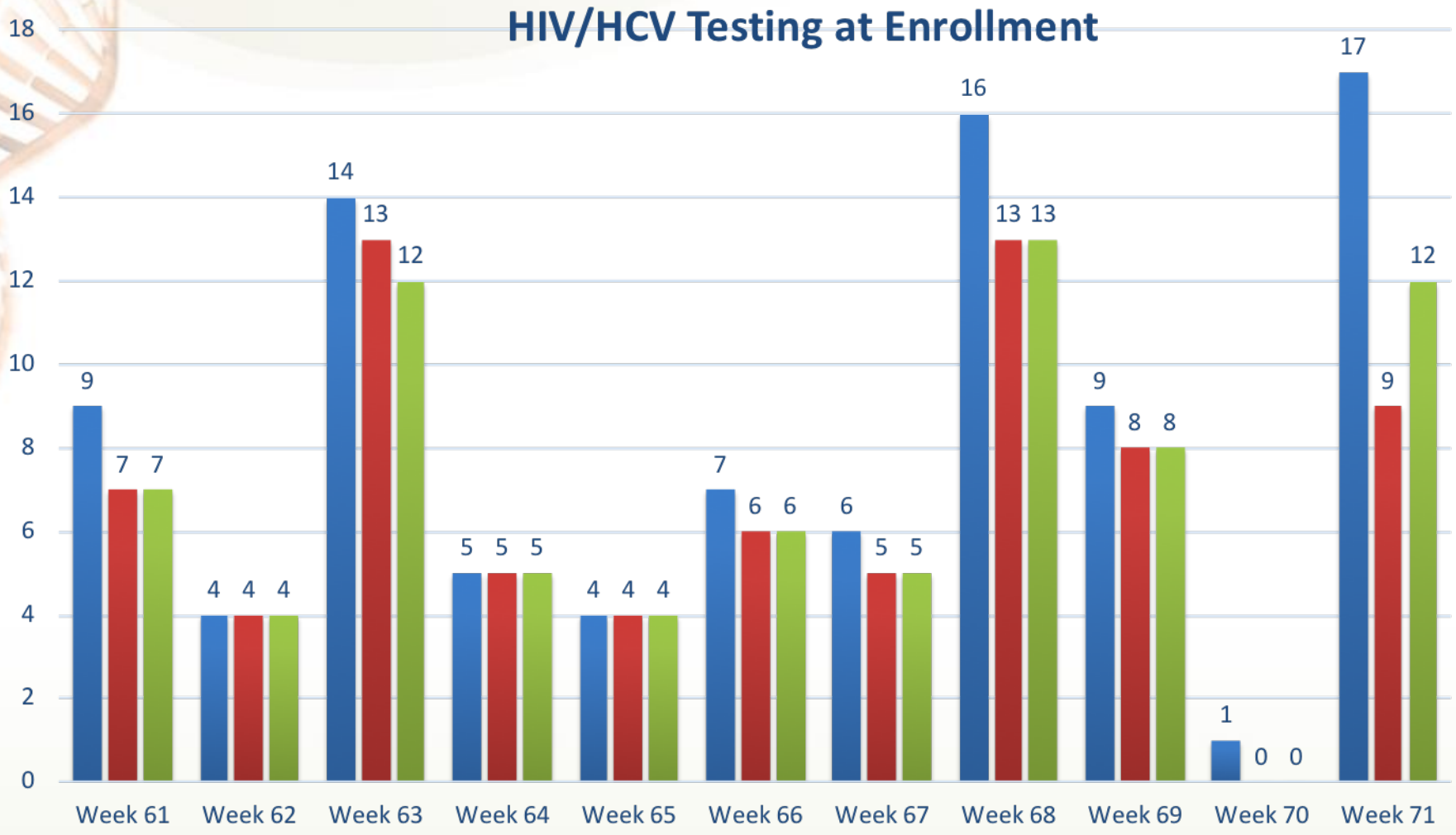

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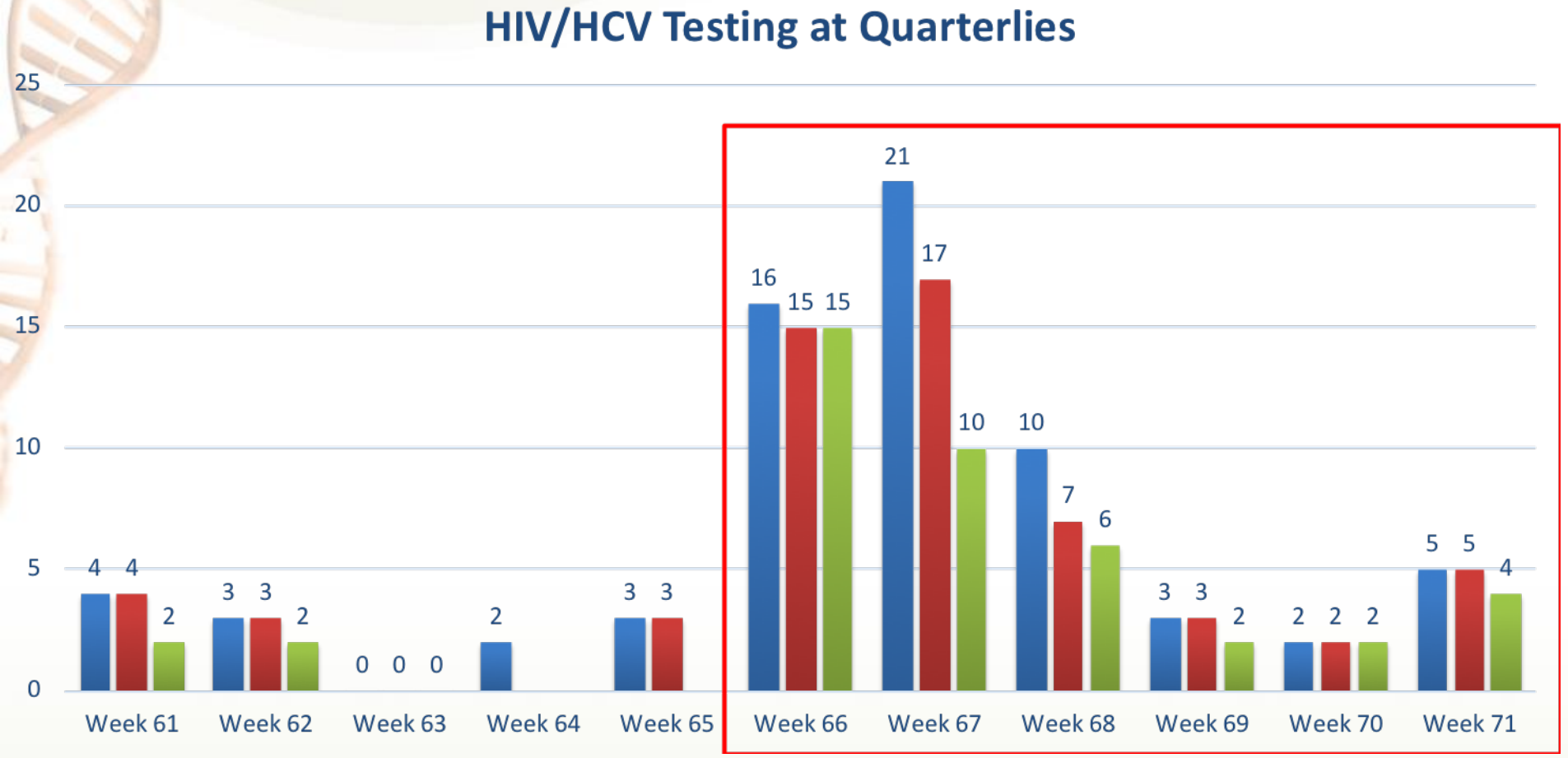

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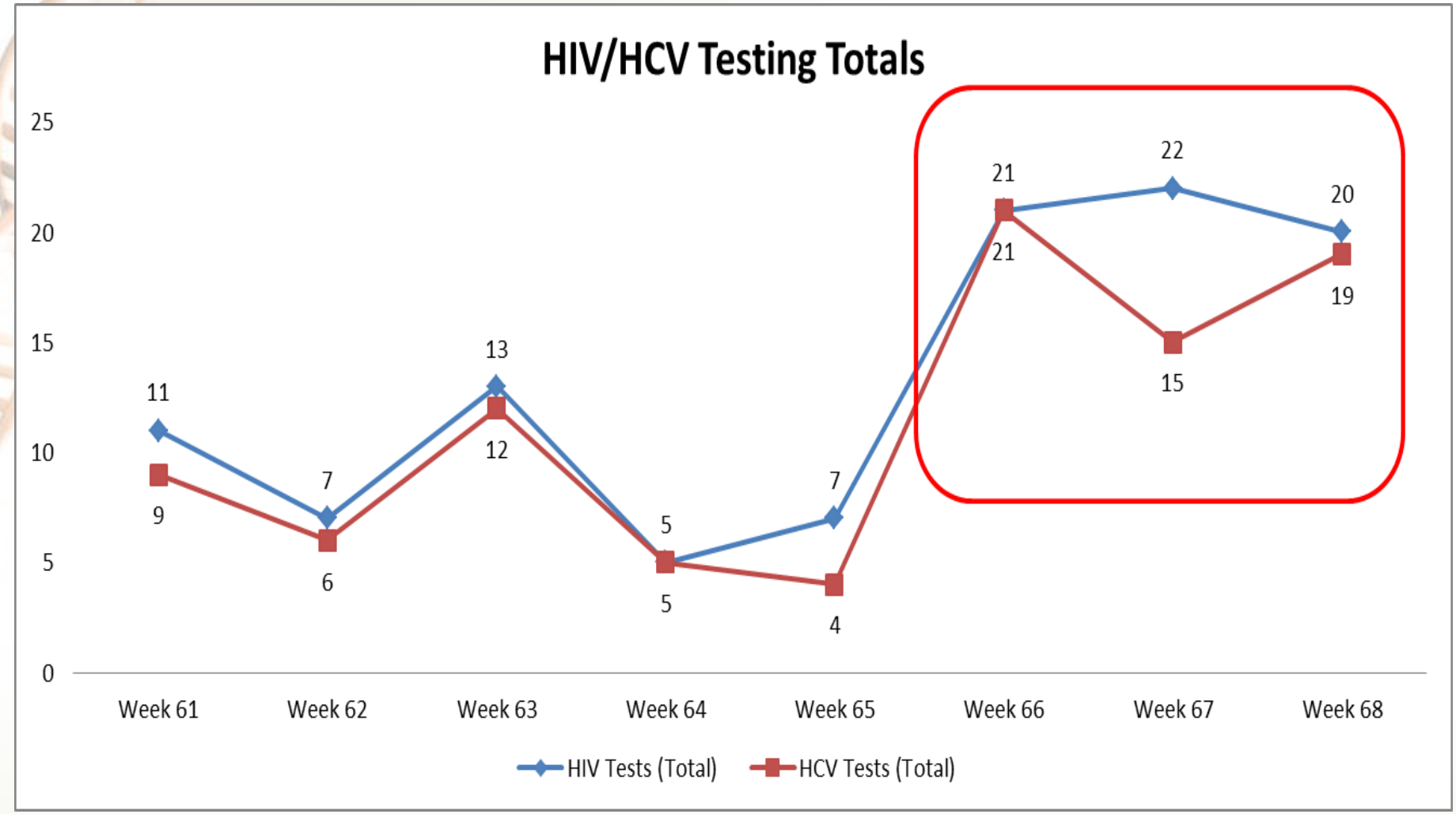

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	Totals
HIV+	12.4%
HIV reactive tests	6.4%
HIV seroconversions	10
HCV+	43%
HCV reactive tests	40.2%
HCV seroconversions	10

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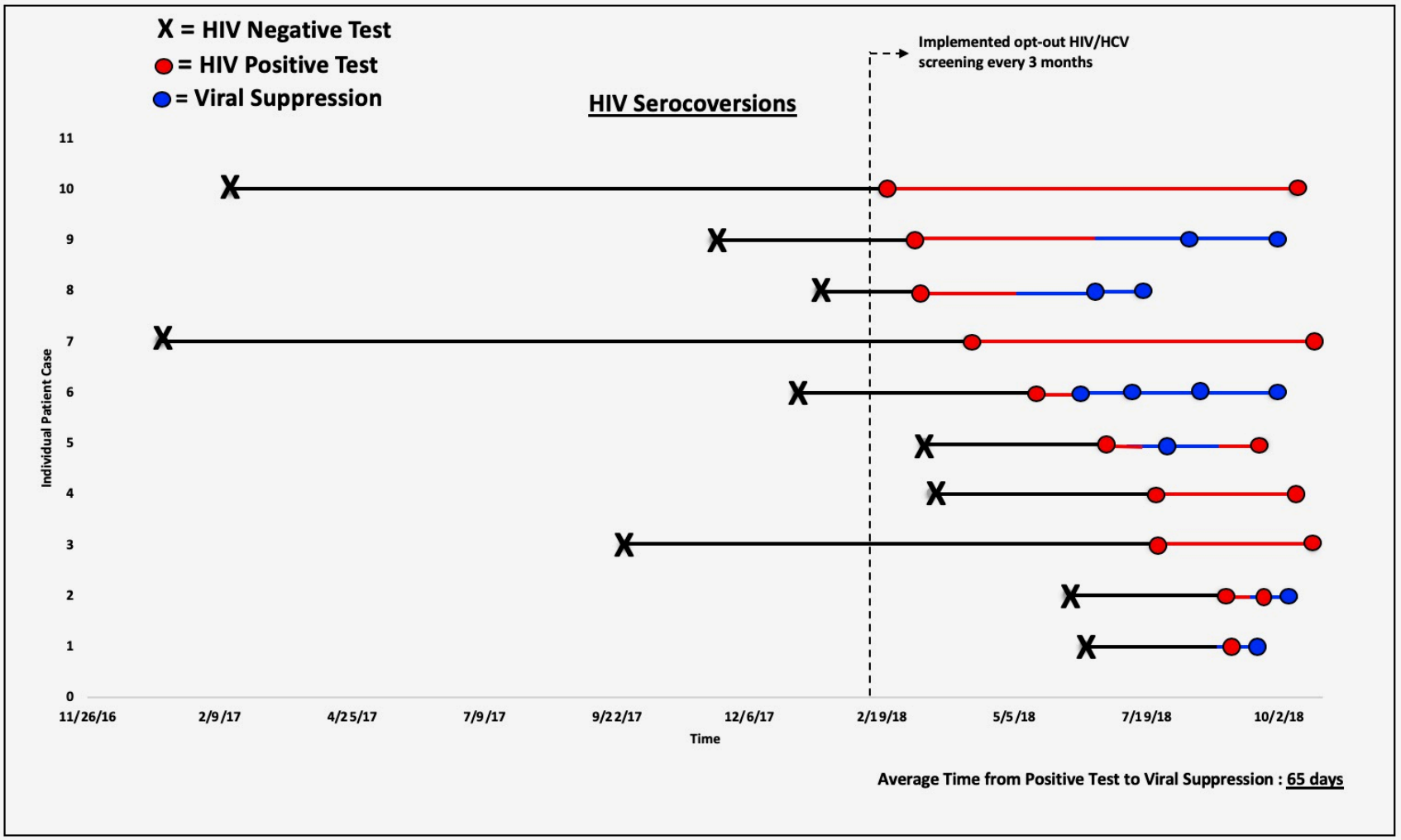

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IDEA Test and Treat

- Launch May 2018
- HIV rapid response linkage to care
- Partnership with FL Department of Health
- Direct referral to Jackson HIV Clinic
- Provider visit, labs, ART initiation same day
- For newly diagnosed and lost to care

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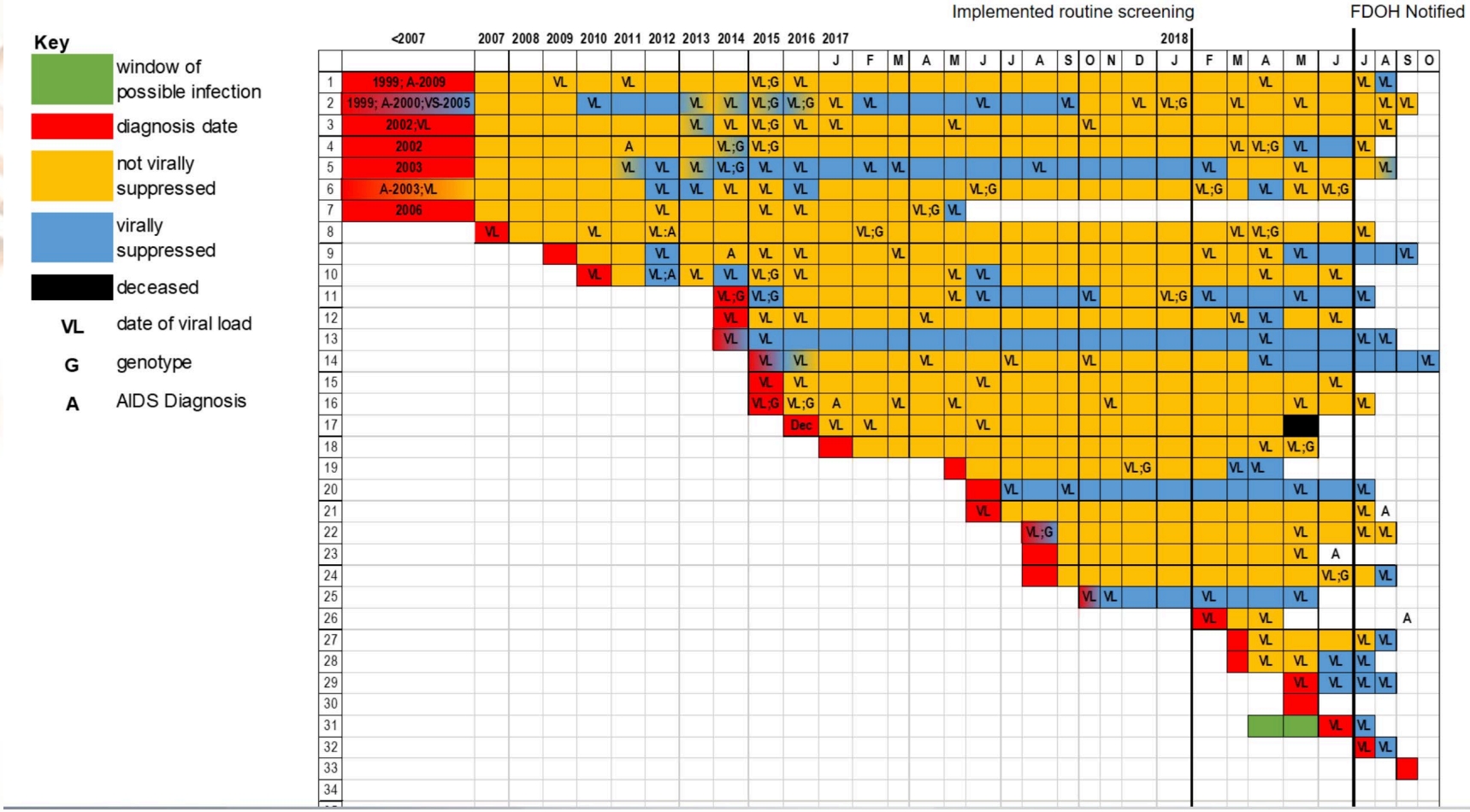

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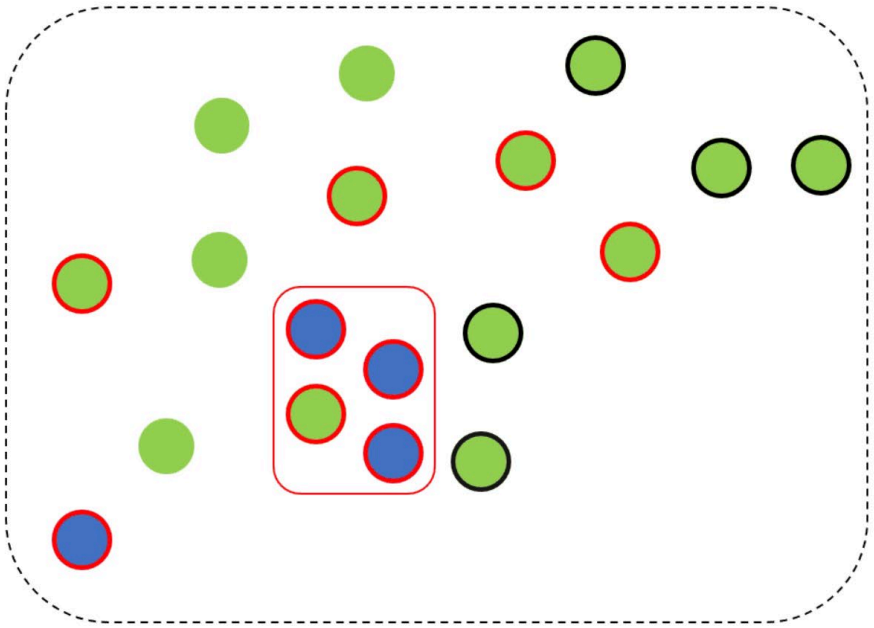
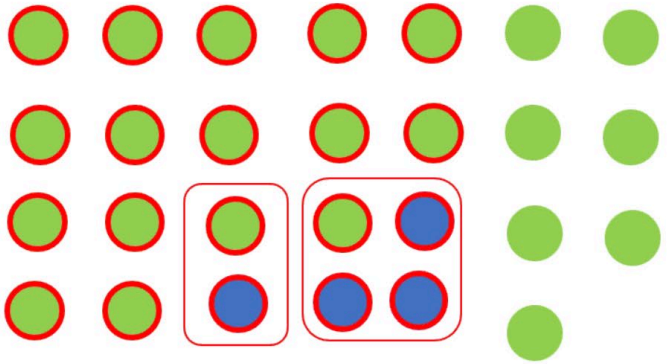
Miami IDU Risk Network

Partner Services
Epidemiological Linkage Only





KEY:

- IDEA Participant with genotype
- IDEA Participants without a genotype, includes recent previous positives and seroconversions with genotypes on order
- Not on IDEA participant list with genotype molecularly linked to an IDEA participant with genotype
- Original risk network
- Molecular linkages at 0.5% between an IDEA participant with genotype

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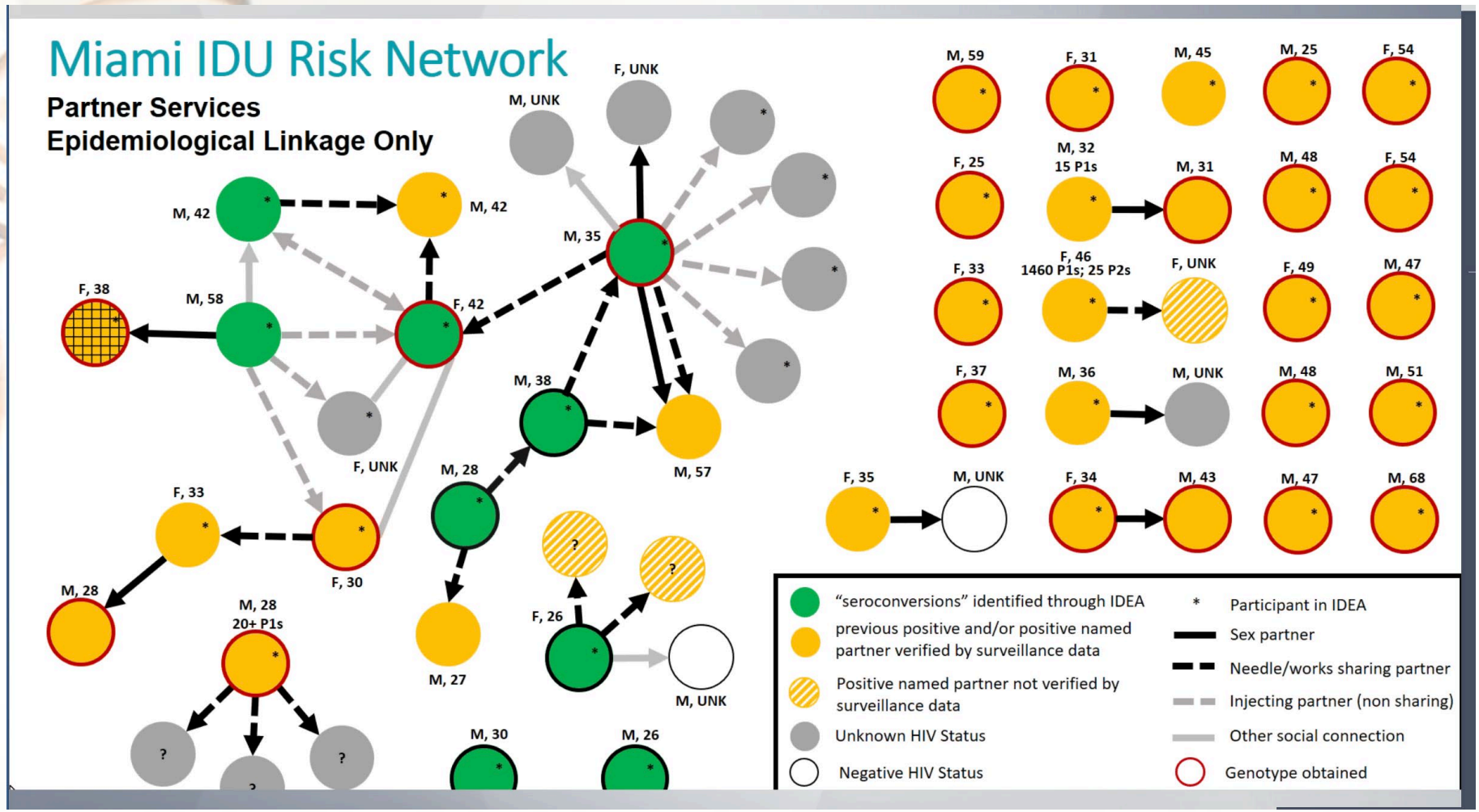

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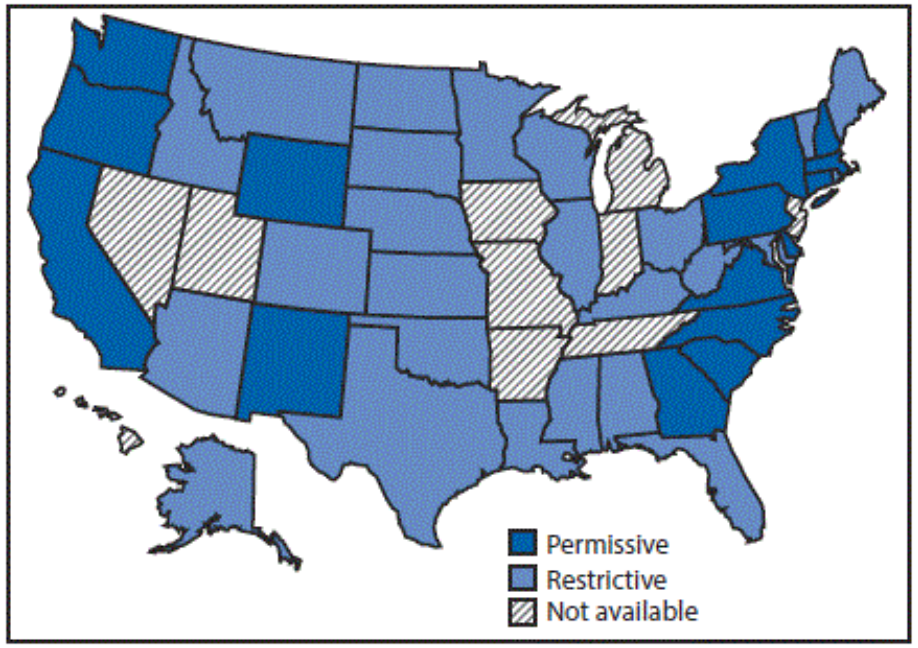
State Medicaid HCV treatment policy restrictions

- Permissive: Did not require a period of sobriety or only required screening and counseling.
- Restrictive: Required a period of sobriety from drugs and/or alcohol.



https://www.cdc.gov/mmwr/volumes/66/wr/mm6618a2.htm

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HCV Coverage Restrictions

- Prescriber restrictions: Stating that medication must be prescribed by a specialist.
  - Recent studies have shown that PCPs providing HCV treatment obtain same, if not higher, SVR rates than specialists.
- Fibrosis restrictions: Patient must have a certain level of disease severity in order to receive treatment (F0-F4 scale).
  - Illegal under the ACA

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NIDA Grant

- PI: Lisa Metsch and Dan Feaster
- Multi-site Multi-Setting RCT of Integrated HIV Prevention and HCV Care for PWID
- Launch Fall of 2018
- Montreal and Miami
- Setting: Syringe Exchanges and Opioid Treatment Centers
- 500 participants

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CTN—0067 CHOICES

- Comparing Treatments of HIV-Infected Opioid Users in an Integrated Care Effectiveness Study Scale-Up
- Non-inferiority trial
- Intervention: XR-NTX
- Primary Outcome: viral suppression at 6 months

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Next Steps

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Acknowledgements

Erin Kobetz
Tyler Bartholomew
David Forrest
Emmanuel Thomas
Edward Suarez
Allan Rodriguez
Lisa Metsch
Emelina Martinez
Carlos Padron
Young Jo
Frankie Martinez
IDEA Team
Jackie Escobar
Dan Feaster

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Questions & Discussion

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Miami Herald

NEEDLE EXCHANGE PROGRAM

Fighting HIV in Miami, one dirty needle at a time

Jose De Lemos, 53, and Dr. Hansel Tookes, a University of Miami medical resident, outside Jackson Memorial Hospital. De Lemos, who has HIV, is being treated by Tookes, who has been leading the fight to help reduce HIV infections by starting a new needle exchange pilot program.

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