The Emerging HCV Epidemic and HIV Outbreak Vulnerability Among Injection Drug Users

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## The Opioid and Blood Born Virus (BBV) Syndemic

 Syndemic - A set of linked health problems involving two or more afflictions, interacting synergistically, and contributing to excess burden of disease in a population

Needle scarcity and unsterile needle re-use (sharing) increases the risk for acquiring BBVs, including HIV and HCV infection



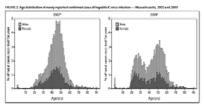
### **Hepatitis C Infection**

Annual age adjusted mortality

- Blood-born virus
- Highly prevalent
  - >5 million in
     US estimated
- High morbidity & mortality
  - 60-70% will develop chronic liver disease
  - 20% will develop liver cirrhosis
  - Up to 5% will die of liver failure or liver cancer
  - Leading cause of liver transplant
- Curative
  - 12 week course of all oral medications

## Evolving Epidemiology of HCV Infection in the US

- Persons born between 1945-1965 account for 75% of infections
- Rising incidence among young (age <30) white



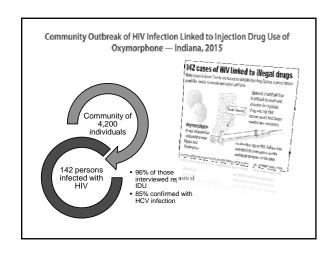
Increases in Hepatitis C Virus Infection Related to Injection Drug Use Among Persons Aged ≤30 Years

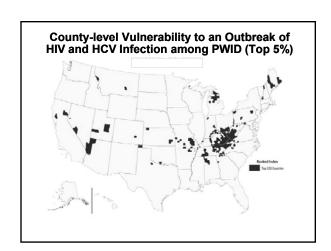
- Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012

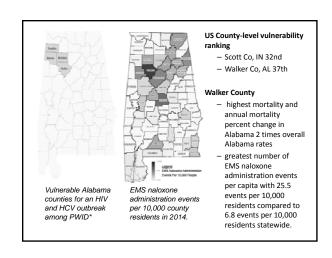
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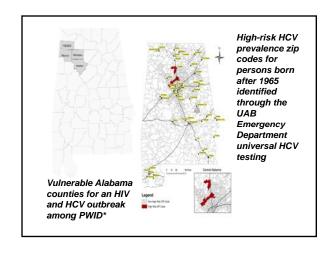
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Universa	ıl Han	atitic C	Testing HC	tai teste	d: 5,972
October 15, 2015 to Fe	hruany 15, 2016	(Unnublished data)	TESTINE HO	V-Ab+: 4	158 (7.7%
		(			
	No.	HCV-Ab+,		No.	HCV-Ab+,
	Tested, n	n (%)		Tested, n	n (%)
Born 1945-1965			Born After 1965		
Total	2,204	231 (10.5)	Total	3,768	227 (6.0)
Sex			Sex		
Male	1,104	163 (14.8)	Male	1,619	138 (8.5)
Female	1,100	68 (6.2)	Female	2,149	89 (4.1)
Race			Race		
White	1,058	100 (9.5)	White	1,554	181 (11.7)
Black	1,092	128 (11.8)	Black	2,063	41 (2.0)
Other	39	3 (7.7)	Other	96	1 (1.0)
Missing	15	0 (0.0)	Missing	55	4 (7.2)
Insurance Type			Insurance Type		
Commercial	562	27 (4.8)	Commercial	1,065	23 (2.2)
Medicare	844	80 (9.5)	Medicare	359	23 (6.4)
Medicaid/Public	419	70 (16.9)	Medicaid/Public	935	48 (5.1)
Uninsured	275	47 (17.1)	Uninsured	1,254	119 (9.5)
Other/Missing	104	7 (6.7)	Other/Missing	155	14 (9.0)

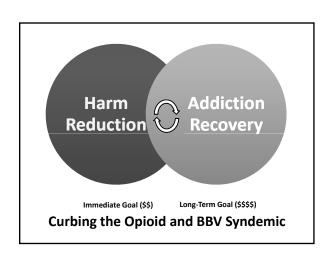












### **Audience Question**

 Some people feel that one way to engage persons who inject drugs and reduce the spread of communicable diseases is to offer needle exchange programs. Needle exchange programs involve agencies providing clean needles to drug users and others who inject themselves in exchange for used ones, in hopes of minimizing the spread of contagious diseases like HIV/AIDS and Hepatitis C.

### **Audience Question**

- In general, would you say you...
  - 1 disapprove strongly
  - -2 disapprove
  - -3 approve
  - 4 approve strongly
  - 5 or have no opinion at all about needle exchange programs

### **Harm Reduction**

- Set of practical strategies and ideas aimed at reducing the negative consequences of drug use
- · Harm reduction interventions:
  - Home naloxone distribution
  - Opioid replacement therapy
  - Syringe service programs
  - Blood born virus testing



### Harm Reduction

- Immediate goals achievable through harm reduction:
  - Reduction in overdose deaths
  - Reduction in the spread of blood born virus infections though testing, referral, and vaccines
  - Education of users on safer practices
  - Reduction in illicit use through opioid replacement therapy



## Improved Addiction Recovery Access (Long-Term Goal)

- Inpatient / Residential / Outpatient Addiction Recovery Care must be:
  - Affordable
  - -Accessible (Local)
  - Accountable for outcomes



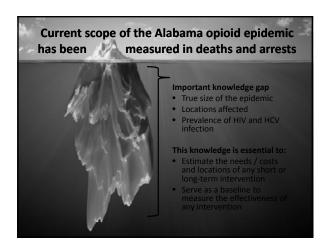
## Improved Addiction Recovery Access (Long-Term Goal)

- Criminal Justice Reform
  - 50% of all prisoners meet criteria for drug abuse or dependence
  - Alternatives to incarceration
    - Treatment merged with judicial oversight in drug courts
    - Prison- and jail-based treatments, including opioid replacement tx

## Improved Addiction Recovery Access (Long-Term Goal)

- Re-entry programs intended to help offenders transition from incarceration back into the community
- Improve medical outcomes & reduce recidivism = reduced costs

"Punishment alone is a futile and ineffective response to drug abuse, failing as a public safety intervention for offenders whose criminal behavior is directly related to drug use."\*



## Barriers to Alabama's Harm Reduction & Recovery Efforts

#### **Financial**

Who pays for this?

 Costs should be shared among all facets of the US healthcare system and criminal justice system because we all stand to gain from such an investment

#### Political

Can we align our laws with the evidence to reduce harm in Alabama?

 The evidence for harm reduction is not controversial, but societal beliefs and politics is controversial



Funding Source	Source Potential Benefits		
AL General Fund	Vote winner		
Public Health	Improved surveillance & addiction outcomes		
Criminal justice system	Reductions in crime and costs related to crime		
Health Systems	Reduction in healthcare costs		
Insurance providers	Reduction in healthcare costs		
Industry	Sales (HCV tx, opioid replacement, naloxone)		
NIH / AHRQ / PCORI	Scientific advancement / knowledge		

### Funding Alabama's Harm Reduction & Recovery







Needle exchanges spread in Kentucky as outbreak threat grows

Early results of W.Va. town's needle exchange program show progress

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The Growing Necessity of Syringe Service Interventions in the US

# Alabama Laws Regarding Syringes (AL Statute 13-A-12-260)

- No explicit authorization for syringe exchange by law
- No exceptions to the law that would allow for the distribution of syringes to prevent blood-borne diseases



Annual Mortality Rate of Change for Mental
Health and Substance Use Disorders
(2000-2014), Both Sexes, Age-Standardized

"Your longevity
and health are
more determined
by your zip code
than they are by
your genetic
code"
Tom Frieden,
MD, MPH
CDC Director