

# **An Emerging Epidemic: The Public Health Response to Hepatitis C Infection in Wisconsin**

Sheila Guilfoyle

Viral Hepatitis Prevention Coordinator

Division of Public Health

Wisconsin Department of Health Services

Bureau of Communicable Disease and

Emergency Response

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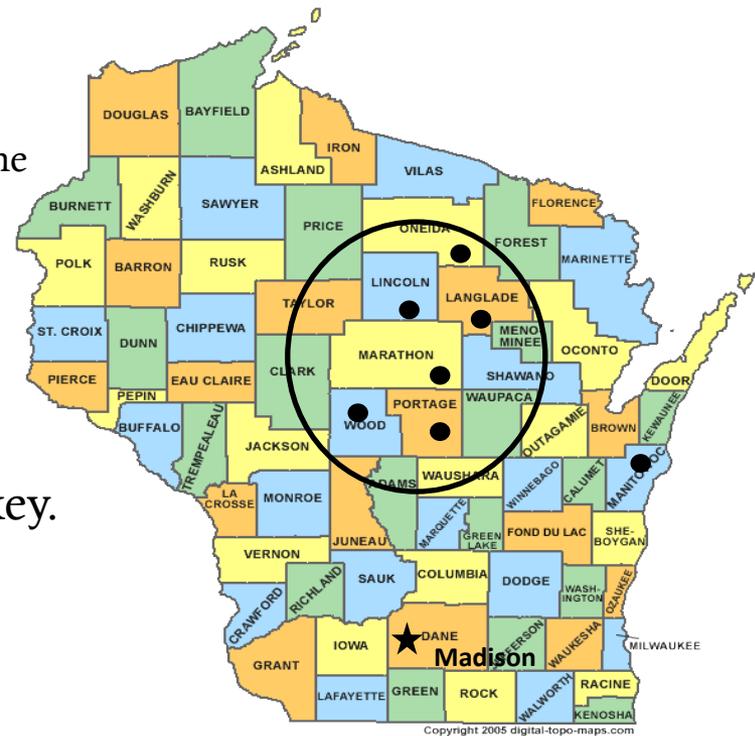


# Outline

- Overview of cluster investigations
- Public health response
- Scope of hepatitis C virus (HCV) in Wisconsin
- HCV rapid testing pilot
- “Baby Boomer Testing”

# Cluster Investigations in Rural Wisconsin

- North Central six rural counties (2010).
  - Five acute HCV cases reported in a short period of time
  - All young adults who reported injection drug use
  - Resulted in a *CDC Notes from the Field*
- Manitowoc, both HIV and HCV cases (2011).
  - Local public health agencies did extensive interviews.
  - Documented networks of injectors.
- Electronic Laboratory Reporting (ELR) was key.



# Public Health Response

## Partners

- Wisconsin DPH
  - Identified clusters
  - Coordinated investigation
  - Worked with State Laboratory of Hygiene on confirmatory testing
  - Provided training and technical assistance to local public health
- AIDS Resource Center of Wisconsin (ARCW)
  - Provided harm reduction services
  - Outreach testing
  - Interviewed cases that could not be located by public health agencies
- CDC Division of Viral Hepatitis
  - Provided onsite assistance with intervention
  - Conducted quasi species analysis on blood specimens
  - Assisted with preparation of *Notes From the Field*
- Local Public Health Agencies
  - Interviewed cases for risk
  - Provided case follow-up
  - Provided Vaccination and linkage to care

# Public Health Response

- Increased outreach testing to young people who inject drugs (PWIDs)
- Piloted the HCV rapid test in harm reduction and outreach settings statewide.
- Integrated HCV testing with the HIV testing program
- Provided training to local health department staff on disease intervention and case follow-up

## Viral Hepatitis Program Collaborations

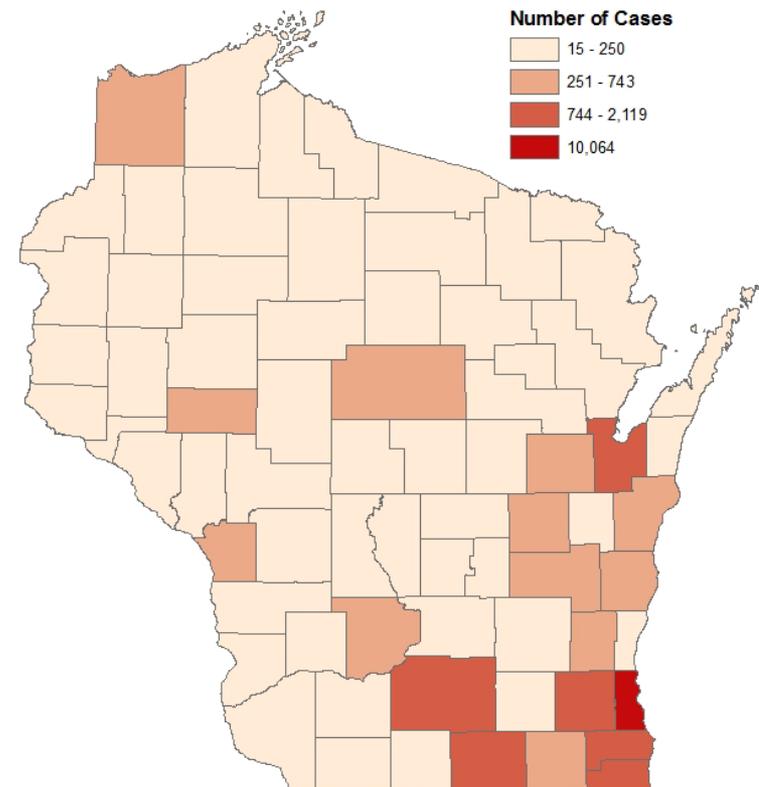
- Community-based organizations: testing and harm reduction services
- State Council on Alcohol and Other Drug Abuse: heroin subcommittee
- Policy Development: Good Samaritan legislation
- Research: UW School of Medicine and Public Health: social networks HCV testing project

## Scope of Disease in Wisconsin: Where

- There are 35,000 *known* HCV infections in people living in Wisconsin.
  - An estimated 1.3% of the Wisconsin population (74,000 people) is living with HCV.
- The majority of people with HCV live in the southeastern (52%) and southern (16%) regions of the state.
- Number reported has increased slowly since 2006.
- On average, 2,500 infections have been detected each year.

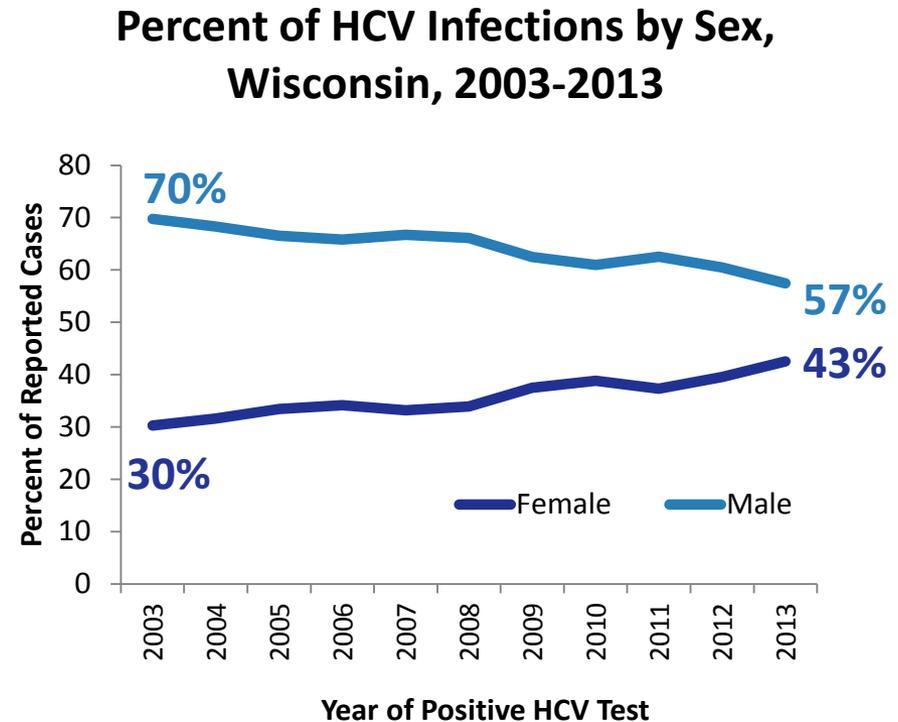
### Prevalent HCV Cases in Wisconsin\*

\*2013 Data. Cases reported from the Department of Corrections and the Federal Correctional Institution are not shown.



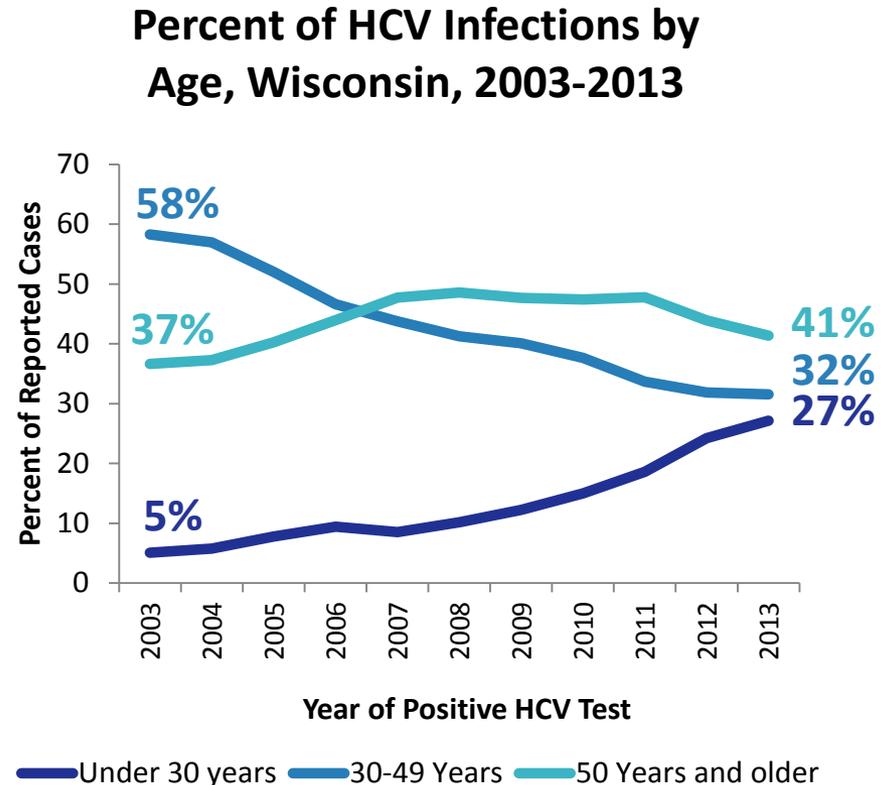
## Scope of Disease in Wisconsin: Who

- In 2013, most (57%) newly reported infections were in males and most of the known individuals living with HCV (65%) were male.
- New reports in females have increased since 2003.



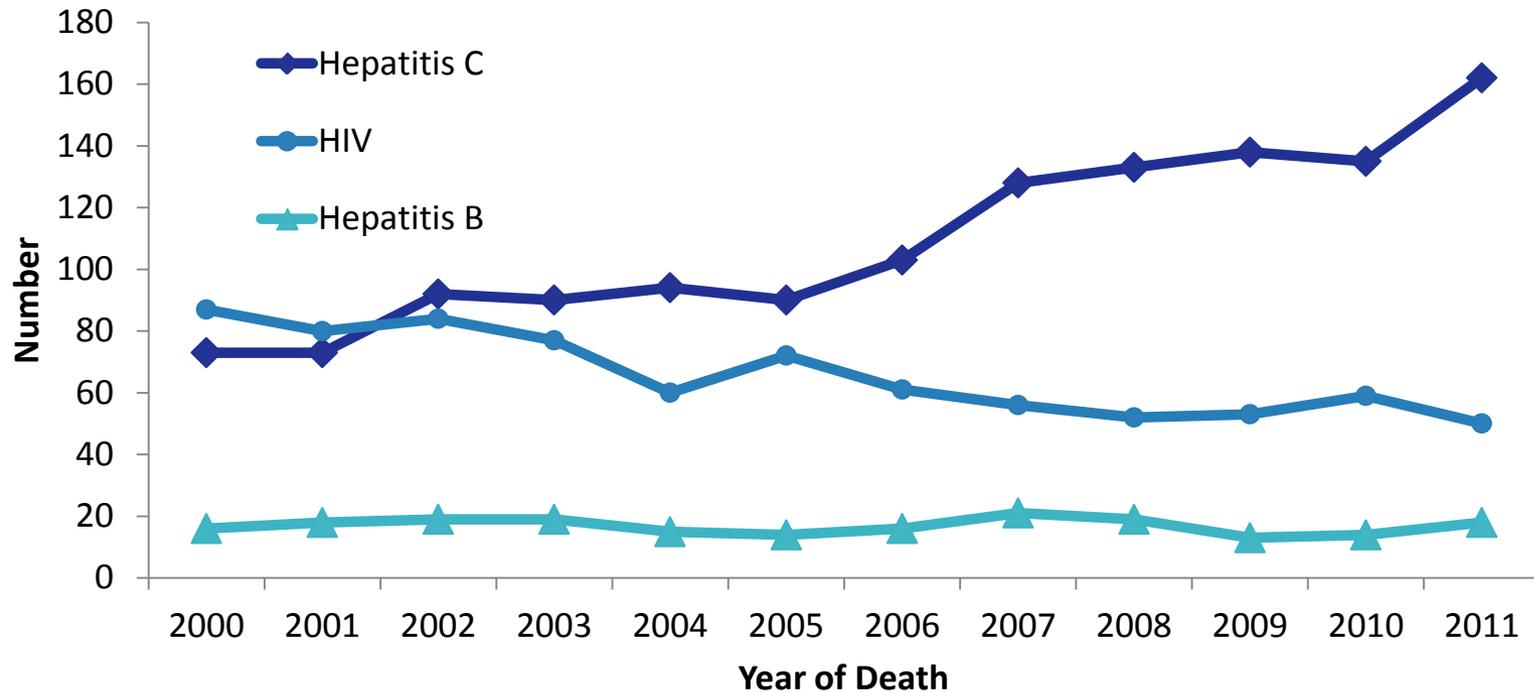
## Scope of Disease in Wisconsin: Who

- In 2013, the largest number (41%) of newly reported infections were in people aged 50 and older.
- *New reports in young adults have increased five-fold since 2003.*
- Median age of reported cases has decreased.
  - 2003: Median age 47 years
  - 2013: Median age 44 years



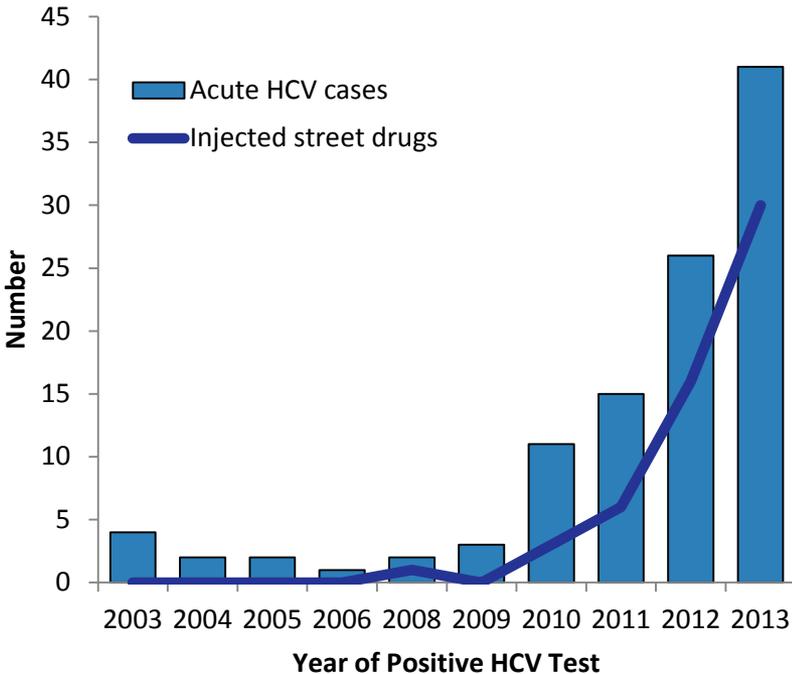
# Mortality Trends

Deaths Associated with Hepatitis C, Hepatitis B and HIV:  
Wisconsin, 2000-2011

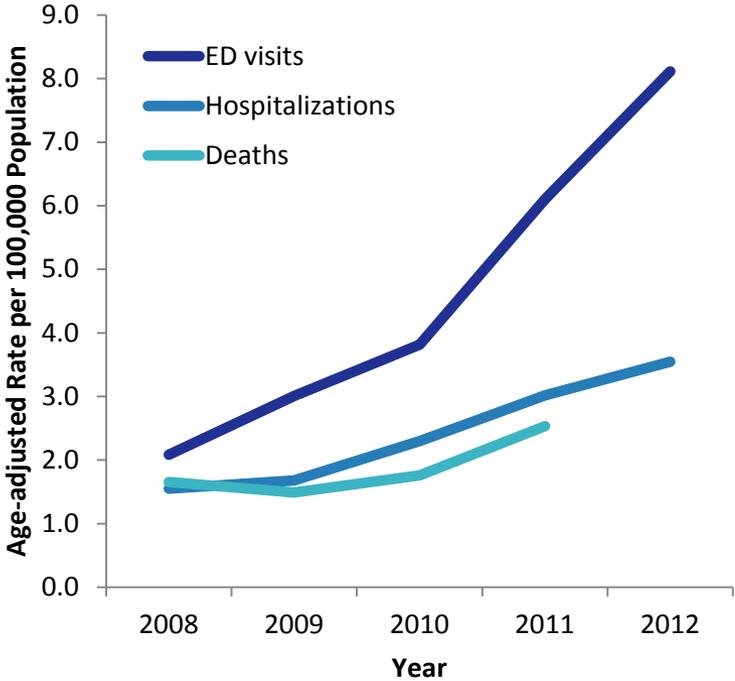


# Scope of Disease in Wisconsin: People with Injection Drug Use (PWID)

### Reported Acute HCV Cases, Wisconsin, 2003-2013



### Rates of Heroin Overdoses and Deaths, Wisconsin, 2008-2012\*

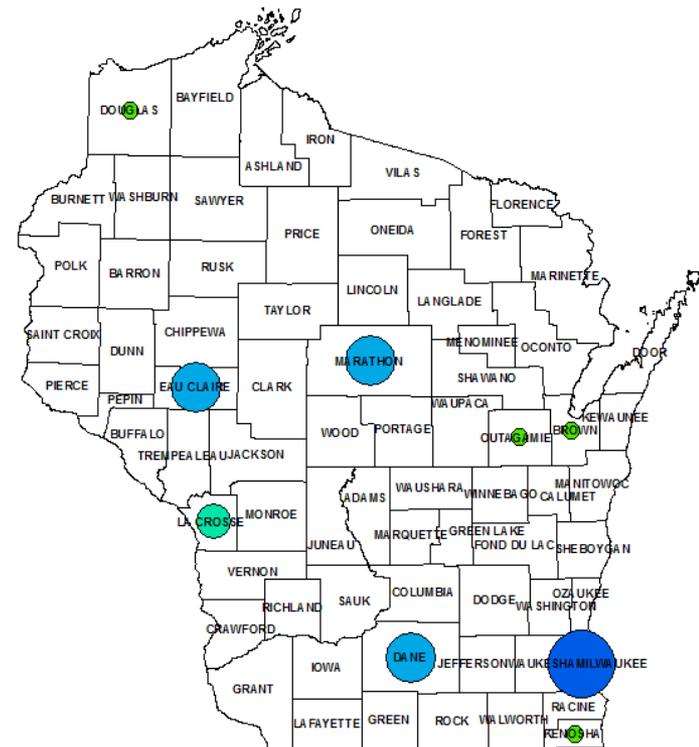


\*Source: Wisconsin hospital inpatient database, Wisconsin emergency department visit database and Wisconsin resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services. Rates were age-adjusted using the United States standard 2000 population.

# Rapid HCV Testing Program

- Project began in 2012.
- Four agencies serving clients statewide.
  - AIDS Network
  - AIDS Resource Center of Wisconsin
  - Public Health-Madison Dane County
  - 16<sup>th</sup> Street Community Health Center
- Provided testing and harm reduction services.
- Completed enhanced risk survey.

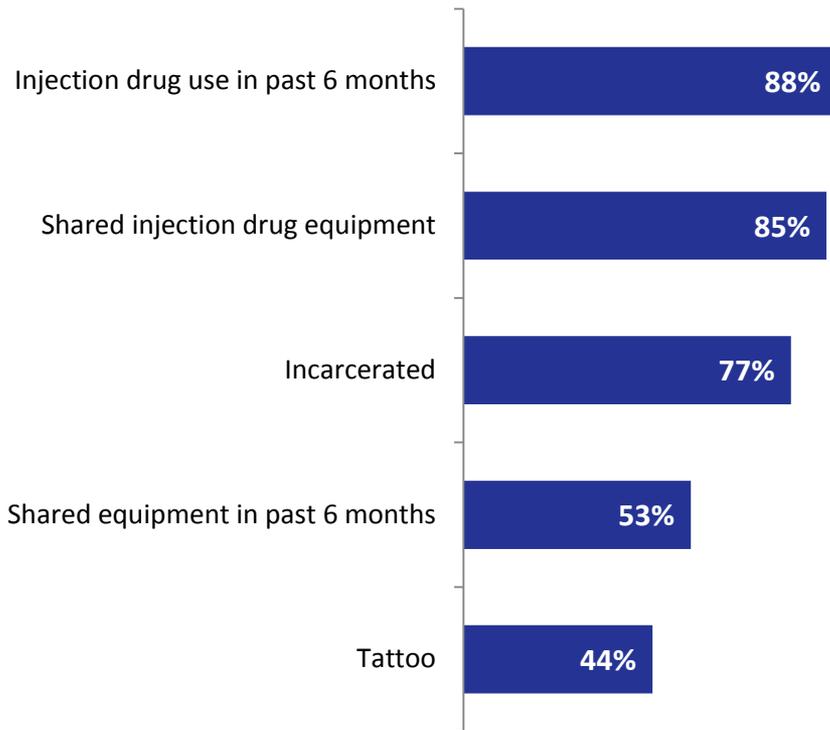
Location of Rapid HCV Test Sites



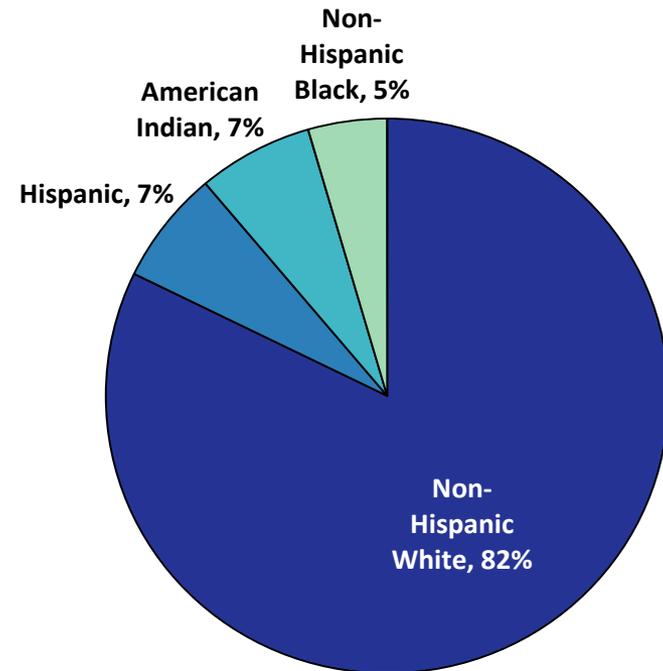
# Scope of Disease in Wisconsin: HCV Positive Persons with Injection Drug Use

Data from HCV rapid test participation conducted at outreach sites in Wisconsin in 2011-2013. Data is limited to PWID.

**Reported Risk Behavior**

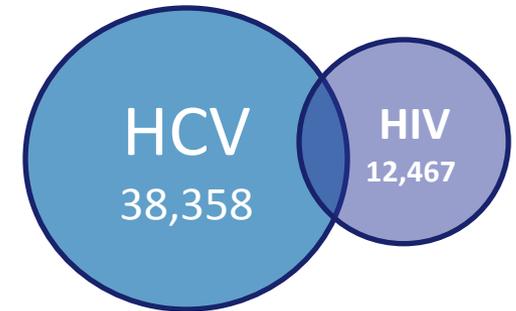


**Race/Ethnicity**



# Surveillance System Match: HCV/HIV Co-infections

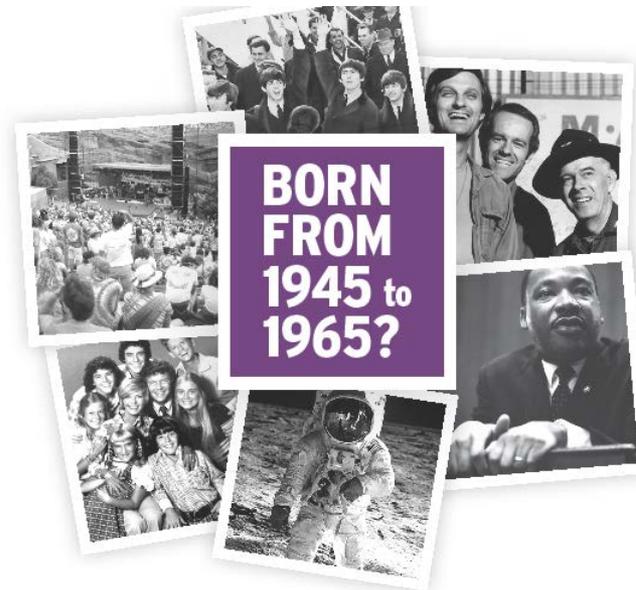
- Approximately 900 HCV/HIV co-infections identified since 2000.
- 2.3% of HCV cases have HIV infection.
- 7.1% of HIV cases have HCV infection.
- Demographics of co-infected:
  - 77% male
  - 45% non-Hispanic black
  - 56% Milwaukee County residence
- Risk: 60% reported IDU at the time of HIV report.



# Summary of Rapid Testing Project

- Injection drug users can be reached.
  - Collaboration between public health and harm reduction programs enhances case finding.
  - Good correctional/jail health relationships are essential.
- Education regarding HCV is needed for providers, local health department staff and injection drug users.
- The use of rapid HCV tests can be a powerful tool for HCV screening, prevention and treatment initiation in a population with high prevalence of HCV infection.

# CDC: Baby Boomer Testing Initiative



**BABY BOOMERS HAVE  
THE HIGHEST RATES OF  
HEPATITIS C.**

Talk to your doctor about getting tested.  
Early detection can save lives.



[www.cdc.gov/knowmorehepatitis](http://www.cdc.gov/knowmorehepatitis)



## Why Focus on Baby Boomers?

- Persons in the 1945-1965 birth cohort are five times more likely to be anti-HCV positive than other adults.
- Anti-HCV prevalence in the birth cohort = 3.25% (approximately 1 in 33).
- As many as 75% of those infected are unaware of their HCV status.
- Represent 76.5% of all chronic HCV infections.
- 68% have medical insurance.

## Why Focus on Baby Boomers?

- Infected population has modifiable disease co-factors.
- 58% consume  $\geq 2$  alcoholic drinks/day.
- 80% lack hepatitis A/B vaccination.
- Represent 73% of all HCV-associated mortality.
  - Hepatitis C is the most common reason for liver transplantation in the U.S.

## **In addition to testing adults at risk for HCV infection, CDC recommends that:**

- Adults born during 1945 through 1965 receive one-time testing for HCV without prior ascertainment of HCV risk factor.
- All persons with identified HCV infections receive a brief alcohol screening and intervention as appropriate, followed by referral to appropriate care and treatment services for HCV infection and related conditions as indicated.

## HCV Testing for Baby Boomers: What's the Message?

- High prevalence of HCV.
- Growing burden of HCV-associated morbidity and mortality.
- A large proportion remain untested and unaware of their HCV.
- HCV care and treatment can cure infection and prevent adverse health outcomes.
- Efficacy and safety of HCV treatment is improving.
- Baby Boomer testing does not replace risk-based testing for high risk populations (e.g., injection drug users).

# Thank You

Sheila Guilfoyle

Viral Hepatitis Prevention Coordinator

AIDS/HIV Program

Wisconsin Division of Public Health

[Sheila.Guilfoyle@wi.gov](mailto:Sheila.Guilfoyle@wi.gov)

608-266-5819