Creating a Local HCV Epidemiologic Profile

Webcast 2.2

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HEPATITIS C
NACCHO

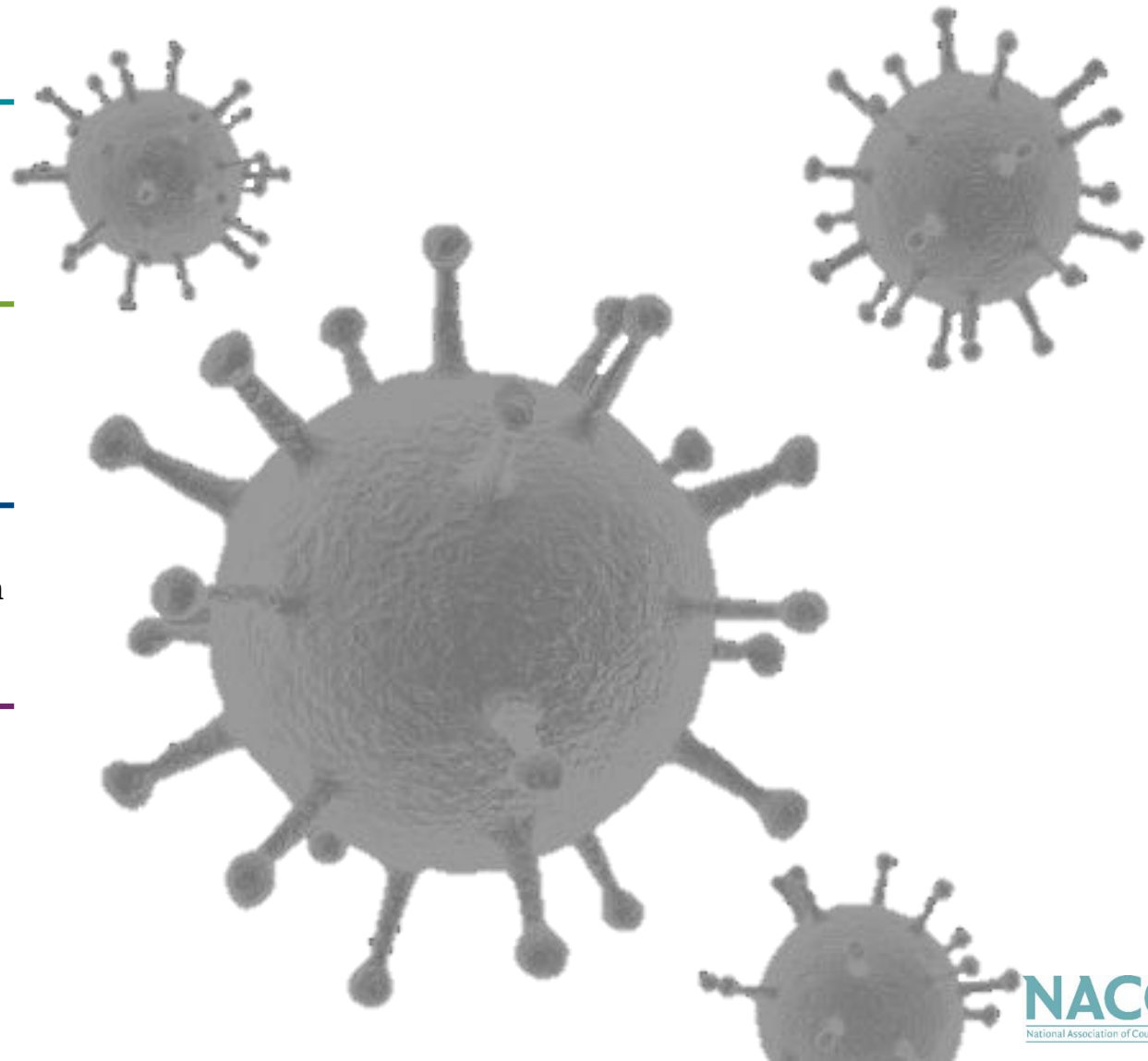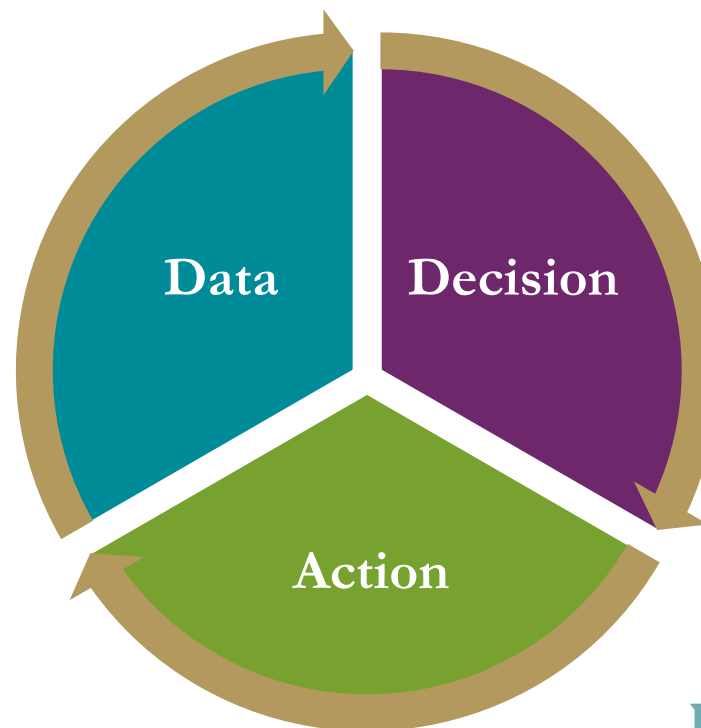# Webcast Overview

Role of a Local HCV Profile

Power of Local Data

- Local information is powerful
- Provides data to drive decisions and engage stakeholders for community action
- Guides programmatic activities, surveillance, and evaluation
- Educates medical community

Sources of Local Data

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Local Public Health HCV Surveillance

- Surveillance data is foundation of local epidemiologic profile

- Lack of designated funding for HCV activities and local HCV surveillance data leads to incomplete data

- Although imperfect, we can use the data we do have to inform local action

Other Local Data Sources

- Viral hepatitis and cancer registries

- Hospital discharge data

- Death certificates

- Electronic medical records (FQHCs, hospitals, private providers)

- Aggregate lab testing data

- Insurance/Medicaid claims

- Pharmacy records

- Opioid use (treatment program admissions, overdose reports, hospitalization records, law enforcement reports, syndromic surveillance)

Local Context for National-level Data and Trends

- National Health and Nutrition Examination Survey (NHANES) provides overall and sub-population prevalence estimates
  - Overall (1.0%), Baby Boomers (3.5%), African-Americans (3.0%),
- Homeless (22-54%), incarcerated (23-41%), nursing home residents (4-5%), dialysis patients (7.8%), people who inject drugs (PWID) (30-90% depending on locality and age)[1]
- HCV in young people is increasing
  - Impact of opioid epidemic
  - White, non-urban most impacted
- More baby boomers are being identified with chronic HCV
- Gender profile trends
  - More men in baby boomer cohort are affected
  - Women are at increasing risk for acute infection
  - Rising incidence of HCV in women of childbearing age and increasing in perinatal HCV infections

1. Chak, et al. (2011). Hepatitis C Virus Infection in USA: An Estimate of True Prevalence. *Liver International,* 31 (8): 1090-1101.
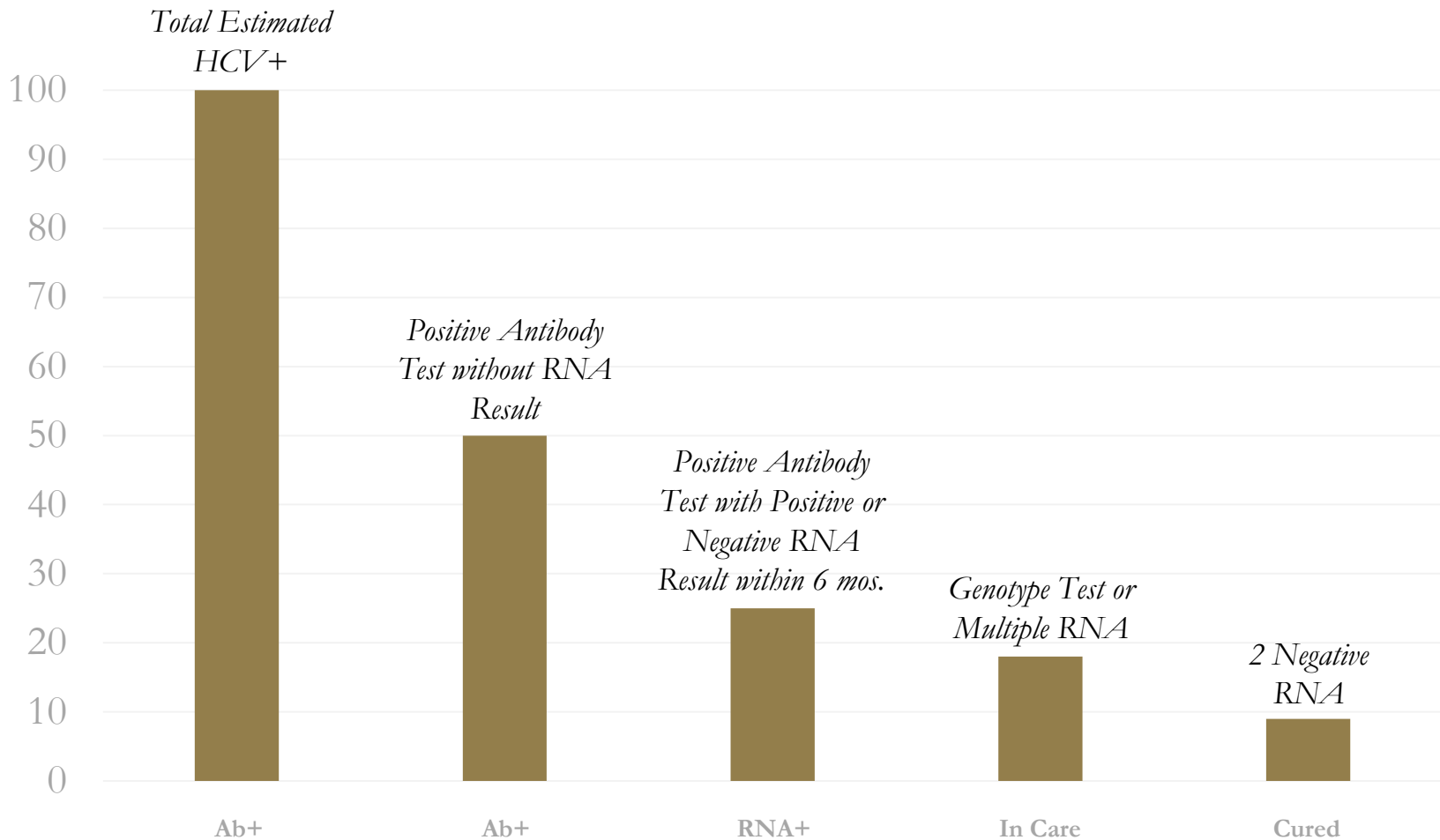
Qualitative Data for Local Perspectives

- Key informant interviews can lead to feedback on real-world challenges faced in implementing policies and programs
  - Service providers
  - Physicians and other health personnel
  - Harm reduction staff
- Client stories can provide insights into the lived experiences of people trying to access medical treatment
  - How is the system actually working (or not)
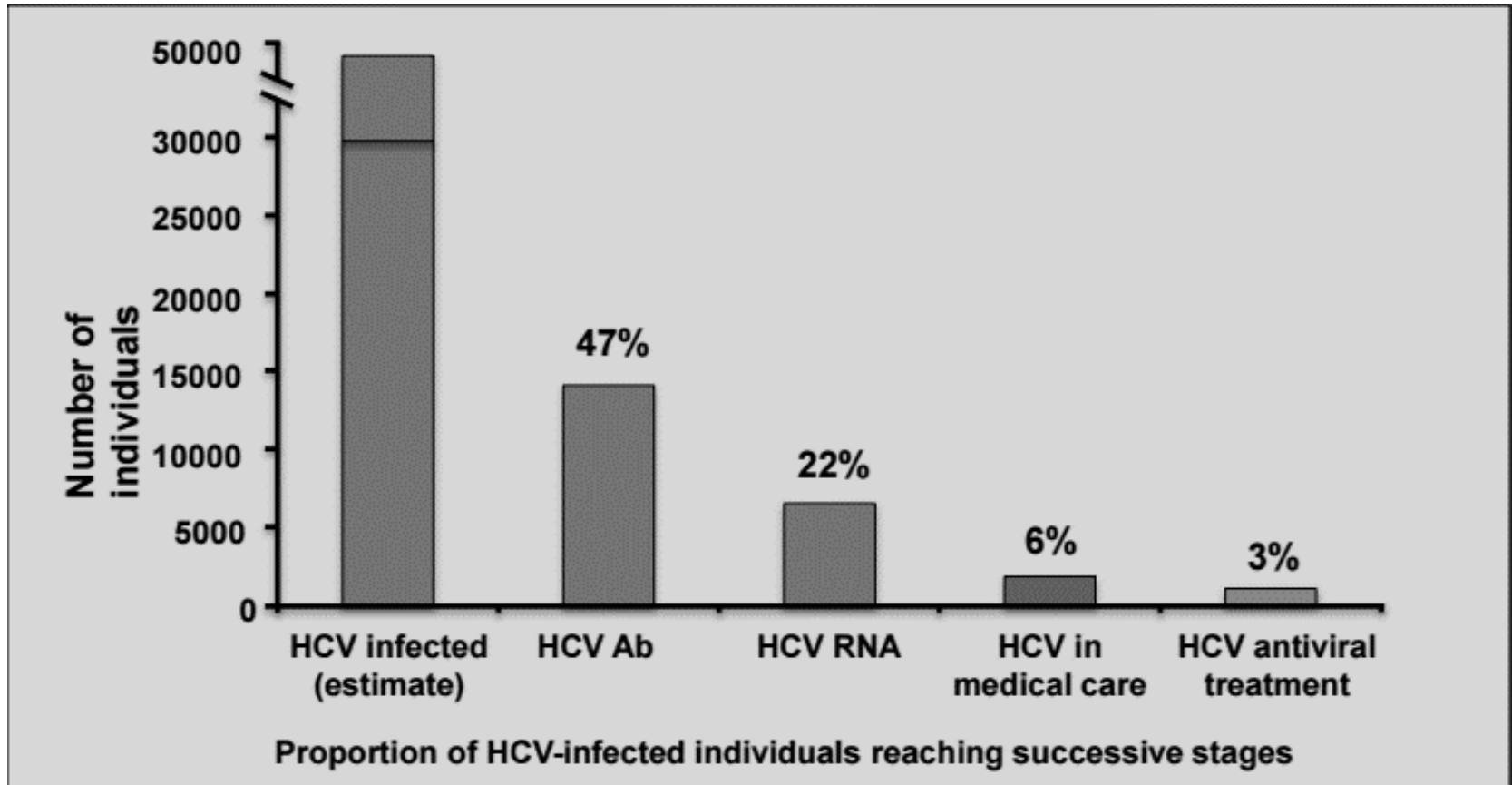 - Barriers and challenges
  - Impact on personal lives

HCV Care Cascade & Data Presentation

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Important Care Cascade Data Points

Total Estimated HCV+

Positive Antibody Test without RNA Result

Positive Antibody Test with Positive or Negative RNA Result within 6 mos.

Genotype Test or Multiple RNA

2 Negative RNA

100 · 90 · 80 · 70 · 60 · 50 · 40 · 30 · 20 · 10 · 0

Ab+   Ab+   RNA+   In Care   Cured

Yehia, B. (2014). The Treatment Cascade for Chronic Hepatitis C Virus Infection in the United States: A Systematic Review and Meta Analysis. *PLoS One, 9* (7).

Example HCV Cascade: Philadelphia Department of Public Health

Kuncio, D. (2015). The Hepatitis C Cascade of Care in Philadelphia [Slide Presentation]. *NASTAD National Hepatitis Technical Assistance Meeting.*
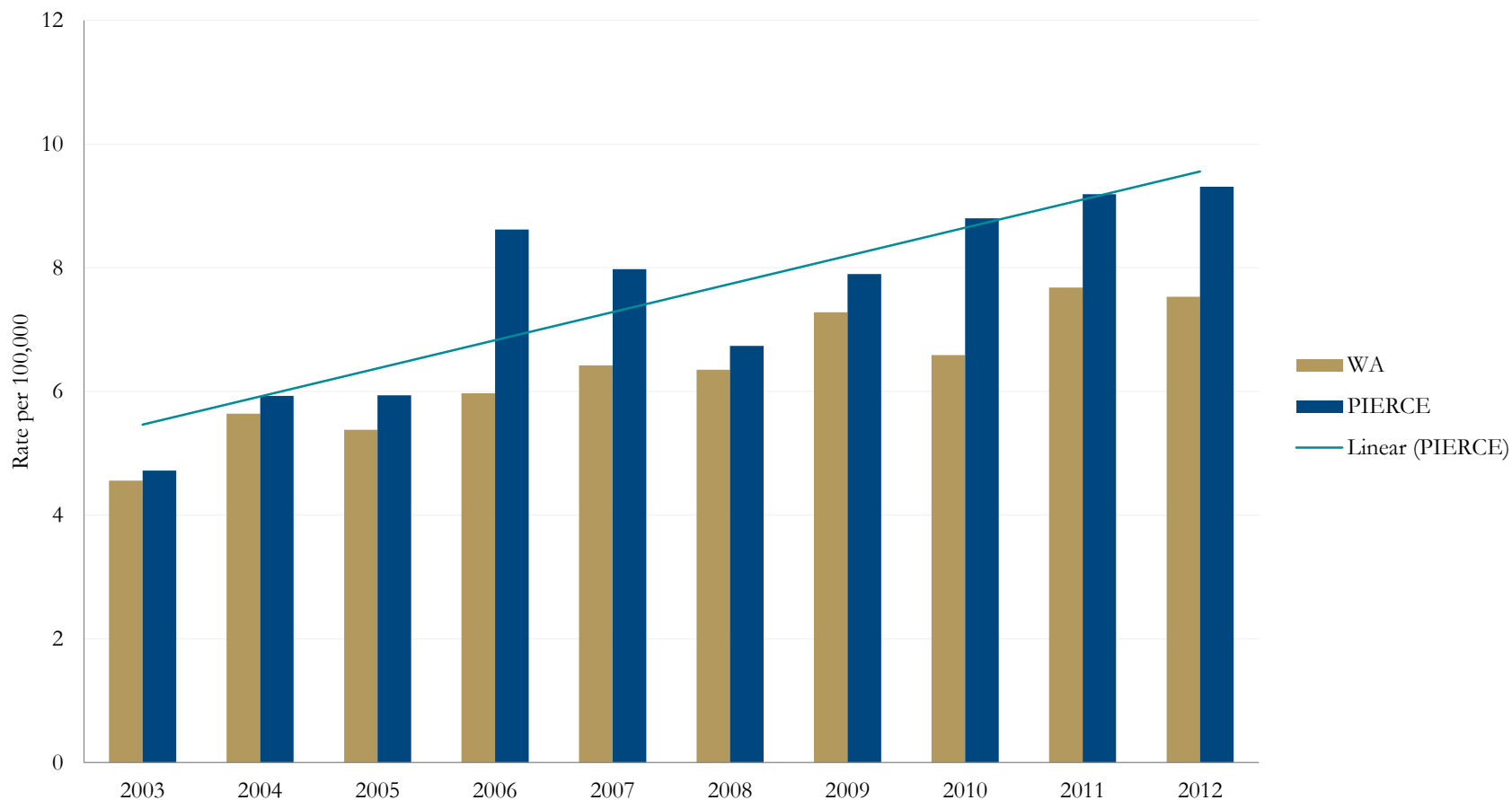
Age Distribution of Case Reports

Number of New HCV Reports, Pierce Co., WA
2006-2014, by Age Group
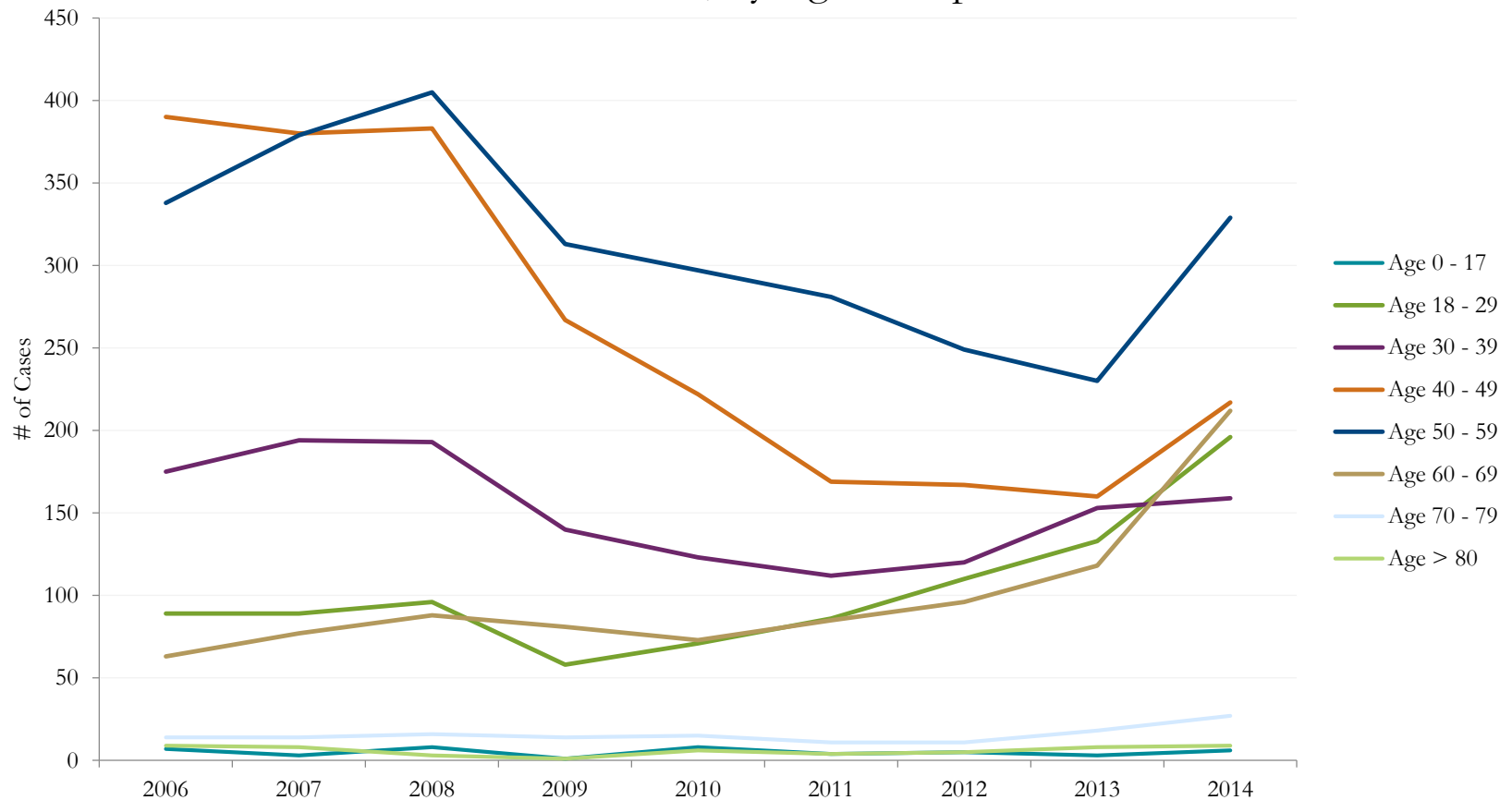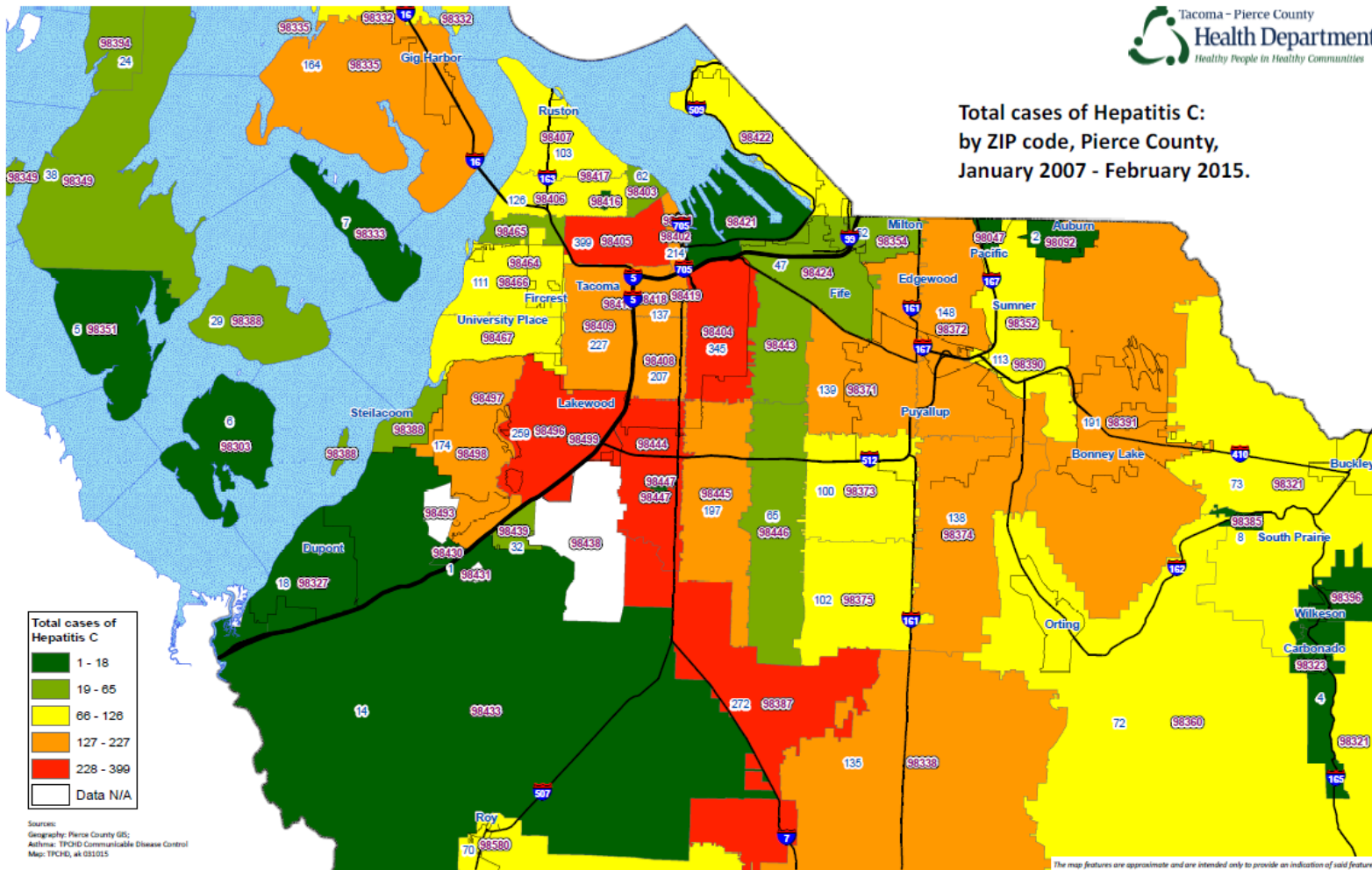
Increasing Rate of Liver Cancer

Liver Cancer, Pierce Co. and WA State, 2003-2012

Geographic Distribution of Cases

Total cases of Hepatitis C: by ZIP code, Pierce County, January 2007 - February 2015.

Examples of Local HCV Profiles

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Wisconsin

Scope of Disease

An estimated 74,000 Wisconsin residents are living with HCV, fewer than half of whom have been diagnosed with the virus. Two populations characterize the majority of HCV reports in Wisconsin: baby boomers (born 1945-1965), many of whom were infected through contaminated blood products and medical equipment in their twenties and thirties, and recent infections in injection drug users, many of whom are under age 30.

Trend

Since 2006, reports of HCV have slowly increased. On average, 2,500 cases have been detected at a rate of 43.5 per 100,000 population per year (Figure 1).

Figure 1: Number and Rate of Reported HCV Cases, Wisconsin, 2006-2013
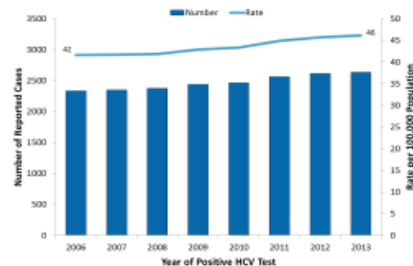
Wisconsin and the United States

The most recent summary of national HCV infection published by the Centers for Disease Control and Prevention (CDC) describes reports of past or present infection reported from Emerging Infections Program sites and the National Notifiable Diseases Surveillance System in 2011 (CDC, a). The rate of reported, laboratory confirmed HCV infection in Wisconsin is among the lowest of reporting jurisdictions and similar to states with comparable populations (Figure 2).

Figure 2: Reported Cases of Laboratory-Confirmed HCV (Past or Present) Infection, Wisconsin in Comparison with other HCV Surveillance Programs*, 2011
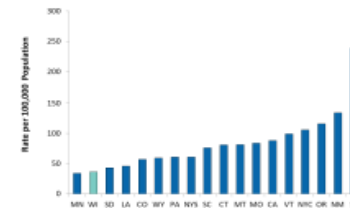
Geography

In 2013, 2,638 new HCV cases were reported in Wisconsin. Milwaukee County, with the largest population, accounted for 22% of reports. Cases reported from the correctional system accounted for 10% of reports in 2013. Although the larger population centers are in the southern half of the state, the highest rates of new HCV reports are in Milwaukee and the northern, more rural counties (Figure 3).

Figure 3: Reported HCV Cases by County, Wisconsin, 2013

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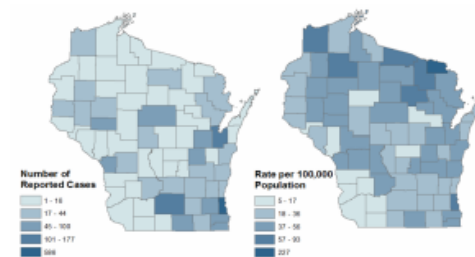
*MN, CO, NYS (New York State), CT, NYC (New York City), OR, NM, SF (San Francisco) are Emerging Infections Program Sites. Others are National Notifiable Diseases Surveillance Systems reporting sites that agreed to have reports published in the Viral Hepatitis Surveillance Report, CDC, 2011. State population for 2011 from U.S. Census estimates obtained from: http://www.census.gov/popest/data/historical/2010s/vintage_2011/index.html.

Denver County

Table 4: Reported Hepatitis C Cases by Risk Factor, and Percentage of Cases Reporting the Risk Factor: Denver County, 2008 - 2013†

	Acute HCV Cases		Chronic HCV Cases †		All HCV Cases
	Number	Percent of Total	Number	Percent of Total	Total
Total	40		3710		3750
IVDU					
Yes	13	32.5%	641	17.3%	654
No	26	65.0%	209	5.6%	235
Unknown	0	0.0%	1578	42.5%	1578
Missing	1	2.5%	1282	34.5%	1283
Household Contact					
Yes	4	10.0%	2	0.05%	6
No	25	62.5%	99	2.7%	124
Unknown	3	7.5%	1646	44.4%	1649
Missing	8	20.0%	1963	52.9%	1971
Sex Contact					
Yes	12	30.0%	62	1.7%	74
No	17	42.5%	39	1.1%	56
Unknown	3	7.5%	1646	44.4%	1649
Missing	8	20.0%	1963	52.9%	1971
Baby Boomer					
Yes	17	42.5%	2373	64.0%	2390
No	23	57.5%	1333	35.9%	1356
Unknown	0	0.0%	4	0.1%	4
MSM					
Yes	19	47.5%	127	3.4%	146
No	13	32.5%	36	1.0%	49
Unknown	0	0.0%	1980	53.4%	1980
Missing	8	20.0%	1567	42.2%	1575

Data is current as of 12/31/2014.
†Risk factor categories are not mutually exclusive.

NACCHO's Educational Series on HCV & Local Health Departments: *Module 2*

2.1: Planning for Action at the Local Level

2.2: Creating a Local HCV Epidemiologic Profile

2.3: *HCV Testing Challenges and Systems-based Solutions*

2.4: Targeted Outreach and Other Strategies for Increasing HCV Testing: Working in Settings that Serve High-risk Populations

2.5: Building and Supporting Local Capacity for HCV Care, Treatment, and Cure

2.6: Advocating for Sensible and Appropriate Policies in the Age of HCV Cure

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