

## BACKGROUND

- The burden of HCV infection on patients and society is substantial and increasing
- There is a window of opportunity to provide efficacious therapy and prevent the development of advanced liver disease
- The availability of direct acting agents and interferon-free regimens have greatly improved the efficacy and decreased the toxicity of HCV treatment
  - Factors that affected outcome in the era of pegylated interferon and ribavirin such as HCV genotype, viral load, disease stage, race, age, IL28B genotype, body size, insulin resistance, and others have become increasingly less relevant
  - Instead, among the most important determinants of treatment effectiveness are co-morbid psychosocial issues, such as mental illness, substance abuse, nihilism, poverty, lack of a social support network, and homelessness
  - Many HCV-infected people with these co-morbidities are found in inner city neighborhoods and are predominantly African-American or Latino
- Despite the advances in therapy, a very low proportion of the infected population has been treated.
  - Many patients have difficulty accessing therapy
  - Residual barriers to initiating treatment include alienation from the traditional health care system, ignorance about HCV-related liver disease, lack of knowledge of current treatment options, and low motivation for positive health behaviors
- Hepatitis C infection also is not a high priority among caregivers, compared to patients' other issues
  - It is unclear how much the situation will improve with increased emphasis on testing and linkage to care in New York and other states
  - There also may be an element of bias in the approach to patients with HCV infection, a stigma that undoubtedly is perceived by patients
- We recognize that inner city patients have encountered many obstacles to obtaining health care in the past, which create significant barriers to care
  - We believe that many patients will remain outside the HCV treatment umbrella unless they receive extra assistance in accessing care
- Community-based organizations have been helpful in the management of patients who are not stably linked to health care
  - The Coalition on Positive Health Empowerment (COPE) has employed an alternative method of identifying HCV infection through rapid testing at community-based events

## AIMS

- To present the demographic characteristics and test results of participants in community testing events
- To determine insurance coverage, a history of IV drug use, and current medical care in subgroups of tested people

## METHODS

- Community testing
  - By invitation or spontaneous
- Process
  - Registration/consent
  - Outreach/education
  - Rapid testing
  - Confirmation
  - Linkage and support

## RESULTS

- 3,275 people, 45% women/55% men, were tested at 187 testing events From March 21, 2012 to November 15, 2014
  - 913 subjects studied in a CDC-funded study, "CDC – Viral Hepatitis Testing and Linkage to Care Project" (# 8610EMPOCOA),
  - 197 subjects studied in a SAMHSA grant [Hepatitis C Screening and Care during Treatment of Opioid Dependency (H79TI024715-01)]
- Mean age 48 years (10-99)
  - 44 percent born between 1945 -1965, the so-called birth cohort
- Subjects resided in 300 separate zip codes.
  - The ten most common accounted for 41% of the total tests.
  - Of the 10 most common zip codes represented, 8 were in Harlem while the other two were in Brownsville, Brooklyn and Rockaway, Queens.

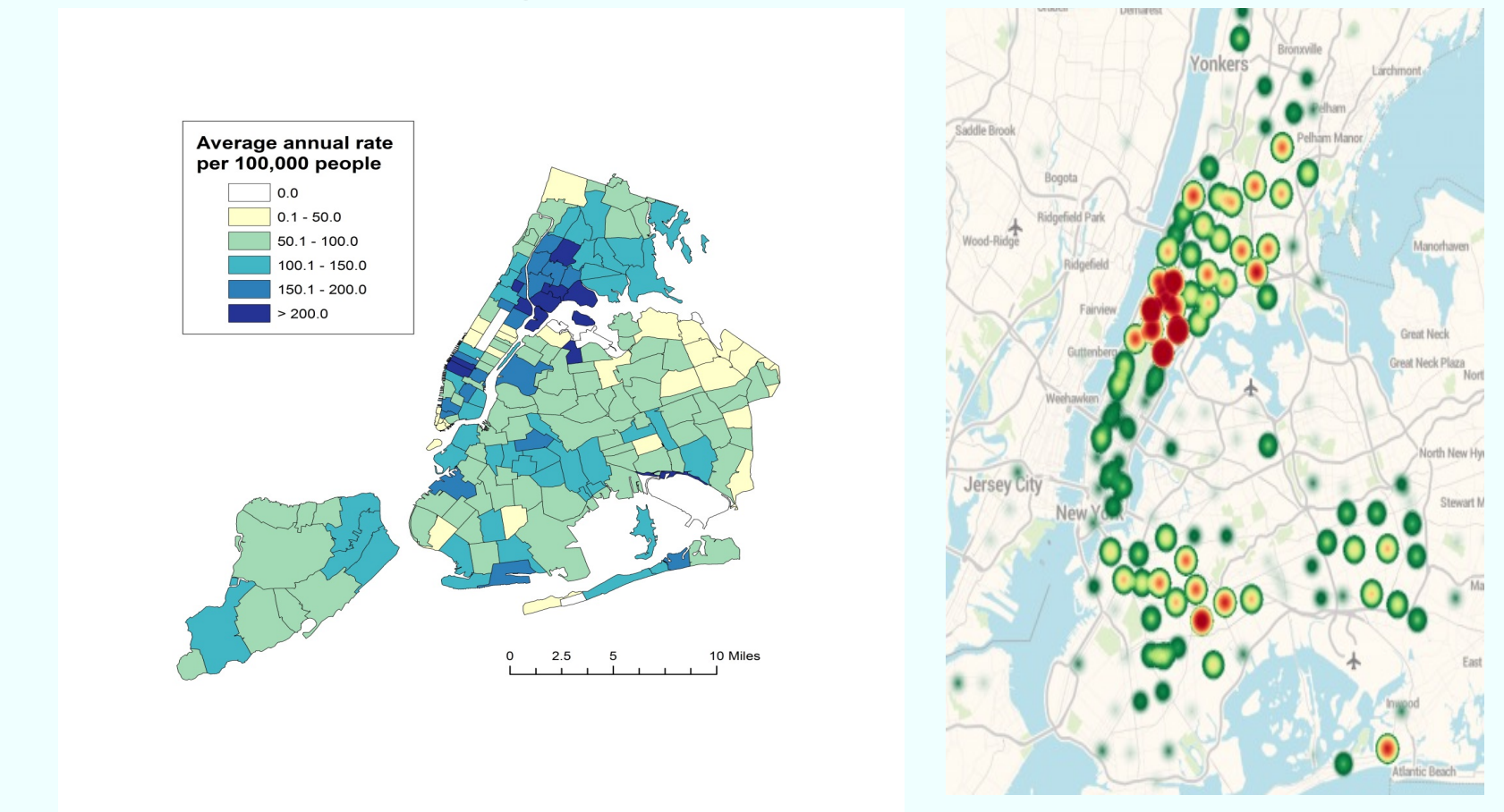
### HCV Seroprevalence

	Number tested	% positive
AA male	1,304	7.6
AA female	926	5.3
Hispanic male	377	21.2
Hispanic female	423	3.5
Caucasian male	74	12.2
Caucasian female	88	5.7

- Overall, 8.0 % of the participants were seropositive for HCV
- - 6.5% of AA, 13.6% of H, and 10.0% of C, 4.3% of other/mixed/unreported
- - The seropositivity rate in participants born between 1945 and 1965 was 11.8%, compared to 4.9% for all others.
- - Among all seropositive participants, 65.8% were born between 1945 and 1965.

## RESULTS

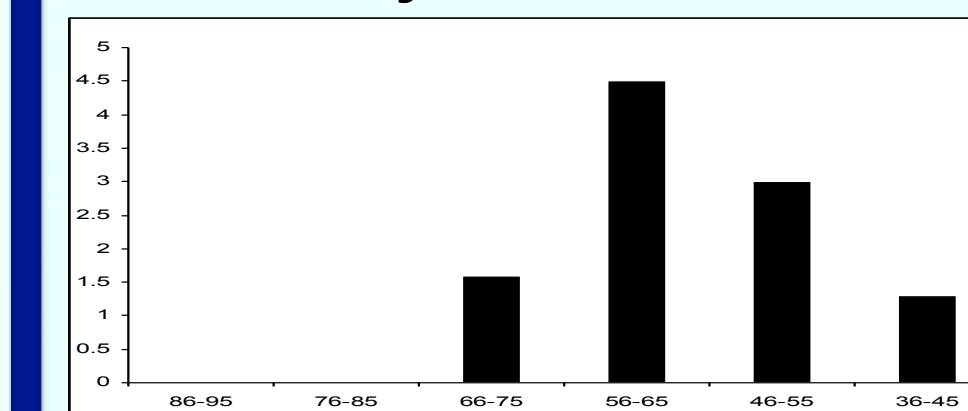
### COPE testing vs. cases reported to the NYC DOH



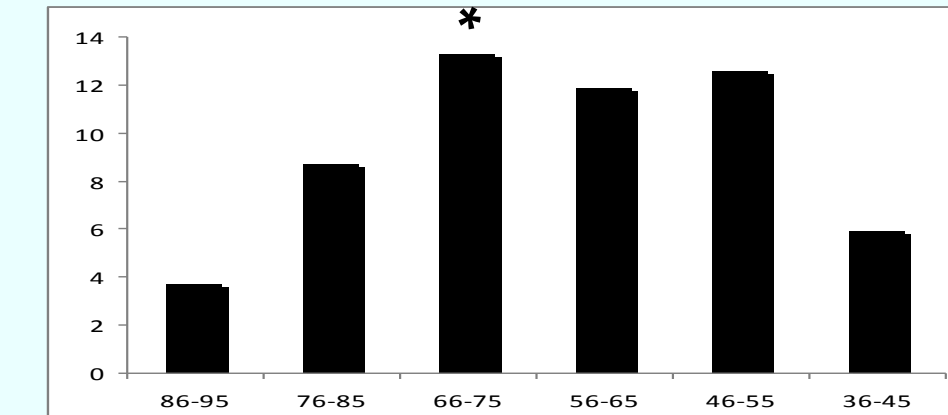
### Effect of a history of IVDU on HCV seroprevalence

- A history of IV drug use was asked of 1,609 consecutive subjects tested and answered by 1,589.
  - 20.4% admitted to IV drug use, of whom 29.6% were HCV seropositive.
  - HCV seropositivity was 2.1% in subjects without a history of IV drug use.
  - Thus, the relative risk of HCV prevalence was 13.7 times higher in those who ever used IV drugs.
- 76.9% of seropositives denying IVDU were born between 1945 and 1965, while 63.4% of seropositives admitting to IVDU were born between 1945 and 1965 (p=0.6).
- HCV-seroprevalence in people admitting to IVDU born between 1965 and 1975, who are not part of the birth cohort, was 13.3%\*.

### Deny IVDU



### Admit to IVDU



- Of 1,609 consecutive participants queried about insurance coverage, the answer was yes in 83%, no in 6.5%, and uncertain in 10.5%
  - Results were similar in seropositive and seronegative individuals
- In addition, a five-question survey was administered to 293 consecutive participants over three months.
  - The survey asked about regular health care and primary care physicians, and about the level of trust and ability to communicate
  - A final question asked if the primary care physician had ever talked about HCV infection or liver disease
  - Positive responses were found in 75-81% for four of the five questions
  - The response to the question of whether or not the physician had ever discussed liver disease was positive in 42%

## CONCLUSIONS

- Most participants in HCV screening at community events are:
  - engaged in health care
  - have health care coverage
  - have not been exposed to HCV education within the traditional health care system
  - are interested in learning about HCV seropositivity
  - are around five times more likely to be HCV-infected (8.0%) than the general population, e.g., NHANES (1.6%)
- HCV screening at community events may be a valuable alternative to traditional screening programs in identifying HCV seropositive people.