

Substance Abuse Behaviors among Newly Reported Hepatitis C Virus Positive Youth

Kathleen Ross, MPH

Philadelphia Department of Public Health



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BACKGROUND

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Hepatitis C Virus (HCV) Infection

- Bloodborne transmission
- 3 million chronic cases in United States
- 75% of cases unaware of HCV status
- No vaccine available



"3 of every 4 cases are unaware they are infected"

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Hepatitis C Virus & Injection Drug Use

- Mechanisms of transmission
 - Needle use & sharing of drug paraphernalia
- Up to 45% of young injection drug users are HCV+
- Increased incidence of acute HCV



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OBJECTIVES

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Objective

- Describe general epidemiology characteristics and substance abuse behaviors of HCV positive youth in Philadelphia
- Examine differences between injection drug users and non-injection drug users

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METHODS

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Study Population

- Newly reported HCV+ laboratory result
- Event date January 1, 2012 - June 30, 2013
- 13 – 30 years of age
- Philadelphia resident

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Data Collection

- Case reporting
- Investigation tools
- Investigation approach

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Data Management & Analysis

- Communicable Disease Management System
- SAS 9.3

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RESULTS

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Demographics

- 269 individuals fit inclusion criteria
 - 172 (72%) white
 - 189 (80%) non-Hispanic
 - 143 (53%) female
 - 252 (93%) ≥ 19 years of age

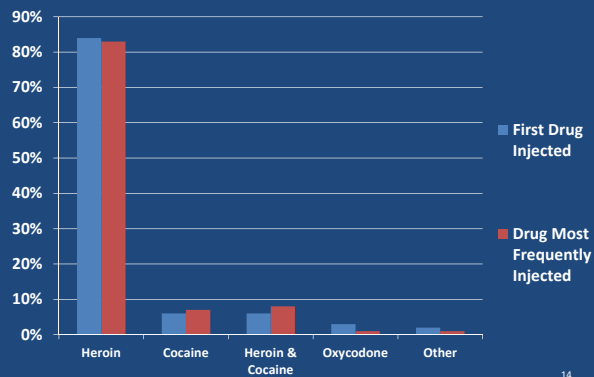
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History of Substance Abuse

- History of any street drug use was reported by 174 of 215 (81%) cases
 - Median initiation age: 15 years old
- History of injection drug use was reported by 128 of 174 (74%) cases
 - Median initiation age: 21 years old
 - White cases (OR 8.12; CI 3.99 - 16.45)
 - Non-Hispanic cases (OR 3.70; CI, 2.09 – 6.54)

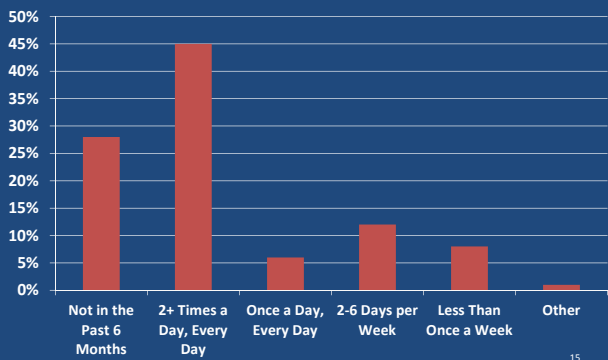
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Injection Drug Use Profile



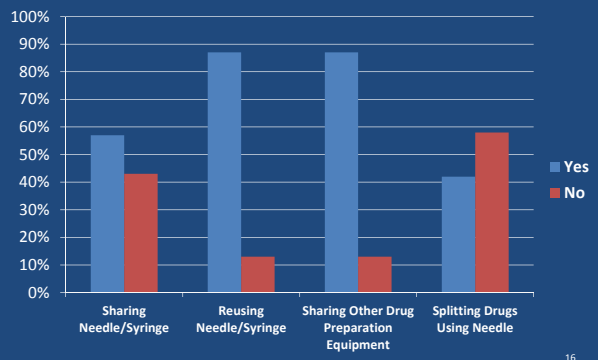
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Injection Drug Use Frequency



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Needle & Syringe Use



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Introduction to Injection Drug Use

- 67 (57%) of 117 cases reported being introduced by friends
 - Males were more likely (OR 2.14; CI, 1.01 – 4.55) to report being introduced by friends
- 21 (18%) of 117 cases reported being introduced by a sex partner
 - Females were more likely (OR 3.22; CI 1.19 – 8.74) to report being introduced by a sex partner

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Injection Drug Use Social Networks

- 30 (54%) of 56 cases reported injecting mostly with friends
 - Cases 19-25 years of age were more likely (OR 4.47; CI, 1.35 – 14.78) to report injecting mostly with friends
- 13 (25%) of 56 cases reported injecting mostly with a sex partner
 - Cases 26-30 years of age were more likely (OR 9.9; CI 2.29 – 43.00) to report injecting mostly with a sex partner

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Predictors for Injection Drug Use

Risk Factor	Odds Ratio	Confidence Interval	P-value
History of incarceration	5.97	2.13 – 16.75	0.0007
Sexual contact with partner who injects drug	8.44	3.24 – 22.01	<0.0001

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Discussion

- Limitations
 - Sample size
 - Recall bias
 - Unable to measure incidence
 - Distinguishing acute vs. chronic infection
- Strengths
 - Descriptive data
 - Generate new hypotheses

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Conclusion

- Results suggest that gender and age-group are associated with substance abuse patterns
 - Introduction to injection drugs
 - Injecting networks
- Results suggest a lack of injection safety knowledge
 - Reusing needles/syringes
 - Sharing other drug preparation equipment

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Thank You

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Contact Information

Kathleen Ross, MPH
Work: Kathleen.Ross@doh.state.nj.us
Personal: Ross.Kathleenmarie@gmail.com
Office: (609) 826-5957

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