Hepatitis C Outreach to People Who Inject Drugs and Baby Boomers in Philadelphia

STACEY B. TROOSKIN MD PHD
DIRECTOR OF VIRAL HEPATITIS PROGRAMS
PHILADELPHIA FIGHT COMMUNITY HEALTH CENTERS
PHILADELPHIA, PA
Natural History of HCV Infection

Acute HCV → 75-85% → Chronic HCV
15-25% → Spontaneous Resolution

Chronic HCV → Hepatic Inflammation

Hepatic Inflammation → Hepatic Fibrosis

Hepatic Fibrosis → Cirrhosis
20% in 20 yrs

Cirrhosis → 2 – 4% per yr → Hepatocellular Carcinoma
→ 2 – 5% per yr → Hepatic Decompensation

Alcohol, HIV, and hepatitis B may accelerate fibrosis
Epidemiology of HCV in the US

Most common blood-borne infection in the US
- 3.2 million to **5.2 million** persons chronically infected
- Birth cohort 1945-1965: **3.27%** antibody positive
  - Non-Hispanic blacks: **6.31%**
  - Non-Hispanic whites: **2.92%**
  - Mexican American/ other: **2.78%**

50% to 75% of individuals chronically infected with HCV are unaware of their infection

Smith BD. AASLD poster #394, 2011
Armstrong GL. Annals of Int Med, 2006 144; 705-714
Chak E. Liver Internat. 2011, 2:1090-1101
Treatment cascade for people with chronic HCV infection

- Chronic HCV-infected: 100%
- Diagnosed and aware: 50%
- Access to outpatient care: 43%
- HCV RNA confirmed: 27%
- Underwent liver biopsy: 17%
- Prescribed HCV treatment: 16%
- Achieved SVR: 9%
Birth Cohort with high rates of HCV


The Chronic Hepatitis Cohort Study (CHeCS)
Doubling of mortality rate, 2007-2013
CDC Recommendations for HCV testing

Birth Cohort based screening

- All individuals born between 1945 and 1965 should be tested at least once for HCV
- All individuals outside of this cohort with a HCV risk factor should be screened
- Cost-effective
- 1-time cohort screening would identify about 86% of undiagnosed cases, compared with 21% with risk-based screening

US Preventive Services Task Force: Grade B recommendation

http://www.uspreventiveservicestaskforce.org/uspstf/uspshepc.htm

CDC. MMWR 2012;61(No. RR-4).
A new population of young HCV cases is emerging in Philadelphia 2007-2013

Data provided by Dr. Kendra Viner PhD from the Philadelphia Department of Public Health
### Heroin Use Has INCREASED Among Most Demographic Groups

<table>
<thead>
<tr>
<th>Category</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEX</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2.4</td>
<td>3.6</td>
<td>50%</td>
</tr>
<tr>
<td>Female</td>
<td>0.8</td>
<td>1.6</td>
<td>100%</td>
</tr>
<tr>
<td><strong>AGE YEARS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-17</td>
<td>1.8</td>
<td>1.6</td>
<td>--</td>
</tr>
<tr>
<td>18-25</td>
<td>3.5</td>
<td>7.3</td>
<td>109%</td>
</tr>
<tr>
<td>26 or older</td>
<td>1.2</td>
<td>1.9</td>
<td>58%</td>
</tr>
<tr>
<td><strong>RACE/ETHNICITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic white</td>
<td>1.4</td>
<td>3</td>
<td>114%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.7</td>
<td>--</td>
</tr>
<tr>
<td><strong>ANNUAL HOUSEHOLD INCOME</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $20,000</td>
<td>3.4</td>
<td>5.5</td>
<td>62%</td>
</tr>
<tr>
<td>$20,000-$49,999</td>
<td>1.3</td>
<td>2.3</td>
<td>77%</td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>1</td>
<td>1.6</td>
<td>60%</td>
</tr>
<tr>
<td><strong>HEALTH INSURANCE COVERAGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>4.2</td>
<td>6.7</td>
<td>60%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>4.3</td>
<td>4.7</td>
<td>--</td>
</tr>
<tr>
<td>Private or other</td>
<td>0.8</td>
<td>1.3</td>
<td>63%</td>
</tr>
</tbody>
</table>

### Heroin Addiction and Overdose Deaths are Climbing

- **Heroin-Related Overdose Deaths** (per 100,000 people) increased by 286%.
- **Heroin Addiction** (per 1,000 people) also increased.

**Sources:**
- National Survey on Drug Use and Health (NSDUH), 2002-2013.

[http://www.cdc.gov/vitalsigns/heroin/](http://www.cdc.gov/vitalsigns/heroin/)
Evolving HCV Treatment

Adapted from Strader DB. Clin Liver Disease 2012, 1:1; 6-11.
SVR (Cure) Associated with Decreased All-Cause Mortality

Van der Meer et al. JAMA 2012; 308:2584

530 patients with advanced fibrosis, treated with interferon-based therapy, and followed for 8.4 (IQR 6.4-1.4) years
Next steps

The Jonathan Lax Treatment Center
The Youth Health Empowerment Project
The John Bell Health Center

COMMUNITY BASED TESTING
Syringe Exchange Program
Drug Treatment Programs
Homeless shelters
Opioid substitution programs
Senior Centers

A Program of Philadelphia FIGHT
Testing Data

Senior Center Testing Program
- 23 sites in 38 sessions, 20 more scheduled sessions at 12 sites
- Goal of educating 4000
- Goal of testing 500 (364 tested as of 4/18)
- Seroprevalence: 1.64%

Testing and linkage to care services for PWID
- Syringe Exchange Program: Prevention Point Philadelphia
- Recovery and drug treatment programs
- Methadone program
- Institute for Community Justice
- Seroprevalence: 30% to 60%
Thank you!

C a Difference Team
Philadelphia Department of Public Health
Prevent Cancer Foundation
Gilead FOCUS Initiative