Homelessness in the US and the Connections Between Homelessness and TB

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Boston Health Care for the Homeless Program
February 7, 2012

HUD Definition of Homelessness
December 5, 2011

(1) Individuals and families who lack a fixed, regular, and adequate nighttime residence and includes a subset for an individual who resided in an emergency shelter or a place not meant for human habitation and who is exiting an institution where he or she temporarily resided (90 days now rather than 30);

(2) individuals and families who will imminently (within 14 days) lose their primary nighttime residence (home, motel, hotel, doubled up);

(3) unaccompanied youth and families with children and youth who are defined as homeless under other federal statutes who do not otherwise qualify as homeless under this definition (new category: no lease or ownership within 60 days, or have had 2 or more moves in last 60 days, and who are likely to continue to be unstably housed because of disability or multiple barriers to employment); and

(4) individuals and families who are fleeing, or are attempting to flee, domestic violence, dating violence, sexual assault, stalking, or other dangerous or life-threatening conditions that relate to violence against the individual or a family member.

Source: Federal Register, 2011
## Homeless Persons Point in Time Count 2010

<table>
<thead>
<tr>
<th>Household Type</th>
<th>Number</th>
<th>% of All Homeless Persons</th>
<th>% of Subcategory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total People</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheltered(^a)</td>
<td>403,543</td>
<td>62.1%</td>
<td></td>
</tr>
<tr>
<td>Unsheltered</td>
<td>246,374</td>
<td>37.9%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>649,917</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Individuals(^b)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheltered</td>
<td>212,218</td>
<td>32.7%</td>
<td>52.0%</td>
</tr>
<tr>
<td>Unsheltered</td>
<td>195,748</td>
<td>30.1%</td>
<td>48.0%</td>
</tr>
<tr>
<td>Total</td>
<td>407,966</td>
<td>62.8%</td>
<td></td>
</tr>
<tr>
<td><strong>Persons in Families</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheltered</td>
<td>191,325</td>
<td>29.4%</td>
<td>79.1%</td>
</tr>
<tr>
<td>Unsheltered</td>
<td>50,626</td>
<td>7.8%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Total</td>
<td>241,951</td>
<td>37.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Family Households</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheltered</td>
<td>62,305</td>
<td>-</td>
<td>78.4%</td>
</tr>
<tr>
<td>Unsheltered</td>
<td>17,141</td>
<td>-</td>
<td>21.6%</td>
</tr>
<tr>
<td>Total</td>
<td>79,446</td>
<td>-</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

\(^a\) The sheltered homeless count includes people using safe havens.

\(^b\) Individuals includes persons in households without children and persons in households with only children.

*Source: 2010 Continuum of Care Applications: Exhibit 1, CoC Point-in-Time Homeless Population and Subpopulations*

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### Exhibit 2-3: Trends in Homelessness PIT Counts, 2007-2010

- **Total**
- **Individuals**
- **Persons in Families**

*Source: Cortes, et al, 2011*
Cluster Distributions: Persons and Shelter Days Consumed
(Single Adults in Philadelphia)

Source: Culhane, et al, 2007

Exhibit 2-4: Trends in Chronic Homelessness, 2007-2010

Source: Cortes, et al, 2011
Characteristics of Outbreaks

• Lax screening policies at shelters
• Unrecognized infectious cases
• Mobility of guests between shelters and other facilities (jails) and jurisdictions (NY)
• Inability to provide preventive treatment to high-risk, infected persons (contacts)
• High costs of screening and follow-up
  – Personal costs: TB morbidity
  – Actual screening costs: Dollars
    » NY 1,093 contacts; 4 cases found
    » ME 1,069 contacts; 0 cases found
    » WA 471 contacts (+ intensified screening); 11 cases found

TB and Homelessness in Boston

• Tuberculosis (TB) among homeless persons traditionally is a great public health concern
• Boston’s Pine Street Inn (PSI) shelter has been the center of several TB outbreaks
  – Outbreak in mid-1970’s triggered Public Health Nurse intervention: on-site clinical TB services
  – Following a 2nd outbreak, with a peak incidence of 29 cases of active disease in 1990, rates have declined to appr. 4-8 annually
  – A recent one-year increase (15 Boston cases in 2000) likely represented coincident reactivation of latent infection
    • 11/15 similar RFLP; no epi contacts
• Targeted Public Health Intervention:
  – Increased surveillance
  – Development of a specialized, public health TB clinic at Pine Street

- from John Bernardo, MD
Drug-Resistant Tuberculosis among the Homeless — Boston

In the period February 1984–March 1985, 26 confirmed cases of tuberculosis (TB) were reported among homeless people in Boston (Figure 1). All 26 cases have been associated with three large shelters. The estimated total population of homeless people in Boston is 4,000. Nineteen of the 26 cases were counted in 1984. This represents an incidence of 316.7 per 100,000, a greater than twofold increase over the 1983 case rate of approximately 90.0/100,000. By comparison, the TB case rate for the rest of Boston in 1984 was 19.0/100,000, and the rate for Massachusetts excluding Boston was 4.8/100,000.

The outbreak was recognized because of reports among the homeless of a number of TB cases due to multidrug-resistant organisms. As a result of this recognition, a screening program using Mantoux tuberculin skin tests, chest roentgenograms, and sputum examinations was established in the shelters.

FIGURE 1. Reported tuberculosis cases among homeless persons, by month of report — Boston, Massachusetts, 1984–1985

- Bacteriologically negative
- Susceptible to all drugs
- Other resistance
- MDR or resistant

*Isolated from sputum and repeat sputum and resistance tests.
Tuberculosis in Boston 1984-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Cases</th>
<th>Homeless</th>
<th>Non-Homeless</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>180</td>
<td>0</td>
<td>180</td>
</tr>
<tr>
<td>1986</td>
<td>160</td>
<td>10</td>
<td>150</td>
</tr>
<tr>
<td>1988</td>
<td>140</td>
<td>20</td>
<td>120</td>
</tr>
<tr>
<td>1990</td>
<td>120</td>
<td>30</td>
<td>90</td>
</tr>
<tr>
<td>1992</td>
<td>100</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>1994</td>
<td>80</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>1996</td>
<td>60</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>1998</td>
<td>40</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>2000</td>
<td>20</td>
<td>80</td>
<td>0</td>
</tr>
<tr>
<td>2002</td>
<td>10</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>5</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>2006</td>
<td>0</td>
<td>110</td>
<td>0</td>
</tr>
</tbody>
</table>
PSI Clinical Services, re-
Structured 2004

• Bi-
Weekly TB clinic staffed with
2 TB Providers
- Pulmonologist
- Nurse Practitioner

• Patients referred primarily by
nurses
- Based on +PPD status and/or
assessment of respiratory
symptoms and "cough log"

• Radiology/Laboratory services
available

• Electronic Medical Record:
BHCHP
References


  – http://www.cdc.gov/mmwr/preview/mmwrhtml/00000578.htm

  – http://repository.upenn.edu/cgi/viewcontent.cgi?article=1069&context=spp_papers