

# Prevention & Response to Infectious Diseases Within the Homeless Population

## FACT SHEET

May 2016

The recent multistate outbreaks of measles and global outbreaks of the zika and ebola virus underscore the need for comprehensive and effective community emergency response plans. In response to these and past outbreaks, government agencies, local and state health departments, and other entities have developed and implemented prevention and outbreak response procedures to reduce transmission and illness severity. Unfortunately, these procedures often do not address the unique circumstances of persons experiencing homelessness. This fact sheet highlights communicable diseases within this population, addresses challenges in these public health issues, and provides strategies and tools that can be used to prevent and respond to emerging and re-emerging infectious diseases.

### Current snapshot

Infectious disease studies for the homeless population often focus on sexually transmitted infections (e.g. HIV/AIDs and hepatitis C) while neglecting many respiratory diseases such as pertussis, meningococcal disease, mumps, measles, tuberculosis and gastrointestinal diseases such as shigellosis and giardiasis. However, the limited literature suggests that risks of contracting these and other highly communicable diseases are high among people experiencing homelessness due to multiple behavioral, social, and environmental factors. These include:

- living in crowded conditions (i.e. shelters) or visiting locations for services that may also be crowded (e.g. drop-in centers and soup kitchens),
- having limited opportunities to maintain personal hygiene and proper nutrition,
- having limited access to clean water for general use and consumption,
- suffering from a variety of chronic and acute conditions that may weaken the immune system,
- having limited access to care, which can translate into missed opportunities for vaccinations, especially among youth,
- lacking of knowledge of disease outbreaks because of limited access to the internet and television, and
- lacking ability to socially distance themselves in the event of an outbreak.<sup>(1-3)</sup>

### Snapshot of recent infectious disease cases among the homeless population:

- In March 2011, the Minnesota Department of Health confirmed one measles case in a homeless shelter in Hennepin County and subsequently confirmed 22 measles cases in the same county.<sup>(4)</sup>
- In January 2016, three cases of meningococcal disease were confirmed in the Boston homeless community with one case resulting in death.<sup>(5)</sup>
- From 1993-2013, between 5% and 7% of all U.S. tuberculosis cases were accounted for by people experiencing homelessness.<sup>(6)</sup>
- In December 2014, the San Francisco Department of Public Health confirmed approximately 26 shigellosis cases among people experiencing homelessness.<sup>(7)</sup>

### Strategies and tools: preventing and responding to outbreak

People without homes face unique challenges when there is an infectious disease outbreak in the general population. Moreover, agencies that provide services to this population may be inadequately prepared to respond to outbreaks. The following table depicts possible challenges that may be faced by homeless service providers in the event of an outbreak and implications to adequately prepare for future outbreaks:<sup>(8,9)</sup>

Possible challenges for providers	Implications for future planning
<p><b>Communication:</b> inadequate information; few formal directives for homeless service providers; and slow dissemination of updated health advisories.</p>	<p>Designate single contact person as main source of information and crisis management teams; build collaboration with other local homeless service providers, community health centers, and public health departments</p>
<p><b>Infection control:</b> lack of basic infection control measures; lack of knowledge of basic communicable diseases among agency staff and clients; crowded service locations may increase risk of disease transmission; highly mobile population; possibility of under-vaccinated community and issues obtaining accurate and complete immunization records.</p>	<p>Prepare explicit guidelines for agencies regarding appropriate use of personal protective equipment, isolation strategies, and referrals; develop educational programs or materials that meet the needs of staff and clients; develop process used to make decisions regarding closure of service sites or policies to encourage individuals to remain at current shelter during outbreak; develop processes for post-outbreak vaccination of population-at-risk or those in imminent threat of infection; and take into consideration use of prophylaxis if available for particular disease</p>
<p><b>Isolation and quarantine:</b> difficulty locating people without homes who have been exposed to infection; inability of people without homes to quarantine or isolate themselves and possible non-adherence to isolation recommendations; and staffing and cost implications of establishing quarantine and isolation sites.</p>	<p>Develop plan in advance regarding funding and staffing of isolation/quarantine sites; identify quarantine/isolation sites; and consider special arrangements that meet the specific needs of persons experiencing homelessness such as for those with substance use disorders or mental illness</p>
<p><b>Resource allocation:</b> meeting the basic needs (food, shelter, safety) of this population during an outbreak; limited resources to support planning process and plan implementation; existing plans do not address the underlying causes of homelessness such as affordable housing and poverty; and those with limited access to health care would compromise plan's effectiveness.</p>	<p>Open discussion needed during the planning process that includes all pertinent stakeholders; and incorporate long term efforts to improve access to health care into plans for an outbreak response</p>

Major roles and responsibilities of outpatient health facilities and other service providers in preventing and controlling emerging and re-emerging infectious diseases include:

- Protecting employees and clients - includes using personal protection equipment, maintaining environmental cleanliness, providing basic hygiene supplies for staff and clients, posting signs promoting good hygiene practices and cough etiquette in highly visible areas.
- Proactively detecting potentially ill patients with infectious diseases through self-report of symptoms by clients and health assessments by provider.
- Isolating patients with possible infectious diseases to the extent possible within facility.
- Transferring patient to appropriate medical facility.
- Notifying local and state health departments of possible cases and areas of suspected outbreaks.
- Collaborating and communicating with local social support services such as shelters and soup kitchens.
- Staying abreast of vaccination and revaccinations of homeless patients against communicable diseases including, but not limited to, diphtheria, measles, influenza, and meningococcal disease. <sup>(10,11)</sup>

## Infectious Disease-Specific Resources

Information about various infectious diseases may change as new research and outbreaks occur. Homeless service providers are encouraged to monitor the following websites for updates:

- Centers for Disease Control and Prevention: [www.cdc.org](http://www.cdc.org)
- National Health Care for the Homeless Council: [www.nhchc.org](http://www.nhchc.org)
- World Health Organization: [www.who.org](http://www.who.org)
- Local and state health departments: <http://www.cdc.gov/mmwr/international/relres.html>

For additional guidance in preventing and responding to infectious diseases in social support and health organizations, providers are encouraged to refer to the following resources:

- The health care of homeless persons: A manual of communicable diseases & common problems in shelters & on the streets. BHCHP 2004. Available at: <http://www.bhchp.org/health-care-homeless-persons>.
- Guide to infection prevention for outpatient settings: minimum expectations for safe care. CDC 2015. Available at: <http://www.cdc.gov/HAI/settings/outpatient/outpatient-care-guidelines.html>.
- Leung et al., "Homelessness and the response to emerging infectious disease outbreaks: lessons from SARS," J Urban Health. 2008. 85(3):402-10
- Duchene M, "Infection control in soup kitchens and shelters: One home health agency's involvement on a community response," Home Healthcare Nurse. 2010. 28(8):471-78
- Emergency Preparedness: Disaster planning for people experiencing homelessness. NHCHC webpage. Available at: <https://www.nhchc.org/resources/clinical/tools-and-support/emergency-preparedness/>
- Communicable Diseases. NHCHC webpage. <https://www.nhchc.org/resources/clinical/diseases-and-conditions/communicable-diseases/>
- Shelter Health. NHCHC webpage. Available at: <https://www.nhchc.org/resources/clinical/tools-and-support/shelter-health/>
- Refer to local County Health Department for response plan for emerging and re-emerging infectious disease

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