According to the U.S. Department of Housing and Urban Development, nearly 1.5 million people stayed in a homeless emergency shelter in 2014. Individuals and families faced with a housing crisis depend on emergency shelters to meet their most basic needs, yet for many, staying in a shelter can contribute to poorer physical and mental health. Conditions such as vermin, asbestos, mold and mildew, peeling paint, and unsanitary restrooms have been identified in American shelters and can adversely affect the health of individuals experiencing homelessness. Recent examples of shelter conditions were widely publicized following a scathing audit of upstate New York shelters that found substandard conditions in 39 facilities. Shelters were characterized as “squalid” and “egregious.” The 320 facilities deemed “adequate” were described as posing a “pervasive risk on personal health and safety.” These issues are not confined to New York. A 2014 report based out of Washington, D.C. noted 200 pest control complaints in a period of less than a year from residents of a local shelter and deteriorating health of children who lived there for a prolonged amount of time. What’s more, the shelter in question was the replacement for a shelter closed in 2007 for similar safety and health concerns. Inadequate funding and limited regulatory oversight contribute to these problems. Such conditions are by no means universal among shelters, but must be addressed where they do exist.

Health centers can play a key role in improving shelter health for individuals and families experiencing homelessness. In addition to screening and treating conditions that arise in the shelter setting, health centers can work with local shelters and public health departments to mitigate health risks by developing strategies to prevent, identify and resolve drivers of poor health. This issue brief identifies certain health issues that can be particularly affected by shelter conditions, identifies opportunities for health centers to be engaged in local efforts to improve shelter health, and describes environmental health services supported by the federal Health Center Program.

**Tuberculosis**

Tuberculosis (TB) is caused by a bacteria, *Mycobacterium tuberculosis*, which usually affects the lungs but can affect other areas of the body. Individuals who have TB in the throat or lungs can spread the bacteria to others by coughing, sneezing, and talking, which puts individuals in their immediate surrounding who breathe in the bacteria at risk for becoming infected. Most people who become infected will never develop the disease since their immune systems are strong enough to fight the bacteria. Those with weakened immune systems may develop the disease within weeks, while in others TB may lay dormant for years and become active when the immune system is compromised. Individuals who test positive for TB but have no symptoms cannot spread TB to others but should be treated in order to prevent the disease from becoming active.

Over the last couple of decades the rate of tuberculosis in the United States has declined but individuals experiencing homelessness have consistently comprised 5-7% of active cases. In addition to crowded shelter conditions, risk factors for TB infection include substance use disorders and compromised immune systems, factors that are also prevalent among homeless populations. In response to TB outbreaks at two Florida shelters, the National Institute for Occupational Safety and Health (NIOSH) conducted risk assessments and described issues such as the lack of fresh outdoor air coming into occupied areas, the lack
of filters in air handling units, and bathroom exhaust fans that weren’t functional.\textsuperscript{5,6} NIOSH reports found similar issues at shelters in Texas that experienced TB outbreaks.\textsuperscript{7,8}

**Opportunities for health centers:**

- **Conduct outreach to minimize delays in case detection and treatment.** Individuals experiencing homelessness who are infected with TB are more likely to be diagnosed later in the course of their disease in the emergency department rather than in a primary care setting.\textsuperscript{9} Health centers can help conduct educational outreach at shelters and encourage residents to seek support at the health center if they have symptoms or have been exposed.

- **Conduct TB screenings for shelter residents and staff.** Some shelters require TB screening prior to admission of a resident. Many require periodic screening of staff members and volunteers. Local health departments often collaborate in routine screenings, and are vital partners when an active case or outbreak of tuberculosis is identified. Active cases must be reported to public health authorities.

- **Encourage shelters to adopt environmental control measures.** The Curry International Tuberculosis Center offers a comprehensive tool kit for homeless service settings. Their [shelter resources](#) include quick guides for staff, administrative tools and templates, and educational materials that can be distributed to residents.\textsuperscript{10}

- **Provide case management.** Individuals who are experiencing homelessness and completing a course of treatment can benefit from case management services aimed to ensure treatment compliance and health care follow-up, to address concerns related to substance use disorders, and to ensure that other supportive services are provided to assist in a full recovery.

- **Educate state Medicaid agencies of the state option to enroll TB infected individuals into the Medicaid program.** States have the option to extend Medicaid eligibility to low-income individuals infected with TB, with federal financial participation. Health centers located in states that have not yet expanded Medicaid could educate their State Medicaid agency to adopt this option to support the cost of TB treatment and other services such as case management and addiction services that aid in treatment. For more information: [https://downloads.cms.gov/cms/downloads/CMCSBulletins/downloads/Info-Bulletin-TB.pdf](https://downloads.cms.gov/cms/downloads/CMCSBulletins/downloads/Info-Bulletin-TB.pdf)

**Figure 1. Basic Principles of TB Control\textsuperscript{11}**
Infestations

Crowded conditions, poor hygiene, and sharing of resources such as clothing and hair brushes can contribute to infestations of parasites such as bedbugs, body and head lice, and mites that cause scabies. With the exception of body lice, which can spread typhus, trench fever, and louse-borne relapsing fever, these bugs and mites are not known to spread disease. However, excessive scratching of bitten areas can lead to secondary infections including bacterial superinfections.

People without homes have a high risk of being exposed to certain parasites. A study of individuals experiencing homelessness in San Francisco found body lice on 30% of those surveyed, head lice on 5%, and both on 3%. *B. Quintana*, the bacterium that causes trench fever, was found in body lice samples. The disproportionate risk of homeless populations being exposed to louse-borne disease was apparent when 8 of the 10 infected with *B. quintana* during an outbreak in Seattle were identified as experiencing homelessness.

In some but not all jurisdictions, shelters are required to have inspections and follow publicly mandated standards for offering adequate showering and laundering facilities to help mitigate infestations. Often shelters will implement additional measures such as bug-proof mattress covers and eliminating wooden bed frames to prevent bedbugs. Systematically eradicating infestations requires strategic partnerships involving the health and housing sectors. For example, clinicians in Marseilles, France worked with shelters over the course of four years to eradicate scabies and body lice. Shelter staff carried out certain cleaning protocols while clinicians worked to establish effective courses of treatment for shelter residents.

Opportunities for health centers:

- **Offer routine screenings and education, and treatments.** Health centers can conduct routine screenings to identify individual infestations and help prevent its spread. When a shelter resident is found to have lice, scabies, or bedbug bites, the housing and health sectors can work together to mitigate a large scale infestation. Health centers can screen residents and staff, and can provide education and treatment. In addition to the physical benefit for the individual and population, reassurance and treatment can have a profound impact on emotional wellbeing.
- **If available, refer individuals who have bacterial superinfections to a medical respite program.** Individuals experiencing homelessness struggle to manage skin infections in street or shelter settings. Bandages become filthy and are sometimes reused. If clean bandages are provided, they are often dropped on bathroom floors or otherwise compromised. Medical respite care can ensure that skin infections heal properly.

Asthma

Shelters can harbor a number of asthma triggers including mold, dust, chemicals, cockroach feces, and second hand smoke. Data from 2015 Health Center UDS reports found that 49,627 of 890,283 (5.6%) individuals who received care at Health Care for the Homeless projects had a primary diagnosis of asthma which resulted in 96,625 primary care visits. Academic studies looking at the health of individuals experiencing homelessness report higher rates of asthma ranging from 16% - 27% among sample populations.
Studies looking at the rate of asthma in children are particularly alarming. Studies report asthma in 28-40% of children experiencing homelessness compared to less than 9% of children in the general population. Children living in homeless shelters who are diagnosed with asthma have high rates of emergency department utilization. One study found that 65% of the children living in New York shelters who had a prior diagnosis of asthma visited an emergency department at least once in the preceding 12 months, and 27% had 3 or more emergency department visits. In addition to higher hospital utilization rates, children diagnosed with asthma and living in shelters are shown to have behavioral health problems and poorer academic functioning at school. A qualitative assessment of homeless families’ barriers to managing asthma in children identified key themes including the need for asthma education, access to asthma medication and equipment, asthma action plans, concerns related to structural barriers to asthma management and environmental triggers.

To assist Health Care for the Homeless providers in supporting patients diagnosed with asthma, the National Health Care for the Homeless Council developed adapted clinical guidelines. In addition to shaping clinical practice to take into account the unique living conditions of individuals experiencing homelessness, health centers can lead community-based efforts to address environmental factors that contribute to asthma. For example, health centers can provide guidance to shelters to eliminate triggers and work with local government to ensure that health is not further compromised by poor conditions of public housing.

**Opportunities for health centers:**

- **Assist shelters in establishing asthma action plans.** Health centers can be working with shelters to facilitate rescue care, store nebulizers, remind clients to take medication, provide smoke-free spaces, and decrease asthma triggers. Because of high turnover rates in shelter staff, ongoing education to staff to support asthma action plans may be needed.

- **Educate stakeholders about benefits of permanent support housing.** Strengthen efforts to rapidly rehouse families to permanent and environmentally safe housing by educating communities on the physical, social, and monetary costs of managing asthma and other illnesses in the shelter setting.

**Hunger and Nutrition**

Individuals and families experiencing homelessness depend on shelters to provide some or all of their daily meals. However, strapped budgets and the high cost of fresh fruits and vegetables often limit meal options. Consequently, meals at shelters are often high in fat and low in fiber, lack adequate nutritional properties and generally aim to address hunger rather than improvements in health. Lacking access to nutritious food increases the risk of malnutrition, chronic disease, poor management of chronic disease, anemia, growth delays, and obesity among shelter users. Individuals who have poor diets and consume significant amounts of alcohol have a higher risk of poor health since alcohol reduces absorption of nutrients.

Malnutrition among individuals experiencing homelessness is also attributed to not having enough food to eat. One national study of 79 HCH clinics found that a quarter of HCH patients reported food insufficiency; of those, 68% went a whole day without eating in the past month. In a report from the U.S. Conference of Mayors’ Task Force on Hunger and Homelessness, a significant number of emergency shelters (76%) and
food pantries (57%) in surveyed cities turned individuals and families away due to limited capacity and resources. Lacking the means to provide meals for their children, parents may choose to sacrifice their own meals in order to feed their children or may scavenge dumpsters for discarded food.

Efforts to improve nutrition education among shelter residents have made little progress in altering the nutrition status among sheltered populations because of systemic barriers to accessing healthy food. These barriers include shelter reliance on donated or low-cost food, limited access to food storage and meal preparation areas for shelter residents, and distance of shelters from grocery stores.

Opportunities for health centers:

- **Educate stakeholders about improved nutrition options at shelters.** Identify shelter policies that contribute to poor nutrition and health status and discuss opportunities to improve options for shelter administrators.

- **Encourage shelters to use nutritional guidelines in meal planning.** The Food Nutrition Resource Guide for Homeless Shelters, Soup Kitchens, and Food Banks includes a number of resources targeted to shelter staff and residents. Shelters can also receive some reimbursement to support the cost of enhancing meals through the U.S. Department of Agriculture’s Child and Adult Care Food Program (CACFP).

**Trauma**

The Center for Nonviolence and Social Justice defines trauma as experiences or situations that are emotionally painful and distressing, and that overwhelm people’s ability to cope, leaving them feeling powerless. Trauma can have a long-lasting impact and is widely understood to be a precursor to homelessness. In a study assessing trauma and PTSD in women experiencing homelessness, investigators found that two-thirds of their study participants had experienced intimate partner violence and two-thirds had been raped. Half of the women screened for trauma had experienced six or more traumatic events in their lifetime. In a study of homeless mothers, over 90% reported physical or sexual assault in their lifetime. Adult men experiencing homelessness are also likely to have experienced a traumatic event. In a study of 239 homeless men, 68% experienced childhood physical abuse, 71% experienced adulthood physical abuse, 56% experienced childhood sexual abuse, and 53% experienced adulthood sexual abuse. Youth experiencing homelessness are also very likely to have histories of trauma with 60-82% having been victims some form of abuse or neglect, often repeatedly.

Homelessness itself comes with the trauma of significant loss and constant stress. Once in a shelter, individuals can be inundated with potential trauma triggers including crowded conditions, limited opportunities for privacy, safety concerns, authoritarian staff, feelings of being processed, increased exposure to violence, and witnessing emotional breakdowns or psychotic episodes by others. The turmoil of the shelter environment compounded with past traumatic experiences can make it difficult for individuals and families to cope and can lead to maladaptive behaviors that impact their health and wellbeing.

Health Care for the Homeless grantees have long been aware of the linkage between trauma and homelessness and many have incorporated trauma-informed practices into their delivery of care. Additionally, there is increasing interest in establishing “trauma-informed organizations” to prevent unintentional re-traumatization due to an organization’s physical environment, practices and policies.
However, health centers are only one part of a larger system that individuals experiencing homelessness depend on to meet their needs.

**Opportunities for health centers:**

- **Encourage the systemic implementation of a trauma-informed framework.** Educate stakeholders and partners on the benefits of a system-wide trauma-informed framework to avoid re-traumatization of people without homes. Encourage local leaders to adopt a trauma lens that affects all levels of an organization, not solely service provision. SAMHSA’s [Concept of Trauma and Guidance on for a Trauma-Informed Approach](#) is a good resource to share with local partners.\(^{49}\)

- **Raise awareness of your health center’s services that can assist individuals who have experienced trauma.** Inform shelter administrators and staff about trauma treatments for residents available through your health center or other community programs. Increase shelter staff awareness on how to make appropriate referrals for treatment.

**Environmental Health Provision of the Health Center Program**

Health centers may request to include environmental health services to their scope of project as an “additional service.” The Health Resources and Services Administration (HRSA) describes environmental health services as those services that prevent, detect and mitigate unhealthy environmental conditions (e.g., contaminated water supply, chemical and pesticide exposures, air quality, exposure to lead, poor field sanitation, rodent and parasitic infestation, and aging or over-crowded housing). Regulatory guidance adds that the detection and alleviation of unhealthful conditions in the environment includes the notification of and making of arrangements with appropriate local, state, or federal authorities responsible for correcting such conditions.\(^{50}\)

This option was used recently to respond to the water crisis in Flint, Michigan. Two health centers received supplemental Health Center Program funding to address lead-contaminated water, which they used to conduct lead testing, make referrals for individuals with elevated lead levels, and hire outreach workers to help prevent continued lead exposure.\(^{51}\)

**Conclusion**

The impact of the shelter environment on the physical and mental health of individuals experiencing homelessness is well documented. Health centers can play a meaningful role in addressing shelter health problems by providing screenings, education, and treatment to shelter residents and staff. Additionally, health centers are well-positioned to lead discussions about creating systemic approaches to improve the health of individuals and families who rely on shelters to meet their basic needs. In some cases, health centers may be able to address shelter health issues as an additional service provided within their approved scope of project.
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DISCLAIMER: This project was also supported by the Health Resources and Services Administration (HRSA) of the U.S.
Department of Health and Human Services (HHS) under grant number U30CS09746, a National Training and
Technical Assistance Cooperative Agreement for $1,625,741, with 0% match from nongovernmental sources. This
information or content and conclusions are those of the authors and should not be construed as the official
position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.