

HEALING HANDS



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Bugs That Bite: Helping Homeless People and Shelter Staff Cope

Among the many indignities that homeless people face is the inability to escape bugs that bite, from parasites such as lice and scabies to common insects, including mosquitoes, spiders, and ticks. The environments in which they live, from crowded shelters to outdoor camps; their inability to wash and change clothes regularly; and their overall poor physical and mental health place homeless people at risk for secondary infections and serious illnesses. This issue of Healing Hands examines some of the more common problems and discusses how HCH providers can help patients and shelter staff confront stigma and prevent outbreaks and serious complications.

Homeless people are at greater risk for health problems that are easily preventable or treatable in a housed population; parasitic skin infestations and insect bites are no exception. Homeless people suffer infestations at a rate three times higher than the general adult population.¹ Children are especially vulnerable. A 1992 study found that homeless children had 23 percent more cases of lice and 16 percent more cases of scabies when compared to a national sample.² Though the incidence of mosquito-born infections such as West Nile Virus is low in some areas, they represent a significant risk to homeless people who spend a great deal of time outdoors.³

Many of the conditions that plague homeless people are not unique to those living in poverty. For example, the Centers for Disease Control and Prevention (CDC) report that 6–12 million people in the United States are infested each year with head lice;⁴ outbreaks among school children are common. However, the crowded living conditions, lack of hygiene, and poor general health that are associated with homelessness make such problems a significant concern for HCH providers and for the shelters in which many homeless people reside. In addition, stigma attached to such infestations may affect the type of care homeless people receive, notes **Barry Zevin, MD**, Medical Director of the Tom Waddell Health Center in San Francisco.

LICE Lice can spread quickly within the close confines of homeless shelters and other shared sleeping arrangements, but, with the exception of body lice, they rarely represent more than a nuisance, HCH providers and shelter operators note.

THE FACTS OF LICE

- There are three types of human lice: *Pediculus humanus capitis* (head louse), *Pediculus humanus corporis* (body louse), and *Phthirus pubis* (pubic or crab louse).⁵
- Bites are painless but injected saliva causes intense itching.³
- Lice do not jump or fly; they are only spread through direct physical contact with a person or sharing of personal items, including clothes, bedding, combs, and hats.⁶
- Head lice are more common in young, white females.³
- Body lice are associated with low-income, poor hygiene, and overcrowded living conditions.³
- Body lice are vectors for serious disease, including trench fever and endocarditis (infection of the heart valves).³
- Up to one-third of people with pubic lice may have other sexually transmitted diseases.³
- People with HIV/AIDS tend to have more severe infestations of pubic lice and be unresponsive to conventional treatment.³

Treatment for lice is fairly straightforward, but homelessness adds a layer of complexity. Homeless people may lack a place to shower and wash their clothes; they may be unaware of their condition or unable to complete recommended treatments because of mental illness

and/or substance abuse; and they may not seek treatment in time to avoid secondary skin infections.

Head lice and crab lice lay their eggs (called nits) at the base of hair fibers and can be treated with an effective pediculocide (anti-lice medication); re-treatment in 7–10 days may be needed. Because pediculocides are ineffective against head lice nits, complete removal of nits by combing with specially designed lice combs is necessary. “Head lice grooming is a tedious and arduous task,” says **Heather Barr, BSN, RN**, Public Health Nurse with the HCH Network in Seattle, WA. Individuals who are unable to comply with instructions for lice treatment, particularly those with mental illnesses, may need help from medical or shelter providers, Barr says.

Because body lice live in the seams of clothing and only leave to feed upon from the host,³ allowing a person to wash and providing clean clothes may be the only treatment that is required, according to Dr. Zevin. “Some people feel you have to throw clothes and bedding away,” says **Aaron Strehlow, RN, PhD, FNP**, Administrator of the UCLA School of Nursing Health Center at Union Rescue Mission in Los Angeles, CA. “We try not to do that, especially with clothes because it might be a person’s favorite shirt or outfit.” Items that cannot be washed can be isolated in a plastic bag at temperatures between 75–85 degrees Fahrenheit for 1–2 weeks.³

Secondary skin infections from repeated scratching and the potential for serious disease spread by body lice are possible complications of lice infestation in homeless people.⁷ But misconceptions about lice among patients and providers are common and can present barriers to appropriate care. “Education must be included with treatment,” says **Jaime Ligot, MD**, supervising physician at Newark Homeless Health Care Project in Newark, NJ.

“There is a tremendous amount of prejudice and shame associated with lice and scabies,” says Dr. Zevin. Despite the fact that lice affect people in all socioeconomic strata, “people with lice think they must not be clean and that others will see them that way.” Their fears may not be unfounded. Dr. Zevin notes that people with lice may be turned away from shelters, medical care, and mental health treatment because of infestations, so they avoid seeking help. In San Francisco, individuals entering drug detox must be de-loused before they can be treated, Dr. Zevin says.

SCABIES Whereas head lice is more commonly seen in children, HCH providers most often see scabies in adolescents and single men. Recognized as a disease for approximately 2,500 years, scabies is caused by the arachnid itch mite, *Sarcoptes scabiei*, variety *hominis*, which burrows under the skin and causes an allergic reaction. Norwegian or crusted scabies is a severe variant that most commonly occurs in institutionalized, debilitated, or immunosuppressed individuals.³ Though popularized as a movie title, “the phrase ‘7-year-itch’ was first used with reference to persistent, undiagnosed infestations with scabies.”⁸



Body lice. A gentleman seen at the Boston Night Center was infested with many generations of body lice. Photo by James O’Connell, MD.³

Scabies is highly contagious and spread by close personal contact or sharing of clothing or linens. At an overflow shelter open during the winter months in Salt Lake City, two staff contracted scabies from handling blankets; one of the individuals had a severe case and ended up leaving his job, says **James Woolf**, Director of The Road Home. Universal precautions, including the use of gloves and barrier clothing, are useful for shelter staff handling clothing or bedding, Barr notes (see separate story in this issue for more advice for shelter staff).

Clothes and bedding used by people with scabies should be washed in hot water and dried on a hot setting. “When treating a homeless person with scabies, HCH providers have to ask these questions: ‘Do you have extra clothes?’ ‘Can you do your laundry?’ ‘Do you need money or tokens?’” notes **Adi Gundlapalli, MD, PhD**, Medical Director at Wasatch Homeless Health Care in Salt Lake City, UT. “It’s not as simple as writing a prescription and walking out. We have to provide continuity of care.”

BEDBUGS Bedbugs are (*Cimex lectularius*) not believed to be vectors of disease and the rash from their bites resolve spontaneously.³ However, notes Dr. Zevin, “Bedbugs can be difficult psychologically because they seem like a violation of personal space.”

Bedbugs feed on human blood at night; often they bite in rows, leaving three or more linear bite marks sometimes referred to as “breakfast, lunch, and dinner.”³ During the day, bedbugs hide in the seams of old mattresses, behind loose wallpaper or baseboards, and near electrical outlets. Bedbugs can live up to a year without feeding and can be extremely difficult to exterminate. Woolf knows how true this is. For the past 8 months, The Road Home has had a major problem with bedbugs in its women’s shelter. In February he planned to have an exterminator back for the fourth time.

“One woman had bites all over her body,” Woolf says. She collected a bug off the bedding and took it to the HCH clinic, where it was identified as a bedbug. Woolf believes the bedbugs may be coming in on personal items with families who stay in motels when the shelter is full.

OTHER INSECTS Spiders, mosquitoes, ticks, fleas, and ants also pose risks for homeless people, particularly those who live out of doors. The venom of the brown recluse spider, *Loxosceles reclusa*, is toxic to human cells and tissues and may cause significant necrosis (tissue death). However, such bites are rare, and most necrotic wounds diagnosed as brown recluse bites are something else.^{9,10}

One of the problems in diagnosing a brown recluse spider bite, even in the Midwestern and Southeastern states where they are found, is locating the spider to make a definitive diagnosis. “We see a lot of spider bites, and some homeless people have had to be hospitalized,” says **Lee Gentry, MPH**, Clinic Administrator at Coastal Family Health Center in Biloxi, MS. “We believe they are brown recluse spiders, but by the time you feel the pain, the spider is gone.”

Misdiagnosis of a spider bite can delay needed treatment for serious conditions.⁹ Particularly in urban homeless populations, Dr. Zevin says, providers should consider that what appears to be a spider bite may be a case of community-acquired methicillin-resistant *Staphylococcus aureus* (MRSA) (see the June 2004 issue of *Healing Hands* at www.nhchc.org/healinghands.html for more information on chronic wounds caused by MRSA).

Homeless people can have a difficult time avoiding bites from mosquitoes and ticks, which carry such diseases as West Nile Virus, Lyme disease, and Rocky Mountain Spotted Fever. They often are outside during the peak hours of mosquito activity, from dusk to dawn, and they may have no access to insect repellent.

In Biloxi, where marshy wooded areas and old tire dumps become breeding grounds for mosquitoes, HCH outreach worker **Rita Baldwin**

gets donations of insect repellent from churches and local citizens. “In the clinic, we educate patients how to care for bites and how to use repellent,” Baldwin says. Homeless herself for a year, Baldwin slept on the beach to avoid mosquitoes but was bitten regularly by sand fleas. She noted that fire ants are also a problem in Biloxi.

Even homeless people who live indoors are at risk from insects. In Billings, Montana, a woman whose Labrador companion dog had ticks stayed in two rooms at a family shelter. Shelter staff placed a tick collar on the dog, but two families who stayed in the rooms where the dog had lived became ill after being bitten by ticks, even though the rooms had been sprayed professionally with insecticide. Tests on one family suggested a diagnosis of Rocky Mountain Spotted Fever, though lab results were unable to confirm the diagnosis, says **Lori Hartford, BSN, RN**, HCH Program Manager for the Yellowstone City-County Health Department in Billings.

DIFFUSING SHAME The care of patients with lice or scabies requires sensitivity and tact. “You can’t express disgust,” Barr says. “You have to treat these problems casually to diffuse shame.” In the end, says **Karen Zimmerman, CNM, FNP**, with the Children’s Health Outreach Team (CHOUT) of Albuquerque HCH, “If you don’t help your patients feel better about themselves, they won’t listen to your treatment advice.”

[For more information about the signs and symptoms of parasitic infestations and communicable conditions discussed in this article, see James O’Connell’s valuable resource, *The Health Care of Homeless Persons: A Manual of Communicable Diseases & Common Problems in Shelters & on the Streets*, published in 2004 by the Boston HCH Program. To order, see www.nhchc.org/manual.html.]

Intake, Showers, and Clean Sheets: Heading Off Infestations in Homeless Shelters

Shelter staff dealing with outbreaks of lice and scabies face some of the same barriers their clients do: misinformation, fear, and lack of resources. Education is a powerful tool that HCH clinicians provide to help shelter staff deal appropriately and respectfully with clients, prevent large-scale infestations, and protect their own health.

“Staff should have communicable diseases training so they can make informed choices about their own care and the care of their clients,” Heather Barr says. As a health consultant and educator, Barr has drafted sample policies on handling lice and scabies for shelters to adopt or adapt.⁶ The key to reducing

the incidence of lice and scabies in shelters is to begin with “sensitive and well-conducted intake,” Barr says. “It’s a gentle and delicate dance when you’re dealing with personal issues.”

Clients with suspected cases of lice or scabies should not be asked to leave the shelter, Barr says. “It’s more hazardous for them to remain outside.” Instead, she instructs shelter staff to let them stay for the night; if they want to stay additional nights they must bring a note from a medical provider which indicates that they have been evaluated and that treatment, if required, has been initiated.

Continued

TIPS FOR SHELTER STAFF

- Ask each client about symptoms of lice or scabies at intake.
- Refer clients with symptoms for a medical evaluation.
- Wear latex gloves when examining patients suspected to have lice or scabies.
- Assist clients who need help with bathing and laundry.
- Wear disposable gowns or aprons when handling dirty laundry.

Shelter procedures on bathing and laundry vary. Some, such as Prospect House in Bridgeport, CT, require all clients to bathe and wash clothes daily. "In the year that I've been here, I've never seen a case of lice or scabies," says Director **Patricia Ginyard**. At Urban Ministries in Durham, NC, only those clients enrolled in the shelter's drug or disability programs are required to wash their clothes; "overnighters" (those who use the shelter for sleeping only) are not, says **Deborah Wilson, ALPN**, with Lincoln Community Health Center Health Care for the Homeless Project.

Lack of resources—from medically trained staff to bedding and laundry facilities—can

make it difficult for shelters to head off outbreaks of communicable diseases. Last May, there was an outbreak of lice and scabies at People in Peril, a wet shelter in Worcester, MA. Formerly, the shelter had its own medical staff; currently the HCH Homeless Outreach and Advocacy Project (HOAP) holds clinics at the shelter twice a week, notes **Anne Laverty, MSN, RN**, Nursing Supervisor.

"We talk to the staff about the need for two clean sheets, one as a barrier for the mattress and one as a barrier for the blanket," Laverty says. "Ideally, they should clean the mattresses everyday, but realistically, this

may not happen." In January, the HOAP medical team conducted a screening for lice and scabies at the shelter. "We tried to do it in the most humane way possible," Laverty says. "We set up screens so people had privacy. Most people were cooperative and appreciative."

Barr's short-hand advice for shelter staff is straightforward: Do a careful intake, intervene quickly, normalize the situation, and ensure that appropriate treatment is carried out. HCH clinicians are available as a resource to help shelters perform these tasks.

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