What Front-Line Service Providers for People Experiencing Homelessness Know About

Body Lice and Associated Diseases - Colorado 2022 University of Colorado Anschutz Medical Campus



COLORADO **Department of Public**

R. Henderson¹, S.N. Rich², B. Sprague³, C. Grano³, D.W. McCormick⁴, E. Mosites⁵, T. Bostic², S.E. Rowan^{6,7}, G.E. Marx^{2,7,8}

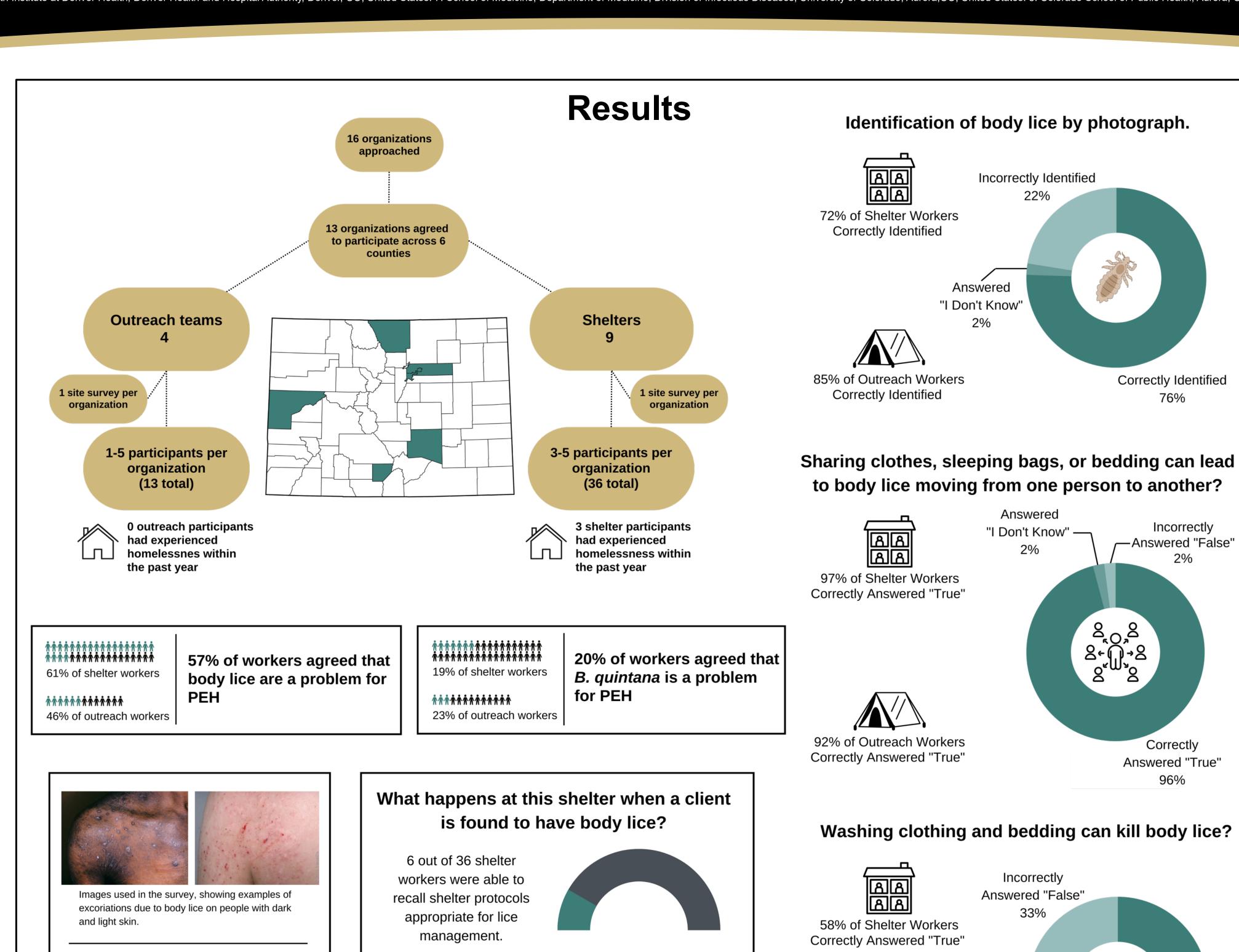
1. School of Medicine, University of Colorado, Denver, CO, United States. 2. National Center for Emerging and Zoonotic Infectious Diseases, Division of Vector-Borne Diseases, Centers for Diseases, Division of Vector-Borne Diseases, Centers for Disease Control and Prevention, Fort Collins, CO, United States. 4. National Center for Emerging and Zoonotic Infectious Diseases, Division of Vector-Borne Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States. 5. Office of the Deputy Director for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States. 6. Public Health Institute at Denver Health, Denver Health and Hospital Authority, Denver, CO, United States, 7. School of Medicine, Division of Infectious Diseases, University of Colorado, Aurora, CO, United States, 8. Colorado School of Public Health, Aurora, CO, United States

Background

- Body lice (Pediculus humanus corporis) are spread by close physical contact or by sharing clothes and bedding
- Bartonella quintana
 - Fastidious gram-negative bacteria
 - Transmitted by infected body lice bites
 - Can cause chronic bacteremia and culture-negative endocarditis
 - In the U.S., infection occurs almost exclusively in people experiencing homelessness (PEH)
 - Recent outbreaks have occurred among PEH, including in Denver, CO

Methods

- Colorado Department of Public Health and Environment (CDPHE) invited organizations serving PEH to participate
- Organizations identified staff or volunteers with regular client interaction
- 1 5 staff completed a 20-minute, inperson, standardized survey on knowledge, attitudes, and behaviors regarding body lice prevention and treatment
- 1 senior staff member completed a sitelevel standardized assessment of policies and resources
- Descriptive analysis was conducted to identify knowledge gaps, barriers to implementing control measures, and preferred education modalities



Common misconceptions among shelter workers:

"Ask them to leave the shelter"

"Get rid of mattresses"

"Probably everyone would get it"

"Wipe down and mop area"

"Everyone in the dorm must leave for pest control"

Image used in the survey, showing body lice eggs

("nits") in the seams of an article of clothing

"Need documentation of treatment to re-enter"

Conclusions

- Most front-line service workers:
 - ✓ Correctly identified body lice
- ✓ Correctly identified methods of body lice transmission
- X Had limited knowledge of body lice management protocols
- X Had limited knowledge and concern about B. quintana infection in PEH
- PEH in shelters reportedly had regular access to and used hot showers and laundry; unsheltered PEH did not

Implications

- Education about body lice and *B. quintana* is needed for front-line service workers in homeless shelters and street outreach organizations in Colorado
 - Should focus on prevention, recognition, and management of body lice infestations
- Communities should ensure that unsheltered PEH have consistent, easy access to shower and laundry facilities to prevent louse-borne diseases

No conflicts of interest.

Correctly

Answered "True"

61%

Answered

"I Don't Know"

69% of Outreach Workers

Correctly Answered "True"

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Photographs courtesy of VisualDx.