# Estimating the Prevalence of Human Trafficking: Progress Made and Future Directions

See also Anderson et al., p 1396.

The Trafficking Victims Protection Act of 2000 (Pub L No. 106–386)—a US policy developed to combat human trafficking—defines human trafficking as "the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery."

"Human trafficking," the term commonly used to refer to both labor and sex trafficking, is associated with negative physical, mental, and social outcomes (e.g., pain, depression, posttraumatic stress disorder, substance use).<sup>1</sup> Therefore, practitioners, researchers, and policymakers have been increasingly interested in understanding, preventing, and responding to this hidden epidemic.

A critical first step in addressing any problem is determining its presence. In their 2017 editorial for AJPH, Rothman et al.<sup>2</sup> identified key priorities for public health researchers to advance the field of antihuman trafficking, with the first priority being the more precise estimation of human trafficking. In the past few years, laudable efforts have been undertaken to develop innovative tools and methods to estimate human trafficking and to determine the prevalence and incidence of human trafficking across the United States as well as specific states, counties, and subpopulations (e.g., immigrant

laborers, homeless youths, child welfare–involved youths).<sup>3</sup>

The recent study of Anderson et al. published in this issue of AJPH, "Estimating the Prevalence of Human Trafficking in Ohio, 2014-2016" (Anderson et al., p. 1396), focuses on using existing systems data from local child welfare, law enforcement, legal, and juvenile justice agencies to estimate known victims and those at risk of trafficking in Ohio. Working through a process of integrating and triangulating existing data and removing duplication through probability matching across data sets, the authors yielded a conservative count for human trafficking in Ohio-one that focused on sex trafficking primarily among girls.

Although strides have been made to develop and apply innovative methods to more accurately and reliably estimate the presence of human trafficking, this field of study continues to struggle with challenges to prevalence and incidence estimation because of the complex nature of the problem and limits to data collected. In April 2019, the National Academies of Sciences, Engineering, and Medicine brought together experts in statistics, survey methodology, demography, public health, and human trafficking for a workshop on estimating the prevalence of human trafficking in the United States. Its focus was on presenting innovative methods that have been used to estimate the

prevalence of human trafficking globally and in the United States, as well as important definitional, measurement, methodological, and ethical issues to estimating the prevalence of human trafficking.<sup>4</sup>

Innovative strategies presented in the workshop and discussed by Fedina and DeForge included adding human-trafficking-related questions to national surveys using probability sampling (e.g., Youth Risk Behavior Surveillance System, National Agricultural Workers Survey) and epidemiologic methods using nonprobability sampling with more sophisticated statistical weighting and corrections to corroborate prevalence and incident estimations. For instance, respondent-driven sampling holds promise for future prevalence estimation, as it has been successfully used to estimate prevalence of sex and labor trafficking in previous studies; however, respondent-driven sampling studies can be costly.2

Capture–recapture methods may be a cost-saving alternative to respondent-driven sampling methods, depending on the quality of existing data.<sup>4</sup> Herein lies the issue: the systematic collection and recording of human-trafficking data across geographic jurisdictions, systems, and entities are lacking. Strategies used to estimate the prevalence of human trafficking by obtaining counts of known or potential victims from systems and community organizations rely on several assumptions: (1) that providers and employees are knowledgeable about human trafficking, including red flags and risk factors associated with victimization and perpetration; (2) that systems and organizations use appropriate and validated instruments to screen for human trafficking or assess for indictors of human trafficking; and (3) that human-trafficking-related data are documented consistently across systems and are accessible to epidemiologists and researchers.

Considering this, we advocate the use of three strategies for enhancing efforts to more accurately identify victims of human trafficking and to estimate the prevalence of human trafficking in the population: (1) consistently using a reliable screening measure of human trafficking in research and practice; (2) preparing systems, current community partners, and nontraditional community partners to incorporate human-trafficking screening and documentation into standard practice; and (3) building the infrastructure necessary to deposit and cross-reference data sources from partners engaged in on-the-ground screening and work.

## USE RELIABLE MEASURES

As Fedina and DeForge concluded, "Both local and national studies need clearly defined

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measures of human trafficking (including the behaviors that comprise force, fraud, and coercion) to achieve more precise estimates of the population."3(p36) Although there has been progress in the development of screening and identification instruments for human trafficking, the research to evaluate measurement scale reliability and validity across different populations has not kept pace. This is a critically important first step in being able to compare human-trafficking prevalence among subpopulations. Although further invariance testing across populations has yet to be done, a recently developed measure for use in homeless youths, which holds promise for use in other practice and research settings because of its brevity, is the Human Trafficking Screening Tool Short Form. In six questions, this measure ascertains information about sex and labor trafficking by force, fraud, or coercion.5

## law enforcement, health care (e.g., hospital emergency departments), criminal justice (e.g., courts, jails, prisons, juvenile detention centers), child welfare, and homeless shelter professionals are not always knowledgeable about human trafficking or prepared to identify potential victims and perpetrators.<sup>6,7</sup> Furthermore, some victims may not come into contact with these systems or identify their experience as trafficking. For these reasons, it is critical that continued efforts be made to ensure that these systems and community organizations, as well as nontraditional partners, are trained to proactively screen for and identify human trafficking. Potentially promising nontraditional partners for identifying and routing people into services for labor and sex trafficking include industries (e.g., agriculture and construction), traditional and alternative public schools, and substance use treatment clinics.

items to a cross-system depository. We need to ensure that systems and agencies are documenting data in similar ways for linking, de-duplicating, all while addressing privacy and confidentiality concerns. Consequently, this work will inventory resources at the state or regional level to create the collaboration and infrastructure necessary to identity human-trafficking victims and provide the data necessary for more accurate prevalence estimations.

We hope that there is increasing consideration by practitioners, researchers, and government officials to document the gravity of human trafficking and to understand the scope of this public health crisis both to prevent human trafficking and to adequately support interventions designed to enhance survivor well-being. *A*JPH

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#### CONTRIBUTORS

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#### **CONFLICTS OF INTEREST**

The authors have no conflicts of interest to declare.

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## PREPARE SYSTEMS AND COMMUNITY PARTNERS

Traditional systems with the ability to identify survivors are likely underidentifying victims especially labor trafficking victims. Research suggests that

# BUILD INFRASTRUCTURE

Finally, infrastructure needs to be developed in geographic regions to ensure that community partners engaged in screening and identifying trafficking victims have the opportunity to report essential

Causality in Public Health: One Word

Can I safely drink alcohol regularly? Should we tax or ban smoking, alcohol, and sugarsweetened beverages (SSBs)? Is SSB intake responsible for the increase in obesity and diabetes? Is there a safe level of intake of

# See also Hall et al., p. 1429.

Is Not Enough

Communication about causality, risk, and evidence in public health is a never ending endeavor and a dangerous job.<sup>1</sup> Ascertaining causality in public health is complex because determinants work at various levels and interact with each other and there is often scarce experimental evidence to help us decipher the mechanisms at stake. Further, most epidemiologic research findings are false.<sup>2</sup> Ignorance and uncertainty are pervasive in this domain, but expectations are also unrealistic. What are the health effects of

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diet? What risks are associated

with environmental exposures?

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