Abstract

Addressing Health Inequities in South Chattanooga: Lead Contamination and Childhood Lead Poisoning †

Dawn Ford, Rosa Cantu *, Zachary North, Tes Cherian, Kavina Patel and Jaleesa Brumfield

Department of Health and Human Performance, The University of Tennessee at Chattanooga, Chattanooga, TN 37403, USA; Dawn-Ford@utc.edu (D.F.); gqb712@mocs.utc.edu (Z.N.); srm793@mocs.utc.edu (T.C.); vyv724@mocs.utc.edu (K.P.); tmd669@mocs.utc.edu (J.B.)
* Correspondence: gnanq247@mocs.utc.edu
† Presented at the 2nd International Electronic Conference on Environmental Health Sciences, 4–29 November 2019; Available online: https://iecehs-2.sciforum.net/.

Published: 5 November 2019

Abstract: Soil lead contamination is an environmental health risk that greatly affects children in Chattanooga, Tennessee. The Southside Chattanooga Lead Superfund Site was added to the National Priorities List in late 2018 by the Environmental Protection Agency (EPA). The EPA has designated the clean-up threshold for soil lead contamination to be equal to or over 360 parts per million. For the EPA to conduct soil testing and proceed with clean-up, a signed access authorization letter from the tenant or property owner must be submitted. As of 7 May 2019, there are still 4371 properties to test with an estimated 1100 expected to be above the remediation threshold. Despite mailing the letters and having several public meetings, the rate of return is approximately thirty percent for access authorization forms. To increase the response rate, local non-profit agencies, the University of Tennessee at Chattanooga (UTC) Lions Club, and the UTC Master’s in Public Health program have been involved in educating the community. Efforts include community health fairs, grant-funded community-based blood lead testing for children, and a door-to-door canvassing campaign where residents are informed of the issue, provided with educational materials, and asked to sign and return access authorization letters to the EPA. The impact of community engagement is measured by the number/proportion of residents engaged, the number of signed authorization forms submitted, and the number of children tested for elevated blood lead levels. This poster presentation will discuss lead contamination in Chattanooga, and the results of our engagement work in the community.

Keywords: lead; child; poisoning; contamination; environment; inequity; health; blood; Southside; Chattanooga; Tennessee

© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).