

Health screening profile of a community near the Escambia Wood Treatment Co.

Superfund site in Pensacola, FL.

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INTRODUCTION

Between December 2002 and May 2004, the Florida Department of Health, Escambia County Health Department (ECHD), in conjunction with the University of West Florida and the University of South Florida, conducted a toxicological health study of 228 persons who had been potentially exposed to chemical contaminants at the Escambia Wood Treatment Co. (ETC) Superfund site in Pensacola, FL. Contamination at the ETC site arose primarily from the use of creosote and pentachlorophenol (PCP), and the primary contaminants of concern at the site include dioxin (by-product associated with PCP), arsenic, lead, and benzo(a)pyrene. As described previously, the targeted population included residents from the neighborhood surrounding the ETC site and former workers of the plant and their family members.

A preliminary census and study, the Community Environmental Health Project (CEHP), a State of Florida-funded collaboration between the ECHD and Citizens Against Toxic Exposure (CATE), was initiated in 2000 and identified eligible workers/residents of the focus area. These eligible citizens were invited to participate in a health screening, which included a health and exposure history/survey, routine blood and urine analysis, and a screening chest x-ray for clients >39 years old. Two-hundred twenty-eight of these initial participants were subsequently invited to participate in an additional study (Partnership for Environmental Research and Community Health; PERCH) funded by the Centers for Disease Control and Prevention (CDC), which included a physical exam conducted by a physician and blood sampling for analysis of contaminant profiles. In the present report, we describe the health screening profile of these 228 participants (ETC cohort). The results of the contaminant screening are presented separately.

METHODS

The initial health screening and survey of the PERCH participants was conducted under the CEHP. During the CEHP project, participants were queried about their medical history using a fixed panel of questions (see Appendix A). These questions investigated demographics, exposure history, and health conditions such as cancer, hypertension, diabetes, alcohol usage, and smoking history, among others. Blood and urine specimens were collected for routine tests (Complete Metabolic Profile, lipid panel, thyroid panel, Complete Blood Count with differential, urinalysis, hepatitis panel, and prostate specific antigen) and analyzed by a commercial laboratory, Laboratory Corporation of America (Labcorp, Pensacola, FL). These data were provided to physicians affiliated with the PERCH study who reviewed these data and performed additional physical examinations on the 228 PERCH participants.

RESULTS

Demographics of the 228 PERCH participants are summarized in Table 1. The majority of the participants were African-American, closely reflecting national census data for the neighborhood surrounding the ETC site (ATSDR, 1995). Participant age ranged from 14 to 88 years (mean = 57 years) and length of exposure ranged from 1 to 69 years (mean= 21.0 years).