

A Collaborative Effort to Fight Lead Poisoning in New Orleans

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The Tulane University Center for Applied Environmental Public Health (CAEPH) and the Daughters of Charity Health Center collaborated on the *Community-Based Childhood Lead Poisoning Prevention Study*. In this collaboration, the Daughters of Charity Health Center provided patient referrals to the Tulane study team for follow-up, providing access to the hard-to-reach inner city African American population whose children are at high risk for lead poisoning in New Orleans.

In an effort to address environmental health concerns, the Tulane University Environmental Diseases Prevention Research Center (PRC), located within CAEPH, was funded in 1998. A major project of the PRC was to conduct research aimed at identifying new and innovative ways to reduce childhood lead poisoning among the high-risk children in central city New Orleans. Community members from central city were hired and trained as lead paraprofessionals, affectionately called Lead Busters, to carry out a research project entitled the *Community-Based Childhood Lead Poisoning Prevention Study*. The study was a randomized controlled trial of dust control and nutritional interventions on blood lead levels of children 12 months to 6 years of age. The project relied on encouraging behavioral change in care-givers as a means to implement the environmental and nutritional measures. Community-based organizations in the area were informed about the study and invited to refer their clients for follow-up. The Daughters of Charity Health Center responded and quickly became an important conduit between the research effort and the target community.

The Daughters of Charity Health Center was opened on February 3, 1997 to provide affordable, accessible and comprehensive medical and social services, especially to the underserved. It is sponsored by the Daughters of Charity Foundation, which is committed to working to improve the quality of life in the community. Primary care preventive services are aimed at addressing the needs of the total individual and are provided in a collaborative manner with other health, social and educational agencies. The Daughters of Charity Health Center administrators recognized the potential benefit of the research project to its clients and agreed to participate.

A primary component of the study involved having the Lead Busters visit the study participants at their home to provide health education, blood lead testing as well as motivation and encouragement. Knowing that their patients were receiving follow-up in their homes was a major advantage as it eliminated the problem of clients not showing up at the clinic for follow-up as scheduled. In addition, the participant also received a home environmental inspection at no cost, a service that the Daughters of Charity Health Center did not provide. In this way, the participant was able to learn which areas in the home were a potential source of lead poisoning and receive health education in the home on ways to prevent or reduce contact with the exposure source. Having the Lead Busters visit the participant at the home enabled them to observe other home issues that may have contributed to the child's elevated lead level including the child's play area, position of the child's bed and others. While the nurse at the clinic may have been able to provide the same assessment, collaborating with the *Community-Based Childhood Lead Poisoning Prevention Study* saved time, increasing efficiency without duplication of activities and resources. Since the Lead Busters conducted multiple visits with the participant, it allowed the team to get a more accurate picture of the home environment and address areas that needed more attention. An added component of the collaboration was the provision of environmental cleaning supplies and nutritional supplements to the participant by the study team. The environmental cleaning supplies consisted of 2 buckets, a mop, cleaning

detergent and disposable paper wipes while the nutritional supplies were TUMS for calcium and Poly Vi Sol with iron. This enhanced the services provided at the health center and empowered the participants by showing them exactly how to “wet-mop” their homes using the two-bucket system and teaching them the importance of nutrition in preventing childhood lead poisoning.

Through this collaboration, both the Daughters of Charity Health Center and its patients and the *Community-Based Childhood Lead Poisoning Prevention Study* have benefited tremendously. The overarching benefit was the sharing and enhancement of services: through the study, Daughters of Charity Health Center patients received home visits, environmental inspections, cleaning supplies and home follow-up visits; the research effort benefited by getting access to the hard-to-reach study participants. The success of this collaboration was acknowledged by the CDC, when it was selected for inclusion in a recent CDC Prevention Research Center informational video entitled “Community Connections”. It was one of only three projects highlighted. The collaboration that was established to fight childhood lead poisoning has been successful and is on-going, giving both organizations an opportunity to collaborate on other health issues that affect the New Orleans inner city minority community.

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