

Community Lead Poisoning Education and Prevention Program: Happytown, USA
Happytown Health Dept.

Lead poisoning is a genuine threat to the health of the citizens in Happytown. Lead poisoning is the number one cause of preventable environmental cause of illness in children. The best way to treat lead poisoning is to prevent it in the first place. Effective prevention strategies involve inclusivity, community involvement, and culturally relevant messaging.

Potential Sources of Lead Poisoning Happytown:

- I. Lead is an ingredient in Yoruba tiro face paint at the New Resident's Day carnival.
- II. Plastic carnival beads at the New Resident's Day carnival are a known source of lead.
- III. Toys from China given out at Happytown Fun Fair
- IV. Original paint in the apartments from the 1940s & 1950s as well as the historical homes made in the 1930s
- V. Lead shot from hunted game meat used at Bufords
- VI. Imported Chapulines from Oaxaca, Mexico have been known to have elevated lead levels

The source of lead in Happytown most likely to affect the most people is the lead paint in the homes. The bulk of the homes and apartments in Happytown were built before the 1978 ban on lead paint in homes. All of these older homes were built before 1950. This means the percentage of lead in the paint could be upwards of 50%. These homes represent a chronic exposure to lead for a large portion of the community. Before 1978, lead paint was used both on the interior and the exterior of the home meaning even the yards surrounding the home present a risk for continuous lead exposure.

Community Characteristics and Practices that Impact Lead Exposure:

- I. The community has a high level of civic pride, leading to the practices of Do It Yourself home renovations and garden/yard upkeep. This upkeep is happening in homes where lead likely contaminates both the interior and exterior of the home, including the surrounding soil. The behaviors of home upkeep are not likely to change, so the emphasis of any education program to address this particular practice will have to include awareness and safety messaging. Partnering with the already established "Renovate it yourself" class should be of high importance to reaching this ground because it is well
- II. The community is very welcoming and values inclusivity. There are many different races, ethnicities, religions, age groups, and economic statuses, within the community. This diversity means English is not the first language of many of the residents of Happytown. Because of this inclusive nature, there are two festivals each year to promote the harmony of this diversity. These festivals are a great way to promote the welcoming nature of the community. However, they are also points where lead exposure can be presented to children en masse through the popular face paint and imported toys and necklaces. Messaging for this type of event will have to be inclusive of the various languages spoken and sensitive to the cultures present.
- III. The median household income of Happytown is lower than the national median. While there are plenty of residents above that median household income line, a larger portion of residents in Happytown make even less than the median household income. Income disparity will increase the likelihood of lead exposure and may limit the ability to rectify the exposure. Messaging for this group needs to include resources that help alleviate the problem without imposing further economic disparity.

Recommended Communication And Program Strategies:

Cultural factors are important for determining the types of messaging that will be suitable for an individual or cultural group. Culture determines who they trust and where they will seek out

information and how they determine personal risk. Cultural factors need to be considered while creating messaging and planning interventions.

I. Planning Stage & Community Partnerships:

- During the planning stages of the education program a community town hall meeting should be organized in order to create a partnership with the community residents.
- Happytown Health Dept. should create organizational partnerships with local schools, businesses, houses of worship, community organizations.
 - Community organizations partnered with should include Festival Planning Committees, Buckshot Buddies, and the Renovate it Yourself educators.
- Focus groups should be utilized to test messaging and educational materials before being widely disseminated.

II. Messaging:

- Educational materials should be created in the multiple languages spoken throughout Happytown to meet the needs of residents whose preferred language is not English or those with low English proficiency.
- Messaging should include web links and phone numbers to locate pertinent resources which include:
 - Certified lead-based paint risk assessors and removal contractors
 - Free blood lead level testing community health sites
 - Programs to aid low income families in lead testing and removal
- Materials should be created with language at or below an 8th grade reading level with appropriate graphics.

III. Implementation/Dissemination:

- For older residents messaging will be disseminated in newspapers and local tv news stations.
- Ad space should be purchased in local church and house of worship bulletins
- For younger residents graphics with linked resources should be created for the Happytown social media pages such as twitter and Facebook.
- Health Dept. in partnership with the Festival planning committee will test all materials, foods and giveaways for lead prior to the start of the festival, and with enough time to find appropriate replacements
- The Health Dept. should run a booth at New Residents Day Carnival and Happytown Fun Fair to disseminate the various pamphlets and materials. Volunteers from the community will be paired with health dept. staff to man the booth to increase both comfort with the materials as well as increasing the likelihood of fair goer interaction.
- Health Dept. lead poison prevention education should be included with quarterly “Renovate it Yourself” classes to help with awareness of risk, and lead poisoning prevention strategies targeting the civic pride minded residents.
- Pamphlets should be disseminated to the “Buckshot Buddies” hunting group to promote the usage of lead free hunting ammunition to lower the risks not only of the families of residents who hunt, but also the residents who dine at Buford’s Restaurant.

IV. Evaluation:

- Surveys should be utilized via phone and mailed to residents to determine the success of materials dissemination and how much of the target populations actually encountered the program, and if there are improvements that could be made.

