Practice Lab: The Integrated Lead Poisoning Prevention Assignment

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Happy Town, USA is advertised as a picture-perfect quaint town to move with all the best to offer such as affordable housing, great schools, restaurants, and community driven activities. Behind the mask of the idealistic town, however, there is risk of exposure to a silent but deadly predator. That predator being lead exposure. Lead exposure comes with risks and can cause health concerns for individuals who are exposed particularly children. Happy Town poses a multitude of risks to lead exposure. Firstly, homes built before 1986 are more likely to have lead pipes and before 1950 majority of homes were painted with lead-based paint on both the interior and exterior. Happy Town has many apartments built in the 1940s and 1950s making them at risk for these exposures seeing as people spend the most time in their homes. Secondly, families of higher income in Happy Town have begun to renovate historic houses including replacing window frames, removing paint and repainting. If this is not completed with lead-safe certified practice risk is posed to those present as well as potentially in the future as paint chips and dust are missed. Another exposure risk identified in the community is the venison sold at Buford’s restaurant. Unfortunately, the weapon of choice was buck shots which is often made from lead risking contamination into the meat that is consumed. An additional food risk posed to the community involving lead is at Arturo’s Place where they sell chapulines imported from Mexico. Studies have shown that chapulines specifically from Oaxaca, Mexico may contain as much as 2,300 micrograms of lead per gram of product. Another noted source is the secondhand toys that are handed out to children of the town at the annual fun fair. These toys have the risk of being painted using lead paint or lead within the plastic of the toy. Lead was often used in plastic toys as well as lead dust can collect on toys that have been sitting for long periods of time in contaminated areas. The last risk that is outwardly obvious for this community is the Tiro eye cosmetic used for face painting at the new resident day event. This face makeup is traditionally made of lead and placed on the eyes. The most people will likely be affected by the lead exposure in the houses in Happy Town as majority of them have lead paint and this is where people tend to spend most of their time on a day-to-day basis.

It is important to take cultural beliefs, values, and practices into consideration when providing educational programs to this community. For example, the concern of lead in the Tiro amongst members of the town. Tiro is traditionally used and thought to improve attractiveness and ward off the evil eye which is the believed to be given to someone based on dislike and can bring on misfortune to who it is given to. Sensitivity to these beliefs will be important when developing an educational program plan. The way the risks and potential solutions are viewed may not be the same as those advocating for public health awareness. Cultural competence in designing the program will be crucial in determining appropriate response. An additional group of the community that would be particularly more at risk for lead exposure would be those living in the low-cost apartments in town. Though these low-cost apartments are great proper replacement of lead paint and pipes is crucial to reduce the amount of exposure to these individuals. Lastly, cultural food such as the sweet chapulines from Mexico and are authentic and native to the area of Oaxaca. Taking this into account when addressing food concerns will be necessary to be mindful and respectfully approached.

Not taking cultural factors into consideration when planning an educational program may lead to communication resistance from community members. The three target audiences for this community would be parents, renovators, and restaurant owners. With children being such a large target audience regarding exposure risk parents will be top priority to communicate with. Educational presentations and information given at local pediatrician offices as well as school meetings will be a prominent location to hold these sessions as most individuals will have children. Children are more likely than adults to inhale dust contaminated by lead as they are closer to the ground. Additionally, they are more likely to place items in their mouth. Parents need to be educated on the long term affects this can have as the lead levels will build in their body and can stay stored for extended periods of time. Renovators will be targeted as an audience of concern and new protocols will need to be put in place requiring them to contract official lead-safe certified individuals to properly investigate the house as well as inspectors to confirm that traces of lead are not found. Lastly, restaurant owners need to be educated on the possibility and dangers of lead contamination in foods and how to properly prevent this from happening as they feed members of the community. Ultimately through transparency and planning education can and will be provided to protect the health and safety of those in Happy Town so that it can live up to the potential it deserves.