

Practice Lab: The Integrated Lead Poisoning Prevention Assignment

1. Identify and briefly explain *five* potential lead sources that could affect people's health in the mock community. Which one is likely to affect the most people? Why?
 1. The apartments from the 1940s and 1950s due to preceding 1950, lead-based paint was used on the inside and outside of most homes.
 2. Single-family homes from the 1930s since again, prior to 1950, lead-based paint was used on the inside and outside of most homes.
 3. The "Renovate it yourself" class for community members to renovate their historic homes can be extremely dangerous. Today, deteriorating lead-based paint is a substantial source of lead exposure and lead poisoning in the United States. So, while many of the historic homes or apartments in Happy Town may need renovating, repairs, or painting due to their age, a contractor that is Lead-Safe Certified should be doing the work due to potential concern of inhaling lead, spreading lead, or not removing it safely.
 4. The beads and second-hand 18-piece musical instrument set and set of rubber critter toys that kids attending this year's Fun Fair event are receiving can be a potential lead poisoning hazard. The U.S. consumer product safety commission alerts patrons of any health hazard recall and the toys should be checked to make sure there is no recalls due to them being second hand, where they were manufactured, and what they are made from.
 5. The traditional Tiro eye cosmetic used at new residents' day on children is shown to contain lead and is a potential risk for exposing children to lead poisoning.
 - Having apartments and single-family homes that are built before the 1950s is likely to affect the most people. Dust on the floor every time a picture is hung on the wall, or a paint chip falling on the floor when a window closes in these older dwellings can cause serious health effects to children especially, but also adults. Per the CDC, lead poisoning is the number one preventable environmental cause of illness in children. Most children get lead poisoning from dust on their hands and toys from living or staying in older homes that have lead paint.
 - Lead is particularly dangerous to young children due to their growing bodies absorbing more than adults, their developing brains and nervous systems are more sensitive to lead, they frequently put their hands and foreign objects into their mouth, and being closer to the ground due to their height makes them more susceptible to breathe in lead-contaminated dust and soil.
 - If lead is absorbed in a child's body it may be stored for long periods in mineralizing tissues such as the teeth and bones, then released into the bloodstream in times of calcium stress or deficiency.
 - There are numerous health effects of lead exposure to children, including damage to the brain and nervous system, slowed growth and development, learning behavior and problems, hearing and speech problems, anemia, persistent fatigue, irritability, loss of appetite, gastrointestinal issues, or insomnia.
2. Identify and briefly discuss *three* conditions/characteristics/practices/activities in the mock community – including cultural beliefs, values and practices – that could affect people's risk of lead poisoning? How are these factors important in how a lead poisoning education program is designed?

1. The traditional Tiro eye cosmetic is a potential risk for exposing children to lead poisoning. Explaining to the community that it contains lead, the negative effects of lead on children, and giving a safe non-toxic option for children to use as an eye cosmetic should be implemented in the lead poisoning education program.
 2. The “Renovate it yourself” class for community members to renovate their historic homes can be extremely dangerous. Explaining to community members in the lead poisoning education program that today, deteriorating lead-based paint is a substantial source of lead exposure and lead poisoning in the United States is important. So, while many of the historic homes or apartments in Happy Town may need renovating, repairs, or painting due to their age, a contractor that is Lead-Safe Certified should be doing the work due to potential concern of inhaling lead, spreading lead, or not removing it safely. The education program could instead recommend a class to create a community garden. This would incorporate diverse fruits, vegetables, and herbs Happy Town neighbors would contribute and allow them to gain more knowledge about each other’s culture.
 3. The apartments and single-family homes that were built before the 1950s can affect the community’s risk of lead poisoning. Explaining to the community the dangers of lead, how to avoid contamination, and how to practice preventable measures when living in these dwellings is critical.
3. Why are cultural factors in the mock community important for effectively communicating lead poisoning information? Using what you know about this community and its situation, recommend specific risk communication strategies for reaching *three* different audiences and sectors in the mock community.
- Cultural factors are important to know how to communicate about situations with a diverse community. Cultural differences affect an individual’s health depending on what risk that person may encounter, how much risk, how that risk is perceived, how the potential solutions are viewed, what resources are available who is seen as credible, and communication.
1. Adults – Giving easy to read pamphlets with graphics explaining ways to prevent lead exposure to children. These should be given to all adults, with or without children, so that the risk for lead contamination is reduced. Stress washing hands and removing shoes when coming in from outside. Discussing the importance of well-balanced meals for children. Cleaning floors, windowsills, and baseboards weekly to remove any dust particles or paint chips. Washing children’s toys and bottles frequently. Give information about the local health government they can always contact with any questions.
 2. Seniors – Using the radio, newspaper, or informational flyers is the best way to communicate with this age group. Making sure this audience has a local health government that they know and trust with contact information is important. Using graphs and images to communicate important lead prevention strategies is helpful. Using simple words and/or phrases to communicate is helpful with this age group.
 3. New immigrants/residents – A “Welcome-to-Happy-Town!” packet should be provided to all new residents in a welcome basket. Since the town is very diverse, providing health related information should be available in up to 15 languages with simple, easy to follow wording and graphics. Information about the local health government in Happy Town and how to contact them should be included, along with a good chunk of information about lead poisoning and how to be a smart citizen by preventing possible contamination or spreading. Having people from the local health government at new residents’ day will help put a face to the community health officials and welcome new residents.