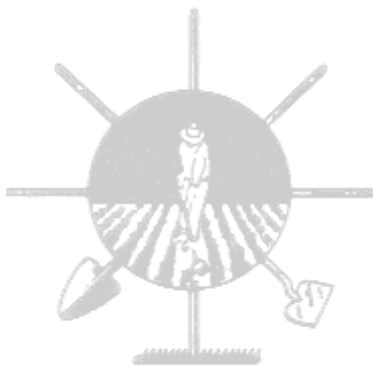


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Project Clean Environment for Healthy Kids

PREVENTING CHILDHOOD LEAD POISONING

*A training curriculum for lay health
educators*



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Activity	Methodology	Materials Needed	Time
Introduction <i>Complete Initial Evaluation, Review the workshop objectives</i>	Group Discussion	<ul style="list-style-type: none"> • Lead Pre-test • Handout 1: Workshop Objectives 	20 mins
What is Lead <i>Define lead and Review uses of lead throughout history</i>	Brain Storm and Group Discussion		10 mins
Common Sources of Lead Exposure <i>Review common sources of lead exposure</i>	Small Group Activity	<ul style="list-style-type: none"> • Pictures of lead sources • Pamphlet: How to Reduce Lead in Your Home • Pamphlet: Protect Your Family from Lead in Your Home 	30 mins
Routes of Exposure <i>Discuss the common routes of entry into the body</i>	Brain Storm and Group Discussion	<ul style="list-style-type: none"> • Flip Chart and Markers 	15 mins
People at Risk of Lead Poisoning <i>Discuss why children, pregnant women and other adults are at risk of lead poisoning</i>	Brain Storm and Group Discussion	<ul style="list-style-type: none"> • Flip Chart and Markers • Handout 2: Who is at High Risk for Lead Poisoning? 	30 mins
Health Effects of Lead Poisoning <i>Discuss the common signs and symptoms of lead poisoning, Review the health effects of lead</i>	Brain Storm and Group Discussion	<ul style="list-style-type: none"> • Flip Chart and Markers 	15 mins
Testing for Lead <i>Discuss when to test children for lead poisoning</i>	Brain Storm and Group Discussion	<ul style="list-style-type: none"> • Flip Chart and Markers 	15 mins
Preventing Exposure to Lead <i>Review ways to prevent or minimize lead exposure</i>	Small Group Activity	<ul style="list-style-type: none"> • Pictures of lead sources • Handout 3: Good Nutrition 	45 mins
Promoting Lead Education In the Community <i>Practice promoting lead education in the community</i>	Directed Role Play		45 mins
Conclusion and Evaluation <i>Complete the post-tests and evaluation forms</i>	Group Discussion	<ul style="list-style-type: none"> • List of Community Resources • Lead Post-test • Workshop Evaluation 	15 mins

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PREVENTING CHILDHOOD LEAD POISONING

(Total time: about 4 1/2 hours)

Workshop Objectives

- Define lead
- Review the common sources of lead exposure
- Discuss the routes of entry into the body
- Review the symptoms of lead poisoning
- Understand the short-term and long-term health effects of lead poisoning
- Discuss the effects of lead exposure on children, adults and pregnant women
- Review ways to prevent or minimize lead exposure

I. Introduction

Pre-test

Time: 15 minutes

Materials: Lead Pre-tests

Distribute the pre-test to the participants before starting the workshop. Explain that this is a questionnaire to help the facilitator make sure that she is presenting the information effectively and doing her job well. Ask participants to answer the questions without consulting with anyone else. If anyone has questions or needs help to answer the questions, ask the facilitator. When all have finished, collect the pre-tests and explain that you will go over the correct answers at the end of the workshop.

Workshop Objectives

Time: 5 minutes

Materials: Handout 1 (Lead Workshop Objectives)

Distribute Handout 1: Workshop Objectives. Review the objectives with the group. Ask them if there are any questions or objectives that they would like to cover that are not included on the handout. Tell the group that throughout the workshop they should feel free to ask questions whenever there is anything they don't understand, and that by the end of the day, you will try to answer all their questions as best you can.

II. What is Lead?

Questions for discussion

- ? What is lead?
- ? How has it been used?

Explain to the group that lead is a metal that has been used in paint, gasoline, water pipes, pottery, crystal and other places. But lead is a poison, especially to infants and young children. Because of the serious harm it can cause to people, it is not used as much anymore, but traces of lead can still be found in our air, water, soil, and many of our homes. The good news is that, over the past ten years, lead poisoning rates in children and adults have gone down. The bad news is that many children -- especially those living in poor neighborhoods, near factories, and close to major highways -- still end up with traces of lead in their brains, bones, muscles, and central nervous systems. In the United States, lead is one of the most serious environmental health hazards affecting children. That is why we are focusing on lead today.

III. Common Sources of Lead Exposure

Explain to the participants that in the United States, lead was used in paint and gasoline and continues to be used in a host of products such as batteries, construction materials, etc. Even though the use of lead in paint and gasoline in the U.S. has ended, some lead remains in our environment. For example, the interiors of many homes were painted with lead-based paint before such paint was banned in 1978. But lead is still in our environment because many people live in homes that were built before 1978. Let's discuss how we can still be exposed to lead from paint and other sources.

Sources of Lead

Identifying the Sources

Time: 30 minutes

Materials: Pictures of lead sources, EPA Booklet: *Protect Your Family from Lead in Your Home* or other similar resource

Before the workshop, prepare pictures of the following sources of lead. These could be drawings, photographs, magazine cut-outs, or even small toys.

Divide the participants into small groups and give each group about 4 or 5 of the pictures of common lead sources. Give them 5 minutes to discuss among their groups why the items might contain



lead. For example, if there is a picture of a car, then they would explain that most car batteries contain lead acid and that gasoline used to contain lead. Have each group prepare a 5-minute presentation to explain their conclusions to the rest of the participants. Make sure that every person in each group plays a part in the presentation.

Paint

The most common source of lead exposure in and around the home is lead-based paint. Lead was added to paint because it made paint easy to apply and scrub clean, but a federal law banned its use in paint in the U.S. in 1978. Today, over 80 percent of all homes built before 1978 in the U.S. still contain lead-based paint. The older the house, the more likely it is to have lead-based paint and to have a greater amount of lead in the paint. Wood surfaces with high-gloss paint, such as windows, baseboards, trim, doors, kitchen and bathroom walls, and outside porches, are the surfaces most likely to have been painted with lead-based paint. Outside surfaces are even more likely than inside surfaces to contain lead-based paint, since paint used outside often had a higher lead content than did paint used inside. Lead paint may still be used on houses and toys in some developing countries.

Children are at high risk of lead poisoning from eating paint that has chipped, peeled or cracked. They may also absorb lead from paint by eating or breathing in household dust containing lead. Lead dust can be created even if the paint is not chipping or peeling. Lead dust is created by friction on surfaces painted with lead-based paint, such as windows, doors, floors and stairs. Children can swallow lead if they crawl or play on contaminated floors and soil and then put their fingers, clothes, or toys in their mouths, or if they eat without first washing their hands. Children can also absorb lead by chewing on surfaces painted with lead paint, such as window sills, molding, knobs and handles.

Automobiles

Gas: For many years, gasoline contained high amounts of lead. Lead has been removed from gasoline in the U.S. and Mexico, but years of contaminated exhaust fumes have created lead deposits in soil, especially near highways and busy roads.

Lead-acid batteries: Most cars used in the US use batteries that contain lead. An average battery contains about 11 kg of lead. When these batteries are not properly disposed, they can leak lead into the environment. Most states require that these batteries be recycled, but some lead is released into the environment in the recycling process.

Other parts: The vehicle coating, wheel balancing weights in tires, electronic components, and other parts of the car interior also contain lead.

Dust and Soil

Soil is easily contaminated by paint chips containing lead and airborne lead particles from car exhaust pipes and industrial plants. Soils of lands used as orchards in the 1940s may also be contaminated with lead from pesticides used during that time. Dust inside homes may contain lead particles from lead-based paint or from soil tracked into the house from outside. This dust eventually makes its way onto pets, toys, carpets and floors, furniture, bedding, etc.

Drinking Water

Drinking water can become contaminated with lead as it passes through lead pipes or pipes joined with lead solder. Lead-lined tanks or containers can also contaminate water stored in them. Lead is no longer used in drinking water pipes or solder, but these pipes still exist in many older homes.

Food containers

Food containers that may contain lead include ceramic pots or water jugs with a lead-based glaze, cans with lead-soldered seams, candy wrappers decorated with leaded paint, and leaded crystal. Foods, especially acidic foods like beans, tomatoes and fruits that are cooked, served or stored in these containers can soak up lead. Cans with lead solder have a silver-gray metallic smear of solder along their seam and small dents along the seam. Lead-free cans have a thin, blue-black paint line along the seam or no seam at all. Such cans are rare in the US, but have been found in cans from Mexico. Lead has been found in ink on the plastic wrapping of tamarind candy and lollipops from Mexico (especially the Dulmex "Bolirindo" brand). Other tamarind and tejocote fruit candy products are packaged in stoneware or terra cotta ceramic jars that contain lead-based glaze. Lead on these jars and wrappers may leach onto the candy, and children might also ingest lead when they put the jars or wrappers in their mouths. Water or other drinks served or stored in leaded crystal will also absorb lead.

Imported foods

In Mexico, spices and other foods are sometimes dried using motors that run on leaded gasoline. Some people have been exposed to high amounts of lead by eating dried chilies or other food items imported from Mexico or India. Candies and snacks imported from Mexico sometimes contain powdered dried chilies.



Home Remedies

Some home remedies from Mexico contain high levels of lead. Examples include *greta* and *azarcon*, which are orange and yellow powders given to babies for indigestion or *empacho*. Other common names for these products are *liga*, *Maria Luisa*, *alarcon*, *coral* and *rueda*. These products are very dangerous if swallowed and should never be used.

Costume jewelry

Lead has been found in cheap metal jewelry coated with enamel. Children can eat and breath the lead by chewing or sucking on this jewelry.

Televisions and computers

Glass from computer monitors and cathode ray televisions contain lead, as do some computer circuit boards. Televisions or computer monitors that are intact do not pose a danger of lead exposure, but if they are broken, children can ingest lead particles. If these items are improperly discarded the lead can contaminated soil and ground water.

Industrial Pollution

Communities near industrial plants and mining activities that release lead (or released lead in the past) may have high levels of lead in the soil. These industrial include lead smelting or refining plants, lead mining, auto repair, battery recycling or manufacturing, glass and plastic manufacturing, and shipbuilding.

Work exposures

Some jobs expose adults to large amounts of lead. Auto mechanics or others who work recycling automotive lead-acid batteries have a high rate of exposure to lead. Other high-risk jobs include lead removal workers, carpenters, painters, plumbers and pipe fitters, and demolition workers. Adults who are exposed to lead through the workplace may also contaminate their cars and homes with lead dust that is on their clothes, shoes, hair, or skin. These residues could poison their families. There is an even greater risk of lead exposure to children if these jobs are performed at home and precautions are not taken to prevent contamination to children and other family members. For example, a person may work as an auto mechanic out of his own home garage and have spent car batteries sitting around the garage, yard or house.

When the group has finished this exercise, hand out pamphlet "How to Reduce Lead in Your Home" (*Como Reducir el Plomo en su Casa*) and EPA booklet "Protect Your Family from Lead in Your Home" (*Proteja a Su Familia del Plomo en Su Casa*). Look over pages 5 (Where Lead Paint is Likely to be a Hazard), and 10 (Other

Sources of Lead Exposure) of the EPA booklet. Ask the participants if they have any questions.

Ask the participants if they know how they could find out whether there is lead in their homes. Tell the group that home test kits for lead are available at hardware and other stores, if they want to test for themselves. However, make sure they understand that such tests are not always accurate. There are also trained professionals who can check your home for lead hazards. Sometimes local health departments test homes for lead free of charge.

IV. Routes of Exposure?

Group Discussion

Time: 15 minutes

Materials: Flip chart and markers

? How can lead enter our bodies?

Swallowing lead

The main way that lead gets into the body is by swallowing it. Toddlers are one age group at great risk because they are always crawling on the floor and putting everything into their mouths as part their normal activities. Exposure may occur in the following ways:

- playing where lead-contaminated dust or soil is present, touching it, then putting their fingers in their mouths;
- chewing on toys contaminated with lead dust; and
- eating flaking paint chips from peeling lead-based paint.

Paint chips with lead actually taste sweet. People can also be exposed to lead by eating or drinking.

? How else can adults and children eat or drink substances containing lead?

- Taking folk remedies that contain lead. Examples: azarcon and greta, common remedies for colic, contain a very large amount of lead;
- Eating food or drinking water that has been stored in pottery containing lead glaze
- Swallowing dust from peeling or damaged lead-based paint
- Drinking water that has traveled through lead pipes



Breathing Lead

Lead also enters the body by breathing (breathing it in). When lead is in the air, people breathe tiny particles into their lungs. Lead dust particles are easily breathed in. The lead particles travel quickly from the lungs and are absorbed into the bloodstream.

V. Who is at Risk for Lead Poisoning?

Group Discussion

Time: 30 minutes

Materials: Flip chart, markers, Handout 2

- ? Who can get lead poisoning?
 - People of any age, race, geographic region, or income level can get lead poisoning. Anyone who is exposed to lead and who eats or breathes it in may develop an elevated blood-lead level. But lead is an especially big problem for children. Poor children, urban children and children living in older houses with peeling lead-based paint are at the highest risk.

Children

- ? Why might children be more vulnerable to lead than adults?
 - Children are at a greater risk from exposure to lead than adults for several reasons, including:
 - Their bodies and nervous systems are still developing
 - Frequent hand-to-mouth activity brings them into greater contact with lead in the environment, especially in lead dust and soil
 - They absorb up to 50% of the lead they take in, and retain a larger proportion of the lead that enters their bodies.

In the United States about 4% of children under the age of six – about one million children -- have high blood-lead levels. Blood lead levels are highest among one to two-year olds and among Mexican-American and African-American children. While blood lead levels remain high, the incidence of lead poisoning has actually gone down in recent years. The de-leadings of gasoline and food containers in the United States was successful in reducing average blood-lead levels by 70 percent between 1970 and 1990.

- ? Who else might be at a greater risk from exposure to lead?
 - Pregnant women and adults who work around lead

Pregnant Women

When a woman is pregnant, her body takes nutrients both for herself and the new baby. If she is exposed to lead, her body will absorb lead very quickly. A pregnant woman, like children, absorbs 50% of the lead that she takes in, while a non-pregnant woman absorbs only 10%. This can affect the unborn fetus as well as the mother-to-be.

Exposures During Work and Play

As mentioned earlier, some adults are exposed to large amounts of lead because of where they work or what they do for pleasure. In lead-related industries, workers may inhale lead dust and fumes, and may also eat, drink, and smoke in or near contaminated areas. If showers and changes of clothing are not provided, they can bring lead dust home on their skin, shoes, and clothing, and expose their families to the same hazards.

? Who might be exposed to lead at work?

- Auto mechanics
- Lead removal workers
- Steel welders and cutters
- Carpenters
- Painters
- Plumbers and pipe fitters
- Demolition workers
- Cable splicers
- Ceramic glaze manufacturers
- Potters

? What hobbies might expose us to lead?

- Home remodeling
- Glazed pottery making
- Target shooting at firing ranges
- Refinishing furniture
- Painting (some art paints have lead pigments)
- Making lead fishing sinkers or lures
- Stained-glass window making

Distribute Handout 2: Who is at High Risk for Lead Poisoning?



VI. Health Effects of Lead Poisoning

Group Discussion

Time: 15 minutes

Materials: Flip chart and markers

Signs and Symptoms of Lead Poisoning

- ? Have you ever known anyone suffering from lead poisoning? How did they act?
- In most cases, there are no visible symptoms of lead poisoning. Even children who seem healthy can have high levels of lead in their blood. Exposure to a small amount of lead, day after day, can make you sick over a long period of time.

The health effects of lead poisoning are often difficult to recognize. A child with lead poisoning may seem healthy while damage is being done in their bodies. Signs and symptoms don't develop until the condition is serious and sometimes the signs of lead poisoning come and go. The signs and symptoms for lead poisoning can easily be mistaken for a cold or the flu.

? What are some of these symptoms?

- Tiredness
- Sleep problems
- Dizziness
- Irritability
- Nervousness
- Hyperactivity (children)
- Headaches
- Difficulty concentrating
- Depression
- Weakness
- Wrist or foot drop
- Joint or muscle pain
- Vomiting
- Loss of appetite
- Constipation
- Metal taste in the mouth
- Problems having children

Long-term Health Effects

? What are the health effects of lead poisoning in children?

- If not detected early, children with high levels of lead in their bodies can suffer from
 - Damage to the brain and nervous system
 - Behavior problems (such as hyperactivity)
 - Learning difficulties
 - Slowed growth
 - Hearing problems
 - Headaches

Lead poisoning in children has effects that can last a lifetime. It can cause children to be less smart than they could have been. Studies have shown that lead-poisoned children have higher school drop out rates and more behavioral problems than non-poisoned children.

? What are the health effects of lead poisoning in adults?

- Difficulties during pregnancy and premature births
- Infertility and still-births
- High blood pressure
- Problems with digestion
- Nerve disorders
- Memory and concentration problems
- Muscle and joint pain

Pregnant Women and Fetuses

Very small amounts of lead can hurt the fetus. The fetus is developing rapidly. Lead can cause brain damage and even death to the fetus. It can cause miscarriages and premature births. The woman is also at risk for lead poisoning since she absorbs 50% of the lead that enters her body. And since the fetus makes demands upon the calcium in the mother's bone structure, pregnancy can have the effect of discharging lead that was stored in her bones from prior environmental exposures.

Lead poisoning is also very dangerous to the female reproductive system. It can make women less fertile. It causes abnormal menstrual cycles and affects menopause.

VII. Testing for Lead

Group Discussion

Time: 15 minutes

Materials: Flip chart and markers



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- ? How can we know if a child has a high level of lead in her body?
 - The easiest way to know if a child is being exposed to too much lead is to get a blood test.

 - ? How can you know if there is a high level of lead in your home?
 - The best way to find out if there are high levels of lead in your home is to test your home for lead.

A blood test is one of the only ways to find out how much lead is in a child's blood. Blood can easily be tested at the child's next medical check-up. The amount of lead in the body is called the blood lead level. The blood test measures the amount of lead in a person's blood. It shows how much lead the person has been exposed to in the last 6 to 8 weeks. Blood lead levels are measured in micrograms per deciliter of blood (ug/dl). A microgram is a measure of weight. Imagine half of a penny broken up into 1 million pieces - each one of the pieces is a microgram. The current acceptable lead level in the blood is 10 ug/dl. However, recent studies have shown that even lower levels of lead in the blood may cause problems.

Because the test shows the exposure in the previous two months, it will miss a large one-time exposure that occurred more than 2 months earlier. For instance, exposure to lead from an herbal remedy such as *azarcon* or *greta* (which may be used for colic in a 3-month old) would not show-up if the child were tested at one year of age.

All one- and two-year olds should be tested for lead. The Federal government requires testing at the ages of 12 and 24 months for all children enrolled in Medicaid, or for any child between 3 and 6 years who has no record of prior screening. The need for testing and how often to repeat it depends on previous blood-lead test results and whether the child is at high or low risk for exposure to lead.

Generally, the most important treatment for lead poisoning is to stop the exposure. If your child has elevated blood lead levels the best approach is to minimize exposure to lead by removing the lead from the environment. This will help to ensure a decline in blood lead levels.

When blood lead levels are very high, doctors may prescribe medications to lower blood lead levels in a treatment known as

chelation therapy. Chelation therapy is a treatment for lead poisoning, not a cure. The longer a person is exposed to lead, the greater the likelihood that damage to health will result. Some effects of lead poisoning are permanent and some are not. Therefore, it is extremely important to take steps to prevent any exposure to lead and to test a child's blood to determine if any poisoning has already occurred.

VIII. Preventing Exposure to Lead

Group Discussion

Time: 30 minutes

Materials: Pictures of lead sources

Have the participants reassemble into their small groups. They will discuss the same lead sources as before, but this time, they will discuss what simple steps they could take to prevent exposure to lead from those sources. Have them prepare a presentation to the rest of the participants. Here are some ideas of prevention techniques.

Paint and dust

- If you rent, notify your landlord of peeling or chipping paint.
- Clean up paint chips immediately. Painting over the lead-based paint with non-lead-based paint does not eliminate the danger and removing old lead paint by sanding, scraping or burning can actually increase the hazard to your family by spreading poisonous lead dust around the house. To permanently remove a lead hazard, it must be treated by a professional trained in lead removal.
- Keep children from chewing on window sills or other painted surfaces.

Soil and dust

- Wash children's hands often, especially before they eat and before nap time and bed time.
- Keep play areas clean. Wash bottles, pacifiers, toys, and stuffed animals regularly.
- Clean floors, window frames, window sills, and other surfaces weekly. Use a mop or sponge with warm water and a detergent (like Spic N Span, dish or dishwasher detergent, or laundry soap). Anti-bacterial (like Lysol, Pinesol, bleach or ammonia) are not detergents. Use paper towels or set aside a sponge used only for lead cleaning.
- Clean or remove shoes before entering your home to avoid tracking in lead from soil.



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- Do not let children play in bare soil. Cover bare soil with grass, plants, or gravel.

Automobiles

- Lead emitted from car tailpipes before the 1980s is still present in soil, especially in areas of heavy traffic. Do not let children play in bare soil near busy roads.
- Do not plant vegetable gardens in soil that could be contaminated.
- Don't leave old car batteries lying around the house or yard. Take old batteries to a car parts store or car garage, where they will be disposed of appropriately. Or ask your local government recycling or waste disposal department how to dispose of them.

Drinking water

- Use only cold water for drinking, cooking, and making baby formula. Boiling will not remove lead from water.
- If water has been sitting in pipes overnight or for several hours, let the water run for about a minute to flush lead out of the pipes. The water has run long enough when it changes temperature – usually gets colder.

Food containers

- Do not cook serve, or store food in ceramics containing lead.
- Do not eat food in cans with lead-soldered seams. Lead-soldered seams are wide and folded, and have dents or solder smears. If there is a thin blue or black line on the seam, it has no lead and is safe to use. (Bring in a lead-free can to show.)
- Do not buy tamarind candy from Mexico or candy in brightly colored ceramic pots.

Home remedies

- Do not use *greta* or *azarcon*. Do not use any home remedy unless you are sure what is in it.

Costume jewelry

- Do not buy metal jewelry for small children.
- Do not allow children to suck or chew on metal jewelry.

Televisions and computers

- Donate these items to organizations that will reuse or recycle them
- Do not discard them in the trash. Ask your local government recycling or waste disposal department how to dispose of them.

Work Exposures

- Wear protective equipment and clothing on the job. If you must take work clothes or shoes home, tie them up in a plastic bag.
- Try to bathe and change clothes before touching your children. If you can't shower at work, wash your hands, arms, face and neck completely before leaving.
- Change or remove shoes before entering your home to avoid tracking in lead.
- Clean washable work clothes separately from other clothing. Run the rinse cycle once before using the washer again.
- Don't leave dangerous items, like car batteries, around the house. Ask your local government recycling or waste disposal department how to dispose of them.

Look at EPA booklet pages 7 (What You Can Do Now to Protect Your Family) and 8 (How to Significantly Reduce Lead Hazards).

IX. Diet and Nutrition

Group Discussion

Time: 15 minutes

Materials: Flip chart, markers, Handout 3

- ? What foods should children eat to reduce their absorption of lead?
 - What a child eats can't make the lead leave his or her body any faster, but a healthy diet will help prevent any more lead from being absorbed by his or her body. Make sure a child eats regularly and has healthy meals with plenty of iron and calcium.

Eating regular, healthy meals with plenty of iron and calcium can help protect a child against lead poisoning because (1) more lead is absorbed into the body on an empty stomach and (2) more lead is absorbed when iron and calcium are lacking from the diet. Foods rich in Vitamin C can help the body to best use the calcium and iron it takes in. Cut back on high fat foods, such as fried foods and butter. Fat can increase lead absorption.

- ? What foods are high in calcium?
 - Milk – low-fat or nonfat milk and foods made with milk (such as soups, milk-based ice cream, and puddings)
 - Yogurt – low-fat yogurt
 - Cheese – pizza, macaroni and cheese
 - Fish/seafood – sardines, trout, cod, mackerel, tuna, salmon, crab, lobster



- Vegetables – turnip tops, cabbage, collards, kale, broccoli, spinach, beets
- Tofu
- ? What foods are high in iron?
 - Fruits – oranges, pineapples, raisins, prunes, dates and other dried fruits
 - Beans and nuts – baked beans, almonds, and other nuts
 - Meat – lean beef, pork, and chicken
 - Cereal – iron fortified, either hot or cold
 - Fish/seafood – clams, mussels, oysters, tuna, trout, cod,
 - Eggs, liver, and wheat germ
 - Vegetables -- leafy greens

Distribute Handout 3: Good Nutrition.

X. Promoting Lead Education in the Community

Role plays

Time: 45 minutes

Divide participants into groups of four. Give each group about 10 minutes to prepare one of the following role plays. Remind the participants that the most effective way to educate the community is to engage individuals in a dialogue. Encourage participants to ask many questions of the community member during their roles as *promotores* to facilitate this exchange of ideas. Note that simply lecturing to the community members is likely to turn them off. Tell them that they are welcome to use any of the materials and props that were used during the workshop. Visit each group as they are preparing to see if they have any questions. Have each group present their role play to the rest of the participants. After each group presents their role play, be sure to provide feed back. Ask the other participants to help you point out what was done well and what can be improved.

- *Promotores de salud* visit the home of a woman who is pregnant and also the mother of a toddler and explain to her some of the ways her children might be exposed to lead at home.
- *Promotores de salud* visit a farmworker couple and explain how good nutrition is important to prevent lead poisoning for their children.
- *Promotores de salud* visit a family living in a rural area in a house with paint peeling off the interior walls. They discuss the

possible existence of lead in the paint because the house was built in the early 1970s.

- *Promotores de salud* visit the family of a car mechanic who often works on cars in front of his house. How can he protect himself and his family from lead poisoning?

XI. Conclusion and Evaluation

Time: 15 minutes

Materials: Lead Post-tests, Evaluation forms

Ask the group if there are any questions or comments. Distribute any materials that they will be giving to members of the community, including referral information to nearby health clinics, governmental agencies, legal services organizations and community-based organizations.

Distribute the post-test and workshop evaluation forms. Review the correct answers for the pre- and post-tests.

XII. Sources

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