# Environmental Public Health Program Overview

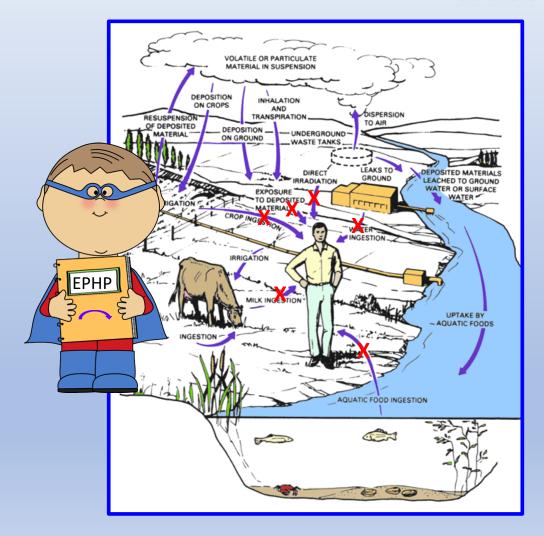
Stacey Cooper
Environmental Public Health Program
Alaska Section of Epidemiology





# **Environmental Public Health Program**

What We Do



## **Mission**

- Hazard and exposure evaluation
- Health assessment
- Health communication and education (Community engagement)
- Reduce or eliminate exposures

# Health Assessment

### **Letter Health Consultations**

- Most common form of assessment.
- Addresses a particular concern at a site.
- Often a concern brought to our attention by Dept. of Environmental Conservation.
- In letter form and relatively short.

### **Health Consultations**

- Done for a "certified" site like Superfund sites or from a citizen petition to ATSDR.
- May address multiple concerns in multiple media (e.g. soil, shellfish, air).
- Longer and in a particular format.
- Consultation is reviewed and "cleared" by ATSDR.

# **Health Assessment Examples**

- Salt Chuck Mine
- Klag Bay
- Vapor intrusion sites





Funded through a cooperative agreement with ATSDR. We work together to finalize these consultations.

# Alaska Blood Lead Surveillance Program

- Investigate high blood lead levels (BLLs).
- Attempt to identify exposure sources.
- Provide recommendations to prevent exposure.
- Provide education on lead, exposure sources, adverse health effects and exposure prevention.
- No amount of lead in the blood is safe, especially for children under 6 years old.

Adm	Childhood Lead Risk C		aire	
Instructions: 1. Ask the child's parent or guardian the following questions and mark their responses.  2. If guardian answers YES or Don't Know (D/K) to any question, test the child for lead as soon as possible.  Child's Name:  Date of Birth:  / / Age:				
2. Does your child live in or visit home 3. Does your child eat or chew on nor 4. Has anyone who lives in the same 5. Is your child a foreign adoptee, reft 6. Does your child eat wild game such 7. Does your child come in contact wit	is, day care centers or other buildings built before 19 is, day care centers or other buildings with recent rep is-food substances such as paint chips or dirt? home as your child previously had an elevated blood igee or has your child recently travelled internationally in as moose, caribou or waterfowl that has been shot or the a person whose job or hobby includes any of the for House construction or repair Battery manufacturing or repair Burning lead-painted wood Automotive repair shop or junk yard Going to a firing range or reloading bullets Radiator repairs	eairs or remodeling lead level? y? with lead bullets?		K NO
creams, spices, or foods? These in Cosmetics such as kohl, surr Imported or glazed pottery, in Traditional medicines such as Foods canned or packaged of For more information, please contact Environmental Public Health Progr	na, and sindor  nported candy, and imported nutritional pills or vitamin ayurvedic, greta, azarcon, alarcon, alkohl, bali goli, co utside the U.S.	ns	pay-loo-ah	and rueda
(907) 269-8000 dphepienvironmental@health.state	e.ak.us		Updated	5/28/2013

# **Lead Health Effects**

# Acute Exposure

## Short exposure to a high lead level can cause:

- Abdominal pain
- Constipation
- Tiredness
- Headaches
- Irritability

- Loss of appetite
- Memory loss
- Pain or tingling in the hands and/or feet
- Weakness

The lack of specificity of these symptoms may cause lead exposure to be overlooked

# **Lead Health Effects**

# Chronic Exposure In Children

#### Lead can cause:

- Damage to the brain
- Slow growth and development
- Learning and behavior problems
- Cause hearing and speech problems







- Lower IQ
- Decreased capacity to focus
- Underperformance at school



# **Lead Exposure Sources**

## **Occupational**

- Mining
- Construction
- Firing Ranges



## Non-occupational

- Lead shot and bullets
- Old paint debris (inside and outside)
- Drinking water (old houses)
- Firing Ranges (Adults & children)
- Fishing weights
- Folk remedies
- Mouthing old toys or household objects

# Choose Safe Places for Early Care and Education

**Purpose:** Ensure that early care and education (ECE) programs are located where chemical hazards have been considered, addressed, and ruled out or mitigated to best protect children's health.



# **Choose Safe Places**

Are you opening a new child care business?

Consider these environmental public health concerns.

#### CHILDREN NEED SAFE PLACES

#### Choose your location wisely when opening a child care business

You may meet all other licensing requirements and create a wonderful environment in which children can thrive, but if your child care facility is located where children and staff come into contact with harmful chemicals, the children in your care are not safe.

Selecting the right location for your child care business is essential to protect the health of children and the success of your business.

#### We're here to help! Choose Safe Places for Early Care and Education, an

Environmental Public Health program within the Alaska Department of Health and Social Services, helps ensure early care and education (ECE) programs are located safely away from environmental contamination.

#### Keep in mind:

Children are not small adults
Children are usually more sensitive to
toxic chemicals than adults.

- Their young, growing brains are more vulnerable.
- Children drink more water and breathe more air relative to adults.
- Crawling and hand to mouth behavior can increase exposure to chemicals in their environment
- Exposure to toxic chemicals as a child can have lifelong effects.



#### Chemical hazards may be hard to detect

Some toxic chemicals can be smelled or tasted, while others can't. The best thing to do is to research the history of your property.

- How was the property used in the past? Were hazardous chemicals used on site? Businesses such as funeral homes, dry cleaners, automotive garages and nail salons may pose contamination risks. Know the history of the building and the land.
- Do nearby businesses use chemicals? These chemicals could migrate onto your property and present a health risk to the children in your care.
- Test for lead-based paint and asbestos. These materials were widely used in buildings constructed before 1978, and may still remain in older buildings.
- If the property uses well water, test the water regularly for arsenic and lead which can occur naturally.
- Cleaning products, insect repellants, weed killers, and pesticides can all be dangerous if not used properly.

#### It makes good business

- Having to shut down your business due to contamination, unsafe drinking water or a chemical leak would be expensive and costly.
- Minimize the risk to your business by carefully considering your location.

#### Contact Us:

Our scientists know about the health effects of toxic chemicals, and can help answer any questions you may have when choosing a location for your new business. Please email us at epi@alaska.gov\_if you have any questions or concerns, and for more information please visit: <a href="www.atsdr.cdc.gov/sateplacesforece/index.html">www.atsdr.cdc.gov/sateplacesforece/index.html</a>

When we work together, we can protect children from unwanted chemical exposures.



#### Focuses on:

- Past uses of site
- Nearby sites (potential for contamination)
- Naturally occurring contamination
- Access to safe drinking water

# Brownfields

- Assess future use of a site from environmental health perspective.
- Former Alaska Native Hospital in Anchorage is one example of our brownfields work.



# Thanks!

**Stacey Cooper** (907) 269-8016

stacey.cooper@alaska.gov

