Proactive screening for lead in drinking water at schools:

March 17, 2017

Amanda Stone
Chief Policy and Legislative Affairs Officer
What is lead & its historic role in plumbing?
How can lead affect children’s health?

Prevent Childhood Lead Poisoning

Exposure to lead can seriously harm a child’s health.

- Damage to the brain and nervous system
- Slowed growth and development
- Learning and behavior problems
- Hearing and speech problems

This can cause:
- Lower IQ
- Decreased ability to pay attention
- Underperformance at school

Lead can be found throughout a child’s environment.

Source: CDC
How can children get exposed to lead?

Lead can be found throughout a child’s environment.

1. Homes built before 1978 (when lead-based paints were banned) probably contain lead-based paint.
   - When the paint peels and cracks, it makes lead dust. Children can be poisoned when they swallow or breathe in lead dust.

2. Certain water pipes may contain lead.

3. Lead can be found in some products such as toys and toy jewelry.

4. Lead is sometimes in candies imported from other countries or traditional home remedies.

5. Certain jobs and hobbies involve working with lead-based products, like stain glass work, and may cause parents to bring lead into the home.

Source: North Carolina Health news
1,570 Public schools
12,690 Public school buildings
1,124,702 Kids in school (FY 16 - includes charter schools)
625 Charter schools
7% Of schools tested in 2004 showed elevated levels of lead

85 Schools provide their own water
Testing shows 4 systems in the past few years exceeded Safe Drinking Water Act Pb Action Level
Proactive Program

Deploying statewide program to screen school drinking water for lead and take immediate corrective actions to eliminate identified exposure

Collaborating with Arizona Department of Health Services, Arizona School Facilities Board, public water systems, schools and other public and private parties.
What is the scope/content of program?

• ~1,198 schools/7,000 school buildings to screen
  – School buildings built before 1987
  – All K-12 public schools (voluntary)
  – Random sampling of other school buildings
  – Two samples per building (drinking fountains, kitchen or classroom sinks)

• Simple sampling protocol

• Analytical labs are under contract

• Communications toolkit for schools deployed

• School sampling results, health information, boilerplate documents for schools -all available online
Is ADEQ partnering with others?

• ADHS, County Health Directors and the School Facilities Board (SFB) play key roles in risk identification, risk communication and abatement efforts

• Some municipalities are partnering with ADEQ to collect and analyze samples:
  – Phoenix
  – Glendale
  – Scottsdale
  – Peoria
  – Tempe
  – Tucson

• City partnerships will result in faster data collection at a higher volume than originally anticipated
What is the current status?

- Scheduled sampling at 873 of the 1,198 schools (73%)
- Scheduled sampling at 7,230 school buildings
- Completed screening at 133 schools (11%)
- Completed screening at 1,105 school buildings (estimated 15%)
- Of the 1,105 school buildings samples 28 (2.5%) exceeded the screening level of 15 ppb
Contact will be made at schools per county as follows:

- Week of March 6, Pinal, Maricopa, Pima
- Week of March 13, Mohave, Maricopa, Pima
- Week of March 20, Cochise, Santa Cruz, Maricopa, Pima
- Week of March 27, Yuma, La Paz, Maricopa, Pima
- Week of April 3, Graham, Greenlee, Gila, Maricopa, Pima
- Week of April 10, Navajo, Apache, Maricopa, Pima
- Week of April 17, Yavapai, Maricopa, Pima
- Week of April 24, Coconino, Maricopa, Pima

Sample collection, lab coordination, notification to parents and mitigation efforts are planned on an individual school basis after initial contact is made.
What happens next?

For sample results above screening level:

School takes immediate corrective actions, in coordination with ADEQ to prevent lead exposure.

School completes post screening letter and notifies staff, students and parents.

School conducts confirmation test and coordinates investigation and remedial action plans with SFB.
Questions?

Amanda E. Stone
Chief Policy and Legislative Affairs Officer
Arizona Department of Environmental Quality
As3@azdeq.gov
(Phoenix Office) 602-771-2248
(Tucson Office) 520-628-6883
(cell) 602-540-7657

http://www.azdeq.gov/LeadScreeningProg