

*“Safe, Accessible and Appealing Drinking Water for Every School.”*

# Drinking Water Program

The School District of Philadelphia

Focus on **Water Testing**  
November 15, 2016



# Overview

- Defining the Problem of Lead in Water
- District's Prior Testing Program from 2000-2010 @20ppb
- EPA's Guidance for Water Testing in Schools
- District's New Re-Testing Program @15ppb
- Phase I – 40 schools (Completed in November 2016)
- Phase II – 178 schools (Complete by June 2017)
- Outcomes

# Defining the Problem

## Risks:

Children under 6 years  
at highest risk of health  
effects of lead

Low income families at  
highest risk in older  
homes w/ paint

Pregnant women

Correlation between  
cities with high  
percentages of African-  
American residents and  
elevated lead poisoning  
rates

Connections between  
childhood lead exposure  
and adult incarceration

**Paint** is the Primary  
Cause of Childhood  
Lead Poisoning

## Health Effects:

Lower IQ and hyperactivity

Behavior and learning  
problems

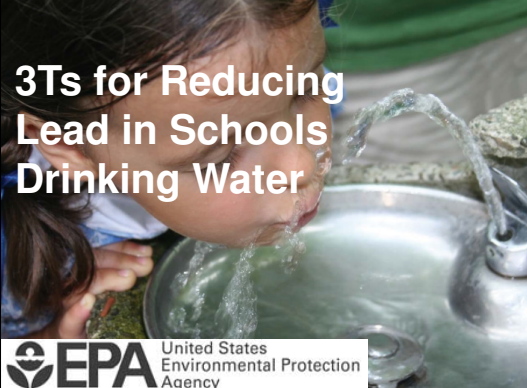
Anemia

Hearing problems

Slowed growth

## District's Testing Program from 2000-2010 @20 ppb

- To guarantee that students have access to safe drinking water at school, from 2000 to 2010, the District conducted a water testing program at schools throughout the District.
- Nearly 30,000 drinking water outlets were tested and all tested outlets that remain in service produced results that were below the U.S. Environmental Protection Agency's (EPA) Action Level for lead in water of **20 parts per billion (ppb)** and were safe for drinking.



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## EPA's Guidance to Protect Children

- In school or child care settings, EPA has set a guidance level of **20 parts per billion (ppb)** when testing 250 milliliter first-draw samples from water fountains and outlets.
- First draw refers to the first water to come out of the tap after an 8-18 hour period of inactivity.
- When results show lead levels exceeding 20 ppb, those fountains and outlets should be taken out of service until remediation is complete.

## 2016 District's Program

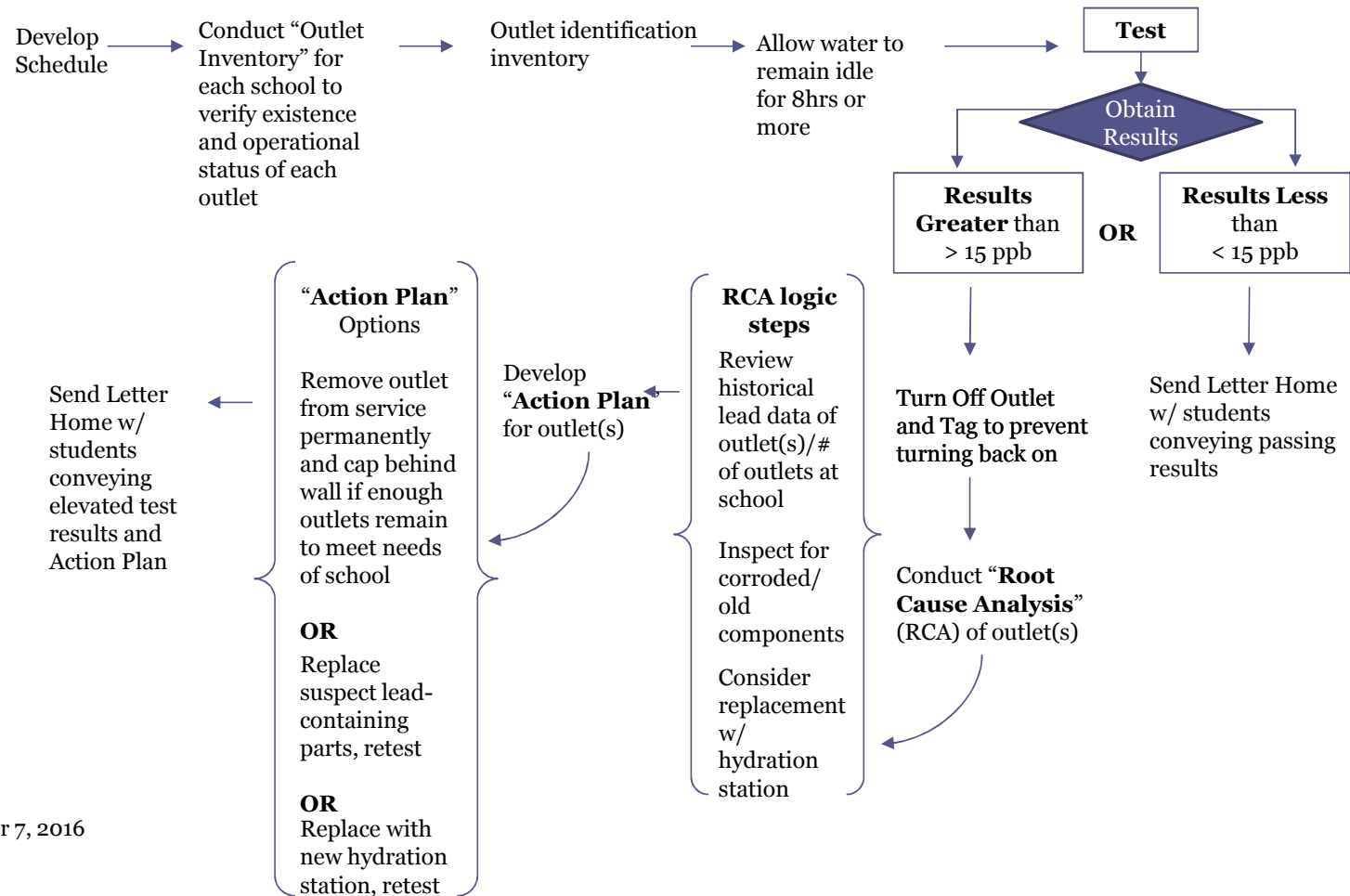
- ✓ Using a level of **15 parts per billion (ppb)** when testing 250 milliliter first-draw samples from water fountains and outlets.
- ✓ Collecting water samples at first draw after an 8-18 hour period of inactivity.
- ✓ Taking outlets out of service when results show lead levels exceeding 15 ppb until remediation is complete.
- ✓ Remediate and re-test as needed.
- ✓ Communication plan: Letters to families and [website](#).

# Water Testing Program

- **Phase I:** 40 schools completed from July to November 2016.
- Priority schools were selected first because they are:
  - Built before 1991.
  - Have elementary school aged children and pre-K classes.
  - Distributed in every Learning Network.
  - Representative of Philadelphia areas where the highest childhood blood lead levels were recorded by Philadelphia Department of Public Health.
- **Phase II:** All remaining elementary, middle and high schools. Complete by June 2017.
- Highlights:
  - No more pre-stagnation flushing by BEs.
  - Accelerated testing program.
  - Adding additional outlets – Nurse's Offices, Kitchen cold water sinks used for cooking, culinary arts classrooms.

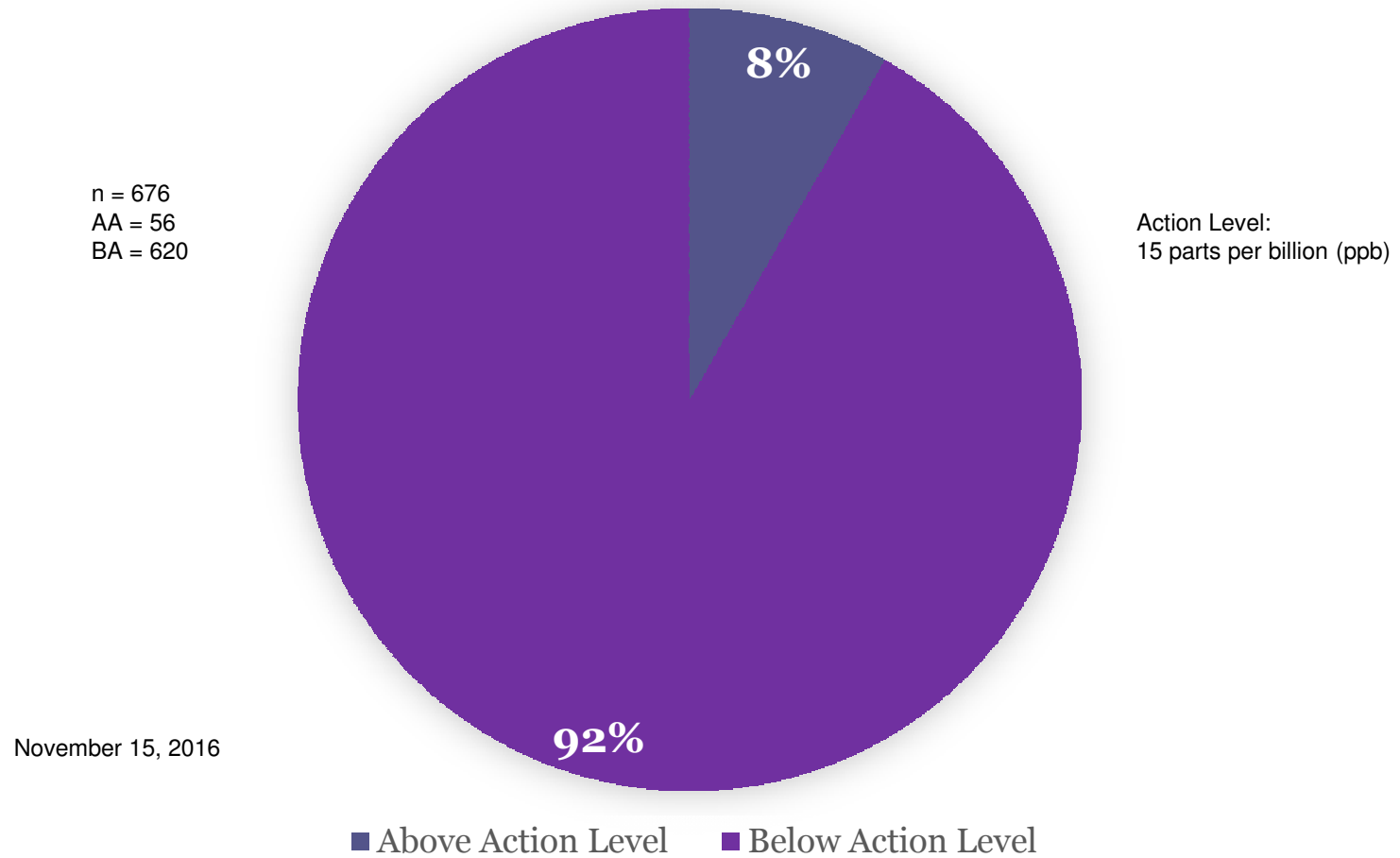


# Water Testing Protocol



November 7, 2016

## Phase I: Percentage of Outlets Above Action Level





## Anticipated Outcomes

All drinking water outlets will be tested by June 2017.

Outlets above the Action Level of 15 ppb will be either replaced with new drinking water units or removed from service permanently.

There will be a minimum of one drinking water fountain per 100 students per floor of every school.

There will be an effort to replace signs above sinks to encourage hand-washing and to direct children to drink water from fountains.

All drinking water outlets will be upgraded to newer, hydration stations, over time.

Children will want to drink their school's water!

## Upgrade All Outlets Over Time.

Hartranft School



JB Kelly School



Ludlow School



Cook Wissahickon School

