Asthma Education Station

How's Your Location?

Why Are These Data Important?

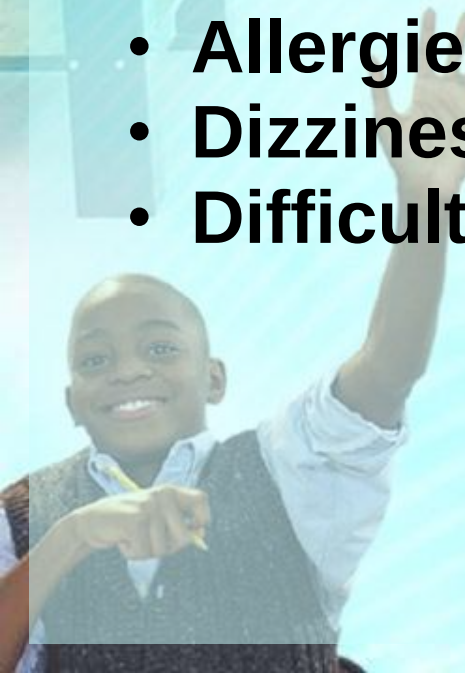
- Americans spend 90% of their day indoors – in classrooms, offices, and at home
- 90% of schools in U.S. were built before 1980, and 50% before 1960;
- 50% of schools nationwide report unsatisfactory environmental conditions;
- Students whose school facilities are in *poor* condition have test scores about 5.5 percentage points below students whose school facilities are in *fair* condition, and about 11 percentage points below students in *excellent* facilities.

School Facilities

- The median age of Missouri School buildings is approximately 35 years.
  - Indicates that they are within 5 years of accelerated deterioration.
  - What does this mean to students, staff, taxpayers?
- The price tag to improve the nation's school facilities is estimated to cost somewhere between the $127 billion (according to the National Center for Education Statistics) and $268 billion (according to the National Education Association).

Common Health Effects of Indoor Contaminants…Do You See These?

- Eye, nose and throat irritation
- Coughing and sneezing
- Headaches
- Fatigue
- Irritability
- Allergies, sinus congestion
- Dizziness
- Difficulty in concentrating



Indoor Air Quality and Student Achievement

- Poor IAQ can reduce a student's ability to perform specific mental tasks requiring concentration, calculation, or memory[6].
  - Students may appear sluggish or sleepy, or have headaches;
- Indoor air quality is related to asthma and other aspects of health in schools.
  - More missed school days
  - Tired from a lack of sleep

What is Wrong With This Picture?

Challenges and Awareness

- **Building cleanliness**
- **Wall dust can be an asthma trigger**

Challenges and Awareness

- Vent is partially covered

Right Spot for an Air Purifier?

- Air purifier that purifies nothing!!!

Challenges and Awareness

- Poor chemical management
- Improper ventilation

Challenges in Schools

- Coats from smoker homes or pet homes stored on top or beside each other.
- Material Transfers

SHARED LOCKER SPACE

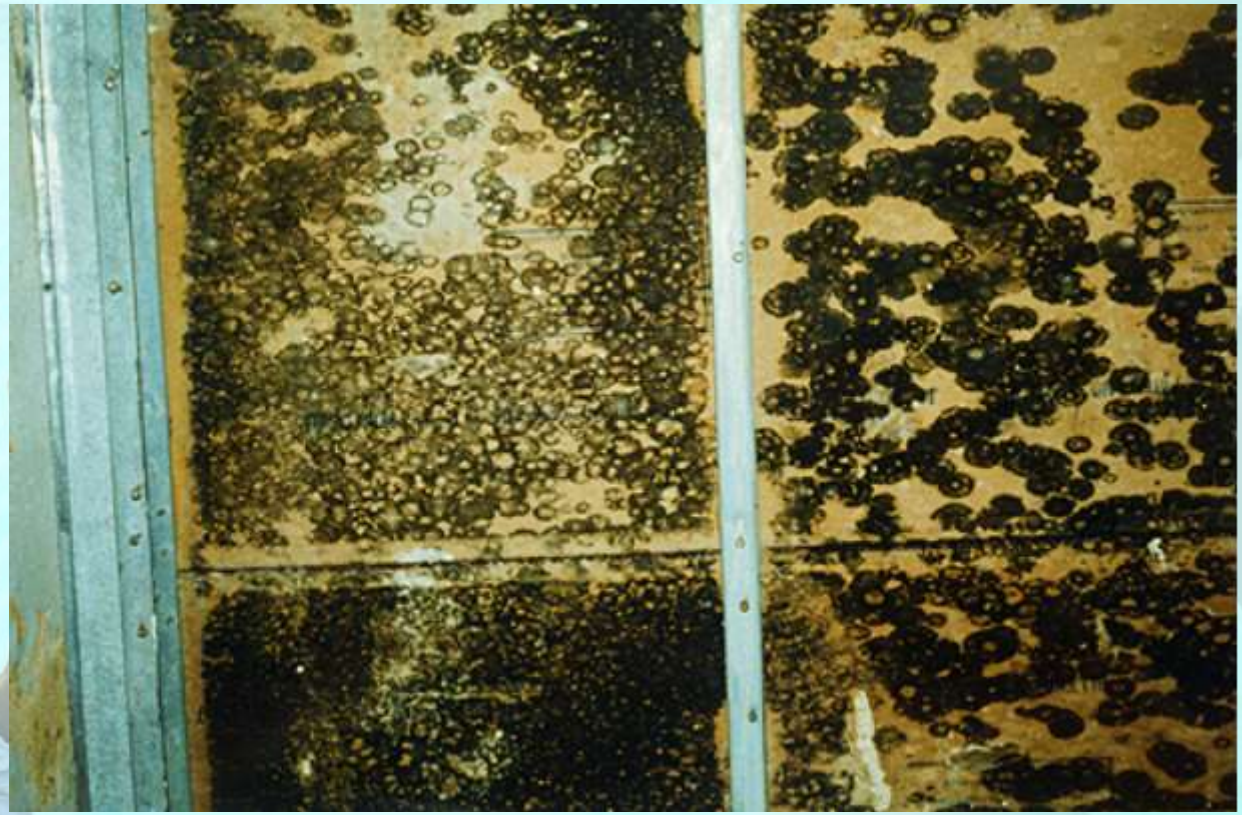
Awareness

- Idling near windows, doors, and students

RESPIRABLE PARTICLES & GASES

Mold in an Air Duct

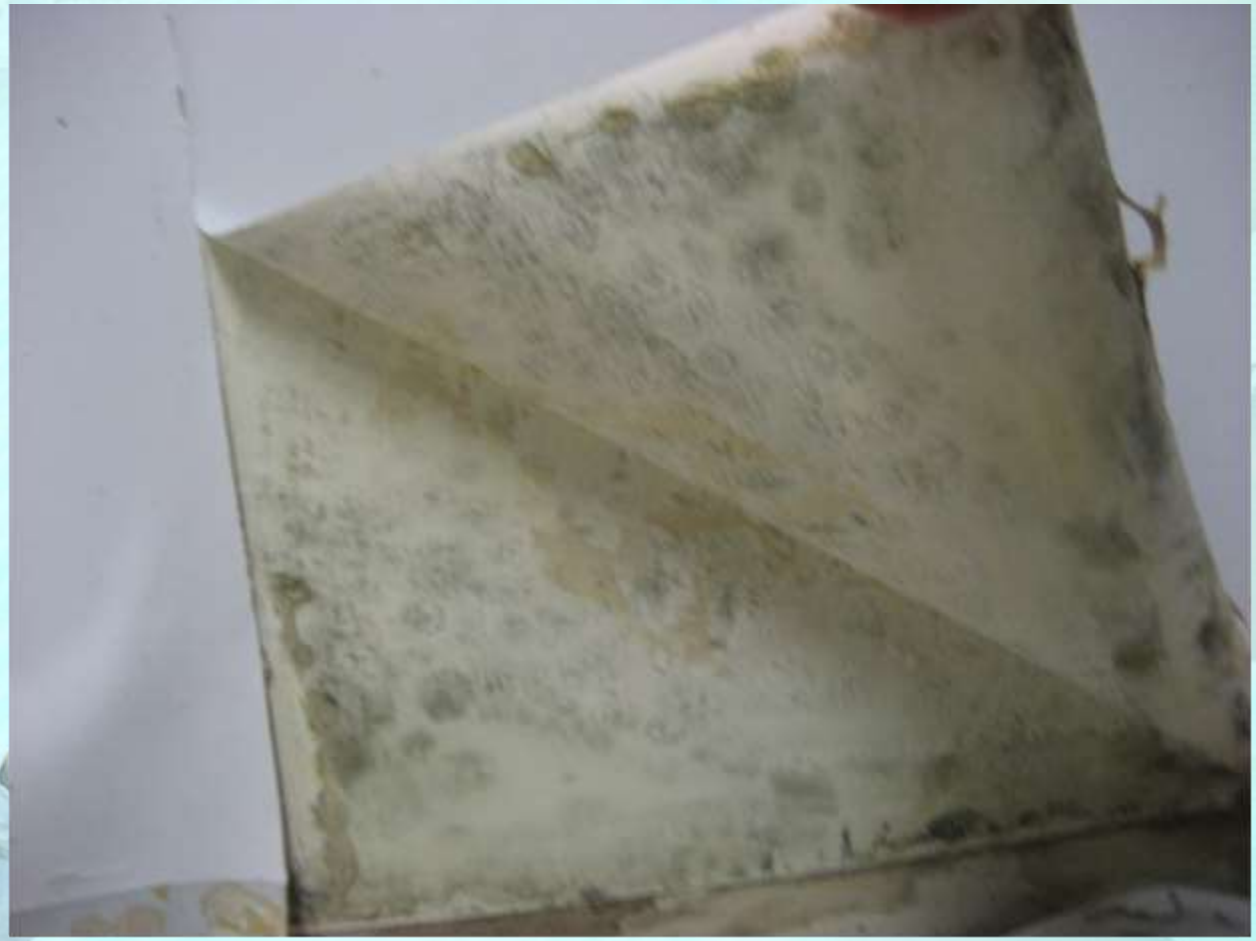
Stachybotrys and other mold on sheetrock



Stachybotrys in ventilation tunnel

Stachybotrys, *Aspergillus* and *Penicillium* in Basement

Vinyl Wall-Covering After Flooding



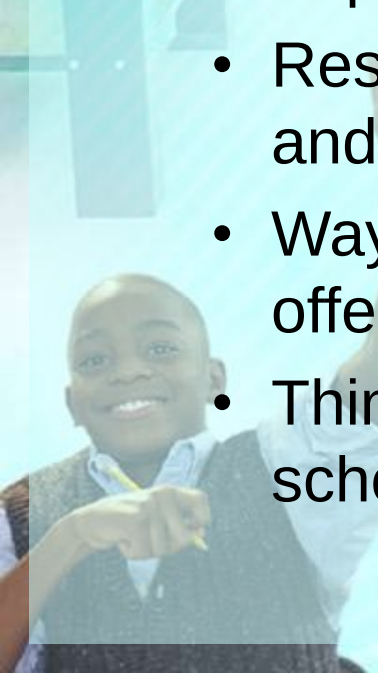
Mold on AC Ductwork

Poor Outside Drainage Design

How Can You Help Assess Home and School Environments?

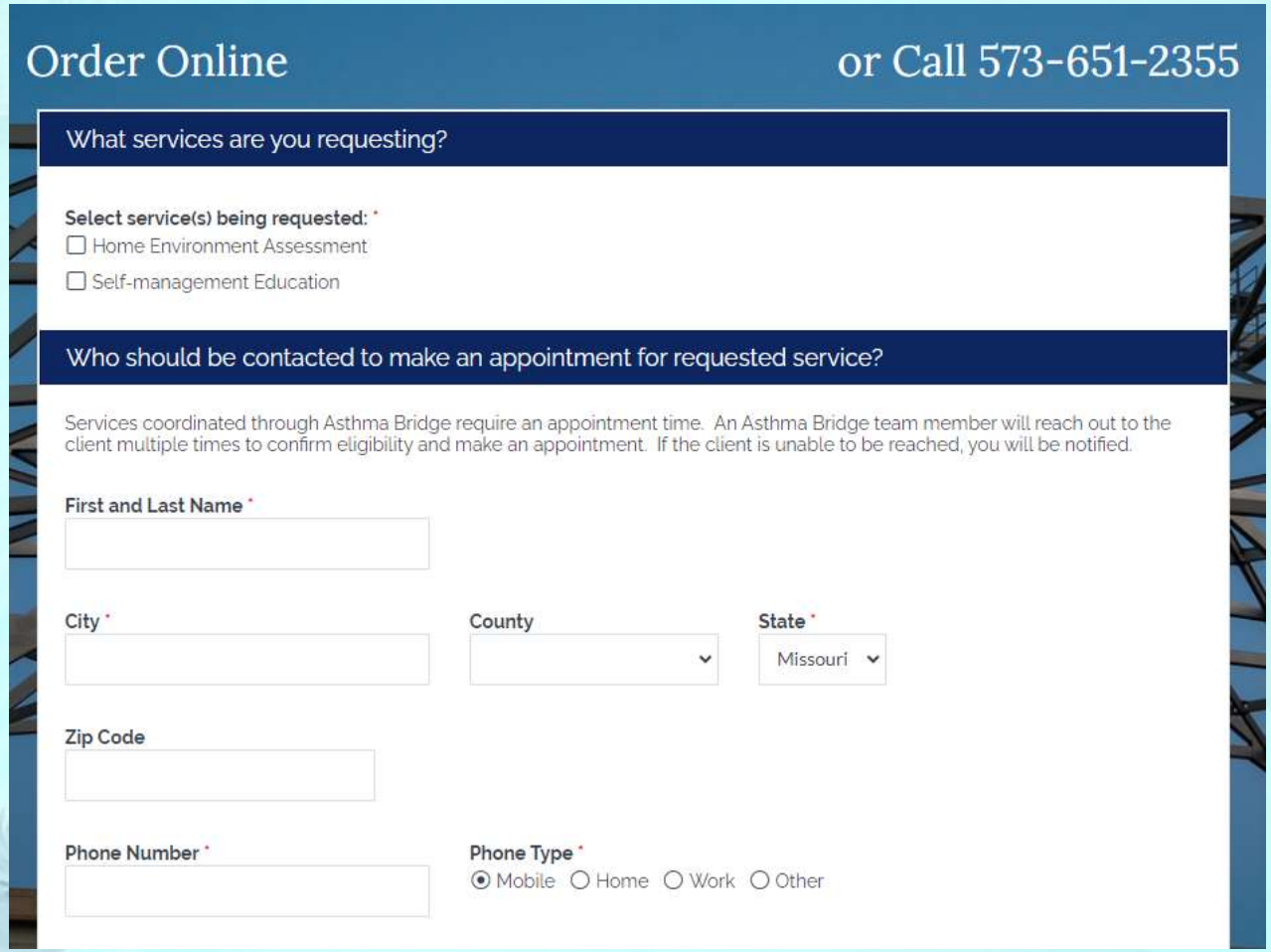
- Remember the possible triggers we talked about?

  - Ask parents to consider the usefulness of a home visit!
  - Experts will call and set up a visit time.
  - Results are communicated to health care providers and the parents.
  - Ways to help address any identified challenges will be offered.
  - Think about requesting an assessment of your school!!



Asthmabridge.com

How It Works…Easy to Use



QUESTIONS???

- Thank you for your kind attention!!