an overview of the EPA's

Indoor Air Quality

Tools for Schools

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Introduction

- Overview of Tools for Schools
- The Salt Lake City School District's experience with Tools for Schools
- Tools for Schools and the Utah Asthma Task Force

IAQ TfS Overview

- Poor indoor air is a major health and facility maintenance issue for schools
- *Indoor Air Quality Tools for Schools* (*IAQ TfS*) is a hands-on, flexible program designed to help schools maintain their indoor environments
- EPA offers partnerships, and provides incentives and recognition to schools implementing *IAQ TfS*

Consequences of Poor IAQ

- Health Problems
- Student and Teacher Performance
- Loss of Public Trust
- Liability Issues
- Negative Media Coverage
- Accountability to School Board and Other School Officials

Good IAQ is Important for Learning

- Asthma is the leading chronic disease causing school absenteeism
  - 14 million missed school days per year
  - Children who aren't in school can't learn
  - Interrupted or un-restful sleep
- Poor IAQ can lead to headaches, dizziness, sleepiness, and other factors inhibiting performance in the classroom
- Poor IAQ can reduce a person's ability to perform specific mental tasks requiring concentration, calculation or memory

Poor IAQ – the Asthma Connection

- Asthma episodes can be triggered by pollutants present in school buildings
- Triggers commonly found in school buildings include:
  - Animal Dander
  - Cockroach Body Parts and Feces
  - Dust Mites
  - Mold Spores
  - Tobacco Smoke
- Bronchial irritants commonly found in school buildings include:
  - Chemicals and Cleaners
  - Fragrances
  - Fumes

Poor IAQ is Costly

- Liability issues and lawsuits
- Substitute teachers and staff
- Lower operating efficiency of equipment and plant
- Emergency response to IAQ problems
- Consultants during an “IAQ Event”
- Closing schools and relocating students

Schools Are Unique

- Tight budgets
- Old buildings/deferred maintenance
- Densely populated space
- “Inventive” space utilization
- Additions/temporary space
- Special sources of pollution

Fast Facts on IAQ in Schools

- 3/4 of schools reported needing to spend money on repairs, renovations, and modernizations to put the school's onsite buildings in overall good condition.

  Source: Department of Education National Center for Education Statistics. "Condition of America's Public School Facilities." 1999 Report

- The average age of public school buildings is 42 years old. School buildings begin rapid deterioration after 40 years if not properly maintained.

  Source: U.S. DOE 1998 Report

Schools *Can* Improve Their Indoor Environments!

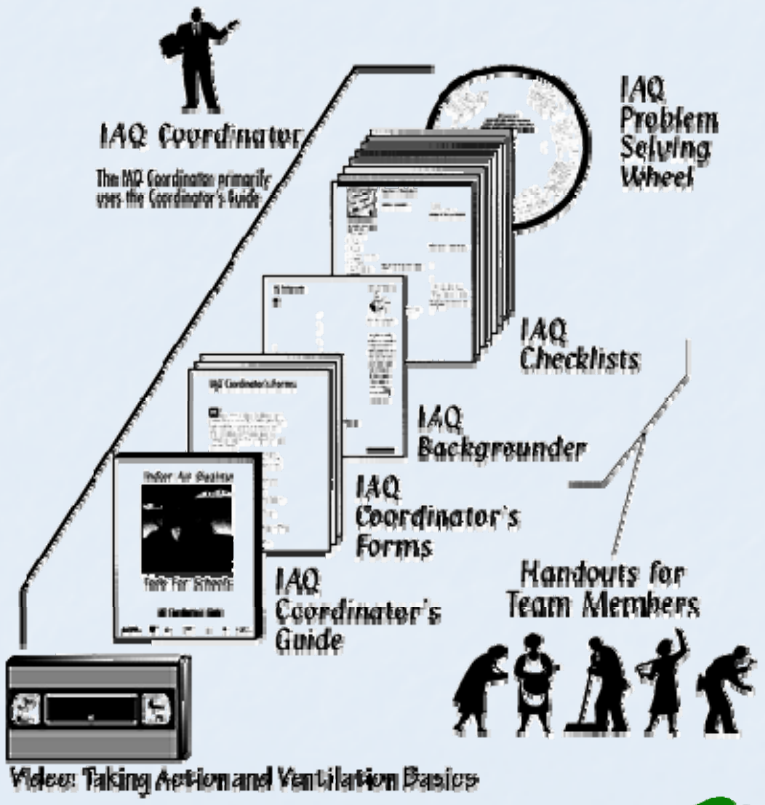
- Most schools have IAQ-related problems
- Many IAQ problems are easily identified and resolved by school staff
- It costs less to prevent IAQ problems than to fix them!
- Being proactive is KEY!

Key Features of the *IAQ Tools for Schools* Kit

- Low cost
- Adaptable to individual school/school district needs
- No specialized training required
- Voluntary
- Common sense approach

Role of IAQ Coordinator

- Disseminates IAQ information
- Creates and coordinates IAQ team and activities
- Implements IAQ management plan
- Communicates to all constituents
- Facilitates resolution of IAQ Problems



IAQ Team Members

Teachers

School Nurses

School Boards

Facilities Operators

Administrative Staff

Students & Parents

IAQ TfS is One Way Schools Are Improving Indoor Environments

- *IAQ TfS* is a successful program used in more than 10,000 schools nationwide
- EPA wants to make *IAQ TfS* available to, and successful for, every school in America
- EPA has developed and designed many tools and resources to make your job easier

IAQ TfS Partners

- American Association of School Administrators (AASA)
- American Lung Association (ALA)
- Association of School Business Officials International (ASBO)
- Council for Educational Facility Planners International (CEFPI)
- National Education Association (NEA)
- National Catholic Education Association (NCEA)
- National Parents and Teachers Association (PTA)
- and many other organizations

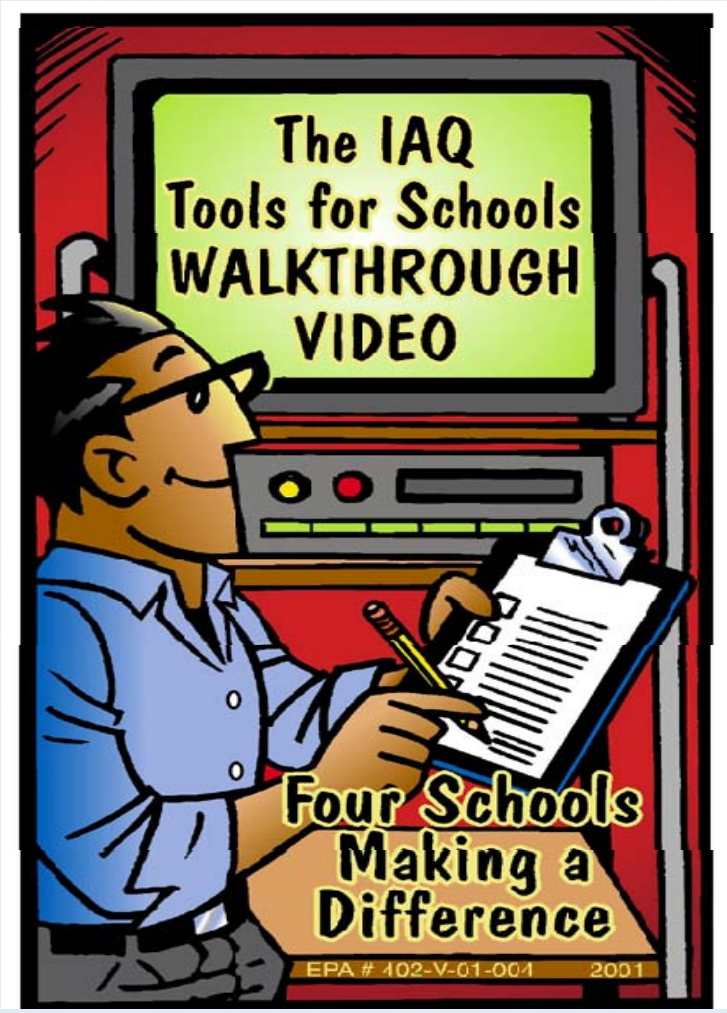
IAQ Tools for Schools Resources

- **Free Resources:**
  - IAQ TfS Kits
  - National Awards Program
  - National Mentoring Program
  - Training on financing options for IAQ TfS
  - IAQ Design Tools for Schools
  - Healthy Schools Web Portal
  - Case Studies
- **Technical Tools:**
  - Managing Asthma in the School Environment
  - Road Map
  - Mold Remediation Document
  - Walk-Through Video
  - Ventilation Software

IAQ TfS Walkthrough Video

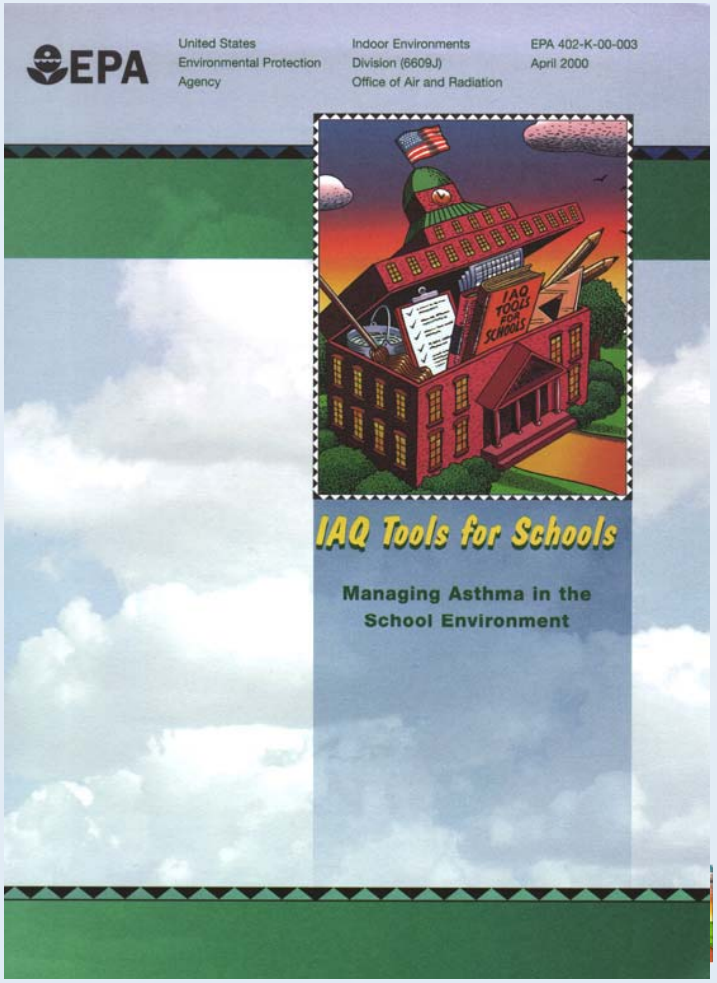
- Demonstrates how to conduct a school walkthrough and use the information found to prioritize IAQ improvements
- Helps identify most commonly found IAQ problems in schools
- Gives non-technical approach for evaluating potential IAQ problems

To order, call the IAQ INFO Hotline at 1-800-438-4318



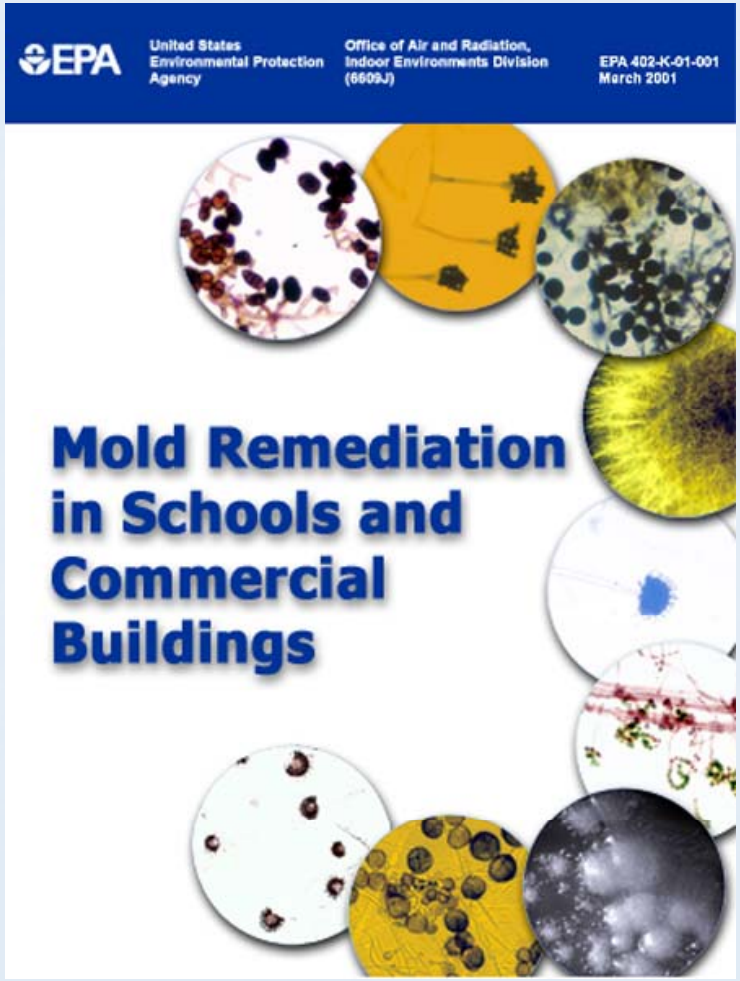
Managing Asthma in the School Environment

- 1 in 13 children suffers from asthma
- 1 in 5 Americans spends his/her day in a school building
- An estimated 8,000 - 26,000 new asthma cases arise in children per year
- Asthma accounts for one-third of all pediatric emergency room visits



Mold Remediation

- New non-regulatory Guidance
- Aimed at Building Managers, Professional Remediators, Anyone Dealing with Mold Issues
- Mold Prevention and Remediation
- Checklists and Resources
- Suggestions on how to communicate with Building Occupants about IAQ



New voluntary, web-based guidance (not building specifications language)

Covers: design, construction, renovation, and operations and maintenance of school facilities

Audiences: school administrators, design team, construction supervisors, facility managers

Complements *IAQ Tools for Schools* guidance for existing schools

Promotes IAQ in the context of high performance schools

EPA Hosts 5th Annual *IAQ Tools for Schools* National Symposium

- WHO: Over 500 School Board Officials, Administrators, School Nurses, Teachers, Facility Managers, School and Health Association Members, parents and others from around the U.S. and abroad
- WHAT: Experts will discuss hot issues including new school construction, asthma, mold remediation, student performance, communications, financing, and networking
- WHEN: The Symposium will take place on December 2-4, 2004
- WHERE: Grand Hyatt Hotel, Washington, DC
- WHY: EPA will build on its success with the 5th Annual *Indoor Air Quality Tools for Schools* National Symposium and will present Excellence awards to schools with exemplary indoor air quality programs
- Watch EPA's Web site www.epa.gov/iaq/schools for additional information on the Symposium

IAQ TfS Awards Program

- **WHAT AWARDS ARE OFFERED?**
- ***IAQ TfS* Great Start Award -** For schools that committed to implementing *IAQ TfS*
- ***IAQ TfS* Leadership Award –** For schools that implemented the *IAQ TfS* Kit and developed an IAQ management plan
- ***IAQ TfS* Excellence Award –** For schools that demonstrated outstanding achievement in implementation of the *IAQ TfS Kit* and in their communications and outreach efforts
- **HOW TO APPLY:**

  Contact Michele Guarneiri, U.S. EPA at (202) 343-9099 to obtain criteria information, and applications

Additional Resources

- **IAQ INFO Hotline (To Order A Kit):** **1-800-438-4318**
- **IAQ TfS Technical Hotline:** **1-866-837-3721**
- **EPA Headquarters:**

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- **IAQ Web Site:** www.epa.gov/iaq/schools