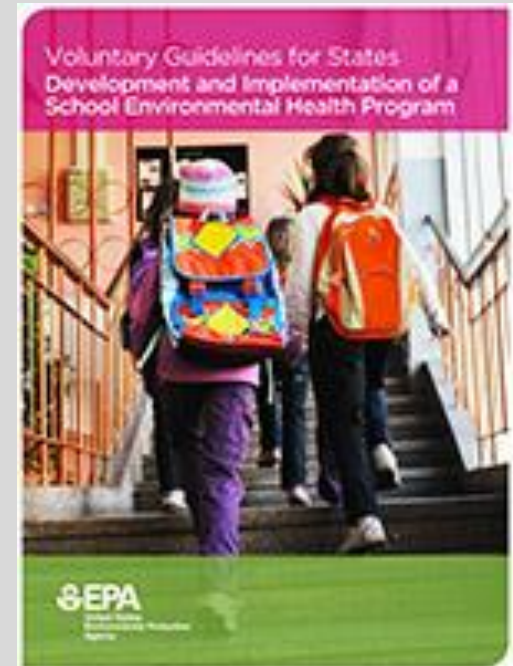




**Clean, Green  
and  
Healthy Schools**



# ***EPA's Voluntary Guidelines for States: Development and Implementation of a School Environmental Health Program***



Presentation to the National Conference of State Legislatures  
January 24, 2013

## Why has EPA developed these guidelines?

The [Energy Independence and Security Act of 2007](#), signed into law in December 2007, amended the Toxic Substances Control Act by adding a requirement for EPA, in consultation with relevant federal agencies, to develop voluntary guidelines to help states establish and implement environmental health programs in K-12 schools.

<http://www.epa.gov/schools/ehguidelines/index.html>

# Why consider these guidelines?

Children spend approximately 90 percent of their time indoors, often up to nine hours a day in a school building.

Student time spent in a school building:

(Approximately 45 hours per week x 37 weeks = 1,665 hours per year)

<http://www.epa.gov/schools/ehguidelines/index.html>

# Why consider these guidelines?

<u>State</u>	<u>K-12 Districts</u>	<u>K-12 Schools</u>	<u>K-12</u>
Iowa	225	1730	473,493
Kansas	293	1667	482,799
Missouri	520	3048	916,842
Nebraska	249	1003	341,458
<b>Totals</b>	<b>1287</b>	<b>7448</b>	<b>2,214,592</b>
U.S.A.	13,809	98,706	49,266,000

<http://www.epa.gov/schools/ehguidelines/index.html>

# Importance?

A growing body of evidence indicates that children are more sensitive than adults to environmental contaminants.

Environmental exposures that would not harm an adult can cause permanent damage to the developing body of a child.

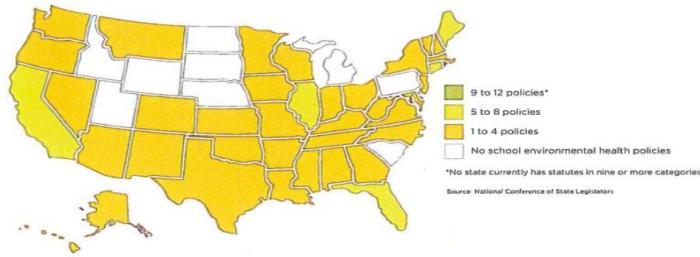
A child's developing organ systems are often more sensitive to environmental stressors. ([www.ncsl.org](http://www.ncsl.org))



<http://www.epa.gov/schools/ehguidelines/index.html>

## State School Environmental Health Statutes At-A-Glance

Map of State School Environmental Health Statutes



State School Environmental Health Statutes

State	Children's environmental health	Asbestos	Asthma	Carbon monoxide	Green cleaning	Indoor air	Lead poisoning and hazard reduction	Mercury	Pesticides	Radon	Smoking	Tools for Schools
AL		■										■
AK		■										
AS		■									■	
AZ						■					■	
AR						■					■	
CA	■	■				■	■	■			■	
CO		■				■				■		
CT		■		■	■	■				■	■	■
DE							■					
DC												
FL		■			■				■		■	
GA		■			■						■	
HI												
ID					■							
IL	■	■			■							
IN					■	■	■	■			■	

*continued on next page*

Currently, most state and federal regulations are based on adults, only within the last few years has state legislation been passed in some states to take children's special vulnerabilities into account.  
[www.ncsl.org](http://www.ncsl.org)

Map of the US - States with School Environmental Health Statutes

<http://www.epa.gov/schools/ehguidelines/index.html>

## **Why consider these guidelines?**

**An unhealthy school environment can affect children's health, attendance, concentration and performance.**

**It can also lead to expensive, time-consuming cleanup and remediation activities.**

**<http://www.epa.gov/schools/ehguidelines/index.html>**

## **How can the guidelines be used?**

**These guidelines are voluntary and are intended as a resource for states, communities, school districts, schools and school stakeholders in their efforts to improve the environmental health and conditions of school facilities and to protect the health of children and school staff.**

**<http://www.epa.gov/schools/ehguidelines/index.html>**



# What do the guidelines address?

- \* Ideas for Planning Strategies

- \* Resources and Information on Various Environmental Issues

(Such as indoor air quality problems, mold, chemicals and pesticides, radon and diesel exhaust, mercury, lead paint, polychlorinated biphenyls, drinking water issues, natural day lighting, acoustics, and other issues relating to the health, comfort, productivity and performance of building occupants.)

<http://www.epa.gov/schools/ehguidelines/index.html>

# What are the guidelines? A resource...

*EPA has identified a six-step process for states to consider :*

- \* *Assess Existing Resources and Infrastructure*
- \* *Determine Capacity*
- \* *Develop a Program Plan*
- \* *Implement the Program*
- \* *Evaluate the Program*
- \* *Sustain the Program*

To complement the guidelines, EPA has developed a [model](#) K-12 school environmental health program as a resource that **states can customize** and share with schools and school districts to help them establish or enhance their individual school environmental health programs.

<http://www.epa.gov/schools/ehguidelines/index.html>

# Five Key Components of a School Environmental Health Program

1. Practice Effective Cleaning and Maintenance
2. Prevent Mold and Moisture
3. Reduce Chemical and Environmental Contaminant Hazards
4. Ensure Good Ventilation
5. Prevent Pests and Reduce Pesticide Exposure

<http://www.epa.gov/schools/ehguidelines/index.html>

***Many states have already done significant work in the area of environmental health.***

***See a few case studies mentioned in the guidelines:***

***Wisconsin , Colorado, Kentucky and Washington***

**<http://www.epa.gov/schools/ehguidelines/index.html>**

## *Example States - Case Studies*

**Wisconsin** created a web-based certification program available to all K-12 schools designed to directly support schools in their quest for a healthy, safe and environmentally-friendly learning environment.

**Colorado** created Colorado Connections for Healthy Schools (CCHS)

**Kentucky** created a voluntary program that encourages students and teachers to evaluate built and natural environments, with an emphasis on conservation, waste reduction and environmental health.

In 1955, the State of **Washington** established minimum environmental health and safety standards for education facilities (siting, lighting, ventilation, noise, heating, and safety), and requiring local health jurisdictions to review and approve plans for new and remodeled schools and conduct pre-opening inspections.

<http://www.epa.gov/schools/ehguidelines/index.html>

# FYI

## ***Tools for Schools Action Kit:***



**<http://www.epa.gov/iaq/schoolslactionkit.html>**

***Call 800-490-9198 to order  
TfS kit***

**<http://www.epa.gov/schools/ehguidelines/index.html>**

# ***Necessary Tools for School Building Evaluations***

***As simple as having a  
Pen, Paper, and a Building Blueprint***

**<http://www.epa.gov/schools/ehguidelines/index.html>**

**If you have some funding – Consider these assessment tools:**

Temperature & RH%

Tracer Smoke

CO<sub>2</sub>

Clipboard &  
Assessment  
Checklist

CO

Particle Counter

Thermal Imager

Moisture Meter

Light Meter



# Tools

***If you have some funds,  
consider these tools to help your assessments:***

## **Tool Kit items**

<b>Tracer Smoke Detector</b>	<b>\$ 50</b>
<b>A Temperature &amp; Relative Humidity detector</b>	<b>\$ 75</b>
<b>Carbon Dioxide detector</b>	<b>\$ 450</b>
<b>Carbon Monoxide detector</b>	<b>\$ 350</b>
<b>Thermal Imager</b>	<b>\$2,500</b>
<b>A particle counter</b>	<b>\$3,500</b>
<b>A moisture meter</b>	<b>\$ 300</b>
<b>A light meter</b>	<b>\$ 30</b>
<b>A decibellnoise meter</b>	<b>\$ 90</b>
<b>Total:</b>	<b><u>\$7,345</u></b>

# Clean, Green and Healthy Schools

## Key Building Blocks

**Dry**  
**Clean**  
**Comfortable**  
**Control  
pollutants**  
**Deliver  
Adequate  
Ventilation**



# Other Important School Resources

## Sensible Steps to Healthier School Environments

[http://www.epa.gov/region8/humanhealth/children/  
SensibleSteps.pdf](http://www.epa.gov/region8/humanhealth/children/SensibleSteps.pdf)

**A summary primer to** affordable, sensible ways to help school districts identify, prevent, reduce and resolve the most common school environmental health concerns.

This booklet includes a Quick Assessment Checklist and waste reduction and energy efficiency ideas for conserving financial resources.

## School Siting Guidelines

<http://www.epa.gov/schools/siting/index.html>

EPA's voluntary school siting guidelines can help local school districts (local education agencies or LEAs) and community members evaluate environmental factors to make the best possible school siting decisions. This website includes an overview for the guidelines, as well as links to resources and additional information.

**Questions?**

**<http://www.epa.gov/schools/ehguidelines/index.html>**

# Thank you for your time

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