



Model School Environmental Health Guidelines

Southern California – Clean, Green, & Healthy
Schools Partnership

Jorine Campopiano
Schools Environmental Health Coordinator
U.S. EPA Region 9
600 Wilshire Blvd, Suite 1460
Los Angeles, CA 90015
213-244-1808
campopiano.jorine@epa.gov



School Environmental Health Program - Benefits

- Improvements in children's health;
- Decreased rates of absenteeism for children and teachers;
- Stronger student academic performance and participation in the classroom;
- Greater teacher retention and job satisfaction; and
- Cost savings through energy and water conservation and efficiency, and improved facility maintenance

EPA – IAQ – Tools for Schools





Five Components

Practice Effective
Cleaning and
Maintenance,

Prevent Mold and
Moisture,

Reduce Chemical
and Environmental
Contaminant
Hazards,

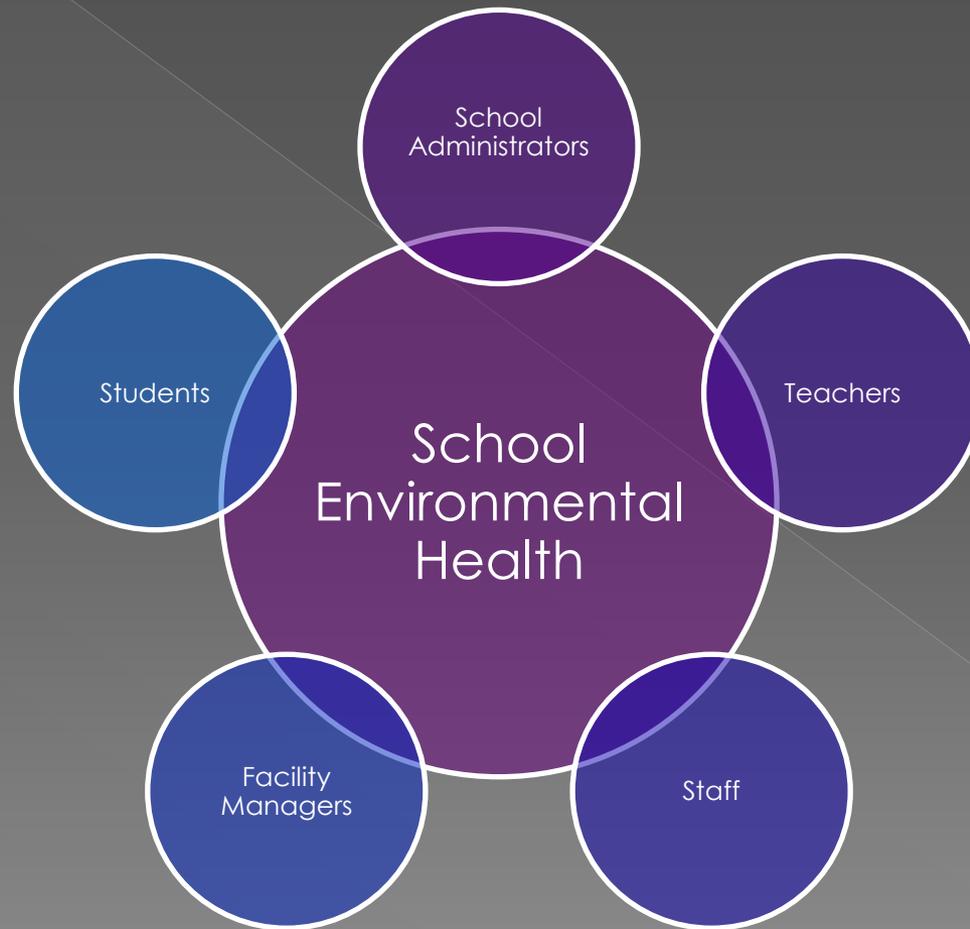
Ensure Good
Ventilation, and

Prevent Pests and
Reduce Pesticide
Use.

California School Environmental Health Laws

CALIFORNIA	CITATION
Children's Environmental Health	CAL. HEALTH & SAFETY CODE §§ 900 to 901
Asbestos	CAL. GOV'T CODE § 37116 (West 2013); CAL. EDUC. CODE §§ 49410 to 49410.7
Asthma	CDPH Guidance - http://www.cdph.ca.gov/programs/caphi/Documents/dhs_ASTHMAguidelinesFINAL.pdf
Carbon Monoxide	NONE
Green Cleaning	NONE
Indoor Air Quality	CAL. PUB. RES. CODE §§ 42630 to 42647
Lead	CAL. EDUC. CODE §§ 32240 to 32245
Mercury	CAL. HEALTH & SAFETY CODE § 25532
Pesticides	CAL. EDUC. CODE §§ 17608 to 17613
Radon	NONE
Smoking	CAL. EDUC. CODE § 48901

Elements of a Successful Program





Secure Leadership Support

- Incorporate environmental health in the school or school district's vision and mission statements;
- Allocate resources for program policies, procedures, and practices; and
- Communicate the goals of the program



Establish a District or School Environmental Health Team

- ◉ Develops and implements school environmental health program
- ◉ Serves as a resource for parents and the community
- ◉ Members should include – administrators, teachers, school nurses, facility managers, students, parents, community agencies and organizations
- ◉ Team should develop communication plan.

Develop Priorities & Goals

Improve indoor air quality by adopting EPA's IAQ Tools for Schools program;

Reduce classroom chemical hazards by removing dangerous chemicals, adopting green chemistry curricula, and purchasing only the amounts of chemicals needed;

Ensure safe drinking water by testing for lead at all drinking water taps and taking mitigation steps when lead concentrations exceed recommended health-based benchmarks;

Reduce unnecessary idling by adopting an anti-idling policy for school buses, passenger vehicles, and delivery trucks; and

Reduce pest problems and exposure to pesticides by adopting integrated pest management practices

SCHOOL HIGHLIGHT

- **New York:** The Rebuild Schools to Uphold Education Law of 1998 requires all school districts in New York to establish a health and safety committee. Committees should include school administrators, staff, and parents and are responsible for addressing health and safety concerns in occupied school buildings.



Develop an Action Plan

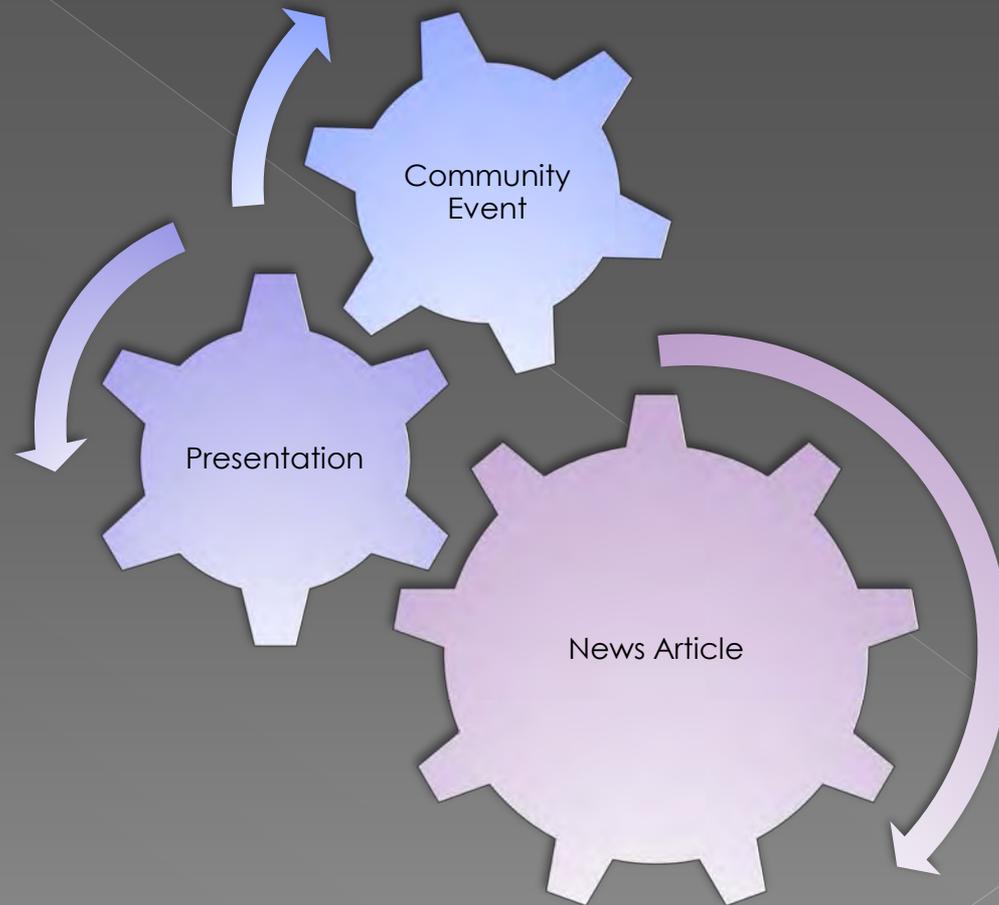
- The roles, responsibilities, and expectations for program participants;
- Methods for implementing program components (e.g., policies, procedures, practices, and regulations);
- Available resources for program implementation and how the resources will be allocated;
- A timeframe for program implementation; and
- Performance measures for evaluating program success.



Provide Training/Encourage Student Involvement

- Train prior to program implementation
- Provide training in conjunction with other mandatory trainings (OSHA)
- Tailor topics to greatest need
- Student involvement gives a sense of ownership and accountability

Promote Program Success





Five Components

Practice Effective
Cleaning and
Maintenance,

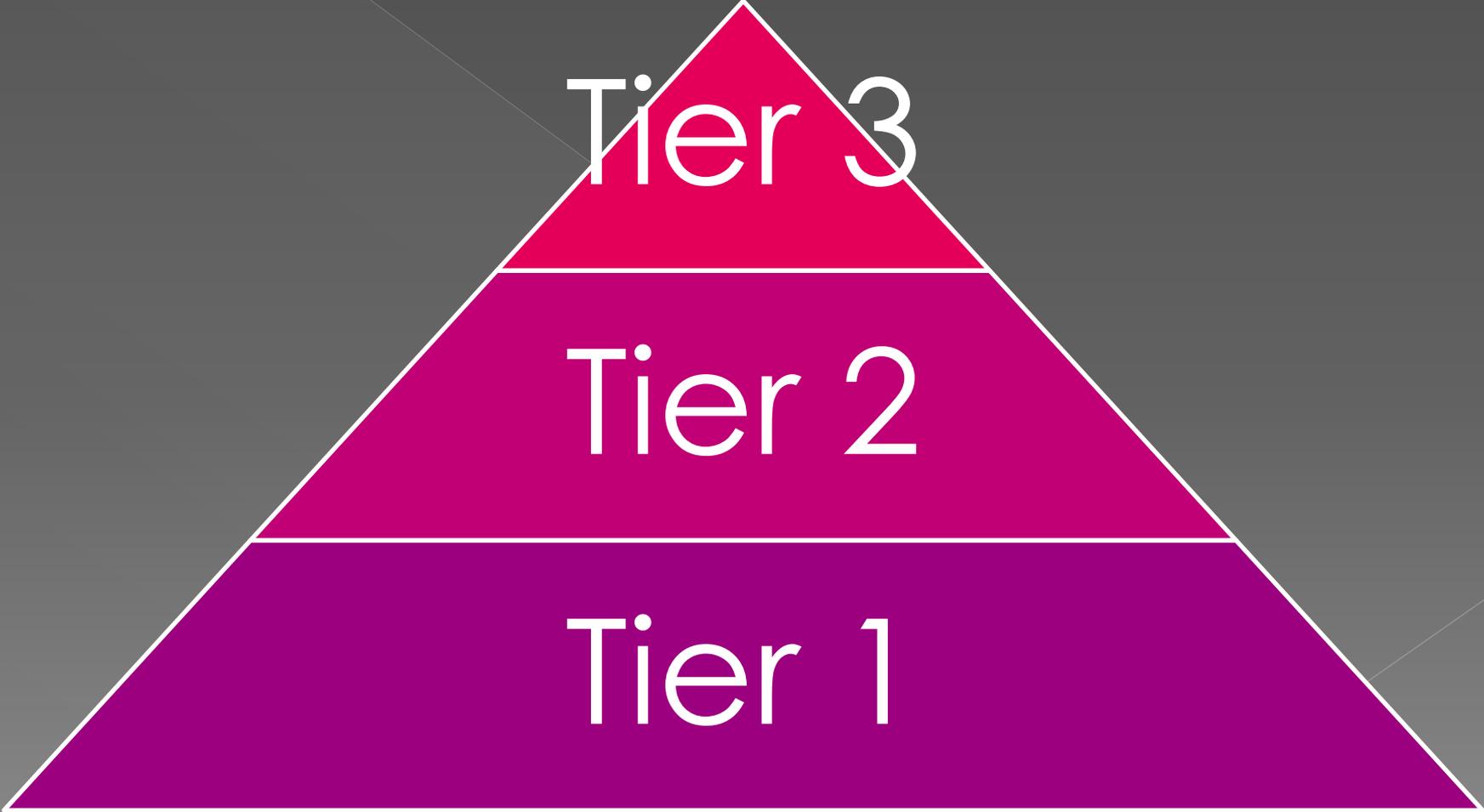
Prevent Mold and
Moisture,

Reduce Chemical
and Environmental
Contaminant
Hazards,

Ensure Good
Ventilation, and

Prevent Pests and
Reduce Pesticide
Use.

TIERED ACTIONS



Tier 3

Tier 2

Tier 1



Effective Cleaning & Maintenance

TIER 1 ACTIONS

- Vacuum using high-efficiency vacuums and filters (e.g., high efficiency particulate air filters).
- Reduce clutter, such as excess paper or plush toys, which collect dust and allergens and prevent thorough cleaning
- Inspect and monitor roofs, ceilings, windows and doors for damage and improper seals

TIER 2 & 3

- Establish a green cleaning and preventive maintenance plan for your school (Tier 2)
- Use [EPA's IAQ Tools for Schools Action Kit](#) checklists to assist with routine school building inspections and maintenance (Tier 2)
- Develop and record measures specific to the school that will demonstrate improvement in adopting healthier cleaning and maintenance practices (Tier 3)



Prevent Mold & Moisture

TIER 1 ACTIONS

- Conduct routine moisture inspections to ensure the school building is free of moisture problems, water damage, and visible mold on all interior surfaces.
- Dry wet areas within 24–48 hours.
- Vent moisture-generating appliances (e.g., dryers) to the outside.
- Ensure carpeting is not installed in areas with exposed plumbing.

TIER 2 & 3 ACTIONS

- Establish a mold prevention and remediation plan (Tier 2)
- Clean carpets with extraction cleaners to remove water and prevent mold growth (Tier 2)
- Purchase furniture and carpeting made from mold-resistant materials when replacing worn or damaged items. (Tier 3)
- Install vents to the outside for all areas in the school building that use large quantities of water (e.g., kitchens, bathrooms, locker rooms, and pool facilities) (Tier 3).



Reduce Chemical and Environmental Contaminant Hazards

TIER 2 & 3 ACTIONS

- Conduct a chemical cleanout (Tier 2)
- Test the school's drinking water for contaminants such as lead (Tier 2)
- Implement an anti-idling policy for school buses, passenger vehicles, and delivery trucks, and post signs stating all vehicles are prohibited from idling on school premises (Tier 2)
- Retrofit or replace busses to pollute less (Tier 3)

TIER 1 ACTIONS

- Conduct a chemical inventory of the school, or locate and review an existing inventory
- Inspect the school's fluorescent light ballasts for leaking PCBs
- If the school was built before 1978, lead-based paint might be present on coated surfaces. If applicable, develop a list of rooms and areas that contain, or might contain, lead-based paint



Ensure Good Ventilation

TIER 1 ACTIONS

- Conduct an initial inspection of the school's HVAC system
- Ensure the school building has a functioning ventilation system. The absence of ventilation can adversely impact classroom performance and overall occupant health.
- Establish and implement a regular schedule for inspecting and changing filters

TIER 2 & 3 ACTIONS

- Install high efficiency filters, if not already in use (Tier 2).
- Take steps to ensure all rooms in the school building are ventilated (Tier 2)
- Ensure that air intakes are located away from high vehicular traffic areas, plumbing and exhaust stacks, and chimneys for the school's heating system (Tier 2).
- Apply new air ventilation, cleaning, and filtration technologies, as resources allow (e.g., MERV 13 air filters and gas filtration media).(Tier 3)



Prevent Pests and Pesticide Exposure

TIER 2 & 3 ACTIONS

- [Establish a school integrated pest management program](#) (Tier 2)
- Use pesticides that present the least risk of exposure (Tier 2)
- Expand the school's integrated pest management program to address outdoor areas including playgrounds, parking lots, athletic fields, loading docks, and trash dumpsters (Tier 3)

TIER 1 ACTIONS

- Conduct an initial inspection of the school to identify potential pest problems. Identify immediate actions that can be taken
- Place weather stripping on doors.
- Caulk and seal openings in walls
- Allow food and beverages only in designated areas and store food in airtight containers.



Additional Opportunities for promoting Environmental Health at Schools

- ◉ [EPA's Voluntary School Siting Guidelines](#)
- ◉ [ENERGY STAR® for K-12 School Districts](#)
- ◉ [IAQ Design Tools for Schools](#)
- ◉ [U.S. Green Building Council – Center for Green Schools](#)
- ◉ [Collaborative for High Performance Schools](#) (CHPS)

Thank You!

