

Physical Environment is one of the ten components represented in the Whole School, Whole Community, Whole Child model. A healthy and safe physical school environment promotes learning by ensuring the health and safety of students and staff. Research shows that unhealthy physical school environments can negatively impact children's health, attendance, concentration, and academic performance.

A healthy physical school environment addresses a school's physical condition during normal operation as well as during renovation (e.g., ventilation, moisture, temperature, noise, and natural and artificial lighting), and protects occupants from physical threats (e.g., crime, violence, traffic, and injuries) and biological and chemical agents in the air, water, or soil as well as those purposefully brought into the school (e.g., pollution, mold, hazardous materials, pesticides, and cleaning agents).



~ Centers for Disease Control and Prevention

## Make Sure Facilities Are Healthy and Safe!



- Flooring surfaces are slip-resistant, and stairways have sturdy guardrails
- Poisons and chemical hazards are labeled and stored in locked cabinets.
- First-aid equipment and notices describing safety procedures are available and accessible.
- All areas of the school have sufficient lighting, and secluded areas are sealed off or supervised.
- Smoke alarms, sprinklers, and fire extinguishers are installed and operational.
- Pedestrians are offered special protection, including crossing guards, escorts, crosswalks, and safe bus and car loading.
- A variety of methods are used to keep weapons out of the school environment.
- School buses do not idle while loading or unloading students, to reduce emission of diesel exhaust and fine particles.
- Spaces and facilities for physical activity (including playgrounds and sports fields) meet or exceed recommended safety standards.
- The campus and buildings are pleasant and welcoming (e.g., uncluttered, uncrowded, well-lit, graffiti-free).



*A whole child approach, which ensures each student is healthy, safe, engaged, supported, and challenged, sets the standard for comprehensive, sustainable school improvement and provides for long-term student success.*

# PHYSICAL ENVIRONMENT

Ways the **WHOLE SCHOOL, WHOLE COMMUNITY, WHOLE CHILD** components can support the physical environment in your school

## 1 HEALTH EDUCATION

- Include lessons about injury (e.g., emergency preparedness, and fire, water, pedestrian, and playground safety) and violence prevention (e.g., anger management, conflict resolution) in your health education curriculum
- Provide opportunities for students to identify and address environmental hazards in the school
- Develop a school-wide media campaign about the importance of hand washing to reduce the spread of communicable diseases

## 2 PHYSICAL EDUCATION & PHYSICAL ACTIVITY

- Make sure equipment and facilities do not present hazards
- Require students to use protective equipment
- Provide supervision to ensure students' physical safety

## 3 NUTRITION ENVIRONMENT & SERVICES

- Provide training and support to nutrition services staff to ensure safe food handling
- Ensure a pleasant cafeteria environment to enhance the school climate
- Use organic pesticides in your school's garden

## 4 HEALTH SERVICES

- Educate school staff about recognizing hazardous conditions that can lead to injury or illness
- Implement and train others on the safe handling of blood and other bodily fluids
- Ensure medicines are safely and appropriately handled, stored, and disposed

## 5 COUNSELING, PSYCHOLOGICAL & SOCIAL SERVICES

- Develop and train staff on protocols related to social, emotional, and physical health (e.g., conflict resolution, violence prevention)
- Promote social emotional health with signage on the school campus

## 6 SOCIAL & EMOTIONAL CLIMATE

- Ensure a clean, welcoming, and pleasant environment
- Ensure all areas of the school have sufficient lighting, and secluded areas are sealed off or supervised

## 7 PHYSICAL ENVIRONMENT

- Ensure the cleanliness of the building, and use appropriate measures to address hazards promptly
- Inspect and repair equipment and keep grounds in good condition
- Facilitate communication to ensure the appropriate and timely referral of reported problems

## 8 EMPLOYEE WELLNESS

- Provide first aid and CPR training to school staff
- Encourage staff to model appropriate care and treatment of the school building and environment (use trash and recycle bins, maintain a clean, welcoming classroom, care of equipment, etc.)

## 9 FAMILY ENGAGEMENT

- Involve students and families in clean up campaigns to improve the school environment and build pride as a sense of community
- Provide information to families about safety hazards and how to reduce injury in the home

## 10 COMMUNITY INVOLVEMENT

- Solicit donations or in-kind services to create, maintain, or repair the school's physical environment (e.g., playgrounds, school gardens)
- Connect staff, students, and families to physical environment service projects in the community



# PHYSICAL ENVIRONMENT

## Maintaining Administrator Support for Physical Environment in the School



Ensure safety assessments, checks, and drills are completed on a regular basis, and improvement or repairs are made in a timely manner



Designate school personnel to lead or assist with assessments, checks, and safety drills



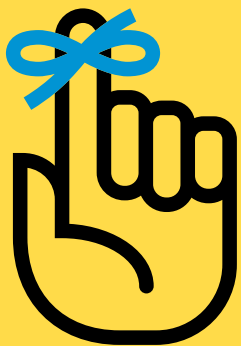
Seek funding for environmental and building improvements



Allow time for staff to participate in professional development on topics related to the physical environment

## Ways to Engage Students

- Establish a physical environment council for students to assist with assessing the school environment, and developing and implementing solutions to make the school campus clean, safe, and inviting
- Invite students to assist in the development of messages and signage related to physical environment (e.g., No Idle Zone, Tobacco Free School Zone, or care of classroom, physical education, and playground equipment)



- ✓ Don't try to take on everything at once!
- ✓ The focus of the School Health Improvement Plan should be on the health needs/highest priorities identified through the assessment (School Health Index or Smart Source).
- ✓ Get input from other individuals in your school on how to best address your school's physical environment.

- ✓ Meet regularly with your school health team and monitor School Health Improvement Plan implementation progress.
- ✓ A final consideration: If you shared the School Health Improvement Plan with someone unfamiliar with it, would they understand the purpose, SMART objective, and action steps necessary to achieve the objective? Would they understand what the school health team is trying to accomplish? If not, add more details!

## Resources

- [Colorado Department of Education, Capital Construction Office](http://tinyurl.com/jsnmgqd)  
<http://tinyurl.com/jsnmgqd>
- [Colorado Department of Transportation](http://tinyurl.com/jam6xag)  
<http://tinyurl.com/jam6xag>
- [Colorado School Safety Resource Center](https://www.colorado.gov/cssrc)  
<https://www.colorado.gov/cssrc>
- [National Center for Safe Routes to School](http://www.saferoutesinfo.org)  
<http://www.saferoutesinfo.org>
- [National Clearinghouse for Educational Facilities](http://www.ncef.org)  
<http://www.ncef.org>
- [US Environmental Protection Agency](https://www.epa.gov/schools)  
<https://www.epa.gov/schools>

## Writing a SMART School Health Improvement Plan (SHIP)

### Sample SMART Objective

By May 15, 20XX, Ridgeview High School will develop and implement a plan for improvements and repairs to the school building and grounds based on assessment results using the [National Clearinghouse of for Safe School Facilities Checklist](http://tinyurl.com/h8t4dft) (<http://tinyurl.com/h8t4dft>).

By May 15, 20XX, Green Middle School will implement a "No Idle Zone" program.



## SMARTness

To ensure your SHIP is SMART, be sure it includes:

- A SMART objective based on the priority identified from a school health assessment tool
- Action steps that are clear, complete, and in chronological order
- Action steps on data collection, team and grant responsibilities, and sustainability efforts
- A realistic budget aligned with the SMART objective
- Shared responsibility among all team members

For more information on School Health Improvement Plans, refer to the Destination <http://tinyurl.com/orq4pyu>

# PHYSICAL ENVIRONMENT



## Air Quality: School buses and cars do not idle while loading or unloading students, to reduce emission of diesel exhaust and fine particles

No Idle Zones are quickly becoming the norm as schools seek to improve air quality in and around the school for students, staff, and visitors. The toxins in car exhaust can lead to serious health conditions and idling can actually damage car engines. Check out the [US Environmental Protection Agencies Idle Free Schools Toolkit](https://www.epa.gov/region8/idle-free-schools) (<https://www.epa.gov/region8/idle-free-schools>).

### Suggested action steps for your School Health Improvement Plan:

- Research toolkits and resources for No Idle Zones
- Gather baseline data by observing driver behavior prior to implementation
- Inform parents about the No Idle Zone (via letter, email, newsletter, student handbook, etc.)
- Inform delivery truck drivers and other regular visitors about the No Idle Zone
- Coordinate with the district transportation office to inform school bus drivers about the new No Idle Zone
- Purchase and display No Idle Zone signage
- Hold a Driver Contact Day to personally thank drivers for turning off engines
- Observe driver behavior after implementation to compare with baseline data
- Share progress and outcomes of implementing the policy within the school community

## Physical Activity and Safety

Students engage in daily physical education and/or physical activity in schools on a regular basis. There are several practices schools can implement to ensure safety of students and reduce injuries while being active on school grounds or during school athletic events. [The School Health Index \(SHI\): Self-Assessment & Planning Guide](http://www.cdc.gov/healthyschools/shi/index.htm) (<http://www.cdc.gov/healthyschools/shi/index.htm>) captures these practices through out the assessment tool.

### In Physical Education:

- Practice active supervision
- Encourage pro-social behaviors
- Use protective clothing and safety gear that is appropriate to child's size and in good shape
- Use safe, age-appropriate equipment
- Minimize exposure to sun (including through use of sunscreen), smog, and extreme temperatures
- Use infection control practices for handling blood and other body fluids
- Monitor the environment to reduce exposure to potential allergens or irritants (e.g., pollen, bees, strong odors)
- Allow for all students to be physically active without overcrowding or safety risks

- Inspect and repair indoor and outdoor playing surfaces, including those on playgrounds and sports fields, on a regular basis
- Inspect and repair physical activity equipment such as balls, jump ropes, nets, weights, and cardiovascular and weight lifting machines on a regular basis
- Install padded goal posts and gym walls
- Use breakaway bases for baseball and softball
- Use securely anchored portable soccer goals that are stored in a locked facility when not in use
- Install bleachers that minimize the risk for falls
- Install slip-resistant surfaces near swimming pools
- Design, construct, and retrofit pools to eliminate entrapment

### On the Playground:

- Use recommended safety surfaces under playground equipment
- Use developmentally-appropriate equipment designed with spaces and angles that preclude entrapment
- Designate boundaries around equipment (e.g., swings) so that students on foot are unlikely to be struck
- Separate playgrounds from motor vehicle and bicycle traffic
- Maintain equipment for safe use, and remove unsafe equipment
- Ensure staff members are trained in developmental appropriateness of different types of playground equipment
- Develop, implement, and enforce rules for safe use of the playground (e.g., no running or pushing, no use of age-inappropriate equipment)

### In Athletic Programs:

- Require physical examination by physician before participation
- Avoid excesses in training regime that may result in injuries (e.g., heat stroke, exhaustion, dehydration, sprains, strains)
- Establish criteria, including clearance by a health-care provider, before allowing further participation in practice or reentry into game play after a head injury
- Reward good sportsmanship, teamwork, and adherence to safety rules
- Strictly enforce prohibitions against alcohol and drug use
- Strictly enforce prohibitions against violence and aggression by students, spectators, coaches, and other persons during sporting events
- Strictly enforce prohibitions against dangerous athletic behaviors (e.g., spearing in football, high sticking in hockey, throwing bat in baseball)
- Report all sports-related injuries to the appropriate authority