Healthy Schools Tips
for Teachers & Other Staff

You have one of the most important and challenging jobs in our community—educating our children. But did you know that teachers and other school staff also play a critical role in students' lifelong health? The way teachers and other staff maintain classrooms, the instructional materials and activities they choose, and even items put on school supply lists can affect indoor air quality and other parts of the school environment. Indoor air quality—how healthy the air is inside a building—can have a huge impact on health and learning. The good news? Research shows that good indoor air quality can improve student attendance, test scores, concentration, and staff performance and sick leave rates.[1] Food provided at school can also affect student health and readiness to learn. Read on to learn how to make school a healthier place for you and your students.

Why are school environments so important to health?

Many kids spend the majority of their waking hours at school. How healthy that environment is can have a big impact on their health and the health of school staff.

This is especially important when it comes to chemicals at school, including those in foods. Children face a greater risk of developing serious health problems from chemical exposure than adults. Kids' bodies are still developing, and they breathe proportionately more air than adults. Kids have activity patterns and behaviors that can expose them to more chemicals, such as putting their hands in their mouths, touching their faces more often than adults, laying their heads on desks, and sitting on the floor. Additionally, kids' bodies are less able to get rid of toxins.[2-7]

Sadly, cancer is the second leading cause of death (after unintentional injuries) of American children ages one to fourteen, and studies suggest environmental contaminants are playing a role.[7, 8] Further, research has shown that chemical exposures during child development may lead to health problems later in life.[9] Even in adults, effects can show up years after chemical exposures and

include respiratory diseases, heart disease, cancer and reproductive problems.[10-12] Children and adults with pre-existing health concerns such as asthma, autism, chemical sensitivities, compromised immune systems and other chronic illnesses are at an even greater risk.[4] Reducing pollution sources in schools lessens these risks. An added bonus—research suggests that improving indoor air quality can improve student and staff performance.[1]

What can I do to help?

Ensure only staff uses cleaning and disinfecting products, never students

The U.S. Centers for Disease Control (CDC) states "cleaning and disinfection products should not be used by or near students."[13] Cleaning and disinfecting products often contain hazardous chemicals and are not tested for safety on children. Also, children's developing bodies (including teenagers) are more susceptible to effects from chemicals than most adults.

Disinfectant sprays and wipes can contain ingredients known to cause and exacerbate asthma, and scented products can contain chemicals that disrupt hormones.[14] These are especially dangerous for kids. Some cleaning and disinfecting products even contain carcinogens and ingredients known to cause fertility problems and birth defects.

The labels on cleaning and disinfecting products carry the statement "Keep Out of the Reach of Children" because of the serious danger the products pose. This means children up to the age of eighteen. In fact, labels on disinfectants are legally enforceable, so allowing kids to use disinfectants violates federal law.[15] THIS INCLUDES DISINFECTING WIPES. Products marketed as natural are not necessarily safer. They are not

required to have all natural ingredients, and even if they do, not all natural substances are safe for human health.

If students need to clean up after themselves, have them use a plain microfiber cloth or paper towel with water or fragrance-free soap and water. Make sure the soap is not antibacterial. According to the CDC, "there is no added health benefit for consumers … using soaps containing antibacterial ingredients compared with using plain soap."[16] However, there often are ingredients in antibacterial soaps that can be harmful to humans, other organisms and the environment.[17]

Clean rather than disinfect routinely in the classroom

Cleaning *removes* germs from a surface and eliminates the conditions they need to thrive (such as dirt, oils and moisture). Disinfecting *kills* germs, usually with toxic chemicals. In classrooms, *cleaning* products should be used routinely on hard surfaces rather than *disinfectants*, including disinfecting wipes. [18, 19]

The CDC states "Cleaning alone removes most types of harmful germs (like viruses, bacteria, parasites, or fungi) from surfaces." [20] Even during a flu outbreak, it does not recommend any additional disinfection beyond normal routine cleaning.[21] During the COVID-19 pandemic, the CDC stated that the risk of catching COVID from touching a surface is low, and "In most situations, cleaning surfaces using soap … and not disinfecting, is enough to reduce risk." [22]

Cleaning products generally contain less hazardous ingredients than disinfecting products. In fact, all disinfectants—including Clorox wipes and Lysol disinfecting wipes—are regulated as pesticides, and disinfectants may only work effectively when used exactly as directed on the label.[23] However, disinfectants should be used to clean up body fluids, such as blood, and when necessary in high-risk areas of the school, such as the nurse's office and restrooms.[18, 24]

Overuse of disinfectants unnecessarily exposes students and staff to harmful chemicals that can make them sick. Also, disinfecting wipes can have a very high concentration of hazardous chemicals and leave a toxic residue on surfaces. They are not allowed to be used in child care facilities in Wyoming.[25] The Natrona County Health Department does not permit disinfecting wipes to be used in school kitchens or lunchrooms. (The health department has no authority over products used in classrooms.)[26]

To safely remove even more germs when cleaning, use a microfiber cloth. Research shows that using a cleaner and plain microfiber cloth can capture and remove up to 99% of germs from hard, nonporous surfaces.[27] Just make sure the microfiber cloth doesn't have additives, such as nano-silver. Very little is known yet about the health effects of nanomaterials. [28, 29]

Make sure routine use of cleaning products in the classroom is done after students have left for the day whenever possible

This reduces student exposure to the chemicals in cleaning products and provides time for the chemicals to dissipate before students return the next day. If cleaning products must be used during the day, do so when students are out of the classroom, such as during a recess, lunch, or passing period. When emergency cleaning or disinfecting is necessary (such as for blood or vomit), have students leave the area until cleaning is completed.

Store classroom cleaning products out of sight and reach of students

When it comes to classroom cleaning products, out of sight and out of the minds of your students is exactly what you want. It may be convenient to leave the classroom cleaner on a counter or under the sink, but much safer to keep it in a high cabinet or closet shelf out of reach of younger students who may mistake it for something else and out of sight of older students. Promote the health and safety of your students, and prevent liability problems for yourself, by literally keeping cleaning products "out of the reach of children" as directed. Disinfecting products should be stored in secure areas out of the

classroom (such as custodial closets) because they generally contain more hazardous ingredients than cleaners.

Use district-provided cleaning products rather than bringing in your own or putting them on school supply lists

This prevents dangerous chemical reactions that could occur if a teacher uses a product on a surface and later a custodian uses a different product on the same surface. It also makes it easier for schools to keep Safety Data Sheets on file for all chemical products in the building, which is an OSHA requirement. Further, it ensures cleaning products meet the district's criteria for health and safety and that the most appropriate product is used in each area of the school. Plus, it saves you and your students money!

Carefully read and follow directions for the products you use

It's easy to skip over the tiny print on product packaging, but doing so could harm you and your students. For example, the instructions for many wipes state that to use for disinfecting, you must pre-clean a surface, then use the wipe enough to keep the surface wet for four minutes, and afterwards, rinse the surface thoroughly with water if it may come in contact with food (this includes desks and tables where students may eat snacks).[30, 31] Skipping some of these steps can prevent the product from working effectively or expose students and staff to harmful chemical residues. (Remember, though, to use only district-provided products and that in classrooms *cleaning* products should generally be used rather than disinfectants, including disinfecting wipes. Any required disinfecting should be done by custodians wearing proper personal protective equipment, not teachers.)

Go fragrance-free

Breathe easier by keeping air fresheners, diffusers, fragrance oils, scented candles and other scented products out of your school. Avoid wearing strongly scented products like perfume, cologne, after shave or scented lotions. Scented products are a source of indoor air pollution.[32, 33]

Chemicals used to create scents can disrupt hormones and cause many serious and chronic health problems.[34] Even natural fragrances, such as essential oils, can emit hazardous and carcinogenic compounds.[35] Fragrance is one of the most frequently identified allergens and can irritate the respiratory system, cause headaches and trigger asthma.[18] An average of one out of every ten school children has asthma, and asthma causes more than 13.8 million missed school days per year nationwide.[36, 37]

Allow students to wash hands with soap and water rather than use hand sanitizer

The CDC recommends washing hands with soap and water over the use of hand sanitizer at school, even to reduce the spread of COVID-19 and the flu.[21, 38] Hand sanitizer is not a substitute for handwashing. It doesn't clean hands; it uses chemicals to kill microbes. These chemicals can't reach microbes on the skin to kill them if hands are dirty, and washing hands removes microbes anyway. Also, hand sanitizer only deactivates a few easy-to-kill germs, leaving other potentially harmful germs behind.[18] Further, skin has beneficial microbes that can be destroyed by hand sanitizer, and hand sanitizers have not necessarily been tested for safety with frequent use by children. Build time into the day to allow for handwashing as needed. If soap and water aren't available (such as on an outdoor field trip) and hand sanitizer is used, make sure it's fragrance-free and alcohol-based (more than 60% alcohol).[18, 21, 38, 39]

Choose least hazardous alternatives

Sometimes there are different products you can use for the same purpose in the classroom, some posing fewer health risks than others. Some quick internet research or a little label-reading can often point you to the safest option. For example, unscented water-based markers (like Crayola and Rose Art) are less hazardous than solvent-based permanent markers. Dry erase markers can be a source of indoor air pollution (even the low-odor ones), so consider dry erase colored pencils or dry erase crayons for students to use on lapboards or use electronic tablets and styluses.[40-42] Be aware that even

products labeled “non-toxic” on their packaging can have health effects.

Keep classroom vents clear

Ventilation is key to good indoor air quality and student concentration. Ventilation is also an important strategy to prevent the spread of infectious diseases in schools by reducing the number of virus particles and other pathogens in the air.[43] This includes COVID-19 and the flu. Make sure you and your students are getting the maximum amount of fresh air by keeping clear the area around vents in the classroom.

Eliminate classroom clutter

Clutter makes a space more difficult to clean, which means allergens—such as dust mites—can flourish. It also means other irritants that have settled onto surfaces stay in the room longer instead of being washed away. Clutter can also attract pests. Keep your classroom clutter-free to promote good health.

Prevent pests

The most powerful weapon against pests isn’t pesticides, it’s prevention. For pests to thrive they need food/water, shelter and breeding sites. Help prevent pest problems by immediately cleaning up spills of food or beverages, keeping food items in sealed containers, making sure classroom trash cans are emptied daily, and eliminating clutter. (Cockroaches love to breed in cardboard boxes—they lay their eggs in the corrugated material.)[44] Preventing pests reduces the need to use pesticides in your school and reduces allergies and asthma problems caused by some pests.

Minimize soft surfaces

Upholstered furniture, stuffed animals and pillows may make a classroom look cozy, but they can have a negative impact on indoor air quality. Soft surfaces are hard to clean and can harbor allergens and asthma triggers like dust mites, chemical irritants that have settled out of the air, and—if the items were brought from home—pet dander, which can trigger allergic reactions for some.[45] Save the soft surfaces for home to improve indoor air quality at school.

Be part of the food solution

There are strong links between healthy diets and academic achievement, so there’s good reason to think carefully about the kind of food provided to students at school.[46] Processed foods can contain potentially harmful food additives like preservatives; artificial colors, flavors and sweeteners; and other forms of added sugar. Some food additives, especially artificial colors, can cause behavior problems that make it difficult for students to learn. Others have been linked to cancer, increased risk of heart disease, and allergic reactions.[47] If you offer students food, make your job easier by giving them unprocessed, nutritious foods that help them be ready to learn. Examples are vegetables, fruit, seeds, nuts (avoid if allergies), whole-grain crackers, and cheese. Ask families to donate these types of foods for class snacks too.

Focus on fun—not food—for rewards, celebrations, and fundraisers

Rewarding students with candy or other food treats may seem like no big deal, but it can really add up, especially when other teachers are doing the same. Using food as a reward or the center of a celebration can also lead to unhealthy lifelong attitudes about food, exclude students with allergies and dietary restrictions, and undermine other healthy schools efforts. Instead, reward with fun, such as special privileges, playing games, extra recess, fun projects, dance parties, or other activities. Your students will have ideas for fun too. Additionally, support non-food fundraisers for your school.

Promptly report concerns about the health of your school environment

Small water leaks can quickly turn into massive mold problems, often in walls, ceilings or under flooring where mold may not be visible. A sudden rash of student or staff headaches, focus problems or lethargy may signal a problem with the ventilation system. Reporting concerns quickly can keep little problems from turning into big ones and minimize health problems for you and your students.

Advocate for healthier schools

Your voice matters. Teachers and school staff can be a powerful force for healthier schools. Start by supporting existing healthy practices and policies at your school and work toward new ones as needed. Continue to educate yourself about what makes a healthy school, share what you learn, and join with others. Connect on the Wyoming Healthy Schools Facebook group. Visit the Wyoming Healthy Schools website, www.wyominghealthyschools.org, to learn more. While you're there, subscribe to our free e-newsletter for news, resources, and opportunities. Share your healthy schools success stories with us and your community. It builds support for the great work you're doing and shows others what's possible.

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