

The 10 Germiest Back-to-School Places

The start of school often triggers the spread of illness, as kids who've been off on various adventures during the summer return with germs that get transmitted to classmates, says Ted Myatt, a senior scientist at Environmental Health & Engineering and biological safety officer at Brigham and Women's Hospital in Boston. Colds alone are responsible for 22 million school days lost each year, according to the Centers for Disease Control and Prevention, and 38 million school days are lost due to the influenza virus.

Most infectious diseases are transmitted by direct contact, either by touching an infected person or by touching surfaces contaminated with pathogens, says Charles Gerba, environmental microbiologist and professor at the University of Arizona's Department of Soil, Water and Environmental Science. "The crowded classrooms, cafeterias and gyms in schools can be a breeding ground for a variety of diseases including colds, influenza, norovirus and staph infections such as MRSA."

Here are 10 of the germiest places to watch out for during the school year.

1. Backpacks

Before tossing a backpack onto the kitchen counter after a school day, consider where it's been. "If a kid takes a backpack on a subway or bus, it will accumulate more bacteria than the backpack of a kid who gets driven to school," says Myatt. Backpacks, like any other often-touched surface, can be contaminated with viruses and bacteria, says Gerba. "And because backpacks carry more than books -- snacks and wet clothes, for instance -- and typically don't get washed very often, they can be teeming with germs."

Germ-free lesson: Wash hands after touching a backpack and before eating, adjusting contact lenses, etc. If the backpack is washable, wash it once a week or so, suggests Myatt. Or simply wipe it down with an antibacterial cloth.

2. Gym class

Walking around barefoot in gym class can lead to a number of nasty infections, says Gerba. "Bacteria thrive in warm, moist conditions such as showers and on any surface that comes into contact with body fluids, especially sweat. Our studies show that an average of 28 percent of gym surfaces we tested were contaminated with body fluids." Those surfaces included mats and other athletic equipment. Some of the most common diseases that lurk in gyms are found on moist floors, says Gerba. Athlete's Foot (tinea pedis), a fungal infection, is one of the most prevalent. Others are onychomycosis, which causes brittle, yellowed toenails and fingernails, and plantar warts, caused by the human papillomavirus.

Germ-free lesson: Wear a dedicated pair of flip flops in the shower or when walking around the locker room.

3. School pools

You can determine the risk of a school swimming pool by looking at a member of the swim team, says Michael G. Schmidt, Ph.D., of the Medical University of South Carolina. "If their hair looks a little brittle or off in color and they smell like a pool you know you are likely safe. Chlorine and bromine are our friends, for they are the enemies of the bacteria and fungi washed from our bodies as we exercise in the pool." Public pools, by state or municipal statute, are required to check water safety as well, says Schmidt.

Germ-free lesson: Showering with soap removes any residual microbes that may have stuck to you while swimming, says Schmidt. It also removes any residual, potentially skin-irritating disinfectants used to keep public pools safe.

4. Mouth Guards

Popping a mouth guard or retainer into your mouth without washing it invites trouble, says Schmidt. "We all have a high concentration of bacteria in our mouths, depending on foods you eat, your genes and status of your oral hygiene." The average mouth guard or orthodontic appliance (retainer) often rattles around in a plastic box, backpack, purse or pocket, says Schmidt. "They pick up food and moisture from our mouths and then multiply while they are away from us in their plastic box or baggy." Fortunately, the microbes are unlikely to make you ill unless the mouth guard picks up different microbes from your hands, backpack, purse or pocket which then end up in your mouth or digestive system, says Schmidt.

Germ-free lesson: Like your teeth, mouth guards should be cleaned properly and often. If there's an odor, they likely need a good scrub, preferably with an over-the-counter mouthwash, says Schmidt. Or rinse it with tap water before putting it back in your mouth.

5. Portable texting devices

Like a backpack, iPads, iPods, iPhones, cellphones and other portable devices may end up in any number of germ-ridden places, including a restroom. Consider what you are doing as you click the keys or touch the screen, says Schmidt. "You're moving bacteria from the surface you have just touched to the keys or screen. Often these devices contain levels of microbes that are off the charts."

Germ-free lesson: Never text while eating or using the toilet. Wipe down the device regularly with antibacterial wipes. Assume your device is contaminated and wash your hands before touching your face or eating, says Schmidt.

6. Computer Lab

You're more likely to encounter germs on a computer keyboard than on a toilet seat, says Gerba. "Computer keyboards and mice get frequent touches and can contain more than 200 times the number of bacteria found on a toilet seat." The keyboard, mouse,

touch pad or touch screen should all be considered a reservoir of bacteria and fungi, says Schmidt. "And the signs that say no eating or drinking? Respect them, for you are protecting yourself." Keep in mind that approximately 80 million Americans get food poisoning each year, and most of the microbes are transferred fecal-orally (fecal matter taken into the mouth via contaminated food or fingers), says Schmidt.

Germ-free lesson: Wash your hands before and after using the computer lab, or use an alcohol-based hand sanitizer. Wash hands vigorously using warm water and soap for 20 seconds (the time it takes to sing the "Happy Birthday" song twice or to recite the alphabet), says Gerba.

7. Cafeteria

Your lunch may be providing nutrition for more than just you. Cafeteria tables are one of the most pathogen-laden places in schools, says Gerba. "They are the gathering place for many students who can contaminate the area through touching, sneezing and coughing. Plus, food residue left there is the perfect breeding ground for bacteria." Communal silverware dispensers may also be home to nasty germs, says Schmidt. If the tines point downward so you're grabbing the end of them, it should be safe unless the person who placed them in the bins touched the tines first. Choose plastic-wrapped utensils if available.

Germ-free lesson: When opening utensils packaged in plastic, pull them out by the handle rather than plunging the end you place in your mouth through the soiled edge of the packaging, says Schmidt. And, of course, wash your hands or use an alcohol-based hand sanitizer before and after eating.

8. Homeroom

As if the computer lab wasn't bad enough, desktops are even worse, says Gerba. "Our studies, which were conducted in actual classrooms in 2009, have found that an average desktop harbors 400 times more bacteria than the average toilet seat." People assume toilets are the dirtiest places, but regular cleaning actually makes toilet seats less germier than other areas. Another unexpected high-microbe site: the pencil sharpener, which is used by so many students every day, says Gerba.

Germ-free lesson: Wash your hands before and after eating or touching your face, or use an alcohol-based hand sanitizer.

9. Water fountains

Drinking out of a water fountain could put you at risk for norovirus, a highly contagious virus characterized by nausea, stomach pain, vomiting, and diarrhea, says Schmidt. Contrary to common belief, you don't need to get on a cruise ship to get norovirus. Many outbreaks happen in schools, says Schmidt. "The virus is tiny and highly infectious and can remain infectious for long periods outside of the body."

Germ-free lesson: Run the water to flush the spout, and drink from the center of the stream, says Schmidt. Don't place your lips on the fountain head as it will likely be contaminated with the previous user. If you use the fountain to fill a water bottle, try for a "clean catch," filling from the center of the stream.

10. Classroom air

Poor classroom ventilation is a common problem and exposes kids to contaminants in the air, says Myatt. "Respiratory diseases such as the common cold can be transmitted by contaminated surfaces or by standing near someone and breathing in viruses they've just exhaled." Gastrointestinal diseases such as E. coli tend to be contracted by touching a contaminated surface, while respiratory illnesses occur by breathing in contaminated air, says Myatt. Influenza, on the other hand, may be found both in the air and on surfaces.

Germ-free lesson: Influenza survives longer in dry air, so a humidifier that keeps a room at between 40 and 60 percent humidity helps keep the flu at bay, says Myatt. "At this humidity the virus dies more quickly, which reduces the amount of virus in the air. Plus, it kills or inactivates those that land on surfaces."

Information taken from: <http://healthyliving.msn.com/pregnancy-parenting/kids-health/10-germiest-back-to-school-places#11>