

Top 10 ways to prevent infection

- 1. Wash your hands frequently. Did you know that microbes can live on inert surfaces anywhere from a few minutes to several months? Imagine these disease-causing microorganisms living on your computer keyboard, your light switch, or even on the elevator button! Surprisingly, most people don't know the best way to effectively wash their hands! The Centers for Disease Control and Prevention (CDC) recommends washing thoroughly and vigorously with soap and water for at least 20 seconds, followed by hand-drying with a paper towel. In the absence of running water, an alcohol-based hand gel or wipe will suffice, although nothing beats good old soap and water. This takes about as long as it does to sing "Happy Birthday," so some hospitals recommend washing your hands for the duration of this simple tune! Get more hand washing tips from the CDC at: http://www.cdc.gov/healthywater/hygiene/hand/handwashing.html.
- 2. Don't share personal items. Toothbrushes, towels, razors, handkerchiefs, and nail clippers can all be sources of infectious agents (bacteria, viruses, and fungi). In kindergarten, you were taught to share your toys, but keep your hands to yourself. Now try to remember to keep personal items to yourself as well! Remind children often about the types of items they should NOT share with others.
- 3. Cover your mouth when you cough or sneeze. In a similar vein, good personal hygiene includes not only personal cleanliness, but also the age-old practice of covering your mouth when you cough or sneeze. Why is this important if you aren't sick? For most infections, the disease-causing microbe has already started growing and dividing long before any symptoms begin to show. Coughing or sneezing can spread these germs through microscopic droplets in the air. The current recommendation is to cover your mouth with your arm, sleeve, or crook of the elbow, rather than using your hands.
- **4. Get vaccinated.** Your immune system is designed to have a "memory" of previous infections. When your body encounters a microbe that has previously caused an infection, it enhances its production of white blood cells and antibodies to prevent infection a second time. However, by getting vaccinated, you "trick" your body into thinking that it has been infected by a particular microbe, hence enhancing its own defenses against subsequent infection. Of course consult your clinician about receiving vaccinations, especially the annual influenza vaccination.
- 5. Use safe cooking practices. Food-borne illnesses frequently arise from poor food preparation and dining habits. Microbes thrive on virtually all food items, and more so on foods left at room temperature. Refrigeration slows or stops the growth of most microbes. Promptly refrigerate foods within 2 hours of preparation. Use separate cutting boards for raw meats and vegetables, keep clean countertops, and wash all fruits and vegetables well prior to eating. See http://www.fightbac.org/ for more information.

Infection Prevention and YOU

- **6. Be a smart traveler.** Infectious diseases can easily be picked up while traveling, particularly when traveling to underdeveloped countries. If your travel destination is one where water is questionable, make sure to use a safe water source such as bottled water for drinking and brushing your teeth. Eat foods that have been cooked, and avoid raw vegetables and fruits. Finally, be sure to update all immunizations that are advised or required for your travel destination. See http://wwwnc.cdc.gov/travel/ for more information.
- 7. Practice safe sex. Sexually-transmitted diseases are probably the most easily preventable infectious disease. By being smart about safe sex (using condoms), transfer of infectious bacteria or viruses from one person to another can be prevented.
- 8. Don't pick your nose (or your mouth or eyes either). Not only is it a social taboo, but it also leads to the spread of a number of infections. Look around, and you'll notice how many people have their hands next to their faces. Many microbes prefer the warm, moist environment inside your nose, as well as other mucous-covered surfaces such as your eyes and mouth. Infections can be easily prevented by avoiding touching of these areas.
- 9. Exercise caution with animals. Infections that can spread from animals to people are called "zoonotic diseases" and are more common than most people realize. If you have pets, make sure they get regular check-ups and that their vaccinations are up-to-date. Clean litter boxes frequently (unless you're pregnant—stay away!), and keep small children away from animal feces. Different types of wild animals can carry diseases such as rabies or bird flu, or fleas and ticks that spread plague and Lyme disease. Make the area around your home unfriendly to rodents and other mammals by eliminating areas where they could hide or build nests, using rodent-proof trash cans that contain food waste, and sealing up holes that offer easy and attractive access to animals. And teach small children in your household to be cautious when encountering wild animals. Finally, always wash your hands and make sure children wash their hands after visiting a petting zoo!
- 10. Watch the news. A good understanding of current events can help you to make wise decisions about traveling or other recreational activities. For example, a bird flu outbreak in Asia may make you think twice about a trip you were planning. Recent reports of West Nile Virus spread by mosquitoes? You may want to bring some insect repellent on your camping trip after all! Salmonella in tomatoes? Don't eat tomatoes. Listeria in cantaloupes? Don't eat cantaloupe. You get the idea.

Your skin acts as a natural barrier against harmful microbes that cause infections, but smart "bugs" have found alternative routes to get into your body and cause infection. By making a few simple behavioral changes (which ultimately reduce their access into your body), you can easily prevent the spread of many infectious diseases.

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