



# PROTECTING YOURSELF DURING THE RESPIRATORY ILLNESS SEASON: A PLAYBOOK FOR THE COMMUNITY

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**The Leapfrog Group asked its Partners Advisory Committee to develop this guide for the community.**





















## Once I have a disinfectant, how can I use it?

- First and foremost, you should follow the directions that come with the product and read all the warnings on the label. The warnings can help keep you and your family stay safe, and they might suggest on what surfaces the disinfectant should and should not be used.
- All disinfectants available to consumers will require that the surfaces you are trying to disinfect stay visibly wet for what is known as the “contact time.” The contact time for any specific disinfectant should be in the use instructions on the container. (If in doubt, let the surfaces remain wet for 10 minutes before wiping the surface dry.)
- Disinfectants normally come in several different forms:
  - **As “wet wipes” in canisters for use directly on hard surfaces.** Because of the use of the wipe itself, you may need to pay even greater attention to ensure you leave the surface wet for the proper amount of time.
  - **As a liquid in a regular bottle.** The instructions for use of these products will often specify how they can be applied, either with a cloth, a sponge or in a separate spray bottle. If you use a cloth or a sponge, be sure to not overuse it or you will risk spreading the germs around on the surfaces. If you use a spray bottle, see the suggestions below. Again, all surfaces need to stay visibly wet for the required contact time.
  - **As a liquid in a spray bottle with a trigger.** While spray bottles can be easy to use, you need to be sure that the surfaces you are focusing on are sprayed completely and allowed to stay wet for the required time. Avoid spraying in such a way as to simply get large droplets on the surface with gaps between them – any viruses in the gaps will not be inactivated. A fine spray is much better.
  - **As a liquid in an aerosol can.** Normal aerosol cans of disinfectant are easy to use and typically produce a nice, fine spray. Keeping the surface wet and avoiding overspray and inhaling it remain issues to think about.
  - **As a liquid for use with a separate high-tech sprayer.** As the issue of infectious diseases has really caught our attention, there are sprayers on the market being purchased by consumers for disinfecting their houses and vehicles. One new popular option is the electrostatic sprayer, sometimes misleadingly called a fogger. These devices are excellent for use outdoors with plenty of ventilation or indoors with specialized Personal Protective Equipment (PPE) more commonly seen in hospitals and other public safety and commercial environments. The small, electrically charged droplets are not meant to be inhaled by you when you are applying the disinfectant, so caution is required (especially in enclosed spaces). The advantage is that the disinfectant will coat surfaces very easily and, when done properly, can stay wet for the disinfectant’s contact time (which is still required, just like any other spray disinfectant).

## What about other devices like air purifiers and ultraviolet lights?

- Be very careful when reading about devices that claim to kill or eliminate viruses and bacteria. Because they are not regulated by any government agency, the manufacturers can make false and/or misleading claims. Buyer beware!
- Ultraviolet (UV) lights are used quite successfully for sanitizing surfaces in certain professional settings like hospitals and nursing homes, but these lighting “robots” are highly specialized and expensive. Even these robots have difficulty dealing effectively with germs if there are shadows or if the light is too far away from the surfaces being treated. UV light can be harmful to your eyes and your skin if you get overexposed to it.
- Like UV lights, some sophisticated air purifiers can help reduce the amount of germs in the air and, when used over an extended period of time, can perhaps reduce the numbers of germs on surfaces. Most home air purifiers will have little or no effect on the viruses that cause the flu or COVID-19.

The keys to keeping the surfaces with which you come in contact safer are to use an EPA approved chemical disinfectant (look for the EPA Reg. No. on the label) and follow the instructions that come with the product.

## OTHER BEST PRACTICES

### Vaccination

The primary goal during respiratory illness season is infection prevention. This includes the Four Pillars previously discussed – hand hygiene, social distancing, mask wearing, surface disinfection – as well as vaccination. Vaccination prevents specific diseases from occurring, which subsequently reduces the burden on you and the healthcare system and avoids future outbreaks. Vaccination may also prevent co-infections (two infections occurring together, e.g., influenza and COVID-19) and secondary infections (an infection that develops as a result of the initial infection, e.g., post-influenza bacterial pneumonia).

A recent [report](#) from the CDC showed a disturbing drop in routine childhood vaccinations due to the COVID-19 pandemic. Notably, the CDC and the American Academy of Pediatrics (AAP) recommend that every child continues to receive routine vaccinations during the pandemic.<sup>4</sup> The importance of staying up to date on vaccinations is not limited to children. In fact, most illnesses, hospitalizations, and deaths from vaccine-preventable diseases occur in adults. In addition to [annual influenza vaccination](#),<sup>5</sup> other vaccines may also be recommended for adults, depending on their risk factors, to prevent tetanus, diphtheria, and pertussis (whooping cough); pneumococcal diseases; shingles; hepatitis A and B; meningococcal disease; measles, mumps, and rubella; and human papillomavirus. The recommended vaccination schedules for children and adults can be found [here](#).

Vaccines for COVID-19 are quickly being developed and submitted to the U.S. Food and Drug Administration (FDA) for emergency use authorization. To stay informed about state specific vaccine distribution programs please visit the “COVID-19 Vaccine Operational Guidance” page of the CDC [here](#).

Other common-sense infection prevention measures include covering your cough and staying home when you are sick.

### Responsible Antibiotic Use

If you do become ill, understanding when and when not to use antibiotics is critical. Antibiotics are medicines used to treat infections caused by bacteria. Bacteria can change over time and become resistant to certain antibiotics, meaning the antibiotics will not work anymore. Antibiotic resistance is bad – it causes infections that are more difficult and more expensive to treat and may even lead to death. The World Health Organization has named antibiotic resistance one of the most urgent threats we will face over the next decade.

Antibiotic resistance happens when bacteria are exposed to antibiotics; in other words, antibiotic use is a key driver of antibiotic resistance. Even more troubling is the fact that we use a lot of antibiotics when we don’t need them – one-third to one-half of all antibiotic prescriptions are not needed. Many respiratory illnesses, like the common cold, are caused by viruses, and antibiotics do not work against viruses (Table 1). However, there are other things you can do to help you feel better if you have a viral respiratory illness:

- ✓ Get plenty of rest.
- ✓ Stay hydrated. Make sure you’re drinking/eating fluids.
- ✓ Use a clean humidifier or cool mist vaporizer, or breathe in steam from a bowl of hot water or shower.
- ✓ Use saline nasal spray or drops to help a stuffy nose.
- ✓ Use lozenges to soothe a sore throat or cough (only if 4+ years old).
- ✓ Use honey to relieve cough for adults and children at least one year old.
- ✓ Ask your doctor or pharmacist about over-the-counter medicines that may help with symptom relief.
- ✓ Establish a relationship with a primary care provider, so you can contact them if any of the following occur:
  - Temperature of 100.4°F or higher or fever that lasts for more than 4 days
  - Shortness of breath or trouble breathing
  - Symptoms that last more than 10 days without improvement
  - Symptoms that improve but then return or worsen
  - Worsening of chronic medical conditions
  - Any other symptom that is severe and/or causes alarm

If you do visit a health care provider, and an antibiotic is prescribed, ask questions. What kind of infection do you have? Will you get better without it? What are the side effects? How long should you take it? Antibiotics save lives, and when an antibiotic is needed, the benefits far outweigh the potential risks. However, protecting yourself by being proactive is important. If you mutually agree that an antibiotic is necessary, make sure you:

- ✓ Take it exactly as prescribed.
- ✓ Do not skip doses.
- ✓ Do not share medication with others.
- ✓ Do not save it for later. Talk to your pharmacist about safe disposal of leftover medicines.

See [other resources](#) for additional information about responsible antibiotic use.

**Table 1. Virus or Bacteria?**

Common Condition	Common Cause			Are Antibiotics Needed?
	Bacteria	Bacteria or Virus	Virus	
Strep throat	✓			Yes
Whooping cough	✓			Yes
Urinary tract infection	✓			Yes
Sinus infection		✓		Maybe
Middle ear infection		✓		Maybe
Bronchitis/chest cold (in otherwise healthy children and adults)*		✓		No*
Common cold/runny nose			✓	No
Sore throat (except strep)			✓	No
Flu			✓	No

\* Studies show that in otherwise healthy children and adults, antibiotics for bronchitis won't help you feel better.

Source: [https://www.cdc.gov/antibiotic-use/community/pdfs/aaw/AU\\_viruses-or-bacteria-Chart\\_508.pdf](https://www.cdc.gov/antibiotic-use/community/pdfs/aaw/AU_viruses-or-bacteria-Chart_508.pdf)

## **Resources**

### **COVID-19**

For more information on COVID-19, visit the Center for Disease Control and Prevention's website at <https://CDC.gov/coronavirus>

### **Vaccination**

Vaccination During COVID-19: <https://www.cdc.gov/vaccines/parents/visit/vaccination-during-COVID-19.html>

Vaccines You Need as an Adult: <https://www.cdc.gov/vaccines/adults/index.html>

Prevent Seasonal Flu: <https://www.cdc.gov/flu/prevent/index.html>

### **Responsible Antibiotic Use**

Choosing Wisely: <https://www.choosingwisely.org/patient-resources>

Be Antibiotics Aware: <https://www.cdc.gov/antibiotic-use/index.html>

Antibiotics and You: <http://antibioticsandyou.org/>

Colds, Flu, & Other Respiratory Illnesses in Adults: <https://www.choosingwisely.org/patient-resources/colds-flu-and-other-respiratory-illnesses-in-adults/>

Antibiotics for a Sore Throat, Cough, or Runny Nose in Children: <https://www.choosingwisely.org/patient-resources/antibiotics-for-respiratory-illness-in-children/>

Speak Up: Antibiotics – Know the Facts: <https://www.jointcommission.org/resources/for-consumers/speak-up-campaigns/antibiotics-know-the-facts/>

ABCs of Antibiotics: <http://professionals.site.apic.org/infographic/abcs-of-antibiotics/>

Using Antibiotics Wisely: <https://choosingwiselycanada.org/campaign/antibiotics/>

Do Bugs Need Drugs? – Early Childhood Education: <http://www.dobugsneeddrugs.org/educational-resources/daycare-early-childhood-education/>

Cold Standard Toolkit (for providers): <https://choosingwiselycanada.org/perspective/the-cold-standard/>

## References

- <sup>1</sup> Daily Updates of Totals by Week and State – Provisional Death Counts for Coronavirus Disease 2019 (COVID-19). Centers for Disease Control and Prevention. <https://www.cdc.gov/nchs/nvss/vsrr/COVID19/index.htm?fbclid=IwAR3hy7dIMLzeHe-gFWS8hzSzbyKJGDU8JYKX5DIStl0qTnnq-a75p1xKE-I>. Published December 10, 2020. Accessed December 10, 2020.
- <sup>2</sup> Fischer EP, Fischer MC, Grass D et al. Low-cost measurement of face mask efficacy for filtering expelled droplets during speech. *Science Advances*. 2020;6(36). <https://advances.sciencemag.org/content/6/36/eabd3083>
- <sup>3</sup> Riddell, S., Goldie, S., Hill, A. et al. The effect of temperature on persistence of SARS-CoV-2 on common surfaces. *Virology Journal*. 2020;17(145). doi: <https://doi.org/10.1186/s12985-020-01418-7>.
- <sup>4</sup> Santoli JM, Lindley MC, DeSilva MB, et al. Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration — United States, 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:591–593. doi: <http://dx.doi.org/10.15585/mmwr.mm6919e2>.
- <sup>5</sup> Summary: 'Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)—United States, 2020-21'. Centers for Disease Control and Prevention. <https://www.cdc.gov/flu/professionals/acip/summary/summary-recommendations.htm>. Published on August 20, 2020. Accessed November 18, 2020.