Respiratory System Health

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Printed: September 16, 2019





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CHAPTER 1

Respiratory System Health

Learning Objectives

• Identify what you can do to keep your respiratory system healthy.



Why sneeze into your elbow?

Sneezing into your elbow can help stop the spread of a respiratory illness, like the flu or common cold. If you sneeze into your hands, you may then spread germs when you touch a doorknob or other surfaces.

Keeping Your Respiratory System Healthy

We know that many respiratory illnesses are caused by bacteria or viruses. There are steps you can take to help the spread of these pathogens, and also to prevent you from catching one. Furthermore, many respiratory illnesses are caused by poor habits, such as smoking. Many of the diseases related to smoking are called **lifestyle diseases**. Lifestyle diseases are diseases that are caused by choices that people make in their daily lives. For example, the choice to smoke can lead to emphysema, cancer and heart disease in later life. But you can make healthy choices instead. There are many things you can do to keep yourself healthy.

Avoid Smoking

Cigarette smoking can cause serious diseases, so not smoking or quitting now are the most effective ways to reduce your risk of developing chronic respiratory diseases, such as lung cancer. Avoiding (or stopping) smoking is the single best way to prevent many respiratory and cardiovascular diseases. Also, do your best to avoid secondhand smoke.

Eat Well, Exercise Regularly, and Get Rest

Eating healthy foods, getting enough sleep, and being active every day can help keep your respiratory system, cardiovascular system and immune system strong. Getting enough exercise makes your lungs stronger and better at giving your body the oxygen it needs. It also helps to boost your body fight germs that could make you sick. These can also, of course, keep your skeletal and muscular systems strong.

Wash Your Hands

Washing your hands often, especially after sneezing, coughing, or blowing your nose, helps to protect you and others from diseases. Washing your hands for 20 seconds with soap and warm water can help prevent colds and flu. In one respect, you can think of hand washing as a survival skill. Some viruses and bacteria can live from 20 minutes to two hours or more on surfaces like cafeteria tables, doorknobs, and desks. Washing your hands often can remove many of these pathogens. Never touch your mouth, nose, or eyes without washing your hands.

Avoid Contact with Others When Sick

Do not go to school or to other public places when you are sick. You risk spreading your illness to other people. You may also get even sicker if you catch something else. Do not share food and other things that go in the mouth, as in guzzling milk from the carton or double dipping chips. You never know what pathogens can be lurking around. Cover your mouth with a tissue when you cough or sneeze and to dispose of the tissue yourself. No time to grab a tissue. Cough or sneeze into the inside of your elbow instead of your hands.

Visit Your Doctor

Getting the recommended vaccinations can help prevent diseases, such as whooping cough and flu. In fact, a yearly flu vaccine is recommended for everyone who is at least 6 months of age. The flu vaccine is especially important for people who are at high risk of developing serious complications (like pneumonia) if they get sick with the flu. People who have certain medical conditions including asthma, diabetes, and chronic lung disease, pregnant women, and people younger than 5 years (and especially those younger than 2), and people 65 years and older should also make sure they get the yearly flu vaccine.

Seeking medical help for diseases like asthma can help stop the disease from getting worse. If you are unsure if you should go to the doctor, call the doctor's office and ask.

Summary

- Avoid smoking, get enough exercise, and wash your hands to protect your respiratory system from illness.
- Getting the recommended vaccinations can help prevent diseases, such as whooping cough and flu.

Explore More

Use the resources below to answer the questions that follow.

Explore More I

• The Genetics of Lung Health and Lung Disease at http://www.youtube.com/watch?v=Pc8oWAzi1FI (2:57)



MEDIA

Click image to the left or use the URL below.

URL: http://www.ck12.org/flx/render/embeddedobject/57520

- 1. Why are scientists studying the genetics of lung disease?
- 2. What do scientists hope will come out of this research?
- 3. How many areas of the genome have scientists found that are associated with COPD?
- 4. Are these scientists engaged in basic or applied research? Explain your reasoning fully.

Explore More II

• Smog and Health Effects at http://www.youtube.com/watch?v=ROf4PeRlJsM (2:31)



MEDIA

Click image to the left or use the URL below.

URL: http://www.ck12.org/flx/render/embeddedobject/57521

- 1. How many days a year does Los Angeles have unhealthy air?
- 2. What are the potential health effects of this air? Who is most at risk? Why do you think risk is higher for these groups?
- 3. What are you supposed to do on days of unhealthy air?

Review

- 1. What are lifestyle diseases.
- 2. What is the relationship between smoking and lifestyle diseases?
- 3. What are two things you can do to keep your respiratory system healthy?
- 4. Explain how washing your hands can help you prevent catching a cold.

References

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