



Virtual Learning

Medical Interventions

Lung Cancer

April 14, 2020



Medical Interventions

Lesson: April 14, 2020

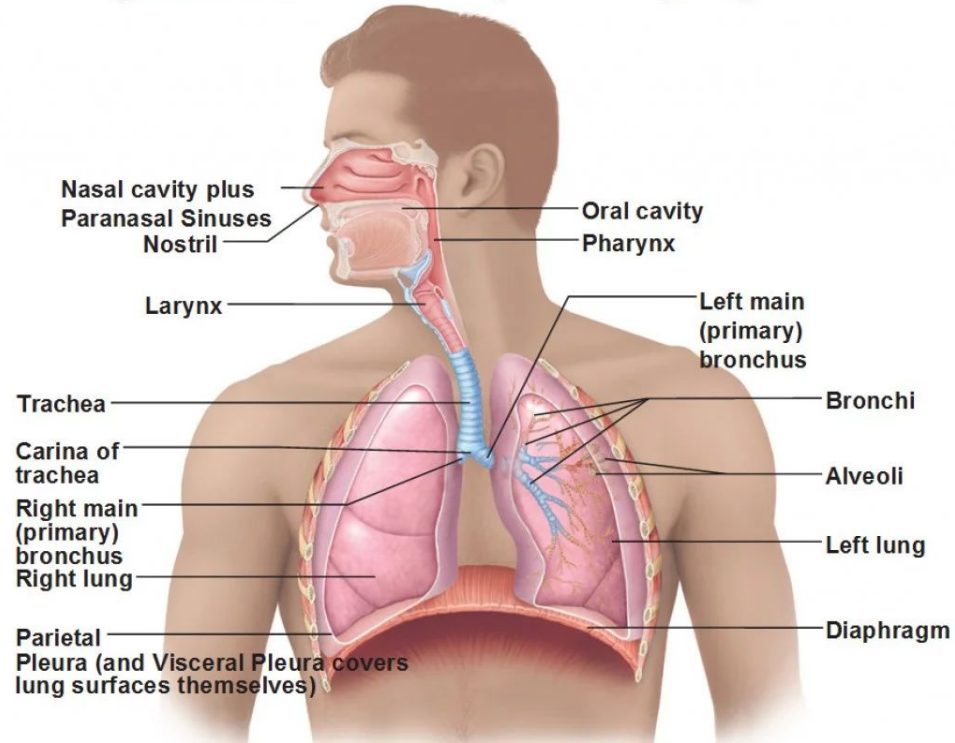
Objective/Learning Target:

Describe the potential risk factors for lung cancer as well as the way to reduce the risk. (3.2.1)

Let's Get Started:

1. Review the structures of the respiratory system using the image to the right and take this [practice quiz](#) to see how much you can remember.
2. Watch this video to learn about the basics of [lung cancer](#).

Organs of the Respiratory System





Background Information

Some risk factors are under our control and others are not. Risk factors for cancer can be grouped into four categories:

1. Behavioral risk factors are behaviors that you can change, such as smoking.
2. Environmental risk factors are toxins found in your surrounding environment that increase your cancer risk, such as radon and asbestos.
3. Biological risk factors are physical characteristics, such as gender, race, and age.
4. Genetic risk factors relate to genes inherited from your parents.



Lesson Activity

Copy the graphic organizer below on paper and use [this website](#) to determine the four risk factors for lung cancer.

Risk Factor Type	Increasing Risk	Decreasing Risk
Behavioral		
Environmental		
Biological		
Genetic		



Lesson Activity - **Answers**

Copy the graphic organizer below on paper and use [this website](#) to determine the four risk factors for lung cancer.

Risk Factor Type	Increasing Risk	Decreasing Risk
Behavioral	<ul style="list-style-type: none">● Smoking tobacco products	<ul style="list-style-type: none">● Avoiding smoking/second hand smoke● Healthy diet/exercise
Environmental	<ul style="list-style-type: none">● Exposure to asbestos, radon, etc.● Living in areas of high air pollution	<ul style="list-style-type: none">● Avoiding areas with asbestos● Living in low-pollution areas
Biological	<ul style="list-style-type: none">● Increasing age, autoimmune diseases	
Genetic	<ul style="list-style-type: none">● Family history of lung cancer	<ul style="list-style-type: none">● No family history



Practice

For each scenario, indicate whether it increases or decreases the risk of developing lung cancer and what type of risk factor it applies to.

1. Sharon smokes 3 packs of cigarettes a day.
2. Tom completed a pedigree and determined his family has a history of lung cancer.
3. Janet has rheumatoid arthritis (an autoimmune disease).
4. Sam eats a healthy diet and exercises everyday.
5. Robert lives in the country on a 3000 acre farm.



Practice - **Answers**

For each scenario, indicate whether it increases or decreases the risk of developing lung cancer and what type of risk factor it applies to.

1. Increases; behavioral
2. Increases; genetic
3. Increases; biological
4. Decreases; behavioral
5. Decreases; environmental



Additional Practice

1. Check your understanding by taking this [online quiz](#) of lung cancer and risk factors.
2. View the CDC worksheet on [radon and lung cancer](#) starting in page 15. Check your answers on page 27.



Additional Resources

1. View the [presentation](#) from the American Cancer Society on lung cancer.
2. Try out this [online game](#) to test your lung cancer knowledge.
3. View this [research article](#) that discusses how the microbiome might impact the development of lung cancer.