

Respiratory system addendum on smoking:

Smoking can be deadly.

First, a little bit about statistics:

Yes, there are stories about people that live to a ripe old age and smoke.

Yes, you can also win the lottery.

These things are all possible!

***BUT**, chances are that if you smoke, you will die between 13 and 14 years earlier than a non-smoker.*

Dangers of smoking:

It destroys the cilia lining the bronchi.

In response to irritation, the lungs produce more mucus, but without cilia to sweep it out, it starts clogging the lungs.

The only other way to get rid of mucus is by coughing - which leads to “smokers cough”.

It kills macrophages in the lungs.

This makes you more prone to infections.

It causes lung cancer.

Most people die within a year of diagnosis.

Bladder, pancreas, mouth & throat cancers are also more common in smokers.

Chemicals can spread throughout the body and irritate other organs, not just those directly exposed to smoke.

Can cause emphysema.

In emphysema, the alveoli deteriorate; this obviously causes difficulty breathing.

It can increase blood pressure and bad cholesterol.

This leads to strokes and heart attacks (we'll revisit this when we do the circulatory system).

Smoking while pregnant deprives the fetus of oxygen.

Other effects:

Wounds and bones take longer to heal.

Skin ages prematurely (wrinkles).

Taste and smell are less sensitive.

Second hand smoke increases these risks for non-smokers.

Each year smoking kills approximately 480,000 people in the U.S. (about 41,000 of these are from second hand smoke)

It is the single biggest cause of preventable deaths in the U.S

Worldwide, the figure is over 5 million.

This is more deaths than deaths due to car accidents, alcohol, drug abuse, HIV and murders combined.

Quitting smoking can be difficult for some people due to nicotine addiction (nicotine causes changes in the brain that “addict” you).

But if you do quit:

Within a year lung capacity is almost back to normal.

Yes, your lung capacity is also affected (we didn't list that above).

Within 15 years, the risk of heart disease and lung cancer drops back to normal.

If you do smoke, the single biggest improvement you can make to your health is to stop!