

SB1: Smoking and breathing game Extra information



What happens to the body when you exercise?

Lungs:	Take in oxygen and transfer it into the bloodstream. They also expel carbon dioxide at the same time (when you breathe out).
Heart:	Works hard to pump the blood around the body to the organs and muscles that need oxygen.
Veins and arteries:	Carry oxygen to your muscles and organs. The more strenuous the activity, the more oxygen we need, which is why we breathe harder during exercise.

What happens to the body when you smoke a cigarette?

- 1) Airway of the lungs immediately constrict, decreasing lung function.
- 2) Within 10 seconds of first inhalation, nicotine passes into the blood. Nicotine triggers the brain to release dopamine - a chemical linked to feelings of pleasure (*as a smoker begins to associate smoking with feeling good, additional cues such as the taste, sight, feel or smell of a cigarette becomes part of the addiction*).
- 3) Increased heart rate and elevated blood pressure.
- 4) Carbon monoxide in blood deprives body cells of oxygen.
- 5) Hazardous chemicals carried in the blood, exposes your body to cancer causing chemicals. Wherever smoke touches cells, it harms them.

How does smoking affect your organs?

Your organs that are vital for physical activity are seriously affected by smoking - even smoking small amounts or being a 'social smoker':

- Smoking damages the heart and blood circulation.
- Toxins from cigarette smoke:
 - make your blood thicker and increase chances of blood clots;
 - increase blood pressure and heart rate, making your heart work harder than normal; and
 - narrow your arteries, reducing the amount of oxygen-rich blood circulating to your organs.
- Your lungs are badly affected by smoking, and a build-up of sticky tar clogs the lungs where oxygen and carbon dioxide are transferred in and out of the bloodstream.

Extra information:

- Up to 15% of a smoker's blood might be carrying carbon monoxide instead of oxygen. Carbon monoxide combines with nicotine to thicken blood and clog blood vessels increasing the risk of heart disease and circulation problems. The reduced amount of oxygen in the body results in the heart working harder to get more oxygen through the body.
- Cigarette smokers have a lower level of lung function than those who have never smoked. Smoking reduces the lung growth rate.

- Young people (13-19 year olds) who smoke are three times more likely to suffer from shortness of breath compared to those who don't smoke.