

The dangers of smoking

Science homework

Dangers of smoking

- ▶ The dangers of smoking result in poor vision, lung cancer, coughing, too much clotting, COPD, bronchitis, anxiety, irritability, constricted blood vessels, high cholesterol, heart disease, blood cancer, yellow finger, stained teeth, bad teeth, cancer connection, diabetes complications,

- ▶ There are more than 5000 chemical compounds found in a cigarette. A sizeable number of them are toxic - they are bad for us and damage our cells. Some of them cause cancer - they are carcinogenic. Some of the chemicals are cadmium, nicotine, toluene, arsenic, methane, acids, paint, ,methanol,



- ▶ Smoking causes great damage to the smoker and those around them. If you breath in smoke from another persons cigarette while they are smoking it is called 2nd hand smoking. This is just as bad as smoking, yourself.
- ▶ Smoking can kill you 10 years younger and gives you a slow,painful death.

[https://vine.co/v/
hjzAowhiMVu](https://vine.co/v/hjzAowhiMVu)

- ▶ 1. Whether you light your cigarette using a matchstick or a lighter, the first puff is the most damaging. The smoke emitted from the match and the cigarette form a strong cocktail that can leave the mucous lining in your nose damaged.
- ▶ 2. Apart from that the heat from the cigarette affects the skin on your face and most importantly around your nose and mouth. The heat causes your lips to darken, leads to wrinkles and the appearance of age spots. Another reason for darkening of a smokers lips is the fact that the tar in the cigarette tends to adhere to the lips, soon staining them.
- ▶ 3. Not to mention the constant pouting and sucking that one has to do in order to take a puff also leads to what is known as a smoker's pout. Where when you pout you will see the appearance of fine lines around the lips – something that does not happen in non-smokers.

What the smoke does to the inside of your mouth

- ▶ 4. When the smoke is inside your mouth, the tar starts to coat the enamel of your teeth, discolouring them.
- ▶ 5. The heat from the smoke also damages the cells in and around your mouth, and in some cases leading to a change in their DNA – causing mutations. Once inside the mouth the tar and other chemicals affect all parts of your oral cavity.
- ▶ 6. The chemicals present in a cigarette are numerous and they form a coat your tongue, palate and the inside of your cheeks. It deadens your taste buds, hyperactivates your salivary glands and eventually blocks them, leading to a lack of saliva in your mouth. That is also one of the reasons smokers need a drink of water after a smoke.
- ▶ 7. The tar and chemicals also coat the roof of your mouth, leading to a condition called the ‘smoker’s palate’ where the roof of your mouth gets coated with a whitish residue with small red spots protruding from it. These protrusions are actually the opening of ducts of glands present on the palate.
- ▶ 8. Smoking also kills the good bacteria within your mouth, giving way to bad breath and a condition called oral thrush.
- ▶ 9. It also leads to gum disease, discolours your gums – turning them black, leads to cavities and causes oral cancer. This is mainly because the heat combined with the chemicals in smoke tend to damage cells leading to mutations and change in their DNA. This change may affect either their mechanism of multiplying in a uniform manner or the one that stops their multiplication.
- ▶ 10. Smoking also affects your olfactory system (nose) leading an eventual loss in your ability to smell.

- ▶ the smoke enters your throat:
- ▶ 11. Once you start to inhale the smoke, it first hits the back of your mouth or the beginning of your throat, this place is packed with blood vessels that immediately contract. It also affects the mucosal cells lining this part of your throat, eventually deadening them. This can lead to infections, excessive dryness and irritation. One of the commonest complaints a smoker has is that they feel an itchy sensation at the back of their mouth. This is due to the irritation and dryness of this region.
- ▶ 12. Once the smoke travels lower down your throat it causes irritation and in some people the need to cough. According to experts the formaldehyde and acrolein abundantly present in cigarettes are primary reasons for throat irritation smokers experience.
- ▶ 13. Apart from that cigarette smoke also causes changes in one's voice. Commonly seen as hoarseness of the voice, it is mainly because of the effect the chemicals have on the vocal chords. Another reason for this is the constant clearing of one's throat, commonly seen in smokers.
- ▶ 14. Smoking can also cause throat cancer. This is because the constant irritation of the lining of the throat combined with the erosion and damage of the cells lining the throat leads to a change in the way the cells form and regenerate.

- ▶ When it enters your trachea or wind pipe:
- ▶ 15. Trachea is the pipe that leads to your lungs. It is lined with tiny hair like processes (called cilia) that help throw out any foreign objects. These cilia get damaged by the smoke of cigarettes and tend to function less optimally. It also leads to itchiness in the trachea leading to what is called the smoker's cough.
- ▶ 16. Smoking can also lead to irritation of the larynx and laryngitis (infection of the larynx)
- ▶ Read more about why you should quit smoking.
- ▶ It also affects your oesophagus:
- ▶ 17. Smoking affects your food pipe as well. The chemicals and heat from the smoke tend to affect your oesophageal sphincter muscle. This is the muscle responsible for keeping the contents and acids in your stomach from rising back up into your throat. The weakening of this muscle is one of the main reasons for GERD (Gastro oesophageal reflux disease), acidity, ulcers and other stomach ailments.
- ▶ When it enters your bronchus and free radicals, depleting collagen below your skin and causing wrinkles, oedema and stains your fingers and nails.

- ▶ . 18. This is where the cigarette smoke does the most damage, that is slow, progressive and deadly. Cigarette smoke attacks the cleaning mechanism of the respiratory system that is guided by cilia and mucous. The cilia moves the mucous that has trapped foreign object like dust, bacteria etc and throws it out of the body. In a smoker these cilia tend to get paralysed and eventually die. Smoking also causes an increase in the amount of mucous produced, and since the cilia can no more function and throw out the mucous, a person develops a smoker's cough.
- ▶ 19. Apart from that the cells along the bronchioles get damaged and tend to multiply abnormally. These cells cause the hardening of the outer surface of the bronchioles and leads to lesser ability to exchange gas with the microscopic air sacs (called alveoli) present around them.
- ▶ Eventually these air sacs burst and lead to what is known as emphysema. A common condition seen in long-term smokers.
- ▶ 20. Smoking also leads to a buildup of tar within the bronchioles. This coupled with the thickening of its walls leads to breathlessness, wheezing, fatigue and in some cases dizziness.
- ▶ 21. Cigarette smoke also contains carbon monoxide. This is a potentially lethal gas since it attaches to the haeme (iron) part of your blood and does not allow it to carry oxygen to other organs. Inhaling too much of this gas can kill you. In cigarette smoke carbon monoxide leads to lack of oxygen in the body, which eventually effects all your organs. It not only sets off the roller coaster of events leading to cancer it also starts the process of eventual decay of your organs — starting from your mouth to your brain, kidneys, liver, digestive system and blood.
- ▶ If all you can think about is how you have tried to quit but failed? Here is some research on why you tend to lose motivation and why smoking is now easier than ever.

- ▶ When you exhale:
- ▶ 22. When you exhale the entire process is repeated and all the chemical, smoke, tar etc deposited along your airway is doubled.
- ▶ 23. Apart from all the damage it causes on your body, smoking also leads to various other problems like cardiovascular disease due to plaque formation, constriction of blood vessels leading to vascular disorders.
- ▶ 24. Smoking also causes loss of bone density leading to conditions like osteoarthritis, loss of teeth and joint paints.
- ▶ 25. It also affects your skin by reducing the effects of antioxidants in your body by releasing free radicals, depleting collagen below your skin and causing wrinkles, oedema and stains your fingers and nails.