

# Adverse effects of cigarette smoking essay examples

[Health & Medicine](#), [Addiction](#)



## **Abstract**

Cigarette smoking is one of the leading causes of death in America. This is due to the multiple carcinogens contained within cigarette smoke which, when inhaled, mutate cells to create cancer and other conditions. Cigarettes also contain the addictive substance nicotine, which creates a physiological dependency upon smoking, leading the smoker to continue the habit. These two things lead to the development of a number of health problems, including emphysema, chronic obstructive lung diseases, cancer and more. A chronological account of the effects of cigarette smoking are outlined in this essay.

Cigarette smoking is universally regarded as one of the leading causes of death in America, if not throughout the world - one of every five deaths in the United States is attributed to adverse health effects resulting from smoking (CDC, 2012). Its effects range from coronary heart disease, stroke, and lung cancer to emphysema, chronic bronchitis, and more. These conditions come about from a combination of carcinogens and the addictive substance nicotine, which create a system that permits continued use of cigarettes until serious health risks occur. Cigarette smoking is known to be a direct cause of many different health problems, including cancer, heart attacks, chronic obstructive pulmonary disease, and others. In order to understand the ultimate effects of cigarette smoking, it is necessary to understand the manner in which cigarettes lead to adverse health effects, including its addictive properties and its carcinogenic attributes.

During the inhalation of cigarette smoke, the body takes in cancer causing agents known as carcinogens. There are many different carcinogenic pyrolytic products contained within cigarette smoke; when inhaled, these products bind themselves to DNA and start the process of mutating one's genetics. Genetic mutations are caused by benzopyrene, which can alternatively kill body cells if it does not mutate them. There are more than 19 carcinogens found in cigarette smoke, some of the most powerful being polynuclear aromatic hydrocarbons, tar particles which can bring about programmed cell death in a cell - this also leads to genetic mutation into a cancer cell. These are nonradioactive carcinogens; radioactive carcinogens also exist within cigarette smoke. The tar from cigarette smoke often helps to transmit these radioactive compounds further into the lungs, as it is not easily dissolved in the lungs. This leads to a cumulative radiation dose of nearly 100 rads in many lung cancer patients (Lichtenstein et al., 2000).

Once cigarette smoking starts, the main method of ensuring continued transmission of these carcinogens is through the addictive compound nicotine. This drug is a stimulant which is absorbed by the body during inhalation, the psychoactive substance working to create a chemical dependence in the user. Tobacco promotes dopamine release in the brain, which targets the pleasure centers of the brain and acts as a stimulant. Done often enough, depending on the smoker's vulnerability to addictive substances, the smoker can feel compelled to continue smoking even after they realize it is bad for them. Attempts at quitting smoking often lead to painful withdrawal symptoms, leading smokers to wish to continue smoking

just to stave off those feelings. Regardless of the widely known health risks, it is still extremely difficult for smokers to quit due to this chemical dependency (Facchinetti et al., 2007). It is this vicious cycle that allows smokers to continue smoking, and with this continued habit more carcinogens are funneled into the body.

With the combination of the carcinogens and the nicotine inspiring continued usage of smoking, several effects occur. First and foremost, death is a very common side effect of smoking - early death is a well-documented effect of longtime smokers, with men and women both losing approximately 14 years of their life on average compared to nonsmokers (Lichtenstein, 2000).

Furthermore, cancer often develops due to the carcinogens mutating healthy cells into cancer cells - the most prevalent types of cancer coming from smoking include lung, kidney, larynx, breast, bladder, stomach, and pancreatic cancer. The lungs are particularly damaged by the inhalation of the tar and other substances in cigarette smoke; a host of cardiopulmonary conditions can be directly caused by smoking, including emphysema and chronic obstructive pulmonary disease (CDC, 2012). Cardiovascular diseases also occur due to increased heart rate and diminishing oxygen rates in blood - stroke, atherosclerosis, heart disease and other cardiovascular conditions often result from long-term smoking habits. These are typically accomplished through constriction of the blood vessels which is caused by smoking - when larger arteries are disrupted in one's extremities, tissue loss or gangrene can occur, a condition known as developing peripheral vascular disease (CDC,

2012). Heart attacks are 500% more likely to occur in people under the age of forty if they have a smoking habit (Facchinetti et al., 2007).

In conclusion, the effects of smoking are numerous and dramatic, with life-threatening consequences for those who take up a consistent, lifelong habit. These health conditions are caused by a combination of substances contained within cigarette smoke - tar and carcinogens, as well as other toxins, contribute to an overall changing of physiology in the smoker. Carcinogens alter the structure and health of a cell until it becomes cancerous and spreads. The addition of nicotine in cigarettes encourages physiological and psychological addiction to the product, which coerces smokers into continuing their habit. Finally, the various health conditions that this combination of nicotine and carcinogens leads to - including lung cancer, emphysema, stroke, heart disease and more - have dramatic effects on mortality and overall health of most people who smoke. With this process in mind, it is ever more important to warn others of the dangers of smoking, lest they fall prey to this vicious cycle that leads to an early death in many.

OUTLINE

## **Introduction**

THESIS: Cigarette smoking is known to be a direct cause of many different health problems, including cancer, heart attacks, chronic obstructive pulmonary disease, and others.

## **Step 1: Smoking cigarettes releases carcinogenic pyrolytic products**

Step 2: Nicotine in tobacco creates addiction in smoker

Step 3: Continued smoking leads to cancer/other health conditions

Conclusion

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