

People start smoking for different reasons. Peer pressure (to fit in, to look cool), Media pressure (Virginia Slims, Marlboro - the ultimate woman and man), or just because they happened to like smoking at first. Everyone agrees, though, that people continue to smoke for the same reason: addiction to nicotine.

There is a chemical in the brain called acetylcholine that is used in the transmission of messages through the nervous system. There are receptors on the nerve endings in the brain that have a specific structure to accept acetylcholine, and only acetylcholine. But the nicotine molecule (in terms of its electrical charge structure) is exactly like the acetylcholine molecule. Therefore, the nerve endings will also recognize nicotine. So, when someone is addicted to cigarettes, it is because nicotine has replaced the acetylcholine, and nicotine becomes the transmitter of these messages that pass through all the nerves in your body.

Most smokers know the risks of tobacco to their own health, but they may not realize the dangers of second-hand smoke to those around them.

The Canadian Heart and Stroke Foundation calls second-hand smoke Environmental Tobacco Smoke (ETS). It is defined as the combination of sidestream smoke from the burning end of a cigarette, pipe, or cigar, and exhaled smoke from the smoker. 85 percent of the smoke from a cigarette is released as sidestream smoke, but the smoker only inhales for about 30 seconds. That is a lot of ETS seeping unfiltered into our lungs.

ETS contains over 4000 chemicals, at least 50 of which are cancer-causing. These toxic and cancer-causing agents are found in higher concentrations in ETS than the smoke inhaled by the smoker. After a study of fifteen Canadian cigarettes, it was found that ETS contains three times more tar, 40 times more ammonia, 10 times more benzene, and six times more nicotine. ETS also contains pesticides and other chemicals used in the tobacco plants. Also, lower tar and lower nicotine cigarettes are not safer - they release the same amount of toxic chemicals into the air.

Certain chemicals in ETS cause cancers to occur, some help the cancer to be started, others speed up its development, and others damage the body's natural cleaning systems so that toxic substances can enter and remain in the body.

A few facts:

- second-hand smoke is the third largest cause of lung cancer after direct smoking and occupational exposure.
- nitrosamine, the chemical suspected to be the cancer causing agent in tobacco, is 50 times more concentrated in sidestream smoke.



Item: During the end of '86, Surgeon General "discovers": second hand smoke is a definite health hazard. (Oh, like we didn't know.)

- laboratory tests have shown that cigarette smoke interferes with the normal cell development in the body.

- second-hand smoke causes cancer. In a report done in 1987, it was found that approximately 330 Canadians, non-smokers, died in each year as a direct result of second-hand smoke.

- kids of parents who smoke have up to a 50% increase of Bronchitis, pneumonia, reduced lung function, and higher rates of asthma than that of children with non-smoking parents.

that would be more profitable financially.

In Peter Taylor's Smoke Ring: The Politics of Tobacco, an interesting parallel is explored.

Between 1853-54, 30 000 people died of cholera in the British Isles. In the space of just ten days in September, 1854, 500 people died of cholera in a small area of London, just 250 yards across. As soon as the cause was found (polluted drinking water), the disease was virtually eliminated, after political involvement. But in 20th century Britain, after cigarettes were shown to be the cause of 30 000 deaths from

lung cancer, about the same number as the cholera epidemic of 1852-54, no political action was taken to eliminate the cause because of the "economic benefits".

It is obvious that the risks from tobacco products far outweigh the "economic benefits". As taxes increase, crime increases. Some people are desperate enough to steal cigarettes. Also, smoking hurts the environment: one third of all fires in Canada are caused by smokers.

So, why do people continue to put their lives and the lives of those around them at risk? Oh, right. It's a free country.

References

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- babies of mothers who smoke during pregnancy are more likely to have low birthweight. Pregnant women who smoke have more stillbirths, spontaneous abortions, and premature deliveries than women who don't smoke. Second-hand smoke may also increase the risk of sudden-infant death syndrome.

- children of parents who smoke have a greater chance of becoming smokers themselves. Smoking will kill eight times more teens than drugs, car accidents, suicide, murder, and AIDS combined.

So what is being done to prevent these deaths?

Not enough. Why? Because our governments are also addicted to tobacco. With all the money they make from taxes, you'd think the government would provide free help to anyone who wanted to quit, especially pregnant women and teens.

The government will continue to support tobacco products until they discover a product