Quit smoking to reduce your cancer risk

Does smoking increase your cancer risk?
Yes, tobacco smoke is the single biggest cause of cancer in the world. Tobacco smoke contains at least 80 different cancer-causing substances.

If you stop smoking, you can reduce your risk of lung cancer and many other types of cancer. The earlier you stop the better.

What cancers are caused by smoking?
Smoking causes one-third of all cancers. It causes cancer of the lung, mouth, gullet (oesophagus), voice box (larynx), kidney, liver, stomach, pancreas, cervix and bladder. Smoking is also linked to certain types of leukaemia.

Smoking causes 85% of all lung cancers. Over 1,500 people die from lung cancer in Ireland every year.

Half of all people who smoke will die from smoking-related diseases such as cancer, lung disease, heart disease and blood vessel disease. Second-hand smoke or ‘passive smoke’ also increases the risk of cancer in people who do not smoke themselves. There are over one million smokers in Ireland.
What chemicals are in tobacco smoke?
Tobacco smoke has over 4,000 dangerous chemicals, like arsenic, ammonia, tar and nail polish remover. Many of these chemicals are known to cause cancer.

Tobacco contains nicotine. This is a highly addictive drug that keeps smokers hooked. It takes just seven seconds for nicotine to reach your brain from inhaled cigarette smoke. Tobacco also has additives designed to make cigarettes easier to become addicted to.

What happens in your body when you smoke?
When you inhale cigarette smoke, the poisonous gases irritate your nose, eyes and throat. They damage the delicate lining of the airways and lungs.

Chemicals in the smoke work in different ways:

- Nitrogen oxide narrows your airways, putting extra pressure on the lungs to do more work, and makes breathing more difficult.
- Carbon monoxide, hydrogen cyanide and ammonia weaken the natural cleaning mechanisms in the lungs so that bacteria, viruses and toxins are harder to clear.
- Poisonous chemicals are absorbed into your bloodstream from the lungs, causing damage to other parts of the body such as your heart.
- Nicotine and carbon monoxide narrow blood vessels, increasing your risk of getting a blood clot.
- Gases like carbon monoxide and nitrogen oxide reduce oxygen flow in the blood around the body. This reduces the amount of oxygen reaching the brain and other organs.

Why do people smoke?
Most people start smoking as teenagers. This is often due to peer pressure. The main reason they continue to smoke is because they become addicted to nicotine very quickly and find it hard to quit. **Nicotine is as addictive as heroin.** People try to quit many times before being successful.
Nicotine increases the heart rate. It causes the release of a chemical called dopamine in the brain. Dopamine is linked to feelings of wellbeing. Therefore, a smoker can psychologically associate smoking with feeling good.

**Tobacco advertising and promotion**

All cigarette advertising is banned in Ireland. Seeing people smoke indirectly exposes young people and non-smokers to cigarette advertising. Shops that sell cigarettes cannot display or sell them to the under-18 age group.

**Stress and relaxation**

Some smokers think that smoking helps them relax and cope better with stress. In fact, the opposite is true. Nicotine is a stimulant. Therefore, it will not help you to relax. It is the nicotine that drives you to smoke and when you are not smoking, you are suffering the effects of nicotine withdrawal. The symptoms of withdrawal include anxiety, irritability, cravings, restlessness, disturbed sleep and difficulty with concentration.

**What is second-hand smoke?**

Even if you don’t smoke, breathing in the smoke of others (called second-hand smoke or passive smoke) can increase your risk of lung cancer. A non-smoker who lives with a smoker has about a 20% to 30% increased risk of lung cancer.

To help protect people from the harmful effects of second-hand smoke, enclosed workplaces became smoke-free by law in Ireland in 2004. Since then, offices, shops, factories, bars, restaurants and other enclosed workplaces have been smoke-free.
There are two types of smoke that make up second-hand or passive smoke:

1. **Mainstream smoke**
   Mainstream smoke is the smoke inhaled and then exhaled by a smoker, which is then breathed in by others present.

2. **Side-stream smoke**
   Side-stream smoke comes from smouldering tobacco, for example, the burning tip of a cigarette:
   - It is produced at lower temperatures than mainstream smoke, which means that many carcinogens and other toxic chemicals are produced in greater amounts than in mainstream smoke;
   - It is four to six times stronger than mainstream smoke per unit of tobacco smoked;

Both side-stream and mainstream smoke contain over 4,000 chemicals, of which over 80 are known or suspected human carcinogens.

**Good reasons to quit**

When you quit, the benefits begin very quickly:

- **12 hours** Nearly all the nicotine is out of your body.
- **24 hours** Carbon monoxide levels in your blood are reduced.
- **2 days** Your taste and smell return.
- **2 months** Your circulation improves.
- **1 year** Your risk of heart disease is greatly reduced.
- **10 years** Your risk of lung cancer is reduced by half.

Also, if you are a smoker and you are due to have surgery soon, you will reduce your risk of surgical complications by quitting smoking.
Quit smoking if you have been diagnosed with cancer

If you are a smoker and have been diagnosed with cancer, it is crucial that you quit immediately. Most patients with a serious illness and their family members are strongly motivated to quit when a serious illness is diagnosed. The reasons for quitting are:

- cancer treatment, surgery, chemotherapy and radiotherapy are all more effective in non-smokers;
- there is less chance of getting a complication, such as infection or other side-effects from your treatment;
- wound healing will be better;
- you are less likely to have a recurrence of your cancer;
- you are less likely to develop another cancer in the future.

What help is there to quit smoking?

Deciding to quit is the very best thing you can ever do for your health. There is help for you. Withdrawal symptoms will disappear within a month after quitting smoking, leading to long-term benefits to your health. Here are some options to help you quit:

- Talk to your GP. They can offer you a lot of support. You can be prescribed nicotine replacement therapies (NRT) or other medicines to help.
  - Nicotine replacement therapy (NRT) is safe and effective,
  - NRT can double your chances of quitting successfully,
  - NRT is sold in pharmacies as an over the counter product and can be purchased without a prescription,
  - NRT is available free of charge when prescribed by a GP on a medical card (General Medical Services) prescription,
    - NRT is available as nicotine patches, gum or lozenges, microtabs or inhalers.
- Call the Smokers’ Quitline: Tel 1850 201 203;
- Enrol in a smoking cessation programme. These are often run by your local HSE Health Promotion Department.
You can quit, we can help

1. Visit www.quit.ie, or go to the HSE Facebook page, www.facebook.com/hsequit, for lots of information and support. You can sign up for the online Quit Plan, which will guide you through the quitting process day by day.

2. Call the National Smokers' Quitline 1850 201 203, Monday to Saturday, 8am to 10pm, for one-to-one personal support and information on how to get in touch with HSE Smoking Cessation Services (free of charge) near you.

3. Ask your GP, nurse or pharmacist for advice about quitting.

Useful websites:
For more information on the Smoke-Free at Work legislation, click on the following link: www.otc.ie/legislation.asp.

For more information on smoking and reducing your cancer risk, click on the following links:

- HSE Health Promotion www.healthpromotion.ie
- Office of Tobacco Control (promotes a smoke-free society): www.otc.ie
- World Health Organisation (promotes tobacco-free initiatives worldwide): www.who.int/tobacco/en/
- National Cancer Institute, US (provides in-depth information on the effects of tobacco smoke and how to quit): www.cancer.gov/cancertopics/factsheet/Tobacco