Effects of Smoking

What you need to know

- Worldwide, tobacco use causes nearly 6 million deaths per year
- Current trends show that tobacco use will cause more than 8 million deaths annually by 2030.
- On average, smokers die 10 years earlier than nonsmokers.
- More deaths are caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined.
- Smoking causes an estimated 90% of all lung cancer deaths in men and 80% of all lung cancer deaths in women.
- An estimated 90% of all deaths from chronic obstructive lung disease are caused by smoking.

What is in a cigarette?

There are more than 600 ingredients in a cigarette. When they burn they generate more than 7000 chemicals many of them poisonous.

- Acetone: found in nail polish remover
- Ammonia: Household cleaner
- Angelica root extract: Known to cause cancer in animals
- Arsenic: Used in rat poison
- Benzene: Used in making dyes, synthetic rubber
- Butane: Gas; used in lighter fluid
- Cadmium: Used in batteries
- Cyanide: Deadly poison
- DDT: A banned insecticide
- Ethyl Furoate: Causes liver damage
- Formaldehyde: Embalming fluid
- Lead: Poisonous in high doses
- Formaldehyde: Used to preserve dead specimens
- Methoprene: Insecticide
- Megastigmatrinone: Chemical naturally found in grapefruit juice
- Maltitol: Sweetener for diabetics
- Naphtalene: used as a herbicide and insecticide
- *Naphthylamine
- *Pyrene
- Nicotine
- *Cadmium
- Carbon monoxide
- *Vinyl chloride
- Acetone (solvent)
- Methanol (used as rocket fuel)
- Ammoniac (detergent)
- *Urethane
- Toluene (industrial solvent)
- *Arsenic (toxin)
- *DDT (insecticide)
- Cyanhydric acid (was used in gas chambers)
- *Polonium 210 (a radioactive element)
- Megastigmatrienone: Chemical naturally found in grapefruit juice
- Maltitol: Sweetener for diabetics
- Naphtalene: Insecticide
- Methyl isocyanate: Its accidental release killed 2000 people in Bopal, India in 1984
- Tar: material for paving roads
Effects of smoking to the body

CENTRAL NERVOUS SYSTEM
- Nicotine – mood-altering drug and makes you feel more energized for a little while.
- Smoking increases risk of muscular degeneration, cataracts & poor eyesight
- Weaken sense of smell & taste
- Physical withdrawal from smoking can impair cognitive functioning. Make you feel anxious, irritated & depressed and can causes headache & sleep problems

SKIN, HAIR & NAILS
- Skin discoloration
- Wrinkles
- Premature aging
- Yellow staining from holding cigarette
- Hair holds on to the smell of tobacco

DIGESTIVE SYSTEM
- Oral problems such as gum infection (tooth decay, tooth loss & bad breath), Gum inflammation (gingivitis), yellow or brown stain on teeth and plaque
- Cancer - Mouth, Throat, Larynx, Esophagus, Stomach, Kidney, Pancreas
- Type 2 Diabetes - smokers develop Insulin resistance. Smokers with Type 2 Diabetes also tend to develop complications faster than non smokers

SEXUALITY & REPRODUCTIVE SYSTEM
- Smokers have higher risk of infertility
- Male smokers have risks of
  - Erectile dysfunction
  - Lower sperm count
  - High percentage of deformed sperm
  - Genetic damage to sperm
- Women smokers
  - Menstrual cycle irregularities or absence of menstruation
  - may experience menopause at an earlier age
- Increased chances of Cervical cancer, Uterine cancer
- Pregnant women’s complications
  - miscarriage,
  - problems with placenta
  - premature delivery
- Babies born to smoking mothers
  - low birth weight
  - birth defects
  - Sudden Infant Death Syndrome
  - chest infections
  - Asthma
  - Glue ear

Respiratory System
- Lung cancer
- Lung diseases
- Emphysema
- Bronchitis
- Pneumonia
- Chronic airway obstruction (COPD)
- Asthma
- Cancer of the larynx (voice box)

Cardiovascular system
- Smokers are twice as likely to die from heart attacks as non-smokers
- Peripheral vascular disease - narrowing of the blood vessels that carry blood to the leg and arm muscles
- Abdominal aortic aneurysm - a swelling or weakening of the main artery of the body (aorta)
- It also affects the walls of the vessels that carry blood to the brain (carotid arteries), which can cause strokes
Passive smoking

- Also known as Environmental Tobacco Smoke (ETS)
- involuntary smoking or second-hand smoke
- when the exhaled and ambient smoke from one person's cigarette is inhaled by other people.

Non-smokers exposed to second hand smoke are at greater risk for many of the health problems associated with direct smoking.

Non-smokers living with smokers have about 25% INCREASE IN RISK OF DEATH from heart attack and are also more likely to suffer a STROKE; and some research suggests that risk to non-smokers may be even greater than this estimate. One recent study in the British Medical Journal found that exposure to second hand smoke INCREASES THE RISK OF HEART DISEASE among non-smokers by as much as 60%.

Different methods to stop smoking

- Quitting smoking cold turkey.
- Systematically decreasing the number of cigarettes you smoke.
- Reducing your intake of nicotine gradually over time.
- Using nicotine replacement therapy or non-nicotine medications to reduce withdrawal symptoms.
- Utilizing nicotine support groups.
- Trying hypnosis, acupuncture, or counseling using cognitive behavioral techniques.

You may be successful with the first method you try. More likely, you’ll have to try a number of different methods or a combination of treatments to find the ones that work best for you.

Medication therapy

Smoking cessation medications can ease withdrawal symptoms and reduce cravings, and are most effective when used as part of a comprehensive stop smoking program monitored by your physician. Talk to your doctor about your options and whether an anti-smoking medication is right for you. U.S. Food and Drug Administration (FDA) approved options are:

Nicotine Replacement Therapy (NRT)

Nicotine replacement therapy involves “replacing” cigarettes with other nicotine substitutes, such as nicotine gum or a nicotine patch. It works by delivering small and steady doses of nicotine into the body to relieve some of the withdrawal symptoms without the tars and poisonous gases found in cigarettes. This type of treatment helps smokers focus on breaking their psychological addiction and makes it easier to concentrate on learning new behaviors and coping skills.

Non-Nicotine Medication

These medications help you stop smoking by reducing cravings and withdrawal symptoms without the use of nicotine. Medications such as bupropion (Zyban) and varenicline (Chantix) are intended for short-term use only.

Non-medication therapies

There are several things you can do to stop smoking that don’t involve nicotine replacement therapy or prescription medications: Ask your doctor for a referral or help in finding qualified professionals in each area.

Hypnosis

A popular option that has produced good results. Forget anything you may have seen from stage hypnotists, hypnosis works by getting you into a deeply relaxed state where you are open to suggestions that strengthen your resolve to quit smoking and increase your negative feelings toward cigarettes.

Smokeless or spit tobacco is NOT a healthy alternative to smoking

Smokeless tobacco, otherwise known as spit tobacco, is not a safe alternative to smoking cigarettes. It contains the same addictive chemical, nicotine, contained in cigarettes. In fact, the amount of nicotine absorbed from smokeless tobacco can be 3 to 4 times the amount delivered by a cigarette.
**Benefits starts as soon as you stop**

- **Within 20 minutes**, your blood pressure and pulse rate will return to normal. Circulation improves in your hands and feet, making them warmer.
- **Within eight hours** of stopping, the oxygen level in your blood will rise to normal and your carbon monoxide level will fall.
- **Within 24 hours**, the chance of you suffering a heart attack and stroke begins to fall.
- **Within 72 hours**, you can hold more air in your lungs. Breathing becomes easier. Your energy levels increase.
- **Within days**, your blood is less likely to clot.
- **Within five years**, the risk of a heart attack falls to about half that of a smoker.
- **Within 10 years**, you will have about the same risk of heart disease as someone who has never smoked.

There are many more benefits including increased energy and you will be free from the worry that you are damaging your health, as well as that of your family and friends.

**Medical Consultants for May 2015**

Dr. Sanjeeda Akhter obtained her Medical degree from the University of Science and Technology in Chittagong, Bangladesh in 2003. From September 2004 to February 2006, she worked as a medical officer in the Department of Gynecology and Obstetrics in Dhaka Central Hospital after which she transferred to Niramoy Clinic to work as an emergency medical officer in Internal Medicine. Dr. Sanjeeda also obtained P.G. training in Department of Gynecology and Obstetrics in DMC an 2004.

Dr. Sanjeeda is also an ACLS (Advance Cardiac Life Support) Instructor under the AHA (American Heart Association) standard.

**About CEDARS - Jebel Ali International Hospital**

Established in 1999, CEDARS – Jebel Ali International Hospital was the only full-fledged 24-hour medical center in the Jebel Ali area and it was upgraded into a hospital in August 2004. Today it is a full-fledged multi-specialty hospital offering services ranging from Pediatrics to Occupational Health, Laparoscopic Surgery to Internal Medicine. The Hospital is equipped with ICU for medical and surgical emergencies, with two major and one minor operation theatres as well as with fully equipped Laboratory and Radiology departments. The CEDARS Training Center is offering classes in basic life support and advanced cardiac life support through an alliance with the American Heart Association (AHA). Further attached to the hospital are 24-hour-pharmacy and Dr. Adnan Kaddaha Clinic. Projects to expand the hospital structure and add more services that enable CEDARS Jebel Ali International Hospital to become a comprehensive tertiary care healthcare provider are under way. The hospital has successfully achieved JCI accreditation in June 2012.

**Acupuncture**

One of the oldest known medical techniques, acupuncture is believed to work by triggering the release of endorphins (natural pain relievers) that allow the body to relax. As a smoking cessation aid, acupuncture can be helpful in managing smoking withdrawal symptoms.

**Behavioral Therapy**

Nicotine addiction is related to the habitual behaviors (the “rituals”) involved in smoking. Behavior therapy focuses on learning new coping skills and breaking those habits.

**Motivational Therapies**

Self-help books and websites can provide a number of ways to motivate yourself to quit smoking. One well known example is calculating the monetary savings. Some people have been able to find the motivation to quit just by calculating how much money they will save. It may be enough to pay for a summer vacation.