

METIMUN 2011

First Session



London Metropolitan
University UNYSA
(UNAMET)

COMMITTEE GUIDE

World Health Organisation

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Introduction to the World Health Organization (WHO)

The WHO, founded on April 7th 1948, is part of the United Nations whose goal is to help all people with health-related issues and efforts. They define health as a state of complete physical, mental and social well-being, not just the absence of disease or illness.

The WHO has a six point agenda which is aimed to improve public health:

1. Promoting development
2. Fostering health security
3. Strengthening health systems
4. Harnessing research, information and evidence
5. Enhancing partnerships
6. Improving performance

What is the WHO definition of “health”?

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

The bibliographic citation for this definition is: Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19 June - 22 July 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948. The definition has not been amended since 1948”

All countries which are Members of the United Nations may become members of the WHO by accepting its Constitution. Other countries may be admitted as members when their application has been approved by a simple majority vote of the World Health Assembly.

Topics for WHO Committee METiMUN 2011

Topic A:

The impact of poverty on the spread of infectious diseases and global health development

Topic B:

Tobacco, Cardiovascular Disease, Chronic Obstructive Pulmonary Disease, and Cancer.

Topic A: The impact of poverty on the spread of infectious diseases and global health development

Introduction

Infectious diseases are easily passed on from one person to the other if they are not controlled. Poverty plays a major role in this. In less developed countries, the infected person(s) is (are) not able to get the medical attention needed to fight the disease before it is passed on to others. Lack of proper hygiene also increases the chance of the disease being spread around faster. Global health development is prevented by poverty as less developed countries cannot afford to pay for medication as well as being able to be seen by a doctor.

Figure 1



<http://oncolinthera.com/basic-healthcare-basic-quality/14335>

Definitions

Poverty is the state of one who lacks the basic needs in life such as food, clothing and medication.

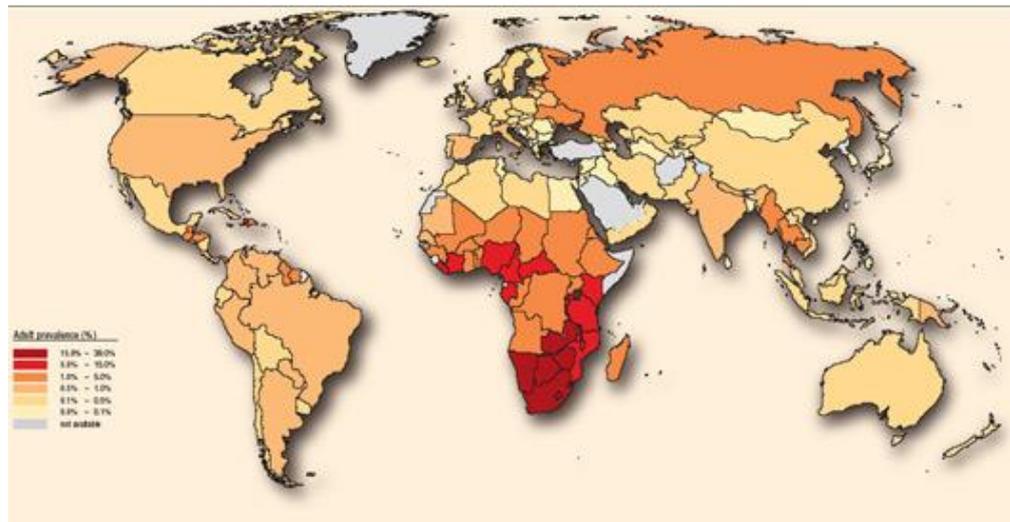
Global Health is development of health services at an international level.

Infectious Disease is a type of disease that can spread directly or indirectly from one person to another

Infectious Diseases Examples:

- **HIV (Human immunodeficiency virus):**
 - Is a type of disease that can cause acquired immunodeficiency syndrome (AIDS). The human immune system fails to protect the individual. HIV attacks the immune system by destroying CD4 positive (CD4+) T cells, a type of white blood cell that is vital to fighting off infection. The destruction of these cells leaves people infected with HIV vulnerable to other infections, diseases and other complications.

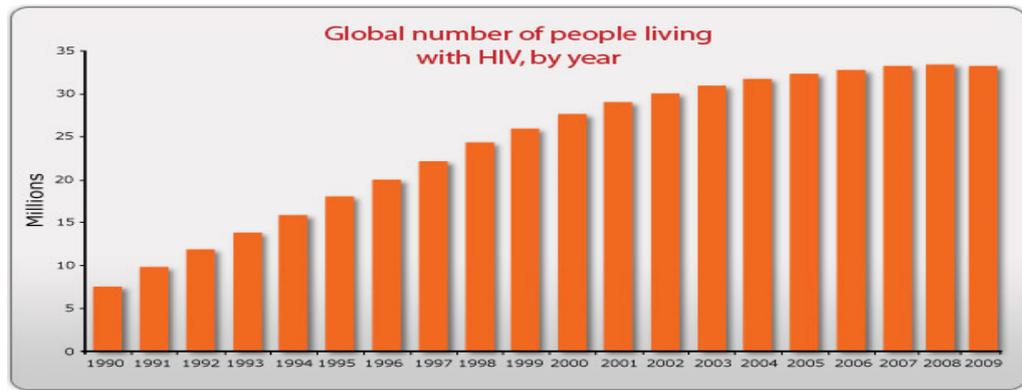
Figure 2: A Global View of HIV infection Source: WHO/UNAIDS



<http://www.who.int/hiv/facts/hiv2003/en/>

- **AIDS (Acquired immunodeficiency Disease):**
 - A disease that weakens the immune system so much so that the person is susceptible to other diseases. It is caused by the human immunodeficiency virus. It is a disease that is contracted by being sexually active with a person who is already infected. Condoms can be used to prevent the transfer of the disease. There is no cure for this disease but there are medications to control it. It is widely prevalent in less developed countries where there is no access to medication or education about the disease. In 2009 there were 33.3 million people living with HIV/AIDS in the world. The highest percentage of people (68 percent) affected by this disease are located in sub-Saharan Africa. This area is less developed and thus more people are being affected by the disease than areas where the population has access to better health services. Most countries advocate for the education of sexually transmitted diseases but this is hindered by the lack of funds.

Figure 3: Population of infected People Worldwide from 1990 to 2009



<http://www.avert.org/worldstats.htm>

- **Tuberculosis:**
 - Is a bacterial infection that most commonly affects the lungs but if left untreated could spread to other parts of the body. The disease can stay dormant for years in the human body without infecting the individual. Breathing in the air that was exhaled by an infected person can transfer the disease to an uninfected person. There are treatments for this disease that could be administered to prevent the spread of the disease.

- **Common cold:**
 - Is the most common infection. It is a virus that could be caught by being in contact with a person who has been infected. If the infected person sneezes, coughs or blows their nose around an uninfected individual is it common that the individual will come in contact with the virus (this also depends on the individual's immune system) This is an infection that the body can fight off without any type of medication.

The following is a list of other infectious diseases that can affect humans.

Anthrax	Influenza	Swine Flu	Tonsillitis	Lice
Polio	Impetigo	Leprosy	Mumps	Croup
Scabies	Measles	Cold Sores	Plantar Warts	Ringworm
Giardiasis	Smallpox	Athlete's Foot	Infection Mononucleosis	Fifth Disease
Diphtheria	Chickenpox	Shigellosis	Nail Fungus	Strep Throat
Scarlet Fever	Pertussis Whooping Cough	Syphilis	Bronchitis	Leptospirosis
Roseola infantum	Conjunctivitis	Molluscum Contagiosum	Viral Laryngitis	Coxsackievirus
Mononucleosis	Viral Gastroenteritis	Cryptosporidiosis	Epstein Barr Virus	Meningococemia
Fungal Skin Infections	MRSA	Rubella	Crabs	Mumps
Meningitis	Encephalitis	Tetanus	Malaria	Hepatitis B
Chancroid	Vaginitis	Human Papilloma Virus		

Figure 4: Common cold



<http://www.knowabouthealth.com/common-cold-virus-ad-36-may-make-kids-fat/6527/>

People in less developed countries lack the basic needs for survival such as proper hygiene to prevent the spread of disease. These people do not have access to health services. They could be carrying an infection without having the knowledge that they are. In less developed countries lack of education on healthcare is a major problem which contributes to the development of health. Even if after care and medication is provided to these people, because of their lack of education on using the medication, they do not use it in an appropriate manner, or sometimes they do not use it at all.

Policy options:

Most governments provide the people living in poverty with funds for treatment of infectious diseases. Other than the governments some countries have the wealthier population providing the population living in poverty medication and funds for treatments as well. However, there still is a lack of supplies in less developed countries, and because of this some infected people become reliant on means of treatment that are not reliable. There are some policies in most countries to tackle poverty and to help those in the less developed regions with health facilities. Some of the most common policies of the World Health Organization include:

1. Providing aid to less developed countries from the countries with more funds and resources.

2. Sending doctors to the rural areas less developed nations to provide health screens and treatment for those who can't afford it.
3. Educating and helping those in less developed areas to learn to use the information provided to stop the spread of infectious diseases.
4. Getting governments from these nations to send out doctors as well as supplies and having local training to increase awareness of the diseases.

Possible Bloc positions

Some countries do not have the necessary equipment as well as the needed professionals to help with the spread of disease. Due to this, the governments do not make efforts to send out help for the people living in poverty that are affected with these diseases. These people might be told to use tradition methods which might not be effective in fighting these diseases. Religions also play a part in the lack of information available to the poor people. They will rely heavily on the religious leaders who might defer an infected person from going to see a doctor.

Gambia:

The Gambian president stated in February 2nd 2007 that he could cure HIV/AIDS as well as other diseases by the use of herbal medication. However, there is no known cure for HIV/AIDS except for medications provided to ease the life of the infected person. By doing this is the government is preventing the population from finding the right help needed for their disease and because they are living in poverty they rely on the president for help. Some infected individuals were told that they have been cured when they weren't. These are the same individuals who go back into their communities and increase the rate of spreading of the disease.

Saudi Arabia:

Religious beliefs in this country combined with living in poverty and not being able to afford the medical services needed are a major deterrent in health development. HIV/AIDS patients from this region will have to have money to be able to get the required treatment and thus hide their condition without being stigmatized by the rest of the community, making them a target of ridicule in their community. Living in poverty and not being able to afford the health services and the privacy that comes with it prevents a lot of people from coming forward. Thus the way to get the treatment needed as well as the privacy would be to be able to afford it without having to go through the public system. In this case the people living in poverty are not being tested and they try to live normal lives there by infecting others so as to not show that they do have this disease. Religion plays a major role in some countries along with poverty.

Guinea Bissau

With the constant change of government in this country it is hard to keep track and to improve the health system. There have been a lot of political issues in this country which made it hard for the government to focus on poverty and to help them with the medical needs they require. As of recently, there has been a change in government that took place where in the previous government was removed by force. This will have a detrimental effect on the system in the country mainly on the health system or even the education system. The people living in poverty are not able to afford medical assistance that they need as they spend the little that they earn on food.

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Topic B: Tobacco, Cardiovascular Disease, Chronic Obstructive Pulmonary Disease, and Cancer.

Introduction

Tobacco products, containing a highly addictive psychoactive ingredient, nicotine, are made entirely or partly of leaf tobacco as raw material, whose leaves are prepared for smoking or chewing or as snuff. Tobacco use is one of the main risk factors for a number of chronic diseases, including cardiovascular diseases, chronic obstructive pulmonary disease, and cancer. Despite this, it is the most common stimulant used around the world. A number of countries have legislation restricting tobacco advertising, and regulating who can buy and use tobacco products, and where people can smoke.

Some statistics (taken from WHO Statistics)

The tobacco epidemic is one of the biggest public health threats the world has ever faced. This epidemic kills more than five million people a year – an average of one person every six seconds – and accounts for one in 10 adult deaths. In addition to tobacco use, more than 600 000 nonsmokers die from exposure to tobacco smoke a year. As a result, in total the tobacco epidemic kills nearly 6 million people per year. It has also been found that more than 80% of the world's one billion smokers live in low and middle income countries, thus confirming the fact that tobacco could be the leading cause of death, illness and also impoverishment. Tobacco users who die prematurely deprive their families of income, raise the cost of health care and hinder economic development. In some countries, children from poor households are frequently employed in tobacco farming to provide family income. These children are especially vulnerable to "green tobacco sickness", which is caused by the nicotine that is absorbed through the skin from the handling of wet tobacco leaves. Tobacco is a gradual killer. Because there is a lag of several years between when people start using tobacco and when their health suffers, the epidemic of tobacco-related disease and death has just begun.

Figure 5: Smoking



<http://edmedication.blogspot.com/2011/04/smoking-is-very-unhealthy-yet-addictive.html>

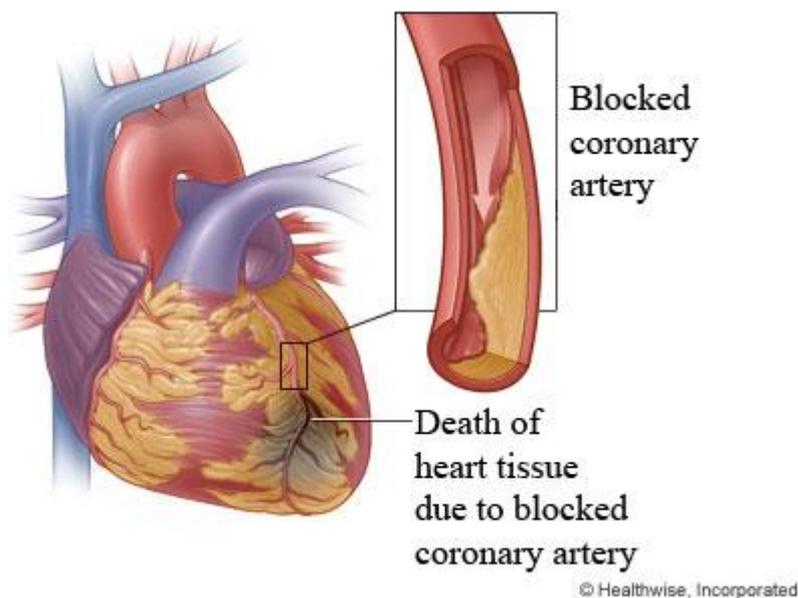
Tobacco and cardiovascular diseases

In order to understand the Cardiovascular Diseases it is important to understand how a normal heart functions. The normal heart is a strong, muscular pump a little larger than a fist. It pumps blood continuously through the circulatory system. The heart has four chambers, two on the right and two on the left:

- Two upper chambers called atria (one is an atrium)
- Two lower chambers called ventricles

Oxygen-rich blood travels from the lungs to the left atrium, then on to the left ventricle, which pumps it to the rest of the body. The right atria takes in oxygen-depleted blood from the rest of the body and sends it back out to the lungs through the right ventricle. The heart pumps blood to the lungs and to all the body's tissues by a sequence of highly organized contractions of the four chambers. For the heart to function properly, the four chambers must beat in an organized way.

Figure 6: Coronary Blocks



<http://student.biology.arizona.edu/honors2007/group13/page5.html>

Definitions

Cardiovascular diseases are defined as disorders of the heart and blood vessels. These include:

- **Coronary heart disease (CHD)** is also known as heart attack, it is described as what happens when the heart's blood supply is blocked or interrupted by a build-up of fatty substances in the coronary arteries.
- **Cerebrovascular diseases** refers to a group of conditions that affect the circulation of blood to the brain, causing limited or no blood flow to affected

areas of the brain. They are most commonly known as a stroke and is the primary type of cardiovascular disease caused by smoking tobacco.

- **Hypertension** is raised blood pressure. It is a common condition in which the force of the blood against the artery walls is high enough that it may eventually cause health problems, such as heart disease.
- **Peripheral artery disease** is a common circulatory problem in which narrowed arteries reduce blood flow to the limbs
- **Rheumatic heart disease** is a condition in which permanent damage to heart valves is caused by rheumatic fever. The heart valve is damaged by a disease process that generally begins with a strep throat caused by bacteria called *Streptococcus*, and may eventually cause rheumatic fever.
- **Congenital heart disease** refers to a problem with the heart's structure and function due to abnormal heart development before birth. Congenital means present at birth.
- **Heart failure** is a condition in which the heart muscle is unable to pump enough blood through the heart to meet the body's needs for blood and oxygen. Basically, the heart can't keep up with its workload.

One of the major causes of cardiovascular disease is tobacco use. Coronary heart disease and stroke are the most common causes of death in many countries. Tobacco smoking increases the risk of coronary heart disease by itself. When it acts with other factors, it becomes even more dangerous. Tobacco smoking increases blood pressure, decreases exercise tolerance and increases the tendency for blood to clot. Smoking also increases the risk of recurrent coronary heart disease after bypass surgery.

Tobacco is the most important risk factor for young men and women. It produces a greater relative risk in persons under age 50 than in those over 50. Women who smoke and use oral contraceptives greatly increase their risk of coronary heart disease and stroke compared with nonsmoking women who use oral contraceptives. Tobacco also decreases High Density Lipids (good cholesterol), which can lead to a heart attack. Not only tobacco is a risk factor for heart attacks but studies have also shown that tobacco is also an important risk factor for strokes. Inhaling cigarette smoke produces several effects that damage the cerebrovascular system.

The link between second hand smoke (also called environmental tobacco smoke) and disease is well known, and the connection to cardiovascular-related disability and death is also clear. About 22,700 to 69,600 premature deaths from heart and blood vessel disease are caused by other people's smoke each year! This is because second hand smoke can be even more dangerous than smoking.

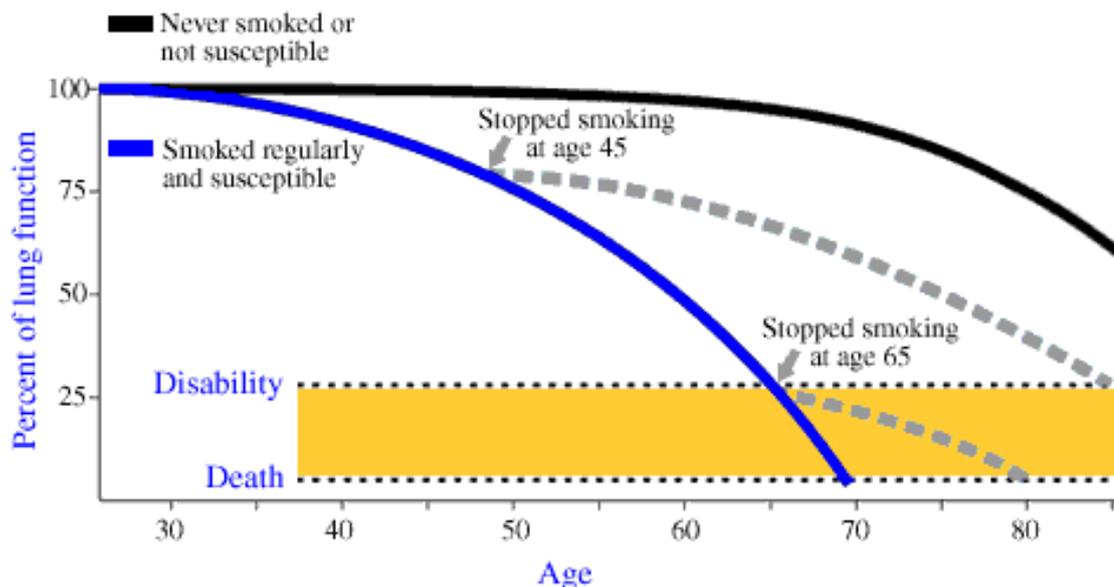
Tobacco and chronic obstructive pulmonary disease

Definition

Chronic obstructive pulmonary disease (COPD) is a chronic inflammation of the airways, including the parenchyma and the pulmonary vasculature.

According to recent studies, the burden of COPD is increasing around the world in terms of morbidity and mortality in adult population. Active smoking is a major risk factor for COPD, although there is individual susceptibility to the effects of tobacco smoke. The primary cause of chronic obstructive pulmonary disease (COPD) is tobacco smoke (including second-hand or passive exposure). This variability could result from host as well as environmental factors. Even passive smoking in early childhood as well as intrauterine exposure could pave the way for COPD. Tobacco smoke induces a specific, persistent inflammation, different from that of asthma. The earlier the smoke exposure, the greater the level of decline in lung function. Fortunately stopping the use of tobacco could reduce the number of hospitalisations and the decline of lung function, and thus reduce the management cost of the disease and improve the quality of life. "Smoking cessation is the single effective and cost effective way to reduce exposure to COPD risk factors" (GOLD, evidence A).

Figure 7: Smoking VS Non Smoking



<http://www.revolutionhealth.com/articles/how-smoking-affects-your-lungs-and-copd/zm2373>

COPD used to be more prevalent in men than in women but due to increased tobacco use among women in high income countries, the risk of encountering COPD in these countries is now equal in both men and women. In 2002 COPD was the fifth leading cause of death. WHO estimated that in 2005 5.4 million people died due to tobacco use. Total deaths from COPD are projected to increase by more than 30% in the next 10 years unless urgent action is taken to reduce the underlying risk factors, especially tobacco use. Estimates show that COPD becomes in 2030 the third leading cause of death worldwide. Out of these tobacco-related deaths are projected to increase to 8.3 million deaths per year by 2030.

Figure 8: Money Burning?



<http://www.stopsmokingsteps.com/2008/05/29/smoking-cessation-lowers-health-risks-for-women-%E2%80%93-new-study/>

Tobacco and cancer:

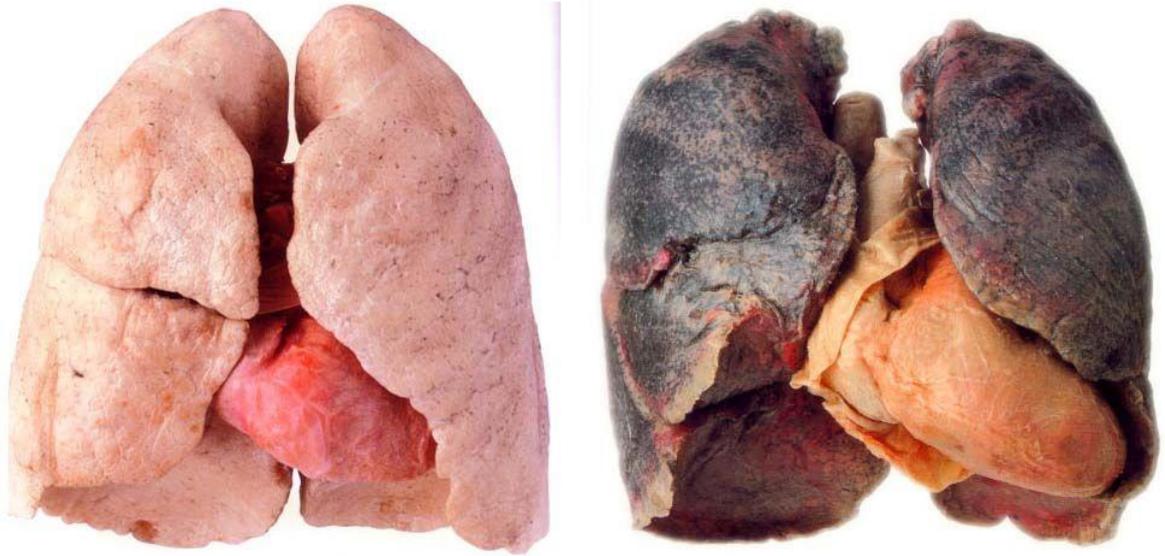
Definitions

Cancer is a term for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems. There are several main types of cancer.

- **Carcinoma** is a cancer that begins in the skin or in tissues that line or cover internal organs.
- **Sarcoma** is a cancer that begins in bone, cartilage, fat, muscle, blood vessels, or other connective or supportive tissue.
- **Leukaemia** is a cancer that starts in blood-forming tissue such as the bone marrow, and causes large numbers of abnormal blood cells to be produced and enter the blood.
- **Lymphoma** and **multiple myeloma** are cancers that begin in the cells of the immune system.

- **Central nervous system cancers** are cancers that begin in the tissues of the brain and spinal cord. Also called malignancy.

Figure 9: Lung Cancer



<http://www.lung101.com/up-in-smoke.html>

Tobacco use is a cause of many different cancers. Lung cancer is the leading cause of cancer death among both men and women in, and 90 percent of lung cancer deaths among men and approximately 80 percent of lung cancer deaths among women are due to tobacco. On average, smokers increase their risk of lung cancer between 5 and 10-fold. Smoking causes many other types of cancer, including cancers of the throat, mouth, nasal cavity, oesophagus, stomach, pancreas, kidney, bladder, and cervix, and acute myeloid leukaemia.

Tobacco use has long been linked to head and neck cancers as well, particularly in tissues through which inhaled tobacco smoke must pass. This could be due to mutations in the p53 gene, a gene that is thought to play a role in regulating cell death or apoptosis, in suppressing tumours, in regulating the cell cycle, and in stopping the cell from dividing when the DNA is damaged.

Another type of cancer which can be caused by tobacco is bladder cancer. Despite the fact that the bladder is not exposed directly to tobacco smoke, polycyclic aromatic hydrocarbons, found in tobacco known to be carcinogenic, may well be absorbed into the blood and transported to the bladder where the bladder cells are then unable to withstand that carcinogenic effects of these compounds.

Tobacco has also been estimated to be responsible for 30% of pancreatic cancer. Similar to bladder cancer, carcinogens inhaled by the smoker are thought to enter the blood stream and reach the pancreas via the blood.

Figure 10: Mouth Cancer



<http://waysquitsmoking.blogspot.com/2009/01/12/smoking-dangers/>

Similarly, colon cancer risk is increased among smokers as well, most likely due to the transport of carcinogens to the colon from inhaled or swallowed tobacco smoke.

Based on data from both male and female health professionals in the USA, smoking appears to double the risk of colon cancers. Most colon cancers begin as polyps, precursor growths for cancer. Risk of cancer increases with polyp size and there is a dose-response relationship with increasing years of tobacco use associated with larger polyps and, after 35 years of smoking, colon cancer.

Also, tobacco can cause cervical cancer in women. Studies have shown a strong correlation between the increasing number of women smokers and cervical cancer.

Policy Options:

The WHO has started a **Tobacco Free Initiative (TFI)**. TFI works with scientists and health experts from around the world to promote research on various aspects of tobacco production and consumption and their impact on health and economics. Policy recommendations (including regulation and legislation in relation to cessation, second-hand tobacco smoke, smoking and children, smoking and gender, economics and trade) are developed based on this research and in accordance with the provisions of the WHO Framework Convention on Tobacco Control (FCTC). These recommendations cover different aspects of tobacco control.

The WHO FCTC is the first international treaty negotiated under the WHO. It was adopted by the World Health Assembly on 21 May 2003 and entered into force on 27 February 2005. It has since become one of the most rapidly and widely embraced treaties in United Nations history. The WHO FCTC was developed in response to the globalization of the tobacco epidemic. Different countries which are part of the WHO

have different legislations with regards to tobacco use and these are in accordance with the WHO FCTC

International Legislations

Countries have implemented various rules and regulations for the use and abuse of tobacco and tobacco products. Most of these are smoking bans. Below is a graph showing the international smoking bans

Figure 11: Worldwide Smoking Ban



<http://chartsbin.com/view/3k0>

The above map shows the smoking ban that has been placed internationally from 0 to 6 on the key, 0 being strong ban to 6 being no ban.

Possible Bloc Positions

In 2004:

- **Ireland** - Nationwide ban on smoking in all workplaces, including pubs, bars and restaurants.
- **India** - Smoking banned in public places, tobacco advertising in media and sales to minors.
- **Norway** - Bans smoking at workplace, smoking in bars and restaurants.
- **Russia** - upper house of parliament approves a bill to restrict smoking in public places.
- **New Zealand** - extends a 1990 ban on smoking in offices, shops and public buildings to pubs, clubs, restaurants, and school grounds.
- **Bhutan** - bans smoking in public and prohibits tobacco sales, the first country in the world to do so.

In 2005:

- **Italy** - bans smoking in enclosed public spaces.
- **Cuba** - bans smoking in offices, stores, theatres, buses and taxis, schools, sports facilities and air-conditioned public areas.
- **Bangladesh** - passes a law implementing a smoking ban in places such as schools, offices, libraries, hospitals and airports. It also prohibits advertising of tobacco products in cinemas, newspapers or on television.
- **Sweden** - bans smoking in restaurants.

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