

Categories of Diseases

There are 9 different categories of diseases:

Physical

Infectious

Non - Infectious

Deficiency

Inherited

Degenerative

Mental

Social

Self - Inflicted

Below is a definition and example of each.

Physical:

These are associated with temporary or even permanent **damages** to part of the body.

Physical diseases includes all other types of diseases e.g. Inherited, but they do not cover mental diseases where there is no sign of any *physical* damage to the brain.

An example of a physical disease is: *Multiple Sclerosis*.

MS is thought to be an autoimmune disease that affects the central nervous system.

Surrounding and protecting the nerve fibres of the CNS is a fatty tissue called Myelin, which helps nerve fibres conduct electrical impulses.

In MS, myelin is lost in multiple areas, leaving scar tissue called sclerosis. When myelin or the nerve fibre is destroyed or damaged, the ability of the nerves to conduct electrical impulses to and from the brain is disrupted, and this produces the various symptoms of MS.

Infectious:

Pathogens are organisms living in or on our bodies, causing disease. Infectious diseases are caused by **pathogens** such as viruses, bacteria, fungi, protoctists, worms and insects, which can be transmitted from person to person. This may be via normal social contact - for example, chicken pox, or via food and water, sexual contact or an animal bite. Carriers are people who can transmit the pathogen but do not have the disease symptoms.

An example of an infectious disease is: *Chicken Pox*

Chicken pox is caused by a virus called *varicella zoster*. People who get the virus often develop a rash of spots that look like blisters all over their body. These spots can be anywhere from the size of a pencil's eraser to the size of a dime. A person who has chicken pox can pass it to someone else by coughing or sneezing. When he coughs, sneezes, laughs, and even talks, teeny tiny drops come out of his mouth and nose. These drops are full of the chicken pox virus. If someone else breathes the drops in or gets them on her hands and touches her mouth or nose, the virus can get in her body.

Non - Infectious:

These are all diseases, which are **not** caused by pathogens and **cannot** be passed on by physical contact. Some non infectious diseases have one cause while others are more complex and are multifunctional.

An example of an non infectious disease is: *Sickle Cell Anaemia*

It is a disorder which effects the red blood cells which contain the special protein called haemoglobin. People with Sickle Cell Anaemia have Sickle haemoglobin which is different from the normal haemoglobin. When sickle haemoglobin gives up its oxygen to the tissues, it sticks together to form long rods inside the red blood cells making these cells rigid and sickle-shaped. Normal red blood cells can bend and flex easily.

Deficiency:

These are **nutritional** diseases caused by an inadequate or unbalanced diet. One or more essential nutrient, such as vitamins, minerals or proteins are missing or in short supply. As a consequence, people suffer from deficiency diseases.

An example of a deficiency disease is: *Iron Deficiency Anaemia*

Anaemia is a deficiency of red blood cells, which can lead to a lack of oxygen-carrying ability, causing unusual tiredness and other symptoms. The deficiency occurs either through the reduced production or an increased loss of red blood cells. These cells are manufactured in the bone marrow and have a life expectancy of approximately four months.

Inherited:

These diseases are caused by **genes** and can therefore be passed from parent to child. They are also sometimes called **genetic diseases** or **disorders**.

An example of an Inherited Disease is: *Cystic Fibrosis*

In Britain, this is the most common inherited disease. Cystic Fibrosis is characterised by a build-up of sticky mucus. This makes breathing difficult and can act as a breeding ground for bacteria, so sufferers need daily physiotherapy to remove the mucus. It is caused by a recessive faulty allele and so parents may be carriers for the disease without having any symptoms. As yet, genetic diseases may be treated but not cured because we cannot replace the faulty gene.

Degenerative:

These diseases are characterised by a **gradual loss of function** in one or several organs or tissues. In old age, this is often the result of the failure of the bodies repair mechanisms - for example, loss of mobility due to worn joints.

However, degenerative diseases can strike in ones youth or middle age. They may be the result of poor nutrition in childhood or due to the immune system attacking the bodies, own cells.

There are three main categories:

1. Diseases of skeletal, muscular and nervous tissues - for example, **osteoarthritis**.

2. Cardiovascular diseases of the circulatory system - for example, **coronary heart disease**.
3. Cancers

An example of a degenerative disease is: *Osteoarthritis*

Osteoarthritis, or degenerative joint disease, is one of the oldest and most common types of arthritis. It is characterized by the breakdown of the joint's cartilage. Cartilage is the part of the joint that cushions the ends of bones. Cartilage breakdown causes bones to rub against each other, causing pain and loss of movement.

Most commonly affecting middle-aged and older people, OA can range from very mild to very severe. It affects hands and weight-bearing joints such as knees, hips, feet and the back.

Mental:

These disorders **affect a person's mind**, but may be accompanied by **physical symptoms**. Emotions, thoughts, memories and personal and social behaviour can be affected. Some mental diseases are caused by degeneration of brain tissue - for example, **Alzheimer's** - a progressive deterioration in memory is followed by a general decline in all mental faculties (dementia). Other mental disorders seem to be accompanied by changes in the blood flow to the brain - for example, **Schizophrenia**.

An example of a mental disease is: *Schizophrenia*

Schizophrenia is a chronic, severe, and disabling brain disease. People with schizophrenia often suffer terrifying symptoms such as hearing internal voices not heard by others, or believing that other people are reading their minds, controlling their thoughts, or plotting to harm them. These symptoms may leave them fearful and withdrawn. Their speech and behaviour can be so disorganized that they may be incomprehensible or frightening to others. Available treatments can relieve many symptoms, but most people with schizophrenia continue to suffer some symptoms throughout their lives; it has been estimated that no more than one in five individuals recovers completely.

Social:

This is a very wide category that can include almost all infectious diseases and multifactorial diseases, which are influenced by people's **living conditions** and their **personal behaviour**. For example, deficiency diseases may be the result of lack of choice of food, due to shortage of money.

An example of a social disease is: *Hypothermia*

Hypothermia is defined as a core temperature of less than 35 degrees Celcius.

Hypothermia is also considered the clinical state of sub-normal temperature when the body is unable to generate sufficient heat to efficiently maintain functions. Many variables contribute to the development of hypothermia. Age, health, nutrition, body size, exhaustion, exposure, duration of exposure, wind, temperature, wetness, medication and intoxicants may decrease heat production, increase heat loss, or interfere with thermostability.