List of Human Diseases

The word disease implies that dis-ease (not easy). In other words malfunctioning or improper functioning of various body parts like genetic disorder, hormonal imbalance, malfunctioning of immune system of body are some factors which affects the human health. The diseases caused by intrinsic sources are called organic or metabolic diseases like cardiac failure, kidney failure, diabetes, allergies, cancer etc and the diseases caused by extrinsic factors are Kwashiorkor, obesity, Night blindness, scurvy etc. Some diseases are also caused by micro-organisms due to unbalanced diet such as viruses, bacteria, and fungi, protozoan's, helminthes, worms, etc.; environmental pollutants, tobacco, alcohol and narcotic drugs are also an important extrinsic factors which upset human health.

Types of Diseases: On the basis of its nature, character and causes of its spreadness is of two types:
1. Congenital Disease is the diseases which are present since birth. These are caused due to genetic abnormality or due to metabolic disorders or malfunctioning of any organ. They are basically permanent, generally not easily curable and may be inherited to the children like Harelip, Cleft Palate, Club foot etc. Also due to imbalance in the chromosomes the appearance of Mongalism, to born the blue baby due to cardiac disorder etc are also some examples of it.

2. *Acquired Disease* is those defects or disorders which are not present by birth but appear due to the various causes and factors. These may be further categorized into following heads:
(i) Communicable or infectious diseases: These are caused by a variety of pathogenic viruses, bacteria, protozoa, fungi and worms. The pathogens are generally carried with the help of a vector.
*(ii) Non-communicable or non-infectious or degenerative diseases***:** These occur due to the malfunctioning of some organ or organ system in the body. It may be of various types like *Deficiency diseases***:** These occur due to the deficiency of some nutrients, minerals or vitamins, *Cancerous diseases*, *Allergy, Genetic diseases.*
Diseases Spread through Blood Transfusion
AIDS (Acquired Immuno Deficiency Syndrome): It destroys *immune system* of the body & is caused by the *Human Immuno deficiency Virus* (HIV).There are two types of HIV namely HIV-1 and HIV-2**.** The most common virus currently associated with AIDS is HIV-1. A virus found in the blood of wild African green monkey called the *Simian Immuno deficiency Virus* (SIV) is similar to HIV-2. HIV is a *retrovirus.* It can synthesize DNA from RNA. The major cell infected by HIV is the helper *T-Iymphocyte* that

bears the CD-4 receptor site. HIV progressively destroys *T-Iymphocytes.* The patient occasionally will suffer from swollen lymph nodes, mild prolonged fever, diarrhoea or other non-specific symptoms.

Important facts about AIDS: AIDS in India was first reported in 1986 and is the end stage of the disease. HIV antibodies can be detected by the ELISA test (Enzyme-Linked Immuno Sorbent Assay). World AIDS Day is celebrated on 1st December.

OTHER DISEASES

Cancer: They are characterized by the uncontrolled growth and division of cells which leads to a mass of cells known as neoplasm. Abnormal and persistent cell division localized in a particular region is called benign tumor.

Gout: It results from accumulation of *uric acid* crystals in the *synovial joints.* It is a disease associated with an inborn error of uric acid metabolism that increases production or interferes with the excretion of uric acid.

Haemophilia is called bleeder's disease. It is a disorder which is sex-linked and is a recessive condition. In a patient of haemophilia, *blood clotting* is deficient.

Haemophilia A, is characterized by lack of anti- haemophilia globulin factor VIII. About four-fifths of the cases of haemophilia are of this type.

Haemophilia B or Christmas disease results from a defect in plasma thromboplastic component.

Hepatitis : It is a viral disease, causes hepatic anorexia resulting in liver damage (liver cancer) or jaundice. It is transmitted by the faecal-oral route. Children and young adults are susceptible to it and no vaccines are acceptable.

Various Deficiency Diseases

Disease	*Deficiency*	*Symptoms*
Anaemia	Haemoglobin (iron)	General weakness and pale complexion
Goitre	Iodine	Painful joints
Beri-beri	Vitamin B_1 (Thiamine)	Weakness, swelling and pain in legs, loss of appetite, enlarged heart
Scurvy	Vitamin C (Ascorbic acid)	Swollen gums, delayed wound healing
Rickets	Vitamin D	Sleeplessness, pale face, diarrhoea, deformed skull, pelvis and limbs in children
Hypokalemia	Potassium	Rise in heartbeat, kidney damage, weakness
Night blindness	Vitamin A	–
Xerophthalmia	Vitamin A	Dryness
Dermatosis	Vitamin A	Skin diseases
Ariboflavinosis	Vitamin B_2 (Riboflavin)	Blurred vision, soreness of eyes and tongue
Pellagra	Nicotinic Acid (Vitamin B complex)	Diarrhoea, mental lethargy, red skin, itchy hands, feet, elbows and knees

VIRAL DISEASES OF HUMANS

Name of disease	**Caused by**	**Parts of body affected**	**Method of spread**	**Type of Vaccination**
Influenza	A myxovirus (RNA virus)	Respiratory passages: epithelial lining of trachea and bronchi.	Droplet Infection	Killed virus
Common cold	Large variety of viruses, commonly rhino-virus (RNA Virus)	Respiratory passages	Droplet Infection	Intramuscular injection.
Smallpox	Variola virus (DNA virus)	Respiratory passages, then skin	Droplet Infection (Wounds in skin)	Living atteneuated virus applied by scratching skin, no

				longer carried
Chickenpox	Varicella-zoster	Blistering Skin rash	Air-borne droplets	Living attenuated virus
Mumps	A paramyxovirus (RNA virus)	Respiratory passages, infection via blood, salivary glands, testes in adult males	Droplet infection	Living attenuated virus
Measles	A paramyxovirus (RNA virus)	Respiratory passages, spreading to skin and intestines.	Droplet infection	Living attenuated virus
German measles (Rubella)	Rubella virus	Respiratory passages, lymph nodes in neck, eyes and skin.	Droplet infection	Living attenuated virus, more essential for girls because disease causes complication in pregnancy.
Poliomyelitis (polio)	Poliovirus (RNA Virus)	Pharynx and intestines, then blood; occasionally motor neurons in spinal cord, paralysis may occur.	Droplet infection or via human faeces	Living attenuated virus given orally
Yellow fever	An arbovirus i.e arthropod-borne virus (RNA Virus)	Lining of blood vessels and liver	Vector-arthropods e.g ticks, mosquitoes	Living attenuated virus
AIDS	Retrovirus (RNA virus)	Skin Cancer	Sexual intercourse homo- and hetrosexuals	Not available
Ebola haemorrhagic	Ebola Virus disease (EVD)	Fatal Illness in Humans,	It is transmitted	No licensed Ebola

fever		Fever	to people from wild animals and spreads in the human population through human-to-human transmission.	vaccine is available
Zika disease	Zika Virus (mosquito borne disease)	Causes mild illness in the people like dengue, yellow fever	Basically Infection in pregnant women is linked to abnormally small heads in their babies.	No vaccine available

Bacterial Diseases of Humans

Name of disease	Caused by	Parts of body affected	Method of spread	Type of vaccination or antibodies
Diphtheria	Corynebacterium diphtheria	Upper respiratory tract, mainly throat also toxin affects heart.	Droplet infection	Toxoid
Tuberculosis (TB)	Mycobacterium tuberculosis	Mainly lungs	Droplet infection, Drinking milk from infected cattle.	BCG living attenuated bacteria. Antibiotics e.g. streptomycin.
Whooping cough (Pertussis)	Bordetella pertussis	Upper respiratory tract, inducing violent coughing	Droplet infection	Killed bacteria
Gonorrhoea	Neisseria gonorrhoeae	Reproductive organs: mainly mucous membranes of	Contagion by sexual contact	Antibiotics, e.g. penicillin, streptomycin

		urinogenital tract. Newborn infants may acquire serious eye infections if they pass through infected birth canal.		
Syphilis	Treponema pallidum	Reproductive organs, then eyes, bones, joints, central nervous system, heart and skin.	Contagion by sexual contact	Antibiotics. e.g. penicillin
Tetanus	Clostridium tetani	Blood. Toxin produced which affects motor nerves of spinal cord and hence muscles, causing lockjaw and spreading to the muscles.	Wound infection	Toxoid
Cholera	Vibrio cholera	Alimentary canal: mainly small intestine.	Faecal contamination (a) food - or water borne of material contaminated with faeces from infected person. (b) handling of contaminated Objects. (c) vector, e,g. flies moving from human faeces	Killed bacteria: short-lived protection and not always effective Antibiotics e.g. tetracyclines, chloramphenicol.

			to food.	
Typhoid fever	Salmonella typhi	Alimentary canal, then spreading to lymph and blood, lungs, bone marrow, spleen.	Same as cholera	Killed bacteria (TAB vaccine)
Bacterial dysentery	Shigella dysenteriae	Alimentary canal, mainly ileum and colon	Same as cholera	No vaccine.
Bacterial food poisoning (gastro enteritis or salmonellosis)	Salmonella spp.	Alimentary canal	Mainly foodborne meat from infected animals from poultry and pigs. Also via faecal contamination as cholera	Antibiotic. e.g. tetracyclines.

Diseases Caused By Worms

Disease	**Pathogen responsible and its habitat**	**Mode of transmission**	**Main symptoms**
Ancylostomiasis or 'Hook-worm disease'	Ancylostoma duobenale, small intestine (jejunum) of man	Transmission from person to person, filariform larvae passed out in faeces, man picks up infection walking barefoot on faecally-contaminated soil.	Dermatitis; reddish, severe anaemia; duodenal ulcer, constipation. Patient pale, face puffy with swelling of lower eyelids.
Ascariasis	Ascaris Lumbricoides; small intestine (jejunum) of man	Transmission from person to person, ripe eggs passed out in faeces, infection	Larvae in lung cause pneumonia. May give rise to typhoid-like fever, causes

		affected by swallowing ripe Ascaris eggs with raw vegetables.	protein and Vitamin A deficiencies resulting in protein-calorie malnutrition and night blindness respectively. Can cause appendicitis, jaundice.
Enterobiasis or 'Pinworm disease'	Enterobius vermicularis, caecum and vermiform appendix	Transmission from one person to another by ingestion of eggs in contaminated food or drink.	Eczematous condition round the anus, bed wetting at night, inflammation of vermiform appendix.
Filariasis	Wuchereria Bancrofti, lymphatic vessels and lymph nodes.	Part of the life cycle in mosquito in which larvae develop and become infectious to man, with mosquito bite larvae deposited on skin which enter through puncture wound and reach lymphatic channels	Elephantiasis i.e. enormous enlargement of certain parts such as that of leg, scrotum, penis, labia, clitoris, breast, forearm.

Diseases Caused By Worms
Diseases caused by Fungi

Disease	Pathogen responsible	Mode of transmission	Main symptoms
Ringworm (tinea)	Microsporum, Trichophyton	Direct contact from unbathed cats and dogs or objects	Contain one or more blistered areas on skin and scalp.

		handled by infected individuals	Cause partial and temporary baldness in children.
Athlete's foot	Trichophyton	Bad foot hygiene where skin remains warm and moist for long periods.	Painful itching or burning sensation in the infected areas. Crack appears in the skin, mass of loose dead skin clings between toes.
Madura foot	Maurella Mycetomi	Fungi gain entry through some minor injury to the skin.	Produce a chronic, granulating infection of the lower extremities, affected part becomes enlarged and develops many deep sores, extensive bone destruction leading to crippling deformities.
Dhobie itch	Several Different Fungi	Direct contact through Objects handled by infected person.	A type of ringworm infection usually located in the groin and inner surfaces of thighs, red rash which itches intensely.