

DISEASES

AGENT	GENERAL INFORMATION	HOW CAUSE DISEASE	TREATMENT	EXAMPLES
<i>bacteria</i>	one-celled 3 common shapes; spiral, rod, sphere are everywhere contaminating agents include: humans, insects, food, water, cuts or abrasions	produce toxins	antitoxins antibiotics	Cholera (<i>Vibrio cholerae</i>), botulism pneumonia, venereal diseases, Typhoid fever (<i>Salmonella typhus</i>), Paratyphoid fever (<i>Salmonella</i> organisms), Food Poisoning
<i>virus</i>	more primitive, smaller than bacteria reproduction is only within living cells will control processes within infected cell difficult to identify & treat too tiny to be seen with light microscope	Interfere with cellular metabolism Cause cell death	vaccinations; don't respond to antibiotics	cold, flu, mumps, measles, rabies, hepatitis, AIDS
<i>fungi</i>	organism which reproduce via spores spores found everywhere	varies	varies	athletes foot, candidacies, histoplasmosis
<i>parasites</i>	transmitted by flies, worms, other pests, poor sanitation, nutrition life cycle will vary	generally: will infect host cells and impede ability to function, take nutritional source or damage the cell	in many cases specific medication are available	pinworm, tapeworm, round worm, schistosomiasis, malaria, sleeping sickness, trichinosis
<i>arthropods</i>	insects and arachnids serve as vectors or can directly cause disease if cause disease, usually affect skin	usually draw body fluids or blood infect host with parasite during feeding	varies	Mites (scabies), ticks (Lyme disease vector), lice, mosquitos (Yellow fever, Malaria vectors), fleas (Plague vectors)
<i>protozoans</i>	single-celled organisms often found in water	varies	varies	trichomona (vaginal infection, <i>Trichomonas vaginalis</i>), amebiasis/amoebic dysentery (<i>Entamoeba histolytica</i>)
<i>allergic reactions</i>	overactivity of immune system in response to certain substances	Antigen-antibody response	varies	fur, pollen, dust, foods, gases, plants, pollution
<i>toxic</i>	poisoning, direct effect on structure & function of specific cells	varies	antitoxin	drugs, chemicals, plants, animals, foods
<i>autoimmune</i>	immune system ceases to function properly body unable to recognize its own cells	normal tissue recognized as being abnormal – autoantibodies are produced against ones own tissues	varies	rheumatoid arthritis, thyroiditis, lupus erythematosus.
<i>metabolic</i>	normal body physiology is altered in some way	too much of a hormone, lack of hormone		diabetes
<i>nutritional</i>	deficiencies of one or more types of nutrients can increase susceptibility to infection and can also retard growth in children	specific to type of deficiency	corresponds to type of deficiency	vit. A- night blindness, vit. C – scurvy vit. D- rickets, Fe- Anemia, Ca - Osteoporosis
<i>traumatic</i>	physical disorders which may result from injury to body	varies	varies	abrasions, lacerations, contusions, fractures, sprains
<i>genetic</i>	inherited from parent(s) at conception	mutation or inherited trait	varies	cystic fibrosis, downs syndrome, hemophilia, sickle cell anemia, tay sachs, turners

<i>congenital</i>	child is born with	hereditary or caused by maternal infection or prenatal exposure to a alcohol, smoking, drugs	varies	heart disease, spina bifida, hydrocephalus
-------------------	--------------------	--	--------	--

(23) DISEASES.doc
 LFN - NEN Study materials

<i>Transmission Source</i>	<i>Disease</i>	<i>Organism</i>	<i>Transmission Source</i>	<i>Disease</i>	<i>Organism</i>
Food & Water	Typhoid fever	<i>Salmonella enterica</i> serotype Typhi and Paratyphi	Wounds	Osteomyelitis, Pneumonia, meningitis	<i>Staphylococcus</i> organisms
	Salmonellosis	<i>Salmonella enterica</i> serotype Enteritidis and Typhimurium		focal infections of teeth, tonsils, sinus, septic sore throat, scarlet fever, bronchopneumonia	<i>Streptococcus</i> organisms
	Bacillary dysentery	<i>Shigella</i> organisms		Infections of abdomen and urinary tract	<i>Leptospira interrogans</i> (Leptospirosis)
	Cholera	<i>Vibrio cholerae</i>		Tetanus	<i>Clostridium tetani</i>
	Food poisoning	<i>Salmonella</i> organisms <i>Staphylococcus</i> organisms <i>Streptococcus</i> organisms <i>Clostridium botulinum</i>		Gangrene	Gas gangrene group (ex. <i>Clostridium perfringens</i>)
	Amoebic dysentery	<i>Entamoeba histolytica</i>	Mucous Membranes	Syphilis, Gonorrhoea, Chancroid	<i>Treponema pallidum</i> <i>Neisseria gonorrhoeae</i> (Gonococcus) <i>Hemophilis ducreyi</i>
	Meningitis	Meningococcus (<i>Neisseria meningitidis</i>)	Skin	Favus, ringworm	dermatophyte fungi (<i>Tinea</i> sp.)
	Sinusitis, bronchitis, pharyngitis, mastoiditis, pneumonia	Pneumococcus (<i>Streptococcus pneumoniae</i>)	Animals	Anthrax	<i>Bacillus anthracis</i> (sheep, goats)
	Pertussis (Whooping cough)	<i>Bordatella pertussis</i>		Undulant fever	<i>Brucella</i> (cows, goats, swine)
	Diphtheria	<i>Corynebacterium diphtheriae</i>		Plague	<i>Yersinia pestis</i> (rats)
Tuberculosis	<i>Mycobacterium tuberculosis</i>	Rabies		Virus (dogs, cats, raccoons, etc.)	
Common cold, influenza, chicken pox, measles, poliomyelitis, mumps	Viruses	Tuberculosis		<i>Mycobacterium bovis</i> (cow), < 2% of all TB cases in US)	
			Insects, arachnids	Typhus, rocky mountain spotted fever	<i>Rickettsias</i> (ticks, lice, fleas)
				Malaria	Virus (mosquito)

		Yellow fever	Virus (mosquito)
--	--	--------------	------------------

(23) DISEASES.doc
LPN ~ NLN Study materials