

Are there any limitations of treating infectious agents via medicines?

There are three limitations:

Our body functions might not be able to recover easily.

This treatment takes time hence it can affect our daily activities.

An infectious disease may transfer from a person who is suffering the disease to another in the meanwhile of the treatment.

Discovery of Helicobacter Pylori as a Reason for Ulcer:

A peptic ulcer is a sore that occurs on the inner lining of the stomach. In 2005, Barry J. Marshall and J. Robin Warren received a Nobel Prize for discovering that Helicobacter Pylori bacteria are a cause of such ulcers. Before that, it was believed that stress and lifestyle are a major cause of such ulcers. The Helicobacter Pylori bacteria weakens the mucous lining of the stomach which lets the acid present inside the stomach to get through the inner sensitive lining. The acid and bacteria together irritate the lining and cause a sore or ulcer.

Inflammation – Our body has an immune system in which it creates the cells that can fight against the disease-causing germs. This process of recruiting cells to kill the infectious agents present in our body is called Inflammation. The inflammation process shows different effects on our body such as fever or swelling.

Some common human diseases for reference :

Common human diseases

Bacterial diseases

- Dysentery
- Plague
- Diphtheria
- Cholera
- Typhoid
- Pneumonia

Viral diseases

- Common cold
- Mumps
- Measles
- Viral hepatitis
- Dengue fever
- Chikungunya
- Chicken pox
- Poliomyelitis

Fungal diseases

- Candidiasis
- Athlete's foot

Protozoan diseases

- Malaria
- Amoebiasis
- African sleeping sickness
- Kala-azar

Helminthic diseases

- Ascariasis
- Filariasis

Some common bacterial diseases with symptoms :

Bacterial diseases in human beings

S. No	Diseases	Causative agent	Site of infection	Mode of transmission	Symptoms
1	Shigellosis (Bacillary dysentery)	<i>Shigella sp.</i>	Intestine	Food and water contaminated by faeces / faecal oral route	Abdominal pain, dehydration, blood and mucus in the stools
2	Bubonic plague (Black death)	<i>Yersinia pestis</i>	Lymph nodes	Rat flea vector- <i>Xenopsylla cheopis</i>	Fever, headache, and swollen lymph nodes
3	Diphtheria	<i>Corynebacterium diphtheriae</i>	Larynx, skin, nasal and genital passage	Droplet infection	Fever, sore throat, hoarseness and difficulty in breathing
4	Cholera	<i>Vibrio cholerae</i>	Intestine	Contaminated food and water/ faecal oral route	Severe diarrhoea and dehydration
5	Tetanus (Lock jaw)	<i>Clostridium tetani</i>	Spasm of muscles	Through wound infection	Rigidity of jaw muscle, increased heart beat rate and spasm of the muscles of the jaw and face
6	Typhoid (Enteric fever)	<i>Salmonella typhi</i>	Intestine	Through contaminated food and water	Headache, abdominal discomfort, fever and diarrhoea
7	Pneumonia	<i>Streptococcus pneumoniae</i>	Lungs	Droplet infection	Fever, cough, painful breathing and brown sputum
8	Tuberculosis	<i>Mycobacterium tuberculosis</i>	Lungs	Droplet infection	Thick mucopurulent nasal discharge

Some common viral diseases :

Viral diseases in human beings

S. No	Diseases	Causative agent	Site of infection	Mode of transmission	Symptoms
1	Common cold	<i>Rhino viruses</i>	Respiratory tract	Droplet infection	Nasal congestion and discharge, sore throat, cough and headache
2	Mumps	<i>Mumps virus (RNA virus)</i> <i>Paramyxo virus</i>	Salivary glands	Saliva and droplet infection	Enlargement of the parotid glands
3	Measles	<i>Rubella virus (RNA virus),</i> <i>Paramyxo virus</i>	Skin and respiratory tract	Droplet infection	Sore throat, running nose, cough and fever. reddish rashes on the skin, neck and ears.
4	Viral hepatitis	<i>Hepatitis - B virus</i>	Liver	Parenteral route, blood transfusion	Liver damage, jaundice, nausea, yellowish eyes, fever and pain in the abdomen
5	Chicken pox	<i>Varicella -Zoster virus (DNA Virus)</i>	Respiratory tract, skin and nervous system	Droplet infection and direct contact	Mild fever with itchy skin, rash and blisters
6	Poliomyelitis	<i>Polio virus (RNA virus)</i>	Intestine, brain, spinal cord	Droplet infection through faecal oral route	Fever, muscular stiffness and weakness, paralysis and respiratory failure
7	Dengue fever (Break bone fever)	<i>Dengue virus or Flavi virus (DENV 1-4 virus)</i>	Skin and blood	Mosquito vector <i>Aedes aegypti</i>	Severe flu like illness with a sudden onset of fever and painful headache, muscle and joint pain.
8	Chikungunya	<i>Alpha virus (Toga virus)</i>	Nervous system	Mosquito vector <i>Aedes aegypti</i>	Fever and joint pain, headache and joint swelling

NOTE ON TYPHOID (FOR REFERENCE)

What is typhoid?

Typhoid is a bacterial infection that can lead to a high fever, diarrhea, and vomiting. It can be fatal. It is caused by the bacteria *Salmonella typhi*.

The infection is often passed on through contaminated food and drinking water, and it is more prevalent in places where handwashing is less frequent.

It can also be passed on by carriers who do not know they carry the bacteria.

If typhoid is caught early, it can be successfully treated with antibiotics; if it is not treated, typhoid can be fatal. Trusted Source.

Fast facts on typhoid:

Symptoms include a high fever and gastrointestinal problems.

Some people carry the bacteria without developing symptoms.

The only treatment for typhoid is antibiotics.

The bacterium lives in the intestines and bloodstream of humans. It spreads between individuals by direct contact with the feces of an infected person.

No animals carry this disease, so transmission is always human to human.

If untreated, around 1 in 5 cases of typhoid can be fatal. With treatment, fewer than 4 in 100 cases are fatal. *S. typhi* enters through the mouth and spends 1 to 3 weeks in the intestine. After this, it makes its way through the intestinal wall and into the bloodstream.

From the bloodstream, it spreads into other tissues and organs. The immune system of the host can do little to fight back because *S. typhi* can live within the host's cells, safe from the immune system.

Typhoid is diagnosed by detecting the presence of *S. typhi* via blood, stool, urine, or bone marrow sample. Symptoms

The two major symptoms of typhoid are fever and rash. Typhoid fever is particularly high, gradually increasing over several days up to 104 degrees Fahrenheit, or 39 to 40 degrees Celsius.

The rash, which does not affect every patient, consists of rose-colored spots, particularly on the neck and abdomen.

The chart is given for reference for any external examination .

Specifically read and learn the diseases given and specified in NCERT BOOK.

NOTES ON ALL IMPORTANT DISEASE CAUSED BY FUNGUS AND WORMS WILL UPLOADED LATER.

This content is prepared from home .