

# [Causes and spread of infection essay sample](https://assignbuster.com/causes-and-spread-of-infection-essay-sample/)

Identify the differences between bacteria, viruses, fungi, parasites? -Viruses aren’t living. They’re only made of complex proteins and nucleic acids. Bacteria, Fungi and Parasites are living organisms. – Bacteria are unicellular microorganisms. Fungi and Parasites are multicellular. – Fungi have cell walls made of chitin and they aren’t animals. Parasites and bacteria are animals. Bacteria come in 3 main shapes; spherical which are known as cocci, rod shaped which are known as bacilli or vibrio, spiral which is known as spirilla or spirochetes. Bacteria is found in everything for e. g. soil, water, animals, plants, waste. The only place they aren’t found is where humans have sterilised.

Virus is a toxin or poison. It is a microscopic organism consisting of genetic material. They cannot reproduce without a host cell. When it gets this host cell, it takes over its functions. The cells then continue to reproduce, and reproduces more viral protein. Viruses can spread from person to person, and by exchange of salvia, coughing, sneezing.

Fungi are skin infections caused by dermatophytes and yeasts, which are groups of fungi that are normally harmless. When these grow excessively, it causes symptoms and usually affects your skin because they live of keratin. Fungi infections can also be caused by antibiotics, pregnant, poorly controlled diabetes, weak immune system.

A parasite lives in close relationship another organism, its host and it causes harm. Viruses are common parasites. Parasites has to be in its host to live, grow and multiply. Identify common illnesses and infections caused by bacteria, viruses, fungi and parasites

Bacterial Infection and illnesses:- Antrax, Bacterial meningitis, Gonorrhea, Plague, MRSA Infection, Tetanus, Tuberculosis. They can cause illnesses like tuberculosis, tonsillitis, and laryngitis and food poisoning. Viral Infections and illnesses- AIDS, Hand foot and mouth disease, Chickenpox, Mumps, Smallpox, Yellow fever. Several human diseases are caused by viruses which include:- smallpox, measles, the common cold, chickenpox, hepatitis, HIV, cold sores, shingles.

Fungi Infections and illnesses:- The different fungi infections are:- athletes foot which is itchy flaky red skin, nail infections which can discolour or make the nail crumbly and thin. There are also other fungi’s like thrush, yeast infection.

Parasite Infections and illnesses:-. A common parasite is a hookworm where it is possible for humans or their pets to get. Hookworms attach themselves to the lining of the small intestine, and cause diseases, and malnutrition as well. Scabies, malaria.

Describe what is meant by infection and colonisation?   
An infection, in general terms, is the illness caused by the growth of a germ on or in a person. Invasion by and multiplication of pathogenic microorganisms in a bodily part or tissue, which may produce subsequent tissue injury and progress to overt disease through a variety of cellular or toxic mechanisms. Colonisation ~ the development of a bacterial infection on an individual. The infected person may have no signs or symptoms of infection while still having the potential to infect others. When the germ is commonly found on our body without causing an illness, we call it carriage or colonisation. Carriage may be very short term (transient). For example, acquired by touching someone but quickly removed by washing your hands, or persistent with the germ multiplying on your body (usually called colonisation). In certain circumstances the germs that colonise our bodies may go on to give an infection.

Explain what is meant by “ systemic infection” and “ localised infection” Localised infection is an infection that is limited to a specific body part or region Systemic infection is an infection that is the opposite to localised infection. It is when the pathogen is distributed throughout the whole body. Identify poor practices that may lead to the spread of infection

Poor practices that may lead to the spread of infection can include:-   
 No hand washing or not doing it properly,   
 Not wearing the right protective equipment,   
 Not preparing food properly or to adequate standards or not serving correctly,   
 Personal hygiene is not to high standards or cleanliness of the environment,   
 Re-using equipment that should be sterilised or thrown away,   
 Not adhering to health and safety procedures,   
 Not cooking or defrosting food properly,   
 Not covering your nose or mouth when you sneeze and using appropriate equipment like hand gels, washing, paper towels,

Understand the transmission of infection

Explain the conditions needed for the growth of micro-organisms?

Nutrients:- micro-organisms need food to survive and they like high protein food to survive. E. g. fish and poultry. Most micro – organisms need warmth & grow best at 20-40c. They need moisture to multiply. some micro-organisms need air to multiply but some need none. Explain the ways an infective agent might enter the body.

Mouth, lungs, cuts, contact with skin or any other external organs such as eyes, entry via any orifice (ears, urinary tract, anus, nose, vagina) and mixing of bodily fluids (though this may entail access via one of the above). It can be breathed in (think tuberculosis), it can enter through mucous membranes (think using a sick person’s utensils or kissing someone sick), it can enter through blood (think a cut or needle stick).