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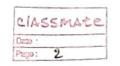
Sub Title: Disaster Management and Mitigation

## Bacteria and Viruses

The two most common (austive agents of infectious disease are the virus and bacteria. Both of these patrogens are invisible to the naked eye, allowing for their statisty stealthyl transfer from person to person during an outbreak of a contagious disease. While they rightly share a nasty reputation as disease agents, their properties aparts from the harm they cause are quite dissimilar.

## · Difference between Viruses and Bacteria

Living or not: Viruses are not living organism, bacteria are . Viruses only grow and reproduce cell inside of the host cells they infect. When found outside of these living cells, Viruses are dormant. Their life therefore requires the hizacking of the biochemical activities of a living cell. Bacteria, on the other hand, are living organisms that consist of single cell that can generate energy, make its own food, move, and reproduce. This allows bacteria to live in many places—soil, water, plants and the human body and serve many purposes.



Size Bacteria are giants when compared to viruses.

The smallest bacteria are about 0.4 micron lone
millionth of a meter) in diameter while viruses

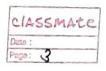
range in size from 0.02 to 0.25 micron. This makes

most viruses submicroscopic, unable to be seen

in an ordinary light microscope, they are

typically studied with an electron microscope.

Mode of Infection: Their mode of infection is different. Because of their distinct biochemistry of it should come as no surprise that bacteria and visuses differ in how they cause infection. Viruses infect a host cell and then multiply by the thousands, leaving the host cell and infecting other cells of the body. A viral infection will therefore be systemic, spreading throughout the body. Systemic diseases caused by viral infection include influenza, measles, polio, AIDS, and COVID-19. Pathogenic bacteria have a more varied operation and will often infect when the right opportunity orises, so called opportunistic infection. The infection caused by pathogenic bacteria is usually confined to a part of the body, described as a localized infection. These infections may be Coursed by the bacteria themselves or by toxins (endotoxins) they produce. Example of bacterial disease include pneumonia, tuberculosis, tetanus and food poisoning.



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		harterio bhases - Viruses that infect bacteria. We		
		don't want to Judge let this may be one 11/000		
		reason to put viruses one notch higher in the nasty		
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_		Virus (Vs) Bacteria		
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