

## Latent Virus Infection

**Safaa Alkhawaja**

Department of Internal Medicine, Salmaneya Medical Center, Ministry of Health,  
Kingdom of Bahrain

### Abstract

A latent infection is an infection that is hidden, inactive, or dormant. As opposed to active infections, where a virus or bacterium is actively replicating and potentially causing symptoms, latent infections are essentially static. Viral latency is the ability of a pathogenic virus to lie dormant within a cell, denoted as the lysogenic part of the viral life cycle. A latent viral infection is a type of persistent viral infection which is distinguished from a chronic viral infection. Keywords: Pain in the chest; Sputum; Chills; Chronic diffuse

### INTRODUCTION

TB bacteria can live in the body without making you sick. This is called latent TB infection. In most people who breathe in TB bacteria and become infected, the body is able to fight the bacteria to stop them from growing. TB bacteria become active if the immune system can't stop them from growing. When TB bacteria are active, this is called TB disease. People with TB disease are sick. They may also be able to spread the bacteria to people they spend time with every day. Many people who have latent TB infection never develop TB disease. Some people develop TB disease soon after becoming infected before their immune system can fight the TB bacteria. Latent infection, generally speaking, means the residence in the body of a specific infectious agent without any manifest symptoms. The symptomless incubation period, which in certain diseases, notably measles and smallpox, is fairly definite in length, is a period of latency in infection. After complete recovery from an infectious disease the infectious agent may survive in the patient for a variable time, sometimes for years, without causing any obvious disturbances. Here the infection outlives the disease. This form of latency in infection occurs in typhoid, cholera, epidemic meningitis, diphtheria, scarlet fever and other diseases. In malaria, recurrent fever, undulant fever and septicemic infections occur symptomless intervals or periods of latency the nature of which presents many problems.

### LATENT TB INFECTION

Persistent infections are characterized as those in which the virus is not cleared but remains in specific cells of infected individuals. Persistent infections may involve stages of both silent and productive infection without rapidly killing or even producing excessive damage of the host cells. There are three types of overlapping persistent virus-host interaction that may be defined as latent, chronic and slow infection. An infection is the invasion of an organism's body tissues by disease-causing agents, their multiplication, and the reaction of host

tissues to the infectious agents and the toxins they produce. An infectious disease, also known as a transmissible disease or communicable disease, is an illness resulting from an infection. Infections can be caused by a wide range of pathogens, most prominently bacteria and viruses. Hosts can fight infections using their immune system.

### CONCLUSION

Specific medications used to treat infections include antibiotics, antivirals, antifungals, antiprotozoal, and anthelmintic. The branch of medicine that focuses on infections is referred to as infectious disease. Different terms are used to describe infections. The first is an acute infection. An acute infection is one in which symptoms develop rapidly its course can either be rapid or protracted. The next is a chronic infection. A chronic infection is when symptoms develop gradually, over weeks or months, and are slow to resolve. A subacute infection is one in which symptoms take longer to develop than in an acute infection but arise more quickly than a chronic infection. A latent infection is a type of infection that may occur after an acute episode; the organism is present but symptoms are not after time, the disease can reappear.