

# Bacterial Disease vs Parasitic disease

Bacterial disease is any of a variety of illnesses \_\_\_\_\_ bacteria. Until the mid-20th century, bacterial pneumonia was probably \_\_\_\_\_ of death among the elderly. Improved sanitation, vaccines, and antibiotics have all decreased the mortality rates from bacterial infections, though antibiotic-resistant strains \_\_\_\_\_ a resurgence in some illnesses. In the early 21st century, tuberculosis, which \_\_\_\_\_ mycobacterium tuberculosis—several strains of which had developed resistance to one or more drugs widely used to treat the infection—was among the deadliest infectious diseases worldwide. Bacteria \_\_\_\_\_ disease by secreting or excreting toxins (as in botulism), by producing toxins internally, which are released when the bacteria disintegrate (as in typhoid), or by inducing sensitivity to their antigenic properties (as in tuberculosis). Other serious bacterial diseases include cholera, diphtheria, bacterial meningitis, tetanus, Lyme disease, gonorrhea, and syphilis.

Parasitic disease, in humans, is any illness that is \_\_\_\_\_ a parasite, an organism that lives in or on another organism (known as the host). Parasites typically benefit from such relationships, often at the expense of the host organisms. Parasites of humans include protozoans, helminths, and ectoparasites (organisms that live on the external surface of a host). They \_\_\_\_\_ many diseases and are transmitted to their hosts most often through the ingestion of contaminated food or water or through the bite of an arthropod (e.g., a fly or tick), which can act as an intermediate host and as a vector. Disease-causing parasites have long \_\_\_\_\_ human populations. Calcified helminth eggs, for example, have been recovered from Egyptian mummies dated to about 1200 BCE, and written records indicate that ancient Greek and Roman physicians treated patients with various nematode infections, including tapeworm. From the 17th to the 20th centuries, with the discovery and classification of numerous parasites, \_\_\_\_\_ the realization of the global burden of parasites. Indeed, more than 3 billion people worldwide are infected by intestinal parasites or protozoans, and parasitic diseases are among the leading causes of deaths in humans globally. Epidemiological studies indicate that multiple factors influence a person's risk of infection and the spread of parasitic disease, including parasite pathogenicity, host health, environment, and social conditions.