

Can Infectious Diseases Be Prevented?

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ABSTRACT

A study of infectious disease is described. The infectious disease pandemic has focused an intense spotlight on respiratory precautions for healthcare workers managing patients with respiratory viral infections. The author is discussed about the infections and recommended precautions for its prevention

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Introduction

Infectious disease may be an inescapable aspect of life, but there are numerous methods for preventing infection and treating a disease once it has manifested.¹ It is essential to practice prevention strategies to maintain the health and safety of local communities and global populations. Infectious disease developed as a special attention in the past century after significant advances had been made in the field of antibiotic therapies to treat life-threatening contagious infections.²

Infectious diseases are conditions caused by organisms, including bacteria, viruses, fungi, and parasites. Many microorganisms inhabit our body and our skin. Typically, they are harmless or even beneficial. Under particular circumstances, some microbes may cause sickness. With the discovery of penicillins, it appeared as that infectious diseases, in particular bacterial infections, would no longer be a major public health problem. However, with the development of drug-resistant bacteria, fatal viral diseases. Certain infectious diseases are contagious, transmitting from one person to another. Some common examples of infectious diseases include COVID-19, strep throat, flu, and HIV.³

Infectious diseases can cause many different symptoms and effects. Some are so mild that you may not even notice any symptoms, while others can be life-threatening. There are treatments for some infectious diseases, but for others, such as some viruses, you can only treat your symptoms. You can take steps to prevent many infectious diseases. However, with some precautions the infectious diseases are can be prevented

immensely. Here are some of the best measures that you can take to prevent the spread of infectious diseases.



Figure 1.

1. Get Vaccinated

A vaccination is a biological preparation that increases resistance to a certain disease.⁴ Vaccines are frequently created from weakened or deceased variants of the microbe or its toxins. The body's immune system reacts to vaccines as though they contain an actual virus, even though vaccines themselves cannot cause disease. Vaccinated individuals generate antibodies that neutralize a pathogenic virus or bacteria. They are considerably

less likely to contract and spread the disease to others. Due to the widespread use of vaccines, diseases such as polio, whooping cough, mumps, and tetanus are now uncommon or under control.⁵

2. Practice Good Personal Hygiene

Microbes can survive on inert surfaces for anything between a few minutes and several months. Imagine these pathogens on your computer keyboard, light switch, or even elevator button!

This makes it essential to wash your hands frequently and practice good hygiene to prevent infectious diseases. The Centers for Disease Control and Prevention (CDC) suggests washing hands thoroughly and vigorously with soap and water for at least 20 seconds, then drying them with a paper towel. It is also advisable not to share personal belongings, such as toothbrushes, razors, and nail clippers, as these items can be contaminated with pathogens.

3. Travel Smart

It is easy to contract infectious infections while traveling. However, you can take some easy measures to minimize the risks. For example, if the water at your trip destination is questionable, be careful to drink and brush your teeth with bottled water. Consume only prepared dishes and avoid raw veggies and fruits. Lastly, ensure you have had any recommended or mandatory vaccinations for your destination.

4. Practice Safe Sex

Sexually transmitted infections are perhaps the easiest to prevent. The transmission of infectious bacteria or viruses can be avoided by practicing safe sexual behavior.

5. Food Safety Measures

Foodborne infections are mostly preventable, yet achieving this objective needs monitoring from the farm to the table. The Hazard Analysis Critical Control Point monitors food production and evaluates risks. You can minimize infectious diseases on your end by following safe cooking procedures. Foodborne infections are usually caused by improper food preparation and consumption practices. Microorganisms thrive on practically all foods, particularly on foods kept at room temperature. Most microorganisms' growth is slowed or halted by refrigeration. Foods should be refrigerated within two hours of preparation. Use separate cutting boards for raw meats and vegetables, maintain clean counters, and thoroughly wash all produce before consumption.

In Conclusion

We coexist with infectious bacteria and pathogens. Some of the organisms we encounter can be dangerous. Fortunately, there are simple ways to maintain your health. Washing one's hands, covering one's mouth while coughing or sneezing, and engaging in other simple practices can help prevent you and others from becoming gravely ill. A modest behavior on your part could save someone's life.

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Conflicts of interest

There is no conflict of interest to note.

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