

Name _____

Unveiling the Culprits: Disease-Causing Microorganisms

Open-Ended Response Answer Key

1. Understanding the different types of microorganisms that cause diseases helps healthcare professionals develop targeted prevention and treatment strategies. For example, knowing whether an infection is bacterial, viral, fungal, or parasitic informs decisions about which medications to prescribe, how to implement infection control measures, and how to educate patients about preventing the spread of infections.
2. One strategy for preventing the spread of bacterial infections is hand hygiene. Regular handwashing with soap and water can help remove bacteria from the hands and reduce the risk of transmitting infections to others.
3. Treating viral infections can be challenging because viruses replicate inside host cells, making it difficult to target the virus without harming the host's cells. In contrast, antibiotics can target bacterial cells without affecting human cells, making bacterial infections easier to treat.
4. Individuals can protect themselves from parasitic worm infections by practicing good hygiene, avoiding contact with contaminated water sources, cooking food thoroughly, and deworming pets regularly. Additionally, using proper sanitation facilities can help prevent the spread of parasitic worms in communities.

