

Name _____

Viral Villains: Exploring Diseases Caused by Viruses

Open-Ended Response Answer Key

1. The severity of influenza can vary depending on factors such as the predominant influenza strains circulating, the effectiveness of the vaccine, and population immunity levels.
2. Effective treatments and preventive measures for viral diseases like COVID-19 are crucial for reducing illness, hospitalizations, and deaths, as well as preventing the spread of the virus and protecting public health.
3. Viruses impact ecosystems by influencing population dynamics, nutrient cycling, and species interactions. For example, viruses can affect the abundance and distribution of species, regulate populations of other organisms, and shape community structure.
4. Vaccines have helped mitigate the impact of viral diseases throughout history by providing immunity to individuals and populations, reducing the spread of diseases, and preventing outbreaks and epidemics.

