

Influenza evolution: Pre- and posttest.

1. A virus can be described as
 - a. A protozoan that always causes illness in its host.
 - b. A disease-causing agent that can only infect humans.
 - c. A nonliving agent, though this designation is currently under debate.
 - d. An organism that is killed by antibiotics.
2. A virus can ensure its evolutionary survival by
 - a. Evolving to be as virulent as possible.
 - b. Evolving to be as nonvirulent as possible.
 - c. Evolving slowly to evade detection from its host.
 - d. Evolving quickly to evade detection from its host.
3. A pandemic can be described as
 - a. An epidemic that spans the entire country.
 - b. An epidemic that affects humans and animal populations.
 - c. An epidemic that kills at least 1% of the population.
 - d. An epidemic that crosses continental borders.
4. The method that many viruses use to enter host cells is
 - a. Through receptor-binding proteins that attach to host cell binding sites.
 - b. Through lysing host cell phospholipid layers.
 - c. Through engulfment by the host cell.
 - d. Brute force.
5. Draw what you think a virus looks like and label whatever parts you can.
6. List four viruses.
7. Why do we need to get a new flu vaccination each year?
8. Explain why public health officials and physicians recommended that people get two types of flu vaccinations during the 2009–2010 flu season?