



How Do Viruses Jump from Animals to Humans



VOCABULARY

***Swine Flu** – highly contagious influenza infecting people and swine

***Pathogen** – any organism which can cause disease in a person, animal, or plant

***Susceptible** – very likely to be affected by a disease

***Novel** – different from anything known before; new

***Mutation** – a change in the chromosomes or genes of a cell

COMPREHENSION CHECK

1. Which species would we expect pathogens to be most likely to jump between?
2. Given equal exposure, which species might we expect to be the greatest source of emerging infectious diseases in humans?
3. What happens when a virus mutates?
4. What does a virus need to bind to before it can enter host cells?
5. Where are viruses found?
6. What steps are required for a pathogen to infect a novel host species?
7. What factors affect the likelihood of a pathogen successfully jumping to a new host?

LET'S TALK

1. What are the things we can do to protect human populations from emerging pathogens, and can we predict the next big epidemic?