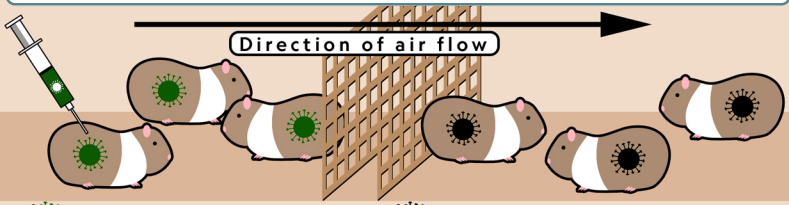
GUINEA PIGS CAN GET THE FLU, TOO!

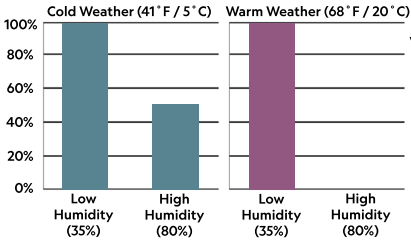
NATIONAL GEOGRAPHIC

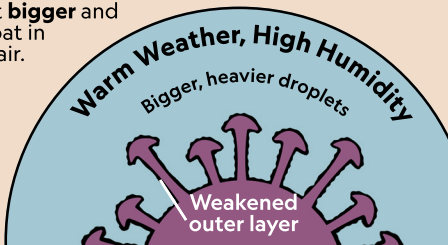
Scientists have had a hard time studying **how the flu spreads**. That's because most animals don't spread the virus in the same way as humans. But in 2007, Dr. Peter Palese discovered that **guinea pigs** in his lab could catch the virus **through the air** from other guinea pigs that had been injected with the virus. This is a lot like humans, and allowed Palese to study how the flu spreads.



= infected by injection

= infected by other guinea pigs



Dr. Palese's study found that when the air was **cold** and **dry**, all the guinea pigs got sick. When the air was **warm** and **moist**, far fewer got sick. This suggests that the flu **spreads more easily** when it's cold and dry. But why? Other scientists have tried to figure that out, and have come up with some ideas.

Scientists have found that in cold weather, the virus has a **thick outer layer** that protects it; as the weather gets warmer, that layer becomes **soft** and leaves the virus **weaker** to the elements. Also, moist air causes the droplets containing the virus to get **bigger** and **heavier**, which means they don't float in the air for as long as they do in dry air.