



## AIDS-like Illness Found in African Chimps

**Finding could shed light on how the disease affects humans**

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WEDNESDAY, July 22 (HealthDay News) -- Scientists have discovered that a species of African [chimp](#) can develop the equivalent of AIDS when infected with an HIV-like virus, a finding that could shed light on how the disease wreaks havoc in people.

The researchers already knew that apes could develop an HIV-like virus, but it generally didn't appear to actually cause illness. But they found that chimpanzees did, in fact, get sick.

The finding allows an examination of AIDS "from a different angle," said study co-author Dr. Beatrice Hahn, "and that usually has an advantage."

According to the researchers, primates in Africa harbor more than 40 types of viruses that target their immune systems like HIV does in humans. In fact, a couple of the viruses jumped to humans and created the two existing forms of HIV.

In their study, the researchers followed [chimps](#) in Tanzania's Gombe National Park for nine years, watching what happened to those infected with a simian equivalent of HIV.

Their findings appear in the July 23 issue of *Nature*.

The infected chimps were 10 to 16 times more likely than other chimps to die during a given year, said Hahn, a professor of medicine and microbiology at the University of Alabama at Birmingham.

Infected females were also less likely to give birth, and their infants were more likely to die, the study found.

One female chimp died within three years of becoming infected with [symptoms](#) that the researchers said were consistent with the end stages of AIDS in humans.

Chimps appear to transmit the simian equivalent of HIV just like humans, Hahn said: They spread it through sex.

Hierarchy in groups of chimps can determine who gets to try to breed with females, she said, but the creatures are anything but monogamous.

"When the females are cycling, capable of becoming pregnant, they mate with anyone who wants to mate with them," Hahn explained.

The next step is to figure out what to do with the new information about chimps and AIDS. The findings "won't have any immediate benefits" for people, Hahn said. "If you're looking for the new drug or the new vaccine in the next year, this will not be it."

Still, the research should be helpful because chimps are 98 percent identical to humans genetically, she said.

Scientists will be interested in understanding why some chimps sicken quickly and others don't as that will help them gain insight into how AIDS affects humans. "There are some people who crash and burn, and others who live without treatment forever," she said.

Dr. Philip R. Johnson, chief scientific officer at Children's Hospital of Philadelphia, said the study findings suggest that the HIV-like infections in the chimps are somewhere between the viruses in monkeys (chimps are apes) that cause no disease and those in Asian monkeys and humans that do.

"Understanding the relative differences will likely help us pick out new targets for drug and [vaccine development](#)," said Johnson, who studies AIDS.

The research could also tell us how AIDS landed in humans. "The origins of HIV in humans might go like this: monkey to chimp to human," he said.

### **More information**

The World Health Organization has details on efforts to develop an [AIDS vaccine](#).