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Chimpanzees Do Get Sick From AIDS After All, Researchers Report

By Rob Waters

July 22 (Bloomberg) -- Chimpanzees, the closest animal relatives to humans, may sicken and die from a simian version of AIDS, contrary to scientists' assumptions, researchers reported today in the journal Nature.

The scientists followed 94 wild chimps for nine years at a national park in Tanzania and found that animals infected with a version of the simian immunodeficiency virus, or SIV, had a 10- to-16 fold higher risk of dying early than did uninfected chimps. Females with the virus were less likely to give birth and had a higher infant mortality rate when they did, the authors found.

Scientists had long believed that primates infected with one of the 40 strains of the simian virus don't develop symptoms. While that's true of two species that have been closely studied -- African green monkeys and sooty mangabeys -- chimps are an exception, said lead study author Beatrice Hahn, an AIDS researcher at the University of Alabama at Birmingham.

"The assumption was made that all primates are the same and it isn't true," Hahn said in a telephone interview today. "SIV is pathogenic and causes disease in chimpanzees."

Studying disease in chimpanzees had been difficult because AIDS is slow to develop and apes are difficult to track in the wild, Hahn said. The development of new tests that detect antibodies to the virus in stool and urine samples allowed Hahn and her colleagues to begin tracking infection rates in chimps in 2000.

Death Rates

The team identified 17 chimps that were infected and compared their death rates over nine years to 77 uninfected chimps and found the 10-to-16-fold greater risk of death in the infected group. They provided the wide range because they couldn't be certain in some cases whether chimps that disappeared had actually died or whether certain chimps were definitely infected.

The findings will allow scientists to study why sooty mangabeys and African green monkeys, for instance, appear to be immune to the disease, and why humans who aren't treated with drugs are much more likely to get ill or die from an infection with the AIDS virus, HIV, than the chimps, Hahn said.

"Now we have three different species and systems to study and we can look at how these viruses interact with the host in each," she said. "We expect to get new insights as to why HIV is so pathogenic in humans."

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