

Simian foamy virus found to be widespread among chimpanzees

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Researchers in Cameroon, the Democratic Republic of Congo, France, Gabon, Germany, Japan, Rwanda, the United Kingdom, and the United States have found that simian foamy virus (SFV) is widespread among wild chimpanzees throughout equatorial Africa. Details are published July 4th in the open-access journal *PLoS Pathogens*.

Recent studies have shown that humans who hunt wild primates, including chimpanzees, can acquire SFV infections. Since the long-term consequences of these cross-species infections are not known, it is important to determine to what extent wild primates are infected with simian foamy viruses. In this study, researchers tested this question for wild chimpanzees by using novel non-invasive methods.

Analyzing over 700 fecal samples from 25 chimpanzee communities across sub-Saharan Africa, the researchers obtained viral sequences from a large proportion of these communities, showing a range of infection rates from 44% to 100%.

Major disease outbreaks have originated from cross-species transmission of infectious agents between primates and humans, making it important to learn more about how these cross-species transfers occur.

The high SFV infection rates of chimpanzees provide an opportunity to monitor where humans are exposed to these viruses. Identifying the locations may help determine where the highest rates of human–chimpanzee interactions occur. This may predict what other

pathogens may jump the species barrier next.

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