

Mountain Gorillas Pose No AIDS Threat, Researchers Say

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(PhysOrg.com) -- Mountain gorillas do not pose an AIDS threat to humans, according to researchers at the UC Davis Mountain Gorilla One Health Program.

Concerns about potential risks to tourists and others who may come into contact with gorillas arose in response to an article published in the Aug. 2 online edition of [Nature Medicine](#). In the article, French researchers reported that they had identified a new HIV strain that is closely related to a western lowland gorilla strain of simian [immunodeficiency virus](#), or SIV. The new HIV strain was identified in a woman from Cameroon.

"HIV and SIV have not been detected in mountain gorillas, so tourists, park workers and other people who come into contact with mountain gorillas are at negligible risk for acquiring a retrovirus infection from them," said Michael Cranfield, co-director of the Mountain Gorilla One Health Program.

According to Cranfield, none of the blood samples taken from more than 50 mountain gorillas during the past 10 years has tested positive for HIV or SIV.

Two decades of post-mortem exams of gorillas who have died of natural or other causes also reveal no reason for concern, according to Linda Lowenstine, professor of veterinary medicine at UC Davis and chief pathologist for the Mountain Gorilla Veterinary Program.

"In more than 20 years of post-mortem examinations, including complete histologic examinations of about 70 gorillas, we have not seen anything to suggest that [AIDS](#) is present in mountain gorillas," Lowenstine said.

In reality, gorillas are at greater risk of catching illnesses from humans than the other way around, said Kirsten Gilardi, co-director with Cranfield of the Mountain Gorilla One Health Program.

"With only 740 mountain gorillas remaining in the world, the primary concern is to protect mountain gorillas from diseases they could contract from humans that could devastate the population, including influenza and measles," Gilardi said.

To that end, the Rwanda Development Board, Uganda Wildlife Authority and the Democratic Republic of the Congo's Institut Congolais pour la Conservation de la Nature have established rules for protecting mountain gorillas from human diseases. For example, all tourists are required to maintain a distance of at least 23 feet from gorillas, and are allowed to be in the vicinity of mountain gorillas for only one hour.

"These rules not only protect gorillas, but also serve to minimize the chance for a disease to move from a gorilla to a person," Gilardi said.

Because humans and all species of gorillas, including mountain gorillas, are very closely related genetically, many infectious diseases can be transmitted among them.

However, HIV and SIV can be transmitted only through direct contact with bodily fluids. The viruses cannot be transmitted via inhalation of viral particles or other forms of indirect contact.

[HIV](#) evolved from a simian immunodeficiency virus in chimpanzees;

transmission to humans likely first occurred in individuals who butchered and consumed infected chimpanzees.

The UC Davis Mountain Gorilla One Health Program aims to improve the health and survival of the world's remaining mountain gorillas by addressing human health, livestock health and agricultural issues in and around gorilla habitat.

Provided by UC Davis ([news](#) : [web](#))

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