

## **Early detection of respiratory infections in villages surrounding mountain gorilla habitats**

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Upper respiratory infections in the gorilla population can cause serious morbidity and mortality. With approximately 1000 mountain gorillas remaining in the world, measures need to be developed to counteract zoonotic viral transmission. Surveillance of respiratory viruses in the mountain gorilla is an important step in the detection, identification of the disease pattern, management and ultimately implementation of interventions to minimize the impact of the disease. (Fox, 2007)

The people affiliated with the national park have the most consistent interface with the gorillas. Therefore, those employees who reside in the surrounding villages are a focal point of possible transmission of infectious diseases to the gorillas. By investigating the pattern of respiratory infections in those employees and comparing this to patterns of disease in gorillas, we may be able to make some assumptions about disease transmission patterns. The Common Cold Questionnaire (CCQ) may be administered to selected villagers with the highest number of people in contact with the gorillas. (Powell, 2008) The CCQ would be used to discriminate those with or without an upper respiratory infection. (Powell, 2008) It is known that epidemics begin 4 weeks following the week which number of cases of respiratory illness per week exceeds a critical value (critical value for an epidemic warning). (Hashimota, 2000)

Once the time line for when the respiratory infection epidemic has been determined then biosecurity interventions such as masks, hand washing, and disinfectant hand sanitizers can be instituted. Additionally, educational programs on the transmission of respiratory infections should be developed and implemented.

**Key words:** South Africa, Mountain Gorillas, epidemiology, respiratory infections

### **References:**

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