

## **Recent study suggests bats are reservoir for ebola virus in Bangladesh**

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EcoHealth Alliance, a nonprofit organization that focuses on local conservation and global health issues, released new research on Ebola virus in fruit bats in the peer reviewed journal, *Emerging Infectious Diseases*, a monthly publication by the Centers for Disease Control and Prevention (CDC). The study found Ebola virus antibodies circulating in ~4% of the 276 bats scientists screened in Bangladesh. These results suggest that Rousettus fruit bats are a reservoir for Ebola, or a new Ebola-like virus in South Asia. The study extends the range of this lethal disease further than previously suspected to now include mainland Asia. "Research on Filoviruses in Asia is a new frontier of critical importance to human health, and this study has been vital to better understand the wildlife reservoirs and potential transmission routes for Ebola virus in Bangladesh and the region," said Dr. Kevin Olival, lead author and Senior Research Scientist at EcoHealth Alliance.

Ebola virus, named after a river in the <u>Democratic Republic of the</u> <u>Congo</u> in Africa, where it was first recognized causes the disease – Ebola hemorrhagic fever. Ebola hemorrhagic fever is a severe, oftenfatal disease in humans and non-human primates (monkeys, gorillas, and chimpanzees) that has appeared sporadically since its initial detection in 1976. Ebola virus is one of two members of a family of <u>RNA viruses</u> called the Filoviridae. Filoviruses are zoonotic pathogens (diseases that are transmitted from animals to humans) that cause lethal hemorrhagic symptoms among humans and non-human primates with case <u>fatality</u> <u>rates</u> up to 80 percent. Natural reservoirs of filoviruses have remained elusive for decades but current literature suggests that bats may be the



primary natural hosts of Ebola virus.

EcoHealth Alliance works to understand the dynamics of <u>emerging</u> diseases and the ecology of associated wildlife reservoirs to prevent and better control potentially pandemic outbreaks. "Bats tend to have a bad reputation and that's unfortunate since they provide services that are vital for maintaining healthy ecosystems. Increasingly, spillover of viruses from bats and other wildlife occurs due to increased human activities that bring people into closer contact with wildlife, such as land-use change and agricultural practices. The next step is to determine whether this Ebola virus is actually causing disease in people, and if so, work to develop strategies that reduce contact with bats to protect human health, without harming bats," said Dr. Jonathan Epstein, coauthor and Associate Vice President at EcoHealth Alliance.

Over 40 years of innovative science has built the foundation of EcoHealth Alliance's rigorous, science-based approach, focused at the intersection of the environment, health, and capacity building. EcoHealth Alliance works to understand the environmental drivers of zoonotic disease emergence and promotes the conservation of species such as bats.

## More information:

wwwnc.cdc.gov/eid/article/19/2/12-0524 article.htm

## Provided by EcoHealth Alliance

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