

Ebola vaccine that can be inhaled shows promise in monkeys

A single dose of a new Ebola vaccine that can be inhaled has been found to neutralize the deadly virus in monkeys, researchers reported on Monday.

The study, published in the *Journal of Clinical Investigation*, demonstrated that the aerosol Ebola vaccine activated immune cells in the respiratory system of rhesus macaques and provided full protection against the virus. It was the first attempt to use an aerosol to vaccinate monkeys against a hemorrhagic viral fever, the study's authors said.

"The initial several decades of attempts to develop a vaccine against the Ebola virus were unsuccessful," said Alexander Bukreyev, a virologist from the University of Texas Medical Branch and one of the paper's authors. "This is one of the few vaccines that works."

Four of the rhesus macaques used in the research were given one dose of the aerosol vaccine; four were given two doses; and two were given the vaccine in a liquid form. Two monkeys were not vaccinated, serving as controls.

Four weeks after their treatments, all 12 monkeys were injected with 1,000 times the fatal dose of the Ebola virus. A little over a week later, the two unvaccinated monkeys succumbed to the disease and were euthanized, but the vaccinated monkeys stayed healthy. At the end of the study, the researchers euthanized the surviving monkeys, examined their blood and tissues, and found no traces of the Ebola virus.

"This is a positive step forward," said Dr. Daniel Bausch, a virologist from Tulane University. "It's not a breakthrough or 'Eureka!' " The next step will be for the team's colleagues at the National Institutes of Health to perform clinical trials of the vaccine on humans.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [Inhaled Ebola Vaccine Stops Virus in Monkeys, Study Finds](#)