

Phase I trial begins of new vaccine against the plague

July 27 2021



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Researchers at the University of Oxford today launched a Phase 1 trial to test a new vaccine against plague.



Based on the ChAdOx1 adenovirus viral vector platform also used in the successful Oxford coronavirus vaccine, forty <u>healthy adults</u> aged 18 to 55 will receive this new vaccine in order to assess side effects and determine how well it induces protective antibody and T cell responses.

Professor Sir Andrew Pollard, Director of the Oxford Vaccine Group, said:

"The coronavirus pandemic has shown the importance of vaccines to defend populations from the threat caused by bacteria and viruses. Plague threatened the world in several horrific waves over past millennia, and, even today, outbreaks continue to disrupt communities. A new vaccine to prevent plague is important for them and for our health security."

Probably the most well-known example of plague is the Black Death of the 1300s; this form of the bubonic plague was the biggest global pandemic in history and killed hundreds of millions of people worldwide.

Although for much of the world plague has been eliminated, cases do continue to occur annually in rural areas of Africa, Asia and even America.

There are three different types of plague: bubonic, pneumonic and septicaemic. If left untreated, the bubonic form has a 30 percent to 60 percent fatality rate and the pneumonic form is almost always fatal. Both bubonic and <u>pneumonic plague</u> can develop into a life-threatening infection of the blood called septicaemia.

From 2010 to 2015, there were 3,248 cases reported globally, including 584 deaths. A relatively recent epidemic in Madagascar saw 2,119 suspected cases and 171 deaths from August 2017 to November 2017.



Christine Rollier, Associate Professor of Vaccinology at the Oxford Vaccine Group, said:

"Although antibiotics can be used to treat <u>plague</u>, many areas experiencing outbreaks are very remote locations. In such areas, an effective <u>vaccine</u> could offer a successful prevention strategy to combat the disease."

Volunteers for the trial will receive expert follow up for 12 months, before the researchers begin evaluating the data in order to report their findings.

To find out more about the study, or to sign up, please visit: <u>https://trials.ovg.ox.ac.uk/trials/plague</u>

Provided by University of Oxford

Citation: Phase I trial begins of new vaccine against the plague (2021, July 27) retrieved 11 May 2024 from <u>https://medicalxpress.com/news/2021-07-phase-trial-vaccine-plague.html</u>

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