

Hundreds of thousands infected by Covid-like viruses each year: Study

Hundreds of thousands of people may be infected annually by animals carrying coronaviruses related to the one that causes Covid-19 in China and South-east Asia, according to a study emphasising the ongoing pandemic threat from spillover events.

An average of 400,000 such infections occur annually, most going unrecognised because they cause mild or no symptoms and are not easily transmitted between people, researchers with the EcoHealth Alliance and Singapore's Duke-NUS Medical School said in a study released before peer review and publication.

Still, each spillover represents an opportunity for viral adaptation that could lead to a Covid-19-like outbreak.

The question of where and how the virus that causes Covid-19 emerged has become particularly contentious, with some leaders blaming a hypothetical leak from a lab in Wuhan, China, that studies the pathogens.

The new research, supported by the US National Institute of Allergy and Infectious Diseases, builds on evidence that bats are the main host-animals for viruses like Sars-CoV-2 and that people living near their roosts are especially vulnerable.

"This is probably the first attempt to estimate how often people are infected with Sars-related coronaviruses from bats," said Dr Edward Holmes, an evolutionary biologist at the University of Sydney who was not involved in the research.

Humans are continually exposed to bat coronaviruses, he said. "Given the right set of circumstances, one of these could eventually lead to a disease outbreak," Dr Holmes said.

Almost two dozen bat species that can be infected by coronaviruses dwell in Asia, with southern China and parts of Myanmar, Laos, Vietnam and Indonesia deemed the riskiest for spillovers.

Dr Peter Daszak and colleagues at the New York-based EcoHealth Alliance used bat distribution modelling and ecological and epidemiological data to estimate the risk of exposure to Sars-related coronaviruses, and the rate of unreported bat-to-human infections in China, South Asia and South-east Asia.

"If you can stop this at the level of individual infections, you've got a much higher chance of stopping the next pandemic," Dr Daszak said on Tuesday in a Zoom interview.

The approach provides proof of concept for a systematic risk assessment of wildlife-to-human spillover events and a strategy to identify key geographic areas that can be prioritised for targeted surveillance of wildlife, livestock, and humans, the researchers said.

"Given the challenges of identifying the origins of Covid-19 and pathways by which Sars-CoV-2 spilled over to people, this approach may also aid efforts to identify the geographic sites where spillover first occurred," they said in the study.

Almost two years since Covid-19 began infecting people in Wuhan, scientists are yet to determine its genesis.

Dr Daszak, who supports the theory of wildlife source, has been criticised for collaborating on National Institutes of Health-funded research at the Wuhan Institute of Virology on lab studies that some scientists say may have led to the creation of a progenitor virus.

No evidence supporting the lab-leak theory has emerged.

Dr Daszak's study estimated a median of 50,000 bat-to-human spillover events occur in South-east Asia annually and said the number could run into the millions. That makes the risk of exposure to animal viruses in nature "far, far greater than any possible exposure in a lab," Dr Holmes said. BLOOMBERG