

Zoonotic viruses like swine flu are ticking time bombs, say experts

KUALA LUMPUR: Experts believe that zoonotic viruses like the Swine Influenza H1N1 (SIV H1N1) are “ticking time bombs” as these pathogens may mutate to facilitate human transmissions, which are often discovered only at the point of outbreaks.

Virologist Dr Chee Hui Yee said viruses had the potential to infect humans.

She cited previous zoonotic pandemics, such as the 2009 swine flu (Influenza H1N1), which killed 285,000 people worldwide before morphing into the seasonal flu. Covid-19, she said, had already claimed 500,000 lives in six months.

“We don’t even know how long the novel coronavirus was circulating in animals before it made that leap. They are ticking time bombs that may have been circulating under the radar for sometime before adapting to humans and evolving to enable people-to-people transmissions.

“What we do know is by the time we find out about them, they are already outbreaks or pandemics,” said Dr Chee, who is associate professor at Universiti Putra Malaysia.

Dr Chee, who hails from Lukut, Negri Sembilan near Bukit Pelanduk, the epicentre of the Nipah Virus outbreak in 1999, said nothing could be left to chance as viruses mutate every day.

“Covid-19 has already happened and if we have another wave of Covid-19 infections and Swine Flu, we are in trouble because we don’t have the resources. And even if it is just restricted to pig-to-human transmissions, it doesn’t make it any less deadly,” she said.

Dr Chee said farmers could not take the recent outbreak in China lightly as it would result in mass culling of their livestock with devastating losses.

“If they have sick pigs or obtained pigs from a source that was known to have sick pigs, they should be isolated and they should contact the Department of Veterinary Services (DVS) for testing. They should also vaccinate their livestock.

“As far as the public is concerned, they should know where their pork is sourced from.”

The DVS on Thursday said it had detected seropositive samples of SIV H1N1 in commercial livestock and wild boars through the national surveillance programme.

The department, however, said that the seropositive pig breeds showed no symptoms of disease

and there was no risk of spreading the infection to humans.

The *New York Times* had previously reported that a new strain, known as G4, had been detected in China’s pig farms since 2016.

It could replicate efficiently in the human respiratory system, according to a study published in the journal *Proceedings of the National Academy of Sciences*.

So far, it had infected some people without causing a disease, but health experts feared that could change without warning as the G4 virus had all the essential hallmarks of a candidate pandemic virus. The study advised that

controlling the spread in pigs and closely monitoring human populations should be urgently implemented.

The study was sent for review in early December, weeks before the coronavirus outbreak in Wuhan, China, began making global headlines.

However, Universiti Putra Malaysia (UPM) Faculty of Veterinary Medicine dean Dr Abdul Rahman Omar said people should not panic over the study.

This, he said, was because the virus with the G4 strain did not have the capacity to become like the 2009 pandemic yet.

He said it was merely capable of re-assorting or swapping genes with other influenza viruses in pigs, and was not capable of human-to-human transmission.

“Humans are susceptible because our influenza virus receptors are similar to pigs, but we are the end-host. Based on serology (antibody profiling) of pig handlers, the symptoms are mild. This is the same with the G4 strain now,” said Dr Abdul Rahman, who is a professor in immunology and infectious diseases.

He said China had a comprehensive system to detect outbreaks to safeguard its interest in pig farming and exports as the country had the largest population of farmed pigs in the world.

“I’m sure the Veterinary Services Department has a surveillance system. What we need, however, is to establish an early warning system if there is human-to-human transmission.

“This is a threat from all viruses. Even the 2009 pandemic was discovered when it was transmitted among humans, and they traced it to the index case in Mexico, where they thought it possibly began.” **Reporting by Veena Babulal**



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