

# UMS develops method to detect leptospirosis

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KOTA KINABALU: Universiti Malaysia Sabah (UMS) researchers have developed a less costly method of detecting the deadly leptospirosis disease among potential patients.

Researchers at the university's Biotechnology Research Institute have developed a series of diagnostic antigens for the detection of antibodies from leptospira bacteria in humans.

The antigens developed had been tested using serum samples derived from patients, said UMS Centre for Research and Innovation Dr Azizi Abd Adis.

The development of the antigens was in collaboration with the Kota Kinabalu Public Health Laboratory.

He said the antigens developed by

Assoc Prof Dr Kenneth F. Rodrigues and Assoc Prof Dr Daisy Vanitha John were significantly cheaper than those that were imported.

The high cost of imported antigens added to the diagnostic costs of the disease, Dr Azizi added.

He said the antigens that took about six months to be developed could be used in a standard Enzyme Linked Immuno-Sorbent Assay (Elisa) by any diagnostic laboratory which is involved in the detection of leptospira-specific antibodies in serum samples.

Leptospirosis is a bacterial disease that affects humans and animals. It is caused by bacteria of the genus leptospira.

"In humans, it can cause a wide range of symptoms, some of which may be mistaken for other diseases," Dr Azizi said.

Some people who are infected with the disease may have no symptoms at all.

Without treatment, leptospirosis can lead to kidney damage, meningitis (inflammation of the membrane around the brain and spinal cord), liver failure, respiratory distress, and even death, he added.

He said the university was now looking at commercial development of the antigens.

The Health Ministry had stated that there were 14 outbreaks of leptospirosis, also known as rat urine disease, and 2,200 people have been infected so far this year.