

# Test developed at UQ diagnosed Australia's first swine flu victim

September 3 2009

---

When the first cases of H1N1 Influenza (swine flu) were reported in Mexico in April, UQ researchers got to work developing a test to diagnose the virus.

In less than two weeks, Dr David Whiley and a team of five scientists were able to provide Pathology Queensland with two detection methods, one of which was used to diagnose Australia's first [swine flu](#) case.

The tests have since been implemented by the Townsville Hospital and Royal Darwin Hospital, and were also used to detect the first case of swine flu in the Northern Territory.

"We have a highly skilled team of scientists, with extensive experience and knowledge in molecular diagnostics," Dr Whiley said.

"When news of swine flu broke we realised we had very little time - possibly days - before the first cases arrived in Australia.

"We therefore temporarily suspended all other research projects so that our team could focus on developing the swine flu assays.

"Ours were certainly the first assays implemented for routine swine flu screening in Australia."

The assays, which are used to test respiratory specimens such as nose swabs, target two key parts of the virus: the haemagglutinin and

[neuraminidase](#) genes.

They detect the virus by using the [polymerase chain reaction](#) (PCR) technique to amplify these parts of the virus's [genetic material](#).

"Once the genetic material begins amplifying, positive fluorescent signal is produced via the use of a fluorescent probe," Dr Whiley said.

"This is all monitored using computer software."

This is not the first time the team has been tasked with developing a [diagnostic test](#) at short notice.

Since 2000, the laboratory has had an ongoing partnership with Pathology Queensland in an assay development program.

"Our laboratory develops new rapid molecular assays for detecting microbial pathogens, and once validated the assays are then transferred to the Molecular Diagnostic Unit of Pathology Queensland for routine use," Dr Whiley said.

"To date, our laboratory has developed and transferred to Pathology Queensland more than 70 rapid diagnostic tests targeting a range of infectious diseases.

"Therefore it was up to us to make sure Pathology Queensland was equipped with the right methods to detect swine flu."

More information: Details of the assays were published in the July issue of the *Journal of Clinical Virology*.

Source: Research Australia ([news](#) : [web](#))

Citation: Test developed at UQ diagnosed Australia's first swine flu victim (2009, September 3)  
retrieved 5 May 2024 from

<https://medicalxpress.com/news/2009-09-uq-australia-swine-flu-victim.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.