

Thursday, 24 April 2008

Tamworth to help simulate flu outbreak

IN AN Australian first, researchers from the federal departments of health and agriculture, the University of Melbourne and Curtin University of Technology have joined forces to construct a social networks-based simulation model for pandemic influenza.

The model will be used to develop and test response plans for pandemic influenza in an urban environment. Tamworth is to be the centre for the simulation test.

The team is led by Sam Beckett, an epidemiologist from independent consulting firm, Broadleaf.

"We are excited about this project," Dr Beckett said.

"It is ambitious but achievable, given modern computing and very detailed census data.

"The program does not name people or places, but otherwise provides a working model of the underlying population.

"It is a spatial model, which means that it uses mapping software to locate households, places of work, etcetera, and to move individuals around through their daily activities.

"It is at least as detailed in this regard as any infectious disease model in the world."

Why was Tamworth chosen to run the simulation?

"We wanted to base the core research component on a real population centre of between 30,000 and 50,000 (people)," Dr Beckett said.

"The population also needed to be reasonably distinct, which ruled out some of the coastal centres.

"Aside from that, it came down to familiarity. I grew up here and know the place – and that makes a lot of difference when it comes to modelling it."

The project will include a significant questionnaire-based study of daily interactions.

"We will be advertising locally and inviting people to join," Dr Beckett said.

"The success of the project will depend to a large extent on buy-in from the local community.

"The work is important to public health planners, particularly those concerned with developing Australia's plans for an influenza pandemic.

"The model will not be limited to this however – we are building it in a way that will enable it to be used to study other infectious diseases, including annual influenza."

For more information about the project, contact Dr Beckett at Beckett@Broadleaf.com.au.

Source: <http://tamworth.yourguide.com.au/news/local/general/tamworth-to-help-simulate-flu-outbreak/1230183.html>