Research does the maths on flu spread

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HEALTH authorities will be able to better manage future flu pandemics and other disease outbreaks in real time using a new mathematical model.

University of Adelaide mathematician Dr Joshua Ross and UK colleagues have developed the model based on the spread of infection during the 2009 HINI swine flu pandemic which is estimated to have killed as many as 300,000 people worldwide.

Dr Ross said the new model used information about infection at a household level – where up to 40 per cent of infection is usually spread – which could be applied during a pandemic to help assess the risk to the wider community and populations.

"The model can estimate how much infection is present in the population... and therefore how severe it actually is so that government health agencies can make better decisions," Dr Ross said.

SA Health data shows there were 9171 cases and 32 swine flu-related deaths in SA in 2009.