

# Biosecurity intelligence-gathering: an analysis of an avian influenza network

**Mark Burgman**

Australian Centre of Excellence in Risk Analysis  
University of Melbourne  
markab@unimelb.edu.au

**Mike Nunn**

Australian Government Department of  
Agriculture, Fisheries and Forestry  
mike.nunn@daff.gov.au



# Overview

- The network
  - origins
  - growth
- The survey
  - context
  - method
- Preliminary findings
- Conclusions



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# Origins

- Within DAFF, 'EMPLAN' e-mail lists during emergency animal disease responses
  - key part of information flow and management during responses
  - recipients part of formal disease response ('by invitation')
  - to inform decision-makers during outbreak responses
- Post-response, for exchange of information/comment
  - postings from publicly available sources (open source)
  - wider range of participants across DAFF (by request')
- In late 2003, series of outbreaks of disease in SE Asia
- In Dec. 2003 and early 2004, several countries in Asia formally reported they had avian influenza A H5N1

## EMPLAN AI list in use in DAFF since H7 outbreaks:

<b>Keysborough, Vic</b>	<b>Jan 1976</b>	<b>H7N7</b>	<b>\$4.0 m</b>
<b>Bendigo, Vic</b>	<b>May 1985</b>	<b>H7N7</b>	<b>\$2.2 m</b>
<b>Bendigo, Vic</b>	<b>Aug 1992</b>	<b>H7N3</b>	<b>\$0.8 m</b>
<b>Lowood, Qld</b>	<b>Dec 1995</b>	<b>H7N3</b>	<b>\$0.4 m</b>
<b>Tamworth, NSW</b>	<b>Nov 1997</b>	<b>H7N4</b>	<b>\$4.2 m</b>

All linked to wild waterfowl:

- four direct, one indirect (common water)
- subtypes involved not found in nearby wild birds at the time

# Growth

- Within Australia
  - DAFF, other departments: health, trade, foreign affairs (aid), environment, State/Territory departments
  - key poultry industry representatives
  - some NGOs: bird groups, wildlife health network
  - other: universities (graduate students etc.), zoos etc.
- Overseas
  - colleagues in government departments, regional and global organisations (SPC, FAO etc.), industry (consultants etc.)
- Core group of about 170 list members
  - 70 in DAFF, 100 external

# The EMPLAN AI list

- Content and focus
  - content: media reports and journal abstracts/articles on avian influenza, plus commentary on these
  - focus: particularly on Asia and Pacific regions
  - In English (but with some basic translation from some non-English sources)
- Source information (name, date, internet address or publication details)
- Key points **highlighted** in postings
- Typically 1 to 10 postings per day
- List members outside DAFF are 'blind'

# Context for the survey

- Disease preparedness focus
  - DAFF focus on improving ‘environmental scanning’ and ‘emerging issues analysis’
  - using foresight and futures approaches
- Development of Australian Centre of Excellence for Risk Analysis (ACERA)
  - for collaborative research in risk analysis
- ACERA project on ‘intelligence-gathering and analysis’
  - review of existing systems and software
  - comparison of options: e-mail lists, search engines, contracted reports (regular and by exception)

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# Method

- Survey designed and ‘piloted’
- Sent to all members of list
  - with follow-up reminders and some phone interviews (planned)
- Questions
  - perceived currency/accuracy of list information
    - compared to other sources of information used
  - how is information used; with whom is it shared?
- Response: 48 of 170 list members
  - 19 DAFF, 7 other departments, 7 international agencies, 7 uni/other, 5 industry, 3 secondary
  - based in 12 countries

# Findings

- Value placed on
  - currency, accuracy of information circulated, especially
    - where limited access to other sources (e.g. Pacific island countries)
    - animal health not main focus (e.g. bird groups)
  - highlighting of key information
  - wide variety of sources used
- Mixed views on
  - e-mail list versus website (most prefer list)
  - list members being ‘blind’ or visible (most prefer ‘blind’)
- Membership not static
  - members enter/participate and leave as change positions/priorities

## Findings (cont.)

- A variety of other sources used
  - ProMED (but not all use this)
  - various ‘flu’ websites (OFFLU etc)., but many did not report using these)
- A range of uses
  - input to members’ thinking (analysis) and planning
  - follow up references of interest/value
- A small number of key disseminators (‘nodes’)
  - two in regional/international organisations, two based in another country, two based in Australia
  - > one-third of respondents had provided information to the list

# [Preliminary] Conclusions

- More detailed analysis still to be done
  - especially to map the network ‘nodes’ and links
- Survey issues
  - those who value list most are probably most likely to contribute information and to respond to survey
  - ‘secondary’ dissemination difficult to assess
- List serves useful purpose
  - meeting members’ needs
  - complementing other information sources
- One form of ‘intelligence-gathering’
  - among ‘mix’ of tools and approaches likely to be needed to do well

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## EMPLAN AI list members

## Survey respondents

Mexicans wearing face masks against 'swine flu' (Reuters Photo), May 2009.





A man wears a gas mask against 'swine flu' in Mexico City (Reuters Photo), 30 April 2009