



# **CENS INSIGHT**

## ***A Review of Global Open Source Intelligence***

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*The Centre of Excellence for National Security is a constituent unit of IDSS. Its mission is to develop intellectual capital on selected national security issues, providing useful perspectives for policy makers and the wider national security community. As part of this mission, CENS produces a weekly report (OUTLOOK) on a wide range of national security issues, with a particular focus on finding faint signals from potentially high impact issues that are not on the “radar screen” of most other agencies and institutions. CENS also produces INSIGHT on an occasional basis to bring focus and clarity to possible low probability but high impact events.*

### **Avian Flu and Pandemics: Focusing on the Wrong Threat?**

- Strategic surprise normally occurs due to a lack of information sharing within government and due to mindset problems at multiple bureaucratic levels.
- Singapore's soon to be deployed Risk Assessment and Horizon Scanning programme (RAHS) intends to break down the information silos that impede effective intelligence analysis and address the mindset issue.

One early example of the change of thinking already brought about by the RAHS process is the view on pandemic threats. Currently, much of the world is gripped by the possibility of a global pandemic caused by the H5N1 virus. Clearly, national and local leaders should focus on this potential threat.

However, a RAHS approach to the problem is to look “over the horizon” to see what else may be of potential interest to leaders. With regard to Avian Flu, it is only one of the 38 or so diseases that have jumped from animals to humans in the last 25 years. For every year that goes by, new pathogens and variations of existing threats infect humans for the first time. According to researcher Mark Woolhouse, professor of epidemiology at the University of Edinburgh in Scotland, this trend is a worrying one that cannot be sustained.

Currently, it is believed that there are some 1,400 pathogens, of which 58% come from animals, that can infect humans. Of these 58% of animal-derived pathogens, scientists believe that 177 of them are emerging or re-emerging and may pose a threat to humans.

How then does one give intelligence led policy advice to a leadership based on this sort of information in these kinds of conditions? Several ideas flow from the RAHS approach:

1. An over focus on one issue means you may be missing another. How wide are the apertures on the intelligence collections system? Have they been widened enough to catch not just avian flu outbreaks but the potential faint signals and early warning signs from other alternative outbreaks? Or, put it in military terms, if one is satisfied with an

operational plan against a known enemy, then there is a high likelihood for an ambush by an unknown enemy.

2. What does this mean for state responses? Currently, some states are heavily focussed on pharmacological responses to the avian flu – which may or may not work in the event of an outbreak of the H5N1 virus. Even then, the vaccines may be of a limited number. Seen from a RAHS perspective, what may really be required by the state is a host of non-pharmacological responses which can be implemented regardless of the actual disease. These responses must be sufficiently strong to contain the problem, yet at the same time be finely targetted enough to not shut down the economic and social system of the society. The SARS crisis in Singapore, Canada, and elsewhere should underline this point.
3. What about the nature of technological research being directed or supported by state institutions? Frequently, the focus is on finding cures or solutions to one threat such as Avian Flu. Instead, perhaps research money and skills would be better spent on broader approaches. Rather than spending on a vaccine for one disease, an alternative would be for the state to invest in a new lab that can cultivate cures more rapidly while also developing better processes that are able to identify new strains of diseases. Given the range of emerging threats, this would be a rational consideration.
4. Is the state taking enough precautions to ensure that it is not part of the problem rather than the solution? The emergence or re-emergence of some diseases is often associated with hospitalization, poor population health, international travel and new bacterial strains associated with changes in land use and agriculture. Mad cow disease, the West Nile virus, or the SARS crisis are the most obvious example for understanding the issues at hand here.

### **Policy Relevant Conclusions**

The state is continually facing a series of national security threats, many of them are asymmetrical or beyond the response capabilities of traditional government agencies and defence departments. Confronted with these altering threats within this new environment, an all-of-government response is necessary so that the faint signals that are often “over the horizon” can be detected in such a way to avoid paralyzing shocks to the state.

It is important to stress though that RAHS should not be a capability monopolized by a single state. All states need to focus on some form of Risk Assessment and Horizon Scanning for better security to be achieved all around. For example, there is little to be gained if one state correctly anticipates the next global pandemic while the message is not heard and understood by others. In our increasingly globalized society, anything less may be quite literally fatal.