

What could go wrong with Australia's pandemic planning and response

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Introduction

Australia's pandemic plan is undoubtedly one of the best national plans in the world. However, this does not mean that the nation's response to a deadly influenza outbreak could not be derailed. The one thing that past epidemics and pandemics, such as influenza, HIV-AIDs and SARs have shown us is to expect the unexpected. Unanticipated developments mean that even the best laid plans can be quickly derailed.

Given this lesson and the seriousness of the pandemic threat, business continuity managers need to plan for a failure of the Australian pandemic response and plan to rapidly deviate from their own pandemic plans if it becomes evident that the situation is not being well managed.

To enable organisations' pandemic plans to become more robust, this paper details the issues which could derail Australia's pandemic response by providing background on the possible economic, social and political consequences of panic, and a pandemic and then examining what didn't go to plan in the 1918-1919 pandemic.

It concludes with an examination of the six top factors that that could derail Australia's pandemic response.

As a prerequisite, readers should be familiar with the following publications which will provide an understanding of Australia's pandemic response:

- *National Action Plan for Human Influenza Pandemic*
- *Australian Health Management Plan for Pandemic Influenza*
- *Australian Management Plan for Pandemic Influenza*
- the relevant State or Territory plan
- the reader's organisation pandemic plan

Possible economic, social and political consequences of panic and a pandemic

Accurately predicting the impact of a pandemic is impossible. There are simply too many variables.

Variables include not only the transmissibility and lethality of the disease, and Australia's medical response, but how quickly government, business and the community respond to minimise the economic, social and political consequences.

Below is an overview of what is likely for a well-managed, mild pandemic influenza in terms of economic, social and political impacts.

1 Economic impacts

The macro-economic impact of a pandemic will be significant, even for localised outbreaks. For example, a consequence of SARS was that the GDP of Hong Kong was reduced by 5.5% in 2003, and growth in East Asia as a whole was reduced by 0.5-1% of GDP in that year, according to the Treasury Working Paper.

It is commonly believed that the biggest economic impact will be the deaths and absenteeism of workers during a pandemic. This is not correct. The biggest impact will be caused by a loss of confidence on the part of the buying public, leading to a reduction of demand during a pandemic. This means that workers will be retrenched and businesses will collapse under a loss of revenue. As the pandemic subsides and people are willing and able to return to work, they may find that they do not have jobs. The problems will increase as the labour supply grows yet demand will not rise at the same rate, as people will not have the confidence in the economy to spend at their pre-pandemic rate. A reduction in wages in the post-pandemic period can be expected.

From an economic perspective, the biggest impacts will not be felt during a pandemic, but in the months and possibly years following it.

Some sectors, organisations and locations will feel the impact more than others. Below are some impact predictions:

- If an outbreak is localised and contained, then the impact will be felt by those who have exposure to that area. However, even if the virus is contained, the panic associated with pandemic influenza may spread causing a reduction in confidence and all that this entails.
- Generally, the greatest impact will be felt in sectors which rely on discretionary expenditure. These include tourism, restaurants and entertainment.
- Other enterprises which may experience a disproportionate impact are:
 - Exporters, due to border closures, and international transport disruptions.
 - Organisations which depend on just-in-time deliveries, particularly those with numerous suppliers. A pandemic may result in some suppliers going out of business and if a substitute cannot be found, then production of the company's final products will cease once the stock on-hand is used up.
 - Companies that have large debts and rely on cash flow to stay solvent. A significant and rapid downturn can push these organisations to the wall even if financial relief is provided.

Some sectors will feel the impact for a short period of time as irrational responses dominate. An example of this would be high-density, multi-storey apartments. It is likely that these types of properties will suffer a disproportionate decline in value during a pandemic as people will consider that living so close to others is unsafe.

Some sectors will benefit from the pandemic. These include:

- Home-goods suppliers, which focus on home entertainment and renovation, because people will seek solace in the one environment they have full control over – their home.
- Personal well-being goods and services. These include trauma counselling, spiritual development, aromatherapy, pharmaceuticals and health-related goods and services.
- Security and safety suppliers, which provide goods and services that create a more healthy and secure environment at home, at work and while shopping. Examples are access control, closed circuit TV, air-purifiers and disinfectants.
- Commercial health care providers and drug companies that make antivirals and vaccines.
- Gold producers, utilities, telecommunications, larger ISPs and blue chip companies. These companies will benefit as investors shift their portfolios to areas they receive as more robust and better able to weather the economic disruption.

There will be a number of organisations which will be created or rapidly evolve during a pandemic. These organisations will see a market niche and expand rapidly into dominating this new area. For example, a transport company that has developed training material and has a large stock of personal protective clothing on hand will be able to rapidly dominate the home-delivery market.

2 Social impacts

The social impacts of a pandemic may include:

- Panic buying of food and medical goods. The impact of panic buying in Australia could be enormous, as retailers do not generally carry large stocks, meaning that shelves can become visibly depleted rapidly, leading to more panic. Two examples illustrate the speed with which panic buying can eliminate food stocks. During the 2003 Canberra bushfires, it took about 3 hours for all essential supplies of batteries, bottled water and other critical products to disappear from shelves. During the SARS outbreak in Hong Kong, it took about just a few hours before some products disappeared. The vulnerability of the Australia public to food supply disruptions is highlighted by the fact that Australia has about 5 days of fresh food in the supply chain.
- Changes to business etiquette. Changes will include a marked reduction in the practice of handshaking, the exchange of business cards and the holding of meetings in public places such as café.
- Changes to the preferred place to shop. Currently most Australians prefer to shop in large, enclosed malls. However post-pandemic, these centres' controlled atmospheres, recycled air and crowds will be seen as risky. Instead, people may prefer to shop in outdoor markets and strip shops which will be perceived as having fresh air and fewer people.
- Increases in the acceptance of non-face to face contract. As a way of reducing exposure, people will increasingly use online transactions, video-conferences, self-service functions and vending machines.
- Acceleration of the sea-change effect. A pandemic will increase people's doubt about their city-based, hectic lifestyles. A pandemic will accelerate their desire to move to low density, fresh air environments which have the added appeal of potentially being food self-sufficient.
- Preference for secure jobs. The increase in unemployment will create a desire to work for larger companies which are more likely to continue to support employees even when their sick and holiday leave runs out. This trend may reduce entrepreneurship as people are less willing to undertake high risk ventures, such as becoming self-employed.

However, the biggest social change will be caused by the shock that individuals themselves are ultimately responsible for their own health and safety. Today, citizens expect that if they dial 000, the emergency services will respond rapidly, and that they will be given the essential medical assistance they need (albeit with some delay). During a pandemic however, emergency services and the health system will be overloaded, essential services may break down and food supplies may be disrupted, meaning that people will have to fend for themselves with little help. As few Australians have been through wars, famines or disasters, this time will be very confronting for the society as a whole.

3 Political impacts

The political impact of a pandemic influenza will be dominated by how governments respond to the pandemic. While governments will experience criticism that they were insufficiently prepared and failed to inform the public of the necessity to prepare, in Australia's case this will have limited political impact as the preparation will be seen as one of the best in the world.

However, if the government fails to act when a pandemic appears to be developing or acts inappropriately, then the political damage will be considerable.

As in the past, governments and oppositions will probably use the pandemic to score political points. For example, it is probable that the opposition will claim that the 'authoritative figure' appointed to reassure the public will be accused of just mouthing the political agenda of the government. It is also likely that governments will transfer blame for failures to other levels of government, which has again happened in the past.

What didn't go to plan in the 1918-1919 pandemic

A number of factors did not go to plan during the 1918-1919 pandemic in Australia and these may provide lessons for today's planners and business continuity professionals.

The 1918-1919 pandemic was the most devastating influenza outbreak in recent history. Between 20 and 40 million died across the world. In Australia, the official death toll was 11,500 dead but the real figure is much higher as the definition of an influenza death varied considerably.

Cases of influenza started arriving in Australia by sea in late 1918. By the quarantining of ships caring people, the disease was kept at bay until finally a carrier came ashore in Melbourne in early in 1919. It rapidly spread in Melbourne and travelled to Sydney via one carrier on a train a few days later. It then spread quickly to Queensland and South Australia.

WA and Tasmania kept out the virus out of their States several more months.

The vast majority of measures implemented during the 1918-19 pandemic are the same as those which would be undertaken today. These included:

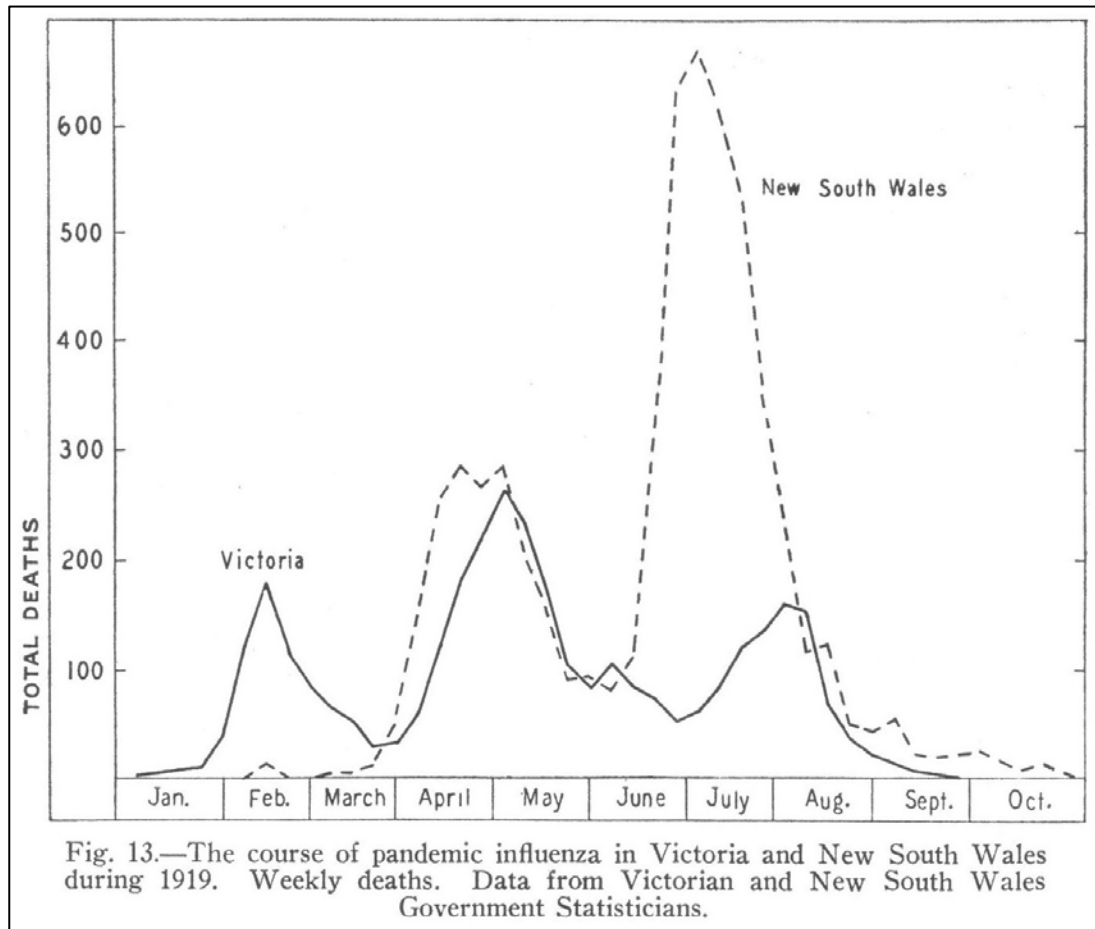
- Mass communications. Every household was provided with pamphlets and education material.
- Telephone hot lines. A hotline was created to report sickness and request help.
- Personal hygiene measures. Incidentally, last century the personal hygiene practices were better than today because infectious disease, such as scarlet fever, TB, and typhoid, were common and anti-bacterial and anti-viral drugs did not exist.
- Border quarantine. Keeping out pandemic influenza was a key priority for two reasons. Firstly, it allow more time for preparations and secondly, it provided more time for the virus's virulence to reduce.
- Social distancing measures. Regulations were introduced which forcibly closed places where people gathered, such as schools, race tracks and pubs.
- Fever clinics. Fever clinics were established where influenza victims would be taken, while hospitals were kept for non-influenza patients.

- Contact tracing. Contact tracing was critical in the early stages of the pandemic to slow the spread.
- Home quarantine. People were forced to stay at home if they became sick during the containment phase of the pandemic.

The major problems that faced the nation during the 1918-19 pandemic included:

1. History did not provide much guidance on the spread and response to pandemic. The pandemic outbreaks in the 1800s provided some information about the consequences and management of a pandemic but only in a general sense. Each pandemic was unique, both in terms of the virus lethality and human response. This lesson has not been learnt today as much of the response is predicated on a belief that the next pandemic will reflect the 1918-1919 one. For instance, it is common to hear that the next pandemic will probably have 3 waves and particularly affect working age people. Not only is this highly unlikely due to the variability of pandemic infectious diseases, but this is only a gross generalisation of the 1918-1919 pandemic. For example, as can be seen from the graph below, Sydney actually experienced only 2 waves. In addition, the predominance of working age victims is only true as a generalisation as some waves heavily affected the traditional victims of influenza – that is, the old and very young. In addition, the pandemic's impact was not uniform across the nation over time.
2. Some measures were ineffective. There were a number of measures that were ineffective and ignored by the population as they were impractical. These included the use of masks, forced opening of windows and bans on standing up in a train.
3. Overconfidence. There was overconfidence by governments in how well prepared there were for an outbreak.
4. Failure of the national plan. Prior to the outbreak, all Australian governments signed up to a pandemic plan. However, within a few days of influenza appearing in Sydney, the plan was discarded due to disagreements between the States and the Commonwealth.
5. Land quarantine failed. A plank of containment was to impose land border quarantine. Not only were these of dubious value because of their arbitrariness of the geographic positioning, but there were regularly broken as people had to work and live regardless of the threat.
6. The rise in quack medicines as people clutched at any possibility.
7. Overwhelmed resources. The rapid explosion in the number of influenza cases quickly overwhelmed resources. This occurred at the sites of maritime quarantine, such as the quarantine camps, at fever clinics, and in local communities where many people were home quarantined but still needed to be fed. An example of resource limitations was the fever clinic established at Randwick Racecourse. It had the tents, beds and blankets in place for when the peak period of influenza cases hit but it didn't receive one patient as there were insufficient doctors and nurses to staff it.

Most of the problems of the 1918-1919 pandemic are likely to appear again.



Six issues that could derail Australia's pandemic response

There are seven main issues which could derail Australia's pandemic response – resulting in large scale deaths, massive unemployment and economic devastation. These are listed below.

1 Waiting too long to raise the pandemic alert level

In the early stages of a possible or actual pandemic, information on the virus characteristics will be incomplete. Details such as its transmission modes, incubation period, infectious period and severity will not be known.

Consequently, it will be very difficult to determine if a new deadly strain of influenza has evolved and is spreading. If the Australian Government waits too long to declare a raised pandemic alert level, then border security measures and other activities designed to keep the illness contained will not be put in place. The danger of waiting too long to raise the pandemic alert level is that the disease could spread into the country and across it, resulting in many lives being lost unnecessarily.

Governments are fully aware that if they overreact and elevate the pandemic level too soon, the economic, and hence political, cost will be enormous. Thus there could be a temptation to delay decisions until more precise information is available.

2 A lack of confidence in governments' ability to manage a pandemic

The most critical factor in reducing pandemic deaths is slowing the spread of the disease. This is because the slower the spread of the disease, the fewer people become infected and the more time is bought in which to develop a vaccine. If an infected person passes on the virus to fewer than 2 people, then the isolation and treatment of all infected cases and their contacts would possibly slow the pandemic to a crawl and may even stop it. To achieve this, the public must respond in ways which reduce the spread. This requires them to obey public health alerts, isolate themselves etc. To be willing to do this, they must have confidence in the government's ability to manage the pandemic. If this confidence is undermined, then the response will be chaotic and will accelerate, rather than reduce, the pandemic.

Signs that the public does not have confidence in government include private stockpiling of antivirals, frenzied demand for information relevant for individuals, panic buying of batteries and food, and ceasing to eat chicken products. An important factor in shaping confidence is how the public sees the response of governments to criticisms on its level of preparedness, and if it considers there is a lack of public practical information.

3 A lack of focus on the post-pandemic recovery phase

While the *Australian Health Management Plan for Pandemic Influenza* (AHMPPR), *Australian Management Plan for Pandemic Influenza* (AAPPI), and the *National Action Plan for Human Influenza Pandemic* (NAPHIP) all note the importance of the post-pandemic recovery phase, there is little detail about how this will occur.

While Australia has considerable experience in the phase shift from response to recovery, because a pandemic will be unlike past disasters, the existing recovery plans will be inadequate. Consequently, specific post-pandemic recovery plans should be developed. Unique response initiatives which should be included in these plans include:

- encouraging people to return to work as early as possible,
- rapidly rebuilding consumer and businesses confidence,
- providing assistance to businesses to remain afloat,
- renewing community cohesiveness,
- facilitating mass bereavement services,
- assisting the unemployed, and
- managing the worker shortage.

A related problem is that little consideration has been given to the long-term economic recovery phase. The impact of a pandemic will cause major reductions in demand for goods and services which will lead to large numbers of retrenchments and business collapses. The pandemic could cause a decline in GDP of over 10%. This means that unless a national economic recovery plan is developed now, then ad-hoc and ineffective measures to rekindle growth and grow employment may be pursued in haste.

It is instructive to note that the NAPHIP does not include a specific 7th and 8th phase which would be called *Short-term recovery* and *Long-term recovery*. Instead it has a broad band called *Recovery* which lessens the focus on this issue.

4 Too little attention given to the fall back strategy of the *Maintenance of Social Function*

The AHMPPR focuses heavily on the *Containment Strategy*, with correspondingly little attention given to the fallback strategy of *Maintenance of Social Function*. This may seem surprising, as it is most likely that containment will only work for a limited time. It has arisen because the plan is principally a national health plan and details those activities which the Australian Government controls, such as international border screening, disease surveillance networks, coordinating the Australian Government response and assessment, rationing of the National Medicines Stockpile goods and vaccines, and communicating an outbreak to the media and the public. It relies on the States to ensure that essential services are maintained. The States' pandemic plans are also heavily health-centric and call up their State Disaster/Emergency Response Plan to coordinate all agencies having responsibilities and functions in emergencies.

There is a risk that while the containment strategy may be well coordinated, the fallback strategy may be less well delivered, as it requires each jurisdiction to ensure essential service, critical infrastructure and business continuity, as well as managing the public health crisis. The *Maintenance of Social Function Strategy* will be far harder to coordinate than the *Containment Strategy* simply because there is a much greater range of tasks required. The success of the fallback strategy will be heavily dependent on each jurisdiction's plan and pre-positioned resources.

5 Failure by critical infrastructure organisations to consider the unique factors of pandemics in their response planning

Many critical infrastructure organisations are vulnerable to the consequences of a pandemic due to their organisational structure and their disaster recovery plans which have been shaped by past incidents.

Over the last few decades, most infrastructure organisations have gone from large, vertically integrated organisations with large, day-labour workforces to lean companies specialising in one component of infrastructure. This has made these organisations very dependent on just a small group of people to manage their infrastructure component and loss of these individuals can bring the entire infrastructure down. Their mitigation strategy for this risk is to have mutual aid agreements with organisations outside their region. Unfortunately, these agreements are unlikely to be useful in a pandemic.

Past disaster experiences of most infrastructure organisations have taught them to focus on recovery plans for physical assets. Little effort has been spent on developing plans to recover from incidents where large numbers of key staff die, are incapacitated or will not attend the workplace. Strikes are the only scenarios that most organisations have considered which involve loss of personnel. Consequently, these organisations are not well prepared for the high level of absenteeism and staff loss that would result in a pandemic.

6 Businesses fail to have business continuity plans and those that do, fail to incorporate pandemic mitigating activities into their plans

The behaviour of businesses in the advent of a pandemic will be critical to limiting the pandemic's consequences. If large numbers of businesses cease operations, then employees will have no income and key inputs to other businesses will dry up, forcing them to close in turn.

Most businesses do not have continuity plans, and there is a direct correlation between a lack of planning and business failure. Currently, about 30% of medium sized companies have these plans and probably less than 1% of these have considered biological threats.

Without these plans, there is a high possibility that businesses will over- or under-react to a pandemic. If this occurs, there will be a significant increase in business failure and unemployment, and a corresponding collapse in economic output.

Conclusion

There are a host of other issues that could derail Australia's response to a pandemic. These include that the transmissibility and lethality of the influenza virus is different from the past, and that antivirals prove to be ineffective as both a prophylactic and a treatment. This last point would cause major problems as Australia's pandemic response relies on the effectiveness of antivirals to ensure that medical and border security personnel continue to operate during a pandemic. If antivirals prove to be ineffective, then containment may not occur as expected.

Dozens of other issues could be identified which would lead to a poorly managed response to an Australian pandemic. What is important for business continuity managers is not so much the reason for the failure but the need to expect failures and plan for the unexpected.

The key is to develop plans and options that can be rapidly tailored in an environment of uncertainty and fluidity.

Resources

There are links to these publications at <http://www.pandemic.net.au/resources.html>

- *Business survival and the influenza pandemic: Essential preparations for critical infrastructure & businesses*, Australian Homeland Security Research Centre, November 2005
- *A pandemic-induced withdrawal of Coalition forces from Iraq*, December 2005
- *Perth and the 1918-1919 Influenza Pandemic* (out 3rd quarter 2006)
- *Sydney and the 1918-1919 Influenza Pandemic* (out 3rd quarter 2006)
- *A primer on the macroeconomic effects of an influenza pandemic*, Treasury Working Paper.
- *Australian Health Management Plan for Pandemic Influenza* (AHMPPR)
- *Australian Management Plan for Pandemic Influenza* (AAPPI)
- *National Action Plan for Human Influenza Pandemic* (NAPHIP)

About the author

Athol Yates is the Executive Director of the Australian Homeland Security Research Centre. The Australian Homeland Security Research Centre undertakes independent, evidence-based analysis of domestic security issues, and is supported by its publications and professional development programs.

He is the author of the report *Business survival and the influenza pandemic* which is available from www.homelandsecurity.org.au. He is also the editor of the Australian Pandemic E-News at www.pandemic.net.au.

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Public Health
Management

Working as your organisation's pandemic influenza officer

Melbourne: 6 October 2006

Course aims

The aim of this course is to provide participants with the knowledge, confidence and process to effectively serve as an organisation's pandemic influenza officer before, during and after a major influenza outbreak.

Who should attend

- Employees who are likely to become the organisation's influenza officer prior to or during a pandemic.
- Business continuity managers planning for a pandemic

Course outline

A Background

1. Understanding what influenza is and how the disease is transmitted
 - a. What is avian bird flu and influenza
 - b. How does it occur
 - c. How does the disease get transmitted
 - d. How long is the incubation and infectious periods
 - e. What are the symptoms
 - f. What is the difference between influenza and a common cold
2. What are the likely impacts from different influenza outbreaks
3. Understanding Australia's Pandemic Plans, and the roles of each level of government, business and the community

B Preparations

1. Keeping abreast of threat and government policy developments
2. Keeping your senior management informed and engaged
3. Addressing the need by employees of information
4. Building relations with health, critical infrastructure suppliers and stakeholders
5. Business continuity planning
6. Pandemic hardening your organisation
7. Stockholdings of PPE and medications
8. Legal preparations, eg contracts, duty of care, insurance
9. Identifying priority processes, people and products
10. Testing business continuity plans
11. Business process re-engineering to allow for remote work
12. Staff education
13. Policies, eg overseas travel and remote work



C Prevention

1. Applying infection control measures in the workplace
 - a. Not coming to work when appropriate
 - b. Good personal hygiene
 - c. Workplace cleaning habits
 - d. Use of personal protective equipment
 - e. Social distancing in the workplace
 - f. Suspending business customs
2. Specific areas requiring attention – receptions, security and storage

D Response

1. Graduated organisation response inline with pandemic alert levels
2. To pre-empt or not to pre-empt the raising of a level
3. Managing in the new hierarchy where influenza issues are dominant
4. Resourcing the influenza manager
5. Stakeholder communication

E Recovery

1. Dealing with employee trauma
2. Predicting the short and long-term economic consequences
3. Providing strategic advice to post-pandemic recovery team

The facilitator

Dr Barry Gilbert

Dr Barry Gilbert has designed and implemented mass vaccination programs in Australia, together with 'best-practice' infection control strategies and programs. His areas of interest remain the prevention and management of infectious diseases in the workplace and in developing countries.

Dr Gilbert has been involved in public health disaster management and capacity building in Africa (South Africa and Mozambique) where he led a public health team in assisting local medical practitioners aim towards best practice in management of cholera and malaria in particular and respiratory and gastroenterological illness in general, particularly for displaced persons. He remains active in a specialist advisory role for a local anti-malarial project in Uganda.

In 2003 he was an invited participant to the WHO SARS Summit in Kuala Lumpur.

In late 2004 Dr Gilbert was responsible for pre-departure health programs for some Victorian emergency service workers attending Tsunami affected regions of SE Asia and the Maldives.

He is currently advocating for education and prevention regarding infectious diseases in the workplace, particularly blood-borne infections, and emerging diseases such as pandemic influenza. This includes assistance in sentinel activity regarding avian flu in Indonesia, particularly North Sulawesi, together with vector-borne disease management and control.

He is currently revising the Infection Control Program for the Victorian Adult Emergency Retrieval and Co-ordination Service, which is a largely air-borne emergency retrieval service, with local, national and international obligations. In addition he is preparing influenza pandemic plans for the Metropolitan Fire and Emergency Services Board in Melbourne, and for Newcrest Mining Limited globally.

Dr Barry Gilbert has longstanding experience in public health education.



Your investment

The individual registration fee of \$670/\$570 includes morning and afternoon tea, lunch and GST.

Conditions

The organisers reserve the right to decline any registration. A list of conditions is available at www.homelandsecurity.org.au/event-conditions.htm

Duration

9:00am-4:30pm

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Fax bookings: download the booking form from www.homelandsecurity.org.au/events and fax to 02 6161 5144

Information

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