

Chief Medical Officer's Report

Responding to Ebola

Last year I highlighted the current outbreak of Ebola in West Africa, which at that time was already the largest ever reported, with just over 1,000 cases. On 8 August 2014, the World Health Organization (WHO) declared the outbreak a Public Health Emergency of International Concern. As at 22 July 2015, there have been 27,741 cases, and of these 11,284 people have died (Figure 1 refers).¹ Guinea, Liberia and Sierra Leone have been the most affected countries, but there have also been importations and limited transmission in a range of other countries.

During the past year, I was an active participant in the WHO International Health Regulations Emergency Committee on Ebola. The committee met six times during 2014-15 to provide advice on the Ebola outbreak to the WHO Director-General, in accordance with the *International Health Regulations 2005*.

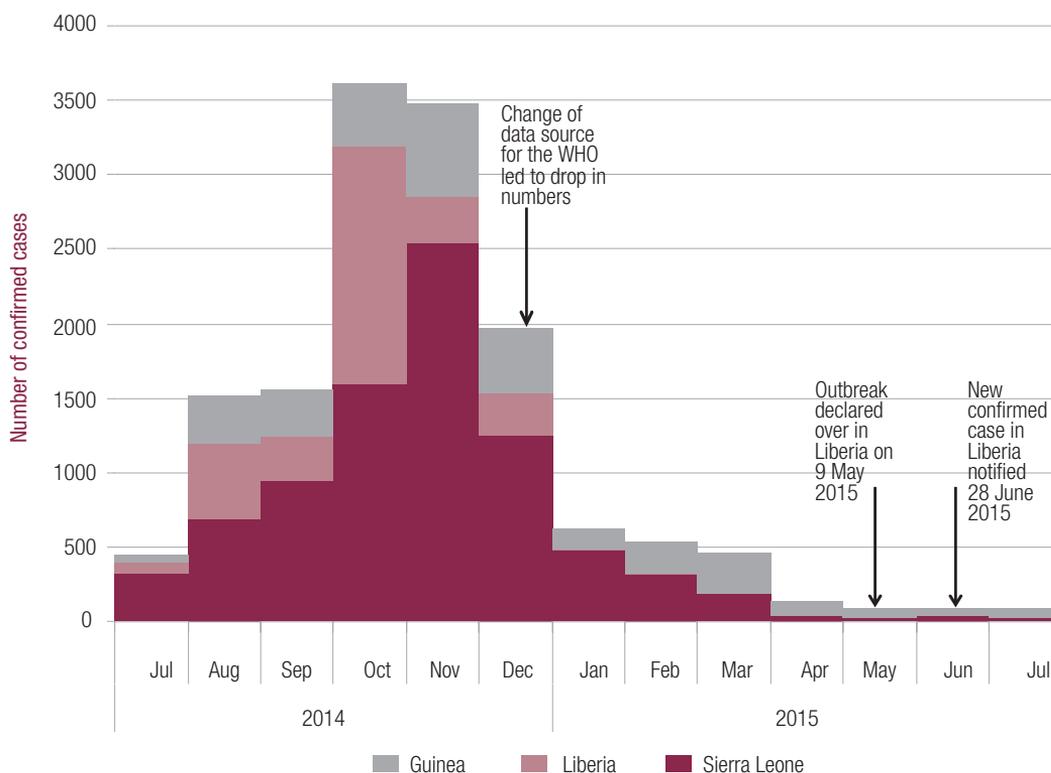
This humanitarian emergency has damaged and significantly compromised West Africa's already fragile health systems. This is because while energies have focused on managing the Ebola outbreak, people have not had access to routine health services.

The risk of a case of Ebola arriving in Australia remains low. However, with many Australians travelling to West Africa to assist with the crisis, and with the potential consequences of a single undetected case being so high, enhanced border measures were introduced in November 2014. These measures include a new travel history card and screening travellers for fever and risk factors for infection. All States and Territories, in partnership with the Commonwealth, have been working together to ensure that anyone who could be at risk of infection is monitored, so that we can identify any potential cases of Ebola in Australia, early. Further information on Australia's domestic response to the Ebola virus outbreak is available in Part 2: *Outcome 9: Biosecurity and Emergency Response*.



¹ World Health Organization, 2015, *Ebola outbreak*, accessed 22 July 2015, www.who.int/csr/disease/ebola/en/

Figure 1: WHO confirmed cases of Ebola in West Africa, as of 22 July 2015



Developing response and preparedness plans for MERS-CoV

In my reports for the last two years, I have indicated that we are actively monitoring the incidence of Middle East Respiratory Syndrome Coronavirus (MERS-CoV). This past year has seen the first significant outbreak of MERS-CoV outside of the Middle East.² The Republic of Korea (South Korea) has reported 186 confirmed cases, with a case fatality rate of 19 per cent. As at 15 July 2015, more than 1,300 laboratory confirmed cases of MERS-CoV had been identified world-wide, with more than one third of those people dying. Interestingly, the cases in the South Korean outbreak have generally had a milder disease on presentation, resulting in a lower case fatality rate. I believe that this can likely be attributed to earlier diagnosis and better contact tracing.

² World Health Organization. Middle East Respiratory Syndrome Coronavirus – updates 23 September 2012 to 15 July 2015.

MERS-CoV continues to be a significant problem in the Middle East and much is still unknown about the transmission and infectivity of the virus. All cases of MERS world-wide have had a history of residence in or travel to the Middle East, contact with travellers returning from these areas, or can be linked to an initial imported case.

To date, no cases have been detected in Australia but I continue to liaise with senior public health officials from around the globe on this issue, through my role as chair of the WHO International Health Regulations Emergency Committee on MERS-CoV.

As part of Australia’s preparedness measures, the Department has revised existing guidelines for health professionals on the management of MERS-CoV, supported a strengthening of infection control and public health management in Australia, and contributed to a more consistent management approach across the country.

Foodborne illness knows no borders

In early February 2015, an outbreak of hepatitis A in Australia was thought to be linked to the consumption of a particular brand of imported frozen mixed berries. Frozen berries have been associated with a number of hepatitis A outbreaks internationally in recent years, and investigating these outbreaks has proved difficult, due to the complex nature of the modern international food supply.^{3,4,5} The outbreak was first detected by Victorian public health authorities and rapid action was taken by the Victorian Department of Health and Human Services, Food Standards Australia New Zealand (FSANZ), the National Food Safety Network and the affected company to withdraw all potentially contaminated product from the market via voluntary recalls.

OzFoodNet, Australia's enhanced surveillance system for foodborne illness, commenced a multi-jurisdictional outbreak investigation in February 2015, and I activated the Department's National Incident Room to coordinate the national public health response and interagency communications. OzFoodNet is funded by the Australian Government in conjunction with the States and Territories to ensure that there are epidemiologists in every State and Territory dedicated to the surveillance and investigation of foodborne illness. The Department also worked closely with FSANZ, the Department of Agriculture, and with State and Territory health authorities throughout the outbreak investigation. OzFoodNet's investigation was closed on 27 May 2015, with a total of 33 cases linked to the outbreak. All 33 people reported eating the same brand of imported frozen mixed berries. The hepatitis A virus for 28 of these cases was confirmed to be genetically identical, indicating that it came from a common source.

The rapid, coordinated, multi-agency response to this multi-jurisdictional hepatitis A outbreak

demonstrated the value of Australia's strong foodborne disease surveillance and response network, and the commitment of all Australian Governments and the food industry to maintain Australia's safe and clean food supply.

Combatting antimicrobial resistance

Antimicrobial resistance occurs when microorganisms such as bacteria, viruses, fungi and parasites change in ways that render the medications used to cure the infections they cause, ineffective. Antimicrobial resistance is a significant global health priority, largely driven by the misuse of antibiotics in human health, agriculture and animal health.

On 2 June 2015, the Government released Australia's First National Antimicrobial Resistance Strategy (the Strategy). The Strategy takes a OneHealth approach, meaning we recognise that human, animal and ecosystem health are inextricably linked, and that achieving optimal health outcomes for people and animals requires cooperation across health communities. The Strategy focuses activity on antibiotic resistance and identifies broad areas for action, recognising the need for actions in all sectors where antimicrobials are used.

We recognise that the high rate of consumption of antibiotics in Australia is an area of immediate concern. Through the Strategy, efforts will be focused on ensuring that coordinated actions are implemented to promote more appropriate use of antimicrobials. While approaches to support the appropriate use of antimicrobials are well established in acute care settings (for example in hospitals), more needs to be done to support antimicrobial stewardship in other settings such as general practice. To address this gap, the Department has engaged a consortium led by the University of Queensland to develop and pilot an integrated, multifaceted set of interventions in Australia to evaluate their potential to reduce antibiotic prescribing rates in primary care by GPs.

Our efforts are now focusing on the development of a detailed Implementation Plan which will identify concrete, measurable actions in response to antimicrobial resistance in Australia, as well as stakeholder responsibilities for implementation and associated timeframes. The Implementation Plan will be developed throughout 2015-16, in consultation with stakeholders.

³ Gillesberg Lassen et al. Ongoing multi-strain food-borne hepatitis A outbreak with frozen berries as suspected vehicle: four Nordic countries affected, October 2012 to April 2013. *Eurosurveillance* 2013 18(17):pii=20467

⁴ Fitzgerald et al. Outbreak of hepatitis A infection associated with the consumption of frozen berries, Ireland, 2013 – linked to an international outbreak. *Eurosurveillance* 2014 19(43):pii=20942

⁵ Rizzo et al. Ongoing outbreak of hepatitis A in Italy: preliminary report as of 31 May 2013. *Eurosurveillance* 2013 18(27):pii=20518

The work of the Australian Commission on Safety and Quality in Health Care, in its Antibiotic Use and Resistance in Australia (AURA) project, has a substantial number of elements, which will feed into the Implementation Plan.

Protecting our borders – *Biosecurity Act 2015*

On 16 June 2015, the *Biosecurity Act 2015* received Royal Assent and became Australian law. The Biosecurity Act, which came out of the Beale Review of Biosecurity in 2008, is the culmination of many years of effort by the Department. We have developed the human health aspects of the Biosecurity Act in close partnership with the Department of Agriculture.

The Biosecurity Act fully replaces the 107 year old *Quarantine Act 1908* in managing biosecurity threats posed by people, goods and conveyances at Australia's international borders and within Australia, supplementing and assisting State and Territory measures where and as needed. The new legislation will modernise and streamline Australia's biosecurity processes, and help to manage the risk of diseases and pests entering and becoming established in Australia. Powers and measures under the Biosecurity Act will be largely similar to those currently available under the Quarantine Act, but with an increased focus on human rights and the flexibility to manage a range of unique risks.

The Biosecurity Act will come into effect 12 months after Royal Assent, on 16 June 2016. During this period, the Department will be working with State and Territory health departments and the Department of Agriculture on detailed implementation arrangements and subordinate legislation.

Continuing to improve immunisation rates

Australia has high childhood immunisation rates, with over 90 per cent of children fully immunised at one, two and five years of age. However, we need to stay vigilant to maintain or improve this high rate to achieve community immunity, especially for those who are too young to be immunised or those that are not able to be immunised for medical reasons.

Immunisation remains the safest and most effective way to stop the spread of many of the world's most infectious diseases. The Department's National Immunisation Program (NIP) funds the purchase of vaccinations to protect millions of Australians from vaccine-preventable diseases.

From 2015, Aboriginal and Torres Strait Islander children aged from six months to less than five years were added to the group of people who can receive free seasonal influenza vaccines under the NIP. Aboriginal and Torres Strait Islander children are five times more likely than non-Indigenous children to die from the flu, and are much more likely to be hospitalised. Further information on the NIP is available in Part 2: *Outcome 1: Population Health*.

Expanding bowel cancer screening

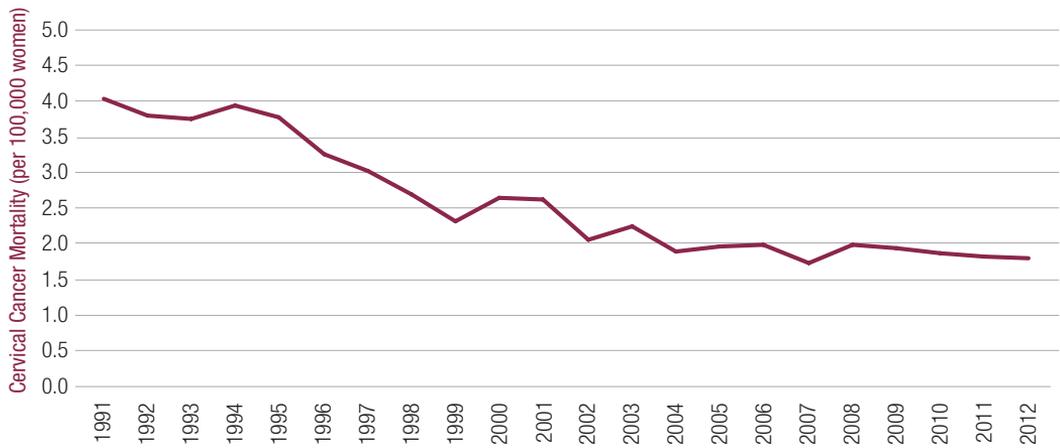
Bowel cancer is Australia's second biggest cancer killer. In the 2014-15 Budget, the Government committed \$95.9 million to accelerate the implementation of biennial screening in the National Bowel Cancer Screening Program (the Program) for Australians aged 50 to 74 years by 2020.

As part of this expansion, in January 2015, the Department started inviting 70 and 74 year olds to undertake screening, in addition to those turning 50, 55, 60 and 65 years of age. Other age groups will be added over the next four years, with full implementation of the expanded Program expected to be completed by 2020.

Once fully implemented, the Program will invite around 4 million Australians to screen each year and could detect approximately 3,500 potential bowel cancers each year.

Evidence shows the Program saves lives. A recent report found that the risk of death from bowel cancer was over two times higher in those who did not participate in the Program but later had a bowel cancer diagnosed.⁶ The report also found that bowel cancers detected through the Program are more likely to be diagnosed at an earlier stage.

⁶ AIHW 2014. Analysis of bowel cancer outcomes for the National Bowel Cancer Screening Program. Cat no. CAN 87. Canberra: AIHW.

Figure 2: Reduction in deaths from cervical cancer⁷

In April 2015, the Government launched the *A Gift for Living* campaign to increase awareness of the Program and increase participation rates. The latest data shows an increase in participation in 2013-14 to 36 per cent from 33.4 per cent and for those receiving their second invitation, a re-participation rate of more than 70 per cent.⁸

Further information on the Department's cancer screening programmes is available in Part 2: *Outcome 1: Population Health*.

Renewing Cervical Cancer Screening

Australia has a two-pronged approach to the prevention of cervical cancer: the National Cervical Screening Program and the Human Papillomavirus (HPV) Vaccination Program. This approach has proven very successful, as Australia has one of the lowest rates of cervical cancer in the world. Since the introduction of the National Cervical Screening Program in 1991, incidence and deaths from cervical cancer have halved (Figure 2 refers).

Over the last 20 years, new evidence and technologies on cervical cancer and screening have emerged and HPV vaccination has become available. To ensure Australia continues to reduce the number of women dying of, or being diagnosed with, cervical cancer, a review of cervical screening was undertaken. In 2014-15, the Government accepted the evidence-based Medical Services Advisory Committee recommendations to replace the current two yearly Pap test with a five yearly HPV test. Australia will be one of the first countries in the world to introduce the HPV test as a primary cervical screening test.

The renewed National Cervical Screening Program will commence from 1 May 2017, when the HPV screening test becomes available on the Medicare Benefits Schedule. Together with HPV vaccination, it is predicted to reduce the incidence and deaths from cervical cancer by an additional 15 per cent.

Professor Chris Baggoley AO

Chief Medical Officer
September 2015

⁷ Australian Institute of Health and Welfare 2014. Australian Cancer Incidence and Mortality (ACIM) books: Cervical cancer. Canberra: AIHW. www.aihw.gov.au/acim-books/

⁸ AIHW 2015. National Bowel Cancer Screening Program: monitoring report 2013-14. Cancer series no. 94. Cat no. CAN 92. Canberra: AIHW.