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## Food poisoning

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Foodborne diseases are increasing. Is this really true or is it just media hype?

The most common bacterial food poisoning in Australia is from various strains of E-coli, campylobacter and salmonella. These are all found in animal foods, but can also contaminate vegetable foods if poor food handling is used. Typically cutting up vegetables on a chopping boards used for chicken or using the same knife.

OzFoodNet is the organisation which keeps track of foodborne disease in Australia. Food poisoning is a difficult thing to measure because many cases go unreported. Hence we have an estimate of 5.4 million cases per annum based on a survey method[5] but actual notifications recorded by OzFoodNet will obviously be much lower.

- In 2005 OzFoodNet[6] recorded 25,779 notifications of foodborne disease — up by 12% from the mean of the previous 5 years.
- Salmonella was up by 13.1%
- Campylobacter was up by 5.1%
- The estimated cost of foodborne disease is \$1.2 billion dollars per year. This includes 1.2 million visits to doctors, 300,000 prescriptions for antibiotics and 2.1 million days of work lost each year.

A ban on locally produced chickens and eggs in Belgium (1999) due to dioxin contamination resulted in lower supplies of chicken meat and eggs. The rate of campylobacter infections dropped by 40%. It returned to normal after the ban was lifted[7]. There are an estimated 208,000 campylobacter infections in Australia annually.

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## Who pays?

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- Why aren't intensive chicken farmers levied to pay for anti-flu drug stock piles?
- Why aren't intensive chicken farmers levied to pay for their large part in the 5.4 million food poisoning cases, the 18,000 hospitalisations and 120 deaths annually in Australia[8].

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## Key Facts

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- Australia produces about 750,000 tonnes of chicken meat annually from the slaughter of 430 million birds[9].
- The chicken meat industry turnover is \$1.2 billion per year — about the same as the total cost of food borne disease[9].
- Chickens are slaughtered after growing for about 6-8 weeks. Some 4% die during this period and about 10-20% are in pain for the last week or two of their miserable lives[10].
- Australia has had outbreaks of bird flu in 1976 (H7N7), 1985 (H7N7), 1992 (H7N3), 1995 (H7N3), 1997 (H7N4)[11]. It is only a matter of time before one becomes lethal to humans.

## References

- [1] Mitchell L. Cohen. Changing patterns of infectious disease. *Nature*, 406(17 August 2000):762–767.
- [2] Jeffery K. et al. Taubenberger. Characterization of the 1918 influenza virus polymerase genes. *Nature*, 437(6 October):889–893, 2005.
- [3] K.F. Shortridge, J.S.M. Peiris, and Y. Guan. The next influenza pandemic: lessons from hong kong. *Journal of Applied Microbiology*, 94(Supplement):70–79, 2003.
- [4] Michael Greger. *Bird Flu : A virus of our own hatching*. Lantern Books, 2006.
- [5] Gillian Hall and Martyn Kirk. *Foodborne illness in Australia Annual incidence circa 2000*. Australian Government Department of Health and Ageing, 2005.
- [6] *Burden and causes of foodborne disease in Australia: Annual report of the OzFoodNet network, 2005*, 2005.
- [7] J.E. Moore et al. Campylobacter. *Veterinary Research*, 36(3):351–382, 2005.
- [8] Gillian Hall et al. Estimating foodborne gastroenteritis, australia. *Emerging Infect. Dis.*, 11(8):1257–64, 2005.
- [9] Barney Foran, Manfred Lenzen, and Christopher Dey. *Balancing Act: A Triple Bottom Line Analysis of the Australian Economy*. University of Sydney and CSIRO, 2005.
- [10] Toby G. Knowles, Steve C. Kestin, et al. Leg disorders in broiler chickens: Prevalence, risk factors and prevention. *PLoS ONE*, 3(2):e1545, Feb 2008.
- [11] Mike Nunn. Avian influenza — ensuring preparedness for a rapidly emerging zoonosis. *The Australian Journal of Emergency Management*, 19(3), 2004.

This leaflet is heavily based upon Michael Greger's excellent and highly recommended book *Bird Flu : A virus of our own hatching*.

Geoff Russell, June 2008

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# THE REAL COST OF CHEAP CHICKEN


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- Bird flu is common in water birds the world over. How has it turned into the lethal H5N1 form?
- How does keeping broiler chickens in crowded stressful conditions like those above increase the risk of potent diseases occurring?
- How does the 1918 flu, which killed perhaps 50 million people, relate to the modern flu that many of us have had?
- How many other types of bird flu are there and how many can infect humans?
- Can you catch bird flu from eating chicken?
- How has the incidence of food poisoning changed over the years, and why?

**This leaflet will provide at least partial answers to these and other questions — read on.**

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## Infectious Diseases

Deadly infectious diseases need tightly packed populations of people to flourish. When people lived in small nomadic groups, any virus, for example, which killed quickly would soon die out.

The advent of farming brought stable food supplies and people began living in large groups. This allowed for more deadly viruses and bacteria to develop more readily. These became the scourge of humanity and were with us for centuries.

Good plumbing, sanitation and antibiotics turned the tables on these diseases and for a few decades they seemed to be a thing of the past.

**Well, they are back!** In the U.S., after decades of falling mortality rates, deaths from infectious diseases increased by 4.8% annually between 1981 and 1995[1]. They are still only a tenth of the rates of 100 years ago, but the trend is disturbing.

## Virus Amplification

Just as large groups of humans allow viruses (and other microbes) to become more deadly, intensive animal industries provide a perfect amplifier system.

When a shed of 20,000 or more chickens becomes infected with a virus, that virus can move from being harmless to deadly in just days. The virus produces offspring which are a little different from their parents. These offspring viruses infect other birds (or can reinfect the same birds) and the time between the virus generations is short. In the stressed and overcrowded conditions, some viral offspring may be deadly and can soon spread through the entire shed. Some viral offspring may carry the ability to infect people, pigs or cats. If these nasty versions escape, then it isn't only chickens which get sick or even die.

Imagine being stuck in a crowded train for a few days with one person who has a cold. In a short period, others will catch the cold. But if you are stuck on the train for weeks, then the cold can become rather more serious as it reinfects people. Viruses and bacteria evolve very quickly.

## A day off with the flu

Many of us have had "*the flu*". We think we know what sort of disease it is. *None of us have had the 1918 flu* — *which was also a bird flu*[2].

The flu of 1918 killed more people in 12 months than the black death of the middle ages (bubonic plague) killed in a century. It killed more people in that brief period than AIDS has killed in 25 years.

With 1918 flu, the aches and fever familiar to sufferers of today's flu frequently progressed to massive internal bleeding. People literally drowned in their own bloody secretions. They bled from their eyes, nostrils, ears. They bled into their lungs. They spat pure blood. When autopsies were done, people's lungs could be 6 times their normal weight.

The first person who died of H5N1 in Hong Kong in 1997 showed how people may die in a bird flu pandemic. He died after a week with multiple organ failure when his blood curdled.

## Government Preparedness

By June 2007, the Australian Government had already spent \$600 million dollars on preparations for worldwide flu (*Herald-Sun* June 9th).

But it isn't just the Australian Government who is planning for a pandemic. All over the world there are teams of scientists working frantically to protect you from pandemic bird flu, while intensive chicken farmers are raising chickens in a manner perfectly suited for the creation of this disease.

## Types of Bird Flu

Since the birth of H5N1 bird flu in 1997, there have been infections of humans by different types of bird flu. Fortunately only H5N1 kills people.

1997 – H5N1 Hong Kong. 1999 – H9N2 China. 2002 – H7N2 Virginia USA. 2003 – H7N7 Netherlands. 2003 – H9N2 Hong Kong. 2004 – H7N3 Canada. 2005 – H5N1 in Cambodia, China, Indonesia, Thailand, and Vietnam. 2006 – H5N1 in Azerbaijan, Cambodia, China, Djibouti, Egypt, Indonesia, Iraq, Thailand, and Turkey.

## Netherlands 2003

In 2003 there was an outbreak of bird flu in the Netherlands. It wasn't the H5N1 family that was so devastating in Hong Kong in 1997, 2001 and 2002[3], it was H7N7. The ability of the benign virus to cause sickness was amplified in the crowded shed and it soon turned deadly. 30 million chickens were killed to prevent further changes which might also make the virus dangerous to humans. They were too late and 1000 people were infected. One person, a vet, was unlucky enough to catch a particularly dangerous member of the rapidly evolving viral family — he died[4].

## How close is close?

How near is the world to a major worldwide outbreak of a deadly influenza?

In 1983 a harmless bird flu infected chickens in Pennsylvania chicken sheds. Overnight, the harmless virus evolved into a killer and 17 million chickens died. This change was the result of a single genetic mutation.

Currently, we have a lethal strain of H5N1 which kills chickens and people very effectively. Unlike the 1918 flu which killed just 5% of the people it infected, this H5N1 kills more than 50% of the people that it infects. Fortunately the virus cannot spread easily from person to person. Nobody can predict when it will acquire this ability. If it does, then the world is in serious trouble.

The Australian Government has stockpiled 4 million doses of Tamiflu (an anti-flu drug) to use in such an eventuality. Other countries are also stockpiling the drug.

## Can you catch bird flu from eating chicken?

It is absolutely true that you can't catch bird flu from properly cooked chicken, this is also true of salmonella and campylobacter — yet these cause illness in thousands of Australians annually. There are an estimated 208,000 campylobacter infections annually[5] with 75% being food-borne. Saying you can't catch bird flu from cooked chicken is like saying you can't have a motor vehicle accident. You can't — if everybody is really, really, really careful.