



Bird Flu is an example of a new infectious disease that poses grave dangers to health, the economy, and society. The Asian bird flu epidemic caused record losses in 2004. Over 100 million birds were killed in attempts to control the epidemic. Twelve Thais and 20 Vietnamese died from the illness.

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At the end of 2003, there were news reports that chickens in coops in Nakhon Sawan Province in Thailand were dying of a strange illness. However, only when chickens throughout the country began to die did the government accept that the country was facing a bird flu epidemic. In mid-January 2004, the epidemic had spread to 32 provinces. Almost every Thai household kept chickens for eggs and meat, and production of chickens was an important export industry for the country, earning 60 billion baht in 2003. In 2004, once the epidemic had arrived, earnings fell to 30 billion baht.

The dangers posed by bird flu can be seen from the two outbreaks of the virus in 2004. The government tried every method to control the disease, killing tens of millions of chickens, and paying more than 5 billion baht in compensation. It enforced rules on safe methods for raising chickens, established special areas for poultry farming, and introduced regulations on the movement of poultry.

All this merely led to the slowing of the epidemic in late 2004. In early 2005, there was a serious outbreak of H5N1 in Vietnam. In Thailand, there may have been a third outbreak, because the illness was still detected in chickens raised in homes. Around 0.5-1 percent of wild birds and 1-2 percent of commercial chickens were infected. Thailand has about 10 million wild ducks; in some places 40 percent of these were infected. This led the government to order another round of tests. Many people predict that Thailand and neighboring countries will continue to be a source of the disease for many years

Infection of humans

People at high risk of infection from bird flu include farmers, abattoir workers, transport workers, and people touching sick birds. If a person contracts the disease, then within five days he or she will have a fever, aches, exhaustion, and breathing difficulties. However, because fewer than 100 people have contracted the disease, it still not well understood. The infected person may recover within a week, but if there are complications, such as lung diseases or breathing problems, there is a high probability of death. There were 661 suspected cases of infection in Thailand in 2004, but only 17 cases were confirmed to be bird flu. Of these 17 cases, 5 survived and 12 died. It should be noted that six of the seven infected children died.









Lessons about the suppression and disclosure of information about bird flu

Many countries in Asia and Europe faced the bird flu in 2003, when Thailand was still disease-free, which increased demand for Thai chickens. Europe and America also experienced shortages of chicken meat because countries in the Middle East placed advance orders for processed chicken to stockpile for the US invasion of Iraq. Similarly, the European Community ordered extra quantities of chicken, because heat wave and drought had reduced chicken production there. Canada also ordered chicken from Thailand instead of the United States, because of a chicken epidemic of Newcastle Disease in the US. Furthermore, there was a finding of the nitrofurance residue from henhouses in Portugal and brazil. All this meant that Thai chicken producers increased production rapidly, and chicken exports were an important source of income for the country.

It is therefore not surprising that government officials at first tried to suppress news about the deaths of Thai chickens. Some officials claimed that the chickens were dying from a form of cholera that appeared every year. But it is important to ask why Thai officials, after receiving information from neighboring countries, ignored the dangers to Thailand

The EU responded to the suppression of information about bird flu by rebuking Thailand's ambassador to the EU in Brussels.

The suppression of information in the early stages of the epidemic created alarm among the population. People did not dare eat chicken or eggs, or other poultry. During the second epidemic, there were continual releases of information, which helped avoid some of the alarm associated with the early stages. Increased knowledge among the population, and full disclosure of information is a way of protecting against panic.

Disputes about the epidemic

It has to be accepted that bird flu is a new issue for Thai society, and little is known about it. People are concerned about the epidemic, but with little knowledge on the H5N1 Virus, the parties involved have two disagreements on the approaches of solving the problem:

1. Disagreements about methods for raising chickens in Thailand. On one side are people who want to raise chickens using industrial methods, which treat chickens like goods, and enclose them in farms where they can be controlled. On the other side are people who want to raise chickens domestically, who believe that chickens should live in natural conditions so that their immune system can be naturally developed. During the first outbreak, chickens raised using industrial methods, which were weaker than domestic chickens, suffered higher mortality. But in the second outbreak, many domestic chickens and ducks died. It is possible that the outbreak started among the industrial overcrowded birds, and then spread to the domestic ones. However, there have not yet been systematic studies of this issue.

2. Disagreements over the use of vaccines. The main users of vaccines are people raising laying hens, domestic chickens, ornamental chickens, and cock-fighting chickens. If birds receive the vaccine after they have been infected but before they show symptoms, they may continue not showing symptoms despite being infectious. The risk of infection is low, however, as the quantity of the virus is reduced by about 1,000 times. Vaccinated chickens can be raised as if they were uninfected. Opponents of vaccination argue that vaccinations may cause the virus to evolve into a more virulent form that can infect other animals. Use of vaccines may also affect systems of disease control, by making it impossible to distinguish between

infected and non-infected birds. In addition, there is a risk that trading partners, especially the European Union and Japan, will refuse to allow imports of chickens from Thailand if any chickens or other birds are vaccinated. Regulations in both places forbid the importation of vaccinated birds. This rule does not apply to cooked chickens, but consumers are likely to reject these too if they are vaccinated.

Rather than waiting for scientists to reduce the uncertainties, concerns about the effect on chicken exports have led Thailand to be the sole country in the world to forbid the use of vaccines in all animals, and to forbid the legal registration of a "bird flu vaccine".

Long term solutions

It is undeniable that there is no easy solution to the problem of bird flu. Collaboration among countries is essential. Thailand itself needs strong surveillance measures. It needs to be able to test for the disease in animals and people in order to control it quickly. Thailand can use its 900,000 village health volunteers to continuously monitor the disease-an idea that has drawn praise from the World Health Organization representative.

Humans have to co-exist with diseases that can kill many people. If bird flu cannot be eradicated, ways must be found to cope without great loss of life. People must take ownership of the problem, share ideas, and cooperate to find a solution. The government must work efficiently, cooperating with civil society.

The bird flu crisis indicates that we still lack sufficient knowledge about migratory birds in Thailand. Therefore, we need systematic studies of Thai birds. Volunteers should be recruited among birdwatchers to collect information and do the research about the birds.

Bird flu is becoming a global problem. there are influenza epidemics every 10-30 years. Every epidemic comes from the transformation of an influenza virus in birds. The last such epidemic was 40 years ago. It is possible that the next epidemic will come from bird flu. Medical scientists around the world believe that bird flu, and particularly H5N1, is coming into contact with people, and may combine with human influenza, or evolve so that it can spread easily from person to person. If this happens, it could kill tens of millions of people. The government therefore needs to prepare plans for dealing with a large-scale epidemic of bird flu, as well as finding ways to fight the disease.







Table showing events associated with bird flu in Thailand from November 2003 to January 2005

November 2003	Outbreak of disease in a chicken farm in Nakhon Sawan Province, spreading to surrounding areas in Central Thailand
December 2003	The Ministry of Public Health announces that the deaths were not caused by bird flu, but instead from climate during the end of raining season to early winter. The deaths of 100,000 birds in Nakhon Sawan were blamed on chicken cholera.
January 2004	The Office of Epidemiology announced that three people were ill with suspected cases of bird flu. The first person to die was a six-year-old, who became ill on 6 January and died on 25 January in Kanchanaburi Province. However, the Minister of Public Health stated that there was no bird flu epidemic, and to demonstrate that chicken was safe, ate chicken at a market in Yaowarat on Chinese New Year. On 20 January, the Prime Minister ate chicken at a Cabinet Meeting, and the pictures were broadcast around the country. Three days later the Ministry of Agriculture found H5N1 in a chicken farm in Suphan Buri. The government accepted that there was bird flu in Thailand, and established a committee to address the problem. On 23-30 January the government ordered the slaughter of 13.9 million chickens on 3,459 farms. Bird flu was found at 148 places in 32 provinces.
February 2004	The government started a campaign 'Eat Thai chicken, 100% safe', and promised that the family of anyone who died from eating well-cooked chicken would receive 5 million baht.
March 2004	The Prime Minister announced that bird flu was receding, and that the government was preparing to declare Thailand disease-free on 9 April.
April 2004	In Chiang Mai, 1,000 chickens died. The government postponed the declaration that Thailand was diseased free until 27 April. It then accepted that it could not make the declaration.
May 2004	On 25 May, the Minister of Agriculture and Agricultural Cooperatives announced that "Thailand was 100% free of bird flu", after the absence of any outbreak for 21 days. Seven days later, there was an outbreak in Chiang Mai.
June 2004	There were protests that the compensation paid for bird flu was unfair. In Phichit Province, it was found that people were deliberately bringing chickens together to infect them and claim compensation.
July 2004	At the beginning of the month, bird flu was discovered in a farm in Ayutthaya. Subsequently it was detected at 59 places in 21 provinces.
August 2004	The Ministry of Public Health prohibited the import, sale, or use of bird flu vaccines. The punishment for violations of the regulation was up to three years in prison.
September 2004	The Ministry of Public Health announced a new plan entitled "Protect 100%, across the country". Rather thanwaiting for disease to be detected, it began to take preventative measures.
October 2004	At the beginning of the month, the government announced that it would eradicate bird flu within one month. A new Minister of Agriculture was appointed. In the middle of the month, tigers at Sri Racha Zoo ate chickens infected with bird flu and contracted the disease themselves. Twenty-three tigers died, and 147 out of 358 were killed.
November 2004	The bird flu committee put forward a five-year strategic plan for controlling bird flu and other new infectious diseases. The plan included six proposals: (1) carry out research on bird flu; (2) increase the capacity of organizations and personnel; (3) control outbreaks of the disease; (4) build up knowledge and cooperation among the public and businesses; (5) improve the safety of farming systems; (6) establish an integrated management system. The objectives of the plan were to control epidemics within two years; reduce the transmission of disease among animals to low levels within three years; eliminate infection of humans within three years; and prepare a plan for a pandemic within one year
December 2004	Outbreaks continued to occur, despite strict enforcement of rules on slaughtering infected birds. A new epidemic began in Vietnam.
January 2005	The epidemic in Vietnam became widespread, killing 10 people. In Thailand a law was passed accepting the recommendations of the strategic plan. A budget of 5 billion baht for the period 2005-2007 was approved.

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