

Why we make dumb decisions

Every day of the week we see it; whether it be in the sport, finance, political or general news pages of our newspapers, supposedly rational people making dumb decisions. And while we are being saintly about others, look in your mirror and ask yourself what on earth possessed you to buy that last gadget that was going to solve all your problems. Why do we all do these things? The answer could be that we are just plain stupid; but more likely it is a case of cognitive dissonance.

Leon Festinger first developed cognitive dissonance theory in the 1950s to explain how members of a cult who were persuaded by their leader, a certain Mrs Keech, that the earth was going to be destroyed on 21st December and that they alone were going to be rescued by aliens, actually *increased* their commitment to the cult when this did not happen (Festinger himself had infiltrated the cult, and would have been very surprised to meet little green men). He found that the dissonance of the thought of being so stupid was so great with the cult members that they revised their beliefs to meet with obvious facts: that the aliens had, through their concern for the cult, saved the world instead.

New Zealand readers might like to equate the Rugby Union's reappointment of Graham Henry as All Black coach as another example of this phenomena.

Cognitive dissonance has become one of the most dominant ways of accounting for many puzzling behavioural phenomena in the world of academic psychology, yet it remains relatively obscure outside the field. The idea behind cognitive dissonance is that we like to think of ourselves as rational, reasonable and consistent beings. Therefore, if we notice our behaviour is inconsistent, we will tend to modify our attitudes to bring consistency back into the frame. This drive for consistency is so powerful that it can have a massive effect, though often an unconscious one, on our attitudes and behaviour.

Cognitive dissonance theory has a wide range of applications. For example, it accounts for the puzzling tendency of those who work in hazardous industries to ignore safety regulations more than those who do not work in such environments.

Cognitive dissonance theory says that those in dangerous occupations must experience dissonance between their choice to work in such a hazardous area and their understandable fear of injury. It is impossible to reconcile your decision to turn up to work with the idea that you are a rational, intelligent person so to reduce dissonance we mentally minimise the probability of injury in our minds.

Cognitive dissonance works the other way for those outside the industry. If the industry is well paid, those who do not work in it will reason that it is better not to take the big rewards because it is too dangerous.

From the eastern side of the Pacific it is hard to understand what drives the American adventure in Iraq yet twenty eight percent of Americans still approve President Bush's performance

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The Bush Cabinet of 2007. These people are not stupid. So how do they rationalize information that is counter to their policy in Iraq?

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in office, suggesting that failure has a surprising large constituency. (The good news is the seventy two percent who do not) Who are those people and how can they still believe in Bush?

Francis Bacon would find nothing surprising in the disinclination of core Bush voters to judge the president harshly. "The human understanding when it has once adopted an opinion...draws all things else to support and agree with it," That theory posits a rough fit between the world and the picture of it in the voter's head. The challenges to this theory proceed from an old source, the human condition - and a relatively new one, misinformation about the world. he wrote in *Novum Organum* (1620).

"And though there be a greater number and weight of instances to be found on the other side, yet these it either neglects or despises... in order that by this great and pernicious predetermination the authority of its former conclusions may remain inviolate." That is, to maintain our former conclusions inviolate we will ignore, deny, even despise numerous and weighty evidence that contradicts them. Most of us would rather be ourselves than right.

Competence is - or should be - ideologically neutral. Conservatives who strongly supported Bush's decision to invade Iraq, for example, had a right to expect that the administration would prosecute the war successfully. If a third of them either cannot recognize incompetence or don't judge presidents by performance, then the rational voter theory no longer describes a significant minority of the voters.

Propaganda reinforces the inertia of opinion. It doctors the picture of the world in our heads, assuaging the pain of cognitive dissonance. A study conducted for the Project for Excellence in Journalism found that an astonishing 87 percent of Fox News viewers voted for Bush in 2004. This near-unanimity is no accident as Fox edits the news with a view to mitigating the cognitive disso-

nance created by the bad fit between the world inside many Republican heads and the Bush-indicting testimony of events.

Over the first 90 days of 2007, Fox devoted 15% of its daytime news to Iraq and 10% to Anna Nicole Smith compared to CNN's 25 and 4%. The Fox glow is something new in the American media world, comparable to a party-run media in a totalitarian state. A University of Maryland study found that viewers fed mainly on Fox News were far likelier than CNN or CBS viewers to believe myths about the Iraq War—for example, that the still-missing weapons of mass destruction had been found and that Saddam was behind 9/11. That myth has persevered: Forty percent of Americans still believe it, which testifies to the pernicious power of the "news" carried by Fox and other party organs. Like Pravda for Communists, Fox News performs cognitive therapy for conservatives, sustaining a presidency that, now more than ever, is "faith-based."

Before we get to hard on the current Bush administration, a look at long term administrations anywhere in the world will show an ever increasing inclination by those in power to dismiss any evidence that does not support their policies.

Go Ahead, Rationalise. Monkeys Do It, Too.

So if we know about our gift for rationalising our behaviour what can we do to counter it? How can we stop displaying to our neighbours at the next inorganic rubbish collection our shrewdness for buying useless junk?

Psychologists have suggested we hone our skills of rationalization in order to impress others, reaffirm our "moral integrity" and protect our "self-concept" and feeling of "global self-worth."

If so, capuchin monkeys are a lot more complicated than we thought. Or, we're less complicated. In a paper in *Psychological Science*, research-

ers at Yale report finding the first evidence of cognitive dissonance in monkeys and in a group in some ways even less sophisticated, 4-year-old humans.

The Yale experiment was a variation of the classic first demonstrated by one of Leon Festinger's students. In 1956 Jack Brehm, carted some of his own wedding gifts into the lab (it was a low-budget experiment) and asked people to rate the desirability of things like an electric sandwich press, a desk lamp, a stopwatch and a transistor radio. Then they were given a choice between two items they considered equally attractive, and told they could take one home. (At the end of the experiment Mr. Brehm had to confess he couldn't really afford to give them anything, causing one woman to break down in tears.) After making a choice (but before having it snatched away), they were asked to rate all the items again.

Suddenly they had a new perspective. If they had chosen the electric sandwich press over the toaster, they raised its rating and downgraded the toaster. They convinced themselves they had made by far the right choice.

So, apparently, did the children and capuchin monkeys studied at Yale by Louisa C. Egan, Laurie R. Santos and Paul Bloom. The psychologists offered the children stickers and the monkeys M&M's.

Once a monkey was observed to show an equal preference for three colours of M&M's - say, red, blue and green - he



This child like capuchin monkey was advertised on the net for sale for \$900 US

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was given a choice between two of them. If he chose red over blue, his preference changed and he downgraded blue. When he was subsequently given a choice between blue and green, it was no longer an even contest - he was now much more likely to reject the blue. The monkey seemed to be coping the same way humans do. When you reject the toaster, you could spend a lot of time second-guessing yourself, and that phenomenon, much less common, is called buyer's remorse.

But in general, people deal with cognitive dissonance, the clashing of conflicting thoughts' by eliminating one of the thoughts. You banish the notion that the toaster is desirable because it conflicts with the knowledge that you have just passed it up. The cognitive dissonance is gone; you are smug.

Of course, when you see others engaging in this sort of rationalization, it can look silly or pathological, as if they have a desperate need to justify themselves or are cynically telling lies they couldn't possibly believe themselves. But you don't expect to see such high-level mental contortions in 4-year-olds or monkeys.

As the Yale researchers write, these results indicate that either the monkeys and children have "richer motivational complexity" than we realize, or our ways of dealing with cognitive dissonance are "mechanistically simpler than previously thought." Another psychologist, Matthew

D. Lieberman of the University of California, Los Angeles, suggests it's the latter.

"If little children and primates show pretty much the same pattern you see in adults, it calls into question just how deliberate these rationalization processes are," he says. "We tend to think people have an explicit agenda to rewrite history to make themselves look right, but that's an outsider's perspective. This experiment shows that there isn't always much conscious thought going on."

This result is supported by another dissonance experiment that Dr. Lieberman and colleagues did with amnesiacs, people with impaired short-term memories, who were asked to rank an assortment of paintings. Then they chose among selected ones and ranked the whole group again. By the second time they ranked the paintings, they couldn't consciously recall their earlier rankings or their choices, so they presumably didn't have a psychic need to rewrite history.

Yet they showed as much new disdain for the paintings they'd rejected as did a control group with normal memories. Apparently, the rejections registered in some unconscious way, so that the amnesiacs rationalised their decisions even though they couldn't remember them.

The compulsion to justify decisions may seem irrational, and maybe petty, but perhaps it is just an example of evolu-

tionary utility for humans as well as animals. Once a decision has been made, second-guessing may just interfere with more important business, such as finding next meal.

And if you are the owner of a the latest "ab buster" that is going to give you six pack abs in five minutes a day, you might as well convince yourself that working out in the gym would be a total bore. It is time for you to move on. Maybe your unconscious realises you don't have time for buyer's remorse. You've got another "easy payment" to make. #



How do these private security guards in Iraq rationalize the risk they face every day?

Gaza fuel shortage adding to health crisis

United Nations officials have called for swift action to end a fuel and electricity shortage, partly caused by Israeli sanctions, that has aggravated a health crisis in the Hamas-run Gaza Strip by making it harder for health services to function.

The World Health Organisation (WHO) and the United Nations Relief and Works Agency (UNRWA) are appealing to all parties involved to ensure that in future all health facilities in Gaza are supplied with the appropriate amount of electricity and fuel to provide fully functional services."

Ambrogio Manenti, the head of the WHO in the West Bank and Gaza, said the Israeli restrictions, a strike by Gaza fuel station

owners and occasional delays in payments from the Palestinian Authority to Israeli fuel companies had led to severe energy shortages in Gaza hospitals.

Hamas seized control of Gaza in June after clashes with Palestinian President Mahmoud Abbas's Fatah group. Israel has declared Gaza an "enemy entity" and launches regular raids into the coastal territory to try to curb rocket fire by militants into the Jewish state.

Israeli Foreign Ministry spokesman Mark Regev said Israel was committed to letting aid into Gaza, but while Hamas continued to fire rockets into Israel, "it cannot be business as usual between Israel and Gaza".

WHO officials and local activists said Israel

had made it increasingly difficult for Gazans to get necessary treatment outside of the territory. "In Gaza, if you are ill, particularly if you have a heavy illness, more or less, your destiny is written," the WHO's Manenti said.

The power struggle between Hamas and Fatah, including the appointment by Hamas of hospital officials and a second health minister, has also caused confusion and affected services in Gaza, said Eyad Al Sarraj, chairman of the Gaza Community Mental Health Program. In Brussels, Palestinian Prime Minister Salam Fayyad urged Israel to lift its blockade on Gaza, saying his government had indicated its willingness to manage the crossings in and out of the strip. #

Mega-Shelter Arrangement in Oregon

American communities have always had both the need and ability to do things bigger and better than most of us in less populated and disaster prone communities. Yet prior to Hurricane Katrina there were no precedents for operating large evacuation centres or “mega shelters” to manage the needs of thousands of people being sent to arenas, stadiums and convention centres during and after the storm.

The term mega-shelter was created during the Katrina response to differentiate the capacity of large evacuation facilities – that can shelter over 2,000 – from traditional sites like schools and churches.

Planning to create mega shelters will be a major task for emergency planners in regions around Auckland when Mt Horrocks begins to smoulder before its planned Exercise Ruauumoko eruption next March.

In the months that followed Katrina and Rita, leaders from the International Association of Assembly Managers (IAAM) and the American Red Cross worked to develop new best practice guidelines for operating mega shelters and providing emergency assistance during large scale disasters. They reached a clear understanding that the capacity to effectively manage human needs during and after major emergencies and disasters required extraordinary preparedness, cooperation and response between agencies with expertise in emergency response and public facility management.

Picking up on that understanding the Metropolitan Exposition Recreation Commission (MERC) and the American Red Cross (ARC) Oregon Trail Chapter have now developed the first mega-shelter agreement of its kind in Oregon to provide for response

and coordination of services and operations during major emergency and disaster relief efforts.

“We’re very pleased about our partnership with the American Red Cross, and it reinforces MERC’s commitment to the regional community,” says MERC CEO David Woolson. And Thomas Bruner, ARC Oregon Trail Chapter CEO said, “We’re always seeking ways to grow our capacity to provide shelter and food to Oregonians following a disaster and our chapter’s partnership with MERC will help improve our community’s overall system of disaster response.”

The cooperative agreement between MERC and the ARC Oregon Trail Chapter creates provisions and conditions to ensure that both agencies work effectively before, during and after disaster events.

The core focus of the agreement provides for collaboration and services that will ensure effective use of the public venues in a disaster situation. MERC has agreed to provide the following assistance to the American Red Cross during disaster relief efforts:

- Use of its kitchen facilities and staff for meal preparation
- Assistance with mobile or fixed feeding operations
- Use of indoor space for disaster

relief facilities

- Use of parking areas for disaster relief Personnel for disaster relief efforts

The agreement also provides for emergency preparedness exercises and other planning activities and calls for maintaining close interaction and liaison between the organizations at all levels to share data and knowledge about disasters, disaster declarations and legislative information relevant to the partnership.

The Metropolitan Exposition Recreation Commission serves as a catalyst for economic development, community and culture in the Portland metropolitan region. It is the management authority for the Oregon Convention Center, the Portland Center for the Performing Arts and the Portland Expo Center. #



The Oregon Convention Centre

English Is A Crazy Language

- * There is no egg in eggplant nor ham in hamburger; neither apple nor pine in pineapple.
- * Sweetmeats are candies while sweetbreads, which aren't sweet, are meat.
- * We take English for granted but, if we explore its paradoxes, we find that.... quicksand can work slowly, boxing rings are square and a guinea pig is neither from Guinea nor is it a pig.

- * And why is it that writers write, but fingers don't fing, grocers don't groce and hammers don't ham?
- * Doesn't it seem crazy that you can make amends but not one amend?
- * If you have a bunch of odds and ends and get rid of all but one of them, what do you call it?
- * If teachers taught, why didn't preachers praught?
- * If a vegetarian eats vegetables what does a humanitarian eat? Humans?
- * If critically injured means badly injured, does critically acclaimed mean badly acclaimed?

Chikungunya carries on spreading through Trojan horses

Back in March 2006 we reported on a chikungunya outbreak in Reunion and cited then WHO Director General, Lee Jong Wook, who was reported as saying that the outbreak was nothing to worry about. On this occasion his call was wrong. The Reunion outbreak saw 266,000 infected and at least 260 deaths. Chikungunya is now endemic right around the Indian Ocean and is spreading into Europe. Yet chikungunya is not a new virus so what led to the change and is it something we should be worried about?

Researchers from the University of Texas Medical Branch at Galveston (UTMB) have proved the epidemic was caused by a single mutation and the virus was carried by a mosquito not previously known to be a carrier. The species, *Aedes albopictus*, is also called the Asian tiger mosquito. This mosquito which has been established in the U.S. for around 20 years and has recently started spreading to Europe, was responsible for an outbreak in Italy this year. As the global climate warms tropical vectors and going to continue to spread north and south.

In its non-lethal form, chikungunya causes extreme arthritis-like pain, sometimes lasting for months or years. The virus is transmitted through the saliva of the mosquito just as in other deadly diseases like malaria and West Nile virus. Many tourists became infected at La Reunion and carried that "La Reunion" strain home with them. Although no epidemics have broken out in Europe with the La Reunion strain, the possibility remains. Another strain of the virus causing an ongoing epidemic in India has spread to humans in Italy through the Asian tiger mosquito.

"Chikungunya virus was known to be primarily carried by a different mosquito, *Aedes aegypti*, which is not found on La Reunion," said UTMB professor Stephen Higgs. "Adaptation to *Aedes albopictus* and introduction to a human population that had never been exposed

to the virus before set everything up for the La Reunion outbreak."

The researchers say the mutation gives the new strain of virus an evolutionary edge over its predecessor. The new strain evolved when a single amino acid chain changed, leading to the ability for the virus to infect the new mosquito. One of the researchers created the same change in a strain collected in Africa in 1983, which then also showed a greater ability to infect *Aedes albopictus*.

"This is such a simple genetic change -- the equivalent of a missing comma in a 6-page short story -- and yet it facilitated a huge epidemic," Higgs said. "With *Aedes albopictus* already present in so many countries and likely to spread to others, helped by global warming, we need to be ready for the possibility that chikungunya virus will soon be spreading to other locations as well."

Italian Outbreak

The Eurosurveillance weekly of November 22nd summarises the outbreak in Ravenna in north eastern Italy.

Most of the 334 reported cases of autochthonously transmitted chikungunya virus (CHIKV) were among persons

living in or visiting the initially affected villages of Castiglione di Cervia and Castiglione di Ravenna. Also detected were 4 smaller clusters of local transmission in 4 towns in the same region located 9 to 49 km from the initially affected villages. For at least 3 of the 4 clusters, population movement (persons who visited the area that was primarily affected or persons from the primarily affected area who visited one of the 4 towns) can be reasonably assumed to have been the main determinant of local

transmission. That is, an infected person visited a town and was bitten by a local mosquito that then infected others.

That raises the question as to why there were no outbreaks in 2005 – 2006 when there were several hundred reported cases of travellers returning to Europe from Reunion. At least 30 of these returned to locations infested by mosquito vector populations. Possible explanations noted by Eurosurveillance include: i) high concentration of vectors in the affected towns;

ii) highly viremic persons exposing themselves to aggressive *Aedes albopictus* populations as a consequence of the structures of houses and/or behavioural factors (such as, spending time outdoors in houses' surroundings).



An Asian Tiger mosquito surveys lunch

Overall, the epidemic in Italy can be said to be the result of the combined effect of the globalisation of vectors and humans, which occurred through a 2-step process: i) the introduction and adaptation of the vector *Ae. albopictus* to a temperate climate; and ii) the introduction of CHIKV in a previously infection-free country, with totally susceptible subjects, as the result of popu-

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lation movement (that is, travelling human hosts, acting as a sort of Trojan horse).

The good news is that the epidemic was limited in space and time, with a marked decay rate once appropriate control measures were adopted. In addition, there is probably a time-limited capacity of the vector to sustain infection transmission beyond the hot season in a country with a temperate climate.

What was learnt from the Italian epidemic?

- Vector-borne diseases, historically confined to tropical environments, can be introduced within Europe (or other temperate climates) if the conditions are appropriate (that is, the presence of vectors). The major determinant of the outbreak in Italy was probably the high vector density at the time of arrival of the index case, which could be explained by the lack of preventive vector-control measures in an area that was considered to be 'infection-free';
- The vectorial capacity of *Ae. albopictus* for CHIKV is high. A few hours spent in a highly vector-dense village by only one feverish patient caused a large outbreak in a naïve population;
- As seen from other infectious diseases causing international crises (that is, SARS), population movement and vector colonisation of new areas are important determinants of disease globalisation.

Nonetheless, there are still some questions that need to be investigated further:

- Why did a single case result in an outbreak while none of the many CHIKV-infected travellers have caused local transmission upon returning home to Italy or other European countries in roughly similar

vector-dense areas?;

- Has the infection been eradicated in the affected area or could it reappear at the beginning of the next hot season from over-wintering infected mosquitoes?
- What is the probability that other similar events will occur in Italy or other European countries where *Ae. albopictus* is present, and could other infections, such as dengue, cause similar outbreaks in Europe?

Eurosurveillance argues for more intense research efforts in Italy and in Europe on the mosquito-virus relationship, as well as in other critical areas concerning vaccine and specific antiviral drugs. Experimental infections in vector populations, virus and vector genotyping are some of the specific investigations already planned in Italy

Closer to home

Across on the eastern side of the Indian Ocean Indonesia leads the way in chikungunya infection as it unfortunately does with avian flu. The difference from Reunion is that *Aedes aegypti* is the transmitting vector. Chikungunya is endemic in many regions. As a prevention measure, the Health Service undertakes fogging (fumigation) and provides medical treatment to the sufferers.

However, fogging will not resolve the problem of this illness because only long term measures are effective. Therefore fogging must be followed by increasing the cleanliness of the residence environment to interrupt the breeding cycle of these mosquitoes," said Efrida Aziz, the Health Service head of Padang City.

The Jakarta Post reports that fumigation has not been available in all areas despite repeated pleas from infected people experiencing high fever and painful joints.

Besides Indonesia (and India) Bangladesh also has a chikungunya outbreak in West Bengal with over 250,000 reported cases. Just another problem from people trying to recover from Cyclone Sidr.

So what can we in at times seemingly sub Antarctic New Zealand take from all this?

First of all, we are fond of travelling to countries where chikungunya is prevalent and our juicy pale skin must be a delightful target for virus carrying mosquitoes.

Second, those infected abroad are free to bring the virus back to our shores for passing on to a home grown mosquito. Currently, those mosquitoes are not programmed to carry chikungunya. But as the Reunion outbreak showed, that could change.



A modern Trojan Horse

Third, Asian Tiger mosquitoes, which also carry dengue fever and West Nile virus, got into the United States through second hand tyres imported into Houston. They have an unhealthy habit of arriving in New Zealand through second hand vehicles and equipment imported from Asia. So far, an alert Public Health service and Antarctic blasts have dealt with most

Keep watching this space #

* An elderly man went to his doctor and said, "Doc, I think I'm getting senile. Several times lately, I have forgotten to zip up." - "That's not senility," replied the doctor. "Senility is when you forget to zip down."

* The real art of conversation is not only to say the right thing at the right time, but also to leave unsaid the wrong thing at the tempting moment.

* The older you get, the tougher it is to lose weight, because by then your body

and your fat have gotten to be really good friends.

* Did you ever notice: The Roman Numerals for forty (40) are "XL."

* If you think there is good in everybody, you haven't met everybody.

More H5N1 deaths and suggestions of human to human transmission

According to the World Health Organisation's official toll H5N1 has killed 208 people worldwide since late 2003. The good news is that the number of deaths has declined from 79 in 2006 to 50 this year. The not so good news is that December has seen a spreading of reported bird flu deaths and in two cases suspected cases of human to human transmission. Meanwhile, the World Bank says that following a conference on the virus in New Delhi aimed at devising ways to tackle the disease; international donors had committed more than 400 million dollars to fight bird flu. But the Bank has projected that the need over the next 2 to 3 years is 1.2 billion dollars.



Birds in a Myanmar chicken farm

Indonesia

Laboratory tests have confirmed that a 28-year-old woman from the outskirts of Jakarta died of bird flu, raising the toll in the nation worst affected by H5N1 to 92. The two laboratory tests on the woman, who died on December 10th at a hospital in Jakarta, showed that she was infected with the highly pathogenic virus, a statement from the Indonesian Ministry of Health's bird flu information centre said. A total of two positive results of tests on blood and tissue samples from a victim are needed before Indonesian authorities confirm a bird flu infection.

Muhammad Nahirin, an official at the centre, said that a team of 5 experts had been dispatched on Monday to the vic-

tim's neighbourhood. The team said that "the source of infection could be from poultry 100 metres away from the victim's house, but we're waiting for test results on whether the poultry is infected with the virus". He said the victim, who had sold ornamental plants, bought plant fertiliser from the neighbour which may have been contaminated by the faeces of infected birds. However, no birds had died in the area in the past 6 months and the poultry appeared healthy, he added.

The victim lived in the satellite city of Tangerang, just west of Jakarta, where 3 other bird flu deaths have been reported since.

Myanmar

The Ministry of Health in Myanmar has confirmed the country's first case of human infection with the H5N1 avian influenza virus. The case is a 7-year-old female from Kyaing Tone Township, Shan State (East).

The case was detected through routine surveillance following an outbreak of H5N1 in poultry in the area in mid-November. The girl developed symptoms of fever and headache on 21 November and was hospitalized on 27 November. She has now recovered. Samples taken from the case tested positive for H5N1 at the National Health Laboratory in Yangon, and the National Institute of Health in Thailand. The diagnosis was further confirmed at the WHO Collaborating Centre for Reference and Research on Influenza, National Institute of Infectious Diseases in Tokyo, Japan.

A team from the Ministry of Health, the Ministry of Livestock and Fisheries and the WHO Country Office are conducting investigations to confirm the source of her infection. Initial findings indicate poultry die off in the vicinity of her home

in the week prior to the onset of illness. To date, all identified contacts of the case remain healthy and ongoing surveillance activities in the area have not detected any further cases.

China

A 24-year-old man in China's eastern Jiangsu province died on 2 Dec 2007 from the same virus. No reports of outbreaks in birds had occurred in the province. Chinese officials say that analysis of a virus sample from the man show no signs of a dangerous mutation, as some news reports said the man and his father, who is hospitalized with an H5N1 infection, both had eaten undercooked chicken.

Mao Qun'an, a spokesman for China's health ministry, told reporters that though the son's sample showed no evidence of mutation, authorities could not rule out the possibility of human-to-human transmission, Reuters reported. "The virus is still avian and has not undergone a mutation in its nature," Qun'an said at a press conference. He said the men could have been infected from the same source or separate sources.

A ProMED post says the father and his wife took their son and his girlfriend to a restaurant at a temple, where the four ate a dish called "beggar's chicken." According to a 1990 report on beggar's chicken from the *New York Times*, the chicken is stuffed with herbs, wrapped in lotus leaves, packed with "6 pounds of pond mud," and baked at low heat for several hours.

Two days after eating the chicken, the son became feverish and was hospitalized, his father got sick 6 days after eating the meal. Relatives also said the father's refrigerator was full of butchered chicken. The report speculates that the son got sick first because his immune system was weakened because he recently had undergone a series of rabies shots after he was bitten by one of his

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girlfriend's dogs.

Hans Troedsson, a WHO representative in China, said the father is recovering after treatment with oseltamivir at the onset of symptoms. Eighty-two people who had contact with the father and son are being monitored, but none appear to have symptoms. The two recent cases serve as a reminder that "the virus is circulating in the environment, (and) there is a risk that we will see these isolated cases," Troedsson said. So far, there is no strong evidence of human-to-human transmission of the H5N1 virus, and the WHO has not received a request to help officials in Nanjing investigate. "We don't see that is an imminent risk that these cases would be the start of a pandemic," he said.

Pakistan

The Ministry of Health in Pakistan has informed WHO of 8 suspected human cases of H5N1 avian influenza infection in the Peshawar area of the country. These cases were detected following a series of culling operations in response to outbreaks of H5N1 in poultry. One of the cases has now recovered and a further two suspected cases have since died. This cluster of cases involved 4 brothers and 2 cousins living in the country's North West Frontier Province.

Samples taken from the suspected cases have tested positive for H5N1 in the national laboratory and are being forwarded to a WHO H5 Reference Laboratory for confirmation and further analysis. The MoH is taking steps to investigate and contain this event, including case isolation and contact tracing and monitoring, detailed epidemiological investigations, providing oseltamivir for case management and prophylaxis, reviewing hospital infection control measures and enhancing health care-based and community-based surveillance for acute respiratory infections.

WHO is providing technical support to the MoH in epidemiological investiga-



This large turkey leg is just a between meal snack for this young American male

tions, reviewing the surveillance, prevention and control measures that have been implemented and carrying out sequencing of avian and human virus isolates.

Multiple poultry outbreaks of H5N1 influenza have been occurring in Pakistan since 2006. A majority of the outbreaks have been in the North-West Frontier Province, particularly in the Abbottabad and Mansehra area, and cases of infection in wild birds have been identified in the Islamabad Capital Territory.

There is still some confusion about how many people had tested positive for the virus, and confirmation from an international laboratory is still required.

A doctor who treated members of the family also tested positive for H5N1 but she was not tested with the standard diagnostic assay used to detect H5N1 infection and further testing is needed to determine if she is indeed a case. Three people who are unrelated to the family but who were involved in culling H5N1-infected poultry in the same area have also tested positive. WHO spokes-

person Gregory Hartl said from Geneva.

Meanwhile, U.S. health officials have confirmed they conducted H5N1 testing on a man who had recently visited Pakistan and was complaining of mild respiratory symptoms. The man is believed to be another brother from the affected family. A spokesperson for the U.S. Centers for Disease Control has confirmed Saturday that the CDC sent its plane to Albany, New York, to collect specimens taken from the man, who lives in Nassau County. Tests done in the New York state lab and confirmed at the CDC in Atlanta showed the man was not infected with the virus.

The initial infection in Pakistan dates back to October, when a livestock official (a brother in the family) fell ill. It appears that it was only after two of the man's brothers fell ill and died that testing for H5N1 infection was done. It is believed the 1st positive test from the national laboratory was received in late November. The WHO was officially alerted on December 12th, Hartl said. "We feel that the Pakistanis have done everything right in terms of their response," he said, noting the country has done a "huge" amount of work to strengthen infection control and increase surveillance. "(But) yes, they could have alerted us earlier."

A team from the U.S. Naval Medical Research Unit in Cairo is travelling to Pakistan to conduct confirmatory testing. And WHO is sending a team of two doctors with experience treating H5N1 patients as well as an epidemiologist to help with the investigation of cases.

Pakistan is the 14th country to announce human infections with the H5N1 virus. Assuming the correctness of the diagnoses, it seems likely that the outbreak occurred several weeks ago since no new cases have appeared in the past 2 weeks. Confirmation of the diagnoses of H5N1 virus infection from an independent source is urgently required. #

Interesting Year 1981

1. Prince Charles got married
2. Liverpool crowned soccer Champions of Europe
3. Australia lost the Ashes tournament
4. The Pope Died

Interesting Year 2005

1. Prince Charles got married
2. Liverpool crowned soccer Champions of Europe
3. Australia lost the Ashes tournament
4. The Pope Died

Lesson Learned? The next time Charles gets married, someone warn the Pope.

Three different H5N1 variants reach Germany

Scientists say they have found 3 distinct variants of H5N1 avian influenza virus in wild birds in Germany, 2 of which might have been brought in by wild birds migrating from Russia. Researchers from the Friedrich Loeffler Institute in Insel Riems, Germany, analyzed 27 H5N1 isolates collected mostly from wild birds in widely scattered locations in Germany in 2006 and 2007. Writing in the journal *Veterinary Microbiology*, they say the findings suggest that the virus was brought into the country on 3 separate occasions; two of them in early 2006 and the third in 2007. The strains that appeared in early 2006 are closely related to viruses found in southern and central Russia, suggesting that wild birds on their winter migration from Russia might have brought the strains to Germany, says the report by E. Starick and colleagues.

Previous study of the H5N1 viruses found in Germany indicated they all belonged to the strain that killed many wild waterfowl at Qinghai Lake in northern China in April 2005, called clade 2.2, the authors say. The new analysis of the 27 isolates showed that they fell into 3 groups that formed geographic and temporal clusters.

The viruses collected in 2006 formed 2 groups: one from northern Germany, designated subclade 2.2.2; and one from southern Germany, called subclade 2.2.1. The isolates gathered in 2007 formed a 3rd type, which the authors called subclade 2.2.3. No examples of which were found in 2006. Some members of both of the 2006 subclades were found in central Germany, and both types were involved in a poultry farm outbreak, the report says. In addition, one isolate of the "northern" type (subclade 2.2.2) was found in southern Germany, and one of the "southern" type was identified in northern Germany.

The authors write that the three subclades they identified match up with three clades described by other re-

searchers who analyzed the complete genomes of 71 H5N1 viruses from Europe, the Middle East, and Africa. The northern Germany isolates fit in EMA group 2, those from the south in EMA group 1, and the 2007 isolates in EMA group 3, the report says.

"Our data suggest the simultaneous introduction in early 2006 of 2 closely related but distinct H5N1 variants into the wild bird population of Germany," the report states. "The source of these viruses and the exact time of introduction could not be identified." But because the 2 subclades are closely related to H5N1 variants from southern and central Russia, the authors add, "an introduction, possibly via wild birds on winter escape from these regions, early in 2006 appears to be a highly likely scenario." The report adds that the separate subclade found in Germany in 2007 appears to represent a "new incursion," whose sources and routes of introduction remain unknown.

David A. Halvorson, DVM, a veterinary pathologist and avian flu expert at the University of Minnesota in St. Paul, commented that the similarity between the German and Russian isolates doesn't necessarily mean the viruses were brought to Germany by wild birds. "What is clear is that related viruses were introduced into Germany and they were observed in wild waterfowl before they were observed in domestic poultry," Halvorson said. "This suggests that waterfowl may have been the source of introduction, but it doesn't prove it and this was known before the viruses were sequenced."

And in Poland

Poland becomes the eighth European country to report an H5N1 outbreak this year. In October, the United Nations Food and Agriculture Organization (FAO) warned that apparently healthy ducks and geese in Europe could be harbouring the H5N1 virus. Now veterinary officials in Poland say H5N1 avian influenza has struck two turkey farms,

the country's first reported outbreak in domestic birds, amid reports that meat contaminated with the virus was sold to consumers. The farms are located near the town of Plock, in eastern Poland, according to a report from the World Organization for Animal Health (OIE). Plock is about 60 miles northwest of Warsaw. The outbreaks, which began on Nov 30, killed 60 birds on one farm and 300 on the other. A total of 4,245 remaining birds were culled on the two farms, the OIE report said.

Samples were sent to the National Veterinary Research Institute in Pulawy, Poland, where they were confirmed as positive for H5N1. Poland last found H5N1 in birds in the spring of 2006, when it was detected in wild swans and other waterfowl.

In related developments, a spokeswoman for the Sanitary Inspectorate in Poland's Pomorze region, said that two warehouses distributed about 1,060 pounds of H5N1-tainted turkey meat to area retail outlets. The Pomorze region is in northern Poland near the border with Germany. Anna Obuchowska, the spokeswoman, told Polskie Radio that authorities were trying to track down the remaining meat in food shops, but said most of it was probably already in consumers' homes, because it had been delivered to stores at the beginning of the previous week. Health officials are monitoring the health of store employees.

Elsewhere, animal-health officials in **Bangladesh** reported more H5N1 outbreaks in poultry in the north western part of the country.

The latest outbreak struck a village in Pabna district, about 100 miles from Dhaka, the capital, an official from the fisheries and livestock ministry told Reuters. Workers culled 6,000 chickens and destroyed more than 2,500 eggs to stamp out the outbreak, the report said. Twenty of Bangladesh's 64 districts have now reported H5N1 outbreaks in poultry. #

HEMNZ Bulletin

The HEMNZ Bulletin is published monthly by the St John Emergency Management Unit for all those interested in emergency management in health care settings

Articles and comment on emergency management issues are welcomed

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Check out our Web site at
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Editor's soapbox

Having survived a season of pandemic influenza exercises and now deeply committed to arranging a volcanic eruption in Auckland next March I look forward to lying on the beach these next few weeks and contemplating black swan events.



Many of you will be familiar with Nassim Nicholas Taleb's definition of a black swan event. That is something that has a large impact and is hard to predict because it has not happened often in our recent past.

Black swan comes from the old western concept that all swans were white, therefore a black swan was an impossibility. That is, until Europeans landed in Australia and found black swans everywhere.

Throughout the year we have planned, practiced and paraded and are now far more accomplished at dealing with any white swan event that may occur.

The best news is that as we have done so, we have looked to adopt an all hazard approach so the concepts we have designed will be suitable for whatever black or white swan event lands on our lake or river.

For those taking time out to enjoy their vacation of choice, enjoy your break and keep your eye out for black swans.

Bruce Parkes

Up coming Events

11 - 15 February 2008

Joint Centre for Disaster Research Emergency Management Summer Institute

Massey University Campus, Wellington

Cost \$200 + GST per day

Each day is a separate module

More information from

www.gns.cri.nz

27 - 28 February 2008

Emergency Management and Business Continuity Conferences

Duxton Hotel, Wellington

Cost \$3195 + GST

Conferences can be booked separately

More information from

www.conferenz.co.nz

27 - 28 March 2008

6th Annual Bird Flu Summit

Bali, Indonesia

Cost US\$1995

More information from

www.new-fields.com/birdflu6

New Software to aid early detection of Infectious Disease Outbreaks

A newly released software program will let health authorities at the site of an infectious disease outbreak quickly analyze data, speeding the detection of new cases and the implementation of effective interventions. The program, called TranStat, was developed by a team of epidemiologists and computer scientists from the Models of Infectious Disease Agent Study (MIDAS), an international program supported by the US National Institutes of Health (NIH) to build computational models for studying disease spread.

Available for free and downloadable at www.midasmmodels.org TranStat can be used by public health officials to systematically enter and store infectious disease data. These data include details about the infected individuals, such as their sex, age, and onset of symptoms; their close contacts; and any interventions they might have received. The program also prompts the field personnel to enter details about exposed but uninfected individuals. The system does not collect names or other personally identifying information.

The computer program uses this information to statistically determine the probability that people contracted the disease from each other, a driving factor in the spread of infections. TranStat also estimates in real time the average number of people an individual could infect and the rate at which that infection occurs in a particular setting. This information can help health officials develop and swiftly implement strategies that thwart further spread while they conduct additional studies.

Ira Longini, Ph.D., a biostatistician at the Fred Hutchinson Cancer Research Center and the University of Washington in Seattle, directed the research behind TranStat. He and his research team have used the underlying methods and software to determine that the H5N1 avian flu virus probably spread between members of an extended family in Indonesia in 2006. According to the results published in the September 2007 issue of "Emerging Infectious Diseases", the transmission was not sustained.

"The faster we learn about emerging infectious diseases and their characteristics, the quicker we can contain and mitigate them," said Longini. #