

News bites

South Africa

SA can handle swine flu: Hogan

Southern African countries have put a response plan in place to deal with possible swine flu cases, Health Minister Barbara Hogan said in late April on her return from a meeting of Southern African Development Community (SADC) health ministers.

She said one of the items on the agenda was the supply of antiviral medicine in the region. 'That was one item in which we have set up a technical task team and they are, through the World Health Organization (WHO), accessing additional supplies for the whole region,' said Hogan. South Africa had enough medicine to deal with an outbreak, she added.

Hogan said South Africa had 'fortunately, or unfortunately' good experience in dealing with outbreaks, referring to the recent cholera outbreak. As a result, national and provincial response teams were already in place. 'We've activated all those response teams at the weekend ... we've been through this before,' said Hogan. She said two suspected cases, neither confirmed, had been reported in South Africa and that there was no need to panic. 'We don't have a case yet in South Africa where people are being infected by pigs. I'm saying to people, be sensible, but if you are worried, contact a health official. Don't travel if you don't have to,' she added. If a South African fell sick in another country, he or she should immediately report to the health authorities there, said Hogan.

WHO raised its flu alert on 22 April, signalling a swine flu pandemic as 'imminent', as at least nine countries had confirmed cases and another 20 countries reported suspected cases. 'Obviously, we've got to be on high alert and monitor the situation in South Africa. We are on high alert and we are respecting everything the WHO is saying,' said Hogan.

AIDS: ANC 'accepts responsibility'

The ANC accepts 'collective responsibility' for the policies and programmes of past administrations since 1994, it said on 27 April.

The ruling party was reacting to a report in *The Times* that the party intended to apologise to the nation for former president Thabo Mbeki's policy on HIV/AIDS which was blamed for the death of thousands. 'It

accepts collective responsibility for both the achievements and shortcomings of successive ANC administrations since 1994,' spokesperson Jessie Duarte said in a statement which noted the media reports but did not say whether an apology could be expected.

The party intended prioritising the implementation of the National Strategic Plan 2007 - 2011 on HIV and AIDS. *The Times* report said there were discussions on a proposal within the ANC alliance about the need for MPs who served under Mbeki to apologise for not publicly questioning his denialist views on HIV and AIDS. 'We owe it to the nation. We, as MPs, were there and we failed to rise up,' the paper said, quoting an ANC MP who it did not name. The proposal would see an ANC parliamentary *ad hoc* committee, composed of MPs, drawing up the apology to the nation. The party would work to expand access to treatment, care and support to 80% of all HIV-positive people and their families, Duarte said.

'As the ANC's 2009 manifesto says, the ANC will work to reduce the rate of new HIV infections by half by 2011 through an aggressive prevention campaign.'

Africa

Africa must make own AIDS drugs

Africa must manufacture its own generic drugs if it is to fight HIV/AIDS and ensure the financial crisis does not stop patients from getting treatment, the new head of the UN's AIDS agency said in April this year in Addis Ababa. 'We should facilitate a discussion around how we can build a business case for producing generic drugs in Africa so that it can increase coverage but can, at the same time, be a profitable business,' Executive Director of UNAIDS, Michel Sidibé, said.

South Africa is the only African country that makes its own HIV/AIDS drugs. 'It's important politically, it's important economically, it's important for the integration of Africa in the global market,' Sidibé told reporters during a trip to the Ethiopian capital Addis Ababa.

He said local production needs to happen quickly as the majority of infected Africans have no access to treatment. The 57-year-old Malian is the first African to hold the post of UNAIDS chief. Sidibé said the priority of his term would be ensuring

universal access to medical treatment for all those infected with the disease worldwide. But he expressed concern that the global financial crisis might hamper his efforts. 'Governments need to start anticipating minimum spending on social services so we don't have a breakdown in our respective systems,' he said. 'My worry about the crisis is that if we are not careful we could face a breakdown in our caring society.'

An estimated 33 million people globally are infected with the HI virus that causes AIDS, and most of them live in Africa and other developing countries.

International

Possible diabetes breakthrough

Australian doctors believe they have found the key to eradicating the type of diabetes that obliges sufferers to regulate their blood glucose levels every day of their lives. 'We're really excited about this because there are no treatments for type 1 diabetes,' Garvan Institute researcher Shane Grey told the *Sydney Morning Herald*.

'The only therapy we have is daily insulin injections, and they don't regulate glucose levels anywhere near as effectively as the body does itself,' Grey said. 'Most diabetics have blood sugar levels which are usually too high or too low, and over a period of time, this damages vital organs.'

Type 1 diabetes can bring on heart disease, strokes, kidney failure, blindness and peripheral vascular disease. The genetic fault is present from birth but might not develop until adulthood. Without daily insulin injections, diabetics can lapse into a potentially fatal coma.

Grey and other researchers at the Sydney institute found a compound that had already been tested in humans with other auto-immune diseases that could block the cells that trigger type 1 diabetes. 'All immune cells talk to each other with various hormones, ... and we've found this drug is an inhibitor of one of those hormones,' Grey said. 'We've hit the nerve centre of the emerging clinical disease.'

The therapy had a 100% success rate in the mice used in laboratory trials, Grey said. 'They all received 100% lifelong protection.' In their research, to be published in the journal *Diabetes*, the scientists injected the compound over 6 weeks into mice that had a 70 - 90% susceptibility of getting the disease.

Grey foreshadowed that those predisposed to type 1 diabetes (people with an affected parent or sibling) would receive vaccinations over a 4-week period that should offer immunity. 'Even if it delays the onset of the disease by 10 years, it's still an amazing achievement,' he said.

Glow-in-the-dark puppies created

South Korean scientists say they have created dogs that glow red by using a cloning technique that opens the way for research into human diseases.

The four cloned beagles known as Ruppy – Ruby Puppy – contain a fluorescent protein that makes them glow red under ultraviolet light. Even in daylight, their skin and claws appear pink. Scientists said the creation of the glowing pups shows it will be possible to implant genes related to human diseases into dogs for research purposes.

'They are the world's first transgenic dogs,' Professor Lee Byeong-Chun, who leads the Seoul National University (SNU) team, told AFP. 'This means we'll be able to switch genes in dogs for genes related to human diseases such as Parkinson's disease for research,' he said, adding that dogs suffer from 224 illnesses that also afflict humans.

The team created the beagles by infecting dog fibroblast cells with a virus that inserted the fluorescent gene into the cell nucleus. The nucleus was then transferred to another dog's egg cell whose nucleus had been removed. The cloned embryo was implanted in a surrogate mother. Six female cloned beagles, all with a gene producing a fluorescent protein, were born in December 2007. Two died and four survived. The experiment was only publicised this month.

'Fluorescent cats, mice and monkeys have been produced, but dogs remain one of the most difficult animals for transgenic engineering while they have many diseases similar to humans,' said Park Se-Pill, a cloning expert. 'This is an important achievement that paves the way for gene-targeting in dogs,' Park said.

In December 2007 other South Korean scientists claimed a world first by manipulating a fluorescent protein gene to clone glowing cats. Lee's team earlier produced the world's first cloned dog, Snuppy. Lee was an aide to Hwang Woo-Suk, who was hailed as a national hero until an inquiry ruled that some of Hwang's work on cloning embryonic

human stem cells was fake. However, Lee's work in creating Snuppy (Seoul National University puppy) has been verified by the university and other authorities.

Camphor poisoning in children, warn doctors

Doctors are warning parents to avoid using imported camphor products after poisonings in several New York City children. The alert is in a report in the May issue of the journal *Pediatrics* about three toddlers who suffered seizures in January 2008.

They had either eaten camphor products, inhaled camphor or had it rubbed on them as a cold remedy. The products included folk remedies, pesticides and air fresheners. The children were treated at a New York hospital and recovered. Several other children developed similar symptoms but authorities were unable to confirm if camphor was the culprit, said Dr Hnin Khine. She is an emergency room physician at Children's Hospital at Montefiore who treated the three youngsters described in *Pediatrics*. The products are made from the wood of evergreen camphor trees that are native to Japan and China, or from synthetics.

Camphor has a strong odour and is used in mothballs. Vicks VapoRub also contains camphor, in low, government-approved doses, although the label advises against use in children younger than two. The products implicated in the poisonings were imported white cubes or tablets and contained doses higher than US regulations allow, Khine said. They're widely available in ethnic pharmacies and discount stores, sometimes labelled 'alcanfor', the Spanish word for camphor. Camphor is easily absorbed by the skin and nose. Young children are especially vulnerable. Poisoning symptoms can include stomach aches, nausea, vomiting and irritability.

Doctors embrace modern technology

More than 100 000 US doctors have traded in their prescription pads and begun to prescribe drugs electronically as national incentives for e-prescribing start to make an impact, according to a report released in April in Chicago. An estimated 17% of office-based prescribers now send prescriptions electronically to pharmacies, according to the report by Surescripts, which operates the largest US electronic prescribing network. That

compared with 12% at the end of 2008 and 6% at the end of 2007, Surescripts said. 'In the past two years, the United States has gone from 19 000 to 103 000 prescribers routing prescriptions electronically,' Harry Totonis, president and chief executive of Surescripts, said in a statement.

President Barack Obama has made using information technology a central plank in his plan to cut costs out of a US health care system that consistently ranks lower in quality measures than other rich countries. The economic stimulus bill signed by Congress in February included about \$19 billion to promote the use of health care information technology, including e-prescribing.

Totonis said the growth this year shows 'clear evidence that the steps taken by policymakers, prescribers, payers, pharmacies and others are having a positive impact'. As of 2008, there were 74 000 active prescribers using the Surescripts network. But that number jumped to 103 000 in the first 3 months of 2009, buoyed by new Medicare incentives that kicked in on 1 January for doctors that use e-prescribing. Many more doctors are projected to switch to electronic prescriptions, which promise to prevent medical errors caused by poor handwriting and harmful drug interactions. Those who do not may suffer penalties starting in 2012 under the new rules for Medicare, the federal health insurance programme covering people aged 65 and over and for the disabled.

A report released last month by the Pharmaceutical Care Management Association projected that as many as 75% of doctors will move to e-prescribing within 5 years. PCMA projected e-prescribing would save the US government \$22 billion over the next decade, more than covering the \$19 billion in spending in the stimulus bill. And while Surescripts said the number of prescriptions routed electronically more than doubled to 68 million last year, that still represents a small fraction of the 4.4 billion prescriptions written annually in the USA.

More electronic prescriptions were routed in 2008 than in 2006 and 2007 combined. And many more community pharmacies are able to handle electronic prescriptions, with about 76% of community pharmacies and six of the largest mail-order pharmacies wired for prescription routing by the end of 2008.

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