Children in Turkey die after contracting avian flu

Jane Parry *Hong Kong*

The World Health Organization has sent a team of experts to eastern Turkey to investigate the outbreak of H5N1 avian flu there, after three children in the area died from the infection.

The confirmed cases have been attributed to close contact with infected poultry, but much remains unknown about the situation in Turkey, said Maria Cheng, a WHO spokeswoman in Geneva. "We have too little information. We don't know if it's the same strain of the virus that is circulating in Asia," she said.

The Turkish authorities reported to WHO that approximately 38 people, mostly children from Dogubeyazit in Agri province, are being monitored and evaluated for possible H5N1 infection at a hospital in the city of Van. "We know that the authorities have a lot of people under surveillance, but we don't have a clear idea of how they are classifying the cases—for example, whether they are people who were admit-

ted to hospital with fever and a cough, or whether they have been in contact with poultry. If so, we don't have enough epidemiological information to know how they were infected," said Ms Cheng.

As of Monday 9 January, the Turkish authorities had announced that there were 14 confirmed cases of human infection: six from Agri and one from Van in eastern Turkey, three in the capital Ankara, and four in other parts of the country.

Turkey's first two confirmed fatal cases in humans were in a 14 year old boy, who died on 1 January, and his 15 year old sister, who died on 5 January, in a rural area near Dogubeyazit.

Another sibling, a 12 year old girl, also died of similar symptoms on 6 January, but initial tests for H5N1 were negative and further tests are under way.

In terms of animal husbandry practices, eastern Turkey has similarities with countries in other

parts of Asia that have had outbreaks of avian flu, with people living close to their small backyard flocks.

WHO has praised the Turkish Ministry of Health's response to the situation. Marc Danzon, WHO's regional director for Europe, said: "My contacts with the Turkish health authorities have convinced me that all necessary measures are being taken to

bring the whole situation under control."

The deaths in Turkey have been the first to occur in humans outside eastern Asia, where the disease has killed 72 and infected 142 people since 2003. WHO, together with the Japanese government, is hosting a meeting in Tokyo on 12 and 13 January of 14 Asian countries at risk of further outbreaks of H5N1 avian flu. □

An Imam prepares the body of a 12 year old girl for burial after she died from suspected avian flu

Korean cloning studies were fakes,

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The Korean stem cell research team led by Hwang Woo-suk faked the results of two landmark papers published in *Science* in 2004 and 2005, an investigation committee at Seoul National University has found. However, the committee found that the team did produce the world's first cloned dog, Snuppy.

The committee initially reported on 23 December that the data in Professor Hwang's landmark paper on embryonic stem cell lines derived from somatic cell nuclear transfer (*Science* 2005;308:1777-83) was entirely fabricated, that only two

of the reported 11 embryonic stem lines existed, and that they were derived from in vitro fertilised eggs and were not a result of somatic cell nuclear transfer.

The committee's final report, published on Tuesday, added: "The stem cells that Professor Hwang claims to have created subsequent to the 2005 publication also turned out to have originated from frozen fertilised eggs and not from cloned blastocysts." Professor Hwang resigned from his post as professor of the college of veterinary medicine at Seoul National University on the day the interim report came out.

The investigating committee expanded the scope of its work to include two other papers, one on embryonic stem cell lines derived from a cloned blastocyst, which was published in *Science* (2004;303:1669-74), and one on the cloning of an Afghan hound nicknamed Snuppy, published in *Nature* (2005;436:641). "Hwang's team did not have the data for the 2004 paper but fabricated it," Chung Myung-hee, the head of the investigating panel, said.

The report also concluded that in each of the *Science* articles Professor Hwang lied about the number of eggs used. It stated: "The exact counting for the number of eggs used for each of the *Science* articles is impossible as the initiation date for each project is uncertain and labora-

tory recording is not thorough. However, while the 2005 article claims to have used 185 eggs, laboratory notes indicated that at least 273 eggs had been used from 17 September 2004 to 7 February 2005."

The committee also said that Professor Hwang had lied when he said he had no knowledge of his staff donating eggs, as he had accompanied a graduate student to MizMedi Hospital in Seoul where she underwent egg aspiration in March 2003.

However, the committee did conclude that DNA fingerprinting analyses of the cloned dog Snuppy (*BMJ* 2005;331:366) confirmed that it was cloned by Professor Hwang and his team. □

The investigating committee's report is available at www.snu.ac.kr.