Human death from bird flu stirs alarm Hong Kong case recalls '97 outbreak M.A.J. MCKENNA 640 words 21 February 2003 The Atlanta Journal-Constitution Copyright (c) 2003 The Atlanta Journal-Constitution, All Rights Reserved

A strain of flu that has jumped from birds to humans has killed a man and sickened his son in Hong Kong, alarming health authorities who fear such jumps signal the emergence of a potentially deadly virus.

In Atlanta, the Centers for Disease Control and Prevention is monitoring the situation intently.

"We are in close communication with the World Health Organization," said Dr. Keiji Fukuda of the CDC's flu branch. "If there is an investigation, the CDC will offer all the help it can provide."

The illnesses are clustered in a family from Hong Kong who went to China's Fujian province in late January to celebrate the new year with relatives. While there, an 8-year-old daughter became ill and died in a local hospital.

After other members of the family became ill, they returned to Hong Kong, where the father, mother, son, a second daughter and a grandfather were admitted to a hospital. The father died Sunday. The 9-year-old boy and his 10-year-old sister remain hospitalized. Research into whether the other family members have the same strain of the flu virus as the father and son is continuing.

According to the WHO, the boy and the father were infected with a virus known as influenza A H5N1.

That strain of virus is common in ducks and causes high rates of death in chickens. It had never been seen in humans, though, until the fall of 1997, when it was diagnosed in a Hong Kong 3-year-old.

The virus ultimately sickened 18 people and killed six, an unusually high death rate for flu.

It caused so much alarm that health authorities decided to slaughter all 1.4 million chickens in Hong Kong in hopes of breaking the chain of transmission between birds and people.

The virus discovered this week in Hong Kong is not exactly the same as the 1997 strain, Fukuda said.

"It appears these viruses are somewhat different, but I don't think enough work has been done yet to know how similar or different they are," he said. "There will be a lot of lab work over the next few weeks."

The Hong Kong cases are causing tension because they hint at a pattern that is familiar to flu scientists.

Flu viruses change slightly every year. Every few decades, though, they mutate dramatically, producing a significantly different strain to which humans are more vulnerable.

Major mutations are believed to have caused the global flu pandemics of the 19th and 20th centuries, including the 1918 "Spanish" flu epidemic that killed 675,000 Americans and up to 40 million around the world.

A virus that jumped between species, from animals to humans, would produce a significant mutation. And flu scientists, including those at the CDC, have warned for several years that the world is overdue for another pandemic. They tend to occur in 20-to 30-year cycles.

Health authorities will be studying the new H5N1 strain for any indication that it can be transmitted from person to person. The 1997 virus could not be passed between people; all 18 cases, scientists said then, came from individual exposures of humans to infected birds. But there were fears at the time that, if the virus cross-bred with a milder flu that did move easily from person to person, it could produce a dangerous strain that would move rapidly around the world.

In response to the current Hong Kong cases, the WHO has alerted its global flu surveillance network, a group of labs, including the CDC, that monitors and analyzes new strains.

"Whenever there is a novel influenza A virus identified that can infect people, then we are automatically quite concerned," Fukuda said.