Constitution 0 Edition Thursday, 8/21/1997 FOREIGN NEWS A12 CDC to probe deadly flu strain Virus common to birds kills boy in China M.A.J. McKenna / STAFF WRITER

A 3-year-old child in Hong Kong has died after being infected with an influenza virus that never had been seen in humans. Mindful of flu's potential for evolving into world-wide epidemics, the Atlanta-based Centers for Disease Control and Prevention has sent a team to investigate.

Chinese health authorities announced Wednesday morning that the boy contracted a strain of flu, H5N1, that usually infects birds and has recently killed 4,500 chickens on a Hong Kong farm. The child died in May in a Hong Kong hospital, but the virus was only identified last week by CDC and European laboratories.

"The important task for us in the next four to eight weeks is to trace the source of the disease, " said Dr. Margaret Chan, Hong Kong's director of health. "If the virus has gone through major change ... it may increase the potential for a big epidemic."

CDC's investigators left for Hong Kong Tuesday. Nancy Arden, an epidemiologist with the agency's National Center for Infectious Diseases, said little is known so far about the new virus. For instance, she said, it isn't clear whether the flu strain itself, or other medical complications, caused the child's death; knowing that will help determine how dangerous the virus is.

"The main objective is to try to determine if there is any evidence that this strain is being transmitted among the population, " Arden said. No other cases of flu from this virus have been identified, she said, adding that a Hong Kong lab affiliated with the World Health Organization has analyzed more than 4,000 samples of local flu cases without finding a match for the virus found in the child.

"That is a pretty good indication that it either hasn't spread at all, or that if it has spread, the impact has been minor, " she said.

The Hong Kong case is of particular concern because avian flus so seldom cross directly into humans. The more common path is from birds to pigs, which, because they can contract both bird and human viruses, act as a sort of genetic mixer for new viruses.

"It is just not a common occurrence for a human to be infected with avian virus, " Arden said. "Theoretically, it could be the start of a new strain in humans."

That is worrisome because flu, considered an underappreciated disease by virologists, has the potential to be lethal on a global scale.

There have been three flu pandemics this century, in 1968, 1957 and 1918. The 1968 epidemic also began in Hong Kong; the 1918 or "Spanish" flu, which began in the U.S., killed more than 20 million people worldwide.

"This may be just a blip, but it is the kind of thing that has to be watched for, " said Dr. Robert Webster, a prominent flu virologist in Memphis who this week published a scientific paper examining the likelihood of another flu pandemic.