Avian Influenza Planning: Decision-Making Matrices for Epidemiology and Surveillance Activities

S. Ehlers, S. Huang, P. Shiono, D. Portnoy
San Francisco Department of Public Health, San Francisco, CA

Introduction

Local health departments are the front-line decision-makers and implementers when controlling the spread of disease through primary surveillance, case investigation, laboratory analysis or identification of disease source.

Hypothetical Situation

Date: Friday, March 23rd, 2007
Patient Description:
• Resident of San Francisco
• 29 year old woman

Epidemiological Risk Factors:
• Traveled to Asia from end of February until a week ago; traveled in areas with H5N1 activity in birds and humans
• Two children, girl age 3 years and boy age 5 years, traveled with her; husband did not travel
• Patient had no contact with animals
• Stayed with cousin for a week
• Cousin is a suspect case of avian influenza

Reference Laboratory Testing
• San Francisco laboratory results: positive influenza A, not H1 or H3
• State laboratory results: positive H5N1

WHO Pandemic Phase: Phase 3
Situation in US: no human or animal cases

What surveillance and investigation activities should be activated?