



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.

The San Francisco Department of Public Health has created a decision-making framework for the major epidemiology and surveillance strategies and actions that would be pursued in different phases of pandemic flu (including inter-pandemic, pandemic alert, and pandemic periods).

Hypothetical Situation

!!THIS IS A 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?

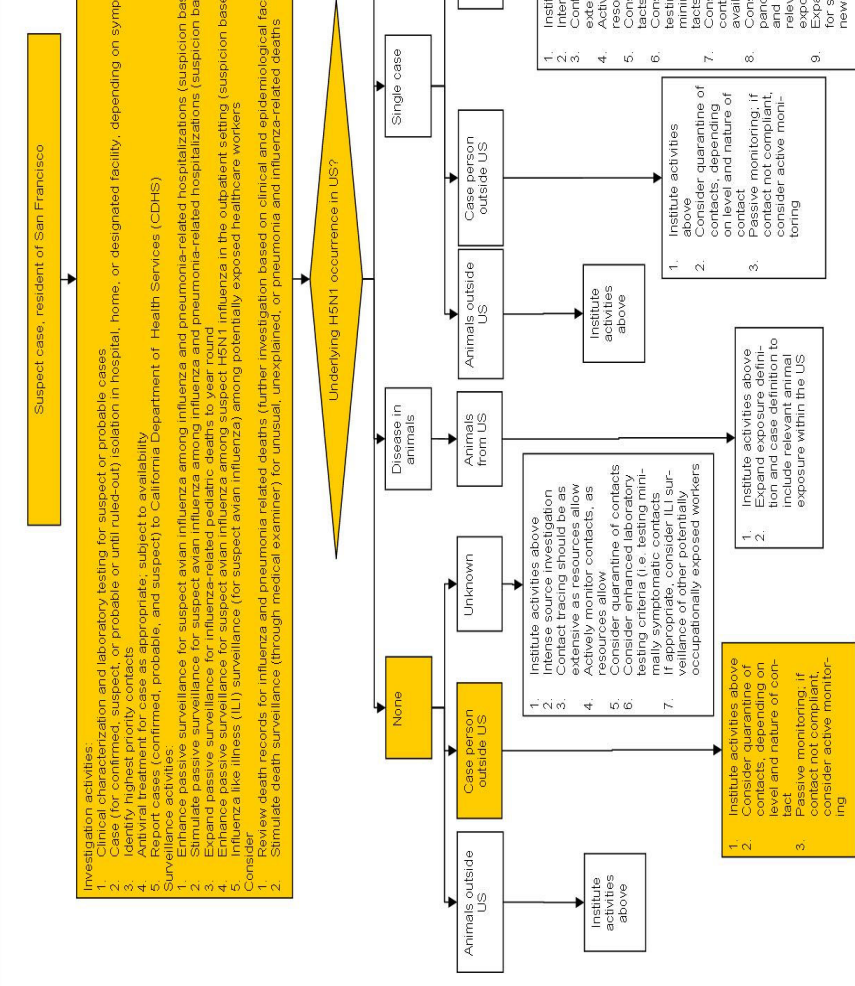


Figure 1. San Francisco Department of Public Health epidemiology and surveillance activity matrices during World Health Organization Pandemic Alert Phase 3. Yellow shading follows the hypothetical situation given at the left.