Appendix 2: Case Definition for Influenza A/H5N1 in Humans (WHO)

The case definition for influenza A/H5N1 used in Ireland is the case definition developed by the World Health Organisation and issued in August 2006. It is notable that this case definition applies to the current phase of pandemic alert (phase 3) and may change as new information about the disease or its epidemiology becomes available.

This case definition is defined by a set of clinical, epidemiological and microbiological criteria and is classified as Person under Investigation (PUI), suspected case, probable case and confirmed case. These definitions are outlined as follows:

Person Under Investigation

A person whom public health authorities have decided to investigate for possible influenza A/H5N1 infection.

Suspected case of Influenza A/H5N1

A person presenting with unexplained acute lower respiratory illness with fever (>38 °C) and cough, shortness of breath or difficulty breathing.

AND

One or more of the following exposures in the 7 days prior to symptom onset:

a. Close contact (within 1 metre /3 feet) with a person (e.g. caring for, speaking with, or touching) who is a suspected, probable, or confirmed H5N1 case

b. Exposure (e.g. handling, slaughtering, defeathering, butchering, preparation for consumption) to poultry or wild birds or their remains or to environments contaminated by their faeces in an area where H5N1 infections in animals or humans have been suspected or confirmed in the last month

c. Consumption of raw or undercooked poultry products in an area where H5N1 infections in animals or humans have been suspected or confirmed in the last month

d. Close contact with a confirmed H5N1 infected animal other than poultry or wild birds (e.g. cat or pig)

e. Handling samples (animal or human) suspected of containing H5N1 virus in a laboratory or other setting.

Probable case of Influenza A/H5N1 Probable definition 1: A person meeting the criteria for a suspected case

AND

One of the following additional criteria:

a. Infiltrates or evidence of an acute pneumonia on chest radiograph plus evidence of respiratory failure (hypoxemia, severe tachypnoea)

OR

b. Positive laboratory confirmation of an influenza A infection but insufficient laboratory evidence for H5N1 infection.

Probable definition 2:

A person dying of an unexplained acute respiratory illness who is considered to be epidemiologically linked by time, place, and exposure to a probable or confirmed H5N1 case.

Confirmed Case of Influenza A/H5N1

A person meeting the criteria for a suspected or probable case

AND

One of the following positive results conducted in a national, regional or international influenza laboratory whose H5N1 test results are accepted by WHO as confirmatory:

- a. Isolation of an H5N1 virus
- b. Positive H5 PCR results from tests using two different PCR targets,
 e.g. primers specific for influenza A and H5 HA
- c. A fourfold or greater rise in neutralization antibody titre for H5N1 based on testing of an acute serum specimen (collected 7 days or less after symptom onset) and a convalescent serum specimen. The convalescent neutralising antibody titre must also be 1:80 or higher;
- d. A microneutralisation antibody titre for H5N1 of 1:80 or greater in a single serum specimen collected at day 14 or later after symptom onset and a positive result using a different serological assay, for example, a horse red blood cell haemagglutination inhibition titre of 1:160 or greater or an H5-specific western blot positive result.