
Part F Healthcare 2007 Pandemic Flu

PART F. INFECTION CONTROL AND PREPAREDNESS IN HEALTHCARE FACILITIES

NC Statewide Program for Infection Control and Epidemiology

A. Introduction

Influenza is a common cause of respiratory illness, requiring health-care visits and hospitalization. During the influenza season, outbreaks of healthcare associated influenza affect both patients and personnel in chronic care facilities and hospitals. The purpose of this chapter is to help healthcare facilities prepare for the presence of a novel or pandemic influenza virus in their facility.

B. Background

1. Incubation Period

The incubation period for human influenza virus is short, usually 1 to 3 days (range 1 to 7 days). The incubation period of novel influenza viruses could be longer than for human influenza viruses. For example, the incubation period for the avian influenza A (H5N1) virus has been shown to be approximately 2 to 4 days, with ranges of up to 8 days.

2. Route of Transmission

Transmission of human influenza is predominately by large respiratory droplets (>5 microns nuclei) and to a lesser degree by the fine droplet nuclei that are expelled from the respiratory tract during coughing, sneezing and even talking. Transmission can also occur through direct contact with contaminated respiratory secretions or surfaces through fomites followed by the touching of one's nose or mouth. In previous reports of influenza A (H5N1) infections in humans, there has been no evidence to suggest airborne transmission of the disease in healthcare settings when only standard and contact precautions were used. Negative pressure isolation is not required for routine patient care and individuals with pandemic influenza.

3. Diagnostic Criteria

In the event of a pandemic, updates of clinical presentations, case definitions, and algorithms will be posted on the CDC influenza website (<http://www.cdc.gov/flu/>) and the WHO website (<http://www.who.int/en/>). Current surveillance criteria and epidemiological risk factors are summarized in Appendix B-1.

4. Specimen Type and Collection

The State Laboratory of Public Health (SLPH) has the capability to test for certain novel influenza viruses (H5 and H7). Instructions for specimen collection and transport can be found in Appendix H-1. Following standard precautions, all specimens should be regarded as potentially infectious and staff that collect or transport clinical specimens should adhere rigorously to protective measures in order to minimize exposure. The request form accompanying the specimen should be clearly labeled as "novel influenza virus" (e.g. influenza A H5 or H7 if one of these subtypes is suspected). The hospital laboratory as well as the SLPH should be notified by phone when the specimen is being transported.

5. Cleaning and disinfection

Environmental cleaning and disinfection for pandemic influenza follow the same general principles used daily in healthcare settings. The influenza virus is inactivated by the standard EPA approved disinfectants (e.g., 1:10 dilution of bleach in water) commonly used in hospitals.