

MH 34:85

21 July 2009

All Registered Medical Practitioners  
Licensees of Medical Clinics

**MOH CIRCULAR 87/2009**

**UPDATES ON THE MANAGEMENT OF INFLUENZA A (H1N1-2009): SEVERE CASES THAT REQUIRED INTENSIVE MEDICAL CARE**

1. The latest data from the Ministry's influenza bio-surveillance programme shows that the prevalence of Influenza A (H1N1-2009) is 53%, indicating that 1 in 2 patients with influenza-like illness (ILI) in the community is positive for Influenza A (H1N1-2009).

**ICU ADMISSION UPDATES**

2. From the last update on 18 July 09, 4 new confirmed cases of Influenza A (H1N1-2009) have been reported to require intensive medical care as of 20 July 09. This brings the total to 10 confirmed cases of Influenza A (H1N1-2009) having needed admission to the intensive care unit (ICU) - 1 case has been discharged, 2 cases have been transferred to the High Dependency (HD) ward, 6 cases are still in the ICU, and 1 case has died. The details of the 4 new cases are at **Annex A** for your information.

**MANAGEMENT OF HIGH RISK PATIENTS WITH INFLUENZA-LIKE ILLNESS**

3. Antiviral treatment can potentially reduce morbidity and mortality. Medical practitioners are reminded that antiviral treatment is recommended for high-risk patients with ILI when the prevalence of Influenza A (H1N1-2009) in the community is significant (please see **Annex B** for list of high risk patients). In the current mitigation phase, doctors should offer anti-virals to their high-risk patients with ILI. Patients should be advised to seek medical assistance immediately should their condition worsen.


4. Laboratory testing for Influenza A (H1N1-2009) under prevailing prevalence is NOT necessary before commencement of treatment. Testing to confirm the diagnosis of Influenza A (H1N1-2009) infection is only required in patients who are seriously ill, or in high risk patients eg children less than 1 year old or those who are pregnant, for initiation of treatment or continuation of treatment and/or in situations where it will be of significant public health importance. When testing is deemed necessary, in order to ensure timely reporting of laboratory test results, attending doctors should label the test samples as 'urgent' and inform the diagnostic laboratory to expedite the processing of these samples. Appropriate courier service arrangements should also be made to ensure that the samples are transported to the diagnostic laboratory promptly.

## **NOTIFICATION INSTRUCTIONS**

5. Medical practitioners are required to notify (i) clinically suspected cases who are seriously ill and who need to be referred to hospitals and (ii) laboratory confirmed Influenza A (H1N1-2009) cases within 24 hours of referral or diagnosis, respectively. Medical practitioners are also required to submit the Notification of Death from Influenza A (H1N1-2009) within 24 hours of death (for confirmed cases, and for deaths in which influenza A (H1N1-2009) is strongly suspected and cannot be excluded). Notifications should be done via the Communicable Diseases Live & Enhanced Surveillance System (CDLENS) at <http://www.cdLens.moh.gov.sg> or by fax to 62215538. The MD131 can also be downloaded from the MOH website at <http://www.moh.gov.sg>.

## **FOR DISSEMINATION TO RELEVANT STAFF**

6. Please bring this circular to the attention of relevant staff in your institution. For further clarifications on this circular, please email [moh\\_info@moh.gov.sg](mailto:moh_info@moh.gov.sg).



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**NEWLY CONFIRMED CASES OF INFLUENZA A (H1N1-2009) WHO REQUIRE INTENSIVE MEDICAL CARE**

Case 1

The case is a 34-year-old Chinese woman with a medical history of acute myeloid leukaemia (AML) who presented at the hospital emergency department (ED) with a 2-day history of cough. The patient was found to be hypoxic, and was admitted into the haematology ward. Swabs taken tested positive for influenza A (H1N1-2009) the next day, and treatment with Tamiflu® was started. The patient's hypoxia subsequently worsened, and she was transferred to the Intensive Care Unit (ICU) on the third day of admission. She was not intubated, and is currently under close observation.

Case 2

The case is a 55-year-old bed-bound Malay man with a medical history of amyotrophic lateral sclerosis and dysphagia, who presented at the hospital ED with a 2-day history of fever and increasing shortness of breath. Chest x-ray showed pneumonia in the right lung. He experienced pulseless electrical activity (PEA) at the ED, and was intubated and admitted directly to the ICU. Swabs taken tested positive for influenza A (H1N1-2009) the next day, and treatment with Tamiflu® was started. The patient is currently in critical condition.

Case 3

The case is a 42-year-old woman with a medical history of hypertension, thyroid disease, gastroesophageal reflux disease (GERD) and impaired glucose tolerance. She presented to the hospital ED with a 5-day history of fever, cough, sore throat and shortness of breath, and was admitted into the ICU. Chest x-ray showed bilateral lower lobe pneumonia, and swabs taken tested positive for influenza A (H1N1-2009). The patient was diagnosed with acute respiratory distress syndrome (ARDS) and pneumonia secondary to Influenza A (H1N1-2009). She was intubated, and is currently in critical condition.

Case 4

The case is a 46-year-old lady with no co-morbidities who presented to the hospital ED with a 6 day history of fever, cough, runny nose and 2 day history of vomiting and diarrhoea. She also complained of chest tightness and palpitations in ED. She was admitted and later transferred to ICU for closer monitoring when her oxygen saturation was noted to be low. The swab result was positive for Influenza A (H1N1-2009). The current working diagnosis is lower respiratory tract infection secondary to Influenza A (H1N1-2009). She is currently not on a ventilator and is stable.

**PERSONS AT INCREASED RISK FOR INFLUENZA-RELATED COMPLICATIONS**

1. Persons aged 65 years and older
2. Children < 5 years
3. Adults and children who have chronic pulmonary or heart disease
4. Adults and children who have required regular medical follow-up or hospitalisation during the preceding year because of chronic metabolic diseases (including diabetes mellitus), renal dysfunction, haemoglobinopathies or immunosuppression (including immunosuppression caused by medications or by the Human Immunodeficiency Virus)
5. Children and teenagers aged 6 months to 18 years who are receiving long-term aspirin therapy and therefore might be at risk for developing Reye syndrome after influenza infection
6. Pregnant women