



MINISTRY OF HEALTH
SINGAPORE

MH 34:85

18 July 2009

All Registered Medical Practitioners
Licensees of Healthcare Establishments

MOH CIRCULAR 85/2009
UPDATES ON THE MANAGEMENT OF INFLUENZA A (H1N1-2009): SEVERE
CASES THAT REQUIRED INTENSIVE MEDICAL CARE

1. Current data from the Ministry of Health's influenza bio-surveillance, shows that the prevalence of Influenza A (H1N1-2009) is now 53 % amongst patients with influenza-like illness in the community.

CASES THAT REQUIRED INTENSIVE MEDICAL CARE

2. As of 18 July 09, 6 confirmed cases of Influenza A (H1N1-2009) have been reported to require intensive medical care - 1 case has been discharged, 1 case has been transferred to the High Dependency (HD) ward, 3 cases are still in the ICU and are in stable condition, and 1 case died. The details of the cases are at Annex for your information.

LABORATORY TESTING AND MANAGEMENT OF HIGH RISK PATIENTS

3. Testing to confirm the diagnosis of Influenza A (H1N1-2009) infection is only required in patients where the result is necessary for clinical management and/or in situations where it will be of significant public health importance. When testing is deemed necessary (e.g. by specialists for their high risk patients), in order to ensure timely reporting of laboratory test results, especially for patients who are clinically unwell or who are at high risk of developing influenza-related complication, 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.



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4. Doctors should exercise clinical judgment in prescribing treatment on a case by case basis for patients, taking into account their respective risk profile and clinical presentation. This includes prescribing antiviral treatment before laboratory results are available for patients who have risk factors for influenza complications e.g. pregnancy, immunosuppression, diabetes, etc or who are very ill.

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.



A/PROF CHEW SUOK KAI
ACTING DIRECTOR OF MEDICAL SERVICES
MINISTRY OF HEALTH

CONFIRMED CASES OF INFLUENZA A (H1N1-2009) WHO REQUIRED INTENSIVE MEDICAL CARE

Case 1

1. The first case was a 63 year old Malay man with multiple co-morbidities, including coronary heart disease, hypertension and hyperlipidaemia who presented to the hospital Emergency Department (ED) with a 3-day history of cough and fever. He was isolated on admission. Chest x-ray revealed pneumonia which was complicated by pulmonary edema. The patient's condition deteriorated and he was intubated and transferred into the Intensive Care Unit (ICU). Laboratory testing was positive for influenza A (H1N1-2009). The patient has been discharged.

Case 2

2. The second case was a 51-year-old Chinese man with diabetes and hypertension. He presented to his GP with a 3-4 day history of fever and mild cough, and was given medication. His family subsequently noted that he appeared to be confused and his lips were purple. He was brought to the hospital ED, and was admitted to the ICU and intubated. Chest x-ray revealed bilateral pneumonia. Laboratory testing was positive for influenza A (H1N1-2009). The patient has been transferred to the High Dependency (HD) ward.

Case 3

3. The third case was a 44-year-old Chinese woman with multiple co-morbidities, including diabetes, hypertension, hyperlipidaemia, peripheral vascular disease, and a history of renal transplantation in 2006. The patient presented to the hospital ED with a 4-day history of fever and a 2-day history of vomiting and diarrhoea. She was admitted to an isolation ward upon admission, and subsequently transferred to the renal ward 1 day later. 8 days after admission, the patient developed hypoxia and collapsed. She was subsequently transferred to the ICU and intubated. Chest x-ray revealed consolidation in the right zone and both lower zones. She was tested to be positive for Influenza A (H1N1-2009). The patient is currently still in ICU, and is in stable condition.

Case 4

4. The fourth case was a 22-year-old Indian woman who was 24 weeks pregnant. She presented to her obstetrician with a 2-day history of fever and cough. A swab was taken, and she was treated symptomatically. The swab result was reported to be positive for Influenza A (H1N1-2009) 2 days later, and chest x-ray done showed signs of bilateral pneumonia. She was referred to KKH on the same day, and treated with Tamiflu®. The patient became hypoxic, and her oxygen saturation was suboptimal despite oxygen therapy. She was subsequently transferred to the ICU for closer monitoring. The patient has no underlying medical conditions. The patient is currently still in ICU, and is in stable condition.

Case 5

5. The fifth case is a 49-year-old Malay man with multiple co-morbidities, including diabetes, hypertension, and high cholesterol. The patient presented to the hospital ED with a 5-day history of cough and shortness of breath, and a 4-day history of fever. The patient was diagnosed to have pneumonia at the ED, and admitted directly to the ICU. He was intubated, and treated with Tamiflu®. Laboratory testing was positive for influenza A (H1N1-2009). The patient subsequently passed away on the third day of admission. The cause of death was acute myocardial infarction (AMI) contributed by severe pneumonia from underlying Influenza A (H1N1-2009) infection.

Case 6

6. The sixth is a 55-year-old Chinese man with a history of hypertension and ischemic heart disease. He presented to the hospital ED with a 3-day history of increasing shortness of breath and fever, and a 1-day history of diarrhoea. ECG done showed signs of acute myocardial infarction (AMI). Chest x-ray was normal. The patient had no recent travel history, but had contact with his daughter who had been coughing for duration of 2 weeks. A swab taken from him test positive for Influenza A (H1N1-2009). The patient was started on Tamiflu®, and admitted to the ICU for monitoring. His condition was stable, and he was not intubated.