

MH 34:85

29 April 2009

All Registered Medical Practitioners
All Licensees of Healthcare Establishments
Managers-in-charge of Clinical Laboratories

MOH CIRCULAR 27/2009

SWINE INFLUENZA:

(A) REVISED CASE DEFINITION

(B) INCLUSION TO THE LIST OF NOTIFIABLE DISEASES UNDER THE INFECTIOUS DISEASES ACT (IDA)

(C) RECOMMENDATIONS ON ANTIVIRAL TREATMENT

(A) REVISED CASE DEFINITIONS

1. The Ministry of Health has revised the case definitions of suspected, probable and confirmed cases of Swine Influenza A (H1N1) virus infection as follows:

a. A suspected case of Swine Influenza A (H1N1) virus infection is defined as an individual with an acute febrile respiratory illness (fever $>38^{\circ}\text{C}$)¹ with onset of symptoms:

- Within 7 days of travel history to affected areas², or;
- Within 7 days of close contact with a person who is a probable case or a confirmed case of Swine Influenza A (H1N1).

b. A probable case is defined as

- an individual with an acute febrile respiratory illness (fever $>38^{\circ}\text{C}$) with an influenza test that is positive for Influenza A but is **un-subtypeable** by reagents used to detect seasonal influenza virus, **OR**;
- an individual with a clinically compatible illness or who died of an unexplained acute respiratory illness who is considered to be epidemiologically linked to a probable or a confirmed case.

c. A confirmed case is defined as an individual with laboratory confirmed Swine Influenza A (H1N1) virus infection by one or more of the following tests:

- Real-time RT-PCR;
- Viral culture;
- Four-fold rise in Swine Influenza A (H1N1) virus specific neutralizing antibodies.

¹ Persons who may not manifest fever include those on dialysis or immunosuppressive medications.

² Please refer to MOH website for the latest list of affected areas: <http://www.moh.gov.sg>

(B) INCLUSION OF SWINE INFLUENZA TO THE LIST OF NOTIFIABLE DISEASES

2. Under Section 6(1) of the Infectious Diseases Act (IDA), every medical practitioner “who has reason to believe or suspect that any person attended or treated by him is suffering from an infectious disease or is a carrier of that disease shall notify the Director within the prescribed time and in such form or manner as the Director may require. Under Section 6(2) of the Infectious Diseases Act (IDA), every person in charge of a laboratory used for the diagnosis of disease who becomes aware of the existence of an infectious disease in the course of his work shall notify the Director within the prescribed time and in such form or manner as the Director may require.

3. The Ministry of Health has revised the list of legally notifiable infectious diseases to include Swine Influenza under Part 1 of the Schedule in the IDA with effect from 28 April 2009. Death notification (by medical practitioners only) is also required for Swine Influenza under Part 1 of the Schedule.

MANNER, FORM & PRESCRIBED TIME FOR NOTIFICATION

4. Notification of cases of Swine Influenza must be done within 24 hours of diagnosis & Notification of Death from Swine Influenza (for medical practitioners only) within 24 hours of death. This should be done preferably through the Communicable Diseases Live & Enhanced Surveillance System (CDLENS) at <http://www.cdLens.moh.gov.sg>. **The system will include Swine Influenza with effect from 1 May 2009.** Medical practitioners can access CD-LENS by using their MCR No. as ‘User Name’ and SMC-CME password as ‘password’. In the interim, Swine Influenza cases can be notified via fax to the Director, Communicable Diseases Division, Ministry of Health (Fax:62215528) using the revised MD131 form (enclosed). The revised MD 131 can also be downloaded from the MOH website at <http://www.moh.gov.sg> with effect from 30 April 2009.

5. The Ministry of Health should also be **notified immediately** of suspected cases. Please contact the Communicable Diseases Division at 98171463 (available 24 hours). MOH will inform the notifying doctor of the need for contact tracing and prophylaxis for close contacts of the case once the diagnosis has been established.

6. Any patient who meets the case definition in Paragraph 1 should be referred immediately to the Emergency Medicine Department at Tan Tock Seng Hospital. Medical practitioners should arrange for these patients to be transferred by ambulance by calling the dedicated ambulance service at 65860237 (available 24 hours).

7. Medical practitioners are reminded that deaths need to be re-notified to the Ministry even if the patient had earlier been notified as a case or suspect case of an infectious disease. Please note that failure to notify or failure to notify in accordance to the time and manner is an offence under the IDA³. The offence carries a penalty of a fine not exceeding \$10,000 or to imprisonment for a term not exceeding 6 months or to both for a first offence and a fine not exceeding \$20,000 or imprisonment for a term not exceeding 12 months or to both for second and subsequent offences.⁴

³ Sec 6(5) : Any person who fails to comply with the requirements of this section or furnishes as true information which he knows or has reason to believe to be false shall be guilty of an offence.

⁴ Sec 65 : Any person guilty of an offence under this Act for which no penalty is expressly provided shall —

8. The notification of other infectious diseases remain unchanged as stated in the previous directive MOH Directive 3/2008 dated 25 November 2008.

ADVICE TO CONTACTS OF SUSPECT CASES

9. Physicians should advise family members and other close contacts of suspected cases to be vigilant for early symptoms of influenza, and to seek medical advice as early as possible if unwell.

(C) ANTIVIRAL TREATMENT

10. Recommendations for the use of antiviral medications may change depending on the situation and data on antiviral susceptibilities. Currently, swine influenza (H1N1) is susceptible to oseltamivir and zanamivir (neuraminidase inhibitors). It is resistant to amantadine and rimantadine.

11. Antiviral treatment should be considered for confirmed or probable cases of swine influenza (H1N1) infection. Treatment should be prioritized for hospitalized patients and those who are at increased risk for complications of influenza.

12. The treatment dose for ill adult cases is oseltamivir 75 mg po q12hrs x 5 days. Treatment should be started as soon as possible from onset of illness, with clinical benefit if started within 48 hours from illness onset (data from seasonal influenza).

13. Antiviral treatment should be used in pregnant women only if the potential benefit justifies the potential risk to the fetus. Oseltamivir and zanamivir are pregnancy Category C medications, but no adverse effects have been reported in pregnant women who had received these in pregnancy. Both amantadine and rimantadine have been demonstrated in animal studies to be teratogenic and embryotoxic.

ANTIVIRAL PROPHYLAXIS

14. Antiviral medications should be prioritized for treatment.

FURTHER INFORMATION

15. For updates on this evolving situation, please refer to the MOH website www.moh.gov.sg. To receive timely dissemination of alerts and information sources from MedAlert, all medical practitioners are strongly advised to login to the Health Professionals Portal website (<http://www.hpp.moh.gov.sg>) to update their contact information (i.e. email address & handphone number).

(a) in the case of a first offence, be liable on conviction to a fine not exceeding \$10,000 or to imprisonment for a term not exceeding 6 months or to both; and

(b) in the case of a second or subsequent offence, be liable on conviction to a fine not exceeding \$20,000 or to imprisonment for a term not exceeding 12 months or to both.

16. For further clarifications of this circular, please email moh_info@moh.gov.sg.
17. If you are a licensee of a healthcare establishment, or a manager of a laboratory, please bring the contents of this circular to the attention of the relevant healthcare professionals in your establishment/laboratory.

A handwritten signature in black ink, appearing to read 'K Satku', with a long horizontal stroke extending to the right.

PROF K SATKU
DIRECTOR OF MEDICAL SERVICES