

GUIDELINES FOR MANAGEMENT OF INFLUENZA -A (H1N1) INFECTION IN ST. LUCIA

This document is produced based on Pan American Health Organization Technical Document 2 on Influenza A /H1N1 -2009 and will be reviewed as the situation changes.

1. Clinical Criteria for suspicion of Influenza A(H1N1)/Influenza-like illness(ILI)

- fever higher than 38°C (100.4°F)
- runny nose (rhinorrhea)
- cough
- sore throat

Other possible symptoms:

Headache, difficulty breathing (dyspnea), joint pain, nausea, myalgia (body ache), vomiting and diarrhea

2. Epidemiological Criteria

- Any person who has been in close contact in the last seven (7) days with a person who is a confirmed case of H1N1 Influenza infection
- Any person who resides in or has travelled in the last seven (7) days from a locality where there has been one or more confirmed cases of H1N1 Influenza

3. Laboratory Criteria

- real-time RT-PCR (Performed at CAREC)
- viral culture

4. Transmission

- from person to person when speaking, sneezing or coughing, contact with contaminated surfaces
- the virus can survive 2-8 hours on surfaces
- General incubation period is 1-4 days with an average of 2 days
- Adults may be contagious from one day prior to onset of symptoms to up to 7 days after onset of symptoms
- Children may be contagious for a period of up to 14 days after onset of symptoms

5. Case definition

- Suspected case:

Include the clinical criteria and at least one epidemiologic criteria (as above)

- Probable case:

Include the clinical criteria, at least one epidemiologic criteria and a positive test for Influenza A that is un-subtypable by real-time PCR

- Confirmed case:

There is a confirmed laboratory case from CAREC.

**GUIDELINES FOR SPECIMEN COLLECTION AND TESTING OF
INFLUENZA A (H1N1) IN ST.LUCIA
(EZRA LONG LABORATORY VICTORIA HOSPITAL)**

This is based on CAREC Guidelines for specimen collection and testing of the Influenza A (H1N1) dated June 23, 2009.

Two samples should be obtained from each patient (a nasal and a throat swab).

Note: Due to a high frequency of false negative results with rapid test kits and IFA, rapid test and IFA cannot be used to rule out H1N1 infection; (patients who may be H1N1 positive, may have an initial negative rapid test result).

Laboratory test results are not necessary to initiate patient management. Patient management should be based on clinical presentation (criteria).

Countries that have laboratory confirmed cases of the novel influenza A (H1N1), but NOT sustained transmission (St. Lucia falls under this category).

The aim of laboratory testing in these countries (category) is to determine if there is sustained (ongoing) transmission.

The **specimen collection** and testing strategy is as follows:

- Collect specimens from a **maximum of two (2) symptomatic contacts per laboratory confirmed case.**
- Collect specimens from **ARI** (Acute Respiratory Illness) patients; maximum of six cases per week per country and all **SARI (Severe ARI) cases** with no travel history and who are not contacts of confirmed cases.
- Send the specimens to Ezra Long laboratory via Ministry of Health's designated "**FLU VAN**" (Kindly contact Nurse Henry/Dr Fredericks for access to the van: Tele: 4685382, 4685309, 4602040, 7156827, 2856127) .This is not applicable to swabs obtained at V.H emergency room. Private practitioners can send the specimens to the Gros Islet Policlinic, Soufriere and Dennery Hospitals, Vieux Fort and Castries Health Centers for transportation after samples have been properly packaged and the staff at those centers notified. If urgently needed, the FLU VAN can also be used to assist with transportation of samples from private practitioners.

- Label the specimen and place it in a small biohazard or ordinary zip lock bag. Fill the appropriate CAREC forms adequately including clinical data. Place the CAREC form in the outside pouch of the biohazard bag or in a separate bag. Place the secured sample in a small cooler along with an ice pack. Then transport to the lab at VH.
- Ezra Long laboratory will send appropriate samples to CAREC.

DO NOT COLLECT SPECIMENS FROM ASYMPTOMATIC PERSONS INCLUDING CONTACTS OF CASES.

NOTE:

- **EZRA LONG LABORATORY WILL NOT ACCEPT SAMPLES WHICH ARE BROUGHT IN BY PATIENTS.**
- **DOCTORS SHOULD NOT ALLOW PATIENTS TO BRING SAMPLES TO THE LAB AT VH, AS MANY PERSONS CAN BE EXPOSED DURING THIS TRANSFER.**
- **SPECIMENS THAT DO NOT ADHERE TO THE ABOVE ALGORITHMS AND DO NOT FIT THE CLINICAL /EPIDEMIOLOGICAL CRITERIA WILL BE DISCARDED BECAUSE CAREC WILL NOT ACCEPT THEM.**
- **THE LABORATORY WILL ONLY BE PERFORMING RAPID TESTING FOR INFLUENZA –TWICE A DAY.**
- **SPECIMENS THAT ARRIVE AT THE LABORATORY AFTER 3. P. M WILL BE PROCESSED THE FOLLOWING DAY.**

GUIDELINES FOR CASE MANAGEMENT

SARI Definition: Sudden onset of fever higher than 38°C (100.4°F) and cough or sore throat and difficulty breathing (dyspnea).

Any patient who has SARI should be referred to Victoria Hospital for admission.

Suspicion of SARI is based on symptoms and clinical signs; a chest x-ray is not necessary for the determination of a suspected case.

ILI (Influenza-like illness) Definition: Sudden onset of fever higher than 38°C (100.4°F) **and** cough or sore throat, and absence of other causes.

AMBULATORY (HOME CARE)

Suspected or Confirmed Case: Stable patient with no lung complications or additional chronic illness; does not require hospital admission.

- Management includes home isolation, use of a surgical mask at all times (not N95 mask) at home if other people live with patient, especially when in their presence.
- Analgesic/antipyretics (avoid Aspirin, especially in children)
- Advice: Abundant oral fluids/ Rest.
- Separate ill person from others in the home, in a separate room if possible, until symptoms resolve.
- Drinking glasses and other utensils used for eating by patient must be thoroughly washed with soap and water before they are used by someone else.
- Ensure permanent communication between primary care teams and the patient (and family)
- Educate patient and other household members on the need to wash their hands frequently and to follow respiratory etiquette.
- Ensure clinical follow- up by primary care team and review immediately if condition deteriorates and arrange subsequent hospital admission.
- Commence antiviral therapy with Osetalmivir (Tamiflu)
- Provide printed materials with recommendations to patients/household members re: measures of isolation and personal protection, medicine use, risks of self medication, alert signs and instruction to consult again if necessary.

RECOMMENDATIONS TO THE RELATIVE OR CARETAKER OF A SUSPECTED OR CONFIRMED CASE

- Use a surgical mask until resolution of the patient's symptoms
- Do not shake hands, kiss or hug.
- Wash hands frequently with soap and water or disinfect with an alcohol-based hand rub.
- Cough or sneeze in disposable tissue which should be discarded immediately in closed container. If not available cough in inner forearm
- Ensure patient does not leave home for seven days post onset of symptoms, except for medical consultation.
- It is not necessary to separate the utensils used by the patient if washing is done appropriately.

HOSPITAL CARE GUIDELINES

- Suspected or Confirmed cases: All patients who meet the criteria for SARI (severe acute respiratory illness) would be admitted to the isolation ward.
- Cases who had confirmed H1N1 prior to arrival at Victoria hospital will be admitted directly to the isolation ward under the care of the Internal medicine or Pediatric team on call.
- Suspected cases will be evaluated at the isolation unit of the emergency room initially by the emergency room physician prior to referral to the on call team.
- Surgical or Pregnant patients who fit the criteria for SARI will be jointly managed by the surgical/O&G and Internal medicine/Pediatric teams respectively and joint ward rounds are encouraged.
- The following investigations will be required for all SARI cases; CBC, RFT, LFT, PT/PTT, RBS, O2 saturation and Arterial blood gases whenever available.
- Other serological investigations will be requested as per clinical status of the patient warrants.

- All radiological investigations will be performed at the isolation ward with the use of the portable x-ray machine.
- A chest x-ray is not urgently needed for the determination of a suspected SARI case.
- Suspicion of SARI is based on symptoms and clinical signs.
- All personnel handling SARI cases should use PPE and practice appropriate personal hygiene measures during contact with the patients.
- There shall be dedicated instruments such as stethoscopes, thermometers etc, provided at each isolation unit.
- Use of personal medical instruments are not allowed in the isolation units.
- Medical records staff will not have access to the isolation units.

TREATMENT PROTOCOL FOR HOSPITAL MANAGEMENT

- Analgesic/antipyretics (avoid Aspirin)
- Oxygen therapy and if necessary mechanical ventilatory support.
- Intravenous / Oral Hydration.
- Continuous monitoring of vitals.
- Infection control measures.
- Oseltamivir 75mg twice daily in adults usually for five days; may require longer course in patients on ventilatory support.
- **For Children 1-13years ,the recommendations are as follows:**

WEIGHT(KG)	DOSE (MG)
15kg or less	30mg every 12hrs
16-23kg	45mg every 12hrs
24-40kg	60mg every 12hrs
> 40kg	75mg every 12hrs

- For the treatment in children less than 1 year of age, the CDC has recommended the use of oseltamivir, when the benefit is greater than the risk.

Age less than 3months	12mg every 12hrs
3-5months	20mg every 12hrs
6-11months	25mg every 12hrs

- Zanamivir inhalation is not available at Victoria hospital.
- Other treatment as needed such as G.I (Ranitidine or Omeprazole) & DVT prophylaxis and parenteral anti-emetics.
- Discharge from hospital when oral tolerance is adequate, afebrile, absence of dyspnea and oxygen saturation greater than 90%
- Arrange follow-up by primary –care team post discharge.

GUIDELINES FOR PRESCRIBING TAMIFLU AT THE HEALTH CENTERS

1. The decision to commence treatment should be made by the District Medical Officer (DMO) and the Public Health Nursing Supervisor (PHNS), after obtaining an endorsement by the Senior Medical Officer.
2. The patient must meet the criteria for a suspected/confirmed case.
3. Treatment should be commenced within 48 hours of onset of symptoms and some patients may benefit if commenced after 48 hours of onset of symptoms.
4. Lack of availability of laboratory result or a negative rapid influenza-A test, should not prevent commencement of therapy, if the clinical criteria is met.
5. Dosage guidelines are as listed above under Hospital guidelines.
6. The prescription should be written by the DMO after exiting the designated contaminated area; before handing same to the Pharmacist.
7. The patient or contacts should not be given any prescription written for Tamiflu to take to the pharmacy (this measure is to limit exposure of other health care workers to the virus)
8. The package containing the Tamiflu shall be handed to the patient/contact only by the DMO (We should avoid allowing other HCW getting involved because of the above reason)

9. Tamiflu for the treatment of children at the health centers will be avoided for now until such recommendations are provided by the Pediatricians(In the Interim Pediatric cases maybe discussed with the Community Pediatricians or call Department of Pediatrics at V.H)
10. Tamiflu prescription for prophylaxis is not recommended.

PRIVATE PRESCRIPTIONS

1. Arrangement for prescriptions for private patients will only be facilitated after the Senior Medical Officer and National Epidemiologist have been informed by the Private physician (the prescription will then be written by the DMO or Emergency room Physician as applicable at Institution where it will be filled).
2. No private prescription should be given to any patient or contacts, unless the case has been reported to the Epidemiology unit at the Ministry of Health. Suspected/ confirmed H1N1 is categorized as a reportable disease. The Epidemiology unit is responsible for investigating contacts of suspected or confirmed patients. Administration of Tamiflu by private practitioners without notifying Epidemiology for the necessary contact tracing, can enhance community spread of H1N1.

OSELTAMIVIR INFORMATION FOR PATIENTS

Brand Name: Tamiflu

Pharmacologic Category: Antiviral agent. Neuraminidase inhibitor.

This medication is used to treat the flu.

It works to injure the virus and fight the infection

Avoid missing doses. Take a missed dose as soon as possible (Do not take a double dose or extra dose).

If it is almost time for the next dose, skip the missed dose and return to your regular schedule.

Use as directed by your healthcare provider even if feeling better.

Take this medicine with or without food. Take with food if it causes an upset stomach.

Drink plenty of non-caffeine containing liquid unless if told to drink less by your healthcare provider.

Talk to your healthcare provider if you have the following conditions: heart, kidney, liver or lung disease; also if you are pregnant or planning to get pregnant.

Some rare side effects that may be experienced include: allergy (such as itching, rash, chest tightness, wheezing), dizziness, belly pain, nausea or vomiting, diarrhea, headache, feeling tired or weak, severe behavioral problems.

Call your healthcare provider if you experience any side effect.

Remember prevention messages for patients, contacts and the general public

- Cover your cough
- Wash your hands frequently
- Take extra hygiene precautions if you are travelling to a country with many H1N1 cases
- Eat healthy foods and exercise
- keep up to date with information on H1N1
- stay away from work or school if ill with flu
- stay at home if ill (after visiting your practitioner)

ACKNOWLEDGEMENTS

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