OPERATIONAL PLAN OF THE MINISTRY OF HEALTH AND WELLNESS ON INFLUENZA A H1N1: (Now referred to as Seasonal Flu)

A STEP-BY-STEP APPROACH

Revised on 1st September 2009 and 2021

1

Table of Contents

1	Overv	iew6
2	Execut	tive Summary7
3	INTROD	DUCTION
3	.1 H	low to use this operational plan8
4 ALEF		IS TO BE TAKEN WHEN THERE IS NO IMPORTED OR INDIGENOUS H1N1 IN MAURITIUS DURING A GLOBAL PANDEMIC
4	.1 C	oordination11
	4.1.1 Wellne	Action 1: Constitute an intersectoral pandemic committee headed the Ministry of Health and ess 11
	4.1.2	Action 2 establish communication strategy within the pandemic committee11
	4.1.3	Action 3: Constitute a crisis management committee11
4	.2 S	urveillance for the virus in Mauritius12
	4.2.1	Action 1: implement SOP for monitoring arrival from H1N1 endemic areas12
ALG	ORITH	M 1: CASE MANAGEMENT OF INFLUENZA H1N1 FOR INCOMING PASSENGERS
Alg	ORITHM	2: TRIAGE AND REFERRAL OF INCOMING PASSENGERS OF H1N114
	4.2.2	Action 2: implement SOP for enhanced surveillance at the community level15
4	.3 H	lealth sector readiness15
	4.3.1	Action 1: Stock piling of medicine and supply15
	4.3.2	Action 2: Develop all protocols15
	4.3.3	Action 3: Build manpower15
5	ACTIO	NS TO BE TAKEN WHEN THERE ARE ONLY IMPORTED CASES OF H1N1 IN MAURITIUS16
5	.1 C	oordination16
	5.1.1 Wellne	Action 1: activate the intersectoral pandemic committee headed the Ministry of Health and ess 16
	5.1.2	Action 2: establish communication strategy within the pandemic committee16

	5.1	.3	Action 3: activate the crisis management committee16
	5.2	Surv	veillance for the virus in Mauritius17
	5.2	.1	Action 1: implement SOP for sick or suspected persons:
	5.2	.2	Action 2: implement SOP for non-sick passengers coming from high risk countries17
	5.2	.3	Action 3: implement SOP for enhanced surveillance at the community level
	5.3	Con	tainment of imported cases18
	5.3	.1	Action 1: Isolation of cases and Quarantine of contacts
	5.3	.2	Action 2: personal and environmental hygiene practices when handling the infected cases. 18
	5.3	.3	Action 3: treatment of imported cases by antiviral18
	5.3	.4	Action 4: Use of vaccines
	5.4	Неа	Ith Sector readiness18
	5.4	.1	Action 1: procure medicine, supplies for 2-3 months
	5.4	.2	Action 2: Plan surge capacity for handling increased patients19
	5.4	.3	Action 3: Ensure adequate manpower for health and critical services
	5.4	.4	Ensuring bio-safety during pandemic19
6	ACT	IONS T	O BE TAKEN WHEN LOCALIZED SECONDARY CASES OCCUR IN MAURITIUS
	6.1	Соо	rdination19
	6.1	.1	Action 1: increase the frequency of intersectoral pandemic committee
	6.1	.2	Action 2 establish communication strategy within the pandemic committee19
	6.1	.3	Action 3: convene regular meeting of the crisis management committee
	6.2	Surv	veillance for the virus in Mauritius19
	6.3	Con	tainment of infected cases
	6.3	.1	Action 1: Isolation of cases and Quarantine of contacts
	6.3	.2	Action 2: personal and environmental hygiene practices when handling the infected cases. 20

	6.3.3	Action 3: zoning and social distancing	20
7	ALGORIT	HM 5: NOTIFICATION PATHWAY FOR SCHOOL CLOSURE	21
8	ALGORIT	HM 6: ALERT AND RESPONSE FOR H1N1 AT THE COMMUNITY-LEVEL	22
	8.1.1	Action 4: treatment of cases by antiviral	23
	8.1.2	Action 4: Use of vaccines	23
8	8.2 Hea	Ith Sector readiness	23
	8.2.1 critical ca	Action 1: procure enough medicine, supplies to ensure maintenance of health care and are staff	23
	8.2.2	Action 2: Plan surge capacity for handling increased patients	23
	8.2.3	Action 3: Ensure adequate manpower for health and critical services	23
9	ACTIONS T	O BE TAKEN WHEN WIDESPREAD TRANSMISSION OF CASES OCCUR IN MAURITIUS	23
9	9.1 Coo	rdination	23
	9.1.1 Ministry	Action 1: increase the frequency of e the intersectoral pandemic committee headed the of Health and Wellness	23
	9.1.2	Action 2 establish communication strategy within the pandemic committee	.23
	9.1.3	Action 3: have regular meeting of the crisis management committee	23
ç).2 Surv	veillance for the virus in Mauritius	24
ç).3 Insti	itute Mitigation measures to reduce the effects of the pandemic	24
	9.3.1	Action 1: Isolation of cases and Quarantine of contacts	24
	9.3.2	Action 2: personal and environmental hygiene practices when handling the infected cases.	. 24
	9.3.3	Action 3: zoning and social distancing	24
	9.3.4	Action 4: treatment cases by antiviral	24
	9.3.5	Action 4: Use of vaccines	24
ç	9.4 Hea	Ith Sector readiness	24
	9.4.1 critical ca	Action 1: procure enough medicine and supplies to ensure maintenance of health care an are staff	

	9.4.2	Action 2: Plan surge capacity for handling increased patients24
	9.4.3	Action 3: Ensure adequate manpower for health and critical services25
10	Time	frame for implementation25
11	Budge	etary considerations25
12	Anne	x 4: A compendium of protocol for pandemic alert and pandemic periods
13	Anne	x 5: duties of Senior Health Inspector in capacity of PHIC27
14	Surve	illance SOP number 1: Case definition of human influenza A (HINI/2009) virus infection28
15	Surve	illance SOP number 2: Specimen Collection procedure (version 1 date: 6 th June 2009)29
16	Surve	illance SOP number 3: Guidance on Specimen storage and transport
17	Surve	illance SOP number 4: Laboratory investigation form (version 1: dated 5 th June 2009)31
18	Surve	illance SOP Number 5 Laboratory Testing Guidance32
19	Conta	inment SOP number 1: illustration of proper hand- washing33
20	Conta	inment SOP Number 2: use of PPE (version 1 dated 5 th June 2009)
21 2009		inment SOP number 3: Illustration of how to wear and dispose PPE (version 1: dated 5 th June
22	Conta	inment SOP 4: Patient Care Checklist36
23 June		ninment SOP number 5: Infection control for Inpatient Ward Management (version 1: dated 5 th
24 Date		AINMENT SOP NUMBER 6: ENVIRONMENTAL HYGIENE BY DISINFECTANT USE (VERSION 1 INE 2009)40
25 2009		ninment SOP number 7: Protocol for Antiviral Therapy for H1N1flu (version 1: dated 6 th June 42
26	Prepa	redness SOP number 1: Supply Checklist for Pre-Positioning (version 1 dated 5 th June 2009)44
27 June		redness SOP number 2: Calculation of of Antivirals and inpatient supplies (version 1: dated 5 th

1 Overview

- Influenza A H1N1 forms part of the seasonal influenza and circulates with the other 2 viruses H3N2 and B.
- Yearly vaccination programs are being done by the Ministry of Health and Wellness and Ministry of Social Security, National Solidarity and Reform Institutions.
- Sensitization campaigns on Radios and TV programs are ongoing.
- Surveillance of influenza is also ongoing by the Ministry of Health and Wellness.

2 Executive Summary

The world is currently reeling under the threat of pandemic due to the novel human H1N1 influenza virus (H1N1 California/4/2009 strains) and WHO has raised its pandemic alert to phase 5 on a six point scale. The impact of the pandemic will have dire consequences on the economy of Mauritius; it will disrupt trade and commerce, travel and tourism and put considerable pressure on our health system.

The Government of Mauritius has formulated a pandemic preparedness strategic plan in order to maximize containment of the virus, minimize its impact and ensure continuity of health care and other essential services during the pandemic. The plan has been jointly conceived and finalized by a task force of the Ministry of health in coordination with other relevant sectors including the Ministry of Agriculture, Mauritius Airport Authority, Mauritius Port Authority, Ministry of Education, Department of Police and the World Health Organization and other stakeholders. The Ministry of health is responsible for the implementation of the health aspects of the plan.

The strategic plan serves as a blueprint for actions and formulation of <u>standard operating</u> <u>procedures (SOP)</u> by all stake-holders. The plan consists of five strategic directions: (<u>1</u>) <u>planning</u> <u>and coordination</u>, (<u>2</u>) <u>situation monitoring and assessment</u>, (<u>3</u>) <u>prevention and containment</u>, (<u>4</u>) <u>health service response</u>, and (<u>5</u>) <u>communications</u>. When properly executed, the actions will ensure surveillance to detect the first entry of H1N1 at our ports and seaports and community at large; separation of infected persons; tracing of contacts and interruption of the virus transmission by pharmacological and basic hygiene measures will ensure the pandemic is contained at the beginning stage, or in the worst scenario mitigate the impacts.

This document is an operational manual to be used in conjunction with the national strategic plan. The present document represents collection of protocols to be used under all phases of the pandemics for commonly encountered pandemic scenarios by all stakeholders involved in controlling pandemic.

3 INTRODUCTION

Diseases due to human influenza viruses have huge health and socio-economic consequences. Two forms of influenza diseases are known: seasonal and pandemic. Seasonal influenza occurs every year in the winter months of temperate climates, it can cause death among persons with preexisting diseases such as chronic heart disease etc, and is also responsible for workdays loss and absenteeism from school. A yearly vaccine is available for the prevention of seasonal influenza. Periodically the seasonal human influenza combines with an animal influenza virus to generate a novel virus that results in a pandemic, with the diseases spreading across the globe in all age groups and during any time of the year. Major past epidemics of the past include the Spanish influenza of 1918, that was responsible for over 40 million deaths and the Asian flu in 1957 and the Hong Kong flu in 1968 causing over million deaths each. Besides disease and deaths, pandemic influenza has huge socio-economic impacts by: putting pressure on health system, disruption of trade commerce; restriction of travel, border closing, social disruption and mass panic.

There is no accurate way to predict the arrival of a pandemic strain of influenza besides active surveillance. In 2003, the world saw the emergence of an avian influenza, H5N1 that is entrenched in the poultry populations of Asia. The H5N1virus is associated with high mortality and it has pandemic potential, although it has not spread across the globe. Since April 2009, a novel human virus, H1N1 emerged simultaneously in USA, Mexico and Canada.

So far no human cases of novel H1N1 virus has been noted in the African continent and in Mauritius. However, with increased travel link to Europe the eventual arrival of this virus is inevitable in Mauritius. This virus has the potential to cause a full pandemic worldwide and increase in virulence leading to higher death rates than seen presently. One way to mitigate the negative consequences of the H1N1 pandemic is to take timely public health measures that have been defined in pandemic preparedness plan.

This document should be used together with the pandemic preparedness plan for the operationalization of the PPP of the Government of Mauritius, consisting of five major strategic direction namely: Planning and coordination, 2) Situation monitoring and assessment, 3) Prevention and containment, 4) Health service response, and 5) communications

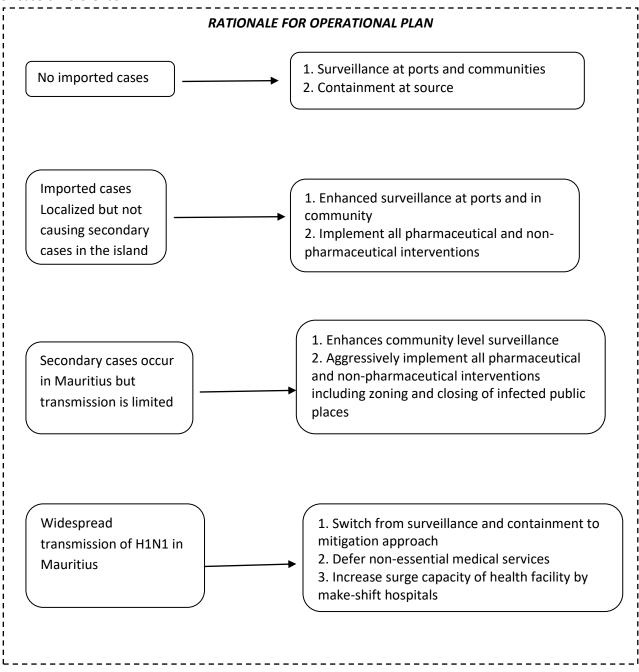
3.1 How to use this operational plan

To facilitate and monitor implementation of the plan, the necessary actions for each of four different scenarios are given namely:

- 1. When there is no imported or indigenous cases
- 2. When imported index cases are localized in the island

- 3. When secondary cases are localized in the island
- 4. When there is widespread cases in the island

The necessary actions and associated standard operating procedures (SOP) or guidelines are given in table 1. The responsible party has simply to consult the relevant sections and the SOPs that have been numbered for ease of reference.



No imported or indigenous cases in island		Only imported cases lo	calized in island	Secondary cases lo	ocalized in island	Widespread a	ases island wise
		COORDINATION					
Action	protocol	actions	protocols	action	protocol	Action	protocols
Constitute pandemic committee	 command center at MOH intersectoral committee Communication 	Activate pandemic committee Create intersectoral crisis management committee	Intersectoral protocol for	Implement crisis management committee	Design crisis protocol	Maintain crisis management committee	Crisis protocol
			MONIT	ORING			
Actions	protocols	actions	protocols	Actions	protocols	actions	protocols
Monitor all ports of entry	All protocols in algorithms 1 and 2	Implement Enhanced surveillance at points of entry	1. All protocols in algorithms 1 and 2	 Implement Enhanced surveillance at points of entry implement Contact tracing 	1. All protocols in algorithms 1 and 2 and 5-6	Monitor disease trend	Surveillance SOP to be developed
			CONTAI	INMENT			
Actions	protocols	actions	protocols	actions	protocols	Actions	protocols
Review patient management protocols	All protocols in algorithms 1 and 2	 Isolate and treat patient implement social distancing at community level Distribute health message 	 All protocols in algorithms 1 and 2 Containment protocols 1-6 	1.Isolate and treat cases 2. Consider zoning for closing schools and public gathering	Infection control protocol number Use of antiviral protocol number Zoning protocol number Social distancing protocol number	 Manage sick patients Implement Triage of patients 	Algorithm4 and containment protocols 1-6
			HEALTH SECTO	OR READINESS			
Stock pile medicine and supply	Containment SOP4	Procure medicine and supply for 2-3 months	Protocols of Annex5	Prepares surge capacity of health sector	Containment protocols 4-6	Mitigate epidemic	All containment SOPs
Develop protocols	Table top protocol number Simulation protocol number						
Build manpower	Develop roster	Compile retiree/volunteers	Try staff or roster	Use during simulation	Deploy backup	Protect staff and deploy back up	Containment SOPs 1-7

4 ACTIONS TO BE TAKEN WHEN THERE IS NO IMPORTED OR INDIGENOUS H1N1 IN MAURITIUS DURING A GLOBAL PANDEMIC ALERT OR PANDEMIC PERIOD

4.1 Coordination

Rationale

To define the role, function and responsibilities of each stake holder, achieve harmonization and minimize duplication, redundancy or contradictory activities.

4.1.1 Action 1: Constitute an intersectoral pandemic committee headed the Ministry of Health and Wellness

The intersectoral committee on pandemic implementation will be headed by the Honourable Minister of Health and Wellness.

4.1.2 Action 2 establish communication strategy within the pandemic committee

The SOP for communication shall be as follows:

- The minister shall be at the central command level and issue any directives
- Any other directive will be issued by management meeting, after consultation with the minister
- Communication with the media shall be channeled via press attaché
- Information pertaining to importation of cases, outbreaks etc will be channeled from the site of occurrence to the appropriate directors by phone and fax
- The directors will inform the minister right away and also other directors
- The directors will delegate actions to be taken to the relevant officers.

4.1.3 Action 3: Constitute a crisis management committee

Another task of the pandemic committee is to constitute a crisis management committee to reviewing the situation during a pandemic and issuing interim or revised guidelines and SOPs.. The decision making body rests with the Ministry of Health and Wellness and the Head of command is the Hon. Minister of Health& Wellness. Other members include:

- Senior Chief Executive, Ministry of Health& W
- Senior Chief Executive, Prime Minister's Office
- Director General Health Services
- Representative from non-health sectors
- Other representative as deemed necessary according to the gravity of the situation.

4.2 Surveillance for the virus in Mauritius

Rationale: to detect the first entry of the H1N1 virus in Mauritius

Surveillance for the virus among crew-members and incoming passengers will be undertaken at:

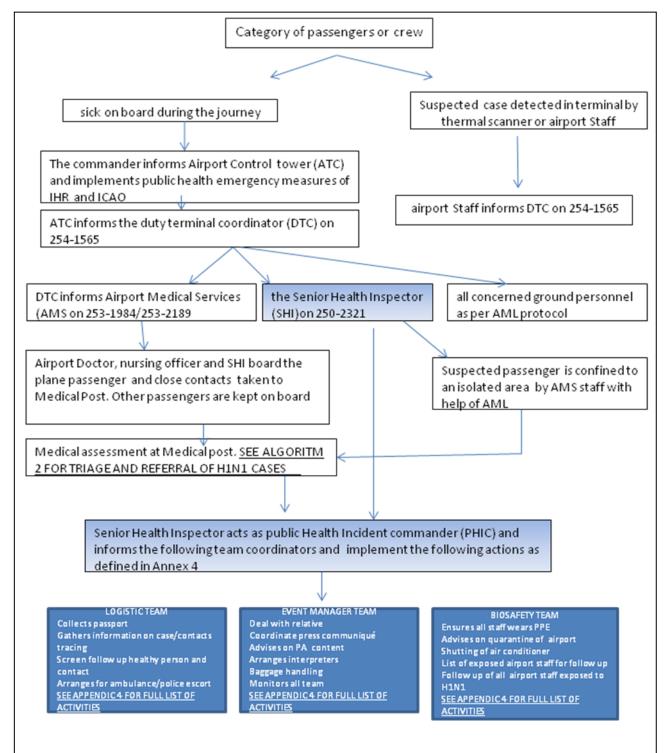
- 1. Airport
- 2. Sea port
- 3. Hotels and guest houses
- 4. In addition community-level surveillance will be done.

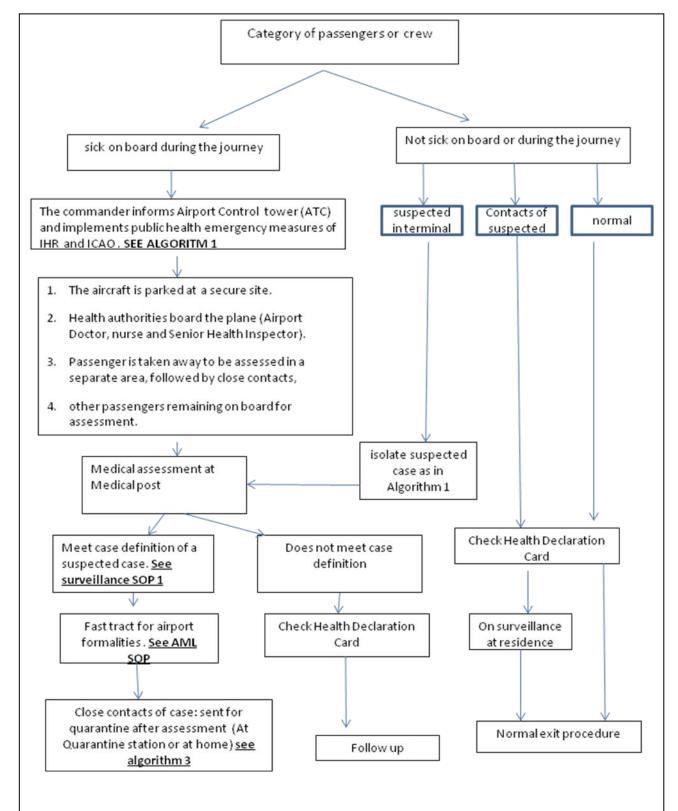
Figure 1 shows the algorithm for screening crew-members and incoming passengers from airport and sea port. The following procedures will be followed:

4.2.1 Action 1: implement SOP for monitoring arrival from H1N1 endemic areas

- 1. Compulsory completion of Health Declaration Form
- 2. Health authorities Senior Health Inspectors follow up all passengers from high risk areas for 7 days post arrival
- 3. Is a passenger develops flu like symptoms
 - a. The respective Regional Health RMO conducts a medical examination using standard case definition criteria by Surveillance SOP number 2
- 4. If subjects meet case definition of suspected criteria,
 - a. The subject is sent to isolation facilities at Souillac hospital (now being used as a district hospital)
 - b. Close contacts of the suspected case are sent for quarantine station or home-confinement for seven days
 - c. Specimens for H1N1 isolation is taken following instruction of Surveillance SOP number

ALGORITHM 1: CASE MANAGEMENT OF INFLUENZA H1N1 FOR INCOMING PASSENGERS





ALGORITHM 2: TRIAGE AND REFERRAL OF INCOMING PASSENGERS OF H1N1

4.2.2 Action 2: implement SOP for enhanced surveillance at the community level

- 1. Collect specimens of throat swabs by surveillance SOP number 3 from all 5 regional hospitals on a weekly basis from patients with flu-like illness (ILI)
- 2. Collect similar specimens from private clinics
- 3. Characterize for H1N1 by Surveillance SOP number 3

4.3 Health sector readiness

The following actions are required to get strengthen the health sector readiness.

4.3.1 Action 1: Stock piling of medicine and supply

- 1. First conduct an assessment of available stock of medicine, supplies and equipment by means of health readiness SOP number 1.
- 2. Second stock pile the supplies for over a 2-3 month period

4.3.2 Action 2: Develop all protocols

- 1. Compile a list of protocols and SOP to be used in the pandemic phase by reference to Appendix 3
- 2. Develop and field test the protocols accordingly

4.3.3 Action 3: Build manpower

- A cadre of doctors and health care personnel including nurses, health inspectors and technicians conducting training in the following areas:
 - o Implement surveillance in accordance with surveillance SOP numbers
 - o investigation,
 - detection and management of suspected and confirmed cases of H1N1 in accordance with surveillance SOP numbers
 - Proper use of PPE in accordance with containment SOP number
 - Bio-safety for patients handling, environmental hygiene in accordance with containment SOP number

5 ACTIONS TO BE TAKEN WHEN THERE ARE ONLY IMPORTED CASES OF H1N1 IN MAURITIUS

5.1 Coordination

5.1.1 Action 1: activate the intersectoral pandemic committee headed the Ministry of Health and Wellness

The intersectoral committee on pandemic implementation will be headed by the Honourable Minister of Health and Wellness.

5.1.2 Action 2: establish communication strategy within the pandemic committee

The SOP for communication shall be as follows:

- The minister shall be at the central command level and issue any directives
- Any other directive will be issued by management meeting, after consultation with the minister
- Communication with the media shall be channeled via press attaché
- Information pertaining to importation of cases, outbreaks etc will be channeled from the site of occurrence to the appropriate directors by phone and fax
- The directors will inform the minister right away and also other directors
- The directors will delegate actions to be taken to the relevant officers
- All information will be used for action to preempt the spread of the virus and all members of the committee must be informed

5.1.3 Action 3: activate the crisis management committee

Another task of the pandemic committee is to constitute a crisis management committee to reviewing the situation during a pandemic and issuing interim or revised guidelines and SOPs. The decision making body rests with the Ministry of Health and Wellness and the Head of command is the Hon. Minister of Health& Wellness. Other members include:

- Senior Chief Executive, Ministry of Health& Wellness.
- Senior Chief Executive, Prime Minister's Office
- Director General Health Services
- Representative from non-health sectors
- Other representative as deemed necessary according to the gravity of the situation.

5.2 Surveillance for the virus in Mauritius

Rationale: to detect the first entry of the H1N1 virus in Mauritius

Surveillance for the virus among crew-members and incoming passengers will be undertaken at:

- 1. Airport
- 2. Sea port
- 3. Hotels and guest houses

Figure 1 shows the algorithm for screening crew-members and incoming passengers from airport and sea ports. The following procedures will be followed:

5.2.1 Action 1: implement SOP for sick or suspected persons:

- 1. The commander (or captain of the ship) puts a mask on the person if available and tolerated or enforces respiratory etiquette and cough hygiene according to *Surveillance SOP number 1*
- 2. The sick person is segregated from other passengers
- 3. The close contacts are identified
- 4. The commander/captain in-charge informs the control tower (for airport) or port authority (for sea ports)
- 5. The control tower (or port authority) informs the airport doctor or seaport doctor (for seaport)
- 6. The aircraft is parked at a secure in the case of yacht or cruise ship, docked outside the harbor
- 7. Health authorities (airport/seaport doctors and Senior Health Inspectors) board the plane/vessel
- 8. Other passengers remain on board for assessment
- 9. Medical assessment is conducted at medical post using standard case definition criteria by *Surveillance SOP number 2*
- 5. If subjects meet case definition of suspected criteria,
 - a. the subject is put through fast tract of airport formalities following algorithm 1 and 2 and AML protocol
 - b. The subject is sent to isolation facilities at a designated hospital for triage and management
 - i. Medically stable cases will be kept at the designated hospital as *per algorithm 3*
 - ii. If the bed capacity of the designated hospital is exceeded, cases will be referred to another designated Hospital
 - *iii.* Cases requiring urgent specialist attention will be admitted to Jawaharlal Nehru Hospital in accordance with *Algorithm 5*
 - c. Close contacts of the suspected case are sent for quarantine station or home-confinement for seven days
- 6. If subjects do not meet case definition
 - a. They complete the health declaration card
 - b. Subjects are followed up

5.2.2 Action 2: implement SOP for non-sick passengers coming from high risk countries

- 1. The high risk country is defined a countries where sustained transmission of H1N1 exists
- 2. Consult latest list of countries issued by WHO

- 3. Check health declaration card
- 4. Normal exit
- 5. Follow up in residence or hotel

5.2.3 Action 3: implement SOP for enhanced surveillance at the community level

- 1. Collect specimens of throat swabs by surveillance SOP number 3 from all 5 regional hospitals on a weekly basis from patients with flu-like illness (ILI)
- 2. Collect similar specimens from private clinics
- 3. Characterize for H1N1 by Surveillance SOP number 3

5.3 Containment of imported cases

Rationale: Contain the imported to break the chain of transmission to the general public. Use both non-pharmacological and pharmacological measures.

5.3.1 Action 1: Isolation of cases and Quarantine of contacts

• The imported cases are isolated from the port of entry by implementing the SOP (containment SOP2, 3 4 and 6) shown in Algorithm2 below.

5.3.2 Action 2: personal and environmental hygiene practices when handling the infected cases.

Ensure good hospital practice to limit transmission by adhering to the following protocols:

- Containment protocol no 3 on infection control
- Containment protocol no 4 on wearing and disposing of PPE
- Containment protocol no 5 on environmental hygiene

5.3.3Action 3: treatment of imported cases by antiviral

Adhere to containment protocol 5 on the use of Tamiflu for:

- Treatment of imported cases
- Prophylaxis or treatment of health care personnel

5.3.4 Action 4: Use of vaccines

There will be no vaccine available at this point.

5.4 Health Sector readiness

5.4.1 Action 1: procure medicine, supplies for 2-3 months Implementing Readiness Protocol Number 2

5.4.2 Action 2: Plan surge capacity for handling increased patients

- Design protocol for triage of non-life threatening patient
- Design protocol for temporary hospital by capacity for staff and health care facility
- Design a system for training of core staff

5.4.3 Action 3: Ensure adequate manpower for health and critical services

- Create a roster of available workforce of retirees and volunteers
- Design a training system of core staff
- Design protocol for protection of staff health by adhering to containment SOP numbers 5 and 6 on biosafety measures and use of antivirals

5.4.4 Ensuring bio-safety during pandemic

Measures to prevent release the H1N1 virus in the environment are ensured by the following action:

- Designing system for Separating infected patients from non-infected patients
- Establishing procedures for Safe handling and disposal of infected laboratory waste
- Instituting Regular environmental cleaning and disinfection
- Institute guidelines for disposal of dead bodies

6 ACTIONS TO BE TAKEN WHEN LOCALIZED SECONDARY CASES OCCUR IN MAURITIUS

6.1 Coordination

6.1.1 Action 1: increase the frequency of intersectoral pandemic committee

6.1.2 Action 2 establish communication strategy within the pandemic committee

- Review SOP for communication in order to use the information to contain the spread of the virus
- Establish mechanism for all members of the committee to be informed

6.1.3 Action 3: convene regular meeting of the crisis management committee

Convert the crisis management committee as an advisory group to the pandemic committee

6.2 Surveillance for the virus in Mauritius

In addition to implementing the SOPs associated with algorithm 1 for screening crew-members and incoming passengers from airport and sea ports, implement a surveillance and response protocol for sporadic cases in the community level. For use the algorithm 3 at the community level to imp

6.3 Containment of infected cases

Rationale: Contain the infected cases to break the chain of transmission to the general public. Use both non-pharmacological and pharmacological measures.

6.3.1 Action 1: Isolation of cases and Quarantine of contacts

• The imported cases are isolated from the port of entry in accordance with containment protocol number 4 shown in figure 2.

6.3.2 Action 2: personal and environmental hygiene practices when handling the infected cases.

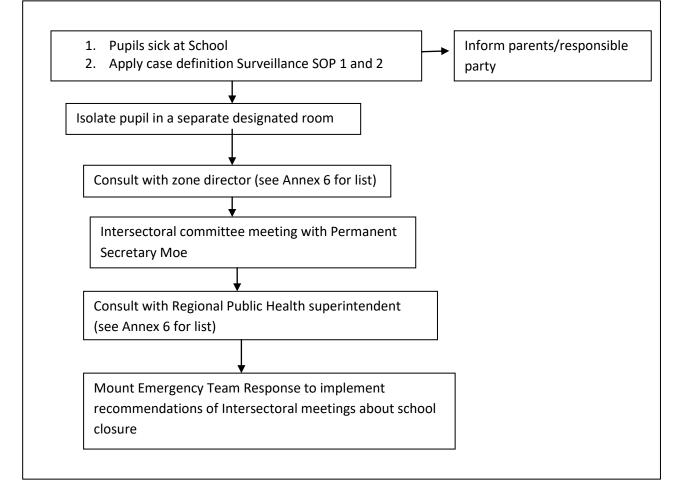
Ensure good hospital practice to limit transmission by adhering to the following protocols:

- Containment protocol no 3 on infection control
- Containment protocol no 4 on wearing and disposing of PPE
- Containment protocol no 5 on environmental hygiene

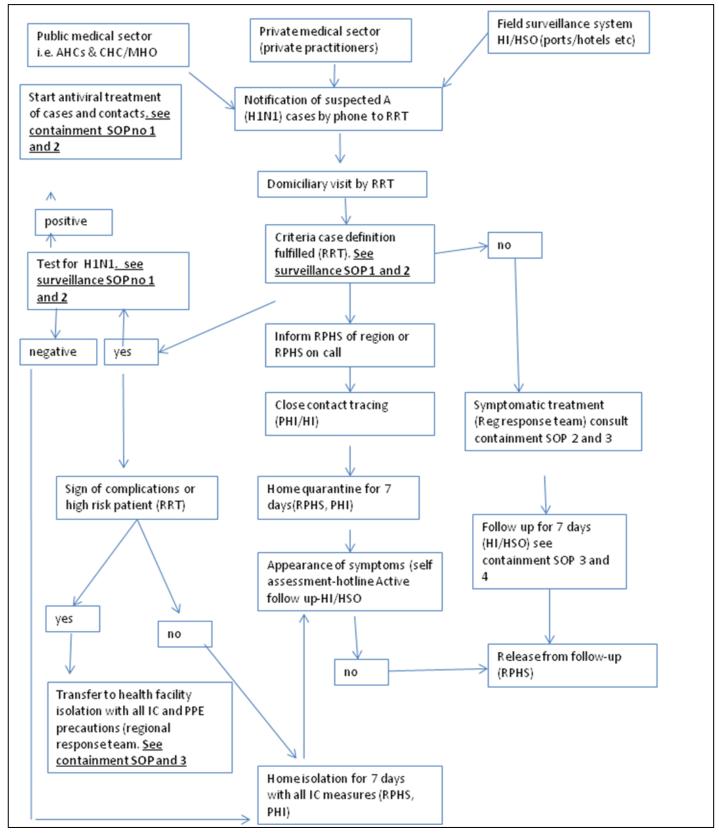
6.3.3Action 3: zoning and social distancing

- Design protocol and criteria for closing infected and disinfection of schools, hotels and other public gathering places
- The crisis management committee must meet to discuss the closure of school, hotels and other public places depending on the degree of spread of H1N1 in Mauritius and in keeping with WHO and best international practices.
- Closing of schools for H1N1 in USA has been shown to delay the onset of the epidemic. Algorithm 5 outlines the steps for school closure
- Closing of hotel in Mexico for H1N1 was initiated when widespread community transmission of the virus was taking place and its effects cannot be evaluated. Hotels closures during SARS outbreaks were effective in containing the disease in Hong Kong. Decision for closing a hotel must be intersectoral with the participation of all relevant ministries and departments. The surveillance system to pick up infection in hotel is shown in algorithm 6.

7 ALGORITHM 5: NOTIFICATION PATHWAY FOR SCHOOL CLOSURE



8 ALGORITHM 6: ALERT AND RESPONSE FOR H1N1 AT THE COMMUNITY-LEVEL



8.1.1Action 4: treatment of cases by antiviral

Adhere to containment protocol 5 on the use of Tamiflu for:

- Treatment of cases
- Prophylaxis or treatment of health care personnel

8.1.2 Action 4: Use of vaccines

There will be no vaccine available at this point but plan for procurement enough vaccine to protect high risk groups and health and essential service staff

8.2 Health Sector readiness

8.2.1 Action 1: procure enough medicine, supplies to ensure maintenance of health care and critical care staff

Implementing Readiness Protocol Number 2

8.2.2 Action 2: Plan surge capacity for handling increased patients

- implement protocol for triage of non-life threatening patient
- Design protocol for temporary hospital by capacity for staff and health care facility
- Design a system for training of core staff

8.2.3 Action 3: Ensure adequate manpower for health and critical services

- review roster of available workforce of retirees and volunteers
- Design a training system of core staff
- Design protocol for protection of staff health by adhering to containment SOP numbers 5 and 6 on biosafety measures and use of antivirals

9 ACTIONS TO BE TAKEN WHEN WIDESPREAD TRANSMISSION OF CASES OCCUR IN MAURITIUS

9.1 Coordination

- 9.1.1 Action 1: increase the frequency of e the intersectoral pandemic committee headed the Ministry of Health and Wellness
- 9.1.2 Action 2 establish communication strategy within the pandemic committee
 - Implement pandemic communication strategy
- 9.1.3 Action 3: have regular meeting of the crisis management committee
 - Convert the committee to an advisory one

9.2 Surveillance for the virus in Mauritius

Switch from virus surveillance to only a clinical case definition (use surveillance protocol number nn that may be modified by WHO) for monitoring trends in morbidity and mortality

9.3 Institute Mitigation measures to reduce the effects of the pandemic

9.3.1 Action 1: Isolation of cases and Quarantine of contacts

• Initiate the isolation procedures outlined in algorithm 4 below to implement Containment SOP 2,3,4,5,7 and Surveillance SOP 2,3.

Review the effectiveness of the isolation measures.

9.3.2 Action 2: personal and environmental hygiene practices when handling the infected cases.

Ensure good hospital practice to limit transmission by adhering to the following protocols:

- Containment protocol no 3 on infection control
- Containment protocol no 4 on wearing and disposing of PPE
- Containment protocol no 5 on environmental hygiene

9.3.3Action 3: zoning and social distancing

• Design protocol and criteria for closing infected and disinfection of schools, hotels and other public gathering places

9.3.4Action 4: treatment cases by antiviral

Adhere to containment protocol 5 on the use of Tamiflu for:

- Treatment of imported cases
- Prophylaxis or treatment of health care personnel

9.3.5 Action 4: Use of vaccines

There will be no vaccine available in the first waves of the epidemic but formulate SOP for deciding who gets vaccines.

9.4 Health Sector readiness

9.4.1 Action 1: procure enough medicine and supplies to ensure maintenance of health care and critical care staff

Implementing Readiness Protocol Number 2

9.4.2 Action 2: Plan surge capacity for handling increased patients

• implement protocol for triage of non-life threatening patient

• Design protocol for temporary hospital by capacity for staff and health care facility

9.4.3 Action 3: Ensure adequate manpower for health and critical services

- activate roster of available workforce of retirees and volunteers
- implement protocol for protection of staff health by adhering to containment SOP numbers 5 and 6 on biosafety measures and use of antivirals

10 Time frame for implementation

This operational plan is a real-time document and will be implemented in phase manner according to the stage of the pandemic based on the importation and spread of the pandemic virus in the country.

11 Budgetary considerations

The main budgetary items include recurrent cost for manpower, equipment, supplies and training. Considerable in-kind and financial expenses have been met by the Government of Mauritius. However, there are some immediate shortfalls that are listed in Annex 6.

12 Annex 4: A compendium of protocol for pandemic alert and pandemic periods

- 1. Protocol for surveillance and detection of H1N1
- 2. Protocol for management of infected patients
- 3. Protocol for prioritization strategy of mask, antiviral and vaccine when available
- 4. Protocol for treatment and prophylaxis of health care and essential service staff
- 5. Protocol for triage of patient to reduce pressure on health care system
- 6. Protocol for use and disposal of PPE
- 7. Protocol for waste management and environmental cleaning/disinfection
- 8. Protocol for specimen collection and handling
- 9. Protocol for international shipment of specimens
- 10. Protocol for laboratory diagnosis of H1N1

13 Annex 5: duties of Senior Health Inspector in capacity of PHIC

team	Contacts/names tel numbers of members	duties	SOP/clues
Logistic team coordinator		Collects passport	Excise precautions it might be infected, use PPE
		Gathers information on case/contacts	Gets information from PAX list from manifest of airline Get sitting configuration on board Include PAX within 1 meter radius OR 2 adjoining rows
		Screen follow up healthy person and contact	Arrange with tour operator to get addresses of contacts Get help of AML to get sitting configuration and trace
		Arranges for ambulance	One standby and permit for next one to come
Event manager coordinator		Ensures hospitalization/quarantine of cases	Use persuasion for family protection If recalcitrant refer to director
		Deal with relative	Stress importance to spreading to family Get police help in crowd control
		Coordinate press communiqué	All passengers to report to health centre when they develop symptoms
		Advises on PA content	Same message
		Arranges interpreters	Usually search among tour operators/other passengers
		Baggage handling	Liaise with customs for keeping and later delivery
		Monitors all team	Make sure SOP are followed and solve any real time problem
		Coordinates with director of health services- preventive	Relate progress and problem to director right away
Biosafety coordinator		Supplies and implement use of PPE by all staff	Ensure stock at airport
		Advises on quarantine of airport	
		Shutting of air conditioner	If case was exposed next to air-conditioning unit
		List of exposed airport staff for follow up	Get from AML
		Disinfectant of airplanes	Refer to WHO rules and contractor/ground handler
		Environmental cleaning of airports	See containment SOP number 6 for use of disinfectant

Page 27

14 Surveillance SOP number 1: Case definition of human influenza A (HINI/2009) virus infection

1. A **<u>Suspected</u>** case of influenza A (HINI, 2009) virus infection is defined as a person with acute febrile respiratory illness (*1) with onset

- within 7 days of close contact (*2) with a person who is a confirmed case of influenza A (HINI) virus infection or
- within 7 days of travel to an area where there are one or more confirmed influenza A (HINI), or
- resides in a community where there are one or more confirmed H1N1 (2009) influenza cases.

2. A <u>confirmed case</u> of influenza A (HINI) virus infection is defined as a person with an acute febrile illness with laboratory confirmed influenza A (HINI) virus infection by one or more of the following tests:

- 1. real-time RT PCR
- 2. Viral culture

*1 Acute respiratory illness is defined as recent onset of at least two of the following: rhinorrhea or nasal congestion, sore throat, cough (with or without fever or feverishness).

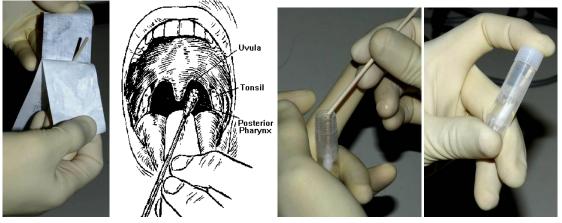
*2 Close contact is defined as:- within about 6 feet of an ill person who is a confirmed or suspected case of influenza A (HINI) virus infection.

NATIONAL OPERATIONAL PLAN FOR H1N1

15 Surveillance SOP number 2: Specimen Collection procedure (version 1 date: 6th June 2009)

A laboratory investigation form (see surveillance SOP number 4) should be filled with the patient's data Obtain a VTM cryovial from -20°C and melt it by twirling between your fingers

- 1. Wear gloves when sampling and dispose of all materials as potentially infectious waste.
- 2. Use sterile non-cotton swabs. Open (peel off the paper covering from) the swab and cryovial using sterile technique.
- 3. It may be helpful to have an assistant open the cryovial for you.
- 4. Swab the patient's posterior pharynx and tonsils, rolling the swab to scrape the mucosa.
- 5. A tongue depressor and asking the patient to vocalize (say 'AAH') may aid in accessing the posterior pharynx.



- 6. Place the tip of the swab into the medium in the cryovial and break it off ensuring that the remaining portion of the stick will not prevent tight sealing of the cap.
- 7. Wipe the tube down with alcohol. Place a liquid-nitrogen-safe label on the tube or mark it with an alcohol safe marker giving the specimen same number on the laboratory form.

16 Surveillance SOP number 3: Guidance on Specimen storage and transport

Duration of Viral Shedding

People may be contagious from one day before they develop symptoms to up to 7 days after they get sick. Children, especially younger children, might potentially be contagious for longer periods.

Preferred Respiratory Specimens --The following should be collected as soon as possible after illness onset: nasopharyngeal swab/aspirate or nasal wash/aspirate. If these specimens cannot be collected, a combined nasal swab with an oropharyngeal swab is acceptable. For patients who are intubated, an endotracheal aspirate should also be collected.

Specimens should be placed into sterile viral transport media (VTM) and immediately placed on ice or cold packs or at 4°C (refrigerator) for transport to the laboratory. Recommended infection control guidance is available for persons collecting clinical specimens in clinics and other clinical settings and laboratory personnel see containment SOP number 2.

Swabs

Ideally, swab specimens should be collected using swabs with a synthetic tip (e.g. polyester or Dacron [®]) abd ab aluminum or plastic shaft. Swabs with cotton tips and wooden shafts are not recommended. Specimens collected with swabs made of calcium alginate are not acceptable. The swab specimen collection vials should contain 1-3 ml or viral transport medium (e.g. containing, protein stabilizer, antibiotics to discourage bacterial and fungal growth, and buffer solution), such M4RT or the <u>BD Universal Viral Transport System</u>.

Storing Clinical Specimens – All respiratory specimens should be kept at 4° C during transport to the Virology Unit of the Central Public Health Laboratory. If transport is not possible, then they can be placed at 70° C freezer is not available, specimens should be kept at 4° C, preferably no longer than 1 week.

Labeling specimen and filing the laboratory request form. All specimens should be labeled clearly with patient name and the laboratory investigation form should be completely filled in and enclosed in a separate envelope

17 Surveillance SOP number 4: Laboratory investigation form (version 1: dated 5th June 2009)

Health Region:
Volunteer ID Number (Cryovial number):
Date of Collection:
Hospital:
Patient Information:
Age: Years: / Months:
Gender: Male Female
Residence (City):
Date of onset of illness:
History of travel to high risk area yes No If yes country visited Duration of stay Contact with someone suffering from influenza
Temperature at presentation of patient to the outpatient clinic: oC
Date Specimen sent to the laboratory:
Date Specimen received in the laboratory:
Condition of specimen on receipt: Frozen \Box Cold \Box room temperature \Box

Signature_____

18 Surveillance SOP Number 5 Laboratory Testing Guidance

Tell-tale sign for H1N1 (2009): Any isolate that is non typable by the currently available WHO reagent or giving low reactivity should be further tested for H1N1 (2009) by the recommended tests below.

Recommended Tests for H1N1(A/2009)

Real-time RT-PCR for influenza A, B, H1, H3 in WHO Reference Laboratory is recommended. Currently, influenza A (H1N1) virus will test positive influenza A and negative H1 and H3 by real-time RT-PCR. If reactivity of real-time RT-PCR for influenza A is strong (e.g. Ct≤30) it is more suggestive of a novel influenza A virus. Confirmation as influenza A (H1N1) virus is performed at WHO Coordinating Centres.

Rapid Influenza antigen test – Also, these tests have unknown sensitivity and specificity to detect human infection with influenza A (H1N1) virus is clinical specimens, and have suboptimal sensitivity to detect seasonal influenza viruses. Therefore, a negative rapid test could be a false negative and should not be assumed a final diagnostic test for influenza infection.

Viral culture – Isolation of influenza A (H1N1) virus is diagnostic of infection, but may not yield timely results for clinical management. A negative viral culture does not exclude infection with influenza A (H1N1) virus.

Shipping of specimens/isolate to WHO collaborating Centre: Any specimen that cannot be confirmed by

19 Containment SOP number 1: illustration of proper hand- washing



NATIONAL OPERATIONAL PLAN FOR H1N1

20 Containment SOP Number 2: use of PPE (version 1 dated 5th June 2009)

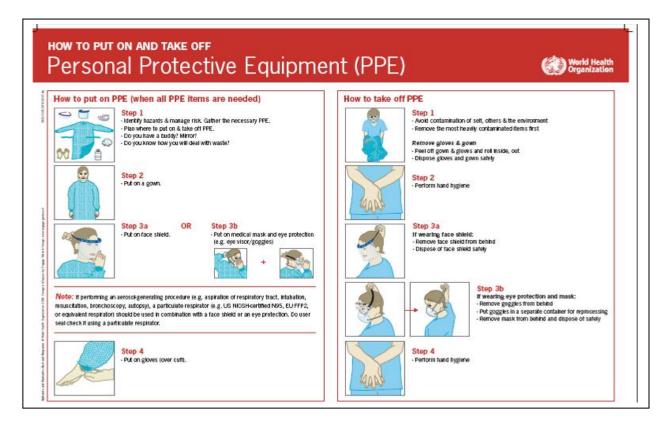
All health care workers providing care for suspected or confirmed Influenza A H1N1 (2009) patients should use PPE. The following steps are reemphasized:

- Perform hand hygiene, preferably with an alcohol-based hand rub or soap and water.
- Put on a fluid-resistant gown.
- Put on disposable particulate respirator.
- Perform user seal check of particulate respirator.
- Put on hair cover (if used, e.g. during an aerosol-generating procedure).
- Use face shield or goggles.
- Put on gloves (make sure gloves cover cuffs of gown sleeves).
- Shut the door after entering/leaving.

After performing the procedure, leave the isolation room/area or the ante room and observe the following steps:

- Remove gloves and discard in biomedical waste bin (gloves may be peeled from hands when gown is removed).
- Perform hand hygiene, preferably with an alcohol-based hand rub or soap and water.
- Remove protective eyewear and discard in biomedical waste bin.
- Remove hair cover and discard in biomedical waste bin.
- Remove medical mask or particulate respirator by grasping elastic band; do not touch front of particulate respirator (fronts of masks may be contaminated) and discard in biomedical waste bin.
- Perform hand hygiene preferably with an alcohol-based hand rub or soap and water.

21 Containment SOP number 3: Illustration of how to wear and dispose PPE (version 1: dated 5th June 2009)



22 Containment SOP 4: Patient Care Checklist

New influenza A (H1N1) See WHO website (www.who.int) for latest version

UPON ARRIVAL TO CLINICAL SETTING/TRIAGE

- Direct patient with flu-like symptoms to designated waiting area
- Provide instruction and materials to patient on respiratory
- o hygiene/cough etiquette
- Put medical/surgical mask on patient if available and tolerable to patient

UPON INITIAL ASSESSMENT

- Record respiratory rate over one full minute and oxygen
- o saturation if possible
- If respiratory rate is high or oxygen saturation is below 90% alert senior care staff for action
- Record history, including flu-like symptoms, date of onset, travel, contact with people who have flu-like symptoms, co-morbidities
- Consider specialized diagnostic tests (e.g. RT-PCR) (<u>see surveillance SOP 3,4</u>)
- Use medical/surgical mask, eye protection, gloves when taking respiratory samples
- Label specimen correctly and send as per local regulations with biohazard precautions
- o Consider alternative or additional diagnoses
- Report suspected case to local authority

INITIAL AND ONGOING PATIENT MANAGEMENT

Supportive therapy for new influenza A (H1N1) patient as for any influenza patient including:

 Give oxygen to maintain oxygen saturation above 90% or if respiratory rate is elevated (when oxygen saturation monitor not available)

- Give paracetamol/acetaminophen if considering an antipyretic for patients less than 18 years old
- Give appropriate antibiotic if evidence of secondary bacterial infection (e.g. pneumonia)
- Consider alternative or additional diagnoses
- Decide on need for antivirals* (oseltamivir or
- zanamivir), considering contra-indications and drug interactions (see containment SOP 7)

BEFORE PATIENT

TRANSPORT/TRANSFER

 Put medical/surgical mask on patient if available and tolerable to patient

BEFORE PATIENT ENTRY TO DESIGNATED AREA

(isolation room or cohort)

- Post restricted entry and infection control signs
- Provide dedicated patient equipment if available
- Ensure at least 1 metre (3.3 feet) between patients in cohort
- o **area**
- Ensure local protocol for frequent linen and surface cleaning
- o in place

BEFORE ENTERING DESIGNATED AREA

(isolation room or cohort)

STAFF AND VISITORS

- Put on medical/surgical mask
- o Clean hands

BEFORE LEAVING DESIGNATED AREA

(isolation room or cohort) STAFF AND VISITORS

- o Remove any personal protective equipment
- o (gloves, gown, mask, eye protection)
- Dispose of disposable items as per local protocol
- Clean hands
- Clean and disinfect dedicated patient equipment and
- personal equipment that has been in contact with patient
- Dispose of viral-contaminated waste as clinical waste (see containment SOP 6)

BEFORE DISCHARGE OF CONFIRMED OR SUSPECTED CASE

- Provide instruction and materials to patient/caregiver on respiratory hygiene/cough etiquette
- Provide advice on home isolation, infection control and limiting social contact
- Record patient address and telephone number

AFTER DISCHARGE

- Dispose of or clean and disinfect dedicated patient
- o equipment as per local protocol
- o Change and launder linen without shaking
- Clean surfaces as per local protocol
- Dispose of viral-contaminated waste as clinical waste

(See containment SOP 6)

23 Containment SOP number 5: Infection control for Inpatient Ward Management (version 1: dated 5th June 2009) Patient Separation

- Patients should be kept separately in designated multi-bed rooms or wards.
- The distance between beds should be more than 1 m and beds should preferably be separated by a physical barriers (e.g. partition).
- If achieving 1 m separation between beds is not feasible, beds should have alternating head-to-toe positioning to maximize the distance between the heads of patients.
- A surgical or procedure mask should be worn by all caregivers/staff when in close contact (i.e. < 1 m away) with any patients. Masks are not necessary if not in close contact with patients.
- If sufficient stocks exist, surgical/procedure masks are also recommended for patients when they are in close contact with others. This may not always be feasible (e.g. when the patient is on oxygen therapy) and thus patients must be encouraged to cover coughs/sneezes with a cloth or to cough/sneezer into their sleeve at all times.
- Movement and transport of patients from the room should be limited to essential purposes only. If transport is necessary, patients should wear a surgical or procedure mask when outside their room/area.
- Protocols for visitation by close relatives should be in place, and surgical or procedure masks made available for their use.
- Inpatient wards should have clinical equipment (e.g. sphygmomanometer, thermometer) dedicated to their exclusive use if possible. If not, disinfection with alcohol-based disinfectant should be carried out between patients.
- Patient examination must be minimized to such that will alter treatment only.

Entry to/exit from respiratory inpatient ward

- Minimise contact between health-care workers and patients as much as possible.
- Only clinical workers who have been educated about influenza should enter the room.
- Ensure that anyone who enters the ward wears appropriate PPE (mask and goggle/visor) if close contact with patients is anticipated.
- If contact with the patient's blood, body fluids/secretions is anticipated, also wear clean, non-sterile gloves and gown (plastic apron if gown is permeable) when entering the room.

Entering the respiratory inpatient ward

- Collect all equipment needed.
- PPE should be put on (and removed) outside the isolation room (see diagrams below for putting on PPE)

NATIONAL OPERATIONAL PLAN FOR H1N1

• Enter the room.

Leaving the respiratory inpatient ward

• If only masks and goggles/visors are used (close contact but no aerosol-generating procedures performed).

• Remove masks by grasping elastic behind ears or ties – do not touch front of mask – and place in biohazard plastic bag; perform hand hygiene. If several PPE in the correct order (e.g. performing aerosol-generating procedures):

- Remove PPE in the correct order (see diagrams below for removing PPE).
- Remove gloves (peel from hand and discard into biohazard plastic bag).
- Remove gown (place in biohazard plastic bag). Gloves and gowns may be removed at the same time.
- Use alcohol-based handrub or wash hands.
- Remove eyewear (goggles) do not touch front of goggles and place in biohazard plastic bag for disinfection and reuse.
- Remove mask by grasping elastic behind ears or ties do not touch front of mask and placing in biohazard plastic bag.
- Use alcohol- based handrub or wash hands again.

Hand hygiene

Each individual having direct contract with (touching) patients must perform hang hygiene:

- before and after patient contact
- after removing gloves

• in case of suspicion of hand contamination after removing gloves, e.g. while undressing after leaving the respiratory inpatient ward. Routing hand antisepsis is performed either:

- by using preferably an alcoholic handrub solution if hands are not visibly soiled; or
- washing hands with running water and soap using a single-use clean towel for drying each time. (see containment SOP number 1)

Ensure that hand-eye contact is not made (e.g. wiping of sweat) as transmission can occur via conjunctival mucosa.

Cleaning/waste disposal

- 1. Alcohol-based hand-rub or hand-washing facilities should be located within and outside the isolation ward.
- 2. Reusable items should be placed in a closed recipient or plastic bag.
- 3. The respiratory inpatient ward must be cleaned each day including all horizontal surfaces.
- 4. Cleaning equipment must be cleaned after each use. Mop-heads should be laundered in hot water (at least 70° C). If hot water is not available, soak mo-heads in 0.5% chlorine solution for approximately 15 minutes after washing.
- 5. Used linen should be placed in a linen bag inside the room. Take immediately to laundry collection area-treat as normal soiled/contaminated linen.
- 6. All waste should be discarded into a clinical waste-bag inside the room. When waste is to be collected for disposal, treat as "normal"
- clinical/contaminated/infectious waste.
- 7. The patient and family should be given appropriate health education messages.
- 8. Thorough cleaning and is infection of the bed and room is required after discharge.

24 CONTAINMENT SOP NUMBER 6: ENVIRONMENTAL HYGIENE BY DISINFECTANT USE (VERSION 1 DATED 6TH JUNE 2009)

Disinfectant	Recommended Use	Precautions
Sodium hypcholorite		
Most household bleach solutions contain 5% sodium hypochlorite (50 000 parts per million (ppm) available chorine).	Disinfection of material/surfaces contaminated with blood and body fluids.	Irritates mucous membranes, the skin and the airways, decomposes under heat and light, and reacts readily with other chemicals.
Rationale	Recommended available chlorine required	Mix and use in well-ventilated areas.
If the initial concentration of the bleach is 5%, 1 part bleach needs to be diluted with 99 parts water to give the final required concentration of 0.05%. Some constant method to measure 99 parts of water and 1 part bleach	0.05% or 500 ppm available chlorine Recommended dilution	Protective clothing required while mixing, handling and using bleach (mask, rubber gloves and waterproof apron). Goggles are also recommended to
must be used or underdiluted (bleach is too strong) or overdilution (bleach is too weak) may occur.	1:100 dilution of 5% sodium hypochlorite is the usual recommendation. To get a 1:100 dilution,	protect the eyes from splashes.
	use 1 part bleach to 99 parts cold tap-water.	Mix bleach with cold water because hot water decomposes the sodium hypochlorite and renders it ineffective.
Example of how to dilute bleach	Adjust ratio of bleach to water as needed to achieve appropriate concentration of sodium	Do not mix with strong acids to avoid release of chlorine gas.
Use spoons, cups, glasses, or other utensils commonly available in the community or the bottle cover (of the bleach) as a measuring tool. Let's assume a spoon is the	hypochlorite, e.g. for bleach preparations containing 2.5% sodium hyprochlorite, use twice as much bleach (i.e. 2 parts bleach to 98 parts water)	Corrosive to metals.
measure of "1part". Using the same spoon, count the number of spoonfuls of water needed to full a cup. This	, , , , , , , , , , , , , , , , , , ,	Surfaces must be cleaned of organic materials such as secretions, mucus,
will show how many "parts" a cup contains. Let's say the cup contains 48 parts water (i.e. it took 48 spoonfuls to fill	Contact times for different uses	vomit, faeces, blood or other body fluids before disinfection or immersion.

Disinfectant	Recommended Use	Precautions
the cup). Therefore 2 cups of water will equal to 96 parts		
of water. So 99 pasts will need 2 cups of water plus 3	Disinfection by wiping of nonporous surfaces: a	
further spoons of water. This quantity of water then	contact time of ≥10 min is recommended.	
mixed with one spoon of bleach gives approximately the	Disinfection by immersion of items: a contact time	
right dilution of 99 parts water to 1 part bleach.	of 30 min is recommended.	
Alcohol		
For example isopropyl 70% ethyl alcohol 60%.	Small surfaces (e.g. rubber stoppers of multiple- dose medication vials and thermometers) and occasionally external surfaces of equipment (e.g. stethoscopes and ventilators)	Flammable, toxic, to be used in well- ventilated areas and only on small surfaces, avoid inhalation.
		Keep away from heat sources, electrical equipment, flames, hot surfaces.
		Allow it to dry completely, particularly when using diathermy, as this may cause burns. May cause discoloration, swelling,
		hardening and crackling of rubber and certain plastics after prolonged and repeated use.

25 Containment SOP number 7: Protocol for Antiviral Therapy for H1N1flu (version 1: dated 6th June 2009)

Prophylaxis

- 1. Close household contacts of a confirmed or suspected case
- 2. Health care providers or public health workers who were not using appropriate personal protective equipment during close contact with a confirmed or suspected case

Adult dose: Oseltamivir (Tamiflu) (o) 75 mg twice daily for 10 days

 $\begin{array}{cccc} \mbox{Pediatric dose:} &< 3 \mbox{ months} & \mbox{not recommended} \\ (age <1 \mbox{year}) & 3-5 \mbox{months} & 20 \mbox{ mg (o) o.d} \\ & 6-11 \mbox{months} & 25 \mbox{ mg (o) o.d} \\ & 6-11 \mbox{months} & 25 \mbox{ mg (o) o.d} \\ & 15-23 \mbox{ kg:} & 30 \mbox{ mg (o) o.d} \\ & 23-40 \mbox{ kg:} & 60 \mbox{ mg (o) o.d} \\ & >40 \mbox{ kg:} & adult \mbox{dose} \end{array}$

Treatment:

1. Adult

Oseltamivir: 75 mg (o) b.d for 5 days

2. Pregnancy:

Potential benefit to be weighed against potential risk to the embryo/or foetus

3. Pediatrics age < 1year

- < 3 months: 12 mg (o) b.d.x 5days
- 3-5 months: 20 mg (o) b.d x 5 days
- 6-11 months: 25 mg (o) b.d.x 5 days

 Age (>1 year)
 <15 kg:</td>
 30 mg (o) o.d x 5 days

 15-23 kg
 45 mg (o) o. x 5 days

 23-40 kg:
 60 mg (o) o.d x 5 days

 >40 kg:
 adult dose

This is a protocol for general guidance. Individual clinicians will need to take decisions for treatment

26 Preparedness SOP number 1: Supply Checklist for Pre-Positioning (version 1 dated 5th June 2009)

- Masks surgical or procedure masks
- Masks particulate respirators (e.g. NIOSH-certified N95, EU FFP2 or equivalent masks)
- Gloves latex, examination gloves, single-use, non-sterile for clinical use (sizes: S,M,L)
- Protective eyewear if possible (face shield)
- Hand-washing soap or hand-disinfectant/alcohol-based gels
- Gowns (plastic apron, disposable)
- Biohazard plastic bags for used personal protective equipment
- Boxes for sharp objects
- Disinfectants for health-care setting
- Rubber gloves and boots (reusable) for environmental cleaning and burial teams
- Stretchers, body-bags for burial teams
- Antiviral medications (oseltamivir 75 mg, see below)
- Antibiotic medications
- Intravenous fluids/cannulae/giving sets

27 Preparedness SOP number 2: Calculation of of Antivirals and inpatient supplies (version 1: dated 5th June 2009)

Item	Quantity	Formulation	Cost of 1 course (MRU)
Oseltamivir	A 5-day course for 15-35% of staff. Increase by 10% for a buffer (2	Pack of 10 capsules	
(for treatment)	pills per day).		
Oseltamivir (for prophylaxis)	Prophylaxis for 100% of staff, for(average of) 6 weeks (1 pill per day).	Pack of 10 capsules	
IV fluids (Ringer lactate and giving sets	Anticipate 500-600 inpatient admissions.	Ringer Lactate = 1- litre bags	Variable depending on source
	Average 3 litres/admission =1500-1800.	-	
	Average 3 giving sets/admission =1500-1800 giving sets.		
IV Cannulae various gauges	Anticipate 500-600 inpatient admissions.	Gauges 14, 16, 18, 20, 22	Variable depending on source
	Average 2 cannulae per day =100-1200 cannulae.		
Needles for injection	Anticipate 500-600 inpatient admissions.	Gauge 21	Variable depending on source
	Assume all need injectables if hospitalized.		
	Average 2 needles per day = 1000-1200 needles.		
Paracetamol	Anticipate 500-600 inpatient admissions (and 3500 outpatient	500 mg	Variable depending
	consultations).		on source
	Anticipate 20 tablets per patient.		
	Total 82 000 tablets.		
Stationery for	Up to 3500 seeking care at outpatient department, up to 600		Variable depending
records/notes	admissions. Case notes, laboratory/referral forms.		on source

NATIONAL OPERATIONAL PLAN FOR H1N1