REPUBLIC OF KIRIBATI

AVIAN & PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN

D R A F T

In consultation with the Pandemic Taskforce of Kiribati
April 2008.

CONTENTS

FOREWORD

ACRONYM

CDC	Centre for Disease Control [Atlanta, USA]
CFR	Case Fatality Rate [= no. of cases/no. died X 100%]
FAO	UN Food and Agriculture Organization
GOK	Government of Kiribati
IHR	International Health Regulation
ILI	Influenza Like Illness
KDC	Kiribati Disaster Council
KIPT	Kiribati National Influenza Pandemic Taskforce
KPLC	Kiribati Poulty and Livestock Co-opeation
KNIPPP	Kiribati National Avian & Pandemic Influenza Preparedness and Response Plan
MOHMS	Ministry of Health and Medical Services
NIPPT	National Influenza Pandemic Preparedness Taskforce
OB	Office of the President
OIE	International Organization on Animal Health
PRIPPP	Pacific Regional Influenza Pandemic Preparedness Project
PUB	Public Utility Board
SPC	Secretariat of Pacific Community
WHO	World Health Organization

DEFINITIONS

These are some definitions that may help to understand the issues and their applicability within the Plan.

Influenza (the flu) virus: A highly infectious disease of the respiratory tract caused by influenza virus [lab confirmed]

Influenza type A: A type of virus that occurs both in humans and animals.

Influenza type B: A type of virus that occurs only in humans.

Influenza like illness [ILI] or suspected case of influenza:
Anyone having an acute onset of fever [38^{o}C], sore throat or cough and myalgia with no other diagnosis. In the case of avian flu suspects, a history of traveled to infected areas, and contacts with live or dead animals either in farms or wet markets would be very helpful.

Confirmed cases: Any suspect cases or with ILI who was laboratory confirmed to be positive for influenza A virus with specific strains identified, as at this time, H5N1 or other similar strains or even other strains.

Contacts: Those who live in the same household with the infected people. In the plane, those sitting close to the positive case. Those on the boat sleeping with the positive case are contacts.

Epidemic: A sudden increase in the incidence of a disease affecting a large number of people and spreading over a large area during one point/period of time.

Pandemic: An epidemic on a global scale. Only influenza type A viruses had been known to cause pandemics

H5N1 avian influenza [bird flu]: Influenza type A virus affecting birds but passable to humans after close contact with sick or dead birds – it causes severe influenza-like symptoms, and can cause multi-organs dysfunction, leading to deaths.

A. PREFACE

Though it is impossible to predict where, when and how serious an outbreak of the pandemic influenza may be, there is increased concern throughout the world because the bird flu outbreaks especially in the Asian countries with highly pathogenic H5N1 has not been well controlled to date, and avian human infections also continue to occur. This scenario implies that as long as the virus continues to mutate, the more likelihood for the virus to get better adapted for a more efficient transmission to human and human to human transmission. However, emergence of pandemic influenza strains from low pathogenic avian influenza cannot be excluded. The mode of transmission to date was through close contact with sick poultry.

The latest update from WHO on cumulative number of confirmed human influenza cases by 17th June 08 were 383 cases and out of which 241 died, giving a case fatality rate [CFR] of 62.9%. Of all the countries/areas that had confirmed more than 10 human infections, Indonesia was confirmed to have 108 cases and out of that, 87 had died, giving a CFR of 80%. In other words, for every 100 human avian infections, 80 of them died. The source of infection was through direct contact with infected poultry.

In the last 20th century, there were three major influenza pandemics globally, namely: Spanish flu of 1918, which resulted in an estimated >40 million deaths worldwide; the Asiatic flu of 1957 and Hong Kong flu of 1968 with about >1 million deaths. Some of the Pacific Island countries were among the worst hit in the world: eg: Samoa [used to be known as Western Samoa] and Tahiti around 22-25% of its total population was wiped off; Tonga 6%, Fiji 5% [>9,000 deaths], Guam 5%, and Nauru 16%. The Kiribati and Tuvalu (then known as The Gilbert and Ellice Group), Vanuatu (New Hebrides] and Solomon Is. were spared through the enforcement of strict maritime quarantine policy by Australia on both the incoming and outgoing vessels. American Samoa was also among those PICTs that were totally spared through total border closure and strict bio-security measures.

Today's high-speed communications means that a pandemic would spread around the world within a matter of days/weeks. The Republic of Kiribati's channel of communication with the outside world is both by sea and air, and these will be the main channels for potential avian or/and pandemic strains to be introduced into the country.
Another challenge is whether Kiribati has the capacity to respond in a well-co-ordinated and timely manner to such threats. This fact alone calls for assistance from Kiribati working partners, like SPC, WHO, FAO, OIE and others, to building the capacity of Kiribati to be able to respond accordingly. At the same token, a whole of Government approach

has the best possibility of being successful in getting Kiribati to be well-prepared to respond to avian and pandemic influenza events.

B: INTRODUCTION

This Plan is an outcome of a series of meetings by the national influenza pandemic multi-sectoral taskforce of Kiribati [KIPT], which has been tasked by the Cabinet, to take the lead-role on the preparedness planning process for the national response to threat or event of avian and pandemic influenza.

The scope of this Plan is divided into two parts:
Part 1: covers relevant information on previous pandemics of influenza, and also on updated information on avian and pandemic influenza and relevant related issues. It is intended that this part needs to be updated now and then, especially when new information comes to hand.

Part 2: is the Pandemic Action Plan for Kiribati following the WHO Phases and Levels Using local scenarios to tailor the preparedness and response to the local context of Kiribati.

The policy directives proposed in this Plan seek the support of the Cabinet in approving this as not only as a working document to guide the preparedness process but also to guide a timely co-ordinated response to any national emergency, like pandemic influenza or any other national emergency be it natural or man-made or other emerging diseases.

The planning framework adopted by Kiribati pandemic taskforce for Kiribati pandemic preparedness planning follows closely that proposed by WHO, and the Pandemic period and phases of 2005. Also, the Plan also encompasses the requirement of the International Health Regulations [IHR] which binds Kiribati to identify, assess, evaluate and report to WHO any unusual disease condition or situation which may be of international threat.

The members of the taskforce through its meetings, discussions and a small desktop exercise carried out in 2006, identified gaps which needed to be addressed in this first reviewed version of the initial draft. There had been implications that Kiribati pandemic preparedness plan should be modified to provide clarity and direction to front-line responders, and the people of Kiribati to be able to respond appropriately to threat of avian and pandemic threat or event.

Though there may be many aspects of the Plan which may require funds for, especially some of the pharmaceutical interventions like antivirals to stockpile; personnel protective equipment, vaccines [once available], adequate laboratory support mechanism like rapid

test kits, specimens shipping, and few others. However, Kiribati working partners like WHO, SPC and others may be assisting with some of those materials and supply.

The non-pharmaceutical measures which had some successes during the previous influenza pandemics of 1918, 1957 and 1968 should be strengthened and enforced, as they can be implemented at no or minimal costs but with more benefits for people in the communities. These measures include: social distancing, isolation/quarantine, closure of schools/workplaces, banning public gatherings and/or border surveillance or border closure, and more.

The Plan is an evergreen document which may change from time to time to incorporate new information, knowledge sourced from reputable sources like WHO, SPC, OIE, FAO and CDC, to better tailor the situation of Kiribati for the best status of preparedness and response to any situation arises.

C. WHO Pandemic period and phases.

A summary of the appropriate responses are provided in the matrix which shows what response/activities that Kiribati would do during different pandemic period and phases, and depending whether the avian and pandemic virus are offshore or onshore of Kiribati.

SUMMARY OF ACTIVITIES PER WHO PANDEMIC PHASES

WHO Pandemic Period & Phases	**Actions Required**	**By Who**
Interpandemic Period	***Main focus is Planning***	***All relevant stakeholders***
Phase 1 – No novel influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals only, the risk of human infection or disease is considered to be low	Kiribati Department of Health takes pivotal role in the consultation and development of Draft of the Kiribati national Influenza Pandemic Preparedness & Response Plan [NIPPP]. The Kiribati Influenza Pandemic multisectoral Taskforce. [KIPT] develop and review its NIPPP. Address crucial issues of the NIPPP eg:Co-ordination mechanisms; surveillance; communication; legal mechanism etc.	Kiribati MOHMS and KIPT
Phase 2 – No novel influenza virus subtypes have been detected in humans: however, a	Continue as in Phase 1. Ensure contingency plans, including Emergency Response	All Departments, Private sectors, NGO including Faith

circulating animal influenza virus subtype poses a substantial risk of human disease	Plans of each essential services are done. Testing of the NIPPP. Each agency prepares information and share with their respective staffs. Intensify public awareness of elements of the NIPPP.	based organization.
Pandemic Alert Period	***Intensify Planning and ensure strategies are ready for deployment in short time.***	
Phase 3 – Human infections with a novel subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	Continue those in Phases 1&2. Promotion of preventive measures.	Permanent Secretary of Health/Director of MELAD & KIPT
Phase 4 – Small cluster(s) with limited human-to-human transmission, but spread is highly localized, suggesting that the virus is not well adapted to humans	***Strong focus on Border control measures*** Activate relevant component of Kiribati Influenza Pandemic Preparedness and Response Plan	Kiribati IPMultisectoral Taskforce [KIPT]/Kiribati Disaster Council (KDC)
Phase 5 – Larger cluster(s), but human to human spread still localized, suggesting that the virus is becoming better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).	***Enhance Cluster monitoring and control*** Implement relevant public health measures & other pharmacological components. Implement alternative work arrangements	KIPT/ Government Departments/ Village Councils/ Churches
Pandemic Period	***Pandemic management***	**All stakeholders**
Phase 6 – Pandemic. Increased and sustained transmission in general population	Continue as in above Phases. Enhanced surveillance & record/report.	KIPT/All stakeholders
Recovery Phase:	**Evaluate the situation (between waves or end of pandemic) and activate relevant components of the Recovery Plan.**	As above

D: ESSENTIAL ELEMENTS OF A PANDEMIC PREPAREDNESS AND RESPONSE PLAN

WHO and PPHSN/SPC have been providing PICTs with suggestions of relevant elements that should be addressed in order for each of these island nations to achieve and fulfill standards of preparedness to cope with the overwhelming nature of an influenza pandemic. Below are some of those elements coupled with activities that Kiribati Government through its National Influenza Pandemic Taskforce will work on in order to provide its people with the best preparedness to cope with the threat and impact of a pandemic. This is planned within the context of Kiribati being a limited resource country, a factor which is shared by most of the Pacific island countries, considering that some of our territories are better off.

Traveling by air between countries makes it possible to get infection from infected places to non infected areas within hours. The International Health regulation {IHR}prescribes that all member states that ratified it, which Kiribati is a party, should report to WHO any suspected/confirmed event or situation, eg avian flu, that would potentially cause worldwide concern. WHO should then is mandated to coordinate verification and investigation within country, and information will then be shared to guide relevant response, both nationally and globally. For this it is important that Kiribati authorities are fully aware of the roles they should play during the different phases of the epidemic preparedness plan.

COORDINATION AND LEADERSHIP

During a time of a national disaster, as will be if the pandemic occurs, great leadership with co-ordination competency are very much in demand to ensure the best and most appropriate response are co-ordinated. It is most important to keep the level of panic among the population at its minimal by ascertaining that mechanism for sharing correct and updated information with the people, and explanation of what the Government is doing is having the best interest of the people of Kiribati at heart.

Commander in Chief:
The taskforce suggests that the Office of the President [OB] shall be the commander-in-chief because it has the authority over other ministries in terms of mobilizing all available resources of the country, including vehicles and all else.

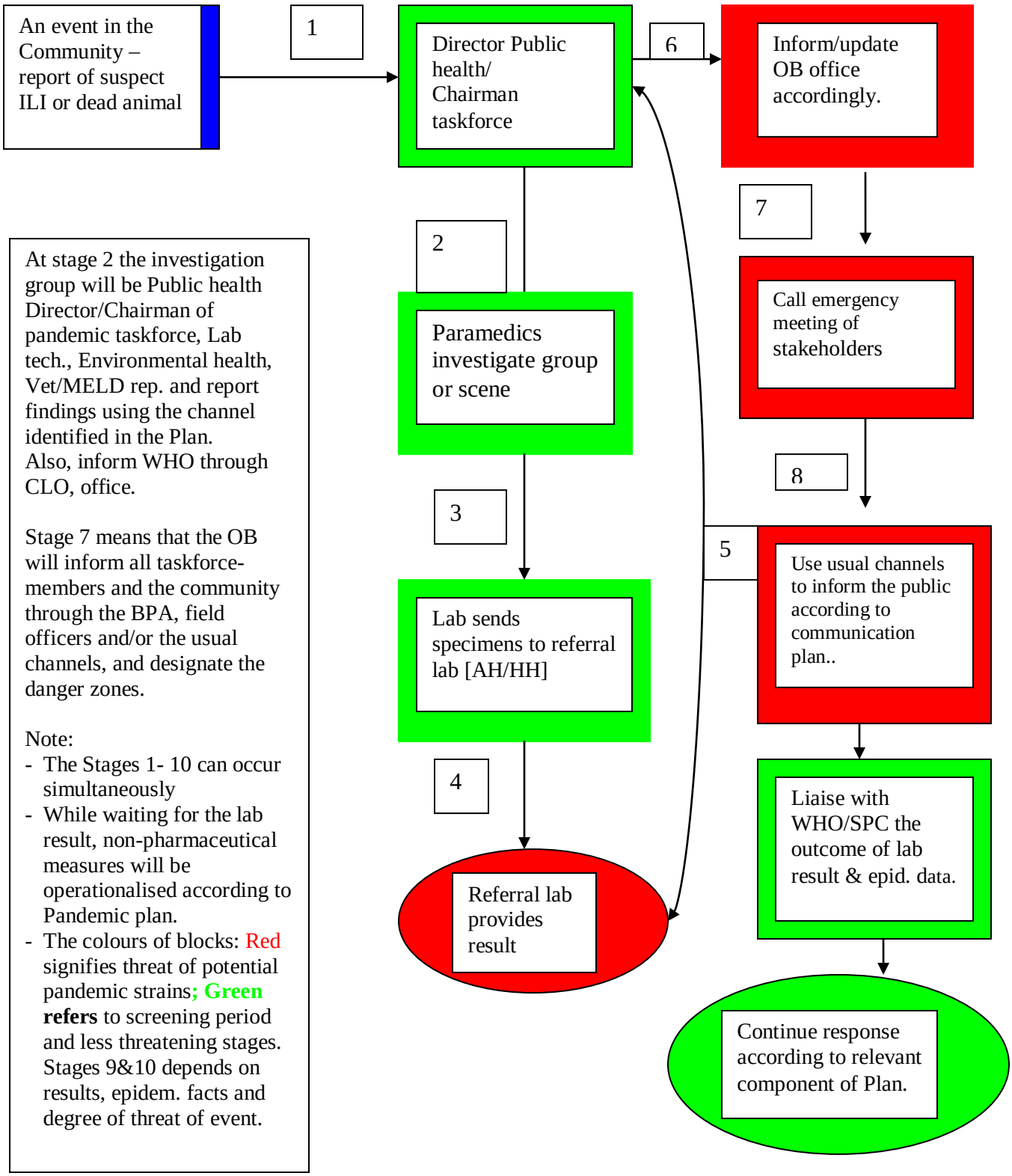
The commander in chief is the Chief Secretary in the Office of the President [OB].

When there is a suspected or confirmed case of either avian or pandemic influenza by the Health authority or the Animal Health/veterinarian, it is the responsibility of that respective authority to inform the OB office. Upon being informed, relevant components of the KIPPP will be activated and responsible stakeholder will ensure that responses are carried out accordingly by all sectors, Government and Non-Government organizations, and the community at large.

Also, it is essential that the Cabinet has a contingency plan to accommodate relevant powers in the wake of any threat/events of hazards/disasters that are of national magnitude, be it diseases like pandemic influenza, or man made. Thus it is most important that relevant stakeholders in the pandemic taskforce, like the Attorney General, is responsible in ensuring that relevant mechanisms are in place to delegate relevant powers and authority to facilitate appropriate, timely and well co-ordinated response to national emergencies.

The Health Department as well as the Department of Agriculture will take lead role in relating relevant information to the taskforce which will in turn discuss/meet before recommendations are provided to the Minister of Health and to the Chief Secretary, OB. While waiting for diagnosis to be lab-confirmed, relevant component(s) of the Plan needs to be activated by relevant stakeholders.

Figure 1: The Organizational framework for decision making.



At stage 2 the investigation group will be Public health Director/Chairman of pandemic taskforce, Lab tech., Environmental health, Vet/MELD rep. and report findings using the channel identified in the Plan.
Also, inform WHO through CLO, office.

Stage 7 means that the OB will inform all taskforce-members and the community through the BPA, field officers and/or the usual channels, and designate the danger zones.

Note:
- The Stages 1- 10 can occur simultaneously
- While waiting for the lab result, non-pharmaceutical measures will be operationalised according to Pandemic plan.
- The colours of blocks: Red signifies threat of potential pandemic strains**; Green refers** to screening period and less threatening stages. Stages 9&10 depends on results, epidem. facts and degree of threat of event.

It is vital that the focal point for Ministries of Health and Medical Services [MOHMS] and Agriculture and Food, or Vet, to be responsible to collecting updated information from WHO, PacNet/SPC, FAO/OIE on avian flu outbreaks and the risks of pandemic influenza. These information should be related to the members of the taskforce, and appropriate Ministries, NGOs, CBOs and to the public via appropriate media.

Securing funds to facilitate preparedness activities:
The Government of Kiribati [GOK] through its various departments are tasked to seek assistance, both monetary and technical, for the Pandemic influenza preparedness and response plan for Kiribati.

It is recognized that some of Kiribati working partners can provide technical assistance as well as limited monetary assistance as part of their Project's assistance: e.g. the Pacific Regional Influenza Pandemic Preparedness Project [PRIPPP] of SPC that is providing direct assistance to PICTs with funds; provision of 100 doses of Tamiflu; some Personal Protective Equipment [PPE]; while provision of technical assistance is ongoing. WHO provides rapid test kits, and Tamiflu for rapid containment strategy. Other assistance through PPHSN/SPC project of the CDC-funded lab-based influenza sentinel surveillance project can be sought which can assist with improving the laboratory capacity of Kiribati.

Food security
It is vitally important to ensure that food security for Kiribati during emergency periods is planned far ahead of time. Kiribati soil is not so fertile especially around Tarawa, so plans on what to store, how to maintain food-storage quantity and quality if there will be a disaster is to be in place now. As Kiribati depends heavily on imported food stuff, this will be of great importance especially if the ports and airports are to be closed, even temporarily, during period of pandemic influenza.

Compensation
Though the issue of hardship-compensation for the civil servants or any other persons/volunteers who will be front-liners like doctors, nurses, paramedics, quarantine officer, immigration, custom, may be brought up now as an issue for Cabinet discussion and approval, but as learned from past events of influenza pandemics, the whole social infrastructure was overwhelmed, and people may be dying regardless of being at home or hospital/other health care facilities.

Also, in Kiribati now, there is no health/life insurance policy for civil servants or other persons in Kiribati. This makes it fairly hard to imagine compensation of this type being put into place at this stage.

As there are no commercial poultry farms in Kiribati, perhaps compensation for mass culling of poultry on a commercial basis does not apply. However, chickens/ducks are food-source for Kiribati people which may make mass culling an issue to be addressed now. It is only imperative for GOK to make a decision on how to address such a situation if it arises, that is, a policy may be put in place now to deal with such a situation if it will arise.

SURVEILLANCE AND LABORATORY SUPPORT

Surveillance as defined as not only collecting data, but also to collate, analyze and interpret into useful information for planning purposes.

It is most important to ensure that functional surveillance systems are in place, and in the case of outbreak-prone communicable diseases like influenza, dengue and others, an early warning system [EWS] component of the surveillance systems should be in place and operational. Kiribati MOHMS and MELAD, especially Livestock section, need assistance in this area, and to be able to link the two surveillance systems for a better collaborative response effort.

As anticipated, the avian and pandemic influenza will be introduced to Kiribati through its air- and sea-ports, hence the emphasis on the importance for relevant stakeholders to be made aware, through awareness programs and through activities of Kiribati pandemic taskforce, of the vital roles and responsibilities of different partners operating at the airport and sea-ports, including incoming and outgoing passengers and crews.

It is the responsibility of the different organizations to ensure that they play their critical roles during the different phases of the preparedness. The border control teams should be well versed on the channel of communication, that is, who {at least 2 or 3 names/organizations} to contact, how {phone numbers, email, fax}, when {24 hours}, and where {community/homes/others} to quarantine persons.

Influenza Like Illness [ILI] surveillance

ILI is defined as an acute viral respiratory illness with acute onset of fever[=>38^0C], with cough or sore throat and with myalgia in the absence of any other diagnosis [WHO,PPHSN/SPC]. It is noted that other constitutional symptoms of viral illness may also be present like coryza, headache, nausea, loss of appetite among others, but

fulfillment of the above symptoms would minimize the possibility of other viruses being responsible but influenza virus.

The attention given to development of a functional surveillance systems of ILI in humans are not as expected considering the current threat of bird flu of the influenza virus mutating to develop a pandemic strain. The current surveillance forms used are being reviewed by the visiting SPC communicable disease specialist, and anticipate the recommendations will be taken on board, and implemented accordingly.

From the animal health aspect, there is still no systematic surveillance system set up, though ad-hoc reporting as a form of early warning systems had been practiced in recent months. However, they are working on establishing a system and to involve the village (community) councils in the implementation of such a system.

Linkage of Human Health [HH] and Animal Health [AH] surveillance; and International/Regional linkage

It is important to ensure that there is clear linkage in terms of identified focal contact person(s) from the HH and AH that should be notified when any suspected situation arises, of either possible avian flu or pandemic threat from a possible pandemic strains.

It is advisable to explore existing functional mechanisms or develop one with identified channels of communication between HH and AH agencies to be used/improve to be used in this situation.
Kiribati's linkage with the regional/international surveillance through WHO, PPHSN/SPC, CDC, OIE, FAO and others should be maintained to ensure that Kiribati is continuously updated with correct and timely information of avian flu. Also, Kiribati should assist these organizations with its situations, including sending relevant specimens for influenza virus sub-typing whenever it can.

Increase capacity of national laboratory
It is almost impossible to upgrade local laboratory to level 2 because of enormous cost involved. However, there are existing mechanisms, like LabNet, which are well supported by its allied members and development partners for preparedness for surveillance of emerging communicable disease of international concern like avian flu and its potential pandemic predisposition. Kiribati is a member, and should benefit from this reviewed and well supported mechanism.

WHO through its CLO office in Kiribati, provided influenza test kits to the Laboratory which will expire in December 07. However, the clinicians need to know about these tests

being available, and how to use them for primary influenza screening in Kiribati of suspected influenza outbreaks. If it is positive for either influenza type A or B, specimens can be arranged either through the CLO office or direct to SPC, for the specimens to be shipped for confirmation using PCR. Institut Pasteur of New Caledonia, which is a WHO National Influenza Centre [NIC]. The current acting director of the laboratory attended a recent LabNet meeting in Noumea [2006], where demonstrations of how to take swab (nasopharyngeal) and specimen-analysis were carried out.

The utilization of existing mechanisms eg LabNet is therefore recommended to provide support for national laboratory diagnostic capacity. LabNet members include all PICTs, and also including development partners and donors like WHO [including WHO-collaborating-lab of Melbourne, Aust.], SPC/PPHSN, Pasteur Institut of New Caledonia, Mataika House, ESR {NZ}, VIDRL{Melbourne, Aust} and PPTC{NZ}.

To take specimens of suspected cases and do preliminary tests to confirm the diagnosis of either Influenza A or B, and send the positive Flu A for further analysis in a L2 lab through the LabNet or assisted by the PRIPPP. **The specimens** for humans are a naso-pharyngeal swabs while for animals/poultry is a cloacal deep swab.

Proper handling of specimens to meet the IATA standard is compulsory on an international level, which dictates that there will be specific certified laboratory and as delegated personnel(s) who are responsible to ensure all IATA requirements are met.

However, it must be stressed that ***public health non-medical interventions to prevent further spread of the virus and decrease rate of infections, should be fully operationalized regardless whether the confirmation has not been made available.***

AH should also ensure mechanisms for transfer of animal specimens for further testing & confirmation are in place. SPC AH section in Suva should be able to assist Kiribati Ministry of Environment, and Land Development in identifying and establishing mechanisms with the relevant laboratories to analyse animal specimens.

HEALTH SERVICES AND EMERGENCIES

It is anticipated that disaster like the magnitude of an avian and pandemic influenza will overwhelm the infrastructure of the Republic of Kiribati, especially its Health care systems as well as other relevant essential services. Thus, the paramount need for the Ministry of Health to be best prepared well ahead of time if ever such disease related disaster

reaches Kiribati. The experience from SARS should set the tone of the response but we must be aware that the spread of influenza is much more potent and easier than compared to SARS.

Table 1: Comparison of epidemiological parameters of influenza and SARS.
[Source: PPHSN Influenza Guidelines 2005]

Issue	SARS	INFLUENZA	CONTROL
Incubation period	Average 5 days	Average 2 days	Harder
Infectious period	Peaks 10 days	Peak 2 days	Harder
Transmission	Droplet>>>>airborne	Droplet>airborne	Harder
Age distribution	Adult	Adult/children/unknown	Unclear
Attack rate	Low/variable	High	Harder

Health Care Systems
Usually the Health Department would be the first to learn if there would be unusual event(s) in the communities through those who will seek assistance from any health care facilities. The usual response is information of the unusual event is as shown in Figure 1 [page 11].

Human Resources:
It is important to take stock of all the health care staffs of MOHMS, both those who are current, already retired but capable of being reemployed on an emergency basis, and those who were dismissed. It is also advisable to keep lists of possible volunteers like those from the Red Cross, and other relevant NGOs, Faith based organizations [FBOs] eg the Churches or members of the civil society who can assist with the caring of those who might suffer from influenza, those infected and affected by the avian and pandemic influenza event.

Contingency Emergency Plan:
The Ministry of Health should have a detailed contingency emergency plan including the response to an avian and pandemic influenza, showing with clarity how the different types of services are synchronized to ensure the response is most appropriate and relevant to avoid unnecessary social disruption, and control the morbidity and mortality of Kiribati people.

Various types of guidelines and protocols should be made available well in advance, coupled with relevant training, before avian and /or pandemic influenza event reaches Kiribati. Eg: Infection control guidelines; clinical management of patients; Antiviral administration protocols including indications, dosages, administration and side-effects (vaccines when available); prioritization of medical services eg elective surgery

postponement and perform only emergency surgery, and others as would contain in the Health Contingency Plan.

Training:
All health care workers around the Republic should be scheduled for some training on influenza pandemic issues, and to be well informed of the Plan that the MOHMS and the taskforce are putting into place. Training sessions on Infection Control for Health care workers [HCW], border control teams have been lined up for implementation with PRIPPP by mid-June 08.

Specific and detailed training on work-related issues including the application of PPE and other protective equipments and supplies will also be part of the training.

Isolation ward or areas:
Considering the nature of the transmission of the influenza virus, isolation of patients may only be effective in the earlier phases [3-4] when the spread is still confined to small cluster in Kiribati. Isolation may play only limited roles at first, and may not have a place in the response once pandemic influenza is established, and only reserved for very seriously ill flu patients.

Isolation of patients with ILI can be carried out in the homes, community- facilities and in the hospital/health care facilities like Isolation/Infectious Ward.

Other transitional health care facilities:
As mentioned above, the hospital may not be able to accommodate all those who may be coming down with influenza during a pandemic event, some maneabas or alternate health care facility as for the DOTS patients, are identified and renovated accordingly. These facilities can also be used to shelter people in times of any disaster that is national in magnitude.

There are many Maneabas observed to be erected around Tarawa by different clans or families which can be used for the purpose of isolation by the members of their own clan. An agreement with the Village Councils on which ones should be used to house sick ones during the pandemic are to be confirmed through the KIPT.

The hospitals may take care of mostly the very sick ones. Otherwise, most people should be able to be nursed at their homes.

Antivirals, antibiotics and other medical supplies
As antivirals (vaccines if available), antibiotics and other medications are mentioned as part of the Pharmaceutical measures/interventions, please refer to the pages for more details.

However, as antivirals cannot be given to every person in a country, it is advisable that a priority group should be identified and agreed upon by the taskforce. Suggestions of priority groups may include the patients and very close contacts, providers of essential services, and those that Kiribati taskforce and relevant stakeholders, considers to be among the priority group for antivirals. There will be a definite ethical issues to be addressed and should be made acceptable to rest of Kiribati through community awareness programs. Annex 3 provides the suggested categories of those that are considered priority to be given the antivirals.

Antiviral distribution policy is to be developed through collaborative planning by the chairman of the taskforce, core clinicians and EPI program managers and the legal officer from the AG office.

The positive cases should be given a full treatment course of Tamiflu immediately. Those in contact may receive the prophylaxis (prevention) which is best within 48 hours.

Though there are Acts [eg: Public Health Act], relevant policies and some related legislation exist to support these measures, **the member of the taskforce from the AG office has been tasked** to check what exactly are available and what needs to be addressed.

Antibiotics are for treatment of secondary bacterial infections, which are commonly respiratory infections that are usually caused by staphlococcus and pneumococcus. However, based on findings from limited number of patients with severe respiratory infections caused by H5N1, it was found that the cause was not bacterial in origin but more of viral nature, thus making the use of antibiotics inappropriate. But it is still advisable for countries to ensure that adequate amount of relevant antibiotics are stocked in country for treatment of potential secondary bacterial respiratory complications from influenza illness.

In Annex 4, there is a table with suggested amount of identified relevant antibiotics for Kiribati. Though this may be computed as surge capacity for stockpiling, but once the expiry dates are approaching, they should be taken off the shelves to be used on patients while new stock are stockpiled as replacements.

Counseling services

Though it is very appropriate to ensure counseling services are available and accessible at various areas/spots in hospital/health care facilities, and even at community levels, it is anticipated that this is going to be difficult as almost everyone in the community will be affected either directly or indirectly by the pandemic.

Experienced counselors on any other situations and including some religious ministers or equivalent should be identified now, as contained in the Strategic response plan [page 33 onwards]. A short refresher/introductory training will be planned and implemented accordingly.

COMMUNICATION

Communication plays major role in connecting perspectives with people, and if communication is not timely, and the content is not clear or/and outdated, then it is futile to plan/act based on information that was communicated.

UNICEF is working in close collaboration with PRIPPP, and also closely with Kiribati Influenza Pandemic Taskforce [KIPT] in its communication advocacy project to develop Kiribati's Communication strategy for avian and pandemic influenza.

Risk Communication:
Risk communication plan is developed, reviewed and oversees by the taskforce for implementation. Roles and responsibilities of identified personnel involved in the avian and pandemic preparedness and response planning are defined and each player is appropriately informed.

Tasks that should be clearly defined and implemented included but not limited to:

- Selection of an official spokesperson who will be responsible for liasing with higher authorities; ensuring accessibility to most updated information on the subject and sharing it with the contact persons for taskforce, MOHMS and other relevant essential services.
- Selection/identification of a communication person(s) who will liaise closely with the media [as national radio or TV or newspapers are the jurisdiction of the media staff], to ensure what the media gives to the public is the most updated and correct information. The spokesperson should be somebody who may be currently doing similar job, and maybe in the taskforce already or can be somebody who is widely acceptable to the public.

Informing the public on threats of avian and pandemic influenza using all various means of communication is crucial to foster good understanding by the public of what the Government through the KIPT is doing, and what it can and cannot do, and what is required of the people of Kiribati, to facilitate the best protection for Kiribati as a whole.

Information, Education and Communication [IEC]
Information shared through Facts Sheet, pamphlets, radio, TV and newspapers and even via emails or websites should be used to disseminate updated information to the public.

UNICEF through its current Avian and pandemic advocacy project is facilitating production of IEC in English though translation of some of those items into Kiribati language is in the pipeline. These IEC materials maybe best translated into I-Kiribati language, and PRIPPP through its Small Grant Scheme can assist with this activity. Information on food safety; food security; simple washing hands hygiene; sneezing and coughing etiquette; and other measures that the taskforce considers very relevant will be made available using any of the appropriate media. Other mean is through a public information paper which was prepared by the Taiwan International Health authority modified by the committee and translated to Kiribati which will be ready for use by the public soon.

Transport
Kiribati is challenged by its widespread distribution of its outer islands, and also the limited accessibility to the hospital by road as it is just one road throughout the whole island from Tarawa to Betio, and not to mention the outer islands.

Contingency plans should be in place to ensure that there are vehicles to be used when needed. The drivers need to be trained to accommodate patients on their cars and how to use the PPE or the protective gears like mask.

PUBLIC HEALTH MEASURES/INTERVENTIONS

There are two major components of public health measures or interventions that are covered below. They are the non-pharmaceutical and pharmaceutical measures. It is considered that the non-pharmaceutical measures are the more important to focus on as most of them are not expensive, and will benefit the general population more than the pharmaceutical measures.

THE NON-PHARMACEUTICAL MEASURES/INTERVENTIONS

It is of utmost importance that the legal system of Kiribati be reviewed {through the direction of the Kiribati influenza pandemic taskforce [KIPT]} does have existing framework to support the implementation of the non-pharmaceutical measures/interventions. The Kiribati people needs to be informed of existing legislation

or policy that requires their supports in the implementation of those activities, and they must be convinced that the Government is doing this for the benefit of every Kiribati.

Measures to reduce risk of spreading/further transmission of influenza

- Any person suspected to have ILI should follow the relevant protocol in the MOHMS contingency plan.

- **Awareness programs:** Educational and informational materials should be distributed to all villages, churches and community groups informing residents of the risks and how to care for themselves or their families. Radio, TV and Newspapers should also used to increase awareness of the people of issues pertaining to preparedness and response to threat or event of pandemic. [Annex 4: Simple infection control in the community].
- **Hand washing and sneeze and cough etiquette**, like covering the mouth when coughing and sneezing. If bare hands are used to cover mouths, touching surfaces or cleaning noses, they should be washed almost immediately, and if it is pieces of tissues, they should be discarded immediately into closed bins and not to allow it to lie around on surfaces, flush in toilets or burn.
- **Restriction of movements**: Depending on the situation within Kiribati and its neighbouring PICTs, movements within Republic of Kiribati and externally may be restrictive. People wishing to travel to near-by islands or territories maybe denied permit to travel because of mounting risk of transmission of the influenza virus, especially if those areas are reported not to have identified any symptoms of the influenza illness there. It is advisable to keep close communication with WHO regarding advice on traveling.
- **Avoid visiting live poultry markets**: People shall be advised to avoid going to live markets or infected farms when visiting Asian countries, like Indonesia, China, Viet Nam and so forth, where avian infection had been confirmed in humans.
- **Home quarantine/isolation** on a home basis or at a location that is set up by the Kiribati authority or the taskforce may be most effective during the early phases of the pandemic when there are small clusters, and limited spread from region to another. However, during the pandemic period, the number of those to be quarantined and isolated maybe too large, and that measure/intervention may no longer deemed effective.
- Depending on which Period and Phase of the Pandemic influenza according to WHO Pandemic Phases (globally) or in Kiribati (locally), special attention shall be made if suspected cases with ILI are detected at the community level (including those from outer islands), that they are properly dealt with, and with the least panic. Isolates taken from these suspected cases will be most appropriate for further analysis in the referral lab, but these procedures have to be done with extreme infection control

measures. Management of suspected cases will be following the Clinical Management guideline provided by the MOHMS.

- **Voluntary home confinement** is recommended for any patient with ILI, and his/her contacts within the household or neighbourhood. The taskforce will work towards ensuring that the public is sensitized so that they are not overwhelmed when there are positive cases in large numbers and they know what they should do when they get infected and what to do to those who are infected. The cases shall receive all the necessary care like any other ill person currently applied by the trained health staff and paramedics.

Voluntary reporting : The Public are encouraged to prompt self diagnosis and report to health authority accordingly if there is fever, cough or sore throat and myalgia in absence of other diagnosis shall be suspected as a case of avian flu or ILI with pandemic strains unless proven otherwise.

- **Masks should be worn** by the ILI suspects if identified until symptoms subside or proven not to be influenza or by front-liners who will be dealing with potential suspects of ILI.
- **Banning of mass gatherings; school, workplaces closures,** church services, concerts, any other social festivals, and social gatherings are recommended to minimize or prevent spread of influenza. Legal framework is in place to support measures like these when situations arise.
- **Corpses disposal:** During the past pandemics, traditional rituals of mourning the dead was not possible to carry out due to large number of deaths within a short period of time, and those who were alive might have been too unwell or frightened to bury their deceased relatives properly. Therefore, plan on how to dispose human remains is completed, and approved. Options may include:
  - Identifying potential areas for 'mass grave' with modification to the current legal system of disposing human remains as currently practiced by the MOHMS.
  - Provide cooler trays in the morgue to stack tagged corpses that are to be properly buried by relatives at a later date. [Note: that if the cooler is run by generators, adequate supply of fuel should be stocked well ahead in time].
  - The deceased are labeled properly and buried even in mass graves, only to be relocated to preferred graveyard at a later date when the pandemic waves end.
  - Training of those who will handle dead bodies on how to carry out these measures under strict infection control should be provided well before any of such occurrences occur.

- **Border surveillance**: Health screening questionnaire to detect whether the people may have been in contact with the infected animals or people are being eye-

balled at the airport, when the level of risk intensifies.

Incoming planes to Kiribati must impose mask to all traveler on board when there is infected person on board – the agreement between the airlines and Kiribati shall be reached soon whether written or in principle.

- **Border closure** needs to wage carefully in terms of when to execute such decision, and how long can Kiribati closes its border to outside world, and remain self sufficient. The committee feels that this issue should be brought to the attention of regional leaders meeting at the Forum or the ministers meeting every two years. This is a rather controversial issue but during the outbreak of influenza, Kiribati needs to have a strong footing on what to do in relation to other countries. The International health regulation [IHR] is the guide that will necessitate better response and protection of Kiribati as well as the rest of the Pacific from any deadly disease that will spread regionally or internationally.
- **Disinfectants use:** Where there is no running water, alcohol based hand rub can be used. But it should be noted that this hand-rub is not to take the place of washing hands with running water and soap. About 70% SVM may be used for this purpose.

  Some countries like Fiji produce their own alcohol rub for this purpose and not a commercial product. Air disinfectant is not advisable. The veterinarian may use disinfectants on his/her clothes, shoes but not applicable to the public. The general use of water and soap when there is contact to the infected areas remains the best option.

THE PHARMACEUTICAL MEASURES OR INTERVENTIONS

Antivirals:

There are two types of antiviral drugs: the M2 inhibitors, Amantadine and Rimantadine, which are only active against influenza A, and not used against H5N1. The Neuraminidase inhibitors, such as Oseltamivir (Tamiflu®) and Zanamivir (Relenza®)) are used effectively to treat seasonal influenza A and B, and are also used against H5N1.

Amandatine, Zanamivir [Relenza], and Oseltamivir [Tamiflu] are currently being licensed to prescribe in New Zealand and Australia. If given as early as 48 hours prior to onset of viral symptoms, they may facilitate shortening the course as well as severity of the illness

Tamiflu can be used for both treatment [symptomatic patients] and prophylaxis [contacts of ill persons; those at risk of being exposed either during providing of essential services

eg health care providers, border control team, livestock handlers and other providers of essential services as identified]

i Treatment

As mentioned above, antiviral medication may be effective if given either before or soon after the onset of symptoms in a patient as it may **reduce the severity and duration of the illness.**

In symptomatic 13 years old and above, that is, patients having influenza (fever, respiratory symptoms), Tamiflu should be administered in a dose of two 75mg capsules per day (total of 150 mg per day) for 5 days. Some evidence however shows that effective treatment may require a higher dose and a longer period of treatment. Therefore, the recommendations for stockpiling Oseltamivir expressed in this plan should be adapted once more information/knowledge becomes available over time. [1]

Oseltamivir [Tamiflu] should not be given to children less than one year old. For those one year and above, and those who cannot swallow the capsules, an oral suspension can be prepared, and used within a duration of 10 days. Dosages for those with complicated chronic conditions should be calibrated accordingly, either as suspension or capsules.

Uncertainty about dosage combined with an unpredictable attack rate, an anticipated wastage and pilferage has to be taken into account when deciding on the amount of antivirals to stockpile. During a pandemic situation, anyone with a fever or respiratory illness should be presumed of having influenza caused by the circulating pandemic strain and will be managed accordingly.

Laboratory diagnosis during a confirmed pandemic situation is a waste of resources. However, taking occasional specimens, especially from more severely sick ones for research reasoning may still be indicative. Prescription will be more based on clinical signs and symptoms. Tamiflu /Oseltamivir is a pharmaceutical agent and should be prescribed by a qualified physician. However, a standing order can be placed so that non-prescriber-health workers can provide the drugs following an endorsed regime, and all dispensed drugs, dosages and patients' particulars must be recorded respectively.

ii Prophylaxis

Antiviral drugs can be used for prophylaxis to people who are likely to have been exposed with a likely possible of contracting the infection. The purpose of prophylaxis is to try and prevent the development of severe pandemic disease in people among those who are potentially exposed to pandemic influenza. BUT the use of antiviral drugs for prophylaxis

[1] Needs to be updated on a regular basis

is extremely resource consuming therefore it is not generally recommended, and each case, if recommended, is judged on its own merits.

However, antiviral drugs should be use for treatment of persons as in priority groups [Annex 3]. The safety and efficacy of prophylaxis for children <13 years has not been established.

The recommended dose is 75mg daily for at least 7 days, and it is worth considering that protection lasts as long as drug is continued.

The current shelf life for Tamiflu capsules is 5 years, although this date may be extended once more information are available.

The tested duration for efficacy and safety had been for 6 weeks [Roche 25/6/04], but as new information comes to hand, this will be updated accordingly.

iii Stockpiling Tamiflu

Though WHO does not encourage national stockpile of antivirals like Tamiflu for treatment of general population, and it is establishing global stockpiles of antivirals worldwide, but if countries decide to stockpile antivirals, they should inform WHO of their supply. This is to maintain visibility on the part of WHO on antiviral stocks that maybe available for containment efforts.

If a pandemic is declared it is very likely that all stocks of medicine useful against influenza, particularly Oseltamivir, will be in very high demand and rapidly exhausted.

Kiribati wishes to stockpile antiviral dosages to cover 20% of its population, which is estimated 17,600 doses [about 40,000 vaccine doses if available]. *SPC through its PRIPPP will provide 100 doses per country for initial containment phase* while WHO will take the rest of the required dosages to enable control and containment of an outbreak, mainly during Phases 4 & 5. SPC has regional stockpile, while WHO has global stockpiles which are housed at convenient sites that will enable fast deployment worldwide once indicated.

Tamiflu capsules are to be stored in a cool [25^0C], and dry place. Because antivirals will become valuable commodities during a pandemic, this storage place will also have to be secured. Negotiations with the Police department for stricter security around the stockpile areas are established, and the mechanism is to be agreed upon between the Police Department and the Ministry of Health.

Stocks of other medications will also use the same storage system. However, for antibiotics and other medications which have a shorter shelf-life, the Ministry of Health will take primary responsibility in their stock-taking and to ensure they can be used for other disease conditions before their expiry dates.

B. VACCINES

i. Vaccine against Seasonal Influenza (SI)

There is a vaccine available to protect against seasonal human influenza (SI). This vaccine will not protect against a pandemic strain but it will protect against SI, which, at a time of pandemic, could be mistaken as being caused by the pandemic virus. Also, SI vaccine **avoids seasonal human influenza re-assorting** with other strains with pandemic potential like the H5N1 to produce a potential pandemic strain. Also, in time of pandemic, it will also protect against re-assortment between the pandemic strain and normal human virus to produce another novel type. Currently, WHO recommends seasonal influenza vaccination to all healthcare workers and selected population groups including those with co-morbidities.

Kiribati does not offer seasonal flu vaccine under any circumstances. Also, H5N1 presence in the Pacific including Kiribati may be unlikely, though the transmission through the border of Papua New Guinea and Indonesia remains a threat to the rest of the Pacific.

ii Vaccine against Pandemic Influenza.

Although a vaccine against the influenza virus A/H5N1 is being developed with the hope that it may be effective against a new emerging pandemic strain, such a vaccine is not yet available, nor is there any guarantee that it would be effective.

It is expected that any new pandemic vaccine will initially be in short supply as the demand will far outstrip availability. However, Kiribati may be expecting coverage with pandemic vaccines to be more than 50% of surviving population. MOHMS should develop protocol for administering, reporting, and monitoring of side effects

c. Antipyretics, antibiotics and medical supplies

Antipyretics, such as paracetamol, should be widely available and the Health department should stockpile sufficient amounts of Paracetamol (tablets and elixir). Aspirin should not be used especially of possibility of Reyes syndrome especially in children.

As influenza is often complicated by secondary bacterial infection of the lungs, antibiotics could be life saving in the case of late-onset pneumonia. Augmentin is suggested for first line oral treatment but MOHMS can review and update these possibilities/options provided

to suit their situation. [Annex 4]. Erythromycin or doxycyline may be options for second line of oral antibiotic treatment, while Ceftriaxone and Vancomycin are for IV treatment. Quantities of antibiotics to be stockpiled will be based on the number of residents predicted to be affected (, and out of that, and considering if 75% of the population is affected, (and 10% of the ones with signs and symptoms) who may develop pneumonia as a complication.

d. Personal protective equipment (PPE) and other supplies

Influenza patients as well as suspected cases should be requested to wear a surgical mask in order to limit the droplet spread of virus through cough, sneeze and talking, and the potential contamination of surfaces when touching nostrils, and using bare hands to cover mouths when coughing/sneezing/ or talking, and fail to wash hands with soap under running water.

Though persons in contact with patients with fever and/or respiratory symptoms may wear a simple surgical mask in order to protect themselves from droplet transmission from patients, it may be too expensive to maintain Patients who use tissues or handkerchief to cover mouths or nose when cough or sneeze, are required to dispose them properly, like placing tissues in trash-bins or wash handkerchief following using it once or dispose it also into the rubbish tin.

In the event of a pandemic influenza, using surgical masks may not be of much benefit as the disease will be affecting the general public.

The purpose of full PPE in the clinical situation is to protect HCWs during aerosol generating procedures, such as intubation, tracheal suctioning should be considered further.

NON-HEALTH ESSENTIAL SERVICES

It is very important to remember that preparedness and response to an emergency with the magnitude of a pandemic is not only a health matter, it is the responsibility of the whole Government for the people of Kiribati. All relevant essential services are to be maintained at some stage during times of national emergency so that continuity of provision of those services to sustain life and welfare of the people is of utmost importance.

Below are some of the services that are essential for the preparedness and response plan of Kiribati for the threat/event of influenza pandemic.

Workforce contingency planning:
All essential services are to have contingency plans of how they would get the service going during the outbreak of the avian flu or/and pandemic influenza so when one gets sick or affected and provision of such essential services is curtailed, there is always another person to replace so that there is no disruption of the service.

Agriculture: {Ministry of Environment, Lands & Agricultural Development [MELAD])
Identify and declare the infected area as quarantine zone – where there are poultry infected and positive cases have been identified. The people near the zone shall be advised to confine their poultry in an enclosed fence. Every household and members living within the perimeters of the infected-areas, to report any case of dead poultry. Collect blood sample from suspected poultry and send to lab.to confirm diagnosis. Incinerate death poultry. There is a need for veterinarian to help on this.

Prohibition of import of chickens [Quarantine/Customs]
Policy to prohibit importation of fresh chicken from affected areas/countries where avian influenza has killed humans. Information on how to prepare imported/local chicken or any poultry and pork meat are part of the community awareness programs. The Kiribati National influenza pandemic taskforce [KIPT] also advises the appropriate authority when to allow importation.

Air lines:
The Chairman/secretary of the KIPT in collaboration with immigration department and relevant authority design arrival forms where health questions are included: eg: fever, cough or/and sorethroat, bodyaches within the last week or 10 days. Mechanism to 'eyeball' the forms and referral to MOH is to be reviewed or to put the current mechanism in writing.

Allocated area for isolation of suspected or sick passengers at the airport is identified. The surgical masks are available at the airport may be used to those who are sick and those in close contacts. Advice on hand washing to those who are sick and close contacts should be provided, and posters are posted above sinks.

Keep database on the seat number of passengers, and passengers are explained on the importance of keeping to their allocated seats.

Quarantine:
Ensure there are no cases of live animals including any possible contaminated equipment, clothes, shoes carried by passengers who come on board aircrafts or sea vessels, and from infected areas. This required update on countries which are currently infected.

Customs department:
To assist in identifying cases who have ILI symptoms who by-passes the health-desk, and to send them back to the health personnels. The luggage of suspected ILI cases can be fumigated or aerosolized before they get them back. It is necessary to ensure these procedures are legally protected.

Environmental Health:
Screen all incoming passengers to ensure that those who come from infected areas with or without symptoms get the proper counseling and advice on what to do at home until 14 days are passed. Refer suspected cases to lab people for confirmation of cases. Escort those confirmed cases to isolation ward and offer necessary counseling to them. Standard books need to be obtained for this purpose to get the same message to the people delivered by health people.

Immigration:
Screen incoming passengers and see if there are those who by-pass the health to send them back to the health when they have symptoms. Check also the passport if there are people traveling to infected countries and possible contact to poultry.

Collect arrival cards of all incoming passengers and see if there are passengers who may be symptomatic or/and had been travelling to infected areas. Daily issue of countries names which are infected to be produced to health staff at the air port. Inform the identified contact person at the OB staff if there is a suspected or symptomatic case, and activate the relevant component of the Plan.

Aviation:
To assist carry out effective screening of potential carriers of avian flu virus at the arrival and departure lounge as agreed to by the AFPPP committee. To direct confirmed cases from the arrival lounge straight to the departure lounge with their luggage.

Police:
Security is needed during times of emergency to observe order in the community. Police and security officers can assist also in case of resistance to the security and other personnel at the air ports, sea-ports or in community. They may help in getting the communication links between key players of the response committee.

As antivirals and pandemic vaccines [once available] may be observed to be of great value in times of pandemic, and security is needed to ensure that where these commidities are stored and for distribution are safe.

Community:
People at large shall be informed to be able to respond appropriately when there is a suspect or confirmed case. They must be able to wash their hands with running water and soap. When they have symptoms they need to use hankerchief to prevent fluids from their mouth spraying environment and to those nearby. Note: the handkerchiefs are to be used only once and need to be either washed or discarded.

Voluntary report to health services when they have the symptoms so that investigation is carried out immediately to avoid delay of treatment/prevention. Reporting of suspected cases by the community is the key event to initiate follow up activities to confirm the case

ETHICAL AND LEGAL FRAMEWORK

In times of crisis, as will be during a pandemic, there are decisions/actions that need to be implemented for the benefit of the majority whereby the rights of the individuals are over-ridden. Ethically, there must a legal mechanism in place to ensure smooth implementation of public health measures, both pharmaceutical and non-pharmaceutical, in times of national disaster.

Within the KIPTaskforce, the Attorney General or a representative from the AG office is a member. It is very important that this person review existing legislation and Act to ensure that there are relevant legal framework for these issues, and if there are not, this is the time to address them. The PRIPPP may assist in this field when the legal adviser will be on board.

It is also necessary to ensure a legislative framework for compliance with International Health Regulation [IHR] exists and operational within the legal systems of Kiribati.

Kiribati Islands Influenza Pandemic Planning

The Kiribati Islands Influenza Pandemic planning is based around the following strategy:

A. Planning

Aim: To put in place a plan to reduce the health, social and economic impact of an avian influenza and pandemic influenza in the Kiribati Islands.

B. Border Management

In the event of human to human transmission overseas, the Kiribati Islands will have to hold consultations based on available information, to make decisions on what measures/interventions to be taken, and for how long if it decides to close its borders or at least to stop people coming into the country who have been to affected areas/regions.

This may be decided based on outcomes of consultation with relevant authorities in Kiribati as well as those from external organizations like WHO and SPC.

Assessment of safety for domestic inter-island travels be carried out, and advice will be offered accordingly: eg: there may be a need to restrict the travels between islands for a period of time if there is evidence that influenza has not reached any of the outer islands of Kiribati; food supply are secured and sustained within set period of restrictions of accessibility to areas; all relevant point of contacts and for what services should be well communicated to the Kiribati public by the most appropriate means of communication identified during the preparedness planning.

All travel from overseas will be restricted and strict border surveillance should be enforced, especially if the border is not totally closed. Kiribati Islanders who are overseas will be asked to remain there until situation improves before returning to Kiribati.

Aim: To keep influenza pandemic out of the Kiribati Islands

C. Cluster Control

The cases with human influenza pandemic strain are found in the Kiribati Islands.

Aim: To control and /or eliminate any other cases found in the Kiribati Is.

If one case has been detected, the Public Health Department in collaboration with members of KIPT and stakeholders, will ensure that alertness and awareness among the population is heightened in its coverage and with updated information.

Case confirmation will take time but for the meanwhile, isolation of cases and quarantining of close contacts will be undertaken. Notify WHO under IHR and also discuss Rapid response and containment strategy[Annex 4].

Prophylactic antiviral therapy may be considered during early stages of pandemic phases, but mainly & only for the priority groups like front line field-workers eg HCW, providers of

other essential services and others depending on the sound and clinical judgement of clinicians, and with who that has the power to carry those out.

Any other relevant measures should be activated accordingly until the relevant authorities are absolutely certain that situations are under control, and are confined.

All inter-island travel may be restricted or stopped (includes maritime and airline) based on information on hand.

D. Pandemic Management

If more than 5 suspected cases of pandemic influenza have been identified in separate locations and the numbers infected are increasing, a State of emergency and an influenza pandemic will be declared for the Kiribati Is. [NB: Pandemic influenza phases will be declared by WHO on global basis which may differ from local/national situation.]

Aim: To reduce the impact of influenza pandemic in the Kiribati Islands and ensure that pandemic measures are put into place to avoid disruption to normal services.

It is assumed that at this time, other neighbouring countries maybe also declared to have cases with pandemic influenza; information also maybe received through IHR-National Focal Point [NFP] and his taskforce that other PICTs may be experiencing the same.

The focus during this period will be on maintaining essential services including health services. Public health measures will need to be maintained, internal travel restrictions may be necessary to protect unaffected islands. Tamiflu used for early treatment of cases.

E. Recovery

The population is protected either by providing vaccination and medication which should be made available by the Kiribati Government through its Ministry of Health OR the pandemic wave(s) had waned.

Aim: To improve/restore the health of the population infected by the influenza pandemic, and to reestablish effective functioning of services/organizations/businesses. In other words, to get society back to normal function.

The pandemic vaccine may be available at the earliest, 4-6 months, after the pandemic started.

Activate relevant components of Recovery Plan of agencies and essential services, Specific issues of great importance to different group of people/agencies should be addressed accordingly: eg: pscychological support for the losses of loved ones; other socio-economic, societal/cultural issues and losses, and others.

II: AVIAN & PANDEMIC INFLUENZA ACTION PLAN

A: PLANNING

INTERPANDEMIC PERIOD PHASE 1:

No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals the risk of human infection or disease is considered to be low

FUNCTIONAL AREA	ACTION	LEAD AGENCY	TIME FRAME
Planning, Coordination and Reporting	*Aim: a) To strengthen pandemic preparedness for management of influenza disease* a) Review, update and submit a well written avian and pandemic influenza preparedness plan [NAPIP] for official endorsement from the Cabinet. b) Develop/review Hospital emergency response plan which will include: i. Manual for clinical patient management; management of hospital services during pandemic, eg: prioritization of health care service, staff mobilization and related issues. ii. Supporting services: laboratory activities; Pharmacy; domestic; transport. iii. Infection control guidelines development. iv. PPE supply and stockpile;	Chairman and members of KIPT [technical assistance from SPC/WHO if needed] MOHMS, Public Health MOHMS: Director of Health & Medical Services [DOHMS] Dir of Nursing	By June 08. i. By Aug 08 ii. As above iii. Guideline review is In progress [just completed infection control training for HCW and border control

	Other necessary medical supplies. v. Develop Policy for distribution and use of tamiflu [antivirals]. vi. Develop a plan for the rapid immunization of Kiribati Islanders to be implemented once the pandemic vaccines are available. a) Establish the legal framework for pandemic interventions[pharmaceutical & nonpharmaceutical] i. Review existing relevant legislation for powers/authority to declare & execute actions endorsed by KIPT/KDMC/OB. ii. Review Public Health Act d. Develop Communication Plan for the Kiribati avian and pandemic influenza preparedness plan. i. Identify official communication officer ii. Identify communication officer to work with media and other communication issues eg IEC, continuing to provide regular health awareness programs. [contents may include: Provide information packs advising on simple infection control	Crown Law/AG office/DIRPH [SPC/PRIPPP legal officer may assist] KIPT and relevant stakeholders i. From MOHMS; KDMC and OB ii. Public Health [Health Promotion Unit]	team – April 08] iv. SPC will send some supply; MOH and MELAD to plan for the rest/ongoing supply… v. Aug 08/ongoing vi. As above [this can be planned with the EPI prog. Manager] i. By Nov 08 ii. By Nov 08 d. UNICEF/SPC and KIPT members had w conducted an advocacy & communication workshop – Oct07. UNICEF had completed CP for Kiribati. i. By August 08 [in line with Tabletop Testing Exercise] ii. By August 08 & ongoing

	measures eg: hand washing, cough/sneezing ettiquetts etc., to minimize the spread of flu amongst health workers and public at large.]		
	iii. Identify focal point to receive, validate, and transmit updated information on pandemic threat to Minister of Health.	iii. DirPH or as delegated.	Ongoing
	iv. Ensure transmission of updated and unusual surveillance findings that PacNet, WHO, FluNet or other credible sources disseminate that is of particular threat to Kiribati Islands to relevant authorities. Ie. Minister of Health, OB etc.	iv. As above	
	e. Border control measures including:		
	i. Developing arrival card to include some health related questions:eg: ILI symptoms	i. DirPH/ImmigrationAviation/airport authority.	i. By Oct 08
	ii. Designate an area at airport for suspected sick or ILI patients getting off the plane.	ii. Airport authority/ MOHMS/DirPH or as delegated.	ii.By Dec 08
	iii. Establish procedural means of communicating any situation to relevant authorities.	iii.As above	iii.As above
	iv. Policy develops for destruction of any suspicious birds/poultry products found on board of ships or aircrafts.	iv. Biosecurity/ guarantine authority and other relevant stakeholders.	iv.By Dec 08
	f: Plan local quarantine facilities and social distancing measures.	f. KIPT and relevant stakeholders	Dec 08
	g. Animal Health issues		By August08 & ongoing
	i. Establish/review routine animal/poultry surveillance.	MELAD/MOHMS [Public Health]	
	ii. Linkage to Human ILI surveillance		As soon as possible
	Restrict importation of animals/untreated animal products from affected countries with avian	As above	

	human infections.		
Monitoring and Surveillance	a) AH and HH influenza surveillance: i. Ensure routine surveillance for ILI for both animal and human is set up and running within Kiribati, and continue to monitor the situation offshore ii. Plan & set up sentinel surveillance for limited influenza testing for human ILI. iii. Ensure implementation of influenza like illness (ILI) as a reported disease condition in routine disease surveillance forms iv. Develop feasible and early warning systems - both humans and animal health surveillance systems v. Linkage surveillance animal and health monthly report vi. Plan laboratory services and assessment facilities, may even including developing a test-procedure for sending samples for analysis to WHO cc. Lab (Melbourne) or as PPHSN – Labnet provides.	MELAD, MOHMS, [DIRPH] and assistance can be provided from SPC/WHO/FAO if needed. MOHMS-Public Health [Dr Kenneth] As above MOHMS[Dr Ken & team]/MELAD [animal health focal persons] As above Director of Laboratory services; DIRPH or as delegated [Kiribati can benefit from the CDC lab-based influenza project & executed by SPC]	, CD surveillance systems including ILI is set and operationalised by September 08 Already in progress especially with current ILI outbreak. Test kits for animal health provided by SPC/PRIPPP. WHO provided for human health

Health [Human and Animal] and Emergency Response	a) Health emergency response plan [HERP] is being developed.	MOHMS/DIRPH or as delegated.	As in page 36
	b) Take stock of health staff (current and retired) their expertise, possible volunteer workers, health facilities, halls, medications eg. IV Fluids, other medical supplies.	Director of Nursing/ Health Admin./Red Cross	By Dec 08
	c) Test Plan/ Mock Exercise [may involve avian and pandemic influenza scenarios?]	KIPT in collaboration with KDMC and working partners [SPC/WHO]	By early Aug 08
	d) Develop guidelines for management of patients.	Refer p/36	
	e) Animal health emergency response for containment of bird flu or large number of animals dying of unknown causes.	Animal health focal point and relevant staffs of MELAD.	By October 08
	i. Facilitate establishment of animal health surveillance systems.	As above [SPC/PRIPPP animal health team can assist with this]	As above
	ii. Development of various SOPs .		
	iii. Paravet training		By June 08
	f. Other essential services' emergency contingency plans are in place.	By PRIPPP team.	As above [members in the KIPT should take lead role in overseeing the development of respective contingency plans]
	iv. Community/outer islands may decide to do their own emergency response plans.	Relevant stakeholders Village councils or equivalent, KIPT designated members	
	v. Ensure training and preparation of health, both human and animal, and essential services	MOHMS,DIRPH/CD surveillance officer, DirAg or as delegated	Ongoing [can be in collaboration with working partners like WHO, SPC]

Communica-tions and Health Education	**Part 1 [Most of these are also being mentioned in page 36 etc]** a) Produce and disseminate information on bird flu – H5N1 influenza outbreaks via multimedia. Stress on risk of pandemic influenza from ongoing uncontrolled bird flu. b) Check WHO, SPC and CDC, FAO/OIE websites for regular updates and provide routine media monitoring. c) Reinforce health awareness and inform the public on how they can prepare for an influenza pandemic. d) Stress the key public health message on hygiene and how to care for yourself and your family during an influenza pandemic. **Part 2: Plan for focal messaging** a) Inform key stakeholders of emergence of new influenza strain and emphasize the following: • Where to go for help, what type of services/help available. • The likely impact of possible pandemic. • What the authorities will do in the event of a pandemic. • Travel advice. • Review and update communications via multimedia • Be vigilant with returning travelers. • Infection Control. • Ensure all health personnel are informed **Part 3** a. Prepare and disseminate the	Health promotion focal person as endorsed by DIRPH/DirAg or as delegated, DIRPH or CD surveillance officer/DirAg As above and including Red cross, NGO's, village councils. As above Official or KIPT designated communication person or as delegated KIPT/OB/MOHMS/	Ongoing Ongoing By Dec 08/early 09

	Avian Influenza and Pandemic influenza Action Plan for tailoring to include: •Ministry of Environment, Lands Agriculture & development [MELAD] •Office of the President •Ministry of Education •Ministry of Finance & Economic Management •Customs (Border Control – travelers) •Kiribati Police •Kiribati Islands Red Cross •Tourism [refer comment below on Border control agencies] •Kiribati Islands Chamber of Commerce •Public Service Commission •Air Kiribati •Border Control Agencies [note: once border closure is a possibility, Kiribati needs to activate that part of the plan for: How to deal with visitors eg; what about tourists who got stuck in Kiribati Is.; what are the necessary supplies/items for people of Kiribati Is. Etc.]	DIRPH/DirAg or as delegated [Contingency plan of each essential services are annexed to Pandemic preparedness and response Plan.]	By Dec 08 As above
	b. Liaise closely with Kiribati Islands Disaster Management Committee as the Avian and pandemic preparedness Plan should be an annex to Kiribati national emergency response plan or similar plan.	Chairman of KIPT/Chairman of National Disaster Committee	As soon as possible
	c. Provide regular updates via multimedia, talkback and monitoring of situation as part of awareness programs	DIRPH or DirAg or as delegated,	Ongoing
	d. Continue to liaise with WHO, SPC, CDC, FAO, OIE and other regional and international	As above	

	agencies for updates. e. Emphasize non health sector preparedness especially, Fuel, power, water and sewage service. f. Prepare religious leaders- to deliver services by alternative means – internet, radio, TV. g. Develop mortuary back up Plan [including how to dispose of human bodies both at community level and hospital mortuary] h. Develop SOPs for mass destruction of birds/animals when situations arise. **b) Communities especially outer islands.**	Relevant stakeholders Village councils/churches MOHMS, and village councils MELAD, village councils Village/islands councils or similar [These can be assisted by KIPT relevant members]	By early 09

INTERPANDEMIC PERIOD PHASE 2 – CODE WHITE

No new influenza virus subtypes have been detected in humans. [However if, highly unlikely infected animals occur in the Kiribati Islands, it will pose a substantial risk of human disease in the Kiribati Islands.

FUNCTIONAL AREA	ACTION	LEAD AGENCY	TIME FRAME
Planning, Coordination and Reporting	a) Ensure that activities in previos Phase are completed, and identify new activities needed to address. b) Following the Tabletop Exercise planned for June 08, gaps identified should be addressed as an update to this Plan. c) Update human and animal detection for ILI and clinical	Chairman and KIPT and relevant stakeholders MOHMS/DIRPH or epidemiologist & DirAg or as delegated	Ongoing End 08

	care guidelines and SOPs. d) Develop surveillance of animal workers SOP for stamping out e) Monitor of poultry imports from affected areas f) Increase surveillance in both humans and animals g) Enhance laboratory diagnostic capacity for influenza virus strain h) Target surveillance of humans in area(s) where animals affected i) Ensure appropriate protection and training for any person that are exposed to animals (poultry and pigs in line with WHO/OIE guidelines j) Restrict the movement of animals or any risk goods from affected areas in the Kiribati Islands	MELAD - Animal Health /Quaran. [This can be assisted by SPC animal health] MELAD/Health inspectors/Quarantine/Customs MOHMS [Public Health, Clinical, Laboratory]/MELAD [animal health] As above MELAD, Animal Health MELAD, Animal Health	
Communications and Health Education	a) Review and update and increase frequency of communications for all human and animal health staff.on evolution of influenza virus. b) Arrange for establishment of "hotline" services and identify personnel to provide counseling services to uphold the community c) Ensure that regular updates are distributed to all Government Ministries as well as NGOs:	DIRPH or CD epidemiologist/DirAg [animal health focal point] or as delegated	Ongoing Ongoing Ongoing

	• Department of Agriculture Communicates with public regarding safe response to observation and handling of dead birds/chicken and risk behaviors when handling poultry	MELAD[DirAg or animal health focal point]	
	• Ministry of Education Prepare teachers and children for alternate means of learning, update them about influenza risk and prevention, about school closure	DirEd or as delegated	
	• Ministry of Finance & Economic Management Including the Banks	CEO and Bank managers	
	• Customs (Border Control – travelers) Get ready for frontline risks of infection.	Customs/Immig/ etc. [SPC/PRIPPP completed infection control training including border control team members-April 08]	
	• Kiribati Islands Police Maintain law and order even if society is greatly affected/disrupted by impact of a avian or pandemic influenza.	CEO, Police Dept.	
	• Kiribati Disaster Management Committee. Manage incident command centre/ incident room during a national emergency.	Chairman of KDMC	
	• Kiribati Islands Red Cross Identify volunteers, assist with site and makeshift hospital/relevant stockpiles		
	• Tourism Kiribati Islands Prepare response and		

	continuity business planning. • Kiribati Islands Chamber of Commerce Prepare business community to plan for when staffs absenteesm is considerable. • Office of the President Support emergency taskforce/ maintain government admin and finance • Public Service Commission Maintain civil function and cope with absenteesm of civil servants • Border Control Agencies Need to plan self protection, quarantine measures , isolation, and rest that go with actions c) Provide regular updates via multimedia, talkback and monitoring of situation d) Conduct regular updates with OB office to advise on situation Continue to liaise with WHO, CDC, SPC, FAO/OIE and other regional and international agencies for updates	Chairman KIPT, DIRPH/DirAg DIRPH/DirAg or as delegated, DirPH/DirAg/Communication officer(s)	

PANDEMIC ALERT PERIOD

PANDEMIC ALERT PERIOD PHASE 3 – SCENARIO 1

International: *Human infection(s) with a new subtype, but no human to human spread or spread by close contact.*
Kiribati: Scenario 1: *No human or animal disease in the Kiribati*

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	As in Phases 1&2 above Consider establishing individual pandemic sub-committee per island group	KIPT/KDMC All stakeholders	MELAD/MOHMS, Internal Affairs [Internal Affairs, NGO's
Monitoring and Surveillance	a) Increased vigilance and surveillance [both animal and human health]. b) Investigate any reports of suspected ILI cases of acute respiratory illness in community, or c) Birds/animals dying in the community d) Public health Inspectors work at airports and seaports of first arrival to ensure all reports of illness on board incoming aircraft and/or ships are reported to, and responded to by, public health services. e) Airlines and Shipping agents are informed of symptoms of particular concern and reminded of the statutory requirement for all symptoms suggestive of infectious disease to be reported to the destination airport/seaport on arrival. [?already implemented]	MOHMS/Epidemiologist, DirAg/animal health team MOHMS/Epidemiologist Animal Health team MOHMS- Chief Health Inspector MOHMS/KIPT DIRPH	KIPT members, external working partners eg SPC, WHO,F Ministry of Immigration & Economic Management MELAD Port Authority Boarder Control Agencies
Health [Animal and Human] and Emergency Response	a) Review and update Kiribati Avian and Pandemic Influenza Action Plan [to identify what had been done and what needs to be done within timeframe] b) Review Emergency Plan; Infection control manual c) Consider vaccination and antiviral policy for accessibility of these agents and for those providing essential	KIPT [MOHMS, Clinical & Public Health; MELAD – DirAg/animal health team] MOHMS/Focal Division; MELAD MOHMS/MELAD/ KIPT	 Red Cross, NGO's Other essential

	services. d) Keep a record of everyone who was given antiviral dosages once that above is implemented. e) Review plan for health care delivery and emergency response at all levels of community, temporary influenza centre, supplies, and equipment. f) Review and update containment and stamping out strategies g) Quarantine planned for travelers, air and ship crew and patients [Specifically, who will be quarantined? Presumably, only people in transit when border is closed [as in page 11] h) Secure supplies	 MOHMS, Public Health MOHMS, DIRPH MELAD/Public Health MOHMS/Border control teams MOHMS/Public Health, MELAD/DirAg	services stakeholders KIPT KIPT KIPT
Communications and Health Education	a) Continue as mentioned above but intensified. b) Review and update the key public health message to reflect changes. c) Provide regular updates via media, talkback and monitoring of situation as per communication plan. d) Conduct regular updates from various local credible sources to advise of situation e) Continue to liaise with WHO, SPC, CDC and other regional and international agencies for updates f) Continue to disseminate brochures/facts sheets in Kiribati and English and have them available to people in the hospitality and retail industry as well as the transport operators and distribute to the other	As previously designated in above. As above DoPH or IHR-NFP Health Education section/KIPT	

	sectors:[***Note**: Other sectors need to have their plans in place & MOHMS/Public Health need to help them to do them if there is considerable delay in completing their* Plans] g) Ensure establishment of "hotline" services and identify personnel to provide counseling services to uphold the community is in place.	Chairman taskforce [MOHMS]with KIR-Telecom	

PANDEMIC ALERT PERIOD PHASE 3 – SCENARIO 2

International: *Human infection(s) with a new subtype, but no human to human spread or spread by close contact in the Kiribati or at most rare instances of spread to a close contact.*

Kiribati Scenario 2: *First animal case reported in the Kiribati, No evidence of human to human transmission as above*

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	a) Increase surveillance in animals within and outside the affected areas. **Stamping out measures as per SOPs** b) Ensure appropriate protection and training for persons exposed to animals (poultry, pigs etc) in line with WHO/FAO guidelines. c) Advice WHO as per IHR, and advise OIE.	MELAD/Focal Division MELAD/IHR focal point MELAD/IHR focal point	All Stakeholders MOHMS/Focal Division As above
Monitoring and Surveillance	a) Target surveillance of humans in area(s) where animals affected b) Continue to monitor the situation offshore	MOHMS/Epidemiologist in collaboration with MELAD focal persons/section MELAD/MOHMS/ IHR focal point	KIPT/.NGOs KIPT

PANDEMIC ALERT PERIOD PHASE 3 – SCENARIO 3

International: *Human infection(s) with a new subtype, but no human to human spread or spread by close contact in the Kiribati or at the most rare instances of spread to a close contact.*

Kiribati Scenario 3: *First human case reported in the Kiribati and confirmed by lab test from identification at border. No evidence of human to human transmission as above. No animal case(s) in the Kiribati*

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	a) Relevant components of the Kiribati avian and Pandemic Influenza Plan will be activated.	Secretary to OB in collaboration with KIPT	MOHMS/AG office/Border control teams
Monitoring and Surveillance	a) Increased vigilance in surveillance b) Ensure laboratory services has sufficient viral test reagents c) Ensure Ministry of Health have sufficient stock of Tamiflu d) Advise WHO and SPC of first case identified in the Kiribati and discuss interventions e) Target surveillance of animals in area(s) where humans affected	MOHMS/Epidemiologist Director of Laboratory MOHMS IHR Focal Point MELAD [DIrAg] in collaboration with epidemiologist /	All stakeholders MOHMS/KIPT / KIPT
Health Care and Emergency Response	a) Isolate and treat case(s) with Tamiflu b) Contact tracing to provide advice/prophylaxis as necessary. c) All aircraft and/or shipping vessel reporting a sick person on board, passengers assessed, advised and release in the absence of human to	MOHMS MOHMS, Public Health MOHMS, Immigration, Airport Authority	NGO's KIPT members

	human transmission but still under surveillance for at least 10 days. d) All national and international agencies are informed of situation.	Chairman KIPT/IHR focal point	
Communica-tions	a) The Secretary of Health or as nominated to implement media campaign in both Kiribati and English to include topics such as: - Risk for Kiribati; - How to prepare for an influenza pandemic; - How to care for yourself and your family during an influenza pandemic, caring for others, staying safe, limiting the spread, advice on possible school closures and indicate activated centers for handling influenza pandemic patients. b) Review and update documents with reference to border control, tourism and travel sectors and produce pamphlets/flyers for incoming travelers.	MOHMS/KIPT/Public Health/OB	Police, Disaste Management Committee

PANDEMIC ALERT PERIOD PHASE 3 – SCENARIO 4

International: *Human infection(s) with a new subtype, but no human to human spread or spread by close contact.*

Kiribati Scenario 4 : *First human case reported in the Kiribati from community surveillance (within 1-2 weeks of nasopharyngeal swab taken)*
No evidence of human to human transmission as above. No animal case(s) in the Kiribati

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	a) Kiribati avian & pandemic influenza plan activated [Code Yellow activated].	Chairman of KIPT and Sec. OB/MOHMS IHR-NFP/Public	KIPT members and agencies

	b) Maintain consultative process with WHO/SPC	Health epidemiologist	
Monitoring and Surveillance	a) Advise WHO and SPC of first case identified in the Kiribati b) Target surveillance of animals in area(s) where humans affected	IHR-NFP MELAD/MOHMS	MOHMS/OB/KDM Public Health/Village councils
Public Health Interventions	a) Undertake case surveillance and treatment plus protect others b) Isolate& treat c) If traveled overseas to an infected country and return recently within 7 days, increase monitoring and surveillance at the border. d) Identify exposure to birds/wildlife sources of infection. e) If not traveled within 7 days AND no animal/bird exposure, assume human to human transmission. In this case, consider implementing public health measures in affected community, and internal travel should be restricted with the slightest indication. - Contact tracing to provide advice, and for home quarantine. - Consider offering Tamiflu as for cluster control. - Consider following up close contacts if not traveled as in (e) above. - Also, consider treating the case as well as the contacts.	MOHMS/Public Health /Clinical; Police; MOHMS [public health], Border control agencies MELAD/ Focal officer MOHMS/Public health, KIPT relevant members, MELAD/ Focal Animal officer MOHMS/ Public Health	AG office and OB Boarder Control Agencies MOHMS Border agencies Police/KIPT members

B: STRATEGY: BORDER MANAGEMENT

PANDEMIC ALERT PERIOD PHASE 4– SCENARIO 1

International: *Human to human transmission.* ***Small cluster(s)*** *with limited human to human transmission but spread is highly localized and perhaps suggest the virus is not well adapted to human. No animal case reported in the Kiribati.*

Kiribati Scenario 1: Cluster(s) occurring offshore

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	a) Activate relevant component of Kiribati avian and pandemic Influenza Preparedness Plan b) Alert KIPT and stakeholders of developments abroad.	MOHMS, KIPT/Kiribati National Disaster Committee.	All Stake holders
	c) Monitoring developments offshore (liaise with WHO/SPC/PacNet)	DIRPH/IHR-NFP/ MOHMS/	
	d) Review & ensure logistics are in place as response may need to be deployed within short notice.	MOHMS, KIPT & other essential services	As above
	e) Prepare to release antiviral for treatment of cases, post-exposure prophylaxis (PEP) or other use as appropriate if events reach Kiribati, Develop Log register for those assigned medications.	MOHMS, KIPT	As above
	f) Review and firmed up plans for release of antiviral to hospitals and pre-position PPE supplies in strategic places and Health care facilities.	MOHMS/ Public Health	
	g) Report updates to WHO, SPC,	DIRPH/IHR-NFP	KIPT
Routine Monitoring and Surveillance	a) Intensive surveillance of ILI in humans/ Review recent surveillance data	Epidemiologist MOHMS/Clinic/Public Health	Statistic Unit, Hospital

	b) Target surveillance of animals especially in area(s) where humans may be/are affected Monitor offshore situation	MELAD/Animal Division DIRPH	MOHMS, Public Health
Public Health Interventions	a) Monitor situation /update KIPT/OB	MOHMS, Border Control Team, Public Health DIRPH/KIPT Chair/	KIPT
	b) Liaise with WHO/SPC for the latest developments.	IHR-NFP	
	c) Issue travel advisories for affected regions	MOHMS, Public Health	All stakeholders
	d) Advise incoming passengers to advice MOHMS promptly if they develop ILI	As above, border control team	
	e) Border management measures to prevent arrival of passengers from affected areas.	As above	All stakeholders
	f) Make public aware of what is the current situation, and what likely to happen if situation worsens.	MOHMS, KIPT	All stakeholders
Health Care and Emergency Response	a) Check health care surge capacity is in place b) Short briefing/update on use of PPE's and infection control measures.	MOHMS/DIRClinical services/ DIRPH	
	c) Track all health staff contacts and review their health status/ address concerns and availability [who is going to do this and how?	DIRPH/DirNursing, Red Cross	Internal Affairs
	d) In other areas of Tarawa and outer islands, healthcare facilities should be alerted to the possibility of pandemic influenza in any person with ILI symptoms (eg: fever, myalgia, sore throat or cough). Simple non-pharmaceutical measures like isolation and quarantine applies here.	MOHMS, Clinical Public Health	As above
	e) Make community assessment centers		

	or all health centres aware of the situation	MOHMS/	As above
Communications and Health Education	a. Make public aware of likely interventions if situation worsens and reach Kiribati. They include possible closure of schools, cinemas, sporting and cultural events, restaurants and bars, churches.	MOHMS, Police Public Health	All stakeholders
	b. Alert public that these restrictions may continue for sometime depending on the situation evolves in Kiribati	KIPT, Public Health, MOHMS	As above
	c. Ensure that regular updates are distributed via mass media	As above + NGOs	
	d. Check that the established 24 hour means of communication as "HOTLINE" service for public can be activated in short time.	Chairman KIPT, MOHMS/TSKL	
	e. Conduct regular updates with Government Ministries to advise of situation	DirPH/epidemiologist	KIPT
	f. The public should be updated daily by the communication officers after getting updates from reliable sources	As above	
	g. Continue to liaise with WHO, SPC, and other regional and international agencies for updates and monitoring of situation offshore	IHR-NFP	DIRPH

PANDEMIC ALERT PERIOD PHASE 4– SCENARIO 2

International: *Human to human transmission. Small cluster(s) with limited human to human transmission but spread is highly localized and perhaps suggest the virus is not well adapted to human. No animal case reported in the Kiribati.*

Kiribati Scenario 2: Cluster(s) occurring on-shore

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	h) Declaration of national disaster by Government	OB/Minister of Health	All Stake holders
	i) Code: YELLOW nationally and Code: RED globally	MOHMS, KIPT	
	j) Release ready use antiviral for treatment post-exposure prophylaxis (PEP) as per policy.	MOHMS, Public Health	KIPT/
	k) Preposition supplies in affected area and release of antivirals to hospitals and Community Based Assessment Centres [CBAC] or health centres as indicated.	As above	As above
	l) Communicate with relevant supplier for Kiribati share of pandemic vaccines. Kiribati should ensure that its plans for rapidly immunizing everyone is firmed up by this stage.	As above	As above
	m) Inform WHO, SPC and neigbouring countries re:status of Kiribati..	IHR-NFP	As above
Routine Monitoring and Surveillance	c) Review recent surveillance	MOHMS/Clinic/Public Health	
	d) Target surveillance of animals in area(s) where human affected	MELAD/Animal Division	MOHMS, Public Health
Public Health Interventions	a. Advise incoming passengers to advice MOHMS promptly if they develop ILI	Border Control Team/ MOHMS, Public Health	All stakeholders
	b. Border management measures to prevent arrival of passengers from affected areas Contact tracing and review with consideration for antiviral for those closely exposed.	As above	
	c. Ban public gatherings; closure of schools, restriction to movements especially to outer islands if they are not affected yet.	Public Health/ Clinical services; OB, AG office	

	d. Constant awareness messages via multimedia regarding public health measures like: keep at least 1 metre from those sick from influenza; hand washing; coughing and sneezing etiquette; dispose of tissues/handerchief if sneezed into; avoid visiting homes where there are sick persons Impose restriction of public gatherings	KIPT/Official communication officer	
Health Care and Emergency Response	a. Isolate patient (if not already isolated) b. Track all close contacts and review their health status c. Activate community assessment centers if necessary for active case finding, and also for triaging of influenza patients for hospital referral or home management. d. Hospitals also should follow hospital case management of influenza and non-influenza patients; how to maintain other essential routine services of the hospital; tamiflu to HCW; etc] e. Activate workforce contingency if impacted by closure of schools	MOHMS MOHMS, Public health MOHMS, Clinical Public Health MOHMS [Clinical and Public Health] As above	Internal Aff, Other essentia services As above
Communications and Health Education	a. Consider possible closure of schools, cinemas, sporting and cultural events, restaurants and bars, churches. b. Ensure that regular updates of situation are disseminated via multimedia; c. Conduct regular updates with Heads of Ministries to advise of situation d. The public should be updated daily by the communication officer(s) or as delegated by the KIPT.	MOHMS, Police KIPT, Public Health Chairperson of KIPT, Minister of	All stakeholders MOHMS NGO's,

	e. The government should be informed on daily basis with the progress of the "human to human" transmission and the national situation	Health	
	f. Operationalize 24 hour means of communication as "HOTLINE" between key health personnel and the hospital clinic/health centre staffs and incident room/command in chief	MOHMS/KIPT/ KNDC	
	g. Continue to liaise with WHO, CDC and other regional and international agencies for updates and monitoring of situation offshore	IHR NFP	

PANDEMIC ALERT PERIOD PHASE 5– SCENARIO 1

International: *Human to human transmission.* ***Large cluster(s)*** *with limited human to human transmission but spread is still localized, suggests that the virus is becoming increasingly better adapted to humans, but as yet, is not fully transmissible.*

Kiribati Scenario 1: Cluster(s) occurring offshore

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	a)As contained in similar section in phases above, and plus	MOHMS	All stakeholders
	b)Intensive monitoring of influenza like illness [ILI] including suspected events occurring the Kiribati	MOHMS/Epidemiologist & team	KIPT
	• Activate appropriate parts of the pandemic preparedness plans	"	"
	• Review response plan for pandemic influenza event and address any identified gap	"	"
	• Prepare and release antiviral to hospitals and pre-position supplies	MOHMS, Clinical & Public Health	

	throughout Kiribati. If initial stock may be getting exhausted. • Review contacts and ensure HCWs are updated and risk communicated for quick deployment once situation arises. Volunteer list may also be checked and they are informed accordingly. • Monitor and regular update of the situation on daily basis & inform national, local, regional and international working partners particularly WHO, SPC/PPHSN . Technical assistance maybe possible if requested. But remember all other countries/areas may also be affected simultaneously. • Heighten alert, prepare to be able to conduct rapid response and containment if virus or situation reaches Kiribati.	As above KIPT/DIRPH/ Communication officer(s) KIPT, relevant stakeholders	All stakeholders media
Monitoring and Surveillance	a. Monitor all international flights and ships. b. Check for operational team are ready to implement cluster control and border management measures at the same time. c. Enhanced surveillance on influenza in hospitals, alternate health care facilities. d. ONLY if applicable, animal surveillance continues and report accordingly.	MOHMS, border control team MOHMS [clinical and public health] Epidemiologist/Clinical services & Public health MELAD	MELAD,and KIPT relevant members KIPT and village council
Public Health Interventions	a) Increase border management and control areas b) Issue travel advisories or restrictions to those coming from declared affected areas. c) Vigilant screening of sick (ILI) and	Border Control Team MOHMS, Public Health, MOHMS/Epidemi	All stakeholders Police/Immigra . KIPT

	institute isolation and other measures in any suspicious situation (as per arrangements) d)The sick are offered courses of tamiflu, while the contacts will be considered also. e)Provisions for isolation and management activated including selected home isolation f) Impose restrictions on public gatherings; closure of schools etc. g)Assess legal framework to support enhanced surveillance & border control management	ologist, DIRPH MOHMS, DIRPH KIPT, DIRPH Director of Clinical Services MOHMS/DIRPH, AG AG/Crown Law/ Public Health	 All stakeholders
Communica-tions and Health Education	As per previous phase 4 a)Review and update frequency of communications for all health staff and HOMS on the influenza virus and advise of situation. b)Ensure that regular updates are distributed to the other sectors: c) Provide regular updates via multimedia, talkback and monitoring of situation d)Continue to liaise with WHO, CDC and other regional and international agencies for updates	MOHMS KIPT/Focal Division, official communication officer KIPT,MOHMS,communication officers Chairman KIPT or as delegated IHR-NFP	All stakeholder

PANDEMIC ALERT PERIOD PHASE 5– SCENARIO 2

C: STRATEGY: CLUSTER CONTROL

International: *Human to human transmission. Large cluster(s) with limited human to human transmission. No animal case in the Kiribati.*

Kiribati Scenario 2: Cluster(s) occurring onshore

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning Coordination and Report	**Declare Code: RED** & a public health national emergency	The Hon President	
	a) Rapid response and containment strategy implemented according to local/national SOPs modified from WHO strategy [Annex 5].	MOHMS/ Chairman KIPT,	All stakeholders
	b) Ensure relevant component of the plan for disposal of the dead has the adequate logistics for implementation when indicated.	MOHMS/Laboratory Public Health/KIPT	All stakeholders.
	c) Continue of surveillance of unaffected areas to try and keep out the influenza from spreading there.	As above	
Monitoring and Surveillance	a) Monitor situation locally and nationally, and follow closely situations offshore.	MOHMS ,DIRPH/epidemiologist/ KIPT	All stakeholders MELAD,
	b) Enhanced surveillance in place for health care facilities, as well as continue surveillance of unaffected areas.	MOHMS, DIRPH/epidemiologist	
	c) Target surveillance on animals especially in areas where humans are affected.	MELAD/MOHMS	
Public Health Interventions	a. Consider border closures and for how much longer. and control measures at airports and seaports (Also discussed with Fiji, Nauru & others like WHO, SPC).	MOHMS, Kiribati Disaster Committee, KIPT	Internal Affairs All stakeholders
	b. Assume that first cases will be isolated in Tarawa, it might be better to recommend 'stop all flight and boats departing from affected areas' arriving in the Kiribati.. How long would that be, will be recommended by the KIPT or as the person with the Powers to do	MOHMS Public Health, Customs/Port authority/ Quarantine team Air Pacific, Air Nauru, ?Air Marshall	As above

	that.		
	c. Quarantine incoming symptomatic passengers or contacts on the flights from affected areas. [Ensure that there are areas set up for this situation during earlier phases, and clear SOPs including staffing including security; and possible tamiflu administration].	As above	All stakeholders
	d. "Don't or delay Travel" warnings for those intending to travel abroad	Chairman KNDC/KIPT, Customs /	As above
	e. Closure of schools	MOE/KIPT	
	f. Cancel of public gatherings	KIPT/MOHMS	
	g. Discontinue outer island travel -.air and boats, assuming that the cases are in Tarawa only. But if tamiflu had not been transferred to outer islands, boats/planes can still transfer the goods but not people.	MOHMS [Secretary]; other essential services	Essential services
	h. Encourage tele-work practices (work from home) including children's classes and church services.	All stakeholders	
	i. Prioritize work activities	As above	
Health Care and Emergency Response	a) Convert community centers and schools to treatment and isolation centers as in CBAC. May need to admit patients while there is capacity, and if so, then need to separate influenza and non-influenza wards, and health care workers, and NO CROSS OVER OF STAFFS during their respective shifts.	MOHMS Public Health, MOW	Internal Affairs
	b) Activate security measures for treatment centers/ clusters need treatment/ contacts on prophylaxis, restrict movement on island, Mobilize CBAC for assessment and tamiflu administration if need be.	Kiribati Police, KIPT, DIRPH, MOHMS	All stakeholders

	c) Continue monitoring resources, food and water supply d) Strict infection measures are practiced both in the hospital, and tailored simple interventions for the community [refer annex 5]	As above As above, plus CNO, Clinical KIPT/All stakeholders	
Communications and Health Education	As per phase 5 Scenario 1 Home care infection control activated	MOHMS, and entire public service	All stakeholders

PANDEMIC PERIOD PHASE 6 - SCENARIO 1:

STRATEGY: PANDEMIC MANAGEMENT

International and the Kiribati: *Increased and substantial transmission in the general population. Presumably that there are lots of cases in Kiribati though there are no animal case in the Kiribati*.

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	Code: RED a) Declaration of the pandemic by WHO and the President and the Cabinet are informed immediately. b) Full activation of Kiribati avian and pandemic Action Plan. Emergency Coordination Centre	Chairman KNDC & KIPT, KIPT/KNDC & All Stakeholders KNDC/KIPT and MOHMS	All Stakeholders All Stakeholders As above
Monitoring and Surveillance	a) Monitor mortality data b) Maintain routine surveillance Health workers and volunteers and public who recover from illness	MOHMS, Statistics, Public Health Epidemiologist Public Health, Clinical,	All MOHMS Support Services & all stakeholders

	identified to assist at health facilities or make shift centres • Epidemiological data analyzed. • Mortality rate • Infection rate • Monitor adverse events from anti viral medical and vaccination, if staff resources available.	Laboratory MOHMS, epidemiologist, Statistics, Laboratory	
Public Health Interventions	a) Public Health Emergency continues • Schools remain closed. • Travel restriction maintained & may only be necessary if there are some islands that are unaffected. If there are some islands in the Kiribati are unaffected then maybe more for internal travel restrictions. • Restriction on public gatherings maintained. • The issue of disposal of the dead should be addressed well in advance, and share with the public.:…. The options being that relatives/household members are well enough to bury the dead immediately; increase the capacity of morgue; tagged and store in refrigerated containers until the pandemic waves are over, and close of kins can bury their deads properly.	MOHMS, KIPT Kiribati National Disaster Committee MOHMS/KIPT, Police DIRPH Asabove As authority vested by law. MOHMS and relevant stakeholders	All Stakeholders INTERNAL AFF " Police, Legal systems
Health Care and Emergency Response	b) Hospitals fo focus on maintaining limited essential clinical services. c) Community based assessment centres [CBAC] for advice on home management of influenza; triage influenza patients and offer antiviral treatment	MOHMS/KIPT Public Health MOHMS/Statistics/Public Health, Clinical	INTERNAL AFF and all relevant stakeholders,

	d) Monitor patient statistics and tamiflu usage [who is getting it; status of stockpile to assess the need to replenish] e) Commence national rapid vaccination programme once pandemic vaccines are available from donor through working partners.	As above MOHMS	
Communications and Health Education	a) Review and update daily frequency of communications for all health staff and Government ministries, and public on the influenza virus and advise of situation. – plus health advise to continue on daily basis. b) Maintenance of essential services c) Options for disposal of the dead as mentioned above. – as per agreement with religious advisory counsel and government. d) Self help line for patient care maintained e) Ensure daily that regular updates are distributed to the other sectors: c) Provide regular updates via multimedia, talkback and monitoring of situation d) Continue to liaise with SPC, WHO, CDC and other regional and international agencies for updates	MOHMS/Chairman KIPT DIRPH National Disaster council/ all stakeholders Communication Team, Religious Advisory Counsil Chairman KIPT or as delegated, DIRPH, IHR-NFP	All Stakeholders Chairman KIPT, DIRPH

PANDEMIC PERIOD PHASE 6– SCENARIO 2

D: STRATEGY: PANDEMIC MANAGEMENT

International and the Kiribati: *Wave decreasing; detection of next wave. No animal case in the Kiribati.*

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	Daily Briefing of President and Cabinet Consider re-opening the border if it was closed.	MOHMS, KIPT,KNDC	
Monitoring and Surveillance	a) Continue Increase laboratory surveillance b) Continue monitoring c) Analyze epidemiological data • mortality rate • infection rate • adverse events from antiviral medication and vaccination d) Target surveillance of animals in area(s) where human affected	MOHMS, Laboratory MOHMS, KIPT Epidemiologist, Statistics, Clinical, Laboratory, Public Health MELAD	KIPT,
Health Care and Emergency Response	Continue monitor community and patients. Also as capacity must be very decreased, need to focus on maintaining essential health services [eg emergencies; life threatening conditions including exacerbation of those with underlying chronic medical conditions; Labour and delivries in Obs., etc]	DIRPH, Public Health	
Public Health interventions	a) Ensure that public health measures that were implemented and were facilitating containing the pandemic are maintained into this period: eg: social distancing. b)	MOHMS, KIPT, DIRPH	

Community and Health Education	a) Must continue to maintain non-pharmaceutical interventions or public health measures into the Recovery period. If they are stopped too early, there might be resurgent of influenza cases!!	MOHMS KIPT	Media All stakeholders
	b) Maintain essential services.	Essential services/PUB	All stakeholders
	c) Review and update frequency of communications for all health staff and HOMS on the influenza virus and advise of situation.	MOHMS	
	• Ensure that regular updates are distributed to the other Government and Private sectors, NGOs and CBOs.	Official spokesperson on pandemic or Chairman KIPT	All Stakeholders
	d) Provide regular updates via multimedia, talkback and monitoring of situation.	MOHMS, Official spokesperson; communication officer	
	e) Continue to liaise with WHO, SPC, OIE, FAO and other regional and international agencies for updates	IHR-NFP, Chairman KIPT	

POST PANDEMIC PERIOD:

E: STRATEGY: RECOVERY

Pandemic wave has passed or pandemic is over.

FUNCTIONAL AREA	ACTION	LEAD AGENCY	SUPPORT AGENCY
Planning, Coordination and Reporting	• Recovery/ psychosocial counseling services	MOHMS, KIPT, Churches, NGOs	All Stakeholder
	• Debriefing	KIPT, OB, KDC	
	• Lesson Learnt	All stakeholders.	

	• Socio-economic Impacts of the pandemic must be assessed, and plan accordingly by all Sectors concerned.	Ministry of finance	All stakeholders
Monitoring and Surveillance	a. Continue active surveillance for a period during Recovery period to ensure that there are no indications of another wave. b. If possible, send further isolates to WHO for further viral analysis. c. Continue monitoring situation for any sign of resurgence of influenza cases. d. Analyze epidemiological data e. mortality rate f. infection rate g. adverse events from antiviral medication and vaccination	MOHMS, DIRPH, Laboratory KIPT Clinical, Laboratory, Public Health As above.	Clinical KIPT,
Health Care and Emergency Response	• Recovery • Debriefing • Lesson Learnt	MOHMS, KIPT,OB, KDC As above	
Communications and Health Education	a) As above b) Review and update all health staff and HOMS on the influenza virus and situation. c) Distribute information to the other sectors: Provide update via multimedia, talkback and report of situation Terminate pandemic media campaign Initiate back to normal campaign Continue to liaise with WHO, SPC, CDC and other key regional and international agencies	MOHMS, KIPT Official spokesperson [DPH] or Communication Officer MOHMS/KDC/OB MOHMS/ KIPT/OB Chairman KIPT/ EpiNet team focal point	All Stakeholder

IIII BIBLIOGRAPHY & REFERENCES

1 Australian Government – Department of Health & Ageing: Australian Health Management Plan for Pandemic Influenza – 2006

2 WHO Checklist for essential elements for influenza pandemic preparedness plans.

3 SPC 2005, PPHSN Influenza guidelines.

4 WHO pandemic influenza draft protocol for rapid response and containment

5 Palau Influenza pandemic preparedness Plan

6 New Zealand Influenza pandemic preparedness and response Plan Version 15. 2006.

7 Tonga Influenza pandemic preparedness and response Plan [2006]

IV: ANNEXES

ANNEX 1: Members of the Kiribati National Influenza Pandemic Preparedness Taskforce [KIPT]

Names of committee members	Title at the committee	Organization represented	Phone contacts
1. Dr Airam Metai	Chairman	MHMS	28396
2. Tonganibeia Koakoa	Commander in chief in implementing the plan - Vice Chairman	OB	21183
3. Dr Teraira	member	MHMS	28100
4. Rubi Tenano	member	Aviation	29322
5. Teretia Tokam	member	AG Office	21242
6. Tubeta Been Rimon	member	Airport security	28027
7. Itibwebwe Kabiriera	member	Air Kiribati	28027
8. Tooua Bateriki	member	Customs	28159
9. Burebure Karirriki	member	Immigration	21342
10. Kireata Ruteru	member	Health promotion	28100
11. Tanimakin Nooti	member	Nursing MHMS	28100
12. Tearo Otiuea	member	Agriculture	28108
13. Veronika Karea	Member	Air Nauru	28715
14. Buraieta Toakare	Member	BPA	21161/21162
15. Tiero Tetabea	member	Lab MHMS	28100
16. Eria Maerere	member	Air Marshall	28944
17. Mika Bateri	member	Police	26187
18. Tianuare Taeuea	Secretary	MHMS	28100
19. Mr Enota	Chairman	National Disaster Council	
20. ??		Port Authority	

National influenza pandemic preparedness taskforce:
This consists of many ministries, companies and NGOs who are primarily involved with the health care provision,,maintenance continuity of other essential service-provisions, monitoring the movement of people [domestic & international], poultry-keeping [management of livestock], and food importation. The terms of reference of the committee is provided below.

ANNEX 2: Terms of Reference of the National influenza pandemic taskforce

[Comment by Dr Kupu: need reference of Cabinet decision paper as tasks below seem to over-rule any other authority/Body in response to the event….I doubt whether taskforce members can handle the tasks or lead ALL responses by itself. The more reason why we need a Whole of Government approach engaging all sectors, both Govt. and Non-govt.]

The Kiribati national influenza preparedness pandemic taskforce [KIPT] is tasked by the Cabinet [Cabinet Ref. gazette/paper?] to see that Kiribati is well prepared to handle the avian flu pandemic should it occur. The committee shall look into measures that would help curtail the outbreak quickly in the most effective and timely manner using current technology and measures available and with minimal disruption of travel by people across the borders and within Kiribati. Adopt preventive measures that are feasible and comply with the IHR. The pandemic is considered a **National crisis** and the committee is entrusted to give appropriate instructions to the various sectors of the community as a security measure.

1. The sharing of information to people with respect to what need to be done by them and various partners during the outbreak is the responsibility of the committee

2. Updates on avian flu information to the public

3. Getting the places for treatment and nursing massive sick people during the outbreak

4. Making policy and recommendations that would address key issues requiring attention quickly by the Cabinet pertaining to Avian flu preparedness.

5. Take command over other ministries to respond quickly to the outbreak

6. Give directions on the use of vehicles owned by ministries or NGOs when needed.

7. Give command on detaining people at designated place.

8. Give orders on limitation of peoples' movements.

9. Identify places for mass patients and mass graves.

10. Coordinate activities to curb the spread of the diseases.

ANNEX 3: [Suggested] Priority groups for antiviral medication [& pandemic vaccines once available].

Categories (Essential services)	Number
Medical staffs [DirPH, nurses,]	
Patients & contacts	
Support services: laboratory, pharmacists, cleaners/kitchen hands,CSSD. Ambulance drivers	
Border control team [airport/port], Police,	
Disaster committee; KIPPT [core members??]	
PM, cabinet members, chief secretary	
Utilities: water, electricity,	
Police/security	
Volunteer helpers [health care/community care]	

ANNEX 4: Items that can be stockpiled for Kiribati in preparedness for pandemic of influenza. [Assumption: total population of 88,000, and 35% got influenza and 10% of those infected are treated for secondary bacterial infection. Adapted from recommendation from WHO mission to Kiribati June 06]

Antibiotics:

	Unit	**Approximate % of patients to receive this**	**Approximate number of units to stock**
Augmentin	1 course	75%	2310
Doxycline	1 course	25%	770
Ceftriaxone: Adult 2g/day IV	1 course	5%	154

Personal Protective Equipment

[Assumption: 4 wards with 3 shifts of 2 nurses each. 2 changes of PPE per shift. Duration 2 months

Item	**Number**	
N-masks	3000	
Gloves [sizes 8 & 7]	3000 each	
Disposal gowns [XL & L]	4000	
Goggles [reusable]	150	
Boots [reusable]	30	
Hand & surface disinfectant		

Laboratory supplies

Items	Number
Rapid test kits for Flu A & B	100
Sampling swabs	200
Viral transport media [or ethanol 100%]	50
Shipping containers	50 or less if specimens are batched

ANNEX 5: Tamiflu regimen for treatment and prophylaxis

Formula:
Capsule 75mg.
Oral suspension: 12 mg / ml (to be reconstituted in water.

Storage: 15-30^{o} C
Shelf life: 5 years
Indications:

Treatment: Those exposed to infection within 48 hours.
These patients shall be treated for 5 days
Doses:

>1 year	Or < 15 Kg body weight:	30 mg bd x 5 days
	15-23 kg	45mg bd x 5 days
	24-40 kg:	60 mg bd x 5 days
13 yrs and above	> 40 kg	75mg bd x 5days

Prophylaxis: Tamiflu 75mg daily x 7 days
Only for those 13 years and above &
the close contacts of index patients.

ANNEX 6: Guidelines for PPE & Personal Hygiene

Purpose of this document
These guidelines for personal protection have been developed as part of the emergency planning for a potential influenza pandemic. They are based on general transmission patterns of seasonal human influenza and may be up-dated once more information on the pandemic strain is obtained. The recommended and general infection prevention and control measures apply to all Niue residents.

Concern for personal protection is greater during a pandemic influenza as it is caused by a virus that is markedly different from recently circulating strains such as that found in a seasonal influenza, which is a familiar infection. A pandemic influenza causes illness in a

large number of the people infected; it spreads widely and quickly because the population will have no immunity.

How is pandemic influenza transmitted?

Primarily, human influenza is transmitted from person to person via virus-laden large droplets (particles >5 μm in diameter), which are generated when an infected person coughs or sneezes. These large droplets can then be directly deposited onto the mucosal surfaces of the upper respiratory tract of susceptible people who are near the infected person (i.e., within 1 meter). Transmission may also occur through direct contact with infectious (wet) respiratory secretions, such as by touching door handles, taps, lift buttons, stairwell railings, keyboards, etc that have deposits of the infected secretions on their surfaces, and then hand-to-face contact.

General and specific infection prevention and control measures

Employers should ensure that all staff with symptoms of respiratory disease do not place others at risk of infection. Such policies can include sending ill people home and enabling staff to work in more isolated settings, such as from home, during times of influenza outbreak.

There is scientific and medical evidence that influenza can spread in inadequately ventilated internal spaces. All internal spaces should be well ventilated, preferably with fresh air, by opening windows, or with properly designed and maintained air-conditioning systems.

Hand hygiene

Hand washing is still the single most important measure to reduce the risks of transmitting infectious organisms from one person to another.

Hands should always be washed and dried after contact with respiratory secretions or after touching surfaces that have been contaminated with respiratory secretions.

Hands should be washed regularly with soap and water, and then thoroughly dried, preferably using disposable tissues or towels. An alcohol-based hand rub or an antiseptic hand wash may be used instead, and hands should be rubbed until they are dry.

Hand-to-face contact, which occurs during such activities as eating, normal grooming or smoking, presents significant risks because of the potential for transmitting influenza from surfaces contaminated with respiratory secretions, and for this reason, hands should always be washed and dried before any activity that involves hand-to-face contact.

Respiratory hygiene/cough etiquette

People with respiratory infection symptoms should practice the following cough/sneeze etiquette whenever they are in the presence of another person.
All symptomatic people should:

- Avoid close contact (less than 1 meter) with other people
- Cover their nose and mouth when coughing or sneezing

- Use disposable tissues to contain respiratory secretions
- Immediately dispose of used tissues in the nearest waste receptacle
- Immediately wash and dry their hands.

Social distancing

Crowded places and large gatherings of people should be avoided at times of an influenza pandemic, whether such gatherings are in internal or external spaces. All UN Staff should follow security instructions issued by the RSA.[2]

A distance of at least 1 meter should be maintained between persons wherever possible. Greater distances are more effective.

Any form of contact with people who are unwell with pandemic influenza, including visiting, should be avoided wherever practicable.

Using masks

People with respiratory infection symptoms should consider using a disposable surgical mask to help prevent exposing others to their respiratory secretions.

Any mask must be disposed of as soon as it becomes moist in an appropriate waste receptacle, and hands must be thoroughly washed and dried after the used mask has been discarded.

For further information on Avian Influenza see www.who.int/csr/disease/avian_influenza/en/