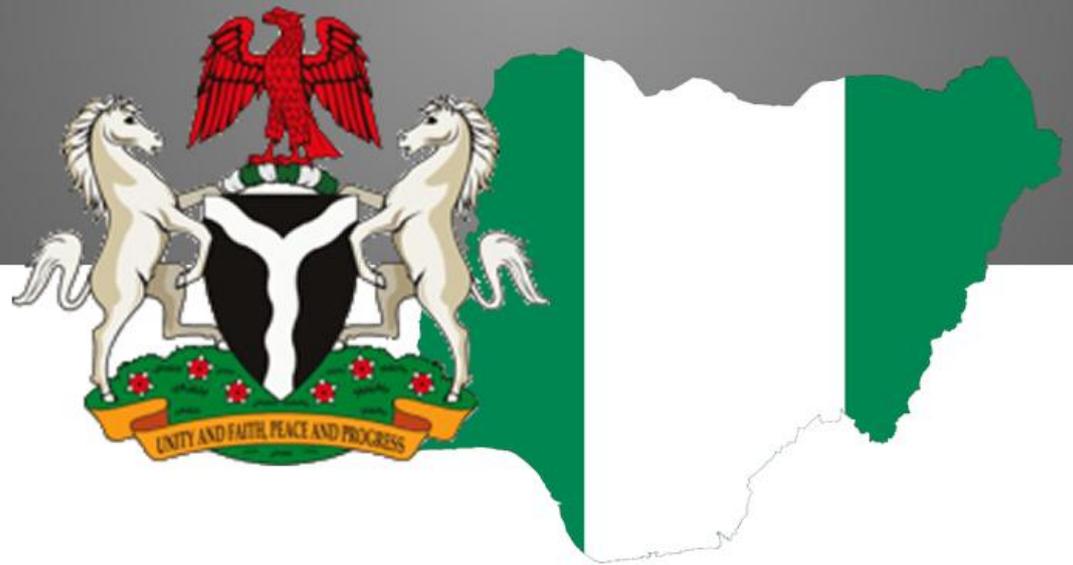


Federal Republic of Nigeria



**Nigeria National
Pandemic
Influenza
Preparedness and
Response Plan**

September 2013

EXECUTIVE SUMMARY

Influenza A viruses periodically cause worldwide pandemics with medium to high rates of illness and death and considerable societal disruption. A future influenza pandemic has the potential to infect a very significant percentage of the population and result in a large number of deaths. Unlike other public health emergencies, an influenza pandemic is a disaster and will simultaneously impact all global regions simultaneously. Given the broad geographic scope of a pandemic, the availability of external international support is expected to be very limited. Therefore, each nation must be prepared to respond within this context of limited external assistance, making maximum use of nationally available resources to mitigate the potentially significant impacts of a severe pandemic.

Planning and preparedness is critical to an effective response to a pandemic disaster and requires the involvement of every level of the Government of Nigeria, the healthcare and social services community, and the business community. This document, the *National Pandemic Influenza Preparedness and Response Plan* of the Federal Republic of Nigeria, serves as a blueprint for a coordinated national strategy to prepare for, and respond to a national pandemic influenza disaster. This plan is intended to be both flexible and dynamic, and includes preparedness and response components that are consistent with the general principles of disaster response.

This plan contains the following sections:

1. *Introduction / Objectives / Endstate*
2. *Situation and Planning Assumptions*
3. *Nigeria Pandemic Sub-Phases*
4. *Execution*
 - a. *Command and Control*
 - b. *NEMA Operations Centre Activation*
 - c. *Concept of Operation (tasks by phase)*
5. *Functional Instructions (10 key functions)*
6. *Annexes addressing key areas*

The core components of the plan are tasks to be accomplished during each pandemic phase. These tasks provide “trigger” points during each phase to ensure appropriate action is taken. The plan also contains functional instructions which provide more detailed background information concerning ten key functional areas. The annexes included in this plan contain a handbook for civilian population use during a pandemic, glossary and acronyms, bibliography and a number of guidelines and checklists which provide detailed practical information concerning priority populations for vaccination and anti-viral medication; Alternative Medical Treatment Sites; implementation of community containment measures; and hospital preparedness recommendations. It is recommended that all pandemic influenza stakeholders become familiar with the introduction, Situation and Planning Assumptions, Execution and Functional Instructions sections of this plan. Those individuals who are directly involved with the tasks outlined in other sections should acquire in-depth knowledge of the appropriate components.

INTRODUCTION

Purpose / Objectives

As a component of Nigeria's comprehensive disaster management system, this pandemic influenza preparedness and response plan addresses issues unique to an influenza pandemic.

The purpose of this plan is to provide a framework for the government of the Federal Republic of Nigeria, pandemic response personnel, and other pandemic stakeholder agencies and organizations to work together to accomplish the following objectives:

1. Contribute to an effective national and local level response to an influenza pandemic
2. Reduce influenza-related morbidity and mortality
3. Minimize disruption of critical social, economic and medical services during a pandemic
4. Mitigate pandemic-related impacts on critical infrastructure
5. Facilitate post-pandemic recovery operations

Desired Endstate

Within the context of the objectives above, the desired post-pandemic endstate is that the Federal Republic of Nigeria and its partners emerge from an influenza pandemic with minimal health and non-health impacts to the local population, government personnel and critical infrastructure and that all private and public sector stakeholders are capable of immediately resuming all aspects of pre-pandemic operations and services.

NOTE: Although this plan provides general guidelines to prepare for and respond to an influenza pandemic, this plan can also be used to prepare for and respond to disaster situations caused by other highly-infectious disease pandemics.

SITUATION AND PLANNING ASSUMPTIONS

Definition of an influenza pandemic

A pandemic is a global disease outbreak. An influenza pandemic occurs when a new influenza virus emerges for which there is little or no immunity in the human population and begins to spread efficiently from person to person, causing serious illness, sometimes resulting in death. Because of its potential to cause significant illness and death worldwide, experts believe that a global influenza pandemic will have a major negative impact on the global economy, including travel, trade, tourism, food, retail consumption and eventually, investment and financial markets.

Characteristics and challenges of a pandemic¹

- **Rapid Worldwide Spread**
 - When a pandemic influenza virus emerges, its global spread is considered inevitable.
 - Preparedness activities should assume that the entire world population would be susceptible.
 - Countries might, through measures such as border closures and travel restrictions, delay arrival of the virus, but cannot stop it.
- **Health Care Systems Overloaded**
 - Most people have little or no immunity to a pandemic virus. Infection and illness rates soar. A substantial percentage of the world's population will require some form of medical care.
 - Nations are unlikely to have the staff, facilities, equipment and hospital beds needed to cope with large numbers of people who suddenly fall ill.
 - Death rates are high, largely determined by four factors: the number of people who become infected, the virulence of the virus, the underlying characteristics and vulnerability of affected populations and the effectiveness of preventive measures.
 - Past pandemics have spread globally in two and sometimes three waves.
- **Medical Supplies Inadequate**
 - The need for vaccine is likely to outstrip supply.
 - The need for antiviral drugs is also likely to be inadequate early in a pandemic.
 - A pandemic can create a shortage of hospital beds, ventilators and other supplies. Surge capacity at non-traditional Alternative Medical Treatment Sites such as schools may be created to cope with demand
 - Difficult decisions will need to be made regarding who gets antiviral drugs and vaccines.
- **Economic and Social Disruption**
 - Travel bans, closings of schools and businesses and cancellations of events could have major impact on communities and citizens.
 - Care for sick family members and fear of exposure can result in significant worker absenteeism.

¹ <http://www.pandemicflu.gov/general/whatis.html>

Clinical Attack Rates for Nigeria

The table below illustrates the estimated number of symptomatic cases expected during a pandemic, based on either a 15% or 35% attack rate.

Estimated Number of Symptomatic Cases by Outcome for Federal Republic of Nigeria

Estimated Number of Symptomatic Cases by Outcome		
Nigeria – Population 162,470,737²		
Outcome	15% Attack Rate	35% Attack Rate
Sick	24,370,611	56,864,758
Deaths (2.5%)	609,265	1,421,619
Hospitalizations (10%)	2,437,061	5,686,476
ICU (15% of Hospitalized)	365,559	852,971
Mechanical Ventilation (7.5% of Hospitalized)	182,780	426,486

Planning Assumptions

- 1) An influenza pandemic will affect multiple communities across Nigeria simultaneously.
- 2) Susceptibility to the pandemic influenza virus will be universal among all population groups.
- 3) Efficient and sustained person-to-person transmission of a “novel” virus signals an imminent pandemic. (Note: a novel virus is one that has not been previously found in the human population and therefore one for which humans have little or no inherent immunity.)
- 4) The typical incubation period (interval between infection and onset of symptoms) for influenza is approximately 2 days.
- 5) Persons who become ill may “shed” virus and can transmit infection for up to one day before the onset of symptoms. Viral shedding and the risk of transmission will be greatest during the first 2 days of illness. Children usually shed the greatest

² World Bank, World Development Indicators,

<http://www.google.com/search?q=nigeria+population&ugexp=chrome.mod=19&sourceid=chrome&ie=UTF-8>

amount of virus and therefore are likely to post the greatest risk for transmission to others.

- 6) On average, infected persons will transmit infection to approximately two other people.
- 7) The clinical disease attack rate will be 30% or higher in the overall population during the pandemic. Illness rates will be highest among school-aged children (about 40%) and decline with age. Among working adults, an average of 25% will become ill during a community outbreak.
- 8) Some persons will become infected but not develop clinically significant symptoms. Asymptomatic or minimally symptomatic individuals can transmit infection and develop immunity to subsequent infection.
- 9) Of those who become ill with a pandemic influenza virus, 50-60% will seek outpatient medical care, but due to the enormous demand for health resources, most infected persons will be treated at home. This will require families to provide in-home care for ill family members.
- 10) Pandemic-related anxiety will cause increased psychogenic and stress-related illness, compounding the strain on healthcare facilities.
- 11) The number of hospitalizations and deaths will depend on the virulence of the pandemic virus. (Note: Estimates of pandemic casualties differ significantly between more and less severe scenarios.)
- 12) Risk groups for severe and fatal infection will include infants, the elderly, pregnant women, and persons with compromised immune systems and/or chronic medical conditions.
- 13) Access to anti-viral medications will be very limited.
- 14) Once a pandemic influenza virus is identified, it will take from three to six months to produce an initial vaccine, and significantly longer to produce and distribute sufficient quantities of this vaccine to effectively impact the pandemic.
- 15) Once produced, vaccine will be distributed in accordance with priorities established by the World Health Organization.
- 16) Lack of access to anti-viral medications and vaccines and perceptions about inequitable distribution is a potential cause of public concern, and even social unrest.
- 17) Workplace absenteeism will depend on the severity of the pandemic. In a severe pandemic, absenteeism attributable to illness, the need to care for ill family members, and fear of infection may reach 40% during the peak weeks of a community outbreak. Certain public health measures (closing schools and childcare facilities, quarantining household contacts of infected individuals, etc.) are likely to increase rates of absenteeism.
- 18) In an affected community, a pandemic outbreak “wave” will last about 6 to 8 weeks. These outbreaks will reoccur multiple times within a community.
- 19) Multiple waves (periods during which community outbreaks occur across the country) of illness will occur, with each wave lasting 2-3 months.

- 20) Government agencies may recommend changes in business workplace rules, such as increased telecommuting, but government action to close businesses or involuntarily mandate business work policies is unlikely to be effective.
- 21) Most national governments will not close their borders or severely limit travel, although significant entrance and exit screening will be mandated at border entry and exit locations and will cause significant travel delays.
- 22) Commercial air transportation will be limited by flight cancellations due to airline crew availability, pandemic-related infrastructure limitations and fiscal challenges. Flights to some countries may be completely unavailable.
- 23) Isolation and quarantine at international ports-of-entry (POE) is a national responsibility, with some local government support and follow-up.
- 24) During a severe “pandemic wave”, local availability of food, health, fuel, and other “everyday” items will be limited by hoarding and pandemic-related impacts on distribution and transportation systems.

NATIONAL PANDEMIC PHASES

The Federal Republic of Nigeria has established pandemic alert phases which are modelled on the World Health Organization (WHO) Pandemic Alert phasing protocols and have also been designed to coincide with various stages of the “pandemic curve.”

These phases also include unique “Nigeria-specific sub-phasing” during phase 4-6. This sub-phasing will be initiated upon the WHO’s declaration of Phase 4, which occurs once a novel virus with the potential to cause community outbreaks has been identified. The purpose of this sub-phasing is to provide a more accurate assessment of regional and national pandemic risk to facilitate decision-making during national pandemic response operations. The President’s Office will determine and declare the current phase using information and recommendations provided by the Ministry of Health. It should be noted that while this phasing protocol has specific standards identified for declaration of each phase, other unique factors may be present which might warrant variation from these standards in determining the appropriate phase.

These phases consider the possibility that Nigeria may experience a severe pandemic prior to the World Health Organization declaring either Phase 5 or Phase 6 to indicate a global pandemic. This would be especially likely if a pandemic virus were to begin in Nigeria, or in close proximity to Nigeria, thus causing the region to experience a pandemic disaster prior to the advent of a global pandemic.

WHO Phase 1: No viruses circulating among animals have been reported to cause infections in humans. WHO will normally declare Phase 1.

Nigeria Sub-Phasing:

Phase 1-3: Preparation: *No significant human pandemic virus identified globally.*

WHO Phase 2: An animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans, and is therefore considered a potential pandemic threat. WHO will normally declare Phase 2.

Nigeria Sub-Phasing:

Phase 1-3: Preparation: *No significant human pandemic virus identified globally.*

WHO Phase 3: An animal or human-animal influenza virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. WHO will normally declare Phase 3.

Nigeria Sub-Phasing:

Phase 1-3: Preparation: *No significant human pandemic virus identified globally.*

WHO Phase 4: Characterized by verified human-to-human transmission of an animal or human-animal influenza virus able to cause “community-level outbreaks.” WHO will normally declare Phase 4.

Nigeria Sub-Phasing:

Phase 4a: *No confirmed or suspected cases within Africa, Nigeria or neighbouring countries (Benin, Niger, Chad, Cameroon).*

Phase 4b: *Confirmed or suspected cases in Africa, but no cases within Nigeria or any of the countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 4c: *Local Outbreak: First confirmed or suspected case in Nigeria or one of the countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 4d: *Regional Outbreak: Confirmed or suspected cases in Nigeria and at least one country bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 4e: *Widespread Regional Outbreak: Confirmed or suspected cases in Nigeria and at least three countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 4f: *High Risk Regional Outbreak: Confirmed or suspected cases in Nigeria and at least three countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon) and widespread confirmed cases in schools.*

Phase 4g: *Deceleration/Resolution: Weekly incidence rates of pandemic influenza decline by at least 10% per week for at least two weeks.*

WHO Phase 5: Characterized by human-to-human spread of the virus into at least two countries in one WHO region. WHO will normally declare Phase 5.

Nigeria Sub-Phasing:

Phase 5a: *No confirmed or suspected cases within Africa, Nigeria or neighbouring countries (Benin, Niger, Chad, Cameroon).*

Phase 5b: *Confirmed or suspected cases in Africa, but no cases within Nigeria or any of the countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 5c: *Local Outbreak: First confirmed or suspected case in Nigeria or one of the countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 5d: *Regional Outbreak: Confirmed or suspected cases in Nigeria and at least one country bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 5e: *Widespread Regional Outbreak: Confirmed or suspected cases in Nigeria and at least three countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 5f: *High Risk Regional Outbreak: Confirmed or suspected cases in Nigeria and at least three countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon) and widespread confirmed cases in schools.*

Phase 5g: *Deceleration/Resolution: Weekly incidence rates of pandemic influenza decline by at least 10% per week for at least two weeks.*

WHO Phase 6: This pandemic phase is characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. WHO will normally declare Phase 6.

Nigeria Sub-Phasing:

Phase 6a: *No confirmed or suspected cases within Africa, Nigeria or neighbouring countries (Benin, Niger, Chad, Cameroon).*

Phase 6b: *Confirmed or suspected cases in Africa, but no cases within Nigeria or any of the countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 6c: *Local Outbreak: First confirmed or suspected case in Nigeria or one of the countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 6d: *Regional Outbreak: Confirmed or suspected cases in Nigeria and at least one country bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 6e: *Widespread Regional Outbreak: Confirmed or suspected cases in Nigeria and at least three countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon).*

Phase 6f: *High Risk Regional Outbreak: Confirmed or suspected cases in Nigeria and at least three countries immediately bordering Nigeria (Benin, Niger, Chad, Cameroon) and widespread confirmed cases in schools.*

Phase 6g: *Deceleration/Resolution: Weekly incidence rates of pandemic influenza decline by at least 10% per week for at least two weeks.*

EXECUTION

Command and Control for Pandemic Response Operations

Nigeria has developed a comprehensive national approach to disaster management applicable at all jurisdictional levels and across functional disciplines. This system allows national, state and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. Current national disaster policies and plans discuss the roles and responsibilities to various disaster stakeholders at the national, state and local levels. In addition, these policies and plans outline the fundamental concept of operations for disaster response and define the functional roles and responsibilities of various government entities, including the Armed Forces of Nigeria (AFN). The Command and Control structure of this *National Pandemic Influenza Preparedness and Response Plan* coincides with the command and control structure outlined in these other policies and plans. During a pandemic, the Federal Ministry of Health (FMOH) will operate as the “lead agency” for governmental response, although all national response will be coordinated and directed by the National Emergency Management Agency (NEMA) in full cooperation with applicable ministries and national committees. Although the FMOH will operate as the lead agency, it should be emphasized that an influenza pandemic is not solely a public health emergency. The non-health impacts of a pandemic may be more problematic than potential health impacts. Therefore, it is critical that the national government respond to any severe influenza pandemic as it would in any other national disaster and that all available resources are committed to pandemic response.

Activation of the Nigeria National Emergency Management Agency (NEMA) Operations Centre:

The trigger point for partial NEMA Operations Centre activation is declaration of the Nigerian sub-phase 4b, 5b, or 6b, which occurs when cases of confirmed pandemic influenza are present in Africa, but not in Nigeria or its neighbouring countries. The Full NEMA Operations Centre activation trigger point is the declaration of the Nigeria sub-phase of 4c, 5c, or 6c, which occurs when a confirmed case of pandemic influenza occurs within Nigeria or a neighbouring country. Although these trigger points will be utilized for NEMA partial and full activation, other factors will be considered (i.e. viral virulence, etc.) prior to activation of the NEMA Operations Centre and may cause acceleration or delay of NEMA Operations Centre activation. At the appropriate trigger point, the President’s Office, with recommendations from the FMOH and NEMA, will draft an Executive Order declaring that a State of Emergency exists and specifying the emergency powers that are necessary or appropriate to cope with the pandemic disaster. Existing disaster management policies and plans outline the procedures for activation of various government ministries and agencies to address the specific needs of a pandemic and the procedures to coordinate the efforts between various government ministries, the AFN, and other disaster stakeholders. To facilitate a coordinated response, NEMA will maintain contact with the State Emergency Management Agencies. Depending on characteristics of an influenza pandemic, regional ECOWAS response actions may be warranted, involving various regional and international stakeholders.

Concept of Operation. Pandemic response operations will be executed using the previously identified pandemic alert phased protocol. Tasks are identified for each pandemic alert phase in the following 10 functional areas:

1. Surveillance and Laboratory
2. Triage and Patient Care
3. Infection Control Measures
4. Antivirals Acquisition, Storage, Distribution and Use
5. Vaccine Acquisition, Storage, Distribution and Use
6. Mass Fatalities Management
7. Mental Health
8. Mass Care and Logistics
9. Communications and Public Education
10. Command and Control and Continuity of Operations

Lead agencies are identified for each task. While the lead agency is primarily responsible for ensuring the identified task is accomplished, other ministries and agencies will usually be involved in task execution. Therefore, ministries and agencies should be familiar with all tasks in the phased matrices and should conduct task analysis to determine what ministry/agency actions are required to facilitate task completion. It should also be noted that the lead agency will work with private sector stakeholders throughout all phases to ensure a “whole of society” approach to pandemic preparedness and response efforts. The following table identifies the agency acronyms used to identify lead ministries and agencies within the phased execution matrices which follow:

FMoA	Ministry of Aviation
FMA&RD	Ministry of Agriculture and Rural Development
FMoCI	Ministry of Commerce and Industry
FMoCT	Ministry of Communications Technology
MOD	Ministry of Defence
FMoE	Ministry of Education
FMEnv	Ministry of Environment
FMoF	Ministry of Finance
MFA	Ministry of Foreign Affairs
FMoH	Ministry of Health
FMI	Ministry of Information
MOI	Ministry of Interior
FMoJ	Ministry of Justice
FMoLP	Ministry of Labour and Productivity
FMoT	Ministry of Transport

FMoTI	Ministry of Trade and Investment
FMoWASD	Ministry of Women's Affairs and Social Development
NPF	Nigerian Police Force
NSCDC	Nigerian Security and Civil Defence Corps (MOI)
NOA	National Orientation Agency

TASK LIST: Nigeria Pandemic Phases 1-3 “Preparation”

Risk Assessment. The risk associated with pandemic influenza during these phases is very limited. People travelling to overseas locations which have a history of sporadic “novel” virus transmission from animals to humans are at some risk, but only if they are in direct contact with infected animals, a presumably minimal risk for most travellers. The World Health Organization, in concert with member states, has a relatively efficient surveillance system to identify and report the origination of any human-to-human transmission of a novel influenza virus capable of precipitating a global pandemic. Therefore, the potential for a person to acquire this form of influenza virus before it is identified and reported by the World Health Organization is not likely, but cannot be discounted completely.

Operational Focus. During this phase, tasks focus on ensuring that governmental and non-governmental stakeholders are adequately trained and informed, necessary tasks to be accomplished during a pandemic have been identified and assigned to the agencies responsible for their execution and needed supplies and equipment are acquired.

TASK LIST WHEN NIGERIAN SUB-PHASING = PHASE 1, 2 OR 3 PREPARATION - NO SIGNIFICANT HUMAN PANDEMIC VIRUS IDENTIFIED GLOBALLY

PHASES 1-3	Tasks
<p>Surveillance and Laboratory</p>	<ul style="list-style-type: none"> • Conduct continuous human surveillance in accordance with established protocols. (Lead: FMoH) • Conduct continuous animal surveillance in accordance with established protocols. (Lead: FMA&RD) • Ensure all human surveillance partners understand their roles and the importance of vigilance in surveillance operations. (Lead: FMoH) • Ensure all animal surveillance partners understand their roles and the importance of vigilance in surveillance operations. (Lead: FMA&RD) • Seek to improve capacity for rapid identification of human influenza viruses, including enhancement of laboratory capacities and capabilities. (Lead: FMoH) • Seek to improve capacity for rapid identification of animal influenza viruses, including enhancement of laboratory capacities and capabilities. (Lead: FMA&RD) • Conduct public health planning efforts for influenza pandemic response to a human virus. (Lead: FMoH) • Conduct planning efforts for epidemiological response to a human influenza virus pandemic. (Lead: FMoH) • Conduct planning efforts for epidemiological response to an animal influenza virus outbreak. (Lead: FMoH) • Ensure reporting to WHO in accordance with the International Health Regulations (IHR). (Lead: FMoH)

	<ul style="list-style-type: none"> • Report animal infections to appropriate authorities (WOAH, FAO, etc.) in accordance with established international standards and regulations. (Lead: FMA&RD)
Triage and Patient Care	<ul style="list-style-type: none"> • Develop and maintain a community-wide inventory/tracking system of essential medical resources, as outlined in established protocols. (Lead: FMoH). • Develop a strategy for triage, diagnosis, and isolation of possible pandemic influenza patient, including potential triage site locations and appropriate site management protocols. (Lead: FMoH) • Identify potential sources of supplemental medical resources for use during a pandemic. (Lead: FMoH) • Periodically update the estimated impact of pandemic influenza on healthcare services and critical medical infrastructure. (Lead: FMoH) • Work with healthcare facilities to address surge capacity requirements. (Lead: FMoH) • Work with healthcare facilities to identify volunteers to expand staffing in non-professional capacities during a pandemic (i.e. custodial, etc.). (Lead: FMoH) • Work with healthcare facilities to identify volunteers to expand staffing in professional capacities during a pandemic (i.e. Nursing, Physicians, etc.). (Lead: FMoH) • Coordinate and oversee the development and implementation of the guidelines for use of alternative medical treatment sites (AMTS). (Lead: FMoH) • Identify potential alternative medical treatment sites (AMTS) and make arrangements for site utilization. (Lead: FMoH - Support: FMoE, MOD) • Maintain a database of current, retired, and volunteer healthcare personnel. (Lead: FMoH)
Infection Control Measures	<ul style="list-style-type: none"> • Develop and implement a program to educate public about influenza infection control measures (cough etiquette, hand hygiene, etc.). (Lead: FMoH - Support: FMI, FMoE, FMEnv, NOA) • Coordinate with ports of entry (POE) to plan for pandemic-related passenger screening, including development of protocols and training of personnel. (Lead: FMoH - Support: NEMA, MOI) • Aggressively respond to animal infections which have the potential to cross the “human-animal interface” and precipitate a human epidemic or pandemic. (Lead: FMA&RD - Support: FMoH) • Encourage public to obtain annual influenza vaccinations. (Lead: FMoH)
Anti-viral Acquisition and Use	<ul style="list-style-type: none"> • Maintain visibility of WHO and other international procurement and maintenance of anti-viral medication stockpiles. (Lead: FMoH) • Define anti-viral priority population groups. (Lead: NEMA - Support: FMoH) • Develop and maintain plans for distribution and use of anti-

	<p>viral medications during a pandemic, in accordance with previously established priorities. (Lead: FMoH)</p> <ul style="list-style-type: none"> • Notify the medical community of the status of anti-viral availability and anti-viral use guidelines. (Lead: FMoH) • Determine and maintain estimates of the number of persons within each anti-viral priority population. (Lead: FMoH)
Vaccine Acquisition, Distribution and Use	<ul style="list-style-type: none"> • Maintain existing vaccination standard operating procedures or guidelines (SOG). (Lead: FMoH) • Identify the maximum amount of pandemic influenza vaccine that can be accepted under emergency conditions for short-term storage, assess its adequacy to meet anticipated requirements and address any shortfall. (Lead: FMoH) • Ensure existing SOGs define adequate procedures to assure the biological safety and physical security of pandemic influenza vaccine. (Lead: FMoH) • Define pandemic influenza vaccination priority population groups to establish priorities for distribution and use of available pandemic influenza vaccine. (Lead: NEMA - Support: FMoH) • Develop and maintain plans for distribution and use of pandemic influenza vaccine, in accordance with previously established priorities and existing SOGs. (Lead: FMoH)
Mass Fatalities Management	<ul style="list-style-type: none"> • Conduct mass fatalities planning for pandemic response operations, to include development of a <i>National Mass Fatality Plan</i>. (Lead: FMEnv - Support: FMoH, MOD, NSCDC (MOI), NPF) • Assess logistics requirements and stockpile necessary supplies. (Lead: FMEnv) • Identify sources of supplies for re-stockage during a pandemic. (FMEnv) • Conduct required education/training. (Lead: FMEnv - Support: FMoH, MOD, NSCDC (MOI), NPF) • Ensure availability of Personal Protective Equipment (PPE) for personnel whose duties include processing of potentially-infected human remains (government and civilian). (Lead: FMEnv - Support: FMoH, MOD, NSCDC (MOI), NPF) • Conduct PPE training for personnel whose duties include processing of potentially-infected human remains (government and civilian). (Lead: FMEnv- Support: FMoH, MOD, NSCDC (MOI), NPF)
Mental Health	<ul style="list-style-type: none"> • Prepare educational and training materials on psychosocial issues for distribution to healthcare employees and pandemic “first responders” during an influenza pandemic. (See Mental Health Functional Instructions in this plan for more information) (Lead: FMoH) • Develop workforce resilience program, in accordance with Mental Health Functional Instructions of this plan. (Lead: FMoH - Support: FMoLP) • Identify Stress Control Teams for deployment during pandemic operations and “Rest and Recuperation Sites” for use by pandemic responders. (Lead: FMoH - Support:

	<p>NEMA)</p> <ul style="list-style-type: none"> • Conduct mental health resilience training among healthcare personnel and distribute support materials that address influenza pandemic-related mental health issues. (Lead: FMoH) • Establish confidential telephone support lines that will be staffed by behavioural health professionals during pandemic response operations. (Lead: FMoCT – Support: FMoH, FMI) • Identify capabilities of the Nigeria faith-based and other community-based organizations to provide or to facilitate community mental health support. (Lead: FMoH – Support: FMI) • Develop protocols for monitoring indicators of pandemic-related adverse mental health impacts. (Lead: FMoH)
<p>Mass Care and Logistics</p>	<ul style="list-style-type: none"> • Coordinate with mass care partners in planning for pandemic-related mass care requirements. (Lead: NEMA – Supporting: MOI) • Coordinate with government ministries and pandemic stakeholders, including international NGOs and UN System Agencies to conduct logistics planning. (Lead: NEMA) • Coordinate with appropriate stakeholders to plan for care of vulnerable populations (i.e. orphaned children, elderly, handicapped, etc.). (Lead: FMoWASD, FMoH) • Ensure appropriate policies are in place to facilitate expeditious customs processing and tax relief for humanitarian aid supplies, pharmaceuticals and other required aid materials. (Lead: NEMA – Support: FMoF)
<p>Communication and Public Education</p>	<ul style="list-style-type: none"> • Develop a communications plan for use during pandemic response operations. (Lead: FMI – Support: NEMA, FMoH) • Develop and distribute influenza-related educational materials to health care providers, first responders, and the general public. (Lead: FMoH – Support: FMI, NOA, FMoE, FMEnv) • Educate the media about what information will, and will not be available during a pandemic. (Lead: FMI) • Develop linkages with neighbouring countries to facilitate coordination of messaging during pandemic response operations. (Lead: MFA – Support: NEMA, FMI)
<p>Command and Control Continuity of Operations</p>	<ul style="list-style-type: none"> • Conduct periodic review and maintenance of the National Pandemic Preparedness and Response Plan. (Lead: NEMA – Support: FMoH) • Develop Continuity of Operations (COOP) Plans for all government ministries and agencies. (Lead: NEMA) • Work with the essential service providers in Nigeria to ensure adequate pandemic influenza continuity of operations planning. (Lead: NEMA – Support: FMoH, FMoTI, FMoCI, MOI, MoCT) • Identify private sector resources that may be needed during a major disaster/pandemic event and coordinate with owners for their use. (Lead: NEMA – Support: FMoJ, NPF) • Prepare plans for maintenance of law enforcement during

	<p>pandemic disaster including assessment of potential threats. (Lead: NPF - Support: MOI, MOD)</p> <ul style="list-style-type: none">• Prepare plans for maintenance of national security during a pandemic disaster, including assessment of potential threats. (Lead: MOD - Support: NPF, MOI)
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TASK LIST: Nigeria Pandemic Alert Phases 4a, 5a, & 6a

Risk Assessment. The risks associated with pandemic influenza during this phase are higher, since at this point the WHO has verified human to human transmission of a virus with pandemic potential. However, since the virus has not yet been identified in Africa, there is relatively minimal risk to Nigeria at this point in the development of the potential global pandemic.

Operational Focus. National efforts focus on monitoring the global situation and increasing surveillance and pandemic preparedness efforts.

TASK LIST - PANDEMIC VIRUS IDENTIFIED, BUT NO CASES IN AFRICA

PHASES 4a, 5a & 6a	Tasks
Surveillance and Laboratory	<ul style="list-style-type: none"> • Provide pandemic surveillance advisories to the health community, including hospitals and other healthcare providers. (Lead: FMoH) • Ensure all surveillance partners understand the increased need for accurate and timely reporting. (Lead: FMoH) • Implement enhanced surveillance to identify initial cases, assess viral virulence and identify any unique viral characteristics. (Lead: FMoH) • Monitor the health alert networks and other sources of pandemic information. (Lead: FMoH) • Continue surveillance for animal disease outbreaks that have potential to threaten the human population. (Lead: FMA&RD) • Provide periodic pandemic-related health updates to key leaders, national and international organizations and other critical stakeholders. (Lead: FMoH - Support: NEMA) • Ensure reporting to WHO in accordance with the International Health Regulations (IHR). (Lead: FMoH)
Triage and Patient Care	<ul style="list-style-type: none"> • Issue guidelines on influenza precautions for emergency departments and hospitals. (Lead: FMoH) • Regularly provide updated information about the epidemiology and spread of the pandemic virus to the health community. (Lead: FMoH) • Recommend that emergency medical providers and hospitals activate severe respiratory illness protocols. (Lead: FMoH)
Infection Control Measures	<ul style="list-style-type: none"> • Increase efforts to educate public about infection control measures. (Lead: FMoH - Support: FMI, FMoE, NOA) • Work with public, private sector, and non-governmental agencies to explain quarantine/isolation rationale and procedures. (Lead: FMoH - Support: FMI, FMoE, NOA) • Work with appropriate authorities and port managers to screen travellers arriving from any region affected by the identified novel influenza virus. (Lead: FMoH - Support: MOI, FMI, FMoT, FMoA, NPF) • Issue influenza precaution guidelines to emergency departments, hospitals, businesses, airlines, schools/universities, daycare facilities, jails/prisons, and

	<p>other stakeholders, as well as the public. (Lead: FMOH)</p> <ul style="list-style-type: none"> • Update medical providers on use of personal protective equipment (PPE). (Lead: FMOH) • Recommend home isolation of all influenza patients and quarantine of their contacts, as appropriate. (Lead: FMOH)
Anti-viral Acquisition and Use	<ul style="list-style-type: none"> • Activate existing pharmaceutical SOGs and follow the procedures outlined in this plan to acquire and distribute anti-viral medications, as required. (Lead: FMOH) • Coordinate anti-viral public information with Joint Media Information Committee. (Lead: FMOH) • Modify, as appropriate, recommendations on anti-viral prophylaxis use. (Lead: FMOH) • Revise anti-viral priority groups, as needed. (Lead: NEMA - Support: FMOH) • Accelerate training on appropriate use of anti-viral medications among public health staff and healthcare partners. (Lead: FMOH) • Coordinate with appropriate agencies for adequate security at anti-viral storage sites and PODs. (Lead: FMOH - Support: NPF, MOD, NSCDC (MOI))
Vaccine Acquisition, Distribution and Use	<ul style="list-style-type: none"> • Educate the public concerning pandemic influenza vaccine and its development. (Lead: FMOH) • Revise vaccination priority groups, as needed. (Lead: NEMA - Support: FMOH) • Monitor global vaccine development efforts. (Lead: FMOH)
Mass Fatalities Management	<ul style="list-style-type: none"> • Update mass fatalities plans. (Lead: FMEnv - Support: FMOH, MOD, NSCDC (MOI)) • Review stockage of necessary supplies and address any shortfalls. (Lead: FMEnv) • Consider increasing stockage of supplies, if warranted by current situation. (Lead: FMEnv) • Review training, including PPE training, with personnel involved in mass fatality operations. (Lead: FMEnv - Support: FMOH, MOD, NSCDC (MOI)) • Issue PPE to appropriate personnel, as required. (Lead: FMEnv - Support: FMOH, MOD, NSCDC (MOI))
Mental Health	<ul style="list-style-type: none"> • Monitor indicators of pandemic-related adverse mental health impacts. (Lead: FMOH)
Mass Care and Logistics	<ul style="list-style-type: none"> • Interface with mass care partners to assess readiness to conduct pandemic-related mass care operations. (Lead: NEMA) • Address requirement shortfalls for pandemic-related mass care operations. (Lead: NEMA) • Coordinate with government ministries and pandemic stakeholders, including international NGOs and UN System Agencies to assess logistics requirements and readiness to conduct logistics operations. (Lead: NEMA) • Address requirement shortfalls for logistics operations. (Lead: NEMA) • Ensure appropriate policies are in place to facilitate expeditious customs processing and tax relief for

	humanitarian aid supplies, pharmaceuticals and other required aid materials and begin coordination with customs and finance authorities. (Lead: NEMA - Support: FMoF)
Communication and Public Education	<ul style="list-style-type: none"> • Continue to distribute influenza-related educational materials to health care providers, first responders, and the general public. (Lead: FMoH - Support: FMI, NOA, FMoE) • Disseminate timely and accurate public information, as available. (Lead: FMI - Support: NEMA, FMoH, NOA) • Coordinate with national emergency managers and Joint Information Committee to respond to pandemic-related media requests. (Lead: FMI - Support: NEMA, FMoH) • Initiate linkages with neighbouring countries to facilitate coordination of pandemic response messaging. (Lead: MFA - Support: NEMA, FMI)
Command and Control Continuity of Operations	<ul style="list-style-type: none"> • Monitor global pandemic situation. (Lead: NEMA - Support: FMoH, MFA, FMI) • Begin coordination with regional healthcare representatives. (Lead: FMoH) • Begin coordination with regional disaster management representatives. (Lead: NEMA) • Ensure maintenance of law and order. (Lead: NPF - Support: MOI) • Address national security issues, as required. (Lead: MOD - Support: NPF, MOI)

TASK LIST: Nigeria Pandemic Alert Phases 4b, 5b, & 6b

Risk Assessment. The risks associated with pandemic influenza during this phase are higher, since a potential pandemic virus outbreak has occurred in Africa. The risk to Nigeria has increased significantly due to the geographic proximity of confirmed or suspected cases of the virus.

Operational Focus. National efforts focus on monitoring the global situation, with special emphasis on the situation in Africa and within the West African Region. Given the increased likelihood of a local outbreak, Nigerian Government officials will enhance surveillance operations, increase preparedness for pandemic response and to provide capability to respond to media inquiries and conduct public information operations.

TASK LIST - VIRUS PRESENT IN AFRICA, BUT NOT IN NIGERIA OR NEIGHBORING COUNTRIES

PHASES 4b, 5b & 6b	Tasks
Surveillance and Laboratory	<ul style="list-style-type: none"> • Provide pandemic surveillance advisories to the health community, including hospitals and other healthcare providers. (Lead: FMoH) • Continue emphasizing the need for accurate and timely reporting to surveillance partners. (Lead: FMoH) • Continue enhanced surveillance to identify initial cases, assess viral virulence and identify any unique viral characteristics. (Lead: FMoH) • Implement enhanced laboratory operation protocols to increase capacity at key laboratories. (Lead: FMoH) • Monitor the health alert networks and other sources of pandemic information. (Lead: FMoH) • Continue surveillance for animal disease outbreaks that have potential to threaten the human population. (Lead: FMA&RD) • Provide periodic updates to key leaders, national and international organizations and other critical stakeholders. (Lead: FMoH - Support: NEMA) • Ensure reporting to WHO in accordance with the International Health Regulations (IHR). (Lead: FMoH)
Triage and Patient Care	<ul style="list-style-type: none"> • Issue any changes to guidelines on influenza precautions for emergency departments and hospitals. (Lead: FMoH)
Infection Control Measures	<ul style="list-style-type: none"> • Continue efforts to educate public about infection control measures. (Lead: FMoH - Support: FMI, FMoE, NOA) • Work with public, private sector, and non-governmental agencies to explain quarantine/isolation rationale and procedures. (Lead: FMoH - Support: FMI, FMoE, NOA) • Continue to work with appropriate authorities and port managers to screen travellers arriving from any region affected by the identified novel influenza virus. (Lead: FMoH - Support: MOI, FMI, FMoT, NPF) • Update influenza precaution guidelines to emergency departments, hospitals, businesses, airlines,

	<p>schools/universities, daycare facilities, jails/prisons, and other stakeholders, as well as the public. (Lead: FMoH)</p> <ul style="list-style-type: none"> • Continue efforts to update medical providers on use of personal protective equipment (PPE). (Lead: FMoH) • Continue recommendations for isolation of all influenza patients and quarantine of their contacts, as appropriate. (Lead: FMoH)
Anti-viral Acquisition and Use	<ul style="list-style-type: none"> • Coordinate anti-viral public information with Joint Media Information Committee. (Lead: FMoH) • Monitor anti-viral medication use and effectiveness. (Lead: FMoH) • Monitor and investigate adverse events concerning anti-viral medications. (Lead: FMoH) • Modify, as appropriate, recommendations on anti-viral prophylaxis use. (Lead: FMoH) • Revise anti-viral priority groups, as needed. (Lead: NEMA - Support: FMoH) • Continue training on appropriate use of anti-viral medications among public health staff and healthcare partners. (Lead: FMoH) • Ensure adequate security at anti-viral storage sites and PODs. (Lead: FMoH - Support: NPF, MOD, NSCDC (MOI))
Vaccine Acquisition, Distribution and Use	<ul style="list-style-type: none"> • Educate the public concerning pandemic influenza vaccine and its development. (Lead: FMoH) • Revise vaccination priority groups, as needed. • Monitor global vaccine development efforts. (Lead: FMoH)
Mass Fatalities Management	<ul style="list-style-type: none"> • Consider increasing stockage of supplies, if warranted by current situation. (Lead: FMEv - Support: FMoH)
Mental Health	<ul style="list-style-type: none"> • Provide information to health care employees and first responders concerning pandemic-related psychosocial issues. (Lead: FMoH) • Monitor indicators of pandemic-related adverse mental health impacts. (Lead: FMoH)
Mass Care and Logistics	<ul style="list-style-type: none"> • Continue coordination with mass care partners and update readiness to conduct pandemic-related mass care operations. (Lead: NEMA) • Address requirement shortfalls for pandemic-related mass care operations. (Lead: NEMA) • Continue to coordinate with government ministries and pandemic stakeholders, including international NGOs and UN System Agencies to assess logistics requirements and readiness to conduct logistics operations. (Lead: NEMA) • Address requirement shortfalls for logistics operations. (Lead: NEMA - Support: MOD) • Ensure appropriate policies are in place to facilitate expeditious customs processing and tax relief for humanitarian aid supplies, pharmaceuticals and other required aid materials and continue coordination with customs and finance authorities. (Lead: NEMA - Support: FMoF)
Communication and	<ul style="list-style-type: none"> • Implement previously developed communications plan and

<p>Public Education</p>	<p>review plan with appropriate stakeholders to ensure coordinated messaging. (Lead: FMI – Support: NEMA)</p> <ul style="list-style-type: none"> • Continue to distribute influenza-related educational materials to health care providers, first responders, and the general public. (Lead: FMOH – Support: FMI, NOA, FMOE) • Review and modify messages and materials as needed. (Lead: FMI – Support: NEMA) • Publicize “Hot Line” information and begin operations. (Lead: FMOCT – Support: FMI, NEMA, FMOH, NOA) • Prepare spokespersons with updated pandemic situation information. (Lead: FMI – Support: NEMA, FMOH, NOA) • Coordinate with national emergency managers and Joint Information Committee to respond to pandemic-related media requests. (Lead: FMI – Support: NEMA) • Disseminate timely and accurate public information, as available. (Lead: FMI – Support: NEMA, FMOH, NOA) • Monitor media coverage and address misinformation. (Lead: FMI – Support: NEMA, FMOH) • Coordinate with neighbouring countries to synchronize messaging, when warranted. (Lead: MFA – Support: NEMA)
<p>Command and Control Continuity of Operations</p>	<ul style="list-style-type: none"> • Activate EOC - Partial Activation. (Lead: NEMA) • Request assignment of liaison officers from Armed Forces of Nigeria to NEMA EOC and to FMOH to coordinate pandemic response operations. (Lead: NEMA – Support: MOD, FMOH) • Continue monitoring of global pandemic situation. (Lead: NEMA – Support: FMOH, MFA) • Monitor pandemic situation at national, state and local levels and distribute critical information to all ministries, agencies, NGOs and other pandemic stakeholders. (Lead: NEMA) • Assess readiness of ministries, agencies, NGOs and other pandemic stakeholders to perform pandemic response missions and address any shortfalls. (Lead: NEMA) • Continue coordination with regional healthcare representatives. (Lead: FMOH) • Continue coordination with regional disaster management representatives. (Lead: NEMA) • Ensure maintenance of law and order. (Lead: NPF – Support: MOI) • Address national security issues, as required. (Lead: MOD – Support: NPF, MOI)

TASK LIST: Nigeria Pandemic Alert Phases 4c, 4d, 5c, 5d, 6c & 6d

Risk Assessment. The risks associated with pandemic influenza during this phase are significant, since cases of a virus with pandemic potential are suspected or confirmed in, or immediately adjacent to Nigeria. The risk to Nigeria is extremely high, but also depends on the morbidity and mortality rates of the virus. The potential for the viral outbreak to expand locally is extremely high.

Operational Focus. State and local efforts focus on heightened surveillance, activation of protocols to reduce viral spread and actions to address existing and anticipated medical caseload. National authorities will begin to take initial actions to ensure the maintenance of critical government services and to ensure that key private sector stakeholders continue to provide essential public services. The demand for information during this phase, both from the media and the public, is very high and will necessitate significant communications resourcing to provide an adequate response.

TASK LIST - LOCAL AND/OR REGIONAL OUTBREAK - FIRST CASES OF VIRUS IN NIGERIA AND/OR AT LEAST ONE NEIGHBORING COUNTRY

PHASES 4c, 4d, 5c, 5d, 6c & 6d	Tasks
Surveillance and Laboratory	<ul style="list-style-type: none"> • Provide pandemic surveillance advisories to the health community, including hospitals and other healthcare providers. (Lead: FMoH) • Continue emphasizing the need for accurate and timely reporting to surveillance partners. (Lead: FMoH) • Continue enhanced surveillance to identify initial cases, assess viral virulence and identify any unique viral characteristics. (Lead: FMoH) • Continue enhanced laboratory operation protocols to increase capacity at key laboratories. (Lead: FMoH) • Monitor the health alert networks and other sources of pandemic information. (Lead: FMoH) • Continue surveillance for animal disease outbreaks that have potential to threaten the human population. (Lead: FMA&RD) • Provide periodic updates to key leaders, national and international organizations and other critical stakeholders. (Lead: FMoH - Support: NEMA) • Ensure reporting to WHO in accordance with the International Health Regulations (IHR). (Lead: FMoH)
Triage and Patient Care	<ul style="list-style-type: none"> • Issue any changes to guidelines on influenza precautions for emergency departments and hospitals. (Lead: FMoH)
Infection Control Measures	<ul style="list-style-type: none"> • Continue efforts to educate public about infection control measures. (Lead: FMoH - Support: FMI, FMoE, NOA) • Update influenza precaution guidelines to emergency departments, hospitals, businesses, airlines, schools/universities, daycare facilities, jails/prisons, and other stakeholders, as well as the public. (Lead: FMoH)

	<ul style="list-style-type: none"> • Continue recommendations for isolation of all influenza patients and quarantine of their contacts, as appropriate. (Lead: FMoH)
Anti-viral Acquisition and Use	<ul style="list-style-type: none"> • Coordinate anti-viral public information with Joint Media Information Committee. (Lead: FMoH) • Monitor anti-viral medication use and effectiveness. (Lead: FMoH) • Monitor and investigate adverse events concerning anti-viral medications. (Lead: FMoH - Supporting: FMI) • Modify, as appropriate, recommendations on anti-viral prophylaxis use. (Lead: FMoH) • Revise anti-viral priority groups, as needed. (Lead: NEMA - Support: FMoH) • Ensure adequate security at anti-viral storage sites and PODs. (Lead: FMoH - Support: NPF, MOD, NSCDC (MOI))
Vaccine Acquisition, Distribution and Use	<ul style="list-style-type: none"> • Educate the public concerning pandemic influenza vaccine and its development. (Lead: FMoH - Support: FMI, NOA, FMoE) • Revise vaccination priority groups, as needed. (Lead: NEMA - Support: FMoH) • Monitor global vaccine development efforts. (Lead: FMoH)
Mass Fatalities Management	<ul style="list-style-type: none"> • Consider increasing stockage of supplies, if warranted by current situation. (Lead: FMEnv)
Mental Health	<ul style="list-style-type: none"> • Deploy stress control/resilience teams, if needed. (Lead: FMoH) • Activate rest and recuperation sites, if needed. (Lead: FMoH - Support: NEMA) • Activate confidential telephone support lines. (Lead: FMoCT - Support: FMoH, NEMA) • Coordinate with faith-based and community-based organizations to provide mental health support services. (Lead: FMoH - Support: NEMA, NOA, FMoWASD, FMI) • Provide counselling and other psychological support services to general public and first responders. (Lead: FMoH)
Mass Care and Logistics	<ul style="list-style-type: none"> • Activate community shelters, if necessary. (Lead: NEMA - Support: FMoE, MOD, NSCDC (MOI)) • Provide feeding to pandemic victims through a combination of fixed sites, mobile feeding units, and bulk distribution of food. (Lead: NEMA - Support: FMA&RD, FMoT, MOD, NSCDC (MOI)) • Work with welfare, faith-based, and community agencies and groups to identify individuals in need of social support services, daycare, medical care, housing, and feeding. (Lead: NEMA - Support: FMoH, FMoWASD, FMI, NOA) • Conduct logistics operations, as required. (Lead: NEMA - Support: MOD) • Ensure care of children orphaned by an influenza pandemic. (Lead: FMoWASD) • Ensure adequate security at mass care sites and to support logistics operations. (Lead: NEMA - Support: NPF, MOD)

	<ul style="list-style-type: none"> • Continue to ensure expeditious processing of aid supplies by customs and finance authorities. (Lead: NEMA – Support: FMoF)
<p>Communication and Public Education</p>	<ul style="list-style-type: none"> • Review and modify messages and materials as needed. (Lead: FMI – Support: NEMA) • Continue to prepare spokespersons with updated pandemic situation information. (Lead: FMI – Support: NEMA, FMoH, NOA) • Continue to publicize “Hot Line” information and update information, as required. (Lead: FMoCT – Support: FMI, NEMA, FMoH, NOA) • Coordinate with national emergency managers and Joint Information Committee to respond to pandemic-related media requests. (Lead: FMI – Support: NEMA) • Disseminate timely and accurate public information, as available. (Lead: FMI – Support: NEMA, FMoH, NOA) • Monitor media coverage and address misinformation. (Lead: FMI – Support: NEMA, FMoH) • Coordinate with neighbouring countries to synchronize messaging, when warranted. (Lead: MFA – Support: NEMA)
<p>Command and Control Continuity of Operations</p>	<ul style="list-style-type: none"> • Activate EOC - Full-Scale Activation. (Lead: NEMA) • Activate National Emergency Plan. (Lead: NEMA) • Activate COOP Plan. (Lead: NEMA) • Convene the Federal Executive Council. (Lead: NEMA) • Convene the Technical and Logistics Sub-Committee. (Lead: NEMA) • Assist Joint Media Information Committee with response to pandemic-related media requests and public information efforts. (Lead: NEMA) • Prioritize resources to maintain public safety services, public works and municipal services (i.e. fire, law enforcement, water treatment/delivery, waste management and utilities). (Lead: NEMA) • Coordinate with private sector to ensure maintenance of critical civil services (i.e. pharmaceuticals, retail food, retail fuel, etc.). (Lead: NEMA – Support: FMoTI, FMoCI) • Request appropriate International assistance to address resource shortfalls. (Lead: NEMA – Support: MFA) • Activate mutual aid agreements to address resource shortfalls. (Lead: NEMA – Support: FMFA) • Obtain permission to use, or commandeer private resources for public use to address resource shortfalls, as required and allowed by law. (Lead: NEMA – Support: FMoJ, NPF) • Coordinate authorization for closure of schools and offices and cancellation of major large events, as warranted by health and security situation. (Lead: NEMA – Support: FMoH, FMoE, FMoJ, FMI) • Coordinate issuance of necessary laws, proclamations and ordinances. (Lead: NEMA – Support: FMoJ) • Continue coordination with regional healthcare representatives. (Lead: FMoH)

	<ul style="list-style-type: none">• Continue coordination with regional disaster management representatives. (Lead: NEMA)• Ensure maintenance of law and order. (Lead: NPF - Support: MOI)• Address national security issues, as required. (Lead: MOD - Support: NPF, MOI)
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TASK LIST: Nigeria Pandemic Alert Phases 4e, 5e & 6e

Risk Assessment. The risks associated with pandemic influenza during this phase are extremely high. While not yet at its peak, the emerging local pandemic will significantly stress the healthcare system and may also begin to manifest negative non-health impacts to businesses and critical service stakeholders.

Operational Focus. Actions during this period are focused on community mitigation measures to minimize spread of the virus and its economic and societal impacts. National authorities will increase efforts to ensure the maintenance of critical government services and to ensure that key private sector stakeholders continue providing critical services upon which the government and general public are dependent. The government must be prepared to take action to ensure maintenance of critical private and public sector essential services. The demand for information from both the media and the public will continue to increase and will necessitate effective communications/information management.

TASK LIST - WIDESPREAD REGIONAL OUTBREAK - CASES IN NIGERIA AND AT LEAST THREE NEIGHBORING COUNTRIES

PHASES 4e, 5e & 6e	Tasks
Surveillance and Laboratory	<ul style="list-style-type: none"> • Provide pandemic surveillance advisories to the health community, including hospitals and other healthcare providers. (Lead: FMoH) • Continue emphasizing the need for accurate and timely reporting to surveillance partners. (Lead: FMoH) • Continue enhanced surveillance to identify initial cases, assess viral virulence and identify any unique viral characteristics. (Lead: FMoH) • Continue enhanced laboratory operation protocols to increase capacity at key laboratories. (Lead: FMoH) • Monitor the health alert networks and other sources of pandemic information. (Lead: FMoH) • Continue surveillance for animal disease outbreaks that have potential to threaten the human population. (Lead: FMA&RD) • Provide periodic updates to key leaders, national and international organizations and other critical stakeholders. (Lead: FMoH) • Ensure reporting to WHO in accordance with the International Health Regulations (IHR). (Lead: FMoH)
Triage and Patient Care	<ul style="list-style-type: none"> • Send out notice to hospital administrators to implement emergency/surge capacity plans to maximize availability of bed space for pandemic-related emergency caseload. (Lead: FMoH) • FMoH Hospital Coordinator will monitor situation in all hospitals. (Lead: FMoH)
Infection Control	<ul style="list-style-type: none"> • Continue efforts to educate public about infection control

Measures	<p>measures. (Lead: FMoH – Support: FMI, FMoE, NOA)</p> <ul style="list-style-type: none"> • Update influenza precaution guidelines to emergency departments, hospitals, businesses, airlines, schools/ universities, daycare facilities, jails/prisons, and other stakeholders, as well as the public. (Lead: FMoH) • Continue recommendations for isolation of all influenza patients and quarantine of their contacts, as appropriate. (Lead: FMoH)
Anti-viral Acquisition and Use	<ul style="list-style-type: none"> • Coordinate anti-viral public information with Joint Media Information Committee. (Lead: FMoH) • Monitor anti-viral medication use and effectiveness. (Lead: FMoH) • Monitor and investigate adverse events concerning anti-viral medications. (Lead: FMoH) • Modify, as appropriate, recommendations on anti-viral prophylaxis use. (Lead: FMoH) • Revise anti-viral priority groups, as needed. (Lead: NEMA – Support: FMoH) • Ensure adequate security at anti-viral storage sites and PODs. (Lead: FMoH – Support: NPF, MOD, NSCDC (MOI))
Vaccine Acquisition, Distribution and Use	<ul style="list-style-type: none"> • Educate the public concerning pandemic influenza vaccine and its development. (Lead: FMoH) • Revise vaccination priority groups, as needed. (Lead: NEMA – Support: FMoH) • Monitor global vaccine development efforts. (Lead: FMoH)
Mass Fatalities Management	<ul style="list-style-type: none"> • Implement existing <i>National Mass Fatality Plan</i>, if warranted. (Lead: FMEnv – Support: FMoH, MOD, NSCDC (MOI)) • If <i>National Mass Fatality Plan</i> is implemented: <ul style="list-style-type: none"> ○ Release appropriate information to the media and public. (Lead: NEMA – Support: FMI, FMEnv) ○ Ensure security of mass fatality processing locations. (Lead: FMEnv – Support: NPF, NSCDC (MOI)) ○ Expedite an issuance and registration of death certificates. (Lead: FMoH – Support: FMEnv, National Population Commission) ○ Establish, in cooperation with funeral businesses, temporary cold storage sites and implement body collection strategies. (Lead: FMEnv – Support: NEMA)
Mental Health	<ul style="list-style-type: none"> • Maintain stress control/resilience teams and rest and recuperation sites. (Lead: FMoH – Support: NEMA) • Maintain operation of confidential telephone support lines. (Lead: FMoCT– Support: FMoH) • Continue coordination with faith-based and community-based organizations to support mental health services. (Lead: FMoH – Support: NEMA) • Provide counselling and other psychological support services to general public and first responders. (Lead: FMoH)
Mass Care and Logistics	<ul style="list-style-type: none"> • If not already activated, activate community shelters, as necessary. (Lead: NEMA – Support: FMoE, MOD, NSCDC (MOI))

	<ul style="list-style-type: none"> • Provide feeding to pandemic victims through a combination of fixed sites, mobile feeding units, and bulk distribution of food. (Lead: NEMA - Support: FMA&RD, FMoT, NSCDC (MOI)) • Work with welfare, faith-based, and community agencies and groups to identify individuals in need of social support services, daycare, medical care, housing, and feeding. (Lead: NEMA - Support: FMoH, FMoWASD) • Conduct logistics operations, as required. (Lead: NEMA - Support: MOD) • Ensure care of children orphaned by an influenza pandemic. (Lead: FMoWASD) • Ensure adequate security at mass care sites and to support logistics operations. (Lead: NEMA - Support: NPF, MOD) • Continue to ensure expeditious processing of aid supplies by customs and finance authorities. (Lead: NEMA - Support: FMoF)
<p>Communication and Public Education</p>	<ul style="list-style-type: none"> • Review and modify messages and materials as needed. (Lead: FMI - Support: NEMA) • Continue to prepare spokespersons with updated pandemic situation information. (Lead: FMI - Support: NEMA, FMoH, NOA) • Coordinate with national emergency managers and Joint Information Committee to respond to pandemic-related media requests. (Lead: FMI - Support: NEMA) • Disseminate timely and accurate public information, as available. (Lead: FMI - Support: NEMA, FMoH, NOA) • Monitor media coverage and address misinformation. (Lead: FMI - Support: NEMA, FMoH) • Maintain “Hot Line” and update information as required. (Lead: FMoCT - Support: FMI, NEMA, FMoH, NOA) • Coordinate with neighbouring countries to synchronize messaging, when warranted. (Lead: MFA - Support: NEMA)
<p>Command and Control Continuity of Operations</p>	<ul style="list-style-type: none"> • Continue to assist meetings of the Federal Executive Council. (Lead: NEMA) • Continue to assist meetings of the Technical and Logistics Sub-Committee. (Lead: NEMA) • Assist Joint Media Information Committee with response to pandemic-related media requests and public information efforts. (Lead: NEMA) • Prioritize resources to maintain public safety services, public works and municipal services (i.e. fire, law enforcement, water treatment/delivery, waste management, and utilities). (Lead: NEMA) • Coordinate with private sector to ensure maintenance of critical civil services (i.e. pharmaceuticals, retail food, retail fuel, etc.). (Lead: NEMA - Support: FMoTI, FMoCI) • Request appropriate international assistance to address resource shortfalls. (Lead: NEMA - Support: MFA) • Activate mutual aid agreements with ECOWAS and neighbouring countries to address resource shortfalls. (Lead:

	<p>NEMA - Support: MFA)</p> <ul style="list-style-type: none"> • Obtain permission to use, or commandeer private resources for public use to address resource shortfalls, as required and allowed by law. (Lead: NEMA - Support: FMoJ) • Coordinate authorization for closure of schools and offices and cancellation of major large events, as warranted by health and security situation. (Lead: NEMA - Support: FMoH, FMoE, FMoJ) • Coordinate issuance of necessary proclamations and ordinances. (Lead: NEMA - Support: FMoJ) • Coordinate activities with INGOs and National NGOs. (Lead: NEMA - Support: National Planning Commission) • Continue coordination with regional healthcare representatives. (Lead: FMoH) • Continue coordination with regional disaster management representatives. (Lead: NEMA) • Ensure maintenance of law and order. (Lead: NPF - Support: MOI) • Address national security issues, as required. (Lead: MOD - Support: NPF, MOI)
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TASK LIST: Nigeria Pandemic Alert Phases 4f, 5f & 6f

Risk Assessment. The risks associated with pandemic influenza during this phase are the highest for any of the phases. At this point, Nigeria is experiencing a severe outbreak, and depending on the morbidity and mortality rates of the virus, a significant percentage of the population will be impacted, either directly or indirectly. Experts believe that 30-35% of the population world-wide may be infected with the pandemic influenza virus during a severe global pandemic and 2-3% of infected persons may die. The numbers of infected persons will overload the medical system and result in many infected persons being cared for at home due to hospital overcrowding. The non-health impacts are potentially severe as well, disrupting utility systems, transportation systems, public safety systems and virtually every other aspect of economic and social infrastructure. The potential health and non-health impacts for all elements of the society are difficult to overstate. It is likely that the pandemic will impact all stakeholders, including businesses and non-governmental organizations upon which the government is dependent for resources and services. These impacts will create a very turbulent and challenging operating environment for pandemic response organizations.

Operational Focus. Actions during this period are focused on continued community mitigation measures to minimize spread of the virus and its economic and societal impacts. National authorities will maximize their efforts to ensure the maintenance of critical government services, as well as those critical services provided by private sector businesses upon which the government and general public are dependent. Non-health impacts may create “mass care” requirements, not unlike other natural disasters, necessitating sheltering and feeding operations. The difficult task of locating additional resources to address pandemic-related shortfalls in critical services, infrastructure and/or supplies will become increasingly important. Effective communication and education operations become paramount, as the severity of the pandemic increases the potential for public panic.

TASK LIST - HIGH RISK REGIONAL OUTBREAK, CASES IN NIGERIA AND AT LEAST THREE NEIGHBORING COUNTRIES, INCLUDING WIDESPREAD OUTBREAKS IN SCHOOLS - (PEAK)

PHASES 4f, 5f & 6f	Tasks
Surveillance and Laboratory	<ul style="list-style-type: none"> • Provide pandemic surveillance advisories to the health community, including hospitals and other healthcare providers. (Lead: FMoH) • Continue emphasizing the need for accurate and timely reporting to surveillance partners. (Lead: FMoH) • Continue enhanced surveillance to identify initial cases, assess viral virulence and identify any unique viral characteristics. (Lead: FMoH) • Continue enhanced laboratory operation protocols to increase capacity at key laboratories. (Lead: FMoH) • Monitor the health alert networks and other sources of pandemic information. (Lead: FMoH)

	<ul style="list-style-type: none"> • Continue surveillance for animal disease outbreaks that have potential to threaten the human population. (Lead: FMA&RD) • Provide periodic updates to key leaders, national and international organizations and other critical stakeholders. (Lead: FMoH – Support: NEMA) • Ensure reporting to WHO in accordance with the International Health Regulations (IHR). (Lead: FMoH)
Triage and Patient Care	<ul style="list-style-type: none"> • Activate triage sites, as required. (Lead: FMoH) • Coordinate with the Joint Media Information Committee to provide public information concerning the location of triage sites and procedures for seeking medical attention. (Lead: FMoH) • Monitor hospital bed and personnel availability, status of emergency facilities, equipment, and supplies. (Lead: FMoH) • Activate alternative medical treatment sites (AMTS), as required. (Lead: FMoH – Support: NEMA) • Alert neighbourhood watch, Red Cross, and/or other community-based response organizations to assist with activation of alternative medical treatment sites (AMTS). (Lead: FMoH – Support: NEMA) • Coordinate for appropriate security at alternative medical treatment sites (AMTS). (Lead: FMoH – Support: NPF, NSCDC (MOI))
Infection Control Measures	<ul style="list-style-type: none"> • Continue efforts to educate public about infection control measures. (Lead: FMoH – Support: FMI, FMoE, NOA) • Update influenza precaution guidelines to emergency departments, hospitals, businesses, airlines, schools/universities, daycare facilities, jails/prisons, and other stakeholders, as well as the public. (Lead: FMoH) • Continue recommendations for isolation of all influenza patients and quarantine of their contacts, as appropriate. (Lead: FMoH) • Recommend cancellation of large public gatherings and recreation activities, as appropriate. (Lead: FMoH) • Recommend the closure of schools, colleges, universities, and office buildings, as appropriate. (Lead: FMoH – Support: FMoE) • Coordinate with appropriate agencies for restriction of mass transit. (Lead: FMoH – Support: NEMA, FMoT)
Anti-viral Acquisition and Use	<ul style="list-style-type: none"> • Coordinate anti-viral public information with Joint Media Information Committee. (Lead: FMoH) • Monitor anti-viral medication use and effectiveness. (Lead: FMoH) • Monitor and investigate adverse events concerning anti-viral medications. (Lead: FMoH) • Modify, as appropriate, recommendations on anti-viral prophylaxis use. (Lead: FMoH) • Revise anti-viral priority groups, as needed. (Lead: NEMA – Support: FMoH) • Ensure adequate security at anti-viral storage sites and PODs.

	(Lead: FMoH – Support: NPF, MOD, NSCDC (MOI))
Vaccine Acquisition, Distribution and Use	<ul style="list-style-type: none"> • Request vaccines through the WHO as it becomes available. (Lead: FMoH) • Revise vaccination priority groups, as needed. Revise anti-viral priority groups, as needed. (Lead: NEMA – Support: FMoH) • Carry out mass vaccination activities, once sufficient vaccine is available. Revise anti-viral priority groups, as needed. (Lead: FMoH – Support: NEMA, MOD) • Ensure vaccine storage security and security at vaccination sites. Revise anti-viral priority groups, as needed. (Lead: FMoH – Support: NPF, NSCDC (MOI), MOD)
Mass Fatalities Management	<ul style="list-style-type: none"> • If not already implemented, implement <i>Mass Fatality Plan</i>. Revise anti-viral priority groups, as needed. (Lead: FMEnv – Support: FMoH, MOD, NSCDC (MOI)) • In coordination with the Joint Media Information Committee, release appropriate information to the media and public. (Lead: FMEnv – Support: FMI) • Ensure security of mass fatality processing locations. (Lead: FMEnv – Support: NPF, NSCDC (MOI)) • Expedite issuance and registration of death certificates. (Lead: FMoH – Support: FMEnv, National Population Commission) • Establish, in cooperation with funeral businesses, temporary cold storage sites and implement body collection strategies. (Lead: FMEnv – Support: NEMA)
Mental Health	<ul style="list-style-type: none"> • Maintain stress control/resilience teams and rest and recuperation sites. (Lead: FMoH – Support: NEMA) • Maintain operation of confidential telephone support lines. (Lead: FMoCT – Support: FMoH) • Continue coordination with faith-based and community-based organizations to support mental health services. (Lead: FMoH – Support: NEMA) • Provide counselling and other psychological support services to general public and first responders. (Lead: FMoH)
Mass Care and Logistics	<ul style="list-style-type: none"> • If not already activated, activate community shelters, as necessary. (Lead: NEMA – Support: FMoE, MOD, NSCDC (MOI)) • Provide feeding to pandemic victims through a combination of fixed sites, mobile feeding units, and bulk distribution of food. (Lead: NEMA – Support: FMARD, FMoT, NSCDC (MOI)) • Work with welfare, faith-based, and community agencies and groups to identify individuals in need of social support services, daycare, medical care, housing, and feeding. (Lead: NEMA – Support: FMoH, FMoWASD) • Conduct logistics operations, as required. (Lead: NEMA – Support: MOD) • Ensure care of children orphaned by an influenza pandemic. (Lead: FMoWASD) • Ensure adequate security at mass care sites and to support logistics operations. (Lead: NEMA – Support: NPF, MOD)

	<ul style="list-style-type: none"> • Continue to ensure expeditious processing of aid supplies by customs and finance authorities. (Lead: NEMA - Support: FMoF)
Communication and Public Education	<ul style="list-style-type: none"> • Review and modify messages and materials as needed. (Lead: FMI - Support: NEMA) • Continue to prepare spokespersons with updated pandemic situation information. (Lead: FMI - Support: NEMA, FMoH, NOA) • Coordinate with national emergency managers and Joint Information Committee to respond to pandemic-related media requests. (Lead: FMI - Support: NEMA) • Disseminate timely and accurate public information, as available. (Lead: FMI - Support: NEMA, FMoH, NOA) • Monitor media coverage and address misinformation. (Lead: FMI - Support: NEMA, FMoH) • Maintain “Hot Line” and update information as required. (Lead: FMoCT - Support: FMI, NEMA, FMoH, NOA) • Assist FMoH in publicizing vaccine development information and potential distribution, prioritization and use protocols. (Lead: FMI) • Coordinate with neighbouring countries to synchronize messaging, when warranted. (Lead: MFA - Support: NEMA)
Command and Control Continuity of Operations	<ul style="list-style-type: none"> • Continue to assist meetings of the Federal Executive Council. (Lead: NEMA) • Continue to assist meetings of the Technical and Logistics Sub-Committee. (Lead: NEMA) • Assist Joint Media Information Committee with response to pandemic-related media requests and public information efforts. (Lead: NEMA) • Prioritize resources to maintain public safety services, public works and municipal services (i.e. fire, law enforcement, water treatment/delivery, waste management, and utilities). (Lead: NEMA) • Coordinate with private sector to ensure maintenance of critical civil services (i.e. pharmaceuticals, retail food, retail fuel, etc.). (Lead: NEMA - Support: FMoTI, FMoCI) • Request appropriate international assistance to address resource shortfalls. (Lead: NEMA - Support: MFA) • Continue to use mutual aid agreements with ECOWAS and neighbouring countries to address resource shortfalls, if available. (Lead: NEMA - Support: MFA) • Obtain permission to use, or commandeer private resources for public use to address resource shortfalls, as required and allowed by law. (Lead: NEMA - Support: FMoJ) • Direct closure of schools and offices and cancellation of major large events, as warranted by health and security situation. (Lead: NEMA - Support: FMoH, FMoE, FMoJ) • Coordinate issuance of necessary proclamations and ordinances. (Lead: NEMA - Support: FMoJ)

	<ul style="list-style-type: none">• Coordinate activities with INGOs and National NGOs. (Lead: NEMA - Support: National Planning Commission)• Continue coordination with regional healthcare representatives. (Lead: FMoH)• Continue coordination with regional disaster management representatives. (Lead: NEMA)• Ensure maintenance of law and order. (Lead: NPF - Support: MOI)• Address national security issues, as required. (Lead: MOD - Support: NPF, MOI)
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TASK LIST: Nigeria Pandemic Alert Phases 4g, 5g & 6g

Risk Assessment. The health risks associated with pandemic influenza begin to diminish during this phase and will eventually reduce to pre-pandemic levels. This phase will not begin until there is objective evidence that the latest pandemic wave is abating. It should be noted that future pandemic waves are likely until a vaccine is widely available, or until sufficient natural immunity is present within the population. There is continued non-health related risk during this phase, primarily due to residual pandemic-related impacts to societal and economic infrastructure. If the pandemic was severe, it is likely that availability of many commodities will be limited during the post-pandemic period, including fuel, food, and other basic subsistence items. Many government and private sector entities and organizations, including schools, utilities, retail stores, etc. may have limited operating capacity due to pandemic-related impacts. Additionally, financial markets may not stabilize immediately, resulting in shortages of cash, credit and other financial instruments during the post-pandemic period. All of these factors result in continued, albeit reduced risk to the general public, as well as private and public sector pandemic stakeholders during the post-pandemic period.

Operational Focus. Actions during this phase are focused on continuing mitigation measures to minimize any additional pandemic-related economic and societal impacts and on conducting assessments of the pandemic's impact on society and the capacity of both government and the private sector to provide critical services. Additionally, national authorities will work with international and regional organizations to ensure societal stability, identify internal and external resources to assist in post-pandemic recovery and to begin and sustain long-term recovery operations.

TASK LIST –ABATEMENT OF THE PANDEMIC WITHIN NIGERIA - WEEKLY INCIDENCE RATES OF PANDEMIC INFLUENZA DECLINE BY AT LEAST 10% FOR AT LEAST TWO WEEKS.

PHASES 4g, 5g & 6g	Tasks
Surveillance and Laboratory	<ul style="list-style-type: none"> • Continue continuous surveillance in accordance with protocols in existing SOP/SOGs but transition to normal operations as appropriate. (Lead: FMOH) • Monitor for mutation of the pandemic virus to guard against new pandemic threat. (Lead: FMOH) • Transition to normal laboratory operations as appropriate. (Lead: FMOH) • Validate decreases in case incidence to ensure reporting and statistical analysis are accurate. (Lead: FMOH) • Ensure all surveillance partners continue their roles in support of human surveillance operations. (Lead: FMOH) • Continue surveillance for animal disease outbreaks that have potential to threaten the human population. (Lead: FMA&RD) • Continue to provide periodic updates to key leaders, national and international organizations and other critical stakeholders as case incidence declines. (Lead: FMOH - Support: NEMA)

Triage and Patient Care	<ul style="list-style-type: none"> • Deactivate triage sites, as warranted by case incidence decline. (Lead: FMoH – Support: NEMA) • Continue to monitor hospital bed and personnel availability, status of emergency facilities, equipment, and supplies. (Lead: FMoH) • Deactivate alternative medical treatment sites (AMTS), as warranted by case incidence decline. (Lead: FMoH – Support: NEMA)
Infection Control Measures	<ul style="list-style-type: none"> • Continue to educate public about importance of continuing infection control measures to decrease chance of further viral spread. (Lead: FMoH – Support: FMI, FMoE, NOA) • Continue recommendations for isolation of all influenza patients and quarantine of their contacts, as appropriate. (Lead: FMoH) • Consider recommending resumption of large public gatherings and recreation activities, as appropriate. (Lead: FMoH) • Consider recommending reopening schools, colleges, universities, and office buildings, as appropriate. (Lead: FMoH) • Recommend resumption of mass transit operations, as appropriate. (Lead: FMoH – Support: NEMA, FMoT)
Anti-viral Acquisition and Use	<ul style="list-style-type: none"> • Continue monitoring of anti-viral medication use and effectiveness. (Lead: FMoH) • Continue monitoring and investigation of adverse events concerning anti-viral medications. (Lead: FMoH) • Continue to ensure adequate security at anti-viral storage sites and PODs. (Lead: FMoH – Support: NPF, NSCDC (MOI))
Vaccine Acquisition, Distribution and Use	<ul style="list-style-type: none"> • Continue vaccination operations in accordance with established guidelines. (Lead: FMoH) • Revise vaccination priority groups, as warranted by changing situation. (Lead: NEMA – Support: FMoH) • Continue to ensure vaccine storage security and security at vaccination sites. (Lead: FMoH – Support: NPF, MOD, NSCDC (MOI))
Mass Fatalities Management	<ul style="list-style-type: none"> • Continue to release information to media and public in coordination with the Joint Media Information Committee and FMoH. (Lead: FMEnv – Support: FMI) • Continue security at mass fatality processing locations. (Lead: FMEnv – Support: NPF, NSCDC (MOI)) • Continue to expedite the issuance of death certificates. (Lead: FMoH – Support: FMEnv, National Population Commission) • Discontinue use of temporary cold storage sites and body collection strategies, as warranted by case incidence decline. (Lead: FMEnv – Support: NEMA)
Mental Health	<ul style="list-style-type: none"> • Continue stress control/resilience team operations to facilitate post-pandemic recovery operations. (Lead: FMoH – Support: NEMA) • Close rest and recuperation sites, as warranted by case incidence decline.

	<ul style="list-style-type: none"> • Discontinue operation of confidential telephone support lines, as warranted by case incidence decline. (Lead: FMoCT - Support: FMoH) • Coordinate with faith-based and community-based organizations to reduce support to mental health service sites, as warranted by case incidence decline. (Lead: FMoH - Support: NEMA) • Continue to provide counselling and other psychological support services to general public and first responders, as required. (Lead: FMoH)
Mass Care and Logistics	<ul style="list-style-type: none"> • Deactivate community shelters, as warranted by decrease in demand. (Lead: NEMA - Support: FMoE, MOD, NSCDC (MOI)) • Discontinue feeding operations as warranted by decrease in demand. (Lead: NEMA - Support: FMA&RD, FMoT, NSCDC (MOI)) • Transition efforts by welfare, faith-based and community agencies to long-term recovery needs of families and individuals. (Lead: NEMA - Support: FMoH, FMoWASD) • Continue to conduct post-pandemic logistics operations until no longer required. (Lead: NEMA - Support: MOD) • Continue to ensure care of children orphaned by an influenza pandemic. (Lead: FMoWASD) • Continue to ensure expeditious processing of post-pandemic aid supplies by customs and finance authorities. (Lead: NEMA - Support: FMoF)
Communication and Public Education	<ul style="list-style-type: none"> • Review and modify messages and materials as needed for post-pandemic peak period. (Lead: FMI - Support: NEMA) • Coordinate with national emergency managers and Joint Information Committee to respond to post-pandemic media requests. (Lead: FMI - Support: NEMA) • Disseminate timely and accurate public information, as available. (Lead: FMI - Support: NEMA, FMoH, NOA) • Maintain “Hot Line” and update information as required. (Lead: FMoCT - Support: FMI, NEMA, FMoH, NOA) • Continue to monitor media coverage and address misinformation. (Lead: FMI - Support: NEMA, FMoH) • Assist FMoH in publicizing changes in vaccination protocols during post-pandemic peak period. (Lead: FMI) • Coordinate with neighbouring countries to synchronize post-pandemic messaging, when warranted. (Lead: MFA - Support: NEMA)
Command and Control Continuity of Operations	<ul style="list-style-type: none"> • Continue to assist meetings of the Federal Executive Council. (Lead: NEMA) • Continue to assist meetings of the Technical and Logistics Sub-Committee. (Lead: NEMA) • Assist Joint Media Information Committee with response to pandemic-related media requests and public information efforts. (Lead: NEMA) • Assess pandemic-related damage to capabilities of public safety services, public works and municipal services agencies

	<p>and infrastructure. (Lead: NEMA)</p> <ul style="list-style-type: none"> • Assess pandemic-related damage to private sector's capacity to provide critical civil services to the public (i.e. pharmaceuticals, retail food, retail fuel, etc.). (Lead: NEMA - Support: FMoTI, FMoCI) • Assess damage to the public, particularly pandemic-related illness and death. (Lead: NEMA - Support: FMoH, FMI, FMoWASD, NOA, National Planning Commission) • Coordinate with international agencies concerning post-pandemic recovery resourcing to facilitate national recovery operations for both the public and private sectors. (Lead: NEMA - Support: MFA, FMoF, National Planning Commission) • Deactivate mutual aid agreements with ECOWAS and neighbouring countries as permitted by resource availability and decrease in requirements. (Lead: NEMA - Support: MFA) • Account for, and return private resources commandeered for public use during pandemic response operations, as permitted by resource availability and decrease in requirements. Provide restitution, as appropriate. (Lead: NEMA - Support: FMoJ, FMoF, NPF) • Discontinue orders for closure of school and offices and allow resumption of large venues, as warranted by case incidence decline and security situation. (Lead: NEMA - Support: FMoH, FMoE, FMoJ) • Review current proclamations, statutes and ordinances and coordinate to rescind and/or adjust for post-pandemic recovery period. (Lead: NEMA - Support: FMoJ) • Coordinate post-pandemic activities with INGOs and National NGOs. (Lead: NEMA - Support: National Planning Commission) • Continue coordination of post-pandemic activities with regional healthcare representatives. (Lead: FMoH) • Continue coordination of post-pandemic activities with regional disaster management representatives. (Lead: NEMA) • Ensure maintenance of law and order. (Lead: NPF - Support: MOI) • Address national security issues, as required. (Lead: MOD - Support: NPF, MOI) • Direct After-Action Reviews at all appropriate government ministries to capture lessons learned and to make appropriate changes to plans, policies and procedures. (Lead: NEMA) • Conduct a national-level AAR and consolidate AAR results from all stakeholders to provide input for revision of national level plans, policies and procedures. (Lead: NEMA)
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SURVEILLANCE AND LABORATORY

General. Aggressive surveillance measures may ensure early detection and isolation of novel virus strains. Overall, surveillance data will drive the pandemic response. Influenza surveillance is designed to determine when influenza viruses are circulating, identify strains, assess the characteristics of circulating viruses (such as transmissibility, genetic make-up, and virulence), detect changes in the viruses, monitor influenza-like illness, and measure the impact of influenza on deaths. Both disease surveillance, in which the epidemiologic features and clinical impact of circulating strains are assessed and virologic surveillance, in which influenza viruses are isolated for antigenic and genetic impact of circulating strains are assessed, are equally critical for pandemic preparedness.

National Surveillance. The Federal Ministry of Health (FMOH) coordinates national influenza surveillance. National surveillance consists of four components: laboratory surveillance, outpatient influenza-like-illness (ILI) surveillance, pneumonia and influenza related mortality surveillance, and assessment of influenza activity throughout Nigeria.

Sentinel Medical Practice Surveillance Program. Physicians throughout Nigeria, including the Armed Forces of Nigeria (AFN) medical providers are part of the sentinel surveillance program. They provide a composite national picture of influenza illness. Information collected through sentinel surveillance is forwarded to the FMOH.

Laboratory Surveillance. Diagnostic test kits available for influenza include viral culture, serology, rapid antigen testing, polymerase chain reaction (PCR), and immunofluorescence. During non-pandemic periods, viral isolation and identification (strain typing) is performed by certified laboratories when suspicious samples are submitted by medical providers. During enhanced surveillance activities, national laboratories will conduct viral isolation (for typing and sub-typing) and serologic testing for influenza on specimens submitted by both sentinel and non-sentinel locations. Where national laboratories lack capability to provide necessary sub-typing, WHO Reference Laboratories will be utilized or samples will be sent to other partner nations with necessary capability.

Animal Surveillance. Surveillance of animal populations is critical to public health. Since any human pandemic virus is expected to first develop within an animal population and then cross the human-animal interface, the best hope of preventing an influenza outbreak is the early detection of such a virus within the affected animal population. Once identified, operations can be conducted to cull or vaccinate the animal population in which the disease is present and thus inhibit its ability to cross the human-animal interface and develop into a human influenza pandemic. Therefore, any pandemic plan must contain appropriate animal surveillance and infection control activities. Once a human pandemic begins, it is important to continue animal surveillance and infection control to ensure that any viral mutations within animal populations are identified and their threat to human public health can be assessed and/or addressed.

NOTE: FMoH and Federal Ministry of Agriculture (FMA&RD) procedural documents outline specific protocols and strategies for human and animal pandemic influenza surveillance activities in Nigeria.

TRIAGE AND PATIENT CARE

TRIAGE.

General. During the peak of a pandemic, it is likely that hospital emergency departments and outpatient offices will be overwhelmed with patients seeking care. Effective triage will direct individuals to the appropriate level of care, according to their needs. This will direct the flow of patients into the healthcare system and ensure that limited resources are used in the most efficient manner possible. Triage should be conducted to:

- Identify persons who might have pandemic influenza;
- Separate them from others to reduce the risk of disease transmission; and
- Identify the type of care they require (i.e., home care or hospitalization).

Once evaluated, patients may be directed to their homes, to health care facilities, or to points of distribution (POD) and/or vaccination clinics to obtain immunization or anti-viral medications, if available.

Patient Assessment and Triage Centres.

Options for community-based triage include locations on-site at healthcare facilities, off-site but in close proximity to healthcare facilities, and other community locations. Hospitals and outpatient facilities will need increased on-site triage/screening capacity, regardless of the existence of potential community-based facilities, as many patients will present to their usual source of medical care during an emergency.

In accordance with FMoH plans, to keep hospitals from becoming overwhelmed by asymptomatic individuals, patient assessment and triage centres will be opened at a variety of sites throughout the country to best meet the needs of the affected population. Patients will be assessed to determine the level of care they require. These triage centres will be staffed by the personnel identified by FMoH and its partners utilizing volunteers, retired medical providers and other qualified personnel. Medical personnel staffing triage sites will be provided with treatment protocols for pandemic influenza in accordance with guidance contained in this plan and FMoH plans and procedural documents. The triage sites will also be utilized as collection sites for patients to be transferred to hospital facilities or Alternative Medical Treatment Sites (AMTS) for further treatment. Transportation of patients to treatment sites will be coordinated by state and local public health authorities. Hospitals must also conduct triage at all entrance points to their facility and may therefore require police assistance for on-site security.

HOSPITAL OPERATIONS

General. Pandemic influenza differs from many biological threats in its potential magnitude and duration, including the likelihood of second and later waves of disease. A pandemic has great potential to overwhelm any local healthcare system by greatly increasing patients requiring hospitalization and critical care, resulting in shortages of multiple resources, including beds, personnel and equipment. This will, in turn, create a situation where nursing homes and homecare agencies will be required to accept more clinically complex hospital discharges and care for patients they would normally transfer to a hospital. All facilities will be required to supplement their highly trained

professional staff with volunteers and lesser trained staff, thus necessitating possible changes to “standards of care” during a pandemic.

Each hospital should develop a plan for response to an influenza pandemic. This plan should be developed using interdisciplinary approach, perhaps using the facility’s plan to address smallpox and other communicable diseases. See Annex I for hospital pandemic influenza planning recommendations.

It is expected that existing facilities and hospital procedures will be insufficient to meet the demand for medical resources during a pandemic. To meet this demand, hospitals must develop the capacity to surge resources, providing adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an affected community. The objectives of surge capacity planning for pandemic influenza are to:

- Ensure adequate care is provided to the maximum number of patients
- Identify resources to increase staffing levels during surge periods
- Identify additional sources of equipment and supplies to provide adequate resources during surge periods
- Identify medical isolation space to meet pandemic-related demands during surge periods.

Bed and staff augmentation will be accomplished by discharging current patients, transferring appropriate patients to long term care facilities, eliminating elective admissions and cancelling elective procedures, augmenting existing facility space, and requesting that all ancillary staff report for duty. Additional staff augmentation may be achieved by using volunteers, recently retired personnel and requesting part-time personnel work full-time schedules. Mutual aid agreements previously executed by area hospitals may also be enacted, if practicable. Space augmentation can be implemented by discharging current inpatients where medically possible, activating unused beds, modifying patient rooms with the addition of additional beds, and the utilization of all areas capable of accommodating patient beds (conference rooms, hallways, etc.), according to the hospital’s emergency plans.

The matrix below provides an action plan for hospitals to use during pandemic response operations. These tasks, as a minimum, provide a “roadmap” for actions hospitals should use in preparing for, and responding to a pandemic. These tasks/actions are phased using the Nigeria Pandemic Alert Phasing Protocol.

<p>PHASE 1-3 “Preparation”</p>	<ul style="list-style-type: none"> • Develop pandemic influenza response plans. • Develop infection control plans. • Conduct pandemic response education/training. • Implement a system for early detection, isolation, and treatment of healthcare workers with ILI symptoms. • Tell providers with ILI symptoms to stay home. • Post signs for respiratory hygiene/cough etiquette.
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PHASE 4a, 5a or 6a	<ul style="list-style-type: none"> • Maintain high suspicion that patients presenting with influenza could be infected with the pandemic strain. • Reinforce infection control practices.
PHASE 4b, 5b or 6b	<ul style="list-style-type: none"> • Implement infection control plans. • Establish segregated waiting areas for patients with influenza symptoms. • Enforce respiratory hygiene/cough etiquette. • Be prepared to provide requested information on cases related to the outbreak and on surge capacity to the FMoH. • Request medical and material supplies, if necessary.
PHASE 4c, 5c or 6c and 4d, 5d, 6d	<ul style="list-style-type: none"> • Activate and implement emergency response and surge capacity plans. • Limit number of visitors. • Screen visitors for signs and symptoms of influenza. • Limit the number of points of entry to facility and establish additional security measures at the entry points to facility.
PHASE 4e, 5e or 6e and 4f, 5f, 6f	<ul style="list-style-type: none"> • Establish triage points at facility's points of entry. • Implement phone triage to discourage Emergency Department / Outpatient visits. • Defer elective admissions and procedures. • Discharge patients as soon as possible. • As needed, request that FMoH activate Alternative Medical Treatment Sites (AMTS). • Redirect personnel resources to support patient care. • Work with FMoH and Nigerian Red Cross (NRC) to alert and deploy volunteers. • Consider reassignment of pregnant personnel and staff with high risk for complications of influenza. • Vaccinate/provide staff with antiviral prophylaxis, if available. • Monitor for nosocomial transmission. • Consider assigning staff recovering from influenza to care for influenza patients. • Implement system for detection and reporting signs and symptoms of influenza in staff reporting for duty.
PHASE 4g, 5g or 6g	<ul style="list-style-type: none"> • Discontinue triage sites and surge protocols, as caseload permits. • Assess pandemic-related impacts to staff and infrastructure and take action to address any shortfalls. • Resume normal facility operations, as caseload permits.

ALTERNATIVE MEDICAL TREATMENT SITES (AMTS)

General. Due to the large number of ill patients that will require medical services (i.e., emergency department visits, hospitalizations, and outpatient visits) during an influenza pandemic, provisions for AMTS must be established to address actions when health care facilities are overwhelmed and medical care must be provided in non-traditional settings. AMTS are designed to ease burden on hospitals by providing:

- Basic care – basic nursing, drip medications, IV fluids, oxygen, etc.
- Medications
- Patient documentation
- Laboratory testing
- Public Information

Sites. Due to the need for multi-agency coordination and involvement of many government ministries and agencies, NEMA will assist the FMOH in the establishment of AMTS throughout the country. The FMOH will coordinate and oversee the development and implementation of appropriate medical guidelines for use of AMTS in accordance with established standard operating procedures (SOP). Staffing for AMTS will be provided by FMOH, Nigerian Red Cross (NRC), and volunteers. In addition, AFN support may also be requested in staffing and equipping of AMTS if the situation is particularly severe. FMOH will maintain information concerning hospital capacities to determine the point at which AMTS mobilization may be required. In addition, FMOH will develop guidelines for the type of care that can be provided at each AMTS and appropriate triggers for activation of these sites. Once criteria are met, AMTS will be opened at appropriate sites throughout Nigeria to meet the needs of the affected population. Rehabilitation hospitals, hotels, medical buildings, schools, government buildings, AFN facilities and large parking lots may be utilized for AMTS locations. When possible, these locations will be on a main road system to assist with transportation requirements.

Collection. Collection sites will be identified to pick up patients and transport to the AMTS. The State Emergency Management Agency will assist the FMOH in establishing the AMTS. The Nigerian Medical Association (NMA) and AFN will act as primary supporting agencies in Alternative Medical Treatment Site efforts. In addition, various international non-governmental organizations and UN agencies may be requested to assist in these efforts. Supplies and equipment required at the AMTS will be coordinated through NEMA by FMOH, including support from the AFN.

Personnel Requirements. To meet the needs of caring for a large number of individuals the NMA and the NRC may access their respective membership for retired and underutilized medical personnel to assist in AMTS staffing. In addition, NRC will utilize its volunteers to assist in non-medical staffing requirements. The AFN is a potential major source for staffing of AMTS, but FMOH must consider that AFN medical resources are limited and may be committed to other national security missions. The FMOH will supply the staff members of AMTS with identification badges, and personal protective equipment. Legal issues related to standards of care and professional credentialing will be addressed by FMOH.

INFECTION CONTROL MEASURES

General. The goal of any infection control measures is to slow the spread of pandemic influenza as much as possible. The ability of containment strategies to slow the spread of pandemic-type influenza may be limited by the short incubation period for influenza, the large portion of asymptomatic infections, and the non-specific nature of clinical illness from influenza infection. Nonetheless, during early stages of a pandemic, particularly if the virus is not transmitted efficiently, use of containment measures may help slow the spread of pandemic-type influenza virus. There are three types of containment measures that are normally employed to slow the spread of pandemic diseases: isolation, quarantine, and community-level containment measures.

Isolation and quarantine are separate and distinct terms with quite different meanings. Isolation refers to the separation of people who have a specific infectious disease from healthy people and the restriction of their movement to prevent the spread of that disease; isolation is a standard procedure used in hospitals for patients with tuberculosis and certain other infectious diseases. Quarantine, on the other hand, generally refers to the separation and restriction of movement of people who are not yet symptomatic, but who have been exposed to an infectious agent and are therefore potentially infectious. Quarantine of exposed individuals is a public health strategy, like isolation, that is intended to prevent the spread of infectious disease. Isolation strategy, contact tracing, prophylaxis or treatment of close contacts, quarantine of contacts and airborne and contact infection control precautions may somewhat limit the spread of an influenza pandemic virus.

Isolation and Quarantine. Both isolation and quarantine may be conducted on a voluntary basis or be compelled on a mandatory basis through legal authority. FMOH has the authority to declare a quarantine to protect the public. The FMOH determines if a threat to the public's health and safety may develop from non-compliance and issues orders, which may be enforced through the courts. The FMOH may recommend and emphasize the following disease control interventions to slow the spread of disease during an influenza pandemic:

- Home or hospital isolation of persons infected with influenza
- Home quarantine of persons exposed to a person infected with influenza
- Travel restrictions for persons infected with influenza or exposed to influenza
- School and work closures and cancellations of public gatherings, if indicated by epidemiologic surveillance and analysis
- Extensive public education, social marketing, and work with social institutions (schools, employers, churches, etc.) to reinforce prevention messages to gain public cooperation with necessary measures to delay the spread of a pandemic

Implementing aggressive infection control strategies for containment (i.e., screening healthcare workers and visitors for illness, initiating cohorting of patients and staff, and establishing separate triage areas) may be indicated during a pandemic, specifically if a pandemic reaches Nigeria. The FMOH will coordinate with appropriate authorities for isolation and quarantine of cases and contacts, respectively, related to pandemic influenza events, and also on care of confirmed, probable, and suspect cases, febrile contacts, and asymptomatic contacts.

Rationale for Isolation and Quarantine. Should quarantine be determined to be necessary, feasible, and useful, a course of immediate action would be developed in consultation with police authorities. AFN assistance may be required to enforce quarantine measures and would be requested through NEMA to support local efforts, if necessary. Existing FMoH procedural documents contain appropriate isolation and quarantine guidelines, strategies, and legal authority. During a pandemic the FMoH, in consultation with NEMA, may conclude that isolation and quarantine are necessary for disease control. Ill individuals may be restricted to specific inpatient settings or to their homes. The FMoH may order quarantine of individuals exposed to pandemic influenza. Isolation and quarantine recommendations will likely be voluntary, although they may be involuntary and require enforcement. Enforcement of quarantine, if necessary, will be coordinated through police authorities and/or the AFN.

Community Mitigation and Other Disease Control Measures. In addition to the isolation and quarantine procedures identified in this section, the FMoH will evaluate the need to implement additional disease transmission control measures. These community mitigation measures may include:

- Suspension of large public gatherings
- School and Day-Care Centre closures
- Travel restrictions
- Quarantine of groups of exposed individuals
- Containment measures that apply to use of specific sites or buildings
- Increased social distancing
- Widespread community quarantine (cordon sanitaire)

FMoH may communicate specific instructions to the public concerning disease control measures and has the authority to close places of public assemblage, restrict travel, and seize needed equipment, property, and facilities, if necessary. Annex H includes recommendations for the graded implementation of community containment measures.

Healthcare Facilities Infection Control Measures. Infection control practices both in the community and in healthcare settings will present special challenges in the event of a pandemic. Preventing and controlling hospital-acquired infection will be an important factor in reducing the spread of influenza during a pandemic.

Measures other than vaccination and chemoprophylaxis are recommended for controlling hospital-acquired influenza outbreaks. These measures include interventions for preventing and controlling hospital-acquired influenza through prompt recognition, detection, isolation, and cohorting of confirmed and suspected cases, and implementation of droplet precautions.

Animal Infection Control Measures. Infection control practices appropriate for animal populations are the responsibility of the Ministry of Agriculture (FMA&RD) and are contained in a separate national pandemic plan for animal populations which addresses infection control measures in detail. This plan identifies measures to prevent infection or exposure of animal populations to potential pathogens, including influenza viruses. It

also includes actions to be taken in the event of infection or exposure to a pathogenic virus.

ANTI-VIRALS ACQUISITION, DISTRIBUTION, AND USE

General. The targeted use of anti-viral agents could decrease the health impact of an influenza pandemic. Use of anti-viral prophylaxis has been up to 90% effective in preventing symptomatic influenza infection caused by susceptible strains, if prophylaxis is begun before exposure to influenza. In addition, treatment with neuraminidase inhibitors such as Zanamivir (Relenza®) and Oseltamivir (TamiFlu®) has been shown to decrease severe complications such as pneumonia and bronchitis and to reduce hospitalizations. Early administration of anti-viral medications (within 48 hours) after the onset of disease is most effective in decreasing the risk of complications and shortening influenza illness duration. The adamantane class of anti-viral medications, amantadine (Symmetrel®) and Rimantadine (Flumadine®), are more widely available and less expensive than the neuraminidase inhibitors, but are not always effective.

Anti-viral Acquisition and Distribution. Generally, anti-viral medications are used to treat active cases and sometimes as prophylaxis for close contacts of active cases. However, during a pandemic influenza event, anti-viral medications will be administered according to the latest FMoH guidance, dependent on their availability. Currently, Nigeria can cautiously plan on receiving limited treatment courses of Oseltamivir (Tamiflu®) from the World Health Organization stockpile and possibly additional allocation from stockpiles maintained by other countries for international distribution, including the United States. The amount of Oseltamivir allocated to Nigeria from WHO and other stockpiles may treat as few as 2% of anticipated pandemic influenza cases. Oseltamivir and Zanamivir will be prescribed in Nigeria to treat the highest priority groups, as recommended by NEMA in consultation with FMoH and approved by national executive authorities. These anti-viral medications will not normally be used for prophylaxis (as a preventative measure) during a pandemic due to limited supply. The FMoH will control distribution of Nigeria's allocation of any anti-viral medications. Priority populations for receipt of anti-viral medications are contained in Annex E of this plan. The FMoH will coordinate with NEMA to adjust these priority populations as warranted by changes in the pandemic situation and knowledge of the unique characteristics of the pandemic virus. FMoH is responsible for requesting WHO stockpiled anti-viral medications and for managing the receipt, repackaging, and distribution to the treatment sites. FMoH will develop appropriate procedures for managing these tasks.

VACCINE ACQUISITION, DISTRIBUTION, AND USE

General. Pandemic influenza vaccines, once developed, have the potential to significantly reduce morbidity and mortality during a pandemic, and, potentially, limit viral spread. Vaccination goals are to:

- Protect persons at higher risk for influenza mortality
- Decrease transmission of infection to those at highest risk for influenza mortality (provide indirect protection)
- Protect the susceptible population at large
- Maintain the ability to provide quality health care, implement pandemic response activities, and maintain vital community services (by protecting priority population groups).
- Protect individuals who are critical to national pandemic response, including disaster management personnel at NEMA and key ministries.

Development and Distribution. A pandemic vaccine can only be manufactured after a pandemic virus is identified. Current manufacturing procedures require 4 to 6 months for vaccine development, once a viral strain has been isolated. Once the initial vaccine has been developed and tested, the manufacture and distribution of large quantities of the newly-developed vaccine takes considerably longer. The WHO goal is to have worldwide production of 2 billion doses of pandemic influenza vaccine 6 months after pandemic is declared. But the 2009 pandemic showed that the current production capacity worldwide is closer to 535 million doses at the six month mark³. Given a global population of approximately 7 billion⁴, it is therefore unlikely that a pandemic influenza vaccine will serve as the central preventive strategy during the first wave of the next pandemic and possibly even a second wave.

Acquisition and Distribution. Given the worldwide production capacity outline above, and the fact that for some vaccines at least two doses will be needed to elicit a good immune response, the vaccine allotments in Nigeria are unlikely to meet the nation's requirements within the first year any pandemic. Expected vaccine shortages may be so extensive that the vaccine supply would not be adequate to protect even those individuals identified as having a critical role in managing the crisis. It should also be noted that Nigeria may need to absorb some, or all of the up-front costs associated with the purchase, delivery, and administration of the vaccine, although international partners are expected to assist in offsetting these costs, but the exact nature of such assistance is not yet determined.

³ Partridge J, Kieny MP. Global production of seasonal and pandemic (H1N1) influenza vaccines in 2009-2010 and comparison with previous estimates and global action plan targets. Vaccine 2010

⁴ World Bank, World Development Indicators, 2010

The FMoH is responsible for coordinating with the WHO in requesting, receiving, repackaging and distributing vaccines to points of distribution within Nigeria. It is expected that vaccine will be allocated to WHO member states based on population priority groups. The FMoH is tasked within this plan to develop plans for acquisition and distribution of vaccine during an influenza pandemic. In addition, FMoH is tasked to work with NEMA to determine and adjust priority population groups, as warranted by the pandemic situation. To properly distribute vaccine throughout the nation, FMoH will be required to identify and maintain information concerning population distribution and the capacity of local immunizations centres.

Prioritization. During a pandemic, it is very likely that prioritization of persons to receive the vaccine will be necessary. During the course of a pandemic, prioritization of groups may change based on epidemiology, viral characteristics, or other factors. The WHO will provide recommendations for priority groups to receive available vaccine based on the characteristics of the virus and other factors. The FMoH will work with NEMA to determine national priority groups for Nigeria, but the ultimate decision will likely be made by the President in consultation with his ministers. This decision will then be transmitted to all levels of government and the healthcare community. In addition, it is critical the criteria for vaccine prioritization be fully explained to the public to ensure maintenance of a transparent process to prevent public misunderstanding and disorder. Once priority groups are established, FMoH will maintain numbers and distribution of these groups nationwide to facilitate efficient distribution of vaccine upon receipt. The listing of priority groups found in Annex E of this plan will serve as a baseline for planning but may be adjusted during a pandemic event due to the specific characteristics of the pandemic virus, demographic information and other factors. Once the vaccine becomes widely available, the FMoH will follow existing immunization procedures to implement mass vaccinations in Nigeria. It is expected that both the public and private sector will be mobilized to administer vaccines.

Vaccination Clinics. Existing SOPs outline the logistics of establishing and operating vaccination clinics. According to these SOPs, clinics will be established in all impacted communities utilizing existing procedures for oversight and facilitation of the process. SOPs outline criteria used to identify sites suitable for immunization clinics as follows:

- Government controlled buildings
- On main traffic routes and bus lines
- Accessible to disabled persons
- Available parking and restroom facilities.

Transportation will be provided to PODs and will be coordinated by the State Emergency Management Agencies through local disaster management committees. Patients will be assessed at the collection points prior to being referred to the pre-determined PODs. Security at vaccination PODs is essential, due to the potential for

public concern about access to the limited doses of vaccine and the further potential for criminal activity to acquire vaccine for sale. FMOH will coordinate with police authorities to ensure adequate security is present at all locations.

Liability Issues. Any activity related to liability issues and concerns that may be associated with instances of adverse reactions to vaccine administration will be the responsibility of the Federal Ministry of Justice.

MASS FATALITIES MANAGEMENT

General. The estimated number of deaths in Nigeria during a pandemic may exceed 1.4 million, depending on the virulence of the virus. Even though it will occur over a period of twelve to eighteen months, this increase in fatalities can easily overwhelm the capacity of local morgues and funeral homes, particularly during pandemic wave periods. An important task in pandemic preparation is the assessment of need for additional resources and space in temporary morgues.

The Federal Ministry of Environment (FMEnv) will coordinate the proper disposal of remains of pandemic victims, with assistance from other key ministries and governmental agencies. Hospitals and funeral homes have some limited resources for storing corpses but additional temporary cold storage facilities may be required during a pandemic for the storage of corpses prior to their transfer to funeral homes. The types of temporary morgue facilities to be considered may include refrigerated trucks, cold storage lockers, and ice production companies. The use of local businesses for the storage of human remains is not normally recommended and should only be considered as a last resort.

Since it is expected that many fatal influenza cases will seek medical services prior to death, hospitals, nursing homes, and other medical facilities must plan for rapid processing of corpses. The management of the rapid removal and processing of corpses will require the assistance of private morticians, specialized technical assistants, volunteer agencies and possible activation of military disaster response teams.

Federal Ministry of Environment (FMEnv) is tasked in this plan to develop a *Mass Fatalities Plan* for activation during pandemic periods where mass fatalities overwhelm normal processing capacity. In addition, FMOH is responsible for expediting issuance of death certificates and the National Population Commission will assist in the registration of these certificates. FMEnv, supported by the Federal Ministry of Information (FMI) is also responsible for providing pandemic-related fatality information to local officials, the media and the public. Due to its sensitivity, this information will be coordinated with Joint Information Committee prior to release.

Due to the potential for public concern concerning the number of fatalities during a severe pandemic and the potential for negative reaction by distraught persons at mass fatality processing sites, it is essential that security be provided at these locations. FMEnv will coordinate with police authorities to ensure appropriate security is provided at mass fatality processing locations.

MENTAL HEALTH

General. The response to an influenza pandemic will pose substantial physical, personal, social, and emotional challenges to healthcare providers, public health officials, other emergency responders, and essential service workers. Enhanced workforce support activities can help ensure that responders remain effective during emergencies. During an influenza pandemic, the occupational stresses experienced by healthcare providers and other responders are likely to differ from those faced by relief workers in other types of disasters. The long timeframe associated with pandemic operations, potentially more than one year, makes it a very special challenge for responders to maintain their effectiveness, both physically and mentally.

Medical and the general public health responders and their families will be at personal risk for as long as the pandemic continues in their community. Special planning is, therefore needed to ensure that hospitals, public health agencies, first-responder organizations, and employers of essential service workers are prepared to assist employees in maintaining their ability to perform their professional duties. An essential part of this planning effort involves the creation of alliances with faith and community-based organizations and nongovernmental organizations with expertise and other resources in the area of psychosocial support services.

The primary recommendations for workforce support focus is the establishment of psychosocial support services that will assist workers in managing emotional stress during response efforts to an influenza pandemic, and resolving related personal, professional, and family issues. Challenges overcoming cultural reluctance to utilize mental health services should be anticipated. Informational materials for employees and their families will be prepared by the FMOH, in cooperation with other pandemic response partners, with a focus on overcoming public reluctance to utilize these services by emphasizing the Government's and private sector businesses' acceptance and encouragement of such treatment.

Hospitals in Nigeria are encouraged to develop a mental health component to their influenza pandemic plans to ensure that healthcare staff and their families receive adequate mental health support during any pandemic disaster. Staff members in hospitals and other healthcare facilities should be trained in behavioural techniques to help employees cope with grief, stress, exhaustion, anger and fear during an emergency. In addition, training in psychological support services should be provided to medical personnel who are not behavioural health professionals (i.e., primary care clinicians, emergency department (ED) staff, medical/surgical staff, safety, and security personnel).

Educational and Training Materials. Educational and training materials developed for distribution to healthcare employees during an influenza pandemic should include information concerning:

- Stressors related to pandemic influenza.
- Signs of distress.
- Traumatic grief.
- Psychosocial aspects related to management of mass fatalities.
- Stress management and coping strategies.
- Strategies for building and sustaining personal resilience.
- Availability of behavioural and psychological support services.
- Strategies for helping children and families in times of crisis.
- Strategies for working with highly agitated patients.
- Developing “family communication plans”.
- Measures that persons can take to protect themselves and their families.

Workforce Resilience Programs and Materials. Workforce resilience programs are particularly helpful during a pandemic, due to the long-term nature of a pandemic disaster, the potential for high casualties and the likelihood that care provider’s families will be also be impacted by the pandemic. Workforce resilience programs should include the following:

- Briefing and training on behavioural health, resilience, stress management issues, and coping skills.
- Training of supervisors in strategies for maintaining a supportive work environment.
- Monitoring occupational health, safety and psychological well-being of deployed staff.
- Providing access to activities that help reduce stress.
- Referrals to behavioural health services, when requested and/or needed.

Information for Pandemic Responders. Responders should be provided periodic information to mitigate pandemic-related personal concerns. Access to accurate and timely information will often decrease the stress of responders. Such information should include:

- Information concerning the global, national, state and local pandemic situation.
- Work issues related to illness, sick pay, staff rotation, shift coverage, overtime pay, use of benefit time, etc.
- Family issues (i.e., availability of child care).
- Availability of vaccines, antiviral drugs, and PPE.
- Infection control practices as conditions change.
- Approaches to ensure patient adherence to medical/public health measures and methods to deal with the non-infected, but worried persons (the “worried well”).
- Guidance on distinguishing between psychiatric disorders and common stress reactions.

- Behavioural reactions to movement restrictions (especially for police, firefighters, and community outreach workers).
- Information on methods to deal with stigmatization or discrimination because of their role in the pandemic influenza response.

Mental Health Response Activities. FMoH will coordinate with faith-based and other relevant organizations in accordance with tasks within this plan to develop appropriate programs for pandemic responders and to address the psychosocial requirements of the general public. The counselling capabilities of FMoH and the healthcare community are limited and will be easily overwhelmed by the anticipated requirements of a severe global pandemic. It is therefore critical to build partnerships with the Nigerian Red Cross, church organizations and other stakeholders with equities in the mental health field to build an adequate response. In addition, FMoH will coordinate with private sector companies to encourage establishment of workforce resilience programs to address the needs of employees, particularly for companies responsible for providing critical public services (telecommunications, utilities, etc.).

Post-Pandemic Mental Health Support. Health care officials must consider that mental health requirements do not end when pandemic caseload declines or ceases. In fact, many experts believe that the greatest mental health caseload will occur after the pandemic has abated and may continue for years after the end of viral caseload. Due to the severe personal impact of a global pandemic, including deaths of spouses, children and co-workers, many persons may exhibit mild or even severe mental health symptoms for a significant period of time. These patients will need continued mental health care, a consideration which is often neglected in pandemic planning. In addition, healthcare and other pandemic response personnel may exhibit continuing mental health symptoms due to their pandemic-related activities and will need continued mental health care assistance during the post-pandemic phase. To address these significant requirements, the Ministry of Health has been tasked within this plan to provide post-pandemic mental health care, in partnership with other mental health stakeholders.

MASS CARE AND LOGISTICS

General. Mass care includes the provision of shelter, food, water, medical care and security to any population impacted by a disaster. Unlike most natural disasters, an influenza pandemic does not cause physical destruction of buildings that would normally require evacuation operations and generate sheltering and feeding requirements. However, depending on disease severity, a large number of individuals may become partially or fully incapacitated and unable to cope with everyday tasks, such as caring for children and other family members. There is also potential for children to be orphaned due to pandemic-related deaths of parents or guardians.

Although physical damage is not typically a component of pandemic influenza pandemics, depending on the level of community mitigation measures imposed in the community, individuals may be asked to avoid public places, such as schools, childcare centres, office buildings, and grocery stores. Community-wide infection mitigation measures such as school and childcare closures may also force parents to care for their children at home, abandoning employment obligations, thus increasing the rates of absenteeism and causing critical labour shortages during the pandemic. In addition, at-risk populations, such as homeless persons, travellers, mentally ill, elderly, and persons with disabilities may require temporary shelters, increased levels of medical care, food, water and other commodities and services during an influenza pandemic.

Because of these pandemic-related impacts, some severe pandemics may require that NEMA, in cooperation with other partners, open temporary shelter facilities and institute mass feeding and other mass care activities. Nigeria will follow established disaster management procedures in providing for the basic human needs of Nigerian citizens during these operations.

Due to the potential for public unrest during a severe pandemic and the possibility that some criminal elements will attempt to acquire commodities for sale during pandemic-related shortages, security at mass care distribution sites is essential. NEMA and State Emergency Management Agencies will coordinate with police authorities to ensure adequate security is present at all appropriate locations.

Vulnerable Populations. Disaster managers must prioritize the provision of aid during any disaster since available supplies are often limited. The provision of aid to vulnerable populations must therefore be a priority, ensuring that the most vulnerable populations within society receive disaster aid before those populations more capable of self-care. Vulnerable populations differ from society to society, but usually include pregnant women, disabled persons, young children and the elderly.

Refugee Operations. Due to the nature of a global influenza pandemic, it is likely that countries throughout the West African Region will be severely affected by both health

and non-health impacts. Nigerian authorities must be prepared for the potential influx of refugees into Nigeria and the associated mass care requirements of such an influx. In addition, there is also the potential for population movement of Nigerian citizens within the country, creating “internally displaced person” populations. The exact nature of these population movements cannot be predicted and may involve rural populations moving to urban areas to seek healthcare and basic necessities, or urban populations moving to rural areas to escape severe pandemic influenza outbreaks. Regardless of the nature of these population movements, it is expected that the Nigerian Government will be required to care for pandemic-related refugee and IDP populations during a severe global pandemic. This will necessitate establishment of camps to provide shelter and security, as well as the provision of food, water and medical care. NEMA will work with the applicable government ministries, the AFN and non-governmental organizations to address these requirements using established procedures and protocols for refugee/IDP operations.

Logistics. Logistics are a critical component of disaster response. The provision of aid supplies, a major part of mass care, is often dependent on logistics infrastructure and available supply networks. The logistics tasks of procurement, transportation, storage and distribution of equipment and supplies, including food, water, shelter materials and medical materiel are often the most resource intensive part of disaster response. It is therefore critical that disaster response logistics be carefully managed and that lead agencies for management of this critical area are identified. Within this plan, logistics is managed by NEMA, supported by the Federal Ministry of Defence. It is anticipated that the Armed Forces of Nigeria will provide critical logistics capability for execution of logistics operations in support of any pandemic response within the Federal Republic of Nigeria.

COMMUNICATIONS AND PUBLIC EDUCATION

General. Before, during, and after a health emergency, the main purpose of communication is to provide timely, accurate, and easily-understood information and instructions to pandemic response personnel, local government, hospitals, the business community, and the public. Dissemination and sharing of timely and accurate information among public health and government officials, health care providers, the media, and the general public will be one of the most important facets of managing response to an influenza pandemic. There will be widespread circulation of conflicting information, misinformation, and rumours, all of which must be adequately addressed. Communication must be coordinated among all relevant agencies to ensure consistent messages to the general public.

There will be great demand for accurate and timely information, including:

- General information concerning the pandemic virus, including morbidity and mortality.
- Disease control efforts, including availability and use of vaccines and anti-viral medications.
- Infection control measures for implementation by the public.
- The status of essential community services
- Steps being taken by the Government to respond to the pandemic and to mitigate suffering and loss of life.

Because of anticipated shortages of both anti-viral medications and pandemic influenza vaccine, the messaging concerning acquisition, distribution and use of these medications must be addressed very carefully. Additionally, any success at containing or slowing viral spread will depend on the timeliness and accuracy of public information and education efforts. Effective communication will also play a large part in reducing panic and unnecessary demand on healthcare resources.

Responsibilities.

Government of Nigeria. At the national level, the Federal Ministry of Information (FMI) will provide primary support to the Joint Information Committee, which includes representatives from all ministries and agencies involved in the communications response. The FMI is responsible for disseminating information to the media and the general public concerning response and recovery actions being taken by national authorities. Messages, press releases and talking points will be developed by the FMI in collaboration with the Federal Ministry of Health (FMoH) and will be approved by the NEMA prior to being released to the media and/or the general public. Ministry Information Officers will work closely with the Joint Information Committee and the FMI to ensure commonality of messaging within the national government and will focus on addressing only those pandemic response actions being taken by their own

ministry, referring other issues to the Joint Information Committee. During each phase of the pandemic, all stakeholders will work with the FMI and the Joint Information Committee to prepare needed materials, including press releases, talking points for national leaders, and educational materials for the general public. The FMOH will be the primary agency responsible for ensuring that appropriate information is shared with healthcare stakeholders throughout the pandemic and will provide medical expertise in the drafting of all pandemic communications, including media information and public health educational materials.

State and Local Level Response. At the sub-national levels of government, the State Emergency Management Agencies and local disaster committees will be the primary agencies responsible for addressing media and public information requirements. State-level Joint Information Committees will receive information from the National Joint Information Committee to ensure commonality of messaging across the different levels of government. State and local level information agencies will limit their focus to addressing pandemic response actions being taken at their level of government and refer national level issues to the National Joint Information Committee and FMI authorities.

Pre-pandemic preparation. The potential for a pandemic disaster to begin quickly makes it imperative that all ministries and other government agencies conduct effective communications planning. Planning must include:

- Identification of Public Information Officers (PIO) that will coordinate the planning of communications activities for a pandemic response.
- Identification and training of spokesperson(s).
- Development of pre-prepared “prescriptive messages” and media materials for use during pandemic response operations.
- Identification of communication channels to be used during pandemic response operations.

Public Education. Public education is absolutely critical during a pandemic disaster. There is a special need to educate the public and the health care community about the rationale for vaccinations and anti-viral medication acquisition, distribution and use, particularly the need to prioritize receipt of these medications for maximum public benefit. Attempts must be made to reach “hard to reach” groups, particularly since they can also be part of high risk and/or vulnerable populations. These include remote rural populations, refugees or IDPs, homeless persons, the elderly and persons with hearing or visual impairments. It should be noted that while the Ministry of Health and NEMA may be responsible for public education and information during a pandemic event, the National Orientation Agency (NOA) can be critically resource to assist these efforts. Ultimately, disaster managers at all levels should remember that effective public education strategies can greatly decrease the potential for panic during a pandemic disaster.

COMMAND AND CONTROL AND CONTINUITY OF OPERATIONS

Command and Control. The National Emergency Management Agency (NEMA) is responsible for assisting the President in guiding, and maintaining command and control of all disaster preparedness and response operations. Pandemic preparedness and response operations are particularly problematic since they take place over a long period of time and because the consequences of a severe global pandemic exceed that of any other type of disaster. Because of the scope of pandemic response operations, including the involvement of all areas of the country, it is anticipated that NEMA will require support from the AFN to maintain situational awareness and communications with all areas of the nation and the region. Therefore, tasks within this plan and the subordinate AFN Pandemic Continuity Plan require that the AFN be prepared to provide appropriate C4I (Command, Control, Communications, Computers and Information) capabilities to support NEMA command and control operations.

Continuity of Operations. One of the critical needs during an influenza pandemic will be the maintenance of essential community services. Unlike natural disasters, where any disruption to operations is likely to be related to physical damage of facilities or equipment, pandemics typically cause disruption by damaging human resources, through illness and death of critical members of an organization. The potential to have 35-40% of the workforce absent makes staffing of critical work functions a major source of disruption during a pandemic.

Staff absences can be expected for many reasons:

- Illness/incapacity (suspected/actual/post-infectious)
- Taking care of family members
- Voluntary social distancing (i.e. avoiding crowded places, such as public transport)

There is the possibility that services could be disrupted if significant numbers of public health, law enforcement, fire and emergency response, medical care, transportation, communications, military, and the general public utility personnel are unable to carry out critical functions due to illness, either their own or a family member's.

As part of comprehensive emergency preparedness planning, Nigerian Government ministries, healthcare facilities, and businesses, particularly those that provide essential services to the public, must develop and maintain continuity of operations plans and protocols.

These plans should include, at a minimum:

- Identification of essential services and processes.
- Identification of key personnel (those associated with maintaining essential services and processes).

- Enabling methodologies for replacing key personnel during a pandemic (cross-training other workers, hiring recently retired persons, etc.).
- Redundancy of mission critical communication and information systems.
- Line of Succession for the organization

Pre-pandemic continuity of operations planning and associated training efforts are critical to an organization's ability to maintain critical functions during any disaster, including an influenza pandemic. These efforts include identifying and cross-training staff to maintain essential services and processes, developing other sources to replace key personnel, identifying critical functions that can be performed via telecommuting and developing mechanisms to track daily absenteeism. To ensure the continuity of essential services provided by private sector partners (i.e. water, gas, electricity, etc.), representatives from the NEMA and relevant ministries are tasked within this plan to reach out to local essential service suppliers to assist with planning and response efforts and to facilitate continuity of operations.

PLAN ANNEXES

Annex A: *Nigeria Handbook for Pandemic Preparedness*

Annex B: *Glossary of Pandemic Influenza Terms and Acronyms*

Annex C: *Bibliography*

Annex D: *WHO Pandemic Alert Phases*

Annex E: *Priority Populations for Antiviral and Vaccine Distribution*

Annex F: *Alternative Medical Treatment Site Guidelines*

Annex G: *Guidelines for Health Facilities and Healthcare Resource Management*

Annex H: *Phased Implementation of Community Containment Measures*

Annex I: *Healthcare Facility Pandemic Influenza Planning Recommendations*

ANNEX A (NIGERIA HANDBOOK FOR PANDEMIC PREPAREDNESS) TO PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN - SEPTEMBER 2013.

What You Need to Know

An influenza (flu) pandemic is a worldwide outbreak of influenza disease that occurs when a new type of influenza virus appears that people have not been exposed to before (or have not been exposed to in a long time). The pandemic virus can cause serious illness because people do not have immunity to the new virus. Pandemics are different from seasonal outbreaks of influenza that we see every year. Seasonal influenza is caused by influenza virus types to which people have already been exposed. Its impact on society is less severe than a pandemic, and influenza vaccines (flu shots and nasal-spray vaccine) are available to help prevent widespread illness from seasonal flu.

Influenza pandemics are different from many of the other major public health and health care threats facing our country and the world. A pandemic will last much longer than most influenza outbreaks and may include “waves” of influenza activity that last 6-8 weeks separated by months. The number of health care workers and pandemic response personnel able to work may be reduced. Public health officials will not know how severe a pandemic will be until it begins.

A Historical Perspective

In the last century there were three influenza pandemics. All of them were called pandemics because of their worldwide spread and because they were caused by a new influenza virus. The 1918 pandemic was especially severe.

- 1918-1919: Most severe, caused up to 50 million deaths worldwide.
- 1957-1958: Moderately severe, caused at least 1-2 million deaths worldwide.
- 1968-1969: Mild severity, caused at least 700,000 deaths worldwide.
- 2009-2010: Least severe, caused approximately 20,000 deaths worldwide

How Influenza Spreads Between People

Influenza is thought to be primarily spread through large droplets (droplet transmission) that directly contact the nose, mouth or eyes. These droplets are produced when infected people cough, sneeze or talk, sending the relatively large infectious droplets and very small sprays (aerosols) into the nearby air and into contact with other people. Large droplets can only travel a limited range; therefore, people should limit close contact (within 6 feet) with others when possible. To a lesser degree, human influenza is spread by touching objects contaminated with influenza viruses and then transferring the infected material from the hands to the nose, mouth or eyes. Influenza

may also be spread by very small infectious particles (aerosols) traveling in the air. The contribution of each route of exposure to influenza transmission is uncertain at this time and may vary based upon the characteristics of the influenza strain.

Some Differences Between Seasonal influenza and Pandemic Flu

Seasonal Flu	Pandemic Flu
Caused by influenza viruses that are similar to those already circulating among people. Occurs primarily in the temperate regions of the world and is therefore less common in sub-Saharan Africa.	Caused by a new influenza virus that people have not been exposed to before. Likely to be more severe, affect more people, and cause more deaths than seasonal influenza because people will not have immunity to the new virus.
Symptoms include fever, headache, tiredness, dry cough, sore throat, runny nose, and muscle pain. Deaths can be caused by complications such as pneumonia.	Symptoms similar to the seasonal influenza but may be more severe and complications more serious.
Healthy adults usually not at risk for serious complications (the very young, the elderly, and those with certain underlying health conditions at increased risk for serious complications).	Healthy adults may be at increased risk for serious complications, unlike with seasonal influenza.
Every year worldwide, on average: <ul style="list-style-type: none"> • 3-5 million people are hospitalized from influenza complications; and • About 250,000 to 500,000 people die from flu. 	The effects of a severe pandemic could be much more damaging than those of a regular influenza season. It could lead to high levels of illness, death, social disruption, and economic loss. Everyday life could be disrupted because so many people in so many places become seriously ill at the same time. Impacts could range from school and business closings to the interruption of basic services such as public transportation and food delivery.

Importance and Benefits of Being Prepared

The effects of a pandemic can be lessened if you prepare ahead of time. Preparing for a disaster will help bring peace of mind and the confidence to deal with a pandemic.

When a pandemic starts, everyone around the world could be at risk. Nigeria has been working closely with other countries and the World Health Organization (WHO) to strengthen systems to detect outbreaks of influenza that might cause a pandemic.

A pandemic will touch every aspect of society, so every part of society must begin to prepare. All have roles in the event of a pandemic. National, county and local governments are developing, improving, and testing their plans for an influenza pandemic. Businesses, schools, universities, and other faith-based and community organizations are also preparing plans.

Pandemic Influenza – Challenges and Preparation

As you and your family plan for an influenza pandemic, think about the challenges you might face, particularly if a pandemic is severe.

You can start to prepare now to be able to respond to these challenges. The following are some challenges you or your family may face and recommendations to help you cope. In addition, an excellent checklist prepared by the United States Centers for Disease Control (CDC) is attached to this handbook.

Essential Services You Depend on May Be Disrupted

- Plan for the possibility that usual services may be disrupted. These could include services provided by hospitals and other healthcare facilities, banks, restaurants, government offices, telephone and cellular phone companies, internet services, utilities and post offices.
- Stores may close or have limited supplies. The planning checklists can help you determine what items you should stockpile to help you manage without these services.
- Transportation services may be disrupted and you may not be able to rely on public transportation. Plan to take fewer trips and store essential supplies.
- Public gatherings, such as volunteer meetings and worship services, may be canceled. Prepare contact lists including conference calls, telephone chains, and email distribution lists, to access or distribute necessary information.
- Consider that the ability to travel, even by car if there are fuel shortages, may be limited.
- You should also talk to your family about where family members and loved ones will go in an emergency and how they will receive care, in case you cannot communicate with them.
- In a pandemic, there may be widespread illness that could result in the shutdown of local automated teller machines, mobile banking and bank branches. Keep a small amount of cash in small denominations for easy use.

Food and Water Supplies May Be Interrupted and Limited

Food and water supplies may be interrupted so temporary shortages could occur. You may also be unable to get to a store. To prepare for this possibility you should store at least one to two weeks supply of non-perishable food and fresh water for emergencies.

Food

- Store two weeks of nonperishable food.
- Select foods that do not require refrigeration, preparation (including the use of water), or cooking.
- Insure that formula for infants and any child's or older person's special nutritional needs are a part of your planning.

Water

- Store two weeks of water, 1 gallon of water per person per day. (2 quarts for drinking, 2 quarts for food preparation/sanitation), in clean plastic containers. Avoid using containers that will decompose or break, such as milk cartons or glass bottles.

Schools and Childcare Centers May Be Closed for an Extended Period of Time

Schools, and potentially public and private preschool, childcare, trade schools, and colleges and universities may be closed to limit the spread of influenza in the community and to help prevent students and children from becoming sick. Other school-related activities and services could also be disrupted or cancelled including: clubs sports/sporting events, music activities, and school meals. School closings would likely happen very early in a pandemic and could occur on short notice.

- Talk to your teachers, administrators, and parent-teacher organizations about your school's pandemic plan, and offer your help.
- Plan now for children staying at home for extended periods of time, as school closings may occur along with restrictions on public gatherings, such as at markets, shopping centers, movie theaters, etc.
- Plan home learning activities and exercises that your children can do at home. Have learning materials, such as books, school supplies, and educational activities on hand.
- Talk to teachers, administrators, and parent-teacher organizations about possible activities, lesson plans, and exercises that children can do at home if schools are closed.
- Plan entertainment and recreational activities that your children can do at home. Have materials, such as reading books, coloring books, and games on hand for your children to use.

Medical Care for People with Chronic Illness Could be Disrupted

In a severe pandemic, local clinics, doctors' offices and hospitals will be overwhelmed.

- If you have a chronic disease, such as heart disease, high blood pressure, diabetes, asthma, HIV/AIDS or depression, you should continue taking medication as prescribed by your doctor. If possible, keep two weeks to one month's worth of these medications on hand at all times.
- Make sure you have necessary medical supplies such as glucose and blood-pressure monitoring equipment.
- Talk to your healthcare provider to ensure continued access to your medications.
- If you receive ongoing medical care such as dialysis, chemotherapy, or other therapies, talk with your health care provider about plans to continue care during a pandemic.

Pandemic Influenza - Prevention and Treatment

Stay Healthy

These steps may help prevent the spread of respiratory illnesses such as the flu:

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue away immediately after you use it. Cough or sneeze into your shoulder or sleeve if you don't have a tissue handy.
- Wash your hands often with soap and water, especially after you cough or sneeze. If you are not near water, use an alcohol-based (60-95%) hand cleaner.
- Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too.
- If you get the flu, stay home from work, school, and social gatherings. In this way you will help prevent others from catching your illness.
- Try not to touch your eyes, nose, or mouth. Germs often spread this way.
- If you have a disease which causes suppression of your immune system, be particularly careful of exposure and seek medical care if you believe you have been infected.

Vaccination

Vaccines are used to protect people from contracting a virus once a particular threat is identified. After an individual has been infected by a virus, a vaccine generally cannot help to combat it. Because viruses change over time, a specific pandemic influenza vaccine cannot be produced until a pandemic influenza virus emerges and is identified. Once a pandemic influenza virus has been identified, it will likely take 3-6 months to develop, test, and begin producing a vaccine. Large quantities of vaccine to combat a specific pandemic strain of influenza may take quite some time to be produced and be

made available to the general population. Efforts are being made to ensure that Nigeria has access to pandemic influenza vaccines once they are available. Once vaccines are available it will be important to prioritize its distribution to the most susceptible populations within society, dependent on the particular characteristics of the pandemic virus.

Antivirals

A number of antiviral drugs are available to treat viral diseases, including influenza. Some of these antiviral medications may be effective in treating pandemic influenza. These drugs may help prevent infection in people at risk and shorten the duration of symptoms in those infected with pandemic influenza. However, it is unlikely that antiviral medications alone would effectively contain the spread of pandemic influenza. These drugs are usually available by prescription only and their availability is very limited. During a pandemic, it is important that the public not buy drugs from street vendors which are purported to treat the pandemic virus, since these drugs are definitely not effective and may in fact harm persons taking them.

Work Policies during a Pandemic

During a pandemic, most businesses and government offices in Nigeria will adjust work policies to protect staff, their families and all persons interacting with staff personnel. These changes are necessary to deal with the health and non-health potential impacts of a pandemic. Suggested work policies during a pandemic include:

- Sick employees must stay at home.
- Employees should wash their hands frequently with soap and water or with hand sanitizer if there is no soap or water available. Also, employees are encouraged to avoid touching their noses, mouths, and eyes.
- Employees should cover their coughs and sneezes with a tissue, or cough and sneeze into their upper sleeves if tissues are not available. Tissues should be immediately disposed of properly. All employees should wash their hands or use a hand sanitizer after they cough, sneeze or blow their noses.
- Employees should avoid close contact with their coworkers and customers (maintain a separation of at least 6 feet). They should avoid shaking hands and always wash their hands or use hand sanitizer after contact with others. Even if employees wear gloves, they should wash their hands upon removal of the gloves in case their hand(s) became contaminated during the removal process.
- Employees should keep all work surfaces, telephones, computer equipment and other frequently touched surfaces and office equipment clean. Be sure that any cleaner used is safe and will not harm your employees or your office equipment.
- Employees should avoid using other employees' phones, desks, offices or other work tools and equipment.

- Managers should minimize situations where groups of people are crowded together, such as in a meeting, during a pandemic. Employees will use e-mail, phones and text messages to communicate with each other and avoid the need for personal contact. When meetings are necessary, avoid close contact by keeping a separation of at least 6 feet, where possible, and assure that there is proper ventilation in the meeting room.
- Managers should limit all employee travel, domestic and international, during an influenza pandemic, in accordance with the guidance found in the applicable company regulations.
- Managers should work with employees to maximize telecommuting (working from home) during periods of pandemic influenza. Some employees may still be required to work at their offices due to the nature of their duties.
- Offices should follow a liberal leave policy, including sick leave, during an influenza pandemic. Employees should discuss their leave requirements with their manager. Managers realize that an influenza pandemic will increase the likelihood of employees needing leave to care for sick family members or children during periods of school closure. Due to the many challenges both managers and employees will face during a severe pandemic, it is critically important to ensure timely coordination of work absences.
- All offices should obtain adequate supplies of personal protective equipment (face masks, etc.) and infection control supplies (hand sanitizer, etc.) in preparation for a pandemic. Employees should be aware of the location of these items and procedures for their use.

Facts of Importance to Person Traveling Internationally

- Persons traveling internationally should be aware that other geographic areas have different influenza seasons and may be affected by a pandemic at different times than in Nigeria.
- It is likely that governments will respond to a pandemic by imposing public health measures that restrict domestic and international movement, further limiting the ability of the Nigerian Government to assist its citizens in these countries.
- Since it is likely that these measures may be implemented very quickly, it is important that travelers maintain close contact with their employers when traveling overseas. This will maximize the opportunity to quickly arrange for return travel to Nigeria during an influenza pandemic.

Stay Informed

- It is critically important to obtain accurate and timely information during a pandemic. The likelihood of rumors during a severe pandemic is very high and may lead to public panic.
- The Nigerian Government will ensure that accurate and timely information is available to all citizens through media and other sources throughout an influenza pandemic. The public should be careful to guard against unfounded rumors which often cause panic during disaster situations.
- One major source of reliable, accurate, and timely information during a pandemic is the World Health Organization's Global Alert and Response (GAR) website at, <http://www.who.int/csr/alertresponse/en/>. This website lists all active response operations and will provide linkage to informative updates of the current pandemic situation.
- Listen to local and national radio, watch news reports on television, and read your newspaper and other sources of printed and web-based information.
- Talk to your local health care providers and listen to local public health officials.

Additional Questions and Answers about Pandemic Influenza

What about influenza viruses from animal species - can they cause influenza pandemics?

Yes. As the 2009 novel influenza outbreak demonstrated, influenza viruses also circulate in other animal species such as swine and birds. Apparently, the virus that caused the 2009 pandemic was an H1N1 influenza A viral mixture of swine, avian, and human influenza virus genes. This novel virus likely resulted from re-assortment of these different species' influenza viruses in swine, producing a new virus which had the capability of spreading from human to human, and to which the human population had little immunity. As with avian influenza and poultry, cooking also kills swine influenza viruses in pork, so it is safe to eat pork or chicken products during these types of outbreaks. The same rules apply for handling and cooking of both chicken and pork products.

What are the Nigerian Government and other countries and organizations doing to prepare for pandemic influenza?

Nigeria has been part of a global effort to prepare for pandemic influenza for several years. Ongoing preparations include the following:

- Monitoring of migratory and wild birds for avian flu, as well as swine and other domesticated animal populations.

- Working with the World Health Organization (WHO) and other nations to help detect human cases of avian influenza or other novel virus strains and to develop plans to respond to an influenza pandemic, if one begins.
- Supporting the manufacturing and testing of influenza vaccines, including finding more reliable and quicker ways to make large quantities of vaccines through cell-based technologies.
- Developing stockpiles of antiviral drugs to help treat and control the spread of disease.
- Supporting the efforts of all levels of government to prepare for and respond to pandemic influenza, including hosting and/or participating in planning summits with stakeholders within Nigeria and globally.
- Preparing for and encouraging communities, businesses, and organizations to prepare for pandemic influenza. These efforts have included joint exercises in pandemic preparation.

Attachment: Centers for Disease Control (HHS) Pandemic influenza Planning Checklist for Individuals and Families

NOTE: The contents of this handbook include information from the U.S. Department of Labor, Occupational Safety and Health Administration, Document OSHA 3327-02N (2007) and various publications of the World Health Organization.

Pandemic influenza Planning Checklist for Individuals and Families

You can prepare for an influenza pandemic now. You should know both the magnitude of what can happen during a pandemic outbreak and what actions you can take to help lessen the impact of an influenza pandemic on you and your family. This checklist will help you gather the information and resources you may need in case of an influenza pandemic.

To plan for a pandemic:

- Store a supply of water and food. During a pandemic, if you cannot get to a store, or if stores are out of supplies, it will be important for you to have extra supplies on hand. This can be useful in other types of emergencies, such as power outages and disasters.
- Ask your doctor if you can get an extra supply of your regular prescription drugs.
- Have any nonprescription drugs and other health supplies on hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes, and vitamins.
- Talk with family members and loved ones about how they would be cared for if they got sick, or what will be needed to care for them in your home.
- Volunteer with local groups to prepare and assist with emergency response.
- Get involved with anyone in your community that is working to prepare for an influenza pandemic.

To limit the spread of germs and prevent infection:

- Teach your children to wash hands frequently with soap and water, and model the correct behavior.
- Teach your children to cover coughs and sneezes with tissues, and be sure to model that behavior.
- Teach your children to stay away from others as much as possible if they are sick. Stay home from work and school if sick.

Items to have on hand for an extended stay at home:

Examples of food and non-perishables

- Ready-to-eat canned meats, fruits, vegetables, and soups
- Protein or fruit bars
- Dry cereal or granola
- Peanut butter or nuts
- Dried fruit
- Crackers
- Canned juices
- Bottled water
- Canned or jarred baby food and formulae

Examples of medical, health, and emergency supplies

- Prescribed medical supplies such as glucose and blood-pressure monitoring equipment
- Soap and water, or alcohol-based hand wash
- Medicines for fever, such as acetaminophen or ibuprofen
- Thermometer
- Anti-diarrheal medication
- Vitamins
- Fluids with electrolytes
- Cleansing agent/soap
- Flashlight
- Batteries
- Portable radio
- Manual can opener
- Garbage bags
- Tissues, toilet paper, disposable diapers

ANNEX B (GLOSSARY OF PANDEMIC INFLUENZA TERMS AND ACRONYMS) TO PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN – SEPTEMBER 2013.

1918 Spanish Flu pandemic	An unusually severe and deadly strain of influenza, a viral infectious disease that killed some 25 million to 50 million people worldwide in 1918 and 1919. It is thought to have been one of the most deadly pandemics in human history. It was caused by an H1N1 type influenza virus.
Activated Vaccine	Refers to vaccines which incorporate a live, but sufficiently weakened infectious agent that can cause sufficient infection to activate the body's immune system to fight the virus without allowing the virus to continue to multiply to the point where it causes illness.
Antibiotic	A substance usually produced by bacteria or fungi that destroys or prevents the growth of other bacteria and fungi.
Antibody	A protein produced by the body's immune system in response to a foreign substance (antigen). One way our bodies fight off an infection is by producing antibodies. An antibody reacts specifically with the antigen that triggered its formation and its function is to inactivate the antigen.
Antigen	Any foreign substance, usually a protein, that stimulates the body's immune system to produce antibodies.
Antiseptic	A substance that prevents the growth and replication of various microorganisms (such as bacteria, fungi, protozoa, and viruses) on inanimate surfaces or on the external surfaces of the body. Some are true germicides, capable of destroying the bacteria, while others merely prevent or inhibit their growth. Antibacterials have the same objective, but only act against bacteria.
Antiviral	A medication that may be used to treat people who have been infected by a virus to help limit the severity of the illness and reduce the potential for serious complications. People who are in high risk groups are often given antiviral drugs because of their increased potential to develop additional health issues.
Asymptomatic	Presenting no symptoms of the disease.

Avian Flu	Commonly known as bird flu, strains of influenza virus that naturally occur in birds. Wild birds may carry the viruses and may not get sick; however, domestic birds may become infected by these viruses and often die from them. Avian influenza is a highly contagious viral disease with up to 100% mortality in domestic fowl (caused predominantly by influenza A virus subtypes H5 and H7). All types of birds are susceptible to these viruses, but outbreaks occur most in chickens and turkeys.
Carrier	A bearer and transmitter of an agent capable of causing an infectious disease. An asymptomatic carrier shows no symptoms of carrying the infectious agent.
COG	Continuity of Government
Contagious	A contagious disease is easily spread from one person to another by contact with the infectious agent that causes the disease. The agent may be in droplets of liquid particles made by coughing or sneezing, from contaminated food utensils, water or food, or from direct contact between two individuals.
Contagion	Contagious disease; any disease easily transmitted by contact.
COOP	Continuity of Operations
Emerging Disease	A new infection resulting from the evolution or change of an existing pathogenic agent, a known infection spreading to a new geographic area or population, or a previously unrecognized pathogenic agent or disease diagnosed for the first time and which has a significant impact on animal or public health.
EOC	Emergency Operations Center
Epidemic	The occurrence of cases of a disease or illness in a community or region in excess of what is usually expected over a given period of time.
Endemic	The amount of a disease or illness that usually occurs in a given time period in the animal or human population of a particular geographic locality.
FBO	Faith Based Organizations
Gene	The basic unit of inheritance. A gene is a segment of DNA that specifies the structure of a protein or an RNA molecule.
H1N1	A subtype of Influenza A virus and the most common influenza virus occurring in humans. While some stains of H1N1 are endemic in humans, others are found in swine and avian populations. The 1918 influenza pandemic which killed over 50 million persons worldwide was a novel H1N1 virus. The influenza outbreak which began in Mexico in March 2009 and later spread to many countries worldwide was an Influenza A H1N1 virus with elements of the swine, avian and human virus.

H5N1	The scientific designation of a subtype of avian influenza (bird flu) virus that has recently spread from birds to humans. One of 16 different known subtypes of avian influenza viruses. Some H5N1 viruses are highly pathogenic, meaning they can cause severe disease and death in birds. H5N1 viruses have been found in birds around the world. As the spread of H5N1 infection among birds increases, so, too, does the opportunity for H5N1 to be transmitted directly from birds to humans.
Host	An organism on, or in which a parasite lives.
ILI	Influenza-like-Illness
Immune	Having a high degree of resistance to a disease.
Inactivated Vaccine	Refers to vaccines which incorporate dead infectious agents and stimulate the body's immune system to detect and destroy viruses identical, or very closely related to the ones they contain
IO	Information Officer(s)
Incubation Period	The period which elapses between the infection of the host and the onset of signs and symptoms.
Infection	The invasion by and multiplication of a pathogenic micro-organism in the host.
Infective Period	The period during which an infected animal or person can be a source of infection for another animal or person.
Infectious Agent	Any organism, such as a pathogenic virus, parasite, or bacterium, that is capable of invading body tissues, multiplying, and causing disease.
Influenza (flu)	A contagious respiratory illness caused by particular strains of viruses.
Influenza Type A	A highly contagious, febrile, acute respiratory infection of the nose, throat, trachea, bronchi, and lungs. It is caused by a category of the influenza viruses that is characterized by specific internal proteins and further sub-grouped according to variations in the two surface proteins. It can be responsible for severe and potentially fatal clinical illness of both animals and humans. Influenza type A viruses caused all three pandemic influenza outbreaks of the 20 th century.
Influenza Type B	A category of influenza viruses characterized by specific internal proteins that infects only humans, and usually causes less severe clinical illness than type A viruses, and typically spreads in regional, rather than pandemic outbreaks.
Influenza Type C	A category of influenza viruses characterized by specific internal proteins that does not cause significant clinical illness in humans.

Influenza Pandemic	A global outbreak of the influenza disease that occurs when a new influenza virus appears and spreads in the human population. Because people have little or no immunity to the new strain, serious illness can occur, and the virus can spread easily and rapidly from person to person with no vaccine immediately available.
Isolation	The physical separation of a person suffering from an infectious or contagious disease from other persons in a community.
AFN	Armed Forces of Nigeria
Mutation	An alteration in gene from its natural state. This change may be disease causing or benign, normal or variant. Specific mutations and evolution in influenza viruses cannot be predicted, making it difficult if not impossible to know if or when a virus such as H5N1 might acquire the properties needed to spread easily to and among humans.
NEMA	National Emergency Management Agency
Outbreak	The confirmed presence of disease or infection of one or more cases of disease or infection in a defined epidemiological unit (i.e. flock, herd, farm or village) and during a specific period of time.
Pandemic	An outbreak of a disease that affects large numbers of people throughout the world.
Pandemic	A virulent influenza (flu) caused by a new influenza virus strain to which influenza humans have not been previously exposed. It is more serious than typical seasonal influenza because there is no natural resistance or immunity to it and a large number of people of different ages are infected all over the world, causing potentially serious illness and possibly death.
Pathogen	A living micro-organism that can cause infection and disease.
Pathogenic	Able to cause disease.
POD	Point of Dispensing
PPE	Personal Protective Equipment
PMO	Prime Minister's Office
Quarantine	The physical separation of healthy people who have been exposed to an infectious disease – for a period of time – from those who have not been exposed.

Risk	The likelihood of the occurrence and the likely magnitude of the consequences of an adverse event to animal or human health during a specified time period, as a result of a hazard.
Seasonal Flu	A contagious respiratory illness caused by influenza (flu) viruses occurring every year causing mild to severe illness, and in some instances can lead to death. Most people have some immunity, and a vaccine is developed and is normally available each year.
Social Distancing	A disease prevention strategy in which a community imposes limits on social (face-to-face) interaction to reduce exposure to and transmission of a disease. These limitations could include, but are not limited to, school and work closures, cancellation of public gatherings, and closures or limitations of mass transportation.
SOP	Standard Operating Procedures
SEMA	State Emergency Management Agency
Surge Capacity	The ability to respond rapidly to a sudden and dramatic increase in demand. Applied specifically to a health care system, it is the ability to rapidly expand beyond normal services to meet the increased demand for qualified personnel, equipment, medicines, and other elements of medical care in the event of a large-scale public health emergency or disaster.
Surveillance	The regular collection, monitoring and analysis of information in a given population or subpopulation to detect the presence of a pathogenic agent or disease; the frequency and type of surveillance will be determined by the epidemiology of the pathogenic agent or disease, and the desired outputs.
Strain	A group of organisms within a species or variety.
Swine Flu	An influenza A virus occurring in swine populations. The H1N1 virus which occurred in Mexico in March/April 2009 and spread to many countries worldwide was dubbed "swine flu", but in fact contained elements of swine, avian and human influenza virus.
Symptom	An indication that is self-reported by a person to a healthcare provider or other caregiver which may mean that the person has a disease or illness.
Tamiflu	Brand name of the drug Oseltamivir, an antiviral drug which fights viruses. In particular, Tamiflu fights influenza ("flu") viruses. When a person gets the flu, Tamiflu can make the sickness last a shorter time and be less severe. It does not cure the flu; there is no cure for the influenza other than time in a person who recovers from the illness.
Vaccine	The administration of an innocuous (weak or killed) form of a virus or bacteria that stimulates the production of antibodies by the immune system to help prevent or create resistance to infection. Vaccines are thus usually given as a preventive measure.

Vaccination	The successful immunization of susceptible animals or human through the administration of a vaccine comprising antigens appropriate to the disease to be prevented.
Viral	Having to do with a virus.
Virulent	Severe or highly lethal; causing severe illness or death.
Virus	Any of various simple submicroscopic parasites of plants, animals, and bacteria that often cause disease and that consist essentially of a core of RNA or DNA surrounded by a protein coat. They are generally unable to replicate without a host cell, viruses are typically not considered living organisms.
WHO	World Health Organization

Sources of definitions of terms are:

<http://www.fao.org/avianflu/en/glossary.html>

http://reports.typepad.com/pandemic_plan/2005/11/glossary.html

<http://www.pandemicflu.gov/glossary/index.html>

ANNEX C (BIBLIOGRAPHY) TO PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN – SEPTEMBER 2013.

U.S. Centers for Disease Control, U.S. Department of Health and Human Services, *Interim Pre-Pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States, Early, Targeted, Layered Use of Non-pharmaceutical Interventions*, February 2007.

U.S. Federal Emergency Management Agency, *Pandemic Influenza Continuity of Operations (COOP) Annex Template Instructions*, undated.

U.S. Department of Health and Human Services, *HHS Pandemic Influenza Plan*, November 2005.

World Health Organization, *International Health Regulations (2005)*, adopted by the World Health Assembly on 23 May 2005, http://www.who.int/csr/ihr/wha_58_3/en/index.html, accessed December 23, 2011.

U.S. Homeland Security Council, *National Strategy for Pandemic Influenza Implementation Plan*, May 2006.

U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), *Guidance on Preparing Workplaces for an Influenza Pandemic*, OSHA 3327-02N (2007).

U.S. Centers for Disease Control and Prevention, *CDC Influenza Pandemic Operation Plan (OPLAN)*, 11 July 2008.

Stephen Prior, Robert Armstrong, Ford Rowan and Mary Beth Hill-Harmon, *Weathering the Storm*, Center for Technology and National Security Policy, National Defense University, November 2006.

World Health Organization, *WHO Checklist for Influenza Pandemic Preparedness Planning*, Geneva, 2005, accessed November 19, 2011. <http://www.who.int/csr/resources/publications/influenza/FluCheck6web.pdf>.

World Health Organization, *WHO Global Influenza Preparedness Plan 2005*, accessed December 5, 2011. http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_5.pdf.

World Health Organization, *WHO Guidelines on the Use of Vaccines and Antivirals During Influenza Pandemics*, Geneva, 2004, accessed December 11, 2011. http://www.who.int/csr/resources/publications/influenza/11_29_01_A.pdf.

Websites with additional pandemic information

U.S. Centers for Disease Control and Prevention: <http://www.cdc.gov/>

U.S. Department of Health and Human Services: <http://www.os.dhhs.gov/>

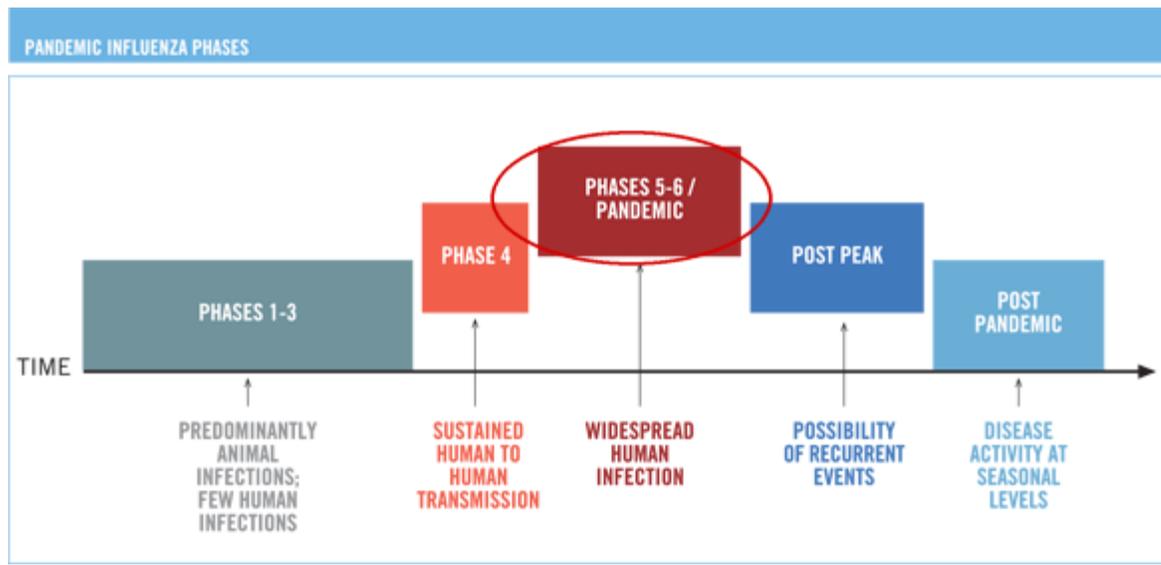
U.S. Department of State: <http://www.state.gov/>

U.S. Federal Government Pandemic Influenza Site: <http://www.pandemicflu.gov/>

World Health Organization: <http://www.who.int/en/>

ANNEX D (WHO PANDEMIC ALERT PHASES) TO PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN – SEPTEMBER 2013.

WORLD HEALTH ORGANIZATION (WHO) PANDEMIC ALERT PHASES



In the 2009 revision of the phase descriptions, the World Health Organization (WHO) retained the use of a six-phased approach for easy incorporation of new recommendations and approaches into existing national preparedness and response plans. The grouping and description of pandemic phases have been revised to make them easier to understand, more precise, and based upon observable phenomena. Phases 1–3 correlate with preparedness, including capacity development and response planning activities, while Phases 4–6 clearly signal the need for response and mitigation efforts. Furthermore, periods after the first pandemic wave are elaborated to facilitate post pandemic recovery activities.

In nature, influenza viruses circulate continuously among animals, especially birds. Even though such viruses might theoretically develop into pandemic viruses, in **Phase 1** no viruses circulating among animals have been reported to cause infections in humans.

In **Phase 2** an animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans, and is therefore considered a potential pandemic threat.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human

transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

Phase 4 is characterized by verified human-to-human transmission of an animal or human-animal influenza reassortant virus able to cause “community-level outbreaks.” The ability to cause sustained disease outbreaks in a community marks a significant upwards shift in the risk for a pandemic. Any country that suspects or has verified such an event should urgently consult with WHO so that the situation can be jointly assessed and a decision made by the affected country if implementation of a rapid pandemic containment operation is warranted. Phase 4 indicates a significant increase in risk of a pandemic but does not necessarily mean that a pandemic is a forgone conclusion.

Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

Phase 6, the pandemic phase, is characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in **Phase 5**. Designation of this phase will indicate that a global pandemic is under way.

During the **post-peak period**, pandemic disease levels in most countries with adequate surveillance will have dropped below peak observed levels. The post-peak period signifies that pandemic activity appears to be decreasing; however, it is uncertain if additional waves will occur and countries will need to be prepared for a second wave.

Previous pandemics have been characterized by waves of activity spread over months. Once the level of disease activity drops, a critical communications task will be to balance this information with the possibility of another wave. Pandemic waves can be separated by months and an immediate “at-ease” signal may be premature.

In the **post-pandemic period**, influenza disease activity will have returned to levels normally seen for seasonal influenza. It is expected that the pandemic virus will behave as a seasonal influenza A virus. At this stage, it is important to maintain surveillance and update pandemic preparedness and response plans accordingly. An intensive phase of recovery and evaluation may be required.

ANNEX E (PRIORITY POPULATIONS FOR ANTIVIRAL AND VACCINE DISTRIBUTION) TO PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN - SEPTEMBER 2013.

GROUP	
A	Healthcare workers and the general public health personnel involved in epidemiological investigations and the distribution of vaccine and antiviral agents.
B	Persons responsible for community safety and security, including police, firefighters, military personnel and other pandemic response personnel not included in Group A. These persons will be only those identified by these organizations as critical to pandemic response operations.
C	Other highly skilled persons who provide essential community services whose absence would pose a significant hazard to public safety or severely disrupt the pandemic response effort.
D	Persons traditionally considered to be at increased risk of severe influenza illness and mortality and their household contacts (D1-D5).
D1	<i>Persons of any age with high-risk medical conditions</i>
D2	<i>Pregnant women</i>
D3	<i>Persons in nursing homes and other long-term care facilities</i>
D4	<i>Persons >65 years of age without high-risk medical conditions</i>
D5	<i>Infants aged 6-23 months</i>
E	Persons not included in Group C who ensure the maintenance of critical infrastructure
F	Pre-school and school-age children
F1	<i>Pre-school children</i>
F2	<i>School-age children</i>
G	Persons with contraindications to influenza vaccine (for consideration during the distribution of anti-viral medications only)

ANNEX F (ALTERNATIVE MEDICAL TREATMENT SITE GUIDELINES) TO PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN - SEPTEMBER 2013.

(FMOH publishes the following guidelines for utilization of non-traditional settings for delivery of medical care during an influenza pandemic – these guidelines should be utilized by subnational disaster management agencies in ascertaining the need for, and establishing AMTS operations)

GUIDELINES: Due to the large number of ill patients that will require medical services (i.e., emergency room visits, hospitalizations, and outpatient visits) during a pandemic, communities and health care organizations will need special guidelines for actions to be taken if health care organizations are overwhelmed and medical care must be provided in non-traditional settings. The following are general principles to be followed by governmental and non-governmental organizations when planning for this situation.

General Principles

1. Appoint an individual or task force (depending on the complexities of the jurisdiction(s) involved) to coordinate and oversee the development and implementation of the plans and procedures.
2. Conduct a community-wide inventory of medical capacity, number of hospital beds, number of intensive care unit beds, quantity of ventilators, morgue capacity, and number of health care providers available to see outpatients.
3. Estimate the number of hospitalizations that could be expected during a pandemic and determine the extent to which health care organizations might be overwhelmed.
4. Conduct a community-wide space and site resource inventory. Determine the availability of shelters, schools, sports facilities, nursing homes, day care centers, and other potential sites for aggregate care and explore the issues associated with use of these facilities, including the impact of cessation of their existing societal function. Determine location and availability of vacant land for possible mobile hospital installations. Make arrangements with owners of each facility to use the site, if necessary, to care for ill persons during a pandemic.
5. For each site identified determine: size; bed capacity (for beds at least one meter apart); availability of space to separate men, women and children; ceiling height, availability of sinks, bathrooms, refrigerators, freezers, food preparation areas, accessibility (to patient and staff) by private and public transportation, heating and ventilation capability, transportation requirements for movement of patients and supplies, storage capacity for pharmacy and other supplies, communications

capability, water and sewage service and capacity, facilities for disposal/storage of medical waste, and facilities for staff lodging and feeding.

6. Identify sources of extra supplies needed to provide medical care at these sites.
7. Develop national and subnational guidelines regarding what type of care could be provided at each site and what will trigger activation of these sites.
8. Determine how triage across these sites would be managed, including cross leveling of patients to facilities from facilities where there is no remaining capacity to those facilities that still have capacity.
9. Conduct an inventory of health care personnel including current and retired MDs, DOs, RNs and other nursing personnel, veterinarians, others with medical training (i.e., emergency medical technicians) and potential volunteers.
10. Determine sources from which additional staff could be acquired assuming hospitals are using much, if not all, available staff for their own needs. Define the extent of care that each type of provider can perform according to current laws and regulations. For example, can pharmacists provide immunizations therefore releasing nurses to provide other types of care?
11. Educate every health care provider about appropriate infection control procedures for influenza as well as how to care for patients suffering from influenza and its complications.
12. Designate an individual to oversee the care provided in each non-traditional setting. The type of person selected for each site may vary based on the type of care provided. This person should monitor patient flow, maintain a log of patient activity including patient outcome, and monitor availability of supplies.
13. Planning should include provisions for referral to other medical care facilities as needed.
14. Consider use of both the military and paramilitary civil defence organizations to provide support, including medical staffing, equipment and supplies, ambulance services, logistics and operations management and other additional requirements.

ANNEX G (GUIDELINES FOR HEALTH FACILITIES AND HEALTHCARE RESOURCE MANAGEMENT) TO PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN – SEPTEMBER 2013.

GUIDELINES FOR HEALTHCARE FACILITIES AND RESOURCES MANAGEMENT

ISSUES: There is no simple answer to the question of how serious the next pandemic might be. It depends on how virulent and transmissible the virus is. Since our world today is vastly more populated than it was during previous pandemics, and people travel the globe with ease, the spread of a next pandemic could be more rapid than that of previous pandemics.

Estimates show that a severe pandemic may result in almost 1.5 million deaths in Nigeria and a total of almost 6 million hospitalizations. Morbidity and mortality patterns during a pandemic differ from those seen during non-pandemic years when primarily the elderly and persons with a compromised immune system are most at risk for serious disease and death. During the three pandemics of the 20th century, a substantial amount of the total mortality occurred among persons less than 65 years of age who would not be considered high risk during non-pandemic years. One of the great challenges of responding to an emerging pandemic will be to plan for the use of limited health care resources. For planning, communities should consider that the demand for healthcare resources would vary, depending on where the community is within the epidemic cycle.

GUIDELINES

Institution-level Guidelines. These guidelines were created in order to assist health care institutions to maximize staffed beds and resources available during an influenza pandemic. The greatest challenge is expected to be the management of high census in the face of reduced professional, ancillary, and housekeeping staff. Many hospitals already have high census protocols and emergency preparedness plans that may be adapted to pandemic planning. Those plans should be updated with special consideration given to the following:

Staffing: Take steps to reduce staff absenteeism during a pandemic.

1. When vaccine becomes available, sponsor local immunization programs for all staff members, physicians and their families, and other at-risk members of the community.
2. Ensure that the facility's time-off policies and procedures adequately consider staffing needs in periods of clinical crisis. Facility policies and employee union contracts should incorporate language that allows flexibility to achieve adequate

staffing during a pandemic. Unplanned staff or family member illness and previously granted vacation request may complicate adequate staffing.

3. Consider or expand hospital-sponsored sick care services for hospital staff children.
4. Within reasonable limits of clinical competency, consider use of registered nurses and other health care providers serving in administrative positions to provide patient care.
5. Use immunized staff to care for those with suspected or confirmed influenza infection.

Discharge: Ensure expeditious patient discharge.

1. Consider appointment of a triage officer to manage patient flow. Utilization review activities have increased importance during a pandemic, when normal continuity of care may be disrupted because of staffing shortages and turnover due to illness.
2. Ensure that the facility has effective rules for expediting patient discharge during periods of anticipated high demand. These rules might include allocation of a sufficient number of triage physicians and nurses to the appropriate services and procedures for discharge and transfer of patients to home, a skilled nursing facility, or other facilities.
3. Review guidelines and policies allowing expeditious transfer of patients between units, especially from critical care units, when indicated.
4. Develop transportation plans and policies to expeditiously transport discharged patients home or to other facilities.
5. Consider creating a patient discharge holding area or discharge lounge to free up bed space.

Emergency Department: Ensure that the Emergency Department (ED) is prepared for high patient volume.

1. Pre-plan space needs for flexible use of alternative space. Urgent care or fast track areas in or adjacent to the ED may need to be converted to patient treatment areas.
2. Review policies and procedures addressing adequate physicians, nurses and ancillary staff in the ED and critical ancillary areas.
3. Consider appointment of a triage officer to manage patient flow, including appropriate patient referral to other clinics within the facility or to local physicians' offices or nontraditional care settings when ED care is not required.
4. Consider spatial separation in waiting room of potentially influenza-infected patients.
5. Plan for proper security to address large crowds and the potential for public panic.

Elective Procedures: Review policies for admitting and scheduling elective procedures and consider how and when to implement contingency plans such as limiting elective admissions and surgery.

1. Elective utilization of health care facilities should be limited as much as possible during a pandemic. In addition to allowing re-distribution of staff and equipment, reducing the number of elective visits to health care facilities may decrease a person's exposure to influenza infected patients receiving care in the facility and may also reduce the risk of influenza infection complications in these patients. Consideration should be given to performing any necessary surgeries in a surgical ambulatory care center to reduce the likelihood of patient exposure to influenza infected patients receiving treatment in facilities providing medical care.
2. The need for home health care visits may increase during a pandemic. When feasible, however, the number of visits to a patient's home and the number of homes visited should be limited to reduce the risk of introducing influenza to the home care patient who is likely to be at high risk of complications. Home health workers should receive the pandemic strain vaccine once it is available.
3. Many persons are dependent on certain health care procedures or treatments (i.e., dialysis) that must continue during a pandemic. Availability of these resources and how they will be allocated must be addressed during pandemic preparedness planning.

Equipment/Supplies: Plan for the limited availability and increased need for allocation of equipment and supplies such as respirators, gurneys and supply carts within the facility and for potential disruption in the normal delivery of supplies and repair services.

Patient Placement: Isolation plans should be developed in advance for use during a pandemic. Under ideal circumstances, patients with suspected or diagnosed influenza should be in a private room. Special ventilation may also be helpful in limiting transmission of the disease. During a pandemic, private rooms and rooms with special ventilation are unlikely to be available and containment of infection is likely to be extremely difficult. Consideration should be given to cohorting patients with active confirmed or suspected influenza infection. Isolation procedures for other pathogens, including use of a private room, should continue to be utilized.

The period of greatest communicability of inter-pandemic influenza is the first 3 days of illness but the virus can be shed before onset of symptoms and up to seven or more days after illness. It is possible that more prolonged shedding could occur with pandemic influenza since the immune system would not have prior experience with related strains. It is also possible that prolonged shedding can occur in young children and immune-deficient patients. Therefore, all influenza specific bed management

measures should be maintained for at least 7 days after onset of illness or longer if symptoms persist.

Community-level Guidelines: A community-wide coordinated response will be essential. Communication with local physicians, physician's groups, urgent care centers, community clinics, and home health care agencies is essential to develop joint contingency plans and to determine their availability during peak periods. Planning should involve healthcare facilities, ambulance services, and other pandemic response personnel to ensure that there is coordinated distribution of scarce critical resources.

In order to effectively respond to an influenza pandemic, communities will need to coordinate many health care related activities. Because so many different perspectives will need to be considered during this process, it is recommended that a Community Health Care Task Force be created that engages all the necessary parties. The Task Force should include representatives from hospitals, infection control specialists, physician groups, the public health sector, home health care, and emergency response groups.

Roles of the Task Force: The Task Force should be responsible for coordinating health care activities from a community perspective during a pandemic. The following are suggestions of activities the Task Force should consider.

1. Working with the local health authorities to issue public health advisories as needed regarding the pandemic disaster and the use of the emergency department (ED), clinics and urgent care centers.
2. Research and define community regulations pertaining to crisis management, the responsibilities of hospitals and other health care facilities, the responsibilities of the public health sector, and any other regulations relevant to pandemic-type situations.
3. Work with hospitals to ensure that adequate protocols for bed management across facilities. These protocols should address how and when the decision will be made to utilize alternative facilities for patient care.
4. Initiate a tracking system for monitoring the impact of the pandemic on hospitals in the community. Ideally the tracking system would be in place prior to a pandemic. This tracking system should collect the following types of data:
 - Number of available ICU beds (adult and pediatric)
 - Number of available medical ward beds (adult and pediatric)
 - Number of available ED beds (total)
 - Number of available ED monitored beds
 - Number of available ED non-monitored beds
 - Number of patients in the ED waiting to be seen
 - Number of patients waiting for inpatient beds (in ED, clinic, recovery I etc.)
 - Average waiting time for non-ambulatory patients to be seen in ED
 - Average waiting time for ambulatory patients to be seen in ED

- Number of hospitals on ED diversion
 - Morgue capacity
5. Work with hospitals that are experiencing unusually heavy patient volumes by giving transfer priority when:
 - Hospital is in danger of exceeding bed capacity
 - Hospital has already performed "in-patient triage" in order to free up as many ICU and ward beds as possible
 - Hospital is currently on emergency department diversion
 - Hospital has implemented procedures to obtain additional staff
 - Hospital is unable to provide/obtain needed medical equipment or services due to overwhelming conditions
 6. Formulate a plan for expediting the patient transfer between hospitals.
 7. When a hospital has exhausted its medical supplies, a mechanism should be in place for allocating urgently needed equipment (i.e. ventilators) and pharmaceuticals (vaccines, anti-viral medications, antibiotics, etc.). Since several hospitals in the community are likely to concurrently experience this problem, it is recommended that one distribution center be responsible for coordinating requests for additional equipment and supplies.
 8. Formulate a plan to coordinate the transport of supplies from one hospital to another when appropriate.
 9. Develop a plan for management of bodies when morgue capacity has been exceeded.
 10. Develop a plan for continuity of home health care services and the delivery of medical supplies to home health care patients.

ANNEX H (PHASED IMPLEMENTATION OF COMMUNITY CONTAINMENT MEASURES) TO PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN
- SEPTEMBER 2013.

Pandemic Influenza Alert Phase	RESPONSE
Phase 1, 2 or 3 (No significant human pandemic virus identified globally)	Isolation of known cases and quarantine of close contacts
Phase 4a, 5a, 6a Pandemic virus identified, but no cases in Africa)	Isolation of known cases and quarantine of close contacts
Phase 4b, 5b, 6b (Virus present in Africa, but not in Nigeria or neighboring countries)	Isolation of known cases and quarantine of close contacts
Phase 4c, 5c, 6c, 4d, 5d, 6d (Local and/or Regional Outbreak - first cases of virus in Nigeria or at least one neighboring country)	Isolation of known cases and quarantine of close contacts. Consider limited community mitigation measures and social distancing strategies.
Phase 4e, 5e, 6e (Widespread Regional Outbreak - cases in Nigeria and three neighboring countries)	Consider increasing level of community mitigation measures and social distancing strategies, including cancellation of large public events and possible closure of schools in outbreak areas.
Phase 4f, 5f, 6f (High Risk Regional Outbreak - cases in Nigeria and three neighboring countries, including widespread outbreaks in schools)	Significant community mitigation measures, including cancellation of large public events and closure of schools. Consider closure of offices and limitation of public transport for limited periods of time in major outbreak areas.
Phase 4g, 5g, 6g (Post-Pandemic Period)	As pandemic cases abate, begin cancellation of community mitigation measures.

ANNEX I (HEALTHCARE FACILITY PANDEMIC INFLUENZA PLANNING RECOMMENDATIONS) TO PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE PLAN – SEPTEMBER 2013.

Elements of a Written Pandemic Influenza Plan

(Note: It is anticipated that larger medical facilities, including major hospitals will have a detailed pandemic plan, while smaller facilities, including local clinics will have a much less detailed plan)

General Considerations

- ✓ The plan specifies the circumstances under which the plan will be activated.
- ✓ The plan describes the organization structure that will be used to implement the plan.
- ✓ Responsibilities of key personnel related to executing the plan have been described.
- ✓ A simulation exercise has been developed to test the effectiveness of the plan.
- ✓ A simulation exercise has been performed.

Surveillance Plan

- ✓ Syndromic surveillance has been established in the emergency department.
- ✓ Criteria for distinguishing pandemic influenza are part of the syndromic surveillance plan.
- ✓ Thresholds for heightened surveillance for pandemic influenza have been established.
- ✓ A system for monitoring for nosocomial transmission of pandemic has been implemented and tested by monitoring for non-pandemic influenza.

Communication Plan

- ✓ Responsibility for external communication has been assigned, including Public Information Officers (PIOs) for public health reporting, clinical spokesperson for the facility, and media spokesperson for the facility.
- ✓ An emergency communications plan which includes key points of contact, chain of communications, and process for tracking and communicating business and employee status has been developed.
- ✓ A system to track pandemic influenza admissions and discharges has been developed and tested.
- ✓ A strategy for regularly updating clinical, ED, and outpatient staff on the status of pandemic influenza, once detected, has been established.
- ✓ A media and the general public communication strategy has been discussed with local FMOH representatives.
- ✓ Procedures to keep patients and visitors informed of the status of the pandemic have been developed.

Education and Training Plan

- ✓ Responsibility for coordination of the pandemic influenza education and training program has been assigned.
- ✓ Language- and reading level-appropriate materials for educating all personnel about pandemic influenza and the facility's pandemic influenza plan have been developed.
- ✓ General topics for staff education include:
 - Prevention and control of influenza
 - Implications of pandemic influenza
 - Infection control strategies for the control of influenza, including respiratory hygiene/cough etiquette, hand hygiene, standard precautions, droplet precautions, and, as appropriate, airborne and/or contact precautions.
- ✓ Hospital-specific topics for staff education include:
 - Policies and procedures for the care of pandemic influenza patients, including how and where pandemic influenza patients will be cohorted
 - Pandemic staffing contingency plans, including how the facility will deal with illness in personnel
 - Policies for restricting visitors and mechanisms for enforcing these policies
 - Reporting to the FMOH suspected cases of pandemic influenza infection.
 - Measures to protect family and other close contacts from secondary occupational exposure.
 - Psychosocial impacts of a pandemic, signs of behavioral distress and counseling available to staff members and families.
- ✓ A system for tracking which personnel have completed pandemic influenza training is in place.
- ✓ A plan is in place for rapidly training non-facility staff brought in to provide patient care when the hospital reaches implements its surge plan.
- ✓ Staff is frequently reminded of the importance of hand hygiene and infection control practices.
- ✓ Clinical personnel, including outpatient healthcare providers, who can provide support for essential patient-care areas (i.e., emergency department, ICU, or medical units), have been cross-trained.
- ✓ Intake and triage staff have been trained to detect patients with influenza and to implement immediate containment measures to prevent transmission.
- ✓ A strategy for "just-in-time" training of non-critical staff who might be asked to assist clinical personnel (i.e., help with triage, distribute food, transport patients), students, retired health professionals, and volunteers who might be asked to provide basic nursing care (i.e., bathing, monitoring of vital signs, etc.); and other potential in-hospital caregivers (i.e., family members of patients) have been developed.

- ✓ Language-specific and reading-level appropriate materials for educating patients, family members, and hospital visitors during an influenza pandemic have been developed.

Triage and Admission Plan

- ✓ A triage coordinator to manage patient flow has been identified and assigned.
- ✓ A specific location has been identified for triage of patients with possible pandemic influenza, ideally physically separating patients with possible pandemic influenza from other patients seeking medical attention.
- ✓ The plan includes use of signage to direct and instruct patients with possible pandemic influenza on the triage process.
- ✓ A system for phone triage of patients for purposes of prioritizing patients who require a medical evaluation has been developed.
- ✓ A method for tracking the admission and discharge of patients with pandemic influenza has been developed.
- ✓ A system to identify patients with pandemic influenza vs. the “worried well” has been established.
- ✓ Plans to enhance the hospital’s capacity to triage by identifying volunteer resources and establishing additional triage sites have been established in conjunction with other healthcare facilities and the FMOH.

Facility Access Plan

- ✓ The facility has been assessed for security and physical access risks.
- ✓ A defined method of identification of staff and visitors has been established, ideally utilizing a unique badging system.
- ✓ A plan for enforcement of hospital access by hospital security services has been established.
- ✓ Contacts with local police forces have been established and there is a procedure in place for requesting police presence at the hospital.
- ✓ Hospital Security is aware and educated about procedures for enforcing facility access controls.
- ✓ Criteria and protocols for closing the facility to new admissions and transfers are in place.
- ✓ Criteria and protocols for limiting visitors have been established.

Occupational Plan

- ✓ A system for rapidly delivering vaccine or antiviral prophylaxis (if available) to hospital personnel has been developed.
- ✓ A method for prioritizing healthcare personnel for receipt of vaccine or antiviral prophylaxis based on level of patient contact, personal risk for influenza complications and criticality of function has been established.
- ✓ A system for detecting symptomatic personnel before they report for duty has been developed.

- ✓ A procedure to identify and reassign personnel who are at high risk for influenza complications (i.e., pregnant women, immunocompromised healthcare workers) has been developed.
- ✓ Mental health and faith-based resources that will provide counseling to personnel during a pandemic have been identified.
- ✓ Strategies for accommodating and supporting personnel who have family care responsibilities have been developed.
- ✓ Workload/tasks that could be taken over by volunteers to ease workload on clinicians have been identified.
- ✓ Procedures to reinforce proper use of PPE, hand hygiene, and other infection control measures have been established, including training in use of infection control equipment.
- ✓ Plans were made to meet workers' physical needs at work (i.e., food and housing, rest and recuperation including breaks from PPE and patient care) and provide emotional support and counseling.
- ✓ A policy to address staff members who refuse to work with influenza patients.
- ✓ A sick leave policy to manage personnel who have symptoms of or documented illness with pandemic influenza, including provisions for the handling of the staff who become ill at work, when personnel may return to work after recovering from pandemic influenza, when personnel who are symptomatic, but well enough to work, will be permitted to continue working, and personnel who need to care for their ill family members has been developed.

Vaccine and Antiviral Use Plan

- ✓ Logistics for obtaining influenza vaccine/antivirals have been established.
- ✓ A contact for obtaining antiviral prophylaxis has been identified.
- ✓ A priority list (based on the FMOH guidance) and estimated number of patients and healthcare personnel who would be targeted for influenza vaccination or antiviral prophylaxis has been developed and has been shared with appropriate FMOH authorities.
- ✓ A system for rapidly distributing vaccine and antivirals to patients has been developed.
- ✓ A system for documenting influenza vaccination of healthcare personnel has been established.

Surge Capacity Plan

- ✓ A plan is in place to address unmet staffing needs in the hospital.
- ✓ The minimum number and categories of personnel needed to care for a group of patients with pandemic influenza has been determined.
- ✓ Responsibility for assessing day-to-day clinical staffing needs during an influenza pandemic has been assigned.
- ✓ Criteria for declaring a "staffing crisis" that would enable the use of emergency staffing alternatives have been defined.

- ✓ The plan includes linking to local and regional planning and response groups to collaborate on addressing widespread healthcare staffing shortages during a crisis.
- ✓ A priority list for reassignment and recruitment of personnel has been developed.
- ✓ A method for rapidly credentialing newly recruited personnel has been developed.
- ✓ Mutual Aid Agreements (MAA) and Memoranda of Understanding/Agreement (MOUs/MOAs) have been signed with other facilities that have agreed to share their staff, as needed.
- ✓ Strategies to increase bed capacity have been identified.
- ✓ A threshold has been established for canceling elective admissions and surgeries.
- ✓ MOAs have been signed with facilities that will accept non-influenza patients to provide additional bed space for influenza patients.
- ✓ Areas of the hospital that could be utilized for expanded bed space have been identified.
- ✓ Anticipated durable and consumable resource needs have been determined.
- ✓ A primary plan and contingency plan to address supply shortages have been developed.
- ✓ Plans and procedures for obtaining resources and supplies have been discussed with FMOH and NEMA.
- ✓ Responsibility for the assessment and coordination of staffing during an emergency has been assigned and call-down lists (phone tree) are updated on regular basis.
- ✓ Admissions and discharge criteria for times when bed capacity is critically short have been reviewed and revised.
- ✓ At-home follow-up care for patients who have been discharged early and for those whose admission was deferred because of the limited bed space has been prearranged with home healthcare agencies.
- ✓ Support and back-up procedures to transfer patients when either capacity or capability is exceeded have been established with other hospitals in the area.
- ✓ Internal systems are in place to collect accurate data relating to bed supply and patient load and to report appropriate data to FMOH.
- ✓ Maintenance of essential medical services for persons with chronic medical problems served by the hospital (i.e., hemodialysis patients, drug infusion therapy, etc.) has been addressed.
- ✓ A strategy for handling increased numbers of deceased persons has been developed.
- ✓ Current inventory of supplies (i.e., body bags) and a projection of requirements to handle anticipated fatalities have been established.
- ✓ Supply sources for postmortem materials have been identified.
- ✓ Current capacity for refrigeration of deceased persons has been assessed and a strategy for acquisition of additional refrigeration has been developed.

- ✓ Plan for expedited processing of corpses is in place.
- ✓ If necessary, additional physicians have been trained and assigned to complete death certificates.
- ✓ Coordination with FMoH to expedite processing of death certificates has been accomplished.

LEGAL PREPAREDNESS

- ✓ Responsibilities to enforce medical evaluation of non-compliant persons who meet the pandemic influenza case definition and have symptoms of pandemic influenza, as outlined by the FMoH have been assigned.
- ✓ Review of national and subnational laws and regulations concerning credentialing of healthcare providers during a pandemic emergency has been accomplished and where appropriate, facility plans, policies and procedures have been updated to ensure compliance.
- ✓ Review of national and subnational laws and regulations concerning voluntary and involuntary isolation and quarantine of infected patients during a pandemic emergency and where appropriate, facility plans, policies and procedures have been updated to ensure compliance.
- ✓ Legal counsel and administrators have reviewed laws, regulations and labor agreements relating to overtime and/or flexibility of hours for staff during a pandemic emergency and where appropriate, facility plans, policies and procedures have been updated to ensure compliance.
- ✓ Legal counsel and administrators have reviewed laws, regulations and labor agreements relating to sharing of confidential patient medical information with public health and other partners and where appropriate, facility plans, policies and procedures have been updated to ensure compliance.
- ✓ Pandemic influenza plans have been discussed with appropriate unions and other appropriate labor organizations.