



Pandemic Influenza Response Plan
Knox County Health Department
March 2007

Knox County Health Department Pandemic Influenza Response Plan

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Knox County Health Department CORE PLAN

Lead Agency

The Tennessee Department of Health (TDH) is the lead state agency for the response to a pandemic. Its plan is part of the Tennessee Emergency Management Plan (TEMP). TDH is responsible for establishing uniform public health policies for pandemic influenza response. Such policies include the establishment of criteria for implementing and rescinding social distancing measures (e.g., school or business closure), prioritizing recipients of vaccines and antiviral medications, and legally altering acceptable standards of health care or medical requirements. When a pandemic is imminent, an emergency will be declared and the TEMP will be activated.

The Knox County Health Department is responsible for implementing state public health response policies for Knox County once the TEMP is activated. Regional health departments that oversee multiple counties will work with their county health departments to implement response policies; the relationship between county and regional health departments in the oversight of implementation will vary depending on the capacity of the county health department. Regional health departments will be the primary points of contact for the communication of state public health response policies from TDH.

Regional health departments are specifically responsible for the following tasks:

- Develop continuity of operation plans for essential public health services, as defined by the TDH
- Timely collection (and interpretation) of regional surveillance data
- Assure that appropriate laboratory specimens from ill persons are collected and shipped by public health or private medical personnel (in collaboration with the state public health laboratory), in accordance with state and national laboratory testing guidance
- Detect, response and control of initial case of novel or pandemic influenza infection in humans, in collaboration with the TDH
- Respond to human exposure to animal influenza viruses with pandemic potential during the pre-pandemic period (WHO Phases 3-5), in collaboration with the TDH
- Administration of prophylactic antiviral medication (WHO Phases 3-5 only) as indicated by national or state policy
- Store pandemic vaccine, administer, and collect data as required by state and/or federal health officials
- Store, distribute and track antiviral medication (per Strategic National Stockpile protocols) in conjunction with acute hospitals where antivirals are administered
- Communicate with regional outpatient and inpatient health care facilities, long-term care facilities, and the public. Messages coordinated with TDH officials will be used
- Implement of social distancing measures under the direction of the TDH
- Assure the continuity of essential operations at regional and county health departments
- Address the psychosocial needs of the public health workforce during a pandemic
- Communicate to the public how to access social support services available in their area during a pandemic

Responsibilities of the Knox County Health Department

- Facilitate countywide pandemic planning and preparedness efforts
- Coordinate the community's emergency public health response through Emergency Support Function 8 (Health and Medical Services), and the Regional Disaster Plan
- Educate the public, health care system partners, response partners, business, community based and organization elected leaders about influenza pandemics, expected impacts and consequences, and preventive measures
- Conduct countywide surveillance to track the spread of the human disease and its impact on the community. Through liaison with agriculture and wildlife agencies, facilitate surveillance in animals in Knox County and monitor surveillance data
- Identify and declare diseases of public health significance and communicate such declarations to health system partners
- Coordinate planning for and implementation of disease containment strategies and authorities
- Provide ongoing technical support to the health care system including current surveillance guidelines, recommendations for clinical case management, infection control measures and laboratory testing
- Support the health care system's planning and response efforts for medical surge capacity including mass casualty and mass fatality incidents
- Support the development and management of local antiviral medication stockpiles
- Develop and implement protocols for the use of limited supplies of influenza vaccine and antiviral medicines consistent with national guidelines and in consultation with the Tennessee Department of Health CEDS
- Direct distribution and administration of vaccine, including mass vaccination efforts
- Provide effective communications to the public, the media, elected officials, health care providers, business and community leaders throughout public health emergencies

Support Agencies

A. Knoxville/Knox County Emergency Management Agency

1. Activate and operate the Emergency Operation Center
2. Keep appropriate government officials updated of the situation
3. Notify appropriate local, state and federal agencies
4. Maintain information flow between agencies represented
5. Coordinate any assistance requested by the Knox County Health Department with the overall operation

B. Emergency Medical Services

1. Provide ambulance/medical personnel for the eight (8) points of dispensing (PODs) or develop a response plan for vaccination sites or staging areas, if requested
2. Provide ambulance/medical personnel for the SNS warehouse during operation hours

C. Knox County School System

1. Provide concessions to volunteers at the points of dispensing sites (PODs) and identify staging areas
2. Provide administrative staffing for points of dispensing sites which could include principals, assistant principals, or other designated staff during operation hours

3. Provide maintenance staff to assist the cleanliness of the site, and initiate set-up of each site or staging areas and assist with storage of biohazard waste
4. Assist in the transportation of supplies from the Knox County Health Department, and/or SNS warehouse to points of dispensing sites using school maintenance vans, and personnel
5. Provide through already established contracts, school buses to assist in the transporting of the population from staging areas to vaccination points
6. Ensure school management is available for consultation during the event
7. Designate school personnel to serve as team leaders and assistant team leaders to work with clinic managers from the Knox County Health Department
8. Provide administrative offices as a command center, as well as the use of telephones and fax machines
9. Provide security for the eight (8) Points of Dispensing during non-operating hours

D. City/County Attorney

1. Provide legal/technical advice to the County/City Mayors, Knox County Health Department director, and/or public health officers during the event

E. Medical Examiner

1. Arrange for disposition of the deceased, working with area funeral home directors, area hospitals and volunteer agencies
2. Assist the Knox County Health Department and KEMA with Mass Fatality/Mass Casualty planning

F. County/City Mayor

1. Head the direction/control group in the County Emergency Management Agency Emergency Operation Center for their respective governments during this event, to include the City/County Finance Director, or his/her designee

G. Knox County Sheriff's Department

1. Provide security at the points of dispensing sites
2. Provide security at staging areas outside the city
3. Provide transport of vaccine to and from points of dispensing sites and hospitals, if requested
4. Provide management personnel at the Emergency Operation Center
5. Provide security at the health department if utilized for vaccination site, if requested.

H. City of Knoxville, Police Department

1. Provide security at the points of dispensing sites within the city
2. Provide security at staging areas within the city
3. Provide the transportation of vaccine to and from the vaccination sites, if requested
4. Provide management personnel at the Emergency Operation Center

I. County/City Public Works Department

1. Provide traffic control devices for points of dispensing sites and staging areas, if requested

2. Provide manpower, vehicles and equipment, if requested
3. Assist in securing additional contacts for traffic control devices (i.e. barricades, traffic cones, signal signage)

J. Tennessee State Guard

1. Assist with security at points of dispensing sites or staging areas

K. County/City Reserve Law Enforcement

1. Provide security at points of dispensing sites, staging areas, and Knox County Health Department

L. County/City Parks & Recreation

1. Provide personnel and vehicles for points of dispensing sites and staging areas, if requested

M. Knox Area Transit Authority

1. Provide transportation to points of dispensing sites and return to staging areas
2. Assist Emergency Medical Services, if requested
3. Coordinate with the Knox County Community Action Committee, the transportation of dialysis patients to centers
4. Maintain essential major route mass transportation as long as possible

N. Knox County School Bus Association

1. Provide transportation to points of dispensing sites and return to staging areas
2. Assist Emergency Medical Services, if requested

O. Knox Area Hospitals

1. Coordinate vaccination/oral medication distribution with Knox County Hospital Coordinator and/or Secondary Distribution Center Leader
2. Coordinate additional supplies/resources through Knox County Health Department Hospital Coordinator
3. Provide the Knox County Health Department Hospital Coordinator bed availability information, when requested

P. Local Ham Radio Association (METERS)

1. Establish Ham Radio communications for eight (8) PODS, sixteen (16) collection points, K-ROC and SNS Warehouse

Q. American Red Cross

1. Assist with recruitment and training of medical and non-medical volunteers for healthcare facilities
2. Provide public education and information to the public
3. Service delivery, specifically food and bulk distribution, working in conjunction with VOAD, Knox County Schools and Knox Area Churches

R. East Tennessee Mental Health Association

1. Provide/coordinate psychological support for healthcare/First Responders/public, through coordination of local mental health agencies

S. Knox County Community Action Community

1. Work with the Knoxville Area Transit, to coordinate the transportation of dialysis patients
2. Assist American Red Cross with food distribution, both meals and bulk to the homebound, and identified senior living centers
3. Assist the Knox County Health Department with Pandemic Influenza Information to the homebound, and area identified senior living facilities
4. Continue to provide/assist with Meals on Wheels program to homebound

Situations and Assumptions

Situation

Novel influenza viruses periodically emerge to cause global epidemics, known as pandemics, either directly from a mutated animal influenza virus or out of combination of animal virus with a circulating human influenza virus. Such viruses circumvent normal immune defenses and cause morbidity and mortality at higher rates than seasonal influenza strains; compared to seasonal influenza, a larger proportion of deaths occur in persons ages <65 years.

Novel influenza viruses that cause pandemics are transmitted from person to person in the same manner as seasonal influenza; typically, by mucosal inoculation with large respiratory droplets caused by coughing or sneezing or by touching contaminated environmental surfaces and subsequently touching one's mouth, nose or eyes.

Ten pandemics have occurred in the past 300 years; there is historical evidence of the success or failure of various strategies to contain or control the spread of influenza. With the exception of a vaccine, antiviral medication, and advanced medical care, many of the strategies used to respond to a modern pandemic are the same as the effective measures of previous generations. For example, through the compulsory restriction of movement in or out of certain regions, known as "cordon sanitaire" was not effective in any but the world's most remote island communities, broad community strategies used to reduce dense social contact were effective and the failure to use such strategies was devastating. The key activities to minimize the impact of a pandemic influenza virus are:

1. Surveillance for disease activity for situational awareness and timely activation of response strategies
2. Accurate communication within and among volunteer and professional responding organizations and with the general public
3. Use of social distancing measures to reduce unnecessary close contacts during a pandemic wave
4. Distribution and use of all available medical resources and personnel

Pandemic Threat Categories Defined by World Health Organization (WHO)

The duration of each period or phase is unknown, but the emergence of pandemic viruses is considered inevitable.

PERIOD	PHASE	DESCRIPTION
Interpandemic No human cases of novel influenza virus	1	No animal influenza viruses circulating with the potential to infect humans
	2	Animal influenza virus is circulating with potential to infect humans
Pandemic Alert Human cases with increasingly efficient human-to-human spread	3 (May 2006)	Human cases with rare or no human-to-human spread
	4	Small clusters caused by human-to-human spread
	5	Large regional clusters caused by human-to-human spread
	6	Geographically widespread and efficiently spread from human-to-human
Pandemic Worldwide epidemic		

Planning Assumptions

A. Basis of Plan

1. The plan is based upon a pandemic of the severity of the 1918-1919 influenza pandemic; public health interventions described herein represent maximal interventions under these conditions. If the characteristics of the actual event do not reflect planning assumptions, responses will be modified accordingly.
2. While focusing primarily on the response to a pandemic (WHO Phase 6), the plan also addresses the response to imported or acquired human infections with a novel influenza virus with pandemic potential during the Pandemic Alert Period (WHO Phases 3-5).

B. Objectives of Pandemic Planning

1. Primary objective is to minimize morbidity and mortality from disease.
2. Secondary objective is to preserve social function and minimize economic disruption.

C. Assumptions for State and Local Planning

1. The plan reflects current federal, state and local response capacity and will be revised annually in light of changes in capacity or scientific understanding.
2. Tennessee state and local pandemic plans should be consistent with each other and with federal guidelines unless these guidelines fail to reflect the best available scientific evidence.
3. Public education and empowerment of individuals, businesses and communities to act to protect themselves are a primary focus of state and local planning efforts; the government's capacity to meet the needs of individuals will be limited by the magnitude of disease and scarcity of specified therapeutic and prophylactic interventions and the limited utility of legal measures to control disease spread.
4. Knox County will not be able to rely on mutual aid resources, state or federal assistance to support local response efforts.
5. An influenza pandemic will result in the rapid spread of infection with outbreaks throughout the world. Communities across the state and the country may be impacted simultaneously.

6. Residents will need public information, education, and tools so they are prepared to take responsibility for basic needs (food, water, prescription meds, over-the-counter medications, etc.)
7. Antiviral medications will be in extremely short supply. Administration of local supplies of antiviral medications will be prioritized by the Tennessee Department of Health in accordance with guidelines from the Centers for Disease Control and Prevention (CDC). First priority will be hospitals for inpatients, with dispensing to other agencies and personnel determined at that time.
8. An influenza pandemic may occur in waves and last for 12 to 24 months.
9. A vaccine for the pandemic influenza strain will likely not be available for four to six months with new technology, following the emergence of a novel virus. Insufficient supplies of vaccines and antiviral medicines will place greater emphasis on social distancing strategies and public education to control the spread of disease in the country.
10. The number of ill people requiring outpatient medical care and hospitalization will overwhelm the local health system.
 - a. Hospitals/clinics will have to modify their operational structure to respond to high patient volumes and maintain functionality of critical systems.
 - b. The health care system may have to respond to increased demands for services while the medical workforce will experience up to 40% absenteeism due to illness.
 - c. Demand for inpatient and assisted ventilators will increase by 25% or more, and prioritization criteria for access to limited resources may be needed.
 - d. Emergency Medical Service responders will face extremely high call volumes for several weeks, and may face up to 40% reduction in available staff.
 - e. The number of fatalities experienced during the first few weeks of a pandemic could overwhelm the resources of the Medical Examiner's Office, hospital morgues and funeral homes.
 - f. Demand for home care and social services will increase.
11. Social Distancing strategies aimed at reducing the spread of infection such as closing schools, community centers and other public gatherings may be implemented during a pandemic

D. Disease Transmission Assumptions

1. Incubation period averages two days (range 1-10); WHO recommends that, if quarantine is used, it be up to seven days following exposure
2. Sick patients may shed virus up to 1 day before symptom onset, though transmission of disease before symptoms begin is unusual. The peak infectious period is the first two days of illness (children and immunocompromised persons shed more virus and for a longer time)
3. Each ill person could cause an average of two to three secondary cases if no interventions are implemented
4. There will be two to three "waves" (local epidemics) of pandemic disease in most communities; they will be more severe if they occur in the fall/winter
5. Each wave of pandemic disease in a community will last six to eight weeks
6. The entire pandemic period (all waves) will last about two years before the virus becomes a routine seasonal influenza strain

7. Disease outbreaks may occur in multiple locations simultaneously, or in isolated pockets

E. Clinical assumptions during the entire pandemic period (from federal planning guidance issued in November 2005)

1. All persons are susceptible to the virus
2. Clinical disease attack rate of $\geq 30\%$ (range: 40% of school aged children to 20% of working adults)
3. 50% of clinically ill (15% of population) will seek outpatient medical care
4. 2% - 20% of these will be hospitalized, depending on virulence of strain
5. Overall mortality estimates range from 0.2% to 2% of all clinically ill patients
6. During an 8 week wave, ~40% of employees may be absent from work because of fear, illness or to care for a family member (not including absenteeism if schools are closed)
7. Hospitals will have $\geq 25\%$ more patients than normal needing hospitalization during the local pandemic wave

F. Knox County, Tennessee, Burden of Illness from Influenza

Characteristic	Moderate*	Severe*
Illness	119,775 [30% of pop]	119,775 [30% of pop]
Outpatient care	59,890 [50% of ill]	59,890 [50% of ill]
Hospitalization	1,200 [1% of ill]	13,175 [11% of ill]
ICU Care	180 [15% of hosp]	1,975 [15% of hosp]
Mechanical Ventilation	90 [50% of ICU]	990 [50% of ICU]
Deaths (Case fatality rate)	240 [0.2% of ill]	2,395 [2% of ill]

(Based on 2006 Knox County population estimate of 399,254)
Rounding to nearest 5

Tennessee, Burden of Illness from Influenza Pandemic

Characteristic	Moderate	Severe
Illness (30%)	1.8 million [30% of pop]	1.8 million [30% of pop]
Outpatient care	900,000 [50% of ill]	900,000 [50% of ill]
Hospitalization	17,300 [1% of ill]	198,000 [11% of ill]
ICU Care	2,575 [15% of hosp]	29,700 [15% of hosp]
Mechanical Ventilation	1,300 [50% of ICU]	14,850 [50% of ICU]
Deaths (Case fatality rate)	4,180 [0.2% of ill]	38,060 [2% of ill]

G. Assumptions about the Pandemic Alert Period (WHO Phases 3-5):

1. During the pandemic alert period, a novel influenza virus causes infection among humans who have direct contact with infected animals and, in some cases, through inefficient transmission from person to person. By definition, during the Pandemic Alert Period, cases are sporadic or limited in number with human-to-human spread not yet highly efficient. Limited clusters of disease during this period can be quenched with aggressive steps to stop spread and treat infected individuals.
2. Individual case management will be conducted during the Pandemic Alert Phase. Isolation or quarantine, including the use of court orders when necessary, would be employed to prevent further spread of the virus. Antivirals would be used during this

time for post-exposure prophylaxis or aggressive early treatment of cases (supplies permitting).

3. Efforts to identify and prevent spread of disease from imported human cases and from human cases resulting from contact with infected animals will continue until community transmission has been established in the United States. Community transmission is defined as transmission from person to person in the United States with a loss of clear epidemiologic links among cases. This may occur some time after the WHO declares that a pandemic has begun (WHO Phase 6).

Concept of Operations

A. WHO Phases 3-5 (Pandemic Alert Period)

The lead agency for addressing influenza disease among animals at the level of the state is the Department of Agriculture described in TEMP Emergency Support Function (ESF) 11. TDH will provide support to the Department of Agriculture in the prevention of human infections and in surveillance and management of human disease as it pertains to contact with infected animals.

The TDH is the lead state agency for responding to human influenza disease caused by a novel influenza virus with pandemic potential, whether imported from an area with ongoing disease transmission or acquired directly from an animal in Tennessee. The State Health Operations Center (SHOC) would be set up, depending upon the scope of and duration of the situation. See the 2006 Tennessee Department of Health Pandemic Response Plan Section 7, Supplement 2, for isolation and quarantine guidelines during the Pandemic Alert Period. Guidance for hospital management and investigation of cases during the pandemic alert period is located in Section 4. The CDC will provide additional support and guidance regarding human infection management during this period.

The primary activities during this period are surveillance for imported cases or cases contracted from contact with infected animals. Any detected cases will be aggressively investigated by regional health departments with the assistance of TDH and contacts are to be identified, quarantined and treated, as appropriate. The objective is to stop the spread of the virus into the general community.

B. WHO Phase 6 (Pandemic)

The lead state agency for the public health response to a pandemic is the Department of Health, working in collaboration with regional health departments. The state and regional health department's response will be conducted in collaboration with federal response agencies; primarily, the Department of Health and Human Services (HHS) and Department of Homeland Security (DHS).

The primary activities are surveillance for disease, communication and implementation of general distancing measures, support of medical care services, appropriate use of available antiviral medications and vaccines, and response workforce support. The state TDH is primarily responsible for communication with federal health authorities and creating statewide pandemic response policies; the implementation of response measures is the

responsibility of local communities and regional public health authorities. Operational details are outlined the operational sections of the regional health department pandemic plan.

Section Summaries

Public health pandemic response policies are outlined in the attached sections. Supplements contain additional detail on state policies and procedures in a specific aspect of the section. Attachments to sections or supplements may be sample forms, excerpts from the federal pandemic plan, recommendations for institutional pandemic plans or other illustrations. Each section is briefly summarized below.

Section 1 Continuity of Operation

This section outlines the essential Knox County Health Department operations that must be sustained during the entire pandemic period. All staff will be shifted to maintain essential services.

Section 2 Disease Surveillance

This section outlines the use and enhancement of current influenza surveillance strategies to monitor for early human infections caused by a novel influenza virus with pandemic potential and to track and respond to the spread of influenza during a pandemic. A focus of this section is the Sentinel Provider Network, a network of outpatient physicians who report the percentage of their patients seen with influenza-like-illness (ILI) and submit occasional specimens for culture at the state laboratory during influenza season.

Section 3 Laboratory Diagnostics

This section outlines laboratory testing and result reporting procedures for novel influenza viruses in Tennessee and describes the volume of testing possible with current resources. The Section also highlights the criteria for novel influenza virus testing before a pandemic (requires concurrence of CEDS physician) and the purposes and criteria for testing specimens during a pandemic. Attachment A contains laboratory guidance from the federal Health and Human Services Pandemic Plan, released in November 2005.

Section 4 Healthcare Planning

This section outlines the details of healthcare provision, focusing on acute care inpatient facilities, before and during a pandemic. Because the exact nature of pandemic disease cannot be known with certainty, clinical treatment guidelines will be distributed to providers as they become available.

This section outlines an explicit framework for ethical pandemic planning and decision making during a pandemic. This section provides a context for understanding the principles used to formulate policies regarding allocation of resources and disease control measures in the pandemic planning.

Supplement One – The Knox County Health Department and local first responders (EMS, FD) are currently developing a protocol to facilitate movement

of patients in the event of a pandemic. The protocol will describe how the services will combine as staff depletes, enlisting the assistance of the Knox County School Bus Association as ambulance drivers, if needed. The Knox County Health Department Public Health Officer has outlined a “First Responder, Novel Influenza Protocol,” which has been reviewed and approved by the Knoxville Academy of Medicine – EMS Committee.

Supplement Two – The Knox County Health Department and representatives from Knox Area Dialysis Centers, along with the Knox County Community Action Committee and Knoxville Area Transit are developing transport protocols for the transporting of dialysis patients during a pandemic. The dialysis centers have discussed combining operations as staff/supplies deplete. Further meetings are scheduled.

Supplement Three – The Knox County Health Department and representatives from Knox County hospitals will be developing a “Clinical Triage Guideline” for standard of care to include EMS.

Section 5 Vaccine Distribution and Use

This section describes the principles of state vaccine use. If supplies are limited, as they are under current manufacturing conditions, all vaccine will be administered in designated health department clinics designated for this purpose over the course of months. All vaccinations will be recorded and reported as required by the federal government. Vaccine will be administered to people according to priority groupings, sub-prioritized within the broader groups that are designated by the federal government. Priority groupings are subject to change depending upon the nature of the virus and upon the ultimate decisions about priority groups.

Section 6 Antiviral Drug Distribution and Use

This section describes the policies for use of antiviral drugs to prevent spread of novel influenza virus outbreaks with pandemic potential and to treat patients during a pandemic. Principles for use are based upon currently available antiviral medications (5.1 million standard treatment courses in the US). Treatment courses will be pre-positioned in Tennessee in collaboration with the federal Strategic National Stockpile program. This section also refers to the use of antiviral medications stockpiled by hospitals for the use of hospital personnel (outside the state or federal stockpile programs).

In response to isolated cases of novel influenza virus, caused by contact with a sick animal in Tennessee or imported from infected areas, antiviral medications will be provided in accordance with national policies at the time. It is likely that post-exposure prophylaxis of close contacts will be done before the beginning of a pandemic, in efforts to stamp out outbreaks and prevent a pandemic from beginning. Once a pandemic begins the widespread nature of disease and limited supply of antiviral drugs will necessitate that post-exposure prophylaxis of

contacts be stopped in order to save as many lives as possible. During the pandemic, treatment courses will be dispensed to the top priority patients for treatment – those who are hospitalized with pandemic influenza.

Section 7 Community Interventions

This section outlines social distancing and other community interventions that may be implemented to respond to isolated cases of illness caused by a novel influenza virus with pandemic potential and during a pandemic. The main section reviews general community distancing measures to be implemented during a pandemic. The criteria for the implementation of social distancing strategies will be uniform across the state. The standard measures will be implemented in a county and its neighboring counties when laboratory and epidemiologic evidence of the presence of the virus circulating in a county.

This section will cover Knox County Health Department's management of outbreaks or isolated cases of a novel influenza virus with pandemic potential. Such outbreaks during the pre-pandemic period will be actively investigated and individual cases and contacts will be tracked and monitored to stamp out such outbreaks. Case management will include isolation of patients and quarantine of contacts, using court-ordered measures only if required. During the pre-pandemic period, the objective is to prevent the novel influenza virus from becoming capable of starting a pandemic. Once a pandemic begins and the influenza virus is spreading easily from person to person, individual case management becomes both inefficient and ineffective at controlling disease; at that point, the focus of disease control shifts to broad community interventions outlined in the main section.

The Knox County Health Department will work with area homeless shelters and health care providers to facilitate the development of plans to provide for continuity of operations and provide needed services for the homeless for the entire pandemic period, encouraging partnerships with volunteer organizations to meet these needs.

Section 8 Public Health Communications

This section outlines the communication goals and strategies of public health to meet the information needs of the general public, ill persons who are isolated or exposed persons quarantined at home, the media, the medical community and other pandemic response partners, including colleges, universities, K-12 public and private schools.

Section 9 Workforce and Social Support

This section outlines resources and issues for support to the public health workforce and social support to communities. Special attention is paid to the role of Volunteer Organizations Active in Disasters. This section is primarily intended to provide direction to regional pandemic planners in creating operational local plans to address social needs for the response workforce and affected individuals.

Training

The state pandemic preparedness plan will be used to guide the development of regional and local preparedness plans. Plans will be drilled in partnership with other stakeholders and updated to correct weaknesses identified through these exercises.

Acronyms

AIIRs	Airborne Infection Isolation Rooms
APHIS	Animal and Plant Health Inspection Service
APHL	Association of Public Health Laboratories
BMBL	Biosafety in Microbiological and Biomedical Laboratories
BSL	Biosafety Level
CDC	Centers for Disease Control and Prevention
CEDS	Communicable and Environmental Disease Services
CNS	Central Nervous System
DEA	Drug Enforcement Agency
DEOC	Director's Emergency Operations Center
DHS	Department of Homeland Security
DOH	Department of Health (Regional/Metro)
DOT	Department of Transportation
EMT	Emergency Medical Technician
DRC	Distribution and Repacking Center – This site is where the SNS material is taken to be stored, broken down and distributed to dispensing sites, hospitals and other sites.
EMA	Emergency Management Agency (Local)
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
ESF	Emergency Support Function
HEOC	Health Emergency Operations Center
HEPA	High Efficiency Particulate Air (Filter)
HHS	Department of Health and Human Services
HPAI	Highly Pathogenic Avian Influenza
ICU	Intensive Care Unit

IHC	Immunohistochemical
ILI	Influenza-like illness
IT	Information Technology
JIC	Joint Information Center
JCAHO	Joint Committee on Accreditation of Healthcare Organizations
KEMA	Knoxville/Knox County Emergency Management Agency
KROC	Knoxville Resource Information Center
LEA	Local Educational Authority
LRN	Laboratory Response Network
LZ	Landing Zone (Helicopter)
MD	Medical Director
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPD	Metropolitan Police Department
NIH	National Institutes of Health
OMS	Outbreak Management System
PCR	Polymerase Chain Reaction
PHO	Public Health Officer
POD	Point of Dispensing
PPE	Personal Protective Equipment
Pre-K	Pre-Kindergarten
Prophylaxis	Measures designed to preserve health and prevent the spread of disease
PTBMIS	Patient Tracking Billing Management Information System
Push Package	The partition of the SNS consisting of medical material that can arrive anywhere in the Continental United States within 12 hours
ROC	Resource Operations Center (Metro/Regional Command)
RT-PCR	Reverse-transcriptase Polymerase Chain Reaction
SARS	Severe Acute Respiratory Syndrome
SHOC	State Health Operations Center
SNS	Strategic National Stockpile

SMI	Stockpile Management Inventory
SPN	Sentinel Provider Network
Staging	Positioning the SNS at the designated receiving facility in such a way that it can be easily broken down to support shipment to dispensing sites
STD	Sexually Transmitted Disease
TARU	Technical Advisory Response Unit
TEMA	Tennessee Emergency Management Agency
TEMP	Tennessee Emergency Management Plan
THAN	Tennessee Health Alert Network
TB	Tuberculosis
TCA	Tennessee Code Annotated
TDH	Tennessee Department of Health
THP	Tennessee Highway Patrol
THA	Tennessee Hospital Association
TPA	Tennessee Pharmacy Association
USDA	United States Department of Agriculture
VMI	Vendor Managed Inventory
WHO	World Health Organization

Operational Section

Section 1 Continuity of Operations

The federal government requires local/regional plans to include a continuity of operations plan for essential health department services, including contingency planning for increasing the public health workforce to deal with worker absenteeism.

A. Purpose

To develop an operational plan for maintaining basic services provided by Knox County Health Department in the event of a pandemic.

B. Overview

In the event of a pandemic Knox County Health Department will consolidate staff to the main location at 140 Dameron Avenue in an attempt to maintain staffing for essential services only. Staff will be reassigned to meet the needs of providing essential services to the citizens of Knox County.

In the event it becomes necessary to dispense vaccine or antivirals in a mass fashion, all Knox County Health Department staff will be used to staff PODs.

C. Assumptions

1. Employee absenteeism could reach 40%.
2. Only essential services will be maintained in the first wave of a pandemic.
3. Staff will be utilized based on need and level of training.
4. Panic and fear may increase telephone calls to local health departments and increase reports of illness.
5. Constant relay of information to the local health departments and to the public will be necessary.
6. Redundant communications will be necessary.
7. Supplies will be depleted quickly and additional supplies may be difficult to obtain.

D. Plan of Action Pre-Pandemic

Knox County Health Department is working with community stakeholders to develop plans to minimize the impact of pandemic influenza. The goals are to reduce morbidity, mortality, and economic disruption. Knox County Health Department is facilitating planning and providing pandemic education to a variety of community stakeholders.

E. Plan of Action for Essential Services during Pandemic

1. Guidelines for all essential services:
 - a. Whenever possible treatment advice will be provided over the phone using standard triage and protocol guidelines
 - b. All attempts will be made to discourage patients from going to the ER unless necessary according to triage criteria established at the time
 - c. When possible, clients with influenza symptoms will be asked to send a well designee to pick up medications or other items distributed
 - d. All telephone conversations will be carefully documented in the client's chart
 - e. As long as there is adequate provider staffing, clients who cannot be managed over the phone will be asked to report to the designated clinic. If provider staffing is inadequate, these patients will be directed to a walk-in clinic or ER
2. The following are considered essential services:
 - a. WIC food vouchers and infant formula
 - 1) According to federal regulations WIC vouchers can be issued for three months
 - 2) Vouchers will be mailed using the plan that is already in place in cases of emergency
 - 3) In a severe pandemic, an exception from the USDA would be requested in order to issue WIC vouchers with less frequently than every three months, possibly by mail
 - b. Family Planning Services
 - 1) The following services will **not** be provided:
 - a) Enrollment of new family planning clients
 - b) Annual family planning examinations
 - c) Pregnancy testing (explanation below)
 - d) No method changes other than changes in brand of oral contraceptives
 - e) IUD insertions

- 2) Title X family planning clients will **not** be given prescriptions for their method. Only those clients with third party payers (i.e., TennCare) can receive prescriptions for their method.
 - 3) Clients who believe they may be pregnant can call the clinic for basic information about early pregnancy. They could be directed to the health department website if they have Internet access. For those patients who are pregnant presumptive eligibility could be done over the phone, if possible. Pregnant women are at particular risk and should be especially careful about being in public areas and should limit their exposure to large groups. As soon as public health officials announce that risks are decreasing, pregnant women should report to their health care provider.
- c. The following limited family planning services for combined hormonal contraceptives and progestin-only pills will be provided:
- 1) Following a telephone conversation with a registered nurse, nurse practitioner, or physician to screen history for contraindications, side effects, or new adverse events, clients will be approved to receive up to a one year supply of combined oral contraceptives, contraceptive rings, contraceptive patches or progestin-only pills. The amount of supply to be dispensed is to be determined by the RN, RNP, or physician.
 - a) Old dispensing orders (i.e., three packs and 10; or 3, 4, and 6, etc.) are superseded to assure that the individual has an adequate supply of the method throughout the pandemic.
 - b) Telephone conversation will include instructions regarding proper storage of the method.
 - c) The client or a person designated by the client will pick up their supply at the front desk after showing identification and signing a receipt.
 - d) Blood pressure checks will not be required.
 - e) Written client instructions including storage instructions will be included with the supply.
 - f) Condoms will be included with the method.
 - g) Treatment with Emergency Contraceptive Pills (ECP'S), for two events of unprotected intercourse, if indicated, and a client instruction sheet will be included with the method.
 - h) In the unlikely event of a serious adverse event related to the method, the client will be instructed to report to the nearest Emergency Department.
- d. The following limited family planning services for progestin-only injections will be provided:
- 1) Following a telephone conversation with a registered nurse, nurse practitioner, or physician to screen history for contraindications, side effects, or new adverse events, clients will be approved to report to the clinic for a progestin-only injection. Medical staff should minimize the visit and limit the time the client needs to be in the clinic for the injection.
 - 2) Clients may be approved to receive a supply of up to one year of injections with injection supplies if the client can give her own injection or has access to someone who can give her the injection. The clinic will not teach the client or her designee how to give the injection during this crisis, but if in the opinion of the nurse, nurse

practitioner or physician, the client has access to a safe mode of administration outside the health department, then she can be given the necessary doses and injection materials.

- 3) Old dispensing orders are superseded to assure that the individual has adequate family planning supplies throughout the pandemic.
 - 4) Telephone conversations will include instructions regarding proper storage of the method if the client will be receiving injections at home.
 - 5) The client or a person designated by the client will pick up the supply (assuming self-administration at home has been approved) at the front desk after showing identification and signing a receipt.
 - 6) Blood pressure checks will not be required.
 - 7) Written client instructions including storage instructions will be included with the supply.
 - 8) Condoms will be included with the method.
 - 9) Treatment with Emergency Contraception Pills, for two events of unprotected intercourse, if indicated, and a client instructions sheet will be included with the method.
 - 10) In the unlikely event of a serious adverse event related to the method, the client will be instructed to report to the nearest Emergency Department.
- e. Diaphragm users will continue to use their current diaphragm throughout the pandemic. Supplies of contraceptive gel for use with the diaphragm can be dispensed at the front window after a telephone conversation with the nurse, nurse practitioner or physician.
- 1) The client or a person designated by the client will pick up their supply at the front desk after showing identification and signing a receipt.
 - 2) Written client instructions including storage instructions will be included with the supply.
 - 3) Condoms will be included with the method.
 - 4) If indicated, treatment with Emergency Contraception Pills for two events of unprotected intercourse and a client instructions sheet will be included with the method.
 - 5) In the unlikely event of a serious adverse event related to the method, the client will be instructed to report to the nearest Emergency Department.
 - 6) Limited family planning services for reproductive health medical complaints in an established family planning client will be in “Guidelines for Essential Services.”
3. Vital Statistics include birth and death certificates and burial permits
- a. Critical activities that must be completed within current timeframes and accuracy standards:
 - 1) Death registration
 - 2) Issuance of certified copies of death certificates to funeral directors
 - 3) Reconciliation of facility reports of deaths within the county against death certificates received
 - 4) Track and obtain delinquent death certificates
 - 5) Issue Cremation Permits
 - 6) Issue permits for burial transit out of state (rare)

- b. After hours and weekend cremation permits will continue to utilize the after hours beeper/telephone procedure already established and published to funeral home directors and maintained by vital records personnel.
 - c. During a pandemic wave, counties should suspend local issuance of birth certificates from the State Vital Records Automated Index Retrieval System (AIRS) and refer those requesting a birth certificate to the state registry office (contact information below).
 - d. Of chief importance during a pandemic, issuance in the county involves the customer presenting in person to the health department. When customers order from the State Office via mail, telephone, or the Internet, there is no human-to-human contact.
 - e. For additional information, go to www.tennessee.gov and click on Vital Records.
Mailing Address: Tennessee Vital Records
Central Services Building
1st Floor
421 5th Avenue North
Nashville, Tennessee 37243
Phone: (615) 741-1763
FAX: (615) 741-9860
4. Tuberculosis (TB) Control: Evaluation, diagnosis, and appropriate treatment of active TB cases and TB suspects.
- a. Maintain TB clinic staff sufficient to evaluate TB cases and suspects only (not LTBI).
 - b. Provide history, physical examination, diagnosis, and treatment by the TB physician.
 - c. Provide appropriate diagnostic test, including x-ray, sputum collections for processing in the State Lab (AFB smears, cultures) and blood tests as directed.
 - d. Provide pharmacy services for Directly Observed Therapy (DOT) of active TB cases/suspects.
 - e. Provide DOT for all patients with diagnosed or suspected active pulmonary, laryngeal or pleural TB disease.
 - f. Proven DOT for all pediatric cases.
 - g. If staffing is severely limited, consider permitting self-administered therapy for extra-pulmonary cases *only*.
 - h. Report all active TB cases/suspects per routine.
5. Identification, evaluation and appropriate treatment of Tuberculosis contacts at highest risk for progression to active TB disease.
- a. Initiate contact investigation for close contacts of all AFB+ TB cases/suspects.
 - b. Ensure that all pediatric close contacts are fully evaluated with PPD, symptom screen, physical examination, and X-ray.
 - c. Provide self-administered LTBI treatment for all PPD+ contacts at high risk for progression to active TB disease (not medium- or low-risk patients).
 - d. Provide window therapy by DOT for all PPD close contacts under the age of five years.
6. HIV/AIDS Service

- a. HIV Centers of Excellence clinic services will be limited during the pandemic. Due to increased risk because of compromised immune systems in persons with HIV, the following services will be postponed until the risk has decreased:
 - 1) Routine HIV counseling and testing
 - 2) Annual and semi-annual Ryan White certification. If allowed, these could be done over the phone.
 - 3) Office visits for routine follow up
 - 4) Routine lab work
 - 5) Non-emergency dental care for COE patients.
 - b. The following services will be provided in AIDS Centers of Excellence:
 - 1) After phone consultation with a nurse, nurse practitioner or physician, prescription refills will be sent to the Ryan White mail order pharmacy.
 - 2) After phone interview with nurse, nurse practitioner or physician, patients who have been assessed and determined to need further evaluations will be instructed to report to the nearest Emergency Department. Since these patients have compromised immune systems and Emergency Departments may be filled with seriously ill flu patients, a referral to an Emergency Department should be carefully considered.
7. STD Services
- a. The following services will **not** be provided:
 - 1) Group education sessions
 - 2) Disease surveillance including both HIV and STDs
 - 3) Disease investigation, contact tracing, and partner notification
 - b. The following services will be provided for persons who are symptomatic:
 - 1) Following a telephone interview with a registered nurse, nurse practitioner or physician to screen history for previous STDs and symptoms, persons assessed by the staff as needing further evaluation will be given a specific appointment time to limit exposure in the clinic. Treatment will be provided on site. If appropriate, partner delivered therapy will be provided.
 - 2) If no qualified staff is available to see the patient and symptoms warrant, the patient may be referred to the nearest Emergency Department. Emergency Department referrals during pandemic flu should be carefully evaluated since Emergency Department staff will be dealing with the seriously ill.
8. Immunization Program Services
- a. During a pandemic or other protracted public health crisis, certain immunization services must be provided regularly to prevent other serious vaccine-preventable diseases. Children whose immunizations are delayed are at high risk of failing to catch up and complete their immunizations on time. Under immunized infants are at high risk for Hib meningitis, pneumococcal disease and pertussis.
 - b. During a local pandemic wave, childhood immunization clinics should be operated at least one-half to one day each week for routine immunizations; priority should be given to vaccinating children <18 months of age.
 - c. Routine adult immunization services may be suspended during the local wave, though emergency immunization for adults should not be suspended (e.g., tetanus prophylaxis following a wound).

- d. Immunization clinics and waiting areas should be separate from those where ill patients may be present. Only patients and accompanying adults who are not ill should be permitted in the immunization clinic.
 - e. The total pandemic period of 12-18 months will include months without significant local pandemic activity. During these periods, full immunization services should resume.
9. Primary Care-Limited Services
- a. As long as staffing is adequate routine 8:00 am to 4:30 pm hours will be maintained. There will be no extended hours for patient care.
 - b. Acute illnesses will be managed by phone and/or office visit. Both pediatric and adult primary care services will be limited to medically necessary.
 - c. Patients will be cohorted based on symptoms
 - 1) Flu-like symptoms to current APC clinic
 - 2) Non-flu visits to current Pediatric Clinic
 - 3) Staff will be re-assigned to cover needs
10. Management of Pharmacy
- a. Pharmacy will dispense at least three months of chronic medications at a time with refills for one year.
 - b. A well family member will be encouraged to pick-up prescriptions.
 - c. Knox County Health Department pharmacy will purchase over the counter medications for influenza symptoms relief to dispense to Knox County Health Department patients.
 - d. In the event Knox County Health Department moves to mass dispensing of vaccine and/or antivirals pharmacy services will be further reduced.
11. Essential Support Functions
- a. Systems will support data and communication systems
 - b. Property and Procurement will support supply demands
 - c. Security vaccine/antiviral
 - d. Laboratory/X-ray
12. The following services will be suspended:
- a. Home visitation programs, CHAD, HUG, Families First
 - b. Travel and most adult immunizations
 - c. Quality Management activities
 - d. Nutritional educational programs
 - e. Community Development activities
 - f. Routine check-ups of any kind
 - g. Environmental Health routine activities
 - h. Air Quality routine activities

F. Public Health Information Technology

1. Purpose

To establish guidelines to ensure Knox County Health Department employees can communicate using established Knox County Information System (KCIS) protocol and

have adequate information technology equipment to perform duties in emergency situations.

2. Assumptions

In addition to the communication methods outlined in Section 8, it is deemed necessary to establish Information Technology (IT) protocol to ensure clinical areas and staff authorized to work off site, i.e. from home or other location, have the necessary equipment to conduct business during a pandemic event.

Within the framework of the Knox County Health Department, current IT infrastructure provides adequate access to computer systems, printers, PTBMIS, network, email, phone, and internet that can meet the necessary operational requirements for “clinical services” outlined in the plans "Description of Basic County Health Department Functions during a Severe Pandemic," but it will be anticipated that there will be a slower than normal ordering process and computer supplies/stockpile may become depleted more quickly than in normal circumstances.

Access to Knox County Information Systems and associated networks has limitations from outside Knox County Health Department infrastructure. Access to specific or personal data files and or programs on the Knox County Health Department networks must be set up prior to an event to ensure software installations has been completed and firewall access have been authorized and tested.

3. Plan

Current IT infrastructure in “clinical areas” can accommodate the limited scope of services as outlined in the “Description of Basic County Health Department Functions during a Severe Pandemic” that includes limited appointment scheduling and processing, phone consults and medication dispensing. Requests for technical help will be prioritized and staff will be cross-trained to perform certain basic functions needed to maintain operation and user support.

It is recommended that Knox County Health Department staff that is authorized to work from home utilize Knox County Governments web portal to gain access to the “intranet” to remain up to date on information that maybe posted on the web and to have access to Knox County web mail. The email address that will be utilized to send group email to health department staff is health.users@knoxcounty.org

Limited VPN and Dialup access is available to Knox County Health Department personnel. This access must be approved by the Director, or his/her authorized designee, i.e. Deputy Director, and coordinated through the Health Systems Coordinator. Access using these protocols should be reserved for specific needs, i.e. sharing of data or access to a specific program. Examples include access to PTBMIS, RWCAREWARE, EARS, or shared database.

In the event of an outbreak, pandemic, or disaster the Knox County Health Department has a designated supply of laptops that will be pooled together to support offsite use.

Laptops can be configured to connect via a VPN connection if the user has DSL, or high-speed cable connection. If the user has an analog telephone line available, dialup access can be authorized and setup.

Only critical installs and/or updates will be performed during a pandemic period.

Plan to stagger work hours for critical IT staff.

Section 2. Disease Surveillance

A. Purpose

To detect and track pandemic influenza activity among humans, using multiple surveillance systems. Data will be used to make resource allocation and intervention decisions to include, if necessary closing schools and the canceling of public events.

B. Assumptions

Influenza disease is tracked each season using a variety of surveillance systems at the local, state and federal levels. An individual case of influenza is not a notifiable disease in state regulations, nor is it expected to become notifiable because of the resulting reporting burden with thousand of cases in a short period of time. Many years of traditional reporting systems have resulted in fairly reliable interpretation of trends in influenza-like-illness (ILI) activity associated with actual influenza disease in a community, despite the range of viruses capable of causing acute febrile respiratory illnesses during fall and winter months.

Surveillance for influenza among animals, primarily domestic poultry, is the responsibility of the Tennessee Department of Agriculture. The role of the Tennessee Department of Health (TDH) is to work with the Department of Agriculture to address human health needs in the event of detection of an animal influenza virus with the potential to threaten human health.

C. Surveillance Systems

1. Sentinel Provider Network (SPN)

Outpatient surveillance for influenza in Tennessee is presently conducted through SPN, according to CDC guidelines; this network is expected to be a primary source of outpatient influenza surveillance data during a pandemic. SPN providers collect two or three specimens from patients with ILI and from any unusual clinical cases, severe cases, outbreak-related cases, and patients with ILI during the summer. The current SPN provides for year round surveillance and a ratio of 1 provider per 100,000 population. The Knox County Health Department has four SPN participants.

2. Syndromic Surveillance

Knox County Health Department operates a syndromic surveillance system designed for early event detection of possible bioterrorism or outbreaks of disease. This system is managed and reviewed by the regional epidemiologist with backup support provided by the environmental epidemiologist and the health planner. Data sources include calls to the 911 Call Center, patient visits to three local emergency departments, patient visits to an outpatient physician's group and student absenteeism data from the Knox County

School System. Monitored events include cases or diagnoses of abdominal pain, breathing difficulty/shortness of breath, generalized illness, diarrhea, nausea, vomiting, gastroenteritis, pneumonia, bronchitis, hemoptysis, dysphagia, and influenza-like illness.

Data files are either emailed or uploaded to an FTP server every 24 hours. The regional epidemiologist reviews output from each data provider to determine if current counts of any event significantly exceed the average count of the previous seven days. If so, a pre-defined response protocol is utilized in order to determine the need for further follow-up. Responses to statistical aberrations include demographic and geographic analyses of data, contacting data sources to get an up-to-date assessment of the event(s) in question, contacting nursing shift supervisors to get information from other sources, and deploying the Public Health Investigation Team to begin an epidemiologic investigation.

3. School Absenteeism

The Department of Education obtains daily absenteeism rates from all local public school systems through an electronic reporting system. The Department of Education will share this data with the TDH to enhance surveillance for influenza activity evidenced by increasing absenteeism levels. A mild pandemic may not result in mandatory school closure; however, if a severe pandemic virus is detected spreading in the community using other surveillance methods, it is anticipated that schools will be closed. Locally Knox County Schools will be in contact with the Knox County Health Department Public Health Officer and Epidemiologist who will monitor school absenteeism, and report to TDH-CEDS.

4. Hospital Surveillance

Hospital surveillance is detailed in the State of Tennessee, Department of Health, Pandemic Influenza Response Plan, (Section 4, Supplement 2, Hospital Surveillance). Once the pandemic response plan is activated, daily electronic reports from hospitals to health departments may include Emergency Department data on ILI, confirmed disease, admissions and deaths.

5. Laboratory Surveillance

The percentage of specimens testing positive for influenza at state and research hospital laboratories are reported weekly. Seasonal influenza peaks typically associated with ~25% of submitted specimen testing positive

Section 3. Laboratory Diagnostics

A. Purpose

The purpose of laboratory testing is to confirm the diagnosis of human influenza caused by novel influenza viruses or a pandemic influenza virus. Such testing will be used to confirm the presence of a novel influenza virus or pandemic virus in the community. During a pandemic, in the absence of serologic testing, testing of clinical specimens also will be done to confirm infection, so that recovered persons can work with pandemic influenza patients without risk of contracting the disease, and to exclude those recovered persons from priority groups for the administration of vaccine.

B. Assumptions

The Tennessee Department of Health (TDH) Laboratory is the agency responsible for testing human specimens for pandemic influenza and influenza subtypes with pandemic potential (e.g., H5N1), as well as communicating with other sentinel laboratories licensed in Tennessee.

C. Plan

Laboratory Diagnostics for Pandemic Influenza – Knox/Regional Operation

1. During WHO Phases 3-5 the testing of birds or animals for influenza is the responsibility of the Department of Agriculture.
2. Criteria established by the TDH – Pandemic Influenza Response Plan, Section 3. Laboratory Diagnostics will be used to determine which human specimens should be collected and submitted for laboratory testing.
3. Current surveillance criteria for the pre-pandemic (WHO Phases 3-5) have been set, and are being followed by Knox area hospitals and Knox County Health Department.
 - a. Hospitalized patient with pneumonia/ARDS and travel to an affected country in the last 10 days,
 - b. Fever, cough/sore throat/shortness of breath, and contact with poultry or a suspected human case in an affected area in the last 10 days, or
 - c. Fever, cough/sore throat/shortness of breath, and laboratory work with H₅N₁ influenza virus).

The persons responsible for this surveillance activity are the notifiable disease reporting nurse, with oversight from the Public Health Officer who will notify TDH-CEDS for consultation, and approval of any testing at the state lab.

4. During the Pandemic, the staff at Knox County Health Department will utilize the TDH Pandemic Influenza Response Plan for guidance for all laboratory diagnostics: “Justification for confirmatory testing for a clinical case would include:
 - a. characterization of a significant epidemiologic or clinical change,
 - b. confirmation of a pandemic virus in a new region of the state or
 - c. confirmation of disease in a health care provider or other person at high risk of exposure in order to exclude the need for future vaccination and possibly reduce the need for Personal Protective Equipment (PPE) in the absence of an alternative serologic test.”
5. Hospital or providers who wish to submit specimens will contact the notifiable disease reporting nurse, or the Knox County Health Department Public Health Officer for approval before the specimen is submitted.
6. The notifiable disease reporting nurse will be responsible for the oversight of the collection and shipment of specimens by the health department to the Tennessee Department of Health, Laboratory. Guidelines provided in the TDH Pandemic Influenza Response Plan will be utilized.
7. The entry of patient and laboratory date into OMS will be the responsibility of the Knox County Health Department bioterrorism epidemiologist, with the assistance of the notifiable disease reporting nurse, and environmental epidemiologist.
8. If immediate notification of laboratory results is needed, the notifiable disease reporting nurse will carry out this function. The Public Health Officer will provide back up for this function.

Section 4. Healthcare Planning

A. Purpose

The objective for healthcare response planning is to assure effective communications, obtain necessary data from healthcare facilities, and to direct all available and necessary human and material resources to existing inpatient and outpatient healthcare facilities to keep them operating at optimal capacity.

B. Assumptions

The Regional Hospital Coordinator (RHC) will serve as the Regional Point of Contact with all area healthcare facilities for pandemic response, with the Emergency Preparedness Nurse Trainer and Emergency Response Coordinator serving as back up to the RHC.

Volunteer medical personnel will be critical assets for the medical community in responding to a pandemic. Details for how anticipated shortages of medical personnel can be addressed in Knox County are covered below in Section 4.C.3.

During a pandemic, demand will greatly exceed supply of certain medical resources such as hospital beds, mechanical ventilators, vaccines and antivirals. It will be necessary to allocate scarce resources in ways that can save as many lives as possible.

Knox County Hospitals/systems are in the process of developing their respective pandemic response to meet TDH requirements, to include surge capacity, infection control, isolation and triage.

All hospital emergency staff identified by the TDH, including Pandemic Flu Coordinators, Emergency Departments and Directors, Disaster Coordinators, Laboratory Managers, and Strategic National Stockpile Contacts have been placed into the Tennessee Health Alert Network (THAN) where they can receive alerts notifying them of any information pertaining to the pandemic flu, including emergency notification if there is an event. The Network Technical Specialist (NTS), Emergency Response Coordinator (ERC), RHC, and Volunteer Coordinator ensure that contact information within THAN remain current. ERC and NTS have the ability and authority to send out a THAN alert.

C. Plan

The state plan describes hospital infection control (TDH Plan, section 4, Supplement 1, p. 73), hospital surge capacity planning (TDH Plan, Section 4, Supplement 3, p. 118) and hospital scarce resource allocation (TDH Plan, Section 4, Supplement 4, p. 129) thoroughly; consequently, that information is not covered again in the plan. This section of the Knox County plan focuses the relationship between public health and healthcare facilities in the region.

1. Regional Hospital Coordinator Roles

- a. Serve as the regional point of contact with all area hospitals for Pandemic Response and Preparedness planning.
- b. Outline steps for obtaining emergency equipment and resources beyond normal use; provides access to emergency resources available through the Tennessee Emergency Management Plan (TEMP).

- c. Participate in individual hospital drills as they relate to Public Health Emergency Response Plans to test emergency and pandemic plans and evaluate hospital preparedness.
- d. Facilitate on-going communication between hospitals, public health officials, emergency planners, and other stakeholders for the purposes of pandemic planning and response.
- e. Ensure hospitals and other healthcare facilities within the region have adequate resources during an actual Pandemic in order to respond at an appropriate level based on the Public Health Regional Emergency Response Plans.
- f. Collaborate with Emergency Medical Services (EMS) and hospital personnel to direct the flow of patients among regional hospitals. Coordinate communications between hospitals and EMS will be conducted through the Regional Medical Communication Center and/or the RHC.
- g. Serve as the primary liaison between Public Health and hospitals and ensure surveillance measures are followed per Tennessee Department of Health Guidance during a pandemic. The Emergency Preparedness Nurse Trainer and the ERC have been trained and are prepared to serve as back-ups for the RHC during an emergency.

2. Healthcare Resource Tracking and Acquisition

Pertinent hospital resources (e.g., service availability, number of beds, bed types, number of staff, types of equipment, medication, and supplies) throughout the region will be tracked during a pandemic. Currently, this is accomplished by the Hospital Resource Tracking System (HRTS), which will be used to communicate resource needs and patient data to the RHC and local public health.

Tracked resources for hospitals in the region should include such data as (Examples): staffed, un-staffed, and licensed bed capacity, ICU capacity, isolation rooms, and routine and surge ventilator capacity will be regularly updated in HRTS. The RHC also maintains hard copies of essential hospital resources and key hospital personnel contact information for the Knox County and East Tennessee Regional Hospitals in a manual that is kept in a cabinet at the RHC'S designated area in the Knoxville/Knox County Emergency Operations Center. Additional copies of the manual are held by the Emergency Preparedness Nurse Trainer, the East Tennessee Regional RHC, and the staff at the Regional Medical Communications Center.

Additional resource request by hospitals will be communicated through the RHC to the Knoxville Emergency Management Agency (KEMA). Other healthcare agencies may make requests directly to KEMA. Additional resource requests may be coordinated through the Tennessee Emergency Agency (TEMA). The RHC may also initiate the processes for securing the Strategic National Stockpile (SNS) and other medications and equipment if assets are requested by hospitals within the region.

3. Volunteer Healthcare Personnel

Knox County Health Department will collaborate with the Knoxville Area Chapter of the American Red Cross to facilitate the movement of volunteers within Knox County. Volunteer healthcare personnel within Knox County will be directed to report to a Red Cross Screening and Training Center. Volunteers will be screened per American Red Cross standards, and medical volunteers will be required to present a copy of their

medical license for verification. All volunteers deployed to the healthcare facilities will receive basic HIPAA, blood-borne pathogen, infection control, and disease specific training at the Red Cross Screening and Training Center.

Qualified personnel will then be referred from the Red Cross Screening and Training Center to Knox County Health Department's Volunteer Coordination Center (VCC). Healthcare agencies requesting volunteers will contact the VCC directly with their needs. Hospitals and home healthcare agencies (for those sick people who do not meet the criteria for hospitalization) will receive prioritization in meeting their personnel resource needs, as both will be vital in meeting the basic medical needs of the community during a pandemic. Each agency receiving volunteers will take on volunteer management responsibilities to include: facility specific training and orientation, supervision, record keeping, scheduling, and recognition. (Appendix C)

4. Healthcare Communications

The Knox County Health Department will be directly and indirectly affected by pandemic influenza and will experience an influx of requests for information. An array of communications strategies will be required to meet these needs.

Specific communications tools of the Tennessee Department of Health are listed in Section 8, state pandemic influenza plan. State communications plans are outlined in ESF-5 of the TEMP. Local communications plans are outlined in ESF-5 of the Knox County, Emergency Operations Plan.

Urgent communications to healthcare providers and other groups will be necessary as rapidly changing conditions necessitate rapid information dissemination. The T-HAN will be used for this purpose to reach all T-HAN participants. Alerts can be sent by the ERC and NTS. Additionally, information may be sent to healthcare providers via Knox County Health Department's, broadcast fax system. The Public Information Officer, ERC, RHC, Emergency Preparedness Nurse Trainer, Volunteer Coordinator, Emergency Preparedness Administrative Assistant, Epidemiology Nurse and NTS have the ability and authority to initiate a broadcast fax.

Information that is unrestricted will be posted on the pandemic influenza web page at www.knoxcounty.org/health and shared through the media as appropriate. 211 – East Tennessee Information and Referral will also be utilized as a central information hub for the entire community. The PIO will have the primary responsibility of providing information to the media and working with Knox County Network Technology to ensure that information is posted on the website. In addition, regular conference calls or meetings may be held among health department personnel and other emergency responders to update the situation. Professional organizations (e.g., state associations, academies and boards) may be notified to forward information to their memberships.

Direct communications between the hospitals, KEMA, Knox County Health Department, and Tennessee Department of Health will occur chiefly via the RHC. Communications between hospitals and EMS will occur primarily through the Regional Medical Communications Center. Additional direct communication measures with other medical

providers will be taken as capacity is developed. Further information on public health information is addressed in Section 8.

5. Ethics and Principles for Planning and Response

The Knoxville Hospitals recognize the need to ensure that they are all in agreement regarding the allocation of scarce resource decision-making guidelines. Consequently, a Pandemic Influenza Ethics Planning Committee has been appointed, consisting of members of Knox County Health Department and all of the Knox County Hospitals. This Committee will work together, using available state and federal guidance to develop decision-making guidelines that are feasible, evidence-based, and transparent. The process for developing the guidelines will be in place prior to the pandemic, and the guidelines themselves will be developed as medical and epidemiological evidence becomes available.

6. Federally-Qualified Health Centers (FQHC'S) and Rural Health Centers

Cherokee Health Systems, the only FQHC within Knox County, serves as primary care provider for many of the indigent population of Knox County. The FQHC has been contacted and provided information regarding pandemic influenza planning. They are aware of the role they will play in serving their patients during a pandemic and are in the process of finalizing their plan. Once their plan has been finalized it will be provided to Knox County Health Department and will be added as an annex to the Knox County Pandemic Influenza Plan. A collaborative relationship will continue to be built with Cherokee Health Systems as pandemic influenza planning progresses.

Section 4

Healthcare Planning

1. Supplement One:
 - A. First Responder, Novel Influenza Protocol
 - B. EMS during a Pandemic (under development)

2. Supplement Two:
 - A. Clinical Triage Guidelines (under development)

**A. First Responder Novel Influenza Force Protection: Guidelines for a Graded Response
Approved by the Knoxville Academy of Medicine – EMS Committee**

1. Novel Influenza Case Definition

Pre-hospital: clinical symptoms with epidemiological risk factors

- a. Fever with cough, dyspnea, some with diarrhea and
- b. Travel to novel influenza endemic area within past tenys or
- c. Close contact (touching or speaking distance) with a person diagnosed with novel influenza.

2. Management of the Febrile First Responder during an Outbreak

- a. Exposure to probable or confirmed case of novel human influenza strain
- b. Fever $\geq 38C$ (101.5F)
- c. Symptom evaluation and symptom-specific treatment
- d. Oseltamivir 75mg po BID x5 days (influenza A/avian influenza or influenza B) unless alternative diagnosis is evident or novel influenza is ruled out in exposure
- e. Off duty and home isolation (novel influenza)
- f. Medical evaluation including posteroanterior and lateral CXR, RT-PCR nasal or throat swabs
- g. Medical follow up
- h. Family Instructed in PPE use at home
If available, family and stationmate chemoprophylaxis (avian or pandemic influenza or unvaccinated close contacts at high risk for influenza-associated complications): oseltamivir 75mg po QD x7 days (with pediatric and renal function dose adjustments)

3. Fire Station, Office and Household Preventive Measures during an Infectious Respiratory Disease Outbreak

- a. Hand hygiene
 - 1) Soap and water hand washing in station/office/home
 - 2) Hand sanitizer hand washing in field
- b. No sharing of utensils
- c. Coughing/sneezing etiquette
 - 1) Cover nose and mouth, tissue preferred
 - 2) Hand washing
- d. Human influenza vaccination
- e. Daily fever checks (avian influenza post-exposure and pandemic influenza)
- f. Daily symptom surveillance (avian influenza post-exposure and pandemic influenza)

All potential actions outlined in the table would be carried out in consultation with Knox County Public Health Officer and guided by evolving case definitions and DHHS/CDC recommendations.

	Human Influenza-Regional Endemic	Avian Influenza-Sporadic Cases	Pandemic Influenza*
Personal Protective Equipment	1) Surgical mask, gloves, eye protection & hand washing on all <u>fever</u> or <u>respiratory</u> calls	1) Surgical mask, gloves, eye protection & hand washing on all <u>fever</u> or <u>respiratory</u> calls 2) May return to duty 24 hours after the	1) Surgical mask, gloves, eye protection & hand washing on <u>all</u> calls 2) Change into and out of uniforms at station on shift change 3) Gowns for respiratory procedures

	<ul style="list-style-type: none"> 2) PPE used for patient care for at least 7 days after the resolution of fever 3) N-95 for aerosolizing procedures 	<ul style="list-style-type: none"> resolution of fever. Off antipyretics 3) N-95 for aerosolizing procedures 	<ul style="list-style-type: none"> 4) Limit number of responders with patient to the extent practical 5) N-95 for aerosolizing procedures
Personnel Health Surveillance	<ul style="list-style-type: none"> 1) Report any symptoms with onset during a shift 2) Do not report to work with a fever 	<ul style="list-style-type: none"> 1) Report any symptoms with onset during a shift 2) Do not report to work with a fever 	<ul style="list-style-type: none"> 1) Twice daily oral temperature checks & symptom surveillance 2) <i>Consider</i> surgical mask use whenever out of the station 3) <i>Consider</i> 3-foot separation of personnel while in station 4) <i>Consider</i> 'work quarantine'
Oral Chemoprophylaxis (If Available in adequate supply and consistent with state and federal guidelines)	<i>Unprotected AND unvaccinated exposure</i> prophylaxis; <i>consider oseltamivir</i> 75mg po QD x7 days (influenza A or B)	<i>High-risk patient (undiagnosed) or unprotected exposure</i> prophylaxis; <i>oseltamivir</i> 75mg po QD x7 days	<ul style="list-style-type: none"> 1) <i>Unprotected high risk exposure (such as an aerosol producing procedure) e</i> prophylaxis; oseltamivir 75mg po QD x7 days (influenza A or B) 2) <i>Consider</i> pre-exposure prophylaxis; oseltamivir 75mg po QD (influenza A or B)
Patient Respiratory Symptom Treatment Protocol Modifications (e.g. BVM ventilation, endotracheal intubation or Combitube, airway suctioning, CPR, bronchodilators)	N-95 respirator, gloves, eye protection & hand washing with all respiratory treatment interventions	<ul style="list-style-type: none"> 1) N-95 respirator, gloves, eye protection & hand washing with all respiratory treatment interventions 2) <i>Consider</i> changing from nebulizers to metered dose inhalers with spacers (see below) 3) <i>Consider</i> low-flow O₂ by nasal cannula unless high-flow O₂ by mask needed based upon SpO₂ 	<ul style="list-style-type: none"> 1) N-95 respirator, gloves, eye protection & hand washing with all respiratory treatment interventions 2) <i>Consider</i> changing from nebulizers to metered dose inhalers with spacers (see below) 3) Change all PPE after respiratory interventions 4) Low-flow O₂ by nasal cannula unless high-flow O₂y mask needed based upon SpO₂
Temporary Metered Dose Inhaler (MDI) with Spacer Bronchodilator Protocol (Replacing nebulizer with mouthpiece or mask)	No protocol changes other than PPE use	<i>Consider</i> albuterol MDI (100ug/puff): Patient breathes 5 (0.5mg)-10 (1mg) puffs of albuterol in spacer (adult or pediatric), repeated as needed every 5-20 min. (150ug/kg up to 2.5-5mg)	<i>Consider</i> albuterol MDI (100ug/puff): Patient breathes 5 (0.5mg)-10 (1mg) puffs of albuterol in spacer (adult or pediatric), repeated as needed every 5-20 min. (150ug/kg up to 2.5-5mg)

B. Emergency Medical Services during a Pandemic

1. Purpose

The Knox County Health Department is the lead agency in Knox County for the response to a Pandemic.

2. Assumptions

- a. The pandemic will be at least two waves, lasting six to eight weeks, over an 18-24 month period.
- b. At least 40% of the EMS workforce may be depleted at the peak of a local wave, due to employee illness, family member illness, or school age children being home due to schools being closed.
- c. During the first weeks of a pandemic, EMS will see extremely high call volume, but will face inadequate staffing to provide prompt medical response.
- d. Regulations may be relaxed on transporting patients to a medical facility, if directed by hospital Emergency Department doctor or medical control, with specific clinical findings.
- e. Knox County will relax staffing requirements, as well as response time requirements.
- f. The pandemic will be widespread, so resources outside Knox County cannot be considered.
- g. During a Pandemic, day to day emergencies, (auto accidents, cardiac arrests, etc) will continue to occur so Knox County must make every effort to maintain an ambulance service.
- h. This protocol will be activated upon a “declared state of emergency”, by the Governor, State of Tennessee, or local executive government officials.

3. Supporting Agencies

- a. Rural/Metro Ambulance Service
- b. Rural/Metro Fire Department
- c. Lifeguard Ambulance Service
- d. Pro-Med Ambulance Service
- e. Knoxville Fire Department
- f. Knoxville Fire Department-EMS Division
- g. Knoxville Emergency Management Agency

4. Concept of Operations

During pandemic, emergency medical services, both transport and first responder, will be overwhelmed with high call volumes with a reduction of personnel and ambulances available to provide prompt responses.

Rural/Metro, the primary ambulance provider in Knox County will continue to respond to medical calls, until which time available staff (full-time, part-time) is depleted or high call volume makes it impossible to provide a prompt response. Rural/Metro will request assistance from Pro-Med and Lifeguard Ambulance for additional personnel and ambulances. All ambulances will move to a common dispatch frequency, whereupon Rural/Metro Dispatch will assume primary dispatch, and coordination of area responses.

Ambulance supplies will be provided by each service until they are depleted at which time Rural/Metro will supplement the other ambulances. Lifeguard and Pro-Med ambulance services will provide a supervisor to Rural/Metro, Ambulance Operations Center as unified command during the operation.

Rural/Metro Fire and Knoxville Fire Department will continue providing first responder on a limited basis, or until firefighters are depleted, whereupon both agencies will maintain firefighting capabilities, which may extend response zones inside or outside the city limits, into the county.

As medical staff depletes, and TDH-EMS/Knox County regulations on required staffing is relaxed, non-medical drivers familiar with Knox County will be utilized.

The Knox County School Bus Association has agreed to assist, by supplying drivers who are familiar with Knox County, since schools will be closed. They will report to the Rural/Metro Ambulance Operations Center for orientation. All ambulances may have at least an Emergency Medical Technician and a driver, or down to a First Responder and a driver. At this level, alternate modes of patient transport may be utilized and coordinated through the Knoxville Emergency Management Agency.

During the pandemic Rural/Metro dispatch will utilize call screening with specific clinical/triage protocols developed by the Knox County Health Department, Knox Area Hospitals, and the Knoxville Academy of Medicine-EMS Committee. Utilizing the pandemic clinical/triage protocol, developed by the Knox County Health Department Ethics Committee in conjunction with Knox area hospitals, if hospitals report full capacity to the Regional Medical Communications Centers, the ambulance crew will contact medical control, or closest medical facility with patient information. If all hospitals have reached surge capacity, and are unable to take the patient and with confirmation from a hospital Emergency Department doctor, or medical control, the ambulance crew will instruct the patient about proper “home” care which will include an informational pamphlet on home care, provided by the Knox County Health Department, along with a “patient release form,” to ensure abandonment does not occur.

Section 5. Vaccine Distribution and Use

A. Purpose

To administer vaccine against pandemic influenza in order to make the best use of scarce resources in light of medical, societal and ethical considerations in order to minimize disease morbidity and mortality. Vaccine must be administered efficiently and monitored appropriately in accordance with federal guidance.

B. Assumptions

The regional pandemic concept of operations for vaccine distribution and use is based upon estimates of production time, capacity, and vaccine efficacy at this writing. In the event that vaccine is given as an investigational new drug, distribution and usage would follow protocol specified by the federal government. Vaccine will be administered to individuals according to priority groups established by HHS and CDC. The prioritization of recipients may change in future federal guidance. The most important aspect of regional preparation is to determine how to identify members of each risk group and how to administer vaccine to them irrespective of their placement in future priority rankings. Therefore, the top priority in minimizing disease morbidity and mortality is to protect direct patient care providers and

those who maintain the critical processes to keep health care facilities operational. The second priority group is made up of those most likely to suffer severe illness or death as a result of infection. These patients may be identified by documentation of qualifying high risk conditions (e.g., possession of prescriptions, medical records). Persons due for a second dose of vaccine take priority over persons not yet vaccinated.

C. Vaccine Administration Priority Groups in Tennessee (based on tentative federal priority tiers as of November 2005)

1. Tier 1 (health care service providers)
 - a. All direct patient care providers in hospital settings (this includes physicians with privileges who are not hospital employees) and the top 10% of non-patient care personnel responsible for critical hospital operations
 - b. Direct patient care providers in outpatient facilities that will have to provide care to pandemic influenza patients (primary care, infectious disease, cardiology, pulmonology, oncology, diabetes, obstetrics, gastroenterology clinics, FQHCs, and outpatient public health clinics) and the top 10% of non-patient care personnel responsible for critical functions in these facilities. Outpatient clinics that do not normally provide such care but alter their scope of services to provide care to infected patients during a pandemic wave also qualify.
 - c. Emergency medical service personnel, (emergency medical technicians (EMT), paramedics and patient care providers in long-term residential care facilities
 - d. Certified first responder medical personnel affiliated with fire and police departments
 - e. Balance of non-patient care workers supporting essential functions in hospitals
 - f. Balance of non-patient care workers supporting essential functions in outpatient facilities providing care to pandemic influenza patients
 - g. Pandemic influenza vaccinators
 - h. Patient care providers in inpatient settings for non-pandemic influenza patients (e.g., Institutes for Mental Disease)
 - i. Health care providers in outpatient facilities providing essential medical services to non-pandemic patients (e.g., neurology, psychiatry, orthopedics, day surgery, pharmacists)
2. Tier 2 (Medically High Risk)
 - a. Persons 6 months to 64 years of age with two or more influenza high risk conditions, not including essential hypertension
 - b. Persons 6 months or older with a history of hospitalization for pneumonia or influenza or other influenza high risk condition in the past year
 - c. Persons \geq years with one or more influenza high risk condition, not including essential hypertension
3. Concept of Operations
 - a. Vaccine received at Knox County Health Department will be administered in accordance with federal priority guidelines. Public health staff will open the appropriate number of clinics to assure vaccine is distributed quickly and efficiently in accordance with federal and state guidelines. Knox County Health Department

will form teams of clinical and non-clinical staff to administer/dispense medications per protocol.

As part of the essential services protocol, nurses and clerks will be pre-determined to establish necessary training to include IND protocol, if necessary, to include appropriate privacy to review/sign consent forms, indications/contraindications of vaccine, proper form documentation, and data entry. If an IND protocol is to be used, staff will be appropriately trained to assure recipient receives the medication appropriately and is aware of IND information.

Each hospital Pandemic Flu Coordinator must provide to the RHC a pre-identified, prioritized list of employees that are eligible for vaccination. Distribution of available vaccine will be based on an across-the-board percentage of pre-identified hospital personnel needing vaccine. In order to alleviate crowding, dates/times for each hospital will be given to the hospital Pandemic Influenza Coordinator, as determined by the PHO.

Once all individuals identified in Tier 1-1 have been vaccinated, vaccine will then be offered to other direct care providers in Tier 1-2 through Tier 1-9 (see the state flu plan at http://www2.state.tn.us/health/CEDS/PDFs/2006_PanFlu_Plan.pdf). These providers will be identified from the Knox County provider database through broadcast fax notice detailing the process for vaccine receipt. After-hour appointments at Knox County Health Department will be utilized to administer and distribute vaccine to all identified.

It is not expected that tiers beyond the first two would be reached with vaccine manufactured during a pandemic. Vaccine availability to lower priority groups, Tier 2 - Tier 8 (http://www2.state.tn.us/health/CEDS/PDFs/2006_PanFlu_Plan.pdf for description from the state flu plan) will be decided at the state level and implemented at the same time statewide. Vaccine will not be allocated to a lower priority group until at least 75% of the estimated number of higher priority persons statewide have been vaccinated and/or supply exceeds the immediate demand in that group.

Identification of individuals in these tiers will require media involvement (refer to Section 8 of the Knox County Health Department Pandemic Influenza Response Plan). The vaccination tier criteria will be explained via newspaper, radio, and television and anyone that meets the tier eligibility requirements will be able to present at a pre-designated health department for vaccine. Vaccine will be administered only to individuals that have a written referral from their provider and/or employer that demonstrates vaccine eligibility status.

- b. Vaccine received at the Knox County Health Department Pharmacy will be immediately stored in accordance with CDC cold chain guidelines, by Public Health staff (pharmacist or other designee). In the event of a power loss and a failure of the emergency generator, vaccine will be transferred in compliance with county emergency vaccine storage and handling plans to UT Vet School.

- c. Knox County Sheriff's Department will be primary security during vaccination clinic hours with the Knox County Reserves serving as secondary.
 - d. Each Public Health vaccination team will need the following items:
 - 1) vaccine
 - 2) syringes
 - 3) alcohol pads
 - 4) adhesive bandages
 - 5) cotton balls
 - 6) ice packs
 - 7) coolers
 - 8) hand sanitizer
 - 9) paper encounter forms
 - 10) immunization cards, if required.
 - 11) appropriate VIS
 - 12) informational handouts discussing the vaccine and how to report adverse effects, which will be required of each hospital to designate an adverse effects doctor.Vaccination supplies will be reordered via normal operating procedures with vendors identified by Knox County Purchasing Department with emergency orders as necessary.
4. It is the responsibility of each hospital's Pandemic Flu Coordinator to notify the Knox County Health Department Hospital Coordinator of any special needs (i.e., language barrier, disability, etc.) that might be encountered by the Knox County Health Department Public Health vaccination team. Each recipient must present with picture identification and be listed by name on the pre-identified vaccine recipient list. Recipients will receive an immunization card noting the date of their first dose and the due date for the second dose. It is the responsibility of each recipient to communicate their immunization status to their employer.
5. The information systems to support tracking and allocation of vaccine distribution, use and monitoring will be utilized through the state. Each hospital Pandemic Flu Coordinator will notify Knox County Health Department RHC of any adverse events related to vaccine administration or dispensed medication. The Knox County Health Department Employee Health Nurse will assure any adverse event related to vaccine administration or dispensed medication is properly reported through the CDC's Vaccine Adverse Event Reporting System (VAERS) which also includes IND protocol monitoring, reporting, etc.
6. Paper encounter forms will be used to record the necessary information for vaccine administration. The data will then be entered into the Patient Tracking Billing Management Information System (PTBMIS) by the Public Health vaccination teams or other clerks familiar with data entry.
7. If during the second wave of the Pandemic a vaccine is made available to the public, Knox County Health Department will activate the Mass Dispensing/Vaccination plan whereupon eight "Points of Dispensing" sites will be established.

Section 6 Antiviral Drug Distribution and Use

A. Assumptions

With currently available antiviral resources, it is not expected that any antivirals will be prescribed to outpatients in private outpatient facilities or health departments.

B. Purpose

Antiviral drugs will be distributed to acute care hospitals for administration to patients ill enough to require hospitalization. Distribution will be in accordance with federal priority group guidelines and the ethical guidance for use of scarce resources in Section 4, Supplement 4 of the TDH Pandemic Influenza Response Plan.

C. Plan

1. Distribution

The Knox County Hospital Coordinator and Secondary Distribution Lead will be responsible for working with hospitals to assure they receive adequate supplies and to monitor the appropriate use of supplies. Knox County Health Department will use the existing Knox County Health Department/ETRO SNS plan for storage and distribution if storage outside the hospital is required.

2. Security

Security of antivirals is addressed in the Knox County Health Department/ETRO SNS plan. Acute care hospitals will be responsible for security of antivirals once distributed to them. It is recommended antivirals be stored in a highly secure area.

3. Tracking

The tracking of antivirals will be accomplished using the HRTS or an alternative database, depending on availability.

4. Monitoring

Adverse event monitoring and reporting will be done as required by the federal government. If the antiviral is used as an experimental new drug, written informed consent will be obtained, as well as the collection of additional data regarding side effects and/or potential adverse event, Knox County Health Department Immunization Department will monitor and provide follow-up to any adverse reactions.

5. Antiviral Drugs for Hospital Use

In addition to antivirals distributed through the system described above, hospitals may purchase additional dosages through the BT-HRSA funding and designated to particular hospital staff, unless otherwise directed by TDH.

Section 7 Community Interventions

Knox County Case Investigation and Management

1. Case Investigation and Outbreak Control

Knox County Health Department has an established procedure for handling case investigation and management of suspected cases of communicable disease. There are established protocols for handling the isolation of cases of Tuberculosis; these protocols have served as the basis for exercising methods of early case containment in the event of an outbreak of novel influenza, SARS or pandemic influenza. The Public Health Investigation Team (PHIT) has exercised the plan for all of these scenarios, with the latest drill being an avian influenza exercise carried out in May of 2006.

The Public Health Officer (PHO) of Knox County carries the legal authority (TCA 68-2-103, 68-2-104, 68-2-608, 68-2-609, as well as TCA 4-5-208, through the Commissioner of Public Health), to implement community control measures during case investigation, and outbreak control in a pre-pandemic period. In such circumstances, the PHO will issue a directive to those with suspected pandemic influenza to be isolated; the PHO will also determine if contacts of pandemic influenza cases need quarantine based on interviews with the case and identified contacts. The identified contacts will also be issued a directive.

In the event that a case or a contact does not agree to isolation or quarantine, the PHO, with the assistance of the Knox County Law Director, will proceed to an emergency hearing in the Knox County Court System to obtain an order for isolation or quarantine for the clinically appropriate period of time. The Knox County Health Department Director and PHO maintain after-hour cell phone numbers for the Knox County Law Director's Office.

The PHO will utilize the following staff to implement thorough case investigation and contact management: the Notifiable Disease Reporting Nurse, Bioterrorism Epidemiologist, Bioterrorism Nurse Trainer, Environmental Epidemiologist, Communicable Disease Clinic nursing staff, and Communicable Disease Public Health Representatives. These staff members are already well trained in disease investigation and contact management and serve as members of the PHIT. The role of the PHIT in control of disease is as follows: 1) Case identification, 2) Identification of the source of initial exposure, if not already known, 3) Case Isolation and Management, 4) Contact Interview, and 5) Contact Management and Quarantine. The epidemiologist will provide expertise in data entry and interaction with OMS.

The organizational structure of the PHIT is established with the Director, PHO, or designee, serving as the Regional Health Operations Commander. (Typically it will be the PHO.) The PHO will provide oversight of all operations in case investigation and disease control and coordinate team efforts. The PHO will also be responsible for the legal aspects of isolation and quarantine and for community communication.

The notifiable disease reporting nurse will serve as the Operations Chief and Laboratory Contact, with oversight of case ascertainment, case/contact status, and lab

contact issues. The bioterrorism nurse trainer, who will specifically handle case management, will support this position. The bioterrorism epidemiologist will serve as the Epidemiology Team Leader and Contact Manager. This person will have responsibility for data entry into OMS, oversight of contact tracing and contact management. The Environmental Epidemiologist will assist with data entry into OMS. The Regional Hospital Coordinator will assist in case management oversight for hospitalized cases, and will oversee active hospital surveillance, if applicable.

CDC nurses and public health representatives will then work as either contact identifiers or as health monitors. Contact identifiers are responsible for the identification of contacts of suspect and confirmed cases of pandemic influenza. Health monitors are responsible for monitoring individuals in isolation, ensuring a safe environment, providing PPE and other necessary supplies, including food, medicine, etc. They will also provide in-person monitoring of the clinical status of patients who are hospitalized.

The staff of the PHIT will operate out of the Knox County Health Department (Main); from there the Operations Chief and Epidemiology Team Leader will initiate field visits and home visits. All PHIT members have cell phones for rapid communication and maintenance of the command structure.

If an imported case is identified, that person will be located with the assistance of local law enforcement and will then be placed in isolation as outlined below, or hospitalized with isolation if medically indicated. The patient will be interviewed for contact identification, as outlined above, and Knox County Health Department will notify TDH-CEDS of the need for assistance in contact location, depending on the type and itinerary of the transport mode. Knox County Health Department has been in contact with the public safety director at McGhee-Tyson Airport and even though the airport is located in Blount County, we would assist if requested. The Manager of the Greyhound Bus Line has been contacted with emergency phone numbers listed. An in-service has been scheduled for employees.

During a pandemic, case management will cease and aggregate case reporting using clinical diagnosis is likely to become the reporting method of choice, while Knox County/Region focuses on social distancing measures.

2. Support Services for Isolation and Quarantine

Knox County Health Department has a current protocol for providing housing and other commodities for those who are isolated or quarantined with Tuberculosis. Details are outlined in Policy and Procedures for Housing of the Homeless with Tuberculosis. Many of the procedures outlined in this Policy and Procedure will be followed for any patient who is under isolation or quarantine. For those patients who cannot be housed in their own home, Knox County Health Department will utilize one of the motel services with whom they currently interact to isolate active Tuberculosis patients. The accounting clerk is familiar with this process and has the

required paperwork. A copy of this protocol is kept in the CDC Clinic, the PHO'S office and the ERC'S office.

Knox County Health Department Administration will work with Knox Emergency Management Agency and Knox County Government to locate appropriate temporary housing in the event motels cannot be used. Food will be supplied by the Knox County Health Department, utilizing petty cash funds. If the financial needs exceed petty cash Knox County Health Department will use the credit cards held by the finance director and the assistant finance director. The Director of the Knox County Health Department will make arrangements with the Knox County Finance Director to secure funding to cover isolation/quarantine costs which will include housing, communication needs, food and daycare for children. The duration of isolation/quarantine is not expected to extend beyond a ten-day period, so these expenses will be short-term.

A realistic scenario is the temporary quarantine of person/persons who become symptomatic while in transit either by bus or airplane. The Knox County Health Department has met with the supervisor of Greyhound Bus Station and has discussed the McGhee-Tyson Airport Authority pandemic response plan with the Public Safety Officer. McGhee-Tyson airport resides in Blount County, but the Knox County Health Department will assist with temporary quarantine issues if requested, in consultation with the East Tennessee Regional Health Office.

If psychosocial support is needed, Knox County Health Department staff will request that a staff member (psychologist/social counselor) from the Helen Ross McNabb Center or from Cherokee Health System provide phone services to the person. If the patient prefers to have a minister/rabbi/other religious leader, the appropriate organization will be contacted and asked to provide phone services. The Knox County Health Department and the American Red Cross will maintain a faith-based organization listing for Knox County, and the Knox County Health Department Volunteer Coordinator will maintain for the health department. If person-to-person contact is requested for psychosocial support, the service provider will be fit tested by the Knox County Health Department Respiratory Program Coordinator prior to the first visit.

3. Social Distancing Measures

a. Purpose

To lower the peak numbers of cases during a pandemic wave by preventing opportunities for widespread viral transmission in crowded group settings.

b. Situation and Assumptions

Once a pandemic becomes widespread, isolation and quarantine are ineffective methods of infection control. At this point infection control measures will shift to what is known as social distancing.

For details regarding how the health department will notify the public, as well as business partners, refer to Section 8, Knox County Health Department, Pandemic Influenza Response Plan.

c. Principle of Social Distancing

In the absence of an effective vaccine, the most effective means of slowing the spread of a pandemic influenza virus are strategies known collectively as “social distancing.” Social distancing involves a range of policies designed to prevent opportunities for the virus to spread in crowded settings where ill and well people mingle.

Large, crowded gatherings accelerate the spread of the virus through communities leading to a steep rise in the daily number of cases and deaths. Sharply increasing case counts exacerbate the strain on the healthcare system, further reducing the resources available to seriously ill patients and increasing the likelihood of poor outcomes.

d. Legal Authority for Social Distancing

Pursuant to TCA 4-5-208, the Commissioner of Health is authorized to issue the emergency rules and regulations he or she deems necessary to protect the public and control the spread of an epidemic disease in the state. Emergency rules may be issued once a pandemic is imminent establishing the terms and conditions for mandatory suspension of discretionary public gatherings.

In addition to the emergency rule-making procedures, executive orders from the Governor during a state of emergency may be used to authorize such measures. Additional information may be found in Section 7, Supplement 1, Tennessee Department of Health Pandemic Influenza Response Plan.

e. Discretionary Public Gatherings Defined

Discretionary public gatherings included for cancellation during a pandemic wave in a county or neighboring county include, but may not be limited to:

- 1) Parades, public festivals, amusement parks and fairs
- 2) Recreational businesses or events where crowds (>100 persons) gather:
 - a) concert venues and theaters
 - b) professional and amateur sporting events (event may be televised without spectators or studio audience)
 - c) bars, nightclubs, dance clubs, and similar facilities where crowds mingle
- 3) Congregate worship services or community events with >100 persons
- 4) Additional discretionary public gatherings of >100 persons

f. Very Large Discretionary Public Gatherings (additional considerations)

Very large discretionary public gatherings are subject to cancellation during a pandemic, even in the absence of disease activity in the county where the event is held.

- 1) Public gatherings involving >10,000 persons

- 2) For example, college or professional football games, NASCAR events, national conventions, large concerts

Such cancellations will be ordered by the Governor, the Commissioner or his designee (e.g., a Public Health Officer) on a case-by-case basis in light of the pandemic conditions at the time.

Any notification to the public, business partners, schools (public/private), colleges and universities with approval or disapproval of such events by the Knox County Health Department PHO, using criteria established by the Commissioner of Health at the time, will incorporate Section 8, Public Health Communications Plan, Knox County Health Department, Pandemic Influenza Response Plan.

g. Exceptions Not Subject to Suspension

- 1) Facilities or events where patrons are not intended to mingle, but are seated at separate tables for service (e.g., seated restaurants)
- 2) Facilities which offer unaffected services in addition to events or venues mandated for closure may continue to offer the unaffected services
- 3) Businesses not affected by closure should consider other means necessary to minimize the risks of spreading infection in the workplace (see Tennessee Department of Health Pandemic Influenza Response Plan, Section 7, Attachment 2)

h. Roles and Responsibilities

The Commissioner of Health, or designee, is responsible for determining when to initiate and lift social distancing measures. These decisions will be based upon the recommendations of the State Epidemiologist using the best available epidemiologic information on pandemic disease severity and spread. The Public Health Officer is responsible for implementing and lifting mandatory interventions when informed that state criteria for implementation or discontinuance have been met.

i. Criteria for Implementation

The criteria for initiating local social distancing measures are:

- 1) A pandemic virus that causes morbidity and mortality in excess of normal seasonal influenza, and
 - 2) Laboratory confirmation of the pandemic virus in the county or neighboring county, and
 - 3) Epidemiological evidence from a state surveillance system indicating community spread of the pandemic virus in the county or neighboring county.
- Measures will be implemented on a county-by-county basis when criteria are met in a county or in a neighboring county.

j. Criteria for Lifting Restrictions

Measures will be lifted when surveillance systems indicate a return to essentially baseline influenza-like activity in the community (e.g., based on sentinel provider

reports). The established criteria may be modified if additional information becomes available indicating the optimal time to lift restrictions.

4. Knox County Social Distancing Strategies

- a. Social distancing strategies are non-medical measures intended to reduce the spread of disease from person-to-person by discouraging or preventing people from coming in close contact with each other. These strategies could include closing public and private schools, colleges and universities; closing non-essential government functions; implementing emergency staffing plans for the public and private sector including increasing telecommuting, flex scheduling and other options; and closing public gathering places including stadiums, theaters, churches, community centers and other facilities.
 - 1) The effectiveness of social distancing strategies is not known with certainty, nor is the degree of public compliance with measures that is necessary for success.
 - 2) Implementation of social distancing strategies in Knox County may create social disruption and significant, long-term economic impacts. It is unknown how the public will respond to these measures.
 - 3) It is assumed that social distancing strategies must be applied on a county-wide or state-wide basis in order to maximize effectiveness.
- b. The PHO will consult with the TDH-CEDS, TDH Commissioner, throughout all phases of a pandemic regarding the epidemiology and impact of the pandemic in and around Knox County.
- c. The PHO will review social distancing strategies and current epidemiological data during each phase and coordinate with the Knox County Mayor, the Mayor of Knoxville, and other affected officials regarding social distancing actions that should be implemented to limit the spread of the disease.
- d. The implementation of social distancing measures, including suspending large public gatherings and closing stadiums, theaters, churches, community centers, and other facilities where large numbers of people gather, will be made jointly and concurrently by the Public Health Officer, Knox County Mayor, Mayor of Knoxville and The University of Tennessee as directed by the TDH. (See Appendix B)
- e. The closing of all public and private schools, community colleges and universities in Knox County will be directed by the TDH and the PHO after consultation with local school superintendents, school presidents (public and private), utilizing requirements set forth by the Tennessee Department of Education for K-12 schools.
- f. Social distancing strategies during Phases 1, 2, and 3:
The Knox County Health Department will coordinate education for elected officials, government leaders, school officials, response partners, homeless services agencies, businesses, the media and public regarding the consequences of pandemics, the use of social distancing strategies, the associated impacts they cause and the process for implementing these measures.
- g. Social distancing strategies during Phases 4, 5, and 6:

The PHO will coordinate with elected officials regarding decision-making and the implementation of social distancing strategies that are commensurate with the severity of illness and societal impact of the pandemic.

Specific county-wide strategies that may be identified by the PHO include:

- 1) Encourage government agencies and the private sector to implement emergency staffing plans to maintain critical business functions while maximizing the use of telecommuting, flex schedules and alternate work site options.
- 2) Recommend that the public use public transit only for essential travel.
- 3) Advise Knox County residents to defer non-essential travel to other areas outside of the county affected by pandemic influenza outbreaks.
- 4) Suspend public events where large numbers of people congregate including sporting events, concerts, and parades, in consultation with The University of Tennessee, and the Tennessee Department of Health Commissioner.
- 5) Close libraries, childcare centers, churches, theaters, community centers, and other places where large groups gather.
- 6) Close public and private schools, colleges, and universities.
- 7) Suspend government functions not involved in pandemic response maintaining critical continuity functions.

The TDH will monitor the effectiveness of social distancing strategies in controlling the spread of disease and will advise the PHO when social distancing strategies should be relaxed. These decisions and reasons for them will be communicated to the public, business partners, colleges, universities, elected officials and schools utilizing Section 8, Public Health Communications, Knox County Health Department Pandemic Influenza Response Plan.

5. Knox County Mortuary Services

The Knox County Health Department has contacted local funeral home directors and has a current roster of available personnel, cold storage, body bags, and transport vehicles.

The Knox County Health Department Hospital Coordinator has compiled the cold storage capacity from Knox County hospitals, including the Knox County Medical Examiners Morgue.

The Knox County Health is working closely with the Knox County Medical Examiner to identify a means of processing remains during a pandemic. This includes a meeting with funeral home directors, hospitals, and first responders to discuss what course of action is to be taken.

The Knox County Purchasing Department has identified by letter of intent the following services:

- a) Refrigerated trucks for each hospital
- b) Necessary caskets and/or body bags

- c) Fuel/maintenance for refrigerated trucks
- d) Alternate warehouse preferable for cold storage

Section 8. Public Health Communications

A. Purpose

There is a need to establish multiple methods for accurate and rapid dissemination of information regarding pandemic status between public health entities and the public.

B. Assumptions

Communication often is the weakest link in disaster response; unless prepared in advance communications among agencies unfamiliar with each other can be difficult, as is timely and accurate communication with the public. The demand for information from all channels will be great once the pandemic becomes imminent.

Regularly updated, accurate, and current information must be readily available in a variety of formats to meet these information needs.

Routine methods of handling public inquiries will rapidly be overwhelmed and surge capacity is required. The Knox County Health Department will collaborate with the Tennessee Department of Health Public Information Officer, other trusted sources for health information, such as the Extension Service and community pharmacists, to assure that accurate and consistent information is readily available.

C. Plan

The Tennessee Department of Health will utilize the following communication tools as outlined in the TDH Pandemic Influenza Response Plan, Section 8.

1. Pandemic Influenza Website
2. Pandemic Influenza Electronic Updates
3. Pandemic Influenza Clinical Hotline for Patients
4. CDC Information Hotline
5. Pandemic Influenza Non-Clinical Hotline
6. T-HAN

Tennessee Health Alert Network (T-HAN) will be used by TDH as well as the Knox County Health Department, to initiate urgent communications to healthcare providers and other groups, assigned by the TDH, T-HAN Coordinator. This can be a redundant communication tool which will prove critical in any public health emergency.

The TDH Commissioner, CEDES, PIO, will have video conferencing available to all regional/metro health directors and public health officers during all phases of a pandemic.

Media briefing will be managed and coordinated by the Knox County Mayor's Senior Director for Communications and the Knox County Health Department Public Information Officer. The Knox County Health Department currently is training several staff members to function as Public Information Officers (PIO) because in a pandemic

event lasting for an extended period of time, one PIO will not be able to maintain critical contact with the media (printed/radio). Regular briefings will be scheduled during the pandemic, initially daily then moving to “as needed” depending on pandemic phase.

Initially, media briefings will be conducted at the Knoxville Emergency Management, Emergency Operations Center, Joint Information Center located at 605 Bernard Avenue, Knoxville, Tennessee 37919. If needed, media briefings will be moved to the Knox County Health Department, Community Room.

The Knox County Health Department has conducted several meetings with media (print/radio) to educate/inform on what will be expected of them during a pandemic and how important accurate/concise information will be to defuse any public hysteria. The Knox County Mayor’s Senior Director for Communications, as well as the Knox County Health Department Public Information Officer, maintains up-to-date media contact information, and they are on call for all emergencies.

The Knox County Health Department, or designee, and the Public Health Officer will schedule briefings with designated spokespeople to assure that subject matter experts and response leadership are able to manage the response to the pandemic and to assure the uniformity and accuracy of information provided. The Knox County Health Department will utilize Risk Communication/Media SOG taken from the Knox County Health Department Response Plan.

The Knox County Health Department will utilize the following communications tools:

1. Pandemic Influenza Website: www.knoxcounty.org/health. This website contains current information regarding Pandemic Influenza Planning, Power Point presentations, meeting dates, etc.
2. Pandemic Influenza Electronic Alert: On the Knox County Health Department website, members of the public have the opportunity to register for free electronic updates. All materials distributed will be approved for unrestricted public dissemination. The medical community has been encouraged to register so other related medical information (Epi-Update, immunization updates) may be distributed in a timely manner. Information already in the public domain (e.g., media reports, publications of the federal government, WHO, or specific journals) is presumed to be approved for unrestricted public dissemination within limits of copyright.
3. East Tennessee Information and Referral (211): The Knox County Health Department has entered into a “Letter of Agreement” with East Tennessee Information and Referral (211) to become our Pandemic Influenza Information Center. 211 will integrate information obtained from TDH-PIO and Knox County Health Department to be able to answer any questions the public may have. The Knox County Health Department will be able to immediately update critical information by accessing 211 main information site, as well as having a 24/7 emergency contact person. If requested, 211 will be able to go on line 24/7 and have 211 communicators work from home in a pandemic event.

4. NOAA Weather Radio: In conjunction with KEMA, TMA, and TDH, the Knox County Health Department will communicate to households, hospitals, and other agencies important messages regarding the pandemic event.
5. Broadcast Fax: This type of communication is already being used to communicate the Knox County Health Department Epi-Update and has over 1,000 medical professionals assigned to it. If needed, another broadcast fax is available in the Knox County Mayor's office and can be readily available.
6. Phone-Tree: The Knox County Health Department utilizes an emergency alert system for Knox County Health Department staff as well as agencies and organizations assisting in emergency planning for Anthrax, Chempacks, and Novel influenza. This includes, but is not limited to, EMS, EMA, LE, Ham Radio, Knox County Schools, etc.
7. Community TV – Channel 12: The Knox County Health Department will work with our local Community TV, Channel 12 to provide information to those who do not subscribe to Cable TV.

Section 9. Workforce and Social Support

The major providers of support services include volunteer organizations, profit or not-for-profit non-government organizations, and government agencies. Names and contact information of multi-service and single service organizations are listed below.

The presence of pandemic influenza in a community will affect the community in ways similar to other natural disasters, except that the response to pandemic influenza may be sustained for weeks and it may be one to two years before the disease is eliminated and the risk is over. Extreme stress will fatigue persons involved in responding officially or unofficially to the pandemic. This section does not address long-term support services or issues of recovery.

Examples of affected groups include:

1. Patients
2. Healthcare workers
3. Families of patients and healthcare workers
4. General public

Support service needs in this section are grouped into six categories;

1. Major multi-disciplinary organizations
2. Social support, including mental health
3. Food and medication
4. Financial issues
5. Child care
6. Employment and school issues

The Knox County Health Department cannot over-emphasize the vital importance of social distancing, including self-imposed isolation (staying home when sick until not contagious) to protect the community. Support for patients and families experiencing serious illness and deaths will be vital to helping them cope. In addition to resources listed here, the federal government posts information about pandemic preparedness and response at www.pandemicflu.gov.

The Knox County Health Department does not assume a primary role in this mission, but will facilitate access to services available to the public health workforce and community to lessen the emotional and physical impact during a pandemic. Knox County Government has an Employee Assistance Program (EAP) for mental health administered by Cariten Insurance and Human Resources will work closely with affected public health employee requesting assistance.

Public Health Workforce Support Groups

A. Public Health Workforce Support Groups:

1. Volunteer/Non-Government

a. American Red Cross

Provides food (meals/bulk), health, mental health services to address basic human needs, and public information and will maintain a phone bank to assist with the above services.

Knoxville Chapter: <http://www.knoxarc.org>
6921 Middlebrook Pike, Knoxville, TN 37909
865-584-2999 (24 hours)

b. Salvation Army

Provides emergency help with food, clothing, shelter
Knoxville:

409 North Broadway, Knoxville, TN 37917
Mailing Address: P.O. Box 669, Knoxville, TN 37901-0669
Don_Vicks@uss.salvationarmy.org
865-525-9401

c. Tennessee Association of Community Action

The mission of TACA is to empower the local agencies through advocacy, training, the provision of technical assistance and the development of quality services to promote self-sufficiency and personal growth in individuals, family, and communities of Tennessee.

Knox County
Community Action Committee
2247 Western Avenue, Knoxville, TN 37921
Mailing Address: P.O. Box 51650, Knoxville, TN 37950-1650
865-546-3500

d. Volunteer Organization Active in Disasters (VOAD)

The TN VOAD is an umbrella group consisting of fifteen organizations, including the American Red Cross, church affiliated organizations, civil air patrol, and ham radio operators. Its mission is to foster, through cooperation in mitigation and response, more effective service to people affected (imperiled or impacted) by disaster. Locally VOAD is assisting the Red Cross with food distribution and meal preparation. In the event Knox County's meals to the homebound can not prepare meals, VOAD will assist.

Larry Triplett, Chair, East TN Chapter,
865-207-1658

2. Government Resources – TDH Pandemic Influenza Response Plan, Section 9

B. Social Support /Mental Health

Social support refers to all services pertaining to prevention or control of distress and anxiety, in addition to more serious mental health issues. Resources are as follows:

- a. Mental Health Association of East Tennessee (education and support services) - 865-584-9125
Will work to organize community mental health during a pandemic.
- b. Mobile Crisis Unit (Knox, Blount, Loudon, and Sevier) - 865-539-2409
Working with Peninsula and Park West Hospital (referred to Peninsula)
- c. Peninsula Services (information and services) - 865-970-9800 or 1-800-526-8215
Working with ParkWest to discharge patients from Peninsula. ParkWest will move gero-psych patients from ParkWest to Peninsula in order to have more available beds at ParkWest.
- d. Family Assistance Service Center - 1-888-863-6178
Michelle Malrey-Johnson 615-313-4707
- e. Helen Ross McNabb - 865-637-9711
Spoke with Paula Hudson 329-9064 she states: Person that was over the plan has retired. When someone is appointed she will call me with the info I need.
- f. Catholic Charities – 865-524-9896
Provide sheltering services, counseling for trauma, contact between Red Cross, Catholic Parishes for specific needs in the Community (ie: bottled water, baby formula, etc.)

C. Food

1. On-line Grocery – www.netgrocer.com
offers home delivery to some parts of the country
2. Knox County Community Action Committee, Senior Nutrition Program
Food preparation and delivery for the elderly who are homebound to ensure adequate meals are provided in a pandemic
3. Second Harvest Food Bank of East Tennessee - 865-521-0000
922 Delaware Avenue, Knoxville, TN 37921
Services agencies such as churches etc. Will arrange for food deliveries to agencies.
Coordinating with American Red Cross
4. FISH Food Delivery – 865-523-7900
Automated phone line – 3 day supply of emergency food to those in need.
5. Knox County General Assistance – 865-577-7591
Emergency Assistance for qualifying persons with KUB and Rent.

6. Ladies of Charity - 865-522-6341
Assist in the supply of food and clothing for community.

D. Child/Elder Care Resources

The Knox County Health Department has worked closely with Knoxville Area Transit, Knox County Community Action Committee (CAC) and the American Red Cross to coordinate food preparation and delivery for the elderly who are homebound to ensure adequate meals are provided in a pandemic. To the extent that if the CAC kitchen becomes inoperable due to staff depletion, the American Red Cross and VOAD will prepare meals from church kitchens. This will include any senior center housing facility. Working with area churches in pandemic influenza planning, the Knox County Health Department strongly encourages church leaders to organize programs to assist the elderly members of their congregation, as well as other members, to establish a “Buddy System” to check on church members and assist with any needs.

The Knox County Health Department has conducted several meetings with area child care centers to emphasize pandemic planning and how to develop internal plans for dealing with staff shortages as well as contingencies for accepting additional children to assist with essential healthcare workers needing to go to work who have no other childcare options. This could be accomplished at healthcare facilities in non-clinical areas or at sites outside of the healthcare facility. If the healthcare facilities decide to plan for childcare, they are aware that their childcare areas must have less than 13 children per room and will be planning with daycare centers accordingly.