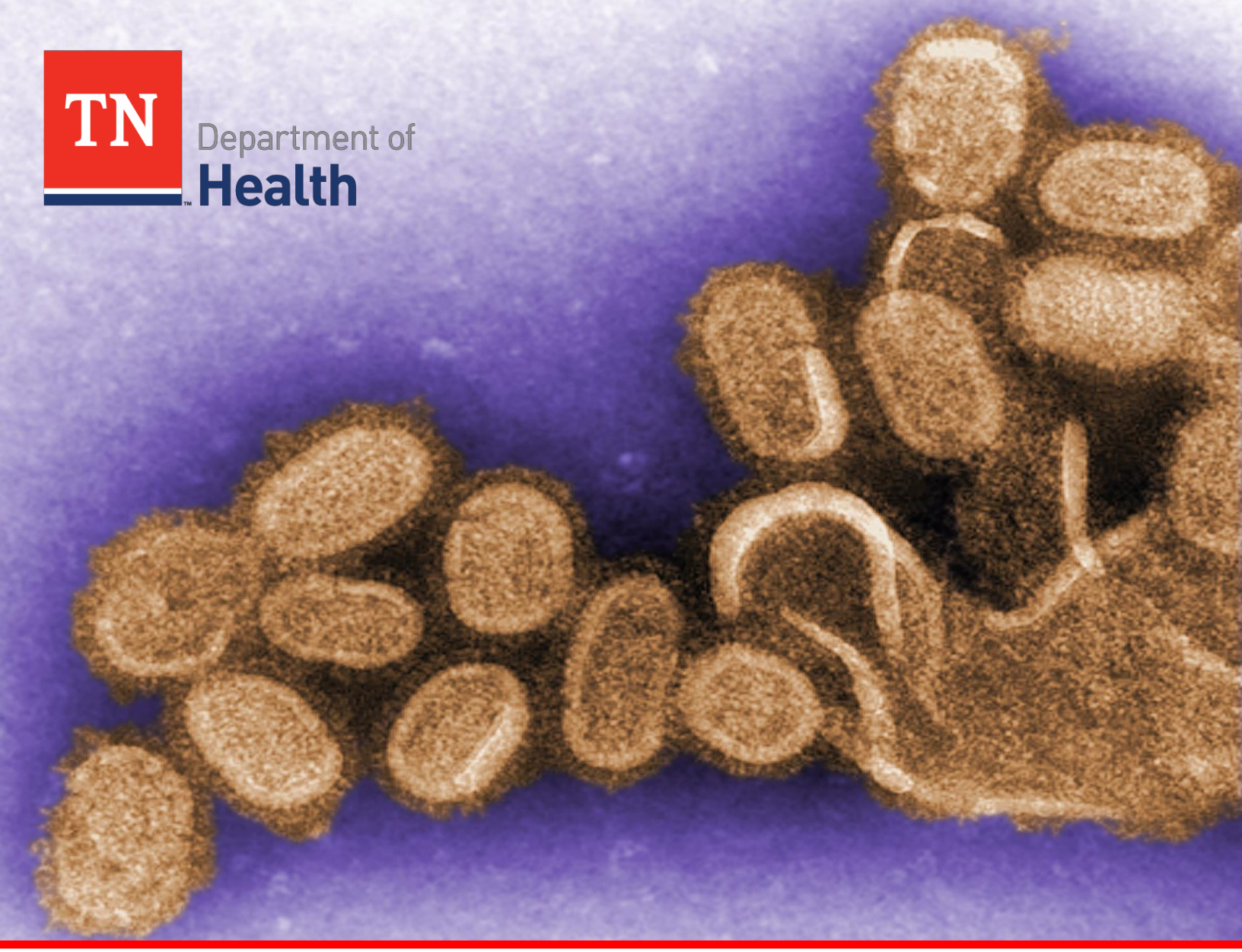

State Department of Health Novel Virus/Pandemic Influenza Response Plan

Tennessee Department of Health| Response Plan | March, 2020

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RECORD OF CHANGES			
DATE	**PAGE(S)**	**REVISION DESCRIPTION**	**ENTERED BY**
2/27/2020	Annex A	Revised based on input from SNS program	D. Green
3/01/2020	Annex F	Revised based on input from vaccination program	D. Green
3/01/2020	Annex I	Created Crisis Standards of Care Annex	D. Green
3/03/2020	Basic Plan	Reviewed, updated and reformatted basic plan	D. Green
3/10/2020	" "	" " " " " "	D. Green

Novel Virus/Pandemic Influenza Response Plan
Tennessee Department of Health
January, 2017
Basic Plan

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Cover Photo Description: Digitally-colorized image of influenza virus from 1918.
Cover Photo Credit: Image courtesy of CDC Public Health Image Library.

Novel Virus/ Pandemic Influenza Response Plan

Executive Summary

The goal of the revised Novel Virus Pandemic Response Plan is to provide decision makers with an actionable strategy should a pandemic outbreak occur. This plan has been revised to be consistent with the most recent CDC guidance published in June, 2017 and suggests recommended actions, both pharmaceutical and non-pharmaceutical, in the event of a pandemic outbreak. The format has also been updated to include all plans that may be implemented to reduce the impact of an outbreak on the state, in the annex section of the plan.

Major changes to the plan include:

1. The adoption of the CDC's pandemic intervals and domains as a framework for the response. The intervals follow the anticipated progression of an outbreak and may be applied regardless of its severity.

Intervals
Investigation
Recognition
Initiation
Acceleration
Deceleration
Preparation

Within each interval there are domains, as appropriate, which contain a decision awareness structure, designed to encourage timely action based on information available.

Domains
Incident Management
Surveillance and Epidemiology
Medical Care and Countermeasures
Vaccine Development and Distribution
Risk Communication
State and Local Coordination

2. Ensure that the response objectives are consistent with CDC guidance.
3. Identify clear state and local actions at each step of the CDC's pandemic response intervals.
4. Reference CDC influenza impact assessment assets available to the department during an outbreak.

5. Include copies of all relevant departmental plans in the annexes to reflect the department's real world response efforts. These mission specific annexes have been reviewed by program managers and updated based on their input. Specific annexes include:
    - Antiviral Drug Distribution and Use
    - Laboratory Diagnostics
    - Disease Surveillance
    - Legal Authority
    - Communications
    - Pandemic Vaccine Distribution
    - Volunteer Management

By reformatting this plan to make it more user friendly, department leadership will be able to identify and implement early actionable steps to limit the severity of a pandemic outbreak in Tennessee.

Novel Virus/Pandemic Influenza Response Plan
Tennessee Department of Health

I. Lead State Agency:

The Tennessee Department of Health (TDH) - Division of Communicable and Environmental Disease and Emergency Preparedness (CEDEP) is responsible for providing public health planning for pandemic influenza. The State Epidemiologist, the Deputy State Epidemiologist and the Emergency Preparedness staff will coordinate preparedness activities with regional and local health departments and other regional and statewide stakeholders.

II. Support Agencies:

Support agencies that would work with the Tennessee Department of Health in the detection and management of pandemic influenza within the State of Tennessee are:

1. Department of Agriculture
2. Department of Environment and Conservation
3. Department of Military
4. Department of Human Services
5. Department of Commerce and Insurance – State Fire Marshall
6. American Red Cross
7. Department of Mental Health and Substance Abuse
8. Department of Safety
9. Tennessee Emergency Management Agency
10. Tennessee Bureau of Investigation
11. Department of Education
12. Tennessee Higher Education Commission – Board of Regents
13. Department of Intellectual and Developmental Disabilities
14. Department of Corrections
15. Department of Transportation

The federal agency that would provide public health laboratory, epidemiologic and medical support during pandemic influenza is the Department of Health and Human Services (HHS), primarily the Centers for Disease Control and Prevention (CDC). Federal planning resources and information to support local preparation and response for all sectors are publicly available at www.cdc.gov/flu.

III. Purpose:

A. The purpose of this plan is to provide a framework for the public health response to pandemic influenza or a novel virus strain with pandemic potential. It also provides guidance for planning by individuals and other sectors of society. During a pandemic or outbreak of a novel virus with pandemic potential, this document will serve as an operational annex for Emergency Support Function 8 (ESF 8), which is part of the Tennessee Emergency Management Plan (TEMP). The TEMP will be implemented during a pandemic.

B. This plan provides standard pandemic response policies so local pandemic planners can create and exercise local pandemic plans focused on the implementation of statewide response policies.

IV. Situation:

Novel viruses or mutated flu strains periodically emerge to cause global epidemics, known as pandemics. The novel virus either results directly from a mutated animal virus or out of reassortment of an animal virus with a circulating human influenza virus. Such viruses circumvent normal immune defenses, leading to a higher rate of morbidity and mortality than seasonal influenza strains.

Novel viruses or mutated influenza viruses with pandemic potential are transmitted from person to person in the same manner as seasonal influenza. Typically, by large respiratory droplets caused by coughing, sneezing or by touching contaminated environmental surfaces and subsequently touching one's mouth, nose or eyes.

A vaccine, antiviral medication, and advanced medical care have proven to be most effective in addressing the threat of a novel virus. Additional response strategies have been employed and proven to be successful in reducing the impact of past pandemics. For example, broad community strategies used to reduce dense social contact have been effective and the failure to use such strategies exacerbates the impact of a novel virus. 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
5. Allocation of scarce resources, such as ventilators, in an ethical manner

V. Novel Influenza Mitigation Strategies:

No intervention short of mass vaccination of the public will dramatically reduce transmission when used in isolation. However, mitigation strategies using multiple non-pharmaceutical interventions have been identified as a way to significantly decrease human to human transmission. An even greater reduction can be achieved by combining such measures with targeted use of antiviral medication for treatment and prophylaxis.

Reducing the number of persons infected will reduce the burden on the healthcare system while minimizing the impact of a pandemic on the economy and society. Such intervention strategies may include but are not be limited to:

1. Isolation and treatment , with effective antiviral medications, of at risk persons with confirmed or probable pandemic exposure to the pandemic virus. Isolation may occur at home or in a healthcare setting depending on the severity of an individual's illness and/or the current capacity of the healthcare infrastructure.

2. Voluntary home quarantine of household member(s) with confirmed or probable case(s) or with other members of their ill family members. Consideration should be given to combining this intervention with the use of antiviral medications, providing sufficient quantities of effective medications are available, and a viable distribution plan is in place.

3. Dismissal of students from school (including public and private schools as well as colleges and universities) along with the cancelation or postponement of school based activities. The closure of childcare programs coupled with protecting children and teenagers through social distancing in the community should be considered as steps to protect the public. Closing of individual schools with high rates of infection should be considered during a moderate outbreak. Closing of all schools and daycare centers should be considered during a severe or highly severe outbreak. When considering these actions, secondary consequences should be taken into account. The economic impact of parents without the benefit of sick leave, for instance, could place a financial strain on families and the added stress of worrying about the possibility of losing a job could be traumatic.

4. The use of social distancing measures and personal hygiene measures for adults in the community and the workplace are essential steps that should be taken. Examples include, alteration of workplace environments such as working from home, diligently cleaning work surfaces, emphasizing healthy personal habits such as frequent hand washing, cough etiquette and decreasing the social density within the work environment. In the event of a severe outbreak canceling large gatherings must be considered.

5. Should effective antiviral medication or a vaccine become available, priority for early distribution should follow CDC guidelines.

VI. Planning Assumptions:

1. Little information on which to base protective actions will be available during the early phases of a potential pandemic.

2. It is possible that current antiviral medications may not be effective against a novel virus strain.

3. The development of an effective vaccine can be expected to take at least 4 to 6 months, possibly much longer, with limited quantities available at the start of production.

4. Should antiviral medication be effective in reducing the effects of the novel virus strain it will, at least initially, be in short supply and distribution may have to be prioritized with priority initially going to those who are most at risk from infection.

5. With a novel virus the Department can expect an increased workload ,for well staff, due to increased absenteeism.

6. Non-pharmaceutical interventions such as social distancing, school closures and placing a limitation on large gatherings may significantly reduce the impact of a novel virus strain during a severe outbreak.

7. The first wave of a novel virus strain could affect a community or large geographic area for weeks.

8. Significant economic disruptions may be expected with impacts on the economically vulnerable of particular concern.

9. Subsequent waves of the virus may be expected

VII. Objectives for Pandemic Planning:

A. Overall Objectives

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

B. Response Objectives

1. **Surveillance-** Estimate the severity and spread of the outbreak through active and passive surveillance collected from multiple sources. All available data should be analyzed from across the country and around the world. Comprehensive surveillance and epidemiologic research plans should be implemented during the initial days/weeks of the outbreak.
2. **Control**- Establish uniform infection and exposure control measures for clinical, occupational, public and other settings. Develop initial case definitions and determine population groups potentially at risk.
3. **Healthcare Guidance-** Provide information and guidance to healthcare partners to support appropriate novel virus evaluations and care, including the use of antivirals, if appropriate.
4. **Public Information**- Disseminate information to the public as rapidly and as accurately as possible. Messaging must be consistent with other responding agencies from all levels of government.
5. **Hospital Surge Support**- Support hospital preparations and implementation of plans in anticipation of an increased patient load.
6. **Intradepartmental Communication-** Notify and update department personnel regarding the outbreak, mitigation measures to be taken, personnel policies regarding leave for those taking care of family or children out of school and any changes in work responsibilities.
7. **Fatality Management**- Address any increase in fatalities as a result of an outbreak and prepare to assist local governments with fatality management as necessary.
8. **Evaluate Resource Availability**- Assess if the availability of critical resources such as anti-viral medications, PPE and ventilators are adequate to meet anticipated needs.

C. Assumptions for State and Local Planning:

1. The plan reflects *current* federal and state 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 should be a primary focus of state planning efforts; the federal and state government capacity to meet the needs of individuals will be limited by the magnitude of the outbreak with scarcity of specific therapeutic and prophylactic interventions and the limited utility of legal measures to control disease spread.

D. Pandemic Disease Transmission Assumptions:

1. Incubation period averages 2 days.
2. Sick patients may shed virus up to 2 days prior to symptom onset, with children shedding more of the virus than adults.
3. There will be at least 2 "waves" (local epidemics) of pandemic disease in most communities; the waves will be more severe if they occur in fall/winter.
4. Each wave of pandemic disease in a community will last 6-8 weeks.
5. The entire pandemic period (all waves) may last up to 2 years before the virus becomes a routine seasonal influenza strain.
6. Disease outbreaks may occur in multiple locations simultaneously, or in isolated pockets.

E. Clinical Assumptions during the Entire Pandemic Period:

1. All persons are susceptible to the virus.
2. Clinical disease attack rate of ≥30% (range: 40% of school-aged children to 20% of working adults).
3. 50% o f 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 ≥25% more patients than normal needing hospitalization during the local pandemic wave.

VIII. Pandemic Intervals Framework (CDC):

On the basis of experience from recent influenza responses, CDC has updated its framework for describing influenza pandemic progression using six intervals. This updated framework can be used for influenza pandemic planning, while

serving as recommendations for risk assessment, decision making and actions in the United States. This framework is designed for decision making by federal, state and local health officials and not meant to be prescriptive or comprehensive.

U.S. experiences during recent novel influenza events were useful for testing the concepts in the proposed intervals along with the decisions and actions that were implemented. The public health impact of novel influenza strains can differ substantially, both in geographic spread and mortality. These experiences have provided opportunities to test the validity and usefulness of the intervals and the recommendations for public health actions triggered by each interval. This helps to ensure that they are applicable in a diverse range of scenarios. The identified intervals are:

1. **Investigation:** When a novel virus is identified in the population, public health will focus on targeted monitoring and investigation. This can trigger a risk assessment of that virus by the CDC and the WHO and will seek to determine if the virus has the potential to cause a pandemic.

2. **Recognition:** When increasing numbers of human cases of novel virus illness are identified and the virus has the potential to spread from person- to- person, public health actions focus on control of the outbreak, including treatment of sick persons.

3. **Initiation:** A pandemic occurs when people are easily infected with a novel influenza virus that has the ability to spread in a sustained manner from person-to-person.

4. **Acceleration:** The acceleration is the upward epidemiological curve as the new virus infects susceptible members of the population. Public health actions at this time may focus on the use of non-pharmaceutical interventions in the community. Including, but not limited to, school and child-care facility closures, social distancing telework, as well as the use of medications and vaccines as they become available. These actions combined can reduce the spread of the disease and reduce illness or death.

5. **Deceleration:** The deceleration of a pandemic wave happens when novel virus cases consistently decrease in the United States. Public health actions include continued vaccinations, monitoring of the novel virus circulation and illness and reducing the non-pharmaceutical interventions in the community such as school and day care facility closures.

6. **Preparation**: When the novel virus has subsided, public health actions include continued monitoring of virus activity and preparing for the potential of additional waves of infection. It is possible that a second wave of infection could have a higher severity than the initial wave. An influenza pandemic is declared ended when enough data shows that the virus worldwide is similar to a seasonal strain of influenza in how it spreads and the severity of the illness it can cause.

Investigation Interval (Table 1)

State/Local indicator: Identification of novel virus infection in humans or animals in the United States with potential implications for human health.

Domain	State/Local Actions
Incident Management	• Establishment of pandemic working group through TEMA • Review state response plans. • Coordinate activities and response plans with state animal health officials, as appropriate. • Review and exercise all aspects of influenza response.
Surveillance and Epidemiology	• Maintain and enhance influenza and respiratory virus surveillance systems as needed. • Implement case-based investigation of novel virus infections in humans and animals. • Assess contacts of ill persons to determine human-to-human transmission and risk factors for infection. • Report cases according to the Nationally Notifiable Diseases Surveillance System. • If only animal cases are identified, assess human exposures and risks for infection. • Coordinate activities with state animal health representatives as appropriate. • Identify whether state or federal assistance is required to support surveillance systems, field investigation, laboratory, and animal control resources.
Laboratory	• Assess and optimize laboratory capacity to detect and characterize novel virus cases. • Coordinate activities with state/local veterinary diagnostic laboratories. • Share viruses with CDC and the U.S. Department of Agriculture (USDA). • Identify whether state or federal assistance is required to support laboratory activities.
Community Mitigation	• Emphasize the importance of personal protective measures (e.g., voluntary isolation by staying home when ill, respiratory etiquette, and hand hygiene) in limiting spread of influenza. • If human-to-human transmission is suspected, consider recommending isolation of ill persons and voluntary quarantine of close contacts (e.g., household members). • Enhance all usual influenza pandemic preparedness activities with schools and businesses.

Recognition Interval (Table 2)

State/Local indicator: Increasing number of human cases or clusters of novel influenza A infection in the United States with virus characteristics indicating increased potential for ongoing human-to-human transmission.

Domain	State/Local Actions
Incident Management	• Consider activating the State Health Emergency Operations Center (SHOC) and begin briefing the Department's leadership on monitoring activities. • Continue or initiate actions described for the investigation interval for all domains. • Consider activation of the state emergency operations center as needed. • Forecast future resource needs for a potential response.
Surveillance and Epidemiology	• Conduct enhanced novel virus surveillance. • Continue case-based investigation and control using standard methods. • Report cases according to the Nationally Notifiable Diseases Surveillance System. • If animal cases are identified, expand implementation of joint investigation plan with state agriculture officials.
Medical Care and Countermeasures	• Consider implementation of voluntary contact chemoprophylaxis based on current recommendations. • Educate clinicians about recommended treatment, prophylaxis, and infection-control guidelines. • Initiate contact with coordinators of the local or regional public health regarding the potential receipt and distribution of Strategic National Stockpile countermeasures, as appropriate. • Assess impact on medical care facilities; Identify whether medical resources are sufficient to manage ill persons and conduct case-based control efforts; determine if federal assistance is required.
Vaccine	• Prepare for vaccine availability and vaccine campaign; refine vaccine distribution and administration plans if a campaign will be initiated, including mass vaccination initiatives and coordination with pharmacies and other groups, as appropriate.

	• Consider enrolling adult, obstetrical, and pediatric health-care providers, including pharmacies, to promote vaccine access to persons in all indicated age and risk groups and ability to identify and vaccinate critical infrastructure personnel. • Ensure that all identified vaccinators are authorized, and review policies and procedures regarding identification, authorization and training of nontraditional vaccinators. • Confirm vaccine providers have access to the Immunization Information System (IIS) or alternative systems. • Review capacity and capabilities of IIS for use by vaccine providers and in mass vaccination clinics for the required dosing schedule anticipated (1 or 2 doses with or without adjuvant).
Risk Communications	• Develop or update a media relations and outreach plan. • Disseminate risk communication messages, including what is known, what is not known, and what is being done by public health officials. • Disseminate messages for travelers, as well as community mitigation messages, when to seek care, and how to care for ill persons at home as appropriate. • Conduct briefings with local, regional, and state response partners, businesses, and health-care facilities on the potential for escalation, response actions underway, and preparedness steps that partners should consider. • Work with CDC, the U.S. Department of Agriculture, and the Food and Drug Administration to disseminate messages to address food safety concerns as appropriate
State/Local Coordination	Continue to coordinate with all partners

Initiation Interval (Table 3)

State/Local Indicator: Confirmation of human cases of a pandemic influenza virus in the United States with demonstrated efficient and sustained human-to-human transmission.

Domain	State/Local Actions
Incident Management	• Activate State Emergency Operations Center (SEOC) if appropriate; implement strategies developed by Pandemic Working Group. • SHOC will support ESF 8 and coordinate the department's response activities, MCG briefings will continue. • Activate Regional Emergency Operations Centers (RHOC's) as needed. • Continue or initiate actions described for the recognition interval. • Consider activation of state emergency operations in areas where infection is identified. • Consider declaring a public health emergency. • Alert ESF 14 and Medical Reserve Corps that volunteers may be needed to help fill gaps due to outbreak.
Surveillance and Epidemiology	• If affected, continue enhanced surveillance; conduct case investigation and response. • If unaffected, prepare for investigation and response. • Consider surveillance for novel virus related hospitalizations and deaths if not already a component of state-based surveillance.
Laboratory	• Continue to confirm all suspected cases at the public health laboratory, resources permitting; prepare a plan for limiting testing using surveillance criteria.
Community Mitigation	• Consider implementing appropriate community mitigation measures in selected affected locations or institutions as indicated by the results of the Pandemic Severity Assessment Framework.
Vaccine	• Implement stockpiled pandemic vaccination campaigns if a stockpiled pandemic vaccine is available, appropriate for the emerging virus, and the U.S. Government has made the decision to do so.

	• Update the state and local distribution plan based on CDC prioritization guidelines, estimated state allocation of vaccine, and epidemiology of pandemic influenza in the state
Risk Communications	• Disseminate updated risk messages, including providing anticipatory guidance or information on what might be expected. • Share information regarding antivirals and the possibility of implementation of community mitigation measures as appropriate. • Continue to provide regular updates to key partners, stakeholders, elected officials, and the media.
State/Local Coordination	• Continue to coordinate with all partners. • Prepare to receive funds to support response, if available.

Acceleration Interval (Table 4)

State/Local Indicator: Consistently increasing rate of pandemic influenza cases identified in the state, indicating established transmission.

Domain	State/Local Actions
Incident Management	• Scale up SHOC and SEOC activities as necessary. • Anticipate full activation of regional offices for response activities. • Continue or initiate actions described for the initiation interval. • Maintain processes to monitor effectiveness of response. • Activate volunteers through ESF 14 and Medical Reserve Corps to meet identified needs.
Surveillance and Epidemiology	• If affected, transition surveillance from individual case confirmation to severe disease and syndromic surveillance as appropriate. • If unaffected, continue individual case confirmation. • Monitor for changes in epidemiology.
Laboratory	• Provide laboratory confirmation of only a sample of cases as required for virologic surveillance. • Implement revised specimen submission protocol per CDC guidance as appropriate.
Community Mitigation	• Consider activating (if not already implemented) or expanding (if already implemented) appropriate community mitigation measures for affected communities (such as temporary closure of child care facilities and schools, school and workplace social distancing measures, and postponement or cancellation of mass gatherings). • Monitor effectiveness of community mitigation measures using appropriate CDC influenza assessment tools if deemed necessary. • Monitor adverse impact of community mitigation measures on society, and coordinate with local response agencies to address the impact if possible.
Medical Countermeasures	• Monitor and respond to surge in healthcare

	needs, including setting up alternative care sites. • Educate clinicians and the public about the need for prompt treatment of ill persons. • Review and prepare to implement Mass Fatality Plan. • Monitor antiviral use to identify possible shortages. • Consider deployment of state caches.

Deceleration Interval (Table 5)

State/Local Indicator: Consistently decreasing rate of pandemic influenza cases in the state.

Domain	State/Local Actions
Incident Management	• Begin demobilizing activities as appropriate. • Continue actions described for the acceleration interval, as appropriate. • Review plans, and evaluate whether response activities are proportionate to the situation.
Surveillance and Epidemiology	• Continue severe disease and syndromic surveillance. • Monitor for changes in epidemiology.
Laboratory	• Provide laboratory confirmation of only a sample of cases as required for virologic surveillance. • Submit a sample of viruses or specimens to CDC per CDC guidance on revised specimen submission.
Community Mitigation	• Assess, plan for, and implement targeted cessation of community mitigation measures, if appropriate.
Medical Countermeasures	• Initiate targeted cessation of surge capacity strategies, as appropriate. • Maintain aggressive infection-control measures in the community.
Vaccine	• Continue vaccination response, as appropriate.
Risk Communication	• Disseminate updated risk messages. • Provide information on measures to prepare for and respond to possible additional pandemic waves.
State/Local Coordination	• Continue to coordinate with all partners.

Deceleration Interval (Table 5)

State/Local Indicator: Low pandemic influenza activity with possible continued outbreaks in the state.

Domain	State/Local Actions
Incident Management	• Continue actions described for the deceleration interval as appropriate. • Consider deactivation of the SHOC and the SEOC . • Prepare for subsequent waves. • Create an after-action report to document lessons learned. • Implement lessons learned and educate other agency partners to changes in plans for future response actions. • Consider suspending the public health emergency declaration.
Surveillance and Epidemiology	• Continue case confirmation of selected cases to monitor progress of the pandemic and to detect acceleration to the next wave. • Begin conducting routine inter-pandemic surveillance.
Laboratory	• Return to routine inter-pandemic virologic surveillance. • Assess and optimize laboratory capacity.
Community Mitigation	• Modify community mitigation measures as necessary. • Continue to promote community mitigation preparedness activities on standby for a subsequent wave.
Medical Countermeasures	• Monitor medical surge trends. • Replenish stockpiles or caches as able. • Monitor antiviral dispensing and usage trends. • Assess for access to care and treatment of at risk populations.
Vaccine	• Participate in vaccine recovery as appropriate. • Continue to vaccinate, with a focus on hard-to-reach populations, in anticipation of a subsequent wave.
State/Local Coordination	• Continue to coordinate with all partners.

IX. CDC Influenza Assessment Assets

1. **Influenza Risk Assessment Tool (IRAT)** – IRAT is used by the U.S. government and the WHO Global Influenza Surveillance and Response System as a risk assessment process involving data gathering, discussion and consensus building among subject matter experts to assign a risk score to a novel virus outbreak. Ten predefined risk elements are given a risk score. These 10 elements fall into 3 categories: 1) attributes that pertain to the biologic properties of the virus (four elements), 2) attributes of the population (three elements) and 3) attributes of the ecology and epidemiology of the virus (three elements). A weight is then assigned to the element scores for each of two risk questions, emergence and impact. The results of this process can be used to decide whether and how to act; communicate concerns regarding both emergence and public health impact. After a novel virus has achieved efficient and sustained transmission, the Pandemic Severity Assessment framework can then be used to characterize the potential impact of a pandemic relative to previous epidemics and pandemic experiences.

2. **Pandemic Severity Assessment Framework (PSAF)** - Once a novel influenza has emerged and is circulating in human populations, the risk posed by the pandemic may be assessed. The PSAF was developed to characterize the potential impact of a pandemic relative to previous influenza and pandemic experiences. The PASF can be used early in a pandemic and assessments can be repeated and changed as more detailed information becomes available. The PASF focuses on transmission and severity after a virus has emerged with efficient and sustained transmission. This requires a sufficient number of cases and clusters in humans to allow for the assessment to be completed.

   Depending on the number of cases, size of clusters and geographic location of outbreaks, the trigger for using the PSAF might be as early as the pandemic recognition interval. However, it is more likely to be triggered during the initiation interval and regularly updated as the pandemic progresses.

3. **CommunityFlu (CDC CommunityFlu 2.0)** -CommunityFlu is a software program that simulates the spread of influenza through a model community and the impact of various interventions. CommunityFlu also calculates the cost, in terms of workdays lost to influenza and the associated interventions.

4. **FluAid (CDC FluAid 2.0)** - FluAid is a test version of software developed by programmers at the CDC. It is designed to assist state and local planners in preparing for the next pandemic by providing estimates of potential impacts to their jurisdictions. FluAid provides only a range of estimates in terms of deaths, hospitalization and outpatient visits due to pandemic influenza. This software cannot predict when or how people will become ill or how a pandemic may spread through a population over time.

5. **FluSurge (CDC FluSurge 2.0)** - FluSurge is a spreadsheet based model which provides hospital administrators and public health officials with estimates of the surge demand for hospital based services during the next influenza pandemic. FluSurge estimates the number of hospitalizations and deaths from an influenza pandemic. Parameters such as length and virulence are determined by the user.

   The output compares the number of persons hospitalized, the number of persons requiring ICU care and the number of patients requiring ventilator support during a pandemic, with existing hospital capacity.

6. **FluLabSurge (CDC FluLabSurge 1.0)** - FluLab Surge is a spreadsheet based program designed to assist laboratory directors forecast demand for specimen testing during the next pandemic. The program produces estimates to compare the daily number of specimens that may be delivered to the laboratory for testing against the laboratory capacity.

7. **FluWorkLoss (CDC FluWorkLoss 1.0)** - FluWorkLoss estimates the potential number of days lost from work due to an influenza pandemic. Users can change almost any input value, such as the number of days lost when a worker becomes ill or the number of workdays lost due to a worker staying home to care for a family member. The estimates of length and virulence of the pandemic may be changed to generate a range of possible impact

X. 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.

During the contract year the Tennessee Department of health conducted FightFluTN, a statewide training exercise for flu vaccination. This exercise involved all 7 of the departments regions and 6 for the metro health offices. Its objective was to establish and staff flu vaccination pods, on the same day, in all of the state's 95 counties giving free flu shots to the public. To coordinate this effort, several planning meetings were held and each region and metro was asked to develop a business plan to establish staff and supply all necessary pods.

On the exercise date all activities were monitored by the State Health Coordination Center (SHOC) and pods were set up in all 95 counties simultaneously. As a result of this exercise over 4000 flu shots were administered statewide on a single day. After action discussions were conducted and areas of improvement were identified. Going forward it is anticipated that a second exercise will be conducted during the next contract year with the goal of expanding the state's flu pod capacity and increasing the number of citizens receiving flu shots.

ANNEXES

Annex A.

Antiviral Drug Distribution and Use

I. Purpose:

To optimize the use of the antiviral medications under state control to minimize morbidity and mortality from pandemic influenza; also to prevent hoarding, theft, and misuse of antiviral medications.

II. Situation:

Antiviral medications, primarily neuraminidase inhibitors, are expected to be the only specific therapeutic agents available to treat or prevent influenza at the onset of a pandemic. The state of Tennessee will have access to stockpiles of antivirals through federal and/or state stockpiles.

To maximize benefit, antivirals should be administered as quickly as possible after onset of symptoms. The optimal timing, dosage, and duration of treatment for pandemic influenza may be known only after the pandemic begins. Treatment guidelines will be disseminated as they become available.

III. Assumptions:

Priorities in this plan reflect the current federal priorities; state guidelines will be adjusted to conform to changes in federal guidelines to optimize treatment effectiveness. Antiviral distribution and tracking will follow state and federal guidelines. Future revisions of the state pandemic plan will reflect significant changes in the quantity of antivirals available in Tennessee and changes in scientific understanding of optimal treatment.

The supply of antivirals will be inadequate to treat the entire population. They should be used to minimize severe morbidity and mortality; Antivirals should be used in accordance with federal priority guidelines.

IV. Concept of Operations:

A. Controlled substance regulation:

Immediately after the Centers for Disease Control and Prevention (CDC) declares that a novel influenza virus is spreading easily from person to person and causing severe disease, the Department of Health may issue an emergency regulation classifying antiviral medications indicated for treatment of influenza infection (e.g., oseltamivir and zanamivir) as controlled substances. All necessary regulations for controlled substances will be implemented; Drug Enforcement Agency (DEA) numbers will be required on all prescriptions and supplies secured and tracked.

B. Control of antivirals in distributor warehouses:

In the absence of federalization of all antiviral supplies, the Governor may issue an executive order placing under state control antiviral medications or other essential medical supplies at distributor warehouses in Tennessee and allocating them to the state antiviral stockpile. Because antiviral supplies available in retail pharmacies are small and widely dispersed, no actions to redistribute medications from retail pharmacies are planned, though the state will collaborate with the Tennessee Board of Pharmacy and the Tennessee Pharmacists Association (TPA) to strongly recommend these medications be used in a manner consistent with state priorities to minimize severe illness and death. The state will work with these partners to communicate recommendations and distribute information to pharmacists state-wide.

C. Strategic National Stockpile (SNS):

Stockpiles under state control will be distributed through the SNS distribution system. The State SNS Coordinator, located in the Communicable and Environmental Disease Emergency Preparedness Division of the Department of Health, will oversee the distribution of state and federal stockpiled supplies to inpatient hospital pharmacies.

Tennessee has a federally subsidized antiviral stockpile and stores this stockpile centrally within the state. Future revisions of the state pandemic countermeasure distribution plan will reflect the changes in the quantity of antivirals available in Tennessee and changes in scientific understanding of optimal treatment. Ultimately, supplies will be allocated and distributed to acute care inpatient hospital pharmacies for dispensing in the state of Tennessee. Hospitals should store stockpiles in a highly secure location until they are needed. The potential for theft or misuse is considered high.

D. Distribution of SNS antivirals:

Approximately 50% of state antiviral stockpile treatment courses will be reserved for dispensing in hospitals and hospital emergency departments, with the balance provided through outpatient Point of Dispensing sites (PODs) or outpatient pharmacies, depending on the disease severity and resource availability. Tennessee will allocate antivirals to each of the acute care hospitals in proportion to the number of staffed beds in the most recently reported year.

Equation (for the 50% of the stockpile initially distributed):
(# staffed beds in most recently reported year ÷ # staffed beds in all TN hospitals) X (# treatment courses available) = # treatment courses sent to the hospital.

The balance of the stockpile will be distributed to hospitals to replenish depleted supplies based upon documented appropriate use. Regional Hospital Coordinators will monitor proper use and inventory of antiviral medications and communicate needs to the SNS Coordinator. Decisions concerning subsequent allocations will take into account hospital in-patient surveillance data, whether a hospital enforces state guidelines for the appropriate use of antivirals for inpatients and whether it provides adequate safeguards against theft or misuse.

Patients requiring outpatient doses to complete their treatment course will be discharged with antivirals properly labeled from the inpatient pharmacy supply.

E. Hospital stockpiles:

Hospitals that have invested in their own stockpiles, without government funding, will use their own antivirals according to approved standards of care. It is recommended that these resources be used to treat ill personnel only, not for prophylaxis, because antivirals are unlikely to be available for purchase after a pandemic begins.

Hospital personnel may be treated using antivirals from the general state or federal stockpile if they meet the standard state criteria for treatment with antivirals from the SNS.

F. Antivirals in post-exposure prophylaxis for pre-pandemic cases:

Antivirals may be approved by the Commissioner of Health, State Epidemiologist, or designee for post-exposure prophylaxis in two settings:

1. Following high risk exposure to poultry, wild birds or a person infected with a novel influenza virus capable of causing human infection.

2. To prevent the beginning of community transmission of a pandemic virus in the state by providing post-exposure prophylaxis to those with high risk exposure to a traveler infected with an influenza virus with pandemic potential.

Annex B.
Laboratory Diagnostics

I. Responsible Agency:

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.

II. 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 in order to identify recovered persons that can work with pandemic influenza patients without risk of contracting the disease; these recovered persons may be safely excluded from priority groups for the administration of vaccine if necessary.

III. Testing of Non-Human Specimens:

Laboratory testing of birds or animals for influenza is the responsibility of the Tennessee Department of Agriculture (TDA). Requests should be directed to the Office of the State Veterinarian at TDA.

In the event information sharing is necessary, notification from TDA to TDH will occur via the State Veterinarian (TDA) to the State Epidemiologist or designee (TDH). In the event of an animal disaster resulting in activation of the Tennessee Emergency Management Plan (TEMP), communication will also occur through the State Emergency Operations Center. The Tennessee Emergency Management Agency (TEMA) will notify other state agencies to stand by to await impending laboratory results as described in the TEMP Emergency Support Function (ESF) 16 Disaster Operations Guide. (Please refer to page 10 of the TEMP ESF-16.)

IV. Laboratory Capacity:

TDH Laboratory has the ability to test for influenza viruses year-round. However, in the early stages of a novel virus outbreak, testing outside of the traditional flu season would be based on CDC guidance and travel histories of potentially infected individuals. With current equipment, reagents, and personnel, a large number of specimens can be tested for influenza using real time reverse transcription polymerase chain reaction (real time RT-PCR) at the state laboratory.

A. TDH Laboratory Testing Capacity:

The state public health laboratory in Nashville is capable of testing human specimens for novel influenza viruses using real time RT-PCR according to Laboratory Response Network (LRN) and the American Public Health Laboratory (APHL) protocols. Varying numbers of specimens may be tested, depending upon the number of targets against which each specimen is tested. Each round of testing takes approximately 3 hours.

The TDH Laboratory has signed memoranda of understanding (MOUs) with Kentucky and North Carolina establishing reciprocal surge capacity if needed and available at the time. LRN protocols may also be used to test specimens at state laboratory branches in Knoxville and Memphis for in-state surge capacity.

V. CDC Interval 1 (Investigation):

A. Suspect Case Reporting:

Healthcare providers will receive updated case definitions for surveillance and testing, as well as reporting recommendations, via blast fax and/or the Tennessee Health Alert Network (electronic notification). If a clinician identifies a patient with a suspected case of novel influenza that meets the current epidemiological and clinical criteria for testing they should contact the local health department or the on-call physician in the Communicable and Environmental Disease and Emergency Preparedness (CEDEP) Division of TDH (615-741-7247). Information will be given regarding specimen collection and the case will be reported to the Centers for Disease Control and Prevention (CDC) Emergency Operations Center (770-488-7100). The state laboratory will follow the guidance of the CDC virology laboratory and either submit the specimen directly to the CDC or conduct RT-PCR testing before submission.

B. Specimen Collection and Shipping:

1. During the Pandemic Alert Period, testing of a human specimen for a novel influenza virus must be authorized by a physician within CEDEP

2. Federal guidance provided by the Department of Health and Human Services (HHS) on specimen collection and shipping, current guidance is attached to the end of this section. This information is subject to change and will be updated through communications from the state laboratory or CEDEP.

3. Unless otherwise directed by a CEDEP physician, all influenza specimens should be sent to the State Laboratory in Nashville for testing. Informed consent is not required.

Address:

Laboratory Services: Attn. Virology
630 Hart Lane
Nashville, Tennessee 37216
Telephone: (615) 262-6300
Fax: (615) 262-6393

4. Confirmatory testing of all specimens positive for novel influenza virus will be conducted at CDC, the referral laboratory for TDH. Submission of specimens will be done through the established mechanism following CDC protocols. During a pandemic, confirmatory testing will not be done at CDC for most specimens due to the large volume.

5. Only confirmed results will be considered valid and reported to the public.

6. Until and unless commercial tests are accepted as valid by CDC, any commercial laboratory results are considered preliminary until confirmed by CDC and should not be publicly announced as a positive result.

C. Specimen testing:

During this pre-pandemic period, human infections are caused by a novel influenza virus considered to have pandemic potential, but the virus lacks the ability to transmit easily from person to person.

Routine surveillance specimens submitted by the Sentinel Provider Network (SPN) will be processed by real time RT-PCR Real-time RT-PCR will determine if the specimen is influenza A or B, and specify if the type A virus has hemagglutinin (H) 1, H3, H5 or H7. If there is a risk of detecting a novel influenza virus in Tennessee, all specimens will be tested by real-time RT-PCR before culture to minimize the risk to laboratory personnel.

This risk will be communicated to the State laboratory by the State epidemiologist or designee and will be determined based upon the presence of a novel influenza virus capable of causing human disease in the United States and outside a confined area of known risk (e.g., in migratory birds in Tennessee or the Southeastern US).

D. Results reporting:

Results of specimen testing will be available to the state and regional health departments and state public health laboratories electronically. Clinicians and hospitals will be notified by telephone and/or fax for the initial cases; they may also be notified electronically if they have the ability to receive Health Level 7 (HL7) messages. The State Public Health Laboratory Information system will be available at the state laboratory for data entry. Patients already approved for testing will have demographic data entered into the system. The, results will be available to other laboratories through faxing and e-mail. Results will be reported to CDC, the reference laboratory for TDH, electronically using the Laboratory Response Network (LRN) messenger.

VI. CDC Interval 3 (Initiation):

A. Selecting specimens for testing:

During the pandemic period, specimens for testing at the State Laboratory or a branch of the State Laboratory will require the approval of a CEDEP physician, regional health officer, or their designee, which will be indicated by the presence of a checked field "approved for RT-PCR" and/or "approved for culture" in the database used for laboratory results reporting to the regional health departments.

Justification for confirmatory testing for a clinical case would include: (1) characterization of a significant epidemiologic or clinical change, (2) confirmation of a pandemic virus in a new region of the state or (3) 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).

B. Specimen testing technique:

During a pandemic period, specimens provided by the SPN will be tested by real-time RT-PCR. In order to double the number of specimens tested in a single testing cycle, the real-time RT-PCR may be set up to distinguish only the pandemic H-type (e.g., H5), and generic influenza A or B. The

current LRN protocol used in Knoxville and Memphis public health laboratories tests only for H5.

C. Specimen collection and shipping:

Same as for the Investigation interval. Any changes to this guidance will be disseminated to laboratories and clinicians by the State Laboratory and CEDEP.

D. Results reporting:

Results of specimen testing will be available to the state and regional health departments and state public health laboratories electronically. Clinicians and hospitals will be notified by telephone and/or fax for the initial cases; they may also be notified electronically if they have the ability to receive Health Level 7 (HL7) messages. Until then, results will be available to other laboratories through faxing and e-mail. Results will be reported to CDC, the reference laboratory for TDH, electronically using the established procedures.

Under normal conditions, laboratory personnel responsible for running tests document and send result reports to clinicians. Once laboratory testing exceeds normal capacity, the laboratory will require data entry support staff to permit laboratory personnel to focus on testing.

VII. Laboratory occupational health:

All laboratory personnel in state, clinical, or research laboratories working with novel influenza viruses should be monitored in the event of developing any influenza like illness (ILI). Current CDC guidance for lab procedures is attached to this section and will be continually updated. The State Laboratory will distribute this and any new information to laboratories licensed in Tennessee.

VIII. Laboratory communications:

The Tennessee State Laboratory will maintain an after-hours telephone and contact listing that will be used to call staff into work for emergencies and/or when increased testing capacity is needed. This list will be maintained in the TNHAN system. TNHAN will be used to place telephone calls, pages, and e-mail notifications requesting that staff respond.

The Tennessee State Laboratory is responsible for all communications with sentinel laboratories licensed in Tennessee. The State Laboratory will copy communications to all regional health officers and appropriate CEDEP physicians. This includes communicating the following:

1. New testing protocols or other information
2. Occupational health surveillance recommendations or requirements
3. Laboratory safety guidelines

Information for clinicians will be disseminated by CEDEP through channels established for clinician updates (See Section 8 [Communications]).

CDC Avian Influenza Health Care and Laboratorian Guidance:

Interim Guidance on Testing, Specimen Collection, and Processing for Patients with Suspected Infection with Novel Influenza A Viruses with the Potential to Cause Severe Disease in Humans (January, 2016).

Background and Purpose

This document provides interim guidance for clinicians and public health professionals in the United States on appropriate testing, specimen collection and processing for patients who may be infected with novel influenza A viruses with the potential to cause severe illness in people. Examples of such viruses include Asian-lineage avian influenza A (H5N2), (H5N8), and (H5N1)[1] viruses, which were detected in wild and domestic birds in North America in December 2014 and January 2015; these viruses may have some or all of their genes from Asian avian influenza viruses, but for simplicity will all be referred to as "newly detected avian influenza A H5" viruses in this guidance document. Other newly detected avian influenza A H5 viruses also may have the potential to cause severe disease in humans. For a list of avian influenza A H5 virus infections identified in birds in the United States, and their locations the department will maintain communications with the CDC, USDA and state Department of Agriculture. CDC will update this guidance as additional information becomes available.

The appearance of newly detected avian influenza A H5 viruses in North America may increase the likelihood of human infection with these viruses in the United States. Because these newly identified avian influenza A H5 viruses are related to avian influenza A viruses associated with severe disease in humans (e.g., highly pathogenic Asian-lineage avian influenza A (H5N1) virus), they should be regarded as having the potential to cause severe disease in humans until shown otherwise. Other CDC guidance provides recommendations for influenza viruses known to be associated with severe disease in humans.

[1] The H5N1 virus isolated in the United States in January 2015 is a new mixed-origin virus (a "reassortant") that is genetically different from the H5N1 virus found in several other countries (notably in Asia and Africa), which has caused human infections with high mortality. Although it is related to the H5N1 virus that has caused human infections with high mortality, the ability of this new reassortant H5N1 virus to cause severe disease is currently unknown.

Recommendations for Surveillance, Testing, and Investigation

Clinicians and public health personnel should consider the following recommendations for surveillance and testing:

1. Consider the possibility of infection with novel influenza A viruses with the potential to cause severe disease in humans in patients with medically-attended influenza-like illness (ILI) and acute respiratory infection (ARI) who have had recent contact[1] (<10 days prior to illness onset) with **sick or dead birds** in any of the following categories[2]:
   a. Domestic poultry (e.g., chickens, turkeys, ducks)
   b. Wild aquatic birds (e.g., ducks, geese, swans)
   c. Captive birds of prey (e.g., falcons) that have had contact with wild aquatic birds
2. If infection with a novel influenza A virus with the potential to cause severe disease in humans is possible, respiratory specimens should be collected with appropriate infection control precautions and sent to the state or local health department for immediate testing (see guidance below).
3. If infection with a novel influenza A virus with the potential to cause severe disease in humans is suspected, state health departments are encouraged to initiate a public health investigation with animal health partners and should notify CDC promptly.

Contact may include: direct contact with birds (e.g., handling, slaughtering, defeathering, butchering, preparation for consumption); or direct contact with surfaces contaminated with feces or bird parts (carcasses, internal organs, etc.); or prolonged exposure to birds in a confined space. For questions or concerns about possible human infection in patients with exposures to birds not listed here, please contact CDC. Exposures that occur in geographic regions in the United States where newly detected avian influenza A H5 viruses are of most concern.

When Specimens Should Be Collected

The duration of shedding of novel influenza A viruses in humans is largely unknown, and there are currently limited data describing prolonged shedding of people infected with these viruses. Therefore, the estimated duration of viral shedding is based upon seasonal influenza virus infection. Specimens should be obtained for novel influenza A virus testing as soon as possible after illness onset, ideally within 7 days of illness onset. However, as some persons who are infected with seasonal influenza viruses are known to shed virus for longer periods (e.g., children and immunocompromised persons), specimens should be tested for novel influenza A virus even if obtained after 7 days from illness onset. Note that prolonged shedding of influenza virus in the lower respiratory tract has been documented for critically ill patients with highly-pathogenic avian influenza A H5N1 virus and avian influenza A H7N9 virus infections.

Infection Control when Collecting Specimens

Standard, contact, and airborne precautions are recommended for patient management; this includes collection of respiratory specimens. Practitioners should employ infection control precautions consistent with precautions recommended for novel influenza A viruses known to cause severe disease in humans. See Interim Guidance for Infection Control Within Healthcare Settings When Caring for Confirmed Cases, Probable Cases, and Cases Under Investigation for Infection with Novel Influenza A Viruses Associated with Severe Disease for more information and consult CDC for specific case-by-case infection control recommendations if needed.

Preferred Respiratory Specimens

The following should be collected as soon as possible after illness onset: (i) a nasopharyngeal swab, or (ii) a nasal aspirate or wash, or (iii) two swabs combined into one viral transport media vial (e.g., nasal or nasopharyngeal swab combined with an oropharyngeal swab). If these specimens cannot be collected, a single nasal, or oropharyngeal swab is acceptable. For patients with lower respiratory tract illness, a lower respiratory tract specimen (e.g., an endotracheal aspirate or bronchoalveolar lavage fluid) may be preferred (these specimens have a higher yield for detecting avian influenza A H5N1 and H7N9 viruses and also may facilitate detection of other novel avian influenza A viruses). Specimens should be placed into sterile viral transport media and immediately placed on refrigerant gel-packs or at 4°C (refrigerator) for transport to the laboratory.

If possible, in order to increase the potential for virus detection, multiple respiratory specimens from different sites should be obtained from the same patient on at least two consecutive days.

Swabs

Swab specimens should be collected using swabs with a synthetic tip (e.g., polyester or Dacron®) and an aluminum or plastic shaft. Swabs with cotton tips and wooden shafts are not recommended. Specimens collected with swabs made of calcium alginate are not acceptable. The swab specimen collection vials should contain 1-3ml of viral transport medium (e.g., containing protein stabilizer, antibiotics to discourage bacterial and fungal growth, and buffer solution).

Storing Clinical Specimens

Respiratory specimens should be kept at 4°C for no longer than 3 days. Specimens can alternatively be frozen at ≤-70°C. Avoid freezing and thawing specimens if at all possible.

Shipping Clinical Specimens to State Public Health Laboratories

Clinical specimens sent to state public health laboratories should be shipped in the appropriate packaging and according to instructions by the laboratory. If clinical specimens will be examined within 72 hours after collection, keep the specimen at 4°C (2-8°C) and ship on refrigerant gel-packs, otherwise store frozen at ≤-70°C and ship on dry ice. Avoid freezing and thawing specimens. Viability of some pathogens from specimens that were frozen and then thawed is greatly diminished. All specimens should be labeled clearly and include information requested by your state public health laboratory.

Diagnostic Testing

The performance of current Food and Drug Administration (FDA) cleared diagnostic tests for influenza has been demonstrated for seasonal human influenza viruses as described by the manufacturer package insert. Performance has not been demonstrated with most novel influenza A viruses. Although some diagnostic assays may detect the presence of some novel influenza A viruses, a negative result should not be used to rule out influenza when testing possible human cases. Testing of symptomatic human cases for novel influenza A virus infections should be referred to the nearest public health laboratory.

Existing, commercially available FDA-cleared molecular assays (e.g., rRT-PCR) may fail to detect novel influenza A viruses or may detect with results that indicate "influenza A positive", but with subtype undetected. For these assays a novel influenza A virus may give influenza A "unsubtypable" result. Clinicians and laboratorians using molecular assays that are capable of detecting all currently circulating influenza A subtypes (i.e., "seasonal influenza" subtypes) who identify an unsubtypable result should contact CDC and their state or local public health laboratory for additional testing (see below).

Rapid influenza diagnostic tests (RIDTs) and immunofluorescence assays are antigen detection tests that also have unknown sensitivity and specificity to detect human infection with novel influenza A virus in clinical specimens. Some studies suggest that antigen detection tests have low sensitivity to detect H5N1 viruses. Therefore, negative results from either type of test do not exclude novel influenza virus infection, especially in patients with signs and symptoms suggestive of influenza. A negative test result could be a false negative and should not be used as a final diagnostic test for influenza, including novel influenza A virus infection. These tests may give a positive influenza A result for a specimen containing novel influenza A virus, but cannot identify the subtype and cannot distinguish a novel influenza A virus from a seasonal influenza A virus. Therefore, testing by rRT-PCR is recommended at state health laboratories for any patient with suspected novel influenza A virus infection.
Clinicians should always consider diagnostic testing for other pathogens that can cause acute febrile respiratory illness since novel influenza A virus infections of humans are very rare, even in exposed persons.

Testing at State Health Departments

Clinicians should notify their state health department immediately when they wish to test a patient for suspected infections with novel influenza A viruses. Specimens to be tested for novel influenza A viruses should be sent first to the state or local public health laboratory.

Testing can be performed by public health laboratories on a portion of the specimen, while a portion of the sample should be reserved in case there is a need to ship it to CDC. CDC should be notified immediately in the event that any clinical specimens from suspected cases test positive for any novel influenza A virus (e.g., H7N9 or H5N1 virus, other avian H5 viruses, or variant influenza viruses[2] such as H3N2v), and clinical specimens should be shipped to CDC for confirmatory testing. The shipping instructions found by using this hyperlink are the current CDC procedures.

CDC Flu rRT-PCR Dx Panel testing algorithms should be used as described in the package insert to rule out seasonal influenza virus infection. Public Health officials should contact CDC immediately if they obtain unsubtypable results when testing an influenza specimen.

Specimens that are unsubtypable or that are presumptive positive for novel influenza A at the state public health laboratory should be sent to CDC, Influenza Division, Virology Surveillance and Diagnosis Branch Laboratory for confirmatory testing. Laboratories should not attempt to isolate novel influenza A viruses using viral culture.

The following protocol may be used when testing for novel influenza A viruses with the potential to cause severe disease in humans:

- All state public health laboratories should use the CDC Human Influenza Real-Time rRT-PCR Flu Diagnostic Panel to screen specimens for InfA, InfB, and RP.
- State public health laboratories should test all InfA-positive specimens with the CDC Influenza A Subtyping kit using all primer/probe sets: H1, H3, pdmInfA and pdmH1. Detailed guidance for testing can be found in the influenza surveillance diagnostic testing algorithm disseminated recently by the Association of Public Health Laboratories.
- Where patients may be infected with influenza A/H5 viruses (see Recommendations for Testing for H5N2 and H5N8 Virus Infections above), test also with H5 primer/probe set. Specimens that are positive for H5 virus by rRT-PCR at the state health department should be sent to CDC Influenza Division for additional testing as soon as possible. Influenza viruses that normally circulate in pigs are termed “variant viruses” when found in humans.

Antiviral Treatment

Until more information is available, antiviral treatment should be given to all patients with possible infection with novel influenza A viruses with the potential to cause severe disease in humans. Antiviral treatment should not be withheld or delayed pending collection of specimens or laboratory testing. Empiric treatment with a neuraminidase inhibitor antiviral drug (oral oseltamivir, inhaled zanamivir, or IV peramivir) should be administered immediately according to current guidelines. For discussion of dosing and duration of therapy, see CDC’s interim guidance on the use of antiviral agents for treatment of human infections with avian influenza A (H7N9) viruses.

Annex C.

Disease Surveillance

I. Purpose:

To detect and track pandemic influenza activity among humans using multiple surveillance systems. Data are to be used to monitor intervention effectiveness, and inform resource allocation and intervention decisions, including implementation and cessation of community mitigation activities based on the pandemic curve for state and local areas (see Intervals, Triggers, and Actions, Section 7).

II 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 thousands 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.

Details of all surveillance systems are not provided here, because these surveillance systems are already in use. Additional surveillance systems may be instituted by the Centers for Disease Control and Prevention (CDC). The state will participate in these systems as requested. As novel technology makes new surveillance strategies possible, those available for implementation by the Department of Health will be added to future revisions of this plan.

III. Surveillance Systems:

A. Sentinel Provider Network (SPN):

Outpatient surveillance for influenza in Tennessee is presently conducted through SPN using a reporting and recruiting protocol that meets and exceeds CDC guidelines. This network is expected to be a primary source of outpatient influenza surveillance data during a pandemic. The goal is to have 1 provider per 100,000 persons with appropriate geographic and demographic representation to ensure that representative data are collected statewide. To better ensure year-round coverage, the state encourages additional providers to join the network beyond the goal of 66.

The SPN protocol states that SPN providers are expected to collect at least one and up to 4 specimens from patients with ILI per month, year-

round. Additional specimens may be submitted from any unusual clinical cases, severe cases, or outbreak-related cases.

Continuous recruitment of new providers to the network is done by the 13 regional health department SPN Influenza Surveillance Coordinators, typically CEDEP nurse/epidemiology personnel. This local network of healthcare providers reports weekly the total number of patient visits and number of patients with ILI. Providers report to CDC via a password-protected web-based system. Data are available to state health department SPN Influenza Coordinators and other surveillance personnel on-line. Data reported by providers on the internet are available in real time. The state pays for SPN members to send specimens from a subset of patients with ILI to the State Laboratory for diagnostic testing. Five influenza specimen collection kits along with shipping instructions are sent out from the TDH Laboratory to each provider in Tennessee in mid-October each year or when new providers are enrolled. The TDH Laboratory replenishes these collection kits as needed during the influenza season.

Distribution of Sentinel Providers

The regional health departments SPN Influenza Surveillance Coordinators are responsible for recruiting the appropriate sentinel providers within their region, according to guidance provided by the CEDEP Influenza Surveillance Coordinator. The CEDEP Influenza Surveillance Coordinator and other CEDEP staff will coordinate the program centrally, and assist with communication with CDC.

Data from this sentinel surveillance system are monitored regularly by CEDEP staff. Weekly e-SPN reports are produced by CEDEP staff year-round and sent by e-mail to all participating providers and regional/local health department personnel. These reports include national, southeastern U.S., state, and regional rates of ILI for that week. It highlights regions of the state with significantly more ILI than the state as a whole. These reports also contain results of laboratory testing of clinical specimens submitted by SPN providers, allowing providers to see the types of influenza [A(H1), A(H3), or B] circulating in Tennessee. Important updates or advisories are included in these weekly reports, as needed. In the event of a pandemic or other substantive change, participating providers may be asked to change the frequency of reporting or specimen submission, using existing communication mechanisms with network physicians.

B. Syndromic surveillance:

TDH uses ESSENCE as its statewide syndromic surveillance system. More than 50 hospitals statewide report chief complaints reported for emergency department (ED) visits and/or ICD10 discharge diagnosis codes regularly. ESSENCE contains standardized influenza syndrome definitions already in use nationally and also allows for new syndrome definitions to be easily developed and shared statewide. Additionally, TDH contributes data from 35 of these hospital EDs to the National Syndromic Surveillance Program, allowing for these data to be shared with other states and used to support influenza situational awareness at the national level. Epidemiologists stationed in all 13 of Tennessee's health regions are responsible for monitoring and following up on these data. Some regional health departments may also use other local data sources, such as 911 data, to provide additional situational awareness about influenza activity in their jurisdictions.

C. School absenteeism:

The Department of Education obtains daily student absenteeism rates from all local public school systems through an electronic reporting system. The Department of Education will share these data with the TDH to enhance surveillance for influenza activity evidenced by increasing absenteeism levels. TDH obtains information from the Department of Education reporting database and uploads them into Tennessee's statewide syndromic surveillance system for analysis and tracking. 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.

D. Hospital surveillance:

Hospital surveillance is detailed elsewhere (Section 4, Supplement 2 [Hospital Surveillance]). Once the pandemic response plan is activated, daily electronic reports from hospitals to health departments may include emergency room data on ILI, confirmed disease, admissions, and deaths reported via the Health Care Resource Tracking System (HRTS) or other tools.

E. Laboratory surveillance:

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

F. Animal Surveillance

Surveillance for influenza among domestic animals, primarily poultry, is the responsibility of the Tennessee Department of Agriculture (TDA). Information sharing and coordination of activities will occur between the State Epidemiologist or designee (TDH) and the State Veterinarian (TDA). Emergency contact information is maintained in TNHAN. The role of TDH is to work with TDA to address human health needs in the event of detection of an animal influenza virus with the potential to threaten human health.

TDA has formed an HPAI (Highly Pathogenic Avian Influenza) Task Force, with representatives from TDH, TEMA, TWRA, USDA-APHIS, and the commercial poultry industry. TDA's Kord Animal Health Laboratory has increased its capacity to perform testing for AI viruses to the level that would be needed during an outbreak in poultry. USDA-APHIS-Wildlife Services routinely performs surveillance testing of wild birds.

G. Electronic Death Registration System

TDH is nearing completion of a state-wide Electronic Death Registration System (EDRS) and has begun preparation for statewide implementation in May of 2017. The goal of the EDRS project is to develop a death reporting system capable of inter-jurisdictional transmission of mortality data that allows for fact of death data reporting to federal partners within 5 days of death and cause of death within 10 days for at least 80% of deaths occurring in Tennessee. The EDRS project will: 1) improve the timeliness and accuracy of communications regarding threats to the public's health; and 2) decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health. Among other benefits, completion of this project will allow rapid assessment of age-specific mortality rates during an influenza pandemic.

Until electronic death reporting is available, funeral directors will fax or email daily reports of influenza deaths to TDH by age. Local registrars or other local health department staff will follow-up with funeral directors from their county who do not report.

Annex D.

Legal Authority

I. Purpose:

To lower the peak numbers of cases during a pandemic wave by preventing opportunities for widespread viral transmission in crowded group settings using legal authority granted under Tennessee law.

II. Situation and Assumptions:

A. 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.

B. Rationale for social distancing:

Given that the current capacity to manufacture vaccine will yield late and limited supplies, social distancing measures will play a central role in minimizing illness and deaths in Tennessee. State-imposed measures will affect discretionary public gatherings and schools (preK-12). The epidemiologic criteria for implementation of such measures will be based on the CDC pandemic intervals. Specific recommendation will be determined by the State Epidemiologist and CEDEP staff and approved by the Commissioner of Health, or designee, upon consultation with the Governor. Such measures shall be implemented by local communities once these criteria are met. Regional and local health departments should conduct outreach to community partners, including public transportation providers, operators of large venues for sporting events and other activities, businesses, education, and faith-based communities to promote additional social distancing policies (resources available at: www.pandemicflu.gov).

C. Mandated versus recommended social distancing measures:

In milder pandemics avoiding crowded public settings may be strongly recommended, rather than mandated. Discretionary public gatherings of ≤100 persons are not expected to be affected by mandatory suspension. Based upon experience with modern quarantine cooperation with Department of Health (TDH) emergency regulations to control disease is expected to be good, though law enforcement support may be used to ensure compliance where necessary; civil arrest is possible pursuant to regulations outlined in 1200-14-4.

D. Legal Authority for Social Distancing:

Pursuant to T.C.A. § 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. The Commissioner, upon consultation with the Governor, may issue emergency rules 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.

E. Criteria for implementation:

Social distancing measures will be implemented based on the CDC pandemic intervals.

The timing of initiation of various non-pharmaceutical community mitigation interventions will influence their effectiveness. Implementing these measures prior to the pandemic may result in economic and social hardship without public health benefit and over time, may result in "intervention fatigue" and erosion of public adherence. To better identify the optimal time, the pandemic intervals model will be applied as described below.

III. Concept of Operations:

A. Discretionary public gatherings defined:

Discretionary public gatherings of >100 persons may be included for cancellation during a pandemic wave in a county or neighboring county.

B. Very large discretionary public gatherings (additional considerations):

Very large discretionary public gatherings of >10,000 persons may be subject to cancellation during a pandemic, even in the absence of disease activity in the

county where the event is held.

1. Such cancellations will be ordered by the Commissioner or designee (e.g., a Regional Health Officer), upon consultation with the Governor, on a case-by-case basis in light of the pandemic conditions at the time
2. Local pandemic plans should address mechanisms for notification and subsequent approval or disapproval of such events by the Regional Health Officer using criteria established by the Commissioner of Health at the time

C. 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.

D. Roles and responsibilities:

The Commissioner of Health, or designee, is responsible for determining when to initiate and lift social distancing measures, upon consultation with the Governor. The Chief Medical Officer (CMO) may make this determination if the Commissioner is unavailable. 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 regional health officer is responsible for implementing and lifting mandatory interventions when informed that state criteria for implementation or discontinuance have been met.

Regional and local health departments will communicate information regarding the rationale for and implementation steps of community mitigation measures to workplaces and the public (resources at www.pandemicflu.gov).

E. Criteria for implementation:

The criteria for initiating local social distancing measures are based on the CDC pandemic intervals.

1. The pandemic virus causes morbidity and mortality in excess of normal seasonal influenza (PSI>1), and

2. Laboratory confirmation of the pandemic virus in the county or neighboring county, and

3. Epidemiologic evidence from the 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.

F. Criteria for lifting restrictions:

Targeted cessation of community mitigation interventions will occur during the deceleration interval and they will be rescinded during the resolution interval of the pandemic curve. The established criteria may be modified if additional information becomes available indicating the optimal time to lift restrictions. The state will take the following step to provide recovery guidance to businesses, workplaces, and large venues:

- The current interval of the local pandemic curve will be communicated by the Commissioner of Health, or designee, upon consultation with the Governor, to regional and local health departments, the public, and the media.

- The Commissioner of Health, or designee, will also communicate when community mitigation interventions may be rescinded and recover plans initiated.

- During recovery, state and federal assistance programs will be available to assist individual victims, businesses, and state and local governments in dealing with the financial ramifications associated with the pandemic as described in Emergency Support Function 15 of the TEMP.

IV. Monitoring secondary and tertiary effects of community interventions.

Closing schools and canceling large gathering may have a negative impact on the planning objective of preserving social functioning and minimizing economic disruption. Therefore, it must be balanced with the objective of minimizing morbidity and mortality. In the absence of federal guidance, TDH will work with TEMA to define potential secondary and tertiary effects and develop strategies to monitor them. This will allow community mitigation interventions to be applied in a balanced way and prevent excessive community disruption.

Additional legal authority for enforcing social distancing measures.

I. Purpose:

To define the legal authority and options for social distancing measures, focusing on the isolation and quarantine orders that may be issued as part of case management during the pre-pandemic period (CDC interval 1).

II. Definitions:

Isolation: to restrict the liberty of a **sick** person reasonably suspected of having a communicable disease in order to prevent the spread of that disease to others.

Quarantine: to restrict the liberty of a **well** person suspected of having been exposed to a communicable disease until the incubation period has passed or until they become ill and are isolated. This is used to prevent people from spreading disease before they realize they are sick.

Quarantine laws cover both isolation and quarantine as described above and any other restrictions.

Sick people under investigation will be isolated in the hospital, at home, or in an alternative facility. Most people exposed to a probable or confirmed patient will be asked to monitor their own symptoms and will be given instructions about what to do if they develop a fever or respiratory symptoms.

Note:

The legal authority for public health actions are outlined below and have been paraphrased for clarity. These laws and Department of Health (TDH) rules and regulations apply state-wide. Cities or counties may have additional local laws that will apply.

III. Authority to write and enforce new rules and regulations:

Tennessee Code Annotated (TCA) 68-1-201 (2): Commissioner of Health has the power to declare quarantine and prescribe rules or regulations deemed necessary to prevent the introduction of an epidemic disease into the state or to control the spread of an epidemic disease within the state, with the least inconvenience to commerce and travel. TCA 4-5-208: If needed immediately, "emergency rules" can be written and go into effect for up to 165 days. See also 68-5-104 a (2).

IV. Authority to control a communicable disease:

TCA 68-5-104(a) (1) It is the duty of the local health authorities, on receipt of a report of a case, or suspected case…to confirm or establish the diagnosis, to determine the source or cause of the disease and to take such steps as may be necessary to isolate and/or quarantine the case or premise upon which the case, cause or source may be found, as may be required by the rules and regulations of the state department of health.

Tennessee Rules and Regulations 1200-14-1-.15: It is the duty of the local health officer, Commissioner, or their designated representative (upon getting a report of a communicable disease case or a suspected case) to:

A. Confer with physician, hospital, laboratory, or person reporting

B. Collect specimens necessary to confirm diagnosis or identify source of epidemic or infection

C. Make a complete epidemiologic investigation including but not limited to: review medical and relevant non-medical records, interview affected people and controls, and create a communicable disease field record

D. Implement appropriate control measures which may include: isolation, quarantine, exclusion, disinfection, immunization, disease surveillance, closure of establishment, education, and other measures considered appropriate by medical experts (e.g., Red Book, Centers for Disease Control and Prevention [CDC]) for the protection of the public's health.

V. Authority to review medical and non-medical records without delay:

Tennessee Rules and Regulations 1200-14-1-.15(2): Medical and relevant non-medical records shall be made available when requested, for inspection and copying, by an authorized representative of the Department when investigating a case, suspect case, or epidemic. The original medical records will not be removed from the health facility, and the information will be treated as confidential and sensitive.

VI. Duty of health professionals to report potential health threats:

Tennessee Rules and Regulations 1200-14-4-.03: any licensed practitioner of the healing arts must report to the Commissioner or a health officer any person they have reason to believe is or may be a health threat to others by potentially exposing them to an infection that causes serious illness.

VII. Legal control measures:

The Commissioner of Health or a designee may take steps to contain the spread of a novel influenza virus with enforcement ranging from unsupervised voluntary measures to court-ordered measures enforceable by law enforcement. The declaration of a state of emergency by the Governor of Tennessee may alter the requirements necessary to quarantine or isolate individuals and would likely streamline actions required for quarantine and isolation by the TDH.

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XI. Voluntary quarantine or isolation :

The first, and usually only, step is to ask affected persons to comply with requests of the health department. Past experience has demonstrated that, the vast majority of affected persons did comply voluntarily.

A. If time permits, a letter explaining the requested action on health department letterhead facilitates voluntary actions. This letter may assist the person in explaining their needs with employers or school and provides a written record of the actions they are expected to take.

B. The person should be given written material and social media postings shall provide information regarding infection control and symptoms, and instructions to prevent exposing others. The department should give a contact phone number and should have instructions for what to do and where to go in case they need medical attention. Post-exposure prophylaxis may be provided, along with instructions for use.

XII. Health Directive:

A. Definition:

A public health directive is issued by a local or regional health officer but does not require a court order. It is a written statement of evidence that a person may be a health threat and a statement of actions the health officer is directing the individual to take to cooperate with public health authorities.

B. Steps:

It is not necessary to issue a health directive first if a court-ordered public health measure or temporary hold order is required. However, if a health measure is sought, a health directive should be issued before a petition is filed with the court.

1. A health directive must be issued to an individual (not a group) and is a written statement specifically listing the clinical or epidemiological evidence that the person may be a health threat, and directing them to cooperate with health authorities' instructions to prevent or control a communicable disease. They may be directed to undergo medical examinations and tests, receive education, or to be isolated or quarantined.

2. If non-clinical evidence of possible infection exists, but a person refuses to be examined, one can presume a health threat and a health officer may issue a health directive requiring examination and testing.

3. A health directive is limited to the least restrictive alternative that, based on reasonable medical judgment, will adequately prevent the spread of the disease.

4. A health directive can be issued verbally, but if so, a written one must follow within 3 days.

5. When a health directive is issued, a copy of Tennessee Rules and Regulations, Chapter 1200-14-4, (which outlines communicable disease control health threat procedures) should be attached, and both should be provided to the individual.

6. When a health directive is issued, the affected person has the right to request a review of the decision by the State Chief Medical Officer or designee. The reviewing official must notify the person in writing of the review decision within 5 business days of receipt of the request.

7. The affected person can also ask that the conditions of the directive be given in the form of a court-ordered public health measure, but the health directive is in force during the time it takes to get the court order.

8. A court-ordered public health measure may be sought against a person who does not or cannot comply with a health directive for any reason

XIII. Court-ordered public health measure:

A. Definition:

A public health measure is sought by a health officer to require actions of a person who is considered a public health threat; it is signed by a General Sessions judge following a hearing. Failure to comply with instructions in a court- ordered public health measure is considered contempt of court.

B. Steps:

Tennessee Rules and Regulations 1200-14-4-.06: this order is issued by a court and should be undertaken with the consultation of the TDH or metropolitan attorney for public health. Rapid action is required, and health officers should keep the after-hours contact information of their consulting attorney available at all times. To obtain a court order, the health officer must:

1. File a petition with the General Sessions Court where the affected person lives or is found. An affidavit must include the specific facts of why the order is needed, including clear and convincing evidence that the person is substantially likely to be a health threat to others. It must also state what the person needs to be required to do. The health officer is responsible for making the necessary arrangements to carry out a judge's order.

2. The person may be required to receive education, to be tested, examined, treated, or confined. The person may be isolated in a setting supervised by the department or committed to the Commissioner's custody in an institutional facility or supervised living condition.

3. The court hearing must take place not before 5 business days after the petition is served on the patient.

4. The affected person has the right to come to the hearing and to call and examine witnesses and to have a personally selected physician examine them and the test results presented as evidence. The health

officer is responsible for advising on, preparing for, and overseeing safety precautions at the hearing.

5. The person has a right to an attorney, or, if indigent, a court-appointed one.

6. When a health measure is issued, a copy must be provided to the individual, along with a copy of the Tennessee Department of Health Rules 1200-14-4.

XIV. Temporary hold in an emergency situation:

A. Definition:

A temporary order sought by a health officer and issued by a General Sessions judge with an ex parte hearing (a hearing in which only the petitioner is heard), requiring actions of a person considered to be a public health threat. These are usually sought in emergency situations while going through the process of obtaining a court-ordered public health measure.

B. Steps:

1. Tennessee Rules and Regulations 1200-14-4-.05. In the case of an emergency, a health officer may petition the General Sessions Court of the county where an affected person lives or is found to order a law enforcement officer to make a civil arrest and take the person to a health care facility for examination, isolation and treatment, or to prevent or restrict access to premises. Health officers should know what procedure to use if such an action must be carried out after hours. This may involve talking with county sheriff's office or a county judge in advance to make them aware of this possibility.

2. The health officer must prepare an affidavit outlining the facts of the situation, why there is reasonable cause to believe the person is an imminent threat to others and what they want the judge to order.

3. This emergency hold can last for no more than 5 business days without a court hearing (unless the affected person consents to delay the hearing) to determine the appropriateness of continuing the hold. At that time, the health officer may petition the court for a public health measure (outlined above). The emergency hold also can be extended for 10 more business days if further examinations or tests need to be completed.

4. When a temporary hold is issued, a copy must be provided to the individual, along with a copy of the TDH Rules 1200-14-4.

Annex E.

Communications

I. Introduction:

Coordinated, accurate and timely communication is critical to effective pandemic response. Regional and local health departments directly and indirectly affected by pandemic influenza will experience an influx of requests for information; regional and local communications plans are outlined in their pandemic response plans. An array of communications strategies will be required to meet these needs. Informational needs include:

1. Private citizens seeking information on the status of the pandemic
2. Members of the media
3. Patients requiring medical advice
4. Quarantined persons requiring active monitoring for signs of disease (pre-pandemic during active case investigation and contact monitoring phase)
5. Physicians needing individual clinical consultation
6. Healthcare providers needing up-to-date recommendations or research findings
7. Community leaders requiring information to direct community response activities
8. Volunteers needing information on how to help
9. Public health and other government agencies involved in response that need to share information with each other

II. Purposes:

A. Respond to information needs efficiently and consistently

B. Communicate accurate and timely information to relevant healthcare providers

C. Route inquiries rapidly to appropriate staff

D. Reduce the burden of general public inquiries on regional health departments to allow them to focus on outbreak management

E. Reduce public fear and increase the public trust by delivering accurate public health messages and updating information regularly that will protect the public and prevent the spread of disease, illness or infection.

F. Provide information to local governments private entities aimed at reducing the impact of the pandemic on operators charged with the efficient operation of critical infrastructure.

III. Assumptions:

This section outlines state-level communications plans; regional and local communications plans will address similar issues and will be detailed in their pandemic response plans. 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. Such challenges should be a major focus of pandemic response drills. 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 Department of Health (TDH) will disseminate sources for health information, to assure that accurate and consistent information is readily available.

Scheduled briefings with designated spokespeople will be needed 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. Communications by the TDH are overseen by the TDH Director of Communications (DOC); once the Tennessee Emergency Management Plan (TEMP) is activated, communication will be coordinated in accordance with ESF 5 of the TEMP.

IV. Specific communications tools of the State Department of Health:

A. Pandemic Influenza Webpage:

The Department of Health will establish and maintain a website specifically for pandemic influenza. This website will contain regularly updated information for healthcare providers and the general public. It also will contain links to authoritative national and international sources of information, including the HHS influenza website (www.cdc.gov/flu). The health educator or designated staff, in the Public Health Preparedness Program of TDH's Communicable and Environmental Disease Emergency Preparedness Division (CEDEP) will be responsible for assuring that the content of the webpage is current and that up to date materials approved by subject matter experts within CEDEP are posted and that links to national and international resources are accurate. Social media platforms will direct stakeholders to the webpage and assist with rumor control.

B. Pandemic Influenza Electronic Updates:

The Tennessee Health Alert Network (TNHAN) is a secure web-portal used specifically for contacting regional and county public health offices, hospitals, and first response personnel statewide. All personnel alerted using TNHAN have the ability to immediately confirm any alerts or updates they receive.

On the pandemic influenza webpage, members of the public will have the opportunity register for free electronic updates on pandemic influenza distributed from the TDH via social media. Information intended for non-medical persons and for the distribution of clinical information intended for health care providers will be available on the webpage. These are intended to provide swift, accurate updates to those seeking the latest pandemic information.

Both electronic updates will be available to the public; all materials distributed will be approved for unrestricted public dissemination. The content of the electronic update and use will be managed by the health educator of the public health preparedness program within CEDEP, with input from CEDEP subject matter experts. Approval for distribution will be obtained through the State Epidemiologist, the TDH Director of Communications or a designee. State-specific information not otherwise publicly available must be approved for content and distribution through the responsible authorities listed above.

The electronic updates are designed to supplement and increase use of the Tennessee Health Alert Network (TNHAN - available only to registered clinician users). Those who sign up and are eligible to register for TNHAN will have the opportunity to indicate interest in obtaining information on and registering for TNHAN.

Development and implementation of the electronic updates will proceed in advance of a pandemic and they will be used to share information on pandemic preparedness and additional pandemic alert information (e.g., surveillance guidance for clinicians).

C. Pandemic Influenza Clinical Hotline for Patients:

During a pandemic, up to 30% of the state population will become ill with influenza. Under ordinary circumstances, it is estimated half of ill persons would seek outpatient medical attention. To reduce the burden on outpatient clinics, TDH will establish a clinical hotline for persons ill with influenza; this service may be contracted or staffed by CEDEP personnel under the supervision of an MD.

The purpose of this hotline is to provide clinical assessment and healthcare advice over the phone for patients with mild or moderate illness who do not need further medical evaluation. Based on responses to standard assessment questions, authorized phone staff can provide recommendations to persons and direct them to professional medical care if needed. The hotline staff also will be able to advise patient's general information regarding the pandemic and how to protect their family and close contacts from infection.

D. CDC Information Hotline:

The Centers for Disease Control and Prevention (CDC) offers an information line, Flu On Call, for callers, seeking general information. When callers with general questions exceed local capacity they may be directed to the Flu On Call information line..

E. Non-Clinical Hotline Stages:

There would be several stages of support at the central office to cover increasing public needs:

a. Interval 1: The published number is answered by front desk staff at central office. Calls are directed to central office personnel trained to answer questions. After hours coverage of calls to central office would remain usual with a central office physician responding to pages.

b. Interval 2 (Overflow Hotline): Use a national phone bank vendor contracted with CDC to provide a help desk service for receiving mass quantities of basic public health inquiries. In addition, calls may be routed to additional Department of Health staff provided with written answers to common questions. A running loop message for callers placed on hold will provide basic influenza information.

c. At every stage, calls requiring immediate regional response (specific to an investigation or a clinical situation) can be routed back to the regional health office, Regional Health Officer, or to the physician on call for immediate response.

F. Communication with Key Professional Groups:

Urgent and secure communications to healthcare providers, local health departments, and other groups will be necessary as rapidly changing conditions necessitate rapid information dissemination. TNHAN will be used for this

purpose to reach all TNHAN participants. TNHAN utilizes multiple contact methods and allows all participants to respond to received alerts and updates.

In addition, TDH maintains a database of primary care providers across the state that includes contacts for the purpose of rapid notification of clinicians. Information that is unrestricted will be posted on the pandemic influenza web page and shared through the public clinical electronic update as appropriate. Professional organizations (e.g., state associations, the health JIC, the state emergency management JIC, academies and Boards) will be notified to forward information to their memberships. Additional direct communication measures will be taken as capacity is developed.

Information that is unrestricted will be posted on the pandemic influenza web page and shared through the public clinical electronic update as appropriate. Professional organizations (e.g., state associations, academies and boards) will be notified of the state of emergency and instructed to forward information to their memberships. Additional direct communication measures will be taken as capacity is developed.

G. Media Briefings:

Media contacts will be managed by the TDH Director of Communications; during a state of emergency, they will be coordinated with the State Emergency Information Director and/or the Joint Information Center Director or their designee. Because of the nature of pandemic influenza, a virtual JIC may be activated, rather than the traditional JIC. This virtual JIC accomplishes two things – it limits the spread of the illness by not creating a mass gathering of reporters and it allows real-time communication with reporters across the state.

Regular briefings will be scheduled during a pandemic: conducted as needed. The objective will be to provide accurate, current information and to limit the media time required of subject matter experts and response personnel. Communication planning will address how to coordinate updates situations with public health, hospital, political leadership, and state and federal officials, as appropriate. Additionally, social media will be monitored to identify and control rumors as well as judge the effectiveness of messaging.

H. Designation of a Spokesperson

The Commissioner of Health is to be the primary spokesperson during an influenza pandemic. The back-up spokespersons include the Chief Medical

Officer and the State Epidemiologist, or their designee. Subject matter experts to assist the Commissioner include the Chief Medical Officer, State Epidemiologist, the director of the State Public Health Laboratory and the Regional Health Officers. Others will be identified and included as necessary. All of the individuals listed above have received training in media relations and risk communication. Additional refresher training is conducted periodically. All of the individuals listed above will also receive the CDC's Pandemic Influenza CERC training.

I. Department of Health Communications:

Regular conference calls will be held among health department personnel and other emergency responders to update the situation. In addition, contact lists of key persons in other agencies are available to facilitate cross-communication throughout the pandemic. The Tennessee Emergency Management Agency, the Office of Homeland Security and the TDH are responsible for maintaining these lists.

Redundant communications utilizing 800MHz radios (on interoperable frequencies), satellite phones, Digital National Warning Alert System (DNAWAS) and HAM radios manned by ARES operators can be utilized by health department personnel in the event traditional communication networks become unusable. Communication equipment used for emergency alerting (and as redundant communication) is utilized in emergency exercises or tested on a quarterly basis.

J. Public and Professional Pandemic Influenza Awareness Information

All pandemic information created for public awareness or education to be reviewed by the DOC or an appointed designee and approved by the Commissioner of Health or designee prior to production and distribution. In addition, news releases created must also be reviewed by the Commissioner of Health or designee before distribution. Specific news releases concerning a particular local entity will also be submitted to staff from those entities for review.

TDH will use a variety of approaches to increase the level of knowledge about pandemic influenza. These will include using social media platforms, posting of information and related links on the Internet, providing updates to the media, and collaborating with professional and civic organizations to raise awareness. Information will specifically be targeted to healthcare providers, public health officials, policy makers, other local partners, and the public.

The DOC will prepare and maintain pandemic influenza messages and materials to be disseminated during the various phases of a pandemic. The DOC has also reviewed state quarantine and isolation regulations and will create education materials (FAQs, Q&A's, etc.) for public education efforts.

1. When a Pandemic Alert enters Interval 3, the DOC will notify all health partners used for delivering information. The DOC also will ensure all pertinent informational materials are available in all appropriate languages and that the contact lists for all media, both English and non-English, are updated and complete.

2. TDH will also disseminate federal materials (e.g. checklist for families, individuals and businesses) found on www.PandemicFlu.gov. The federal government (CDC/HHS) has created an extensive web site that includes a variety of materials to help the media and public deal with issues arising from pandemic influenza.

K. Channels of Message Distribution

The Commissioner or his designee will notify divisions within the department that their staff will be utilized to help deliver information to at-risk populations such as communities where English is a secondary language, the homeless community, people who are homebound, etc. TDH programs which may provide assistance in reaching these communities include Primary Care; WIC; Refugee Health; Local Health Services; Aging and Adult Services; Services for the Blind; Mental Health, Developmental Disabilities, and Substance Abuse Services; Services for the Deaf and Hard of Hearing, and Vocational Rehabilitation. The DOC, emergency preparedness staff and others will work with the various programs to utilize communication channels that exist within community groups providing services to people in the communities listed above.

L. Interaction with the CDC Emergency Communication System (ECS)

The DOC, will be in constant communication with the CDC Office of Communications. As in past public health crises, contact will be maintained continuously via telephone communications and e-mail to allow sharing of all news releases before distribution to the media.

The DOC will interact, as appropriate, with CDC's Emergency Communication System (ECS). It is understood that once human-to-human transmission of novel influenza virus is confirmed in the United States, the CDC will activate its ECS to serve as a resource to state and local communications personnel and coordinate the federal public health communication response. The ECS will direct all CDC

pandemic influenza-related communication activities, including communication strategy development, key message development, CDC website management, materials development and dissemination, national media relations, media monitoring, and all other national communication components. Some ECS staff will be designated to focus on national level issues, whereas others will coordinate field personnel. As much as possible, the ECS will support Tennessee's JIC activities.

Annex F.

Pandemic Vaccine Distribution

Background:

This document describes the proposed process for adapting the existing Tennessee Vaccine-Preventable Disease and Immunization Program's Flu Distribution Tool for distribution of pandemic influenza vaccine in the case of an outbreak and using the Tennessee Immunization Information System (TennIIS) to track administered doses reported by providers participating in pandemic response. TennIIS is the web-based immunization registry operated by Scientific Technologies Corporation (STC) that was launched in November 2014 to replace the state's legacy system, TWIS, which was used during the 2009 H1N1 influenza pandemic vaccination program. Access to TennIIS enables pandemic influenza providers to obtain comprehensive immunization information on patients, update or initiate new patient records, and link to other web sites for more specific information on pandemic influenza vaccine. Providers will pre-order annual influenza vaccine through a REDCap survey designed and implemented by the TennIIS Epidemiologist and the Vaccine-Preventable Disease Epidemiologist.

Pandemic influenza vaccine will be obtained by the state in the manner designed by the federal government. Available pandemic influenza vaccine will be distributed to providers based on the populations of the 13 public health regions and administered to people according to priority groupings as designated by the federal government. Priority groupings are subject to change depending upon the nature of the virus, the type and quantity of pandemic influenza vaccine, and associated adjuvant available (if necessary). Pandemic influenza vaccine orders will be submitted in the Vaccine Tracking System (VTrckS) and sent to the Centers for Disease Control and Prevention (CDC) where the order will be fulfilled by the CDC contracted vaccine distributor. All pandemic influenza vaccinations will be recorded and reported in TennIIS.

The three stages of pandemic vaccine distribution preparedness are: 1) the inter-pandemic period (no declared pandemic), 2) the pandemic pre-vaccine period, and 3) the pandemic vaccine distribution period.

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Roles

- Vaccine Lead: VPDIP Medical Director
- Vaccine Lead Back-Up: VFC Manager
- Vaccine Immunization Registry: TennIIS Manager
- Vaccine Ordering/Shipping: Vaccine Manager
- Vaccine Troubleshooting/Clinical Questions: P H N C , Registry Clinical Consultant (CAC2) and supervisor of hotline clerks
- Vaccine Data Management: TennIIS Epidemiologist
- Disease Surveillance (Sentinel Provider Network)/Laboratory Testing: Vaccine-Preventable Disease Lead Epidemiologist
- Technical Support for TennIIS: STC contractors

Vaccine Assumptions

1. Effective pandemic influenza vaccines often require 2 doses administered 1 month apart.
   - **a.** The first dose primes and does not provide protection.
   - **b.** Optimal protective level is reached 2 weeks after the second dose.
2. Depending on the pandemic influenza virus circulating (for instance, H7 vaccines are historically not very immunogenic), the pandemic influenza vaccine may require an adjuvant.
   - **a.** An un-adjuvanted product may or may not be licensed by the Food and Drug Administration (FDA).
   - **b.** An adjuvant may be pre-mixed or require mixing at point of use.
   - **c.** Vaccine recipients may need to receive 2 doses of the same adjuvant.
   - **d.** An adjuvant product may not be FDA-licensed (there is one US-licensed adjuvanted flu vaccine). Therefore an Emergency Use Authorization (EUA) will likely be issued and signed consent from vaccine receipts may be necessary.
3. Pandemic influenza vaccine formulations may be in multi-dose vials, single dose vials, or multiple formulations.
   - **a.** Licensed products will likely use existing age indications for the brand.
   - **b.** Multi-dose vials are the quickest to manufacture and result in the least amount of waste.
   - **c.** A live-attenuated influenza vaccine may be available, depending upon the virulence of the circulating pandemic influenza virus.
   - **d.** Injection supplies will need to be shipped along with pandemic influenza vaccine.

Stage 1: Inter-Pandemic Period (no declared pandemic)

1. Step 1: Build and deploy a REDCap project for recruiting Pandemic Vaccinating Providers (PVPs)
    - **a.** A REDCap database and corresponding survey will be designed and built by the TennIIS Epidemiologist and the Vaccine-Preventable Disease Epidemiologist. This database will house information related to the pandemic registration process.
    - **b.** Information to be collected in the project:
        - **i.** General:
            1. Pandemic/VFC Provider Identification Number (PIN) (assigned during Pandemic Pre-Vaccine Period)
            2. Priority Level (assigned based on site type/region)
            3. Maximum Dose Space (with definition)(none less than 100)
            4. Pandemic Provider Agreement upload
            5. Interested in being a pandemic provider: Y/N
        - **ii.** For TennIIS:
            1. Practice name (TennIIS facility)
            2. Associated legal entity (TennIIS organization)
            3. Practice Address (County, Region)
            4. Group NPI
            5. Point of Contact Name
            6. Point of Contact Phone Number
            7. Point of Contact Email
            8. Point of Contact Fax
            9. Site Type
            10. Currently an immunizing provider?
                - **a.** No.
                - **b.** Yes; currently submit data to TennIIS?
                - **c.** Yes; further identification for matching.
                    - **i.** VFC provider?
                    - **ii.** Yes; VFC PIN
                    - **iii.** No; register in TennIIS if willing to start reporting prior to pandemic
        - **iii.** For VTrcKs:
            1. Shipping address (if different than practice address)
            2. Availability to receive vaccine (receiving hours)
        - **iv.** For Quality Assurance:
            1. Refrigerator/Freezer information (pictures)

2. Downloadable storage and handling guide
3. Training expectation? Frequency?
4. Data logger

Timeframe	The REDCap for Recruiting Pandemic Vaccinating Provider project will be completed and deployable by June 30, 2020.
Responsible Person	TennIIS Epidemiologist and the Vaccine-Preventable Disease Epidemiologist
Additional Personnel	No additional personnel needs anticipated
Concerns/ Limitations	1. Utilizing REDCap makes VPDIP reliant on two separate systems. 2. REDCap slows considerably with >1000 entries
Enhancements and Requirements for funding	1. The REDCap database must store information for REDCap providers.

2. Step 2: Recruit providers into REDCap (Annually)
    a. Providers will be recruited through a REDCap survey sent to the following organizations:
        i. TennIIS facility list
        ii. Tennessee Academy of Family Physicians (TNAFP)
        iii. Tennessee Chapter of American Academy of Pediatrics (TNAAP)
        iv. Tennessee Medical Association (TMA)
        v. Tennessee Public Health Association (TPHA)
        vi. Tennessee Primary Care Association (TPCA)
        vii. Tennessee Hospital Association (THA)
        viii. Tennessee Health Care Association / Tennessee Center for Assisted Living (THCA/TNCAL)
        ix. Tennessee Pharmacists Association (TPA)
        x. American College of Physicians (ACP)
        xi. Tennessee Sentinel Provider Network (SPN)
        xii. Centers for Medicare & Medicaid Services (CMS)
        xiii. Cumberland Pediatric Foundation (CPF)

xiv. Tennessee Chapter of the American College of Obstetricians and Gynecologists (TN ACOG)

b. The survey will be deployed annually to recruit new providers and update contact information for already-enrolled providers. The survey will be emailed to the organizations listed in Step 2, Section A. This list is subject to change as more partners are identified

c. Geographical gaps in pandemic influenza vaccine providers will be identified through geocoding shipping addresses identified through REDCap via ArcMap. The Medical Director and Deputy TennIIS Manager will conduct outreach to areas with few pandemic influenza vaccine providers.

Timeframe	The survey will be deployable by June 2020.
Responsible Person	VPDIP Medical Director, Emergency Preparedness staff, TennIIS Epidemiologist, TennIIS Deputy Director, and the Vaccine-Preventable Disease Epidemiologist
Additional Personnel Needs	No additional personnel needs anticipated
Concerns/ Limitations	Continuing to engage providers during the inter-pandemic period will take frequent and creative communications.
Enhancements and Requirements for funding	Smarty Streets and GIS software will be necessary to identify gaps in Pandemic Vaccinating Provider coverage across the state.

3. Step 3: TennIIS Registration (for Immunizing Providers who want to start reporting prior to a pandemic)
    a. Immunizing providers who indicate on the REDCap survey that they wish to start reporting into the registry will be added as a new TennIIS organization, facility, and/or user.

Timeframe	Quarter 4 2020- Quarter 1 2021
Responsible Person	TennIIS Registration Team
Additional Personnel Needs	No additional personnel needs anticipated
Concerns/ Limitations	Communication will be planned for Q1 and Q4 during slower times for the TennIIS team to prepare for the influx of additional registration and onboarding.
Enhancements and Requirements for funding	N/A

4. Step 4: Engage providers (Bi-annually)
    - **a.** The REDCap survey will be deployed annually to:
        - **i.** Recruit new pandemic vaccinating providers
        - **ii.** Update existing provider information
        - **iii.** Allow existing providers to opt-out.
    - **b.** Annual communication (deployed 6 months after the REDCap survey) will serve to keep registered pandemic vaccinating providers engaged with VPDIP and the pandemic process. Communication will be made through:
        - **i.** Emails to facility points of contact
        - **ii.** An annual influenza webinar

Timeframe	Communication and the REDCap survey will be deployed every 12 months
Responsible Person	TennIIS Epidemiologist, Vaccine-Preventable Disease Epidemiologist, VPDIP Medical Director, TennIIS Deputy Director, Emergency Preparedness Staff

Additional Personnel	No additional personnel needs anticipated
Concerns/ Limitations	New and innovative communication strategies will be needed to keep providers and facilities engaged in the Pandemic process during the inter-pandemic phase.
Enhancements and Requirements for funding	N/A

Stage 2: Pandemic Pre-Vaccine Period

1. Step 1: Provider and Public Notification of Pandemic Influenza Vaccine
   - **a.** Email the provider list in REDCap to alert them of the Pandemic Pre-Vaccine Period.
   - **b.** Recruit additional providers through social media, the TennIIS website, the TDH website, Tennessee Health Alert Network messaging, etc.
   - **c.** Deploy the REDCap survey to the organization distribution list noted in Stage 1, Step 2, Section A.
   - **d.** Providers to confirm themselves as a Pandemic Vaccine Provider (PVP). Ask PVPs to update/enter their existing information in REDCap.

Timeframe	When CDC announces the plan to have vaccine available to begin vaccinating the population in 60 days
Responsible Person	VPDIP Medical Director, Emergency Preparedness Staff, Administrative Team Manager
Additional Personnel	TennIIS Deputy Director, Office of Media and Communications Director,
Concerns/ Limitations	Reaching enough providers for each tier per jurisdiction.
Enhancements and Requirements for funding	N/A

2. Step 2: TennIIS Registration (for all other PVP not previously registered)
   a. All facilities in REDCap that are not already registered in TennIIS will be registered. In addition, all persons in REDCap listed as a point of contact for a facility will be registered as users in TennIIS.

Timeframe	The amount of time it takes to register a new user depends on the volume of requests received. If there is only one request to process, it could take less than one day to fulfill the request. If there are many requests to process, it could take several
Responsible Person	TennIIS registration team.
Additional Personnel	2 people dedicated to processing requests - Level: ASA2 or ASA3
Concerns/ Limitations	None at this time.
Enhancements and Requirements for funding	Future updates to the IIS will allow us to have the option for pandemic registration in TennIIS.

3. Step 3: Assign pandemic Provider Identification Numbers (PINs) to providers who do not already have a VFC PIN
   a. Eligibility to become a pandemic vaccinating provider will be assessed.
      i. Eligibility for being a pandemic provider is based on provider type, ability to store pandemic influenza vaccine, and the number of pandemic influenza vaccines the provider expects to administer.
         - Providers who expect to administer fewer than 100 doses of pandemic influenza vaccine are not able to participate in the program. Instead, they must contact the LHD to receive pandemic influenza vaccine.

   b. Providers meeting the minimum requirements will be assigned a PIN.
      i. When the facility has been deemed eligible to administer pandemic influenza vaccine, the provider is issued a PIN by the vaccine manager.
      ii. VTrckS accounts will be created by the Vaccine Manager and staff

using the information in the REDCap database.

Timeframe	Providers will receive a VTrckS PIN number within 2 weeks of registering.
Responsible Person	TennIIS Epidemiologist, Vaccine Manager
Additional Personnel	1 person dedicated to assisting with creation of VTrckS accounts.
Needs	- Level: ASA2 or ASA3
Concerns/ Limitations	Ensure PINs for new providers are not duplicates.
Enhancements and Requirements for funding	The Provider PIN will be requested and created outside of TennIIS. Future improvements to the current IIS will allow providers to register for a PIN through TennIIS.

4. Step 4: Provider Agreements and Education/Training
   - **a.** CDC's existing 1-hour online module, "You Call the Shots Vaccine Storage and Handling" will be required for facilities that are not part of the VFC program to ensure that staff has adequate knowledge of proper vaccine storage and handling. A copy of the certificate of completion this module generates should be submitted with the provider agreement.
   - **b.** The CDC will provide the state with a standard federal Pandemic Influenza Vaccine Provider Agreement. The Provider Agreement will be uploaded as a PDF file in REDCap by the provider once completed.

Timeframe	Providers should complete training and upload the signed agreement and training certificate into REDCap within one week of notification.
Responsible Person	VFC Quality Assurance team, Vaccine Manager, VPDIP Medical Director, TennIIS Epidemiologist
Additional Personnel	No additional personnel needs anticipated

Concerns/ Limitations	Completion of the online module does not ensure competency or compliance with storage and handling requirements.
Enhancements and Requirements for funding	To ensure provider compliance with vaccine storage and handling, regional immunization representatives (RIRs) will conduct drop-in visits. Visits will be focused on providers with large quantities of pandemic influenza vaccine and providers who have complaints of misuse and/or mishandling.

5. Step 5: Review pandemic flu distribution logic and test SAS code
    - **a.** Create/update pandemic flu distribution SAS code (adapting from existing flu distribution logic).
        - **i.** Use REDCap to identify pandemic providers (PIN number), region, priority number (by site type/region), maximum doses to be allocated and how often shipments can be received by the provider
        - **ii.** Import excel file into SAS and update the NDC number(s)/number of doses allotted from CDC during pandemic.
        - **iii.** Establish and test distribution/allocation rules:
            - Pre: distribute allocated doses proportionally by region population.
            - Step 1: for orders less than 500 doses, each qualifying order should be allotted 10 doses. Note: if not all qualifying orders can be allotted 10 doses, skip and move to Step 2.
            - Step 2: for orders more than or equal to 500 doses, each qualifying order should be allotted 50 doses. Note: if not all qualifying orders can be allotted 50 doses, skip and move on to Step 3.
            - Step 3: fulfill orders less than 100 doses. Note: if not all qualifying orders can be fulfilled, skip and move on to Step 4.
            - Step 4: calculate the proportion of the remaining order to the sum of all remaining orders. Use that percent order to determine the amount of remainder to be distributed proportionally to all providers (i.e. higher order remaining will get higher proportion of remaining doses).
            - Step 5: Sort orders remaining from smallest to largest. Fulfill as many small orders as the remaining doses allows.
            - Step 6: Sort orders remaining from largest to smallest. Apply all remaining doses to the largest order remaining.

Stage 3: Pandemic Vaccine Distribution Period

1. Step 1: Vaccine allocation from CDC
2. Step 2: SAS code/reporting for distributing doses based on region population, provider type, and provider request amount
    a. Output:
        i. Order sheet for VTrcKs
        ii. Allocation Summary
        iii. Remainder Summary
        iv. Flu Distribution Update/Completeness
3. Step 3: Order Uploading into VTrcKs
4. Step 4: SAS code:
    a. Reporting for tracking administered doses reported to TennIIS
        i. Total number of pandemic influenza doses administered to ensure that at least 10% of population is being vaccinated each week
        ii. Mapped locations of facilities where vaccine is being distributed/administered

Appendix 1: Acronyms

CDC	Centers for Disease Control and Prevention
EP	Public Health Emergency Preparedness
EUA	Emergency Use Authorization
FDA	Food and Drug Administration
LAIV	Live Attenuated Influenza Vaccine
LHD	Local Health Department
PIN	Personal Identification Number
PIVPN	Pandemic Influenza Vaccine Provider Network
PVP	Pandemic Vaccinating Provider
SPN	Sentinel Provider Network
TDH	Tennessee Department of Health
TennIIS	Tennessee Immunization Information System
VFC	Vaccines for Children
VPDIP	Vaccine-Preventable Diseases and Immunization Program
VTrckS	Vaccine Tracking System

Appendix 2: Definitions

Adjuvant – A substance added to an immunogen in order to elicit a more marked immune response.

Authorized Immunization Provider (AIP) – A licensed healthcare provider authorized to administer vaccine. Generally, this person is legally responsible for a facility's account in TennIIS. For the purpose of administering pandemic influenza vaccine, it is the person who will be responsible for signing the Pandemic Vaccine Provider Agreement before placing the initial vaccine order.

Emergency Use Authorization (EUA) – If an emerging public health threat is identified for which no licensed or approved product exists, the Project BioShield Act of 2004 authorizes the Commissioner of the Food and Drug Administration to issue an EUA so appropriate countermeasures (e.g., distribution of unlicensed antiviral medications) can be taken quickly to protect the safety of the U.S. population.

Live Attenuated Influenza Vaccine (LAIV) – A type of influenza vaccine that contains live but attenuated (weakened) influenza viruses which are sprayed into the nostrils rather than injected into the muscle.

Point of Contact – For registration in TennIIS, it is the person designated by the facility as the person to receive all necessary communications via email or phone regarding TennIIS. For pandemic influenza vaccine, it is the person designated by the facility as the person to receive all necessary communications via email or phone regarding updates on the planning and administration of pandemic influenza vaccine. The person designated as the point of contact for TennIIS may or may not be the same person that is designated as the point of contact for pandemic influenza vaccine or the Shipping Contact.

Scientific Technology Corporation (STC): The vendor that owns, manages and hosts the Tennessee Immunization Information System (TennIIS).

Sentinel Provider Network (SPN) – Voluntary reporting of influenza-like illness by health care providers, laboratories, and state health departments. Allows for understanding of influenza virus activity, the geographic distribution of influenza viruses, and the clinical impact of the circulating virus (es).

Shipping Contact – The person to whom vaccine shipping alerts should be sent. This may be the primary point of contact or another person. This information must be accurate. It is used to set up the facility shipping account for vaccine.

Supervising Authority – Required for read-only access to the Tennessee Web Immunization System (TWIS). This person is typically a Manager or Director of an office, program, or department. In a public or private school, this would be the head of the school (e.g., Principal or Headmaster). In a pre-school or daycare, this would be the Director or Owner.

Tennessee Immunization Information System (TennIIS) – The state's immunization registry. It is a proprietary program (iWeb) developed, hosted and managed by Scientific Technology Corporation (STC). Access to TennIIS enables authorized users to obtain comprehensive immunization information on patients, update or initiate new patient records, and link to other web sites as indicated to get more specific information on vaccines, vaccination strategies, and current information from the Tennessee Immunization Program. Access also offers providers who participate in the Vaccines for Children (VFC) program with the ability to order federally purchased vaccines and monitoring their inventory through the Vaccine Order Management System (VOMS). VOMS access for pandemic vaccine can be turned on for Pandemic Influenza Vaccine Provider Network (PIVPN) facilities after the CDC Provider Agreement is completed as part of the pandemic vaccine registration process.

Vaccines for Children (VFC) – An entitlement program (a right granted by law) established by Congress in 1993 for eligible children aged 18 years and younger. The program helps families of children who may not otherwise have access to vaccines by providing free vaccines to doctors who serve them. VFC is administered at the national level by the CDC, that contracts with vaccine manufacturers to buy vaccines at reduced rates. Tennessee enrolls physicians who serve eligible children and provide routine immunizations. More than 600 private physicians, health department clinics, federally qualified health centers, and rural health centers participate in VFC in Tennessee.

Vaccine Tracking System (VTrckS) – A Centers for Disease Control and Prevention (CDC) application that integrates the purchasing, ordering, and distribution of federal vaccine. VTrckS allows healthcare providers to input their vaccine requests (orders) directly online thereby improving efficiency and accountability of public dollars. The system then evaluates vaccine orders against specific guidelines set by grantees (i.e., state, local, and territorial health departments) and the CDC.

Pandemic Influenza Vaccine Shipment Form

Facility Shipping Information
The physical location where pandemic influenza vaccine will be shipped to - NO P.O. BOX ALLOWED. Only shipments within the State of Tennessee will be processed.

Check here if the facility shipping name and address are the same as the TennIIS practice name and address:	☑
Facility Shipping Name:	
Facility Shipping Street Address:	
BLDG/Box/Suite/etc.:	
City:	
State:	TN
County:	--select--
Zip Code:	
Please select the option that best describes this practice:	
This is an independent practice that will be directly receiving the shipment of pandemic influenza vaccine:	○
This is a hospital-affiliated practice that will be directly receiving the shipment of pandemic influenza vaccine:	○
This is a hospital-affiliated practice that will NOT be directly receiving the shipment of pandemic influenza vaccine:	○

Shipping Contact

Check here if the shipping contact is the same as the primary pandemic point of contact (PPOC):	☐
First Name:	
Middle Name:	
Last Name:	
Title:	
Email:	
Confirm Email:	
Phone:	
Extension:	
Fax:	

Shipping Instructions

Check the days and times the facility is able to receive shipments of pandemic influenza vaccine.

Monday:	☐	--select--	--select--	--select--	--select--
Tuesday:	☐	--select--	--select--	--select--	--select--
Wednesday:	☐	--select--	--select--	--select--	--select--
Thursday:	☐	--select--	--select--	--select--	--select--
Friday:	☐	--select--	--select--	--select--	--select--

Assessment and Planning Information
The purpose of this data is to understand the vaccination capacity of this practice for assessment and planning purposes. Data entered here does not represent an order request for pandemic influenza vaccine.

Assuming the U.S. can distribute enough pandemic influenza vaccine to vaccinate every U.S. resident within 6 months after the start of vaccine distribution and that this vaccine is accepted by the public	
Estimate the total number of healthcare staff, including affiliated professionals, this practice intends to vaccinate during the course of this 6-month vaccination program:	
Estimate the total number of patients or other persons this practice intends to vaccinate on a weekly basis during the course of this 6-month vaccination program:	
Estimate the total number of patients or other persons this practice intends to vaccinate on a routine clinic day (exclude special vaccine clinic events) during the course of this 6-month vaccination program:	
Will you offer pandemic influenza vaccine to the general public or will you only vaccinate current patients?	
Pandemic influenza vaccine will be offered to the general public as well as current patients:	○
Pandemic influenza vaccine will be offered to current patients only:	○

Annex G.

Fatality Management

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I. Authorities

A. Tennessee Department of Health Mass Fatality Plan

B. Tennessee Code Annotated (TCA) Title 38 Prevention and Detection of Crime, Chapter 7, Post-Mortem Examinations, Part 1, Post-Mortem Examination Act, TCA 38-7-101 (2012), Short Title, This part shall be known and may be cited as the "Post-Mortem Examination Act."

38-7-102. Post-mortem examination division.

The department of health is authorized and empowered to create and maintain a post-mortem examination division or service. The division or service shall have as its functions the investigation of certain deaths as defined in this part, and the keeping of full and complete records of all reports on investigations and examinations made pursuant to the provisions of this part. The commissioner of health, acting for the state and with the approval of the governor and considering the recommendation made by the Tennessee medical examiner advisory council, shall appoint a chief medical examiner to direct the division or service, and such other personnel as the commissioner may find appropriate to the enforcement of the duties and powers of this part.
The commissioner is authorized and empowered to spend such funds as may be appropriated for the enforcement of this part, and to promulgate rules through the department of health to establish fees for autopsies, guidelines for death investigations and forensic autopsies, and other costs and services associated with this part.

HISTORY: Acts 1961, ch. 174, § 2; 1980, ch. 810, § 2; T.C.A., § 38-702; Acts 2008, ch. 969, § 1.

38-7-103. Chief medical examiner -- Deputies and assistants -- Duties and authority.

(a) The chief medical examiner shall be a physician with an unlimited license to practice medicine and surgery in the state of Tennessee, or who is qualified and eligible for such license, and shall be required to obtain a license within the six-month period after employment. The chief medical examiner shall be a pathologist who is certified by the American Board of Pathology and who holds a certificate of competency in forensic pathology. In addition to the chief medical examiner's other administrative duties, the chief medical examiner's educational duties shall include developing and providing initial training and regular continuing education to all county medical examiners and medical investigators. The chief medical examiner shall be appointed to a five-year term, and may serve unlimited consecutive terms.

(b) The Tennessee medical examiner advisory council shall recommend to the chief medical examiner three (3) deputy state medical examiners, one (1) from each grand division of the state. The chief medical examiner, in consultation with the advisory council and with the approval of the commissioner of health, shall appoint the three (3)

deputy state medical examiners and any assistant state medical examiners needed for regional administrative, professional and technical duties. The deputy medical examiners shall be based in one (1) of the state forensic centers. These state medical examiners shall have the same qualifications as the chief medical examiner. In addition to their other administrative, professional and technical duties, the deputy and assistant state medical examiners may lecture to medical and law school classes and conduct such special classes for county medical examiners, law enforcement officers and other investigators.

(c) The chief medical examiner shall have investigative authority for certain types of death that are in the interests of the state, including mass fatality incidents, for the identification, examination and disposition of victims' remains, and instances that represent a threat to the public health or safety, or both.

HISTORY: Acts 1961, ch. 174, § 3; T.C.A., § 38-703; Acts 1994, ch. 775, §§ 1, 2; 2008, ch. 969, §§ 2-4.

38-7-104.County medical examiner.

(a) A county medical examiner shall be appointed by the county mayor, subject to confirmation by the county legislative body, based on a recommendation from a convention of physicians resident in the county. A county medical examiner shall be a physician who is either a graduate of an accredited medical school authorized to confer upon graduates the degree of doctor of medicine (M.D.) and who is duly licensed in Tennessee, or is a graduate of a recognized osteopathic college authorized to confer the degree of doctor of osteopathy (D.O.) and who is licensed to practice osteopathic medicine in Tennessee, and shall be elected from a list of a maximum of two (2) doctors of medicine or osteopathy nominated by convention of the physicians, medical or osteopathic, resident in the county, the convention to be called for this purpose by the county mayor.

(b) If it is not possible to obtain an acceptance as a county medical examiner from a physician in a county, authority is given for the election of a county medical examiner from an adjacent or another county. A county medical examiner, when temporarily unable to perform the duties of the office, shall have the authority to deputize any other physician in the area to act as county medical examiner during the absence. If the county legislative body fails to certify a county medical examiner for a county or if the county medical examiner resigns or is unable to fulfill the duties of the office during the interim between county legislative body sessions and a deputy has not been appointed by the county medical examiner, the chief medical examiner shall have the authority to appoint a county medical examiner to serve until the next session of the county legislative body.

(c) A county medical examiner shall serve a five-year term, and shall be eligible for reappointment by the county mayor with confirmation by the county legislative body.

(d) Whenever any county medical examiner shall be called as a witness in any proceedings before the grand jury or in any criminal case, the county medical examiner shall receive from the county as compensation for services as witness a fee as shall be determined by the court before which the proceedings are conducted, unless the fees are paid under provisions of § 38-7-111 [repealed].

(e)) The county medical examiner may be suspended by the county mayor for good cause, which shall include, but not be limited to, malfeasance in the performance of the duties of a county medical examiner, criminal conduct, or behavior that is unethical in nature or that is in violation of a relevant code of professional medical responsibility. The suspension shall be for a period of ninety (90) days. At the end of the ninety (90) day period, the suspension shall terminate, unless the county mayor has recommended to the county legislative body in writing that they remove the county medical examiner from office. If the county mayor recommends removal of the county medical examiner, then the county legislative body shall vote on whether to remove the county medical examiner from office within ninety (90) days of the date of the written recommendation. A majority vote shall be required in order to remove the county medical examiner from office. If a majority of the county legislative body does not vote for removal of the county medical examiner from office, then the suspension of the county medical examiner shall terminate immediately.

(f) (1) A medical investigator shall be a licensed emergency medical technician (EMT), paramedic, registered nurse, physician's assistant or a person registered by or a diplomat of the American Board of Medicolegal Death Investigators and approved by the county medical examiner as qualified to serve as medical investigator.

(2) If the county has an elected coroner, the coroner shall serve as the medical investigator for the county; provided, that such coroner meets the qualifications for a medical investigator set out in subdivision (f)(1). If the coroner is not qualified to serve as medical investigator, then the county legislative body shall, by resolution, either authorize the county medical examiner to appoint a medical investigator subject to confirmation by the county legislative body, or provide for this function through a contract for service approved by the county medical examiner and the county legislative body; provided, however, that, if the county has an elected coroner who has served in that capacity for ten (10) years or more, such coroner shall serve as the medical investigator for the county, regardless of whether the coroner meets the qualifications set out in subdivision (f)(1).

(3) The county medical investigator may conduct investigations when a death is reported, as provided in § 38-7-108, under the supervision of the county medical examiner. The county medical investigator may make pronouncements of death and may recommend to the county medical examiner that an autopsy be ordered. However, the county medical investigator shall not be empowered to sign a death certificate. The county medical examiner may delegate to the county medical investigator the authority to order an autopsy.

(g) County medical examiners and medical investigators shall be required to receive initial training and regular continuing education through the chief medical examiner and to operate according to the death investigation guidelines adopted by the department of health.

HISTORY: Acts 1961, ch. 174, § 4; 1967, ch. 399, § 1; 1969, ch. 21, § 1; 1971, ch. 246, § 1; 1977, ch. 141, § 1; impl. am. Acts 1978, ch. 934, §§ 7, 36; T.C.A., § 38-704; Acts 1983, ch. 12, § 1; 1994, ch. 775, § 3; 2003, ch. 90, § 2; 2004, ch. 651, §§ 1, 2; 2005, ch. 472, § 1; 2008, ch. 969, §§ 5-10.

38-7-105. Facility for performance of autopsies.

All autopsies must be performed at a facility accredited by the National Association of Medical Examiners (NAME). A facility must receive accreditation from NAME within one (1) year of July 1, 2011, maintain that accreditation, and operate pursuant to NAME guidelines.

HISTORY: Acts 1961, ch. 174, § 5; 1967, ch. 399, § 2; 1968, ch. 626, § 1; impl. am. Acts 1978, ch. 934, §§ 7, 16, 36; T.C.A., § 38-705; Acts 1994, ch. 775, § 4; 1995, ch. 258, § 1; 2008, ch. 969, § 11; 2009, ch. 392, § 1.

38-7-201. Tennessee medical examiner advisory council -- Creation -- Members.

(a) There is created the Tennessee medical examiner advisory council. The council shall consist of nine (9) members, each of whom shall be a resident of this state. The director of the Tennessee bureau of investigation shall be a permanent member of the council. The governor shall appoint one (1) district attorney general, one (1) district public defender, three (3) county medical examiners, one (1) from each grand division of Tennessee, one (1) licensed funeral director, and one (1) public citizen to the council. The commissioner of health or the commissioner's designee shall serve as an ex-officio, nonvoting member of the council. All regular appointments to the council shall be for terms of three (3) years each, with a maximum of two (2) consecutive terms. Each member shall serve until a successor is appointed. Vacancies shall be filled by appointment of the governor for the remainder of the unexpired term.

(b) Each member of the council shall receive reimbursement for travel expenses in accordance with the comprehensive travel regulations promulgated by the department of finance and administration and approved by the attorney general and reporter.

(c) The council shall organize annually and select a chair and other officers as needed. Meetings shall be held at least annually with additional meetings as frequently as may be required.

(d) The council shall have the power and duty to:

(1) Review candidates and make a recommendation to the commissioner of health on the appointment of the chief medical examiner and deputy state medical examiners;

(2) Assist the chief medical examiner in the development and updating of guidelines for death investigations and forensic autopsies in this state, to be promulgated as rules through the department of health; and

(3) Issue an annual report on death investigations in this state.

HISTORY: Acts 2008, ch. 969, § 23.

C. Tennessee Code Annotated (TCA) Title 68 Health, Safety and Environmental Protection, Health, Chapter 4 Disposition of Dead Bodies, Tenn. Code Ann. § 68-4-103 (2012)

68-4-103. Persons dying in publicly-supported institutions or to be buried at public expense -- Notice to relatives -- Notice to chief medical examiner -- Removal of body -- Embalming -- Infectious or contagious cases.

(a) Whenever a person dies in any hospital, infirmary, mental health institute, poorhouse, penitentiary, house of correction, workhouse, jail, or other charitable or penal institution that is supported in whole or in part at public expense, or whenever a body is delivered to a public official for the purpose of burial at public expense, it is the duty of the public official or of the custodian, superintendent or active head of such institution to immediately notify the nearest or other relative of the person, if any relative be known, of the person's death.

(b) (1) After the notification pursuant to subsection (a), the custodian, superintendent or active head of the institution or public official shall then hold the body of the deceased person not less than ninety-six (96) hours, and if at the end of that time no relative claims the dead body and no provision has been made for its interment other than at public expense, then the custodian, superintendent or active head or public official shall notify the chief medical examiner or the chief medical examiner's representative that the custodian, superintendent or active head or public official has the body, and, upon demand by the chief medical examiner or the chief medical examiner's representative, shall deliver or surrender the body to the chief medical examiner or the chief medical examiner's representative or to either of their order.

(2) Notification shall be made in any manner that the chief medical examiner shall direct and all the expense of notification and delivery or surrender of the body shall be at the expense of and shall be borne by the institution obtaining the dead body.

(c) If the chief medical examiner or the chief medical examiner's representative, upon receipt of the notification, does not, within twenty-four (24) hours, make a demand for the body, then it shall be buried as provided by law.

(d) No custodian, superintendent or head of a charitable or penal institution or public official shall charge, receive or accept money or other consideration for any body.

(e)) The chief medical examiner may, by proper instructions, have the body embalmed by

such person as the chief medical examiner may direct, and, to the person performing this work under the chief medical examiner's instructions the institution receiving the body shall pay a reasonable compensation.

(f) No person who has died of any contagious or infectious disease shall be held to be within §§ 68-4-102 -- 68-4-109, unless proper precautions, as prescribed by the chief medical examiner, are taken to prevent the spread of contagions or infections.

HISTORY: Acts 1947, ch. 163, § 2; C. Supp. 1950, § 2569.9 (Williams, § 5379.2); Acts 1955, ch. 34, § 2; T.C.A. (orig. ed.), § 53-505; Acts 1984, ch. 525, § 4; 1990, ch. 598, § 4; 1996, ch.
744, § 2.

C. Public Law 93-28, Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended

D. Title 44 (Emergency Management and Assistance), Code of Federal Regulations

II. Purpose

The purpose of this plan is to outline the concept of operations and identify specific roles and responsibilities of State of Tennessee departments and private organizations in responding to mass fatality incidents within Tennessee.

III. Acronyms and Explanation of Terms

A. ***Acronyms***

AC	Area Command
CDC	Centers for Disease Control and Prevention
CME	Chief Medical Examiner
DHHS	United States Department of Health and Human Services
DME	Deputy Medical Examiner
DMORT	Disaster Mortuary Operational Response Team
DoD	United States Department of Defense
DVA	United States Department of Veteran Affairs
EOC	Emergency Operations Center
EOP	Emergency Operations Plan EMS
	Emergency Medical System
EPI	Emergency Public Information ESC
	Emergency Services Coordinator
FAC	Family Assistance Center

FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FI	Forensic Investigator
IC	Incident Command(er) ICP
	Incident Command Post
ICS	Incident Command System
JFSOC	Joint Family Support Operations Center
JIC	Joint Information Center
MACP	Mortuary Affairs Collection Point
MAS	Mortuary Affairs System
ME	Medical Examiner
MFMG	Mass Fatality Management Group
NDMS	National Disaster Medical System
NIMS	National Incident Management System
NTSB	National Transportation Safety Board
OCME	Office of the Chief Medical Examiner PIO
	Public Information Officer
SEOC	State Emergency Operations Center
TCA	Tennessee Code Annotated
TDH	Tennessee Department of Health
TEMA	Tennessee Emergency Management Agency TEMP
	Tennessee Emergency Management Plan
UC	Unified Command

B. ***Definitions***

1. The post-mortem examination division or service per TCA is under the direction of the department of health. The division or service shall have as its functions the investigation of certain deaths as defined in this part, and the keeping of full and complete records of all reports on investigations and examinations made pursuant to the provisions of this part. The commissioner of health, acting for the state and with the approval of the governor and considering the recommendation made by the Tennessee medical examiner advisory council, shall appoint a chief medical examiner to direct the division or service, and such other personnel as the commissioner may find appropriate to the enforcement of the duties and powers of this part. The commissioner is authorized and empowered to spend such funds as may be appropriated for the enforcement of this part, and to promulgate rules through the

department of health to establish fees for autopsies, guidelines for death investigations and forensic autopsies, and other costs and services associated with this part.

2. Area Command (AC): An organization established (1) to oversee the management of multiple incidents that are each being managed by an ICS organization or (2) to oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. Area Command sets overall strategy and priorities, allocates critical resources according to priorities, ensures that incidents are properly managed, and ensures that objectives are met and strategies followed. Area Command becomes Unified Area Command when incidents are multi-jurisdictional.

3. Chief Medical Examiner: The governing forensic pathologist for the Tennessee Department of Health, Office of the Chief Medical Examiner authorized to carry out the provisions of the Tennessee Code Annotated (TCA) Code 38-7-101 through 38-7-105, 38-70201 and 68-4-103.

4. Disaster Mortuary Operations Response Team (DMORT): A DMORT is a team of experts in the fields of victim identification and mortuary services. DMORTs are activated in response to large scale disasters in the United States to assist in the identification of deceased individuals and storage of the bodies pending the bodies being claimed. DMORTS are federal resources and can be requested by a local government through the state Emergency Operations Center or state health department.

5. Family Assistance Center (FAC): The purpose of a FAC is to serve as a location for exchange of information between families of victims and appropriate governmental agencies for the purposes of identifying victims and reunifying families. It is a physical facility, staffed by trained professionals who have the expertise to gather identifying information that will assist in the identification of deceased victims and the reunification of missing victims with their families. Examples of actual locations might include community centers, office buildings, hotels, or unused military facilities.

6. Health Officer: Health officer means the Commissioner of Health or the duly designated representative of the health officer of each of the 95 counties and the duly designated representative of the health officer, or both.

7. Incident Command System (ICS): A model for disaster response that uses common terminology, modular organization, integrated communications, unified command structure, action planning, manageable span-of-control, pre-designated facilities, and comprehensive resource management. In ICS there are five functional elements: Command, Operations, Logistics, Planning, and Finance/Administration.

8. Joint Family Support Operations Center (JFSOC): The JFSOC is a central location where participating organizations are brought together by the responsible airline to monitor, plan, coordinate, and execute a response operation maximizing the

utilization of all available resources following an aviation accident or incident.

9. Joint Information Center (JIC): The JIC is a facility established to coordinate all incident-related public information activities. It is the central point of contact for all news media at the scene of the incident. Public information officials from all participating agencies should co-locate at the JIC.

10. Mass Fatality Incident: An event that results in more fatalities than the local mortuary affairs system can handle utilizing the usual standard of care and processes.

11. Medical Examiner (ME): A Chief Medical Examiner, Deputy Chief Medical Examiner, or Assistant Medical Examiner who is a forensic pathologist authorized to carry out the provisions of Tennessee Annotated Code 38-7-101 through 38-7-105, 38-70201 and 68-4-103.

12. Medical Investigators (MI): A person appointed by the Office of the Chief Medical Examiner who has privileges to enter a crime scene and investigate the circumstances surrounding deaths meeting Office of the Chief Medical Examiner reporting criteria TN 38-7-104g.

13. Mortuary Affairs Collection Point (MACP): MACPs are locations throughout the community where non-contaminated remains are collected, stored, and preserved before being transported to the incident morgue or released to the funeral home chosen by the next of kin.

14. Mortuary Affairs System (MAS): The MAS is a collection of agencies (public and private) all working within a common system that cares for the dead. The MAS addresses the entire spectrum of operations which includes search, investigation of scene and interviewing of witnesses, recovery, presumptive (tentative) and positive identification services, releasing of remains, and final disposition by the next of kin's requested preference regarding funeral services.

15. National Disaster Medical System (NDMS): A nation-wide mutual aid network consisting of federal agencies, businesses, and other organizations that coordinates disaster medical response, patient evacuation, and definitive medical care. At the federal level, it is a partnership among the Department of Health and Human Services (DHHS), the Department of Defense (DoD), the Department of Veterans Affairs (DVA), and the Federal Emergency Management Agency (FEMA). Non-federal participants include major pharmaceutical companies and hospital suppliers, the National Foundation for Mortuary Care, and certain international disaster response and health organizations.

16. National Incident Management System (NIMS): A system mandated by Homeland Security Presidential Directive (HSPD) 5 that provides a consistent nationwide approach for federal, state, local and tribal governments; the private-sector and nongovernmental organizations to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size or complexity.

17. Temporary Autopsy Facility: A temporary autopsy facility is a facility established to store bodies prior to transport, serve as a facility for visual identification, or serve as a substitute location for the routine processing and related activities at the Office of the Chief Medical Examiner's facility or other Regional Forensic Autopsy facility.

18. Temporary Burial (interment): Temporary burial is a process of burying remains to preserve the remains. When or if utilized, the remains are positively identified, properly tagged, placed into a protective container, and placed into the ground. The exact coordinates for the remains is documented by GPS readings. Temporary interment also involves the disinterment of the individual remains to return to the legal next of kin for final disposition.

19. Unified Command (UC): An application of ICS used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the UC to establish their designated Incident Commanders at a single Incident Command Post (ICP) and to establish a common set of objectives and strategies and a single Incident Action Plan (IAP).

IV. Situation and Assumptions

A. *Situation*

1. A large number of fatalities may result from a variety of causes including natural disasters, hazardous material incidents, terrorist attacks, transportation accidents, or as the result of a naturally occurring disease outbreak.

2. For purposes of this plan, a mass fatality incident is defined as any situation that results in more fatalities than the local mortuary affairs system can handle utilizing the usual standard of care and processes.

3. The authority for handling decedents is fully vested in the Tennessee Code Annotated.

4. Any physician, undertaker, law enforcement officer, or other person having knowledge of the death of any person from violence or trauma of any type, suddenly when in apparent health, sudden unexpected death of infants and children, deaths of prisoners or persons in state custody, deaths on the job or related to employment, deaths believed to represent a threat to public health, deaths where neglect or abuse of extended care residents are suspected or confirmed, deaths where the identity of the person is unknown or unclear, deaths in any suspicious/unusual/unnatural manner, found dead, or where the body is to be cremated, shall immediately notify the county medical examiner or the district attorney general, the local police or the county sheriff, who in turn shall notify the county medical examiner. The notification shall be directed to the county medical examiner in the county in which the death occurred.

5. Jurisdiction over the body (ies) is determined by the place of death and not the location of the incident. For example, a person injured at a federal installation that is transported to a civilian hospital in Tennessee and subsequently dies would fall under the jurisdiction of CME.

6. Each death requires an investigation by competent and trained personnel, (such as law enforcement and medical investigators) to ensure the cause of death is a result of a natural disease such as influenza versus death by other mechanisms (e.g. fall, homicide, abuse, etc.)

7. Under normal conditions, 88-90% of the fatalities in the region are not Medical Examiner cases because these deaths are due to natural diseases occurring under natural circumstances. Non-Medical Examiner deaths are managed by the local law enforcement agency (if death occurred out of medical treatment facilities), Emergency Medical Services (EMS), treating physicians, hospitals, funeral directors, cemetery or cremation owners and the individual families.

8. For incidents that do not fall under the jurisdiction of the CME such as an outbreak of a naturally occurring communicable disease, the State of Tennessee will establish a Unified Command to coordinate the management of fatalities exceeding the capacity of the local forensic centers. The UC may consist of the health department, emergency management, fire and rescue, and law enforcement.

9. Regardless of the scenario, many Tennessee government divisions and private organizations may have a significant role in mass fatality incidents.

10. Health Emergency Support Function 8 is coordinated by the Tennessee Department of Health – Emergency Services Coordinator (ESC). However, no single agency can handle the full responsibility for mass fatalities, whether those fatalities are naturally occurring or as the result of human actions. In either situation there will be multiple disciplines involved in the management of the mass fatalities.

11. During a mass fatality event all jurisdictions will continue to experience cases where people die from accidents, suicides, homicides, and sudden unexplained deaths which are NOT related to the event. Investigation into each death by law enforcement and county medical examiners necessary to differentiate between deaths from the naturally occurring disease versus other activity (violence, other disease related, suicide, etc.)

12. In the absence of assigned local authority the CME and Tennessee Department of Health ESC coordinates with the regional forensic centers, local funeral directors and cemeteries to form public/private partnerships to address surge capacity issues.

13. The processing of individual human remains cannot be “rushed” and must maintain specific industry health and safety standards. Therefore it can be expected that delays will occur in a mass fatality operation.

14. Additional obstacles that will challenge the response include the availability of supplies and equipment, personnel/staffing, transportation, funeral home processing and time necessary to conduct funeral services.

15. The National Transportation Safety Board (NTSB) is the lead investigative agency in determining the cause of an accident involving an aircraft, rail or pipeline that results in loss of life, serious injury or major damage. The Aviation Disaster Assistance Act of 1996 requires NTSB to coordinate the disaster response resources of federal, state, local and volunteer agencies. Since the attacks of September 11, 2001, the NTSB has partnered with the Federal Bureau of Investigation (FBI) and has developed a mutual aid agreement that brings in the FBI early in a NTSB investigation. In the event the incident is determined to be a terrorist act, the FBI assumes investigative jurisdiction. In aviation incidents airlines are responsible for the establishment of a Joint Family Support Operations Center (JFSOC) -- a Family Assistance Center (FAC) -- which also incorporates federal, state and local resources. Tennessee Department of Health, as part of a unified command, will provide a liaison to coordinate information and resources requested to support the JFSOC operations.

16. The FBI is the lead agency for the criminal investigation of acts of terrorism or suspected terrorism however appropriate agencies in Tennessee will be expected to provide law enforcement support and coordination in this effort. The CME will have jurisdiction for managing the fatalities except in very rare circumstances when jurisdictional authority lies with U.S. Code Title 10 Sec. 1471 (e.g. involves the President of the United States, etc.). The FBI has a Victim Assistance Team they will deploy to a terrorist incident who can assist in establishing a FAC.

17. Tennessee does not have a Disaster Mortuary Operational Response Team (DMORT), and the Federal DMORT teams may not be available during an infectious outbreak because the members, who are all intermittent Federal employees performing similar functions in their own communities will be needed at home. Mutual aid may not be available for the same reasons. The capacity of existing morgues and/or the autopsy facilities in the state will be exceeded quickly during an infectious outbreak.

18. Death pronouncement of cases that fall under the jurisdiction of the medical examiner may be made by the county medical examiner or county medical investigator (TCA 38-7-104 g). Death determination is the time death is determined or the time the body is found. Any person may determine death. Death determination is assumed when first responders such as fire/EMS and law enforcement do not initiate resuscitation or obtain orders to stop resuscitation after a physician consult. During a mass fatality event persons who are clearly dead should not be transported to a hospital for death pronouncement, unless an unusual circumstance is involved, since doing so may overwhelm the system that is already stressed. An unusual circumstance would need to be investigated by the usual authorities.

B. ***Assumptions***

1. Operations under this plan will be conducted in accordance with the National Incident Management System (NIMS).

2. Public and private health and mortuary affairs services resources located in Tennessee will be available for use during emergency situations. However, these resources may be adversely impacted by the emergency or quickly overwhelmed by the number of fatalities. There may be shortages of resources such as caskets, litters and transportation vehicles or storage facilities for human remains. The availability of personnel to perform processing, funeral services and transportation services will also impact mortuary services.

3. Large numbers of deaths may backlog the entire mortuary affairs system in the state including law enforcement, forensic investigators, hospital morgues, funeral homes, cemeteries, crematories, the CME and the Office of Vital Statistics. The entire process of managing the fatalities may take months to years to completely resolve.

4. The conventional methods for managing fatalities and the deceased will continue as long as possible until circumstances dictate a change in operation policy and procedures.

5. Management of the deceased will be conducted with reasonable care in a respectful, dignified manner. To the greatest extent possible, respect will be paid to faith based or cultural beliefs related to the disposition and handling of remains.

6. Terrorist incidents or other mass fatality events may occur with little or no warning. However, it may be a period of days or weeks before recognition or confirmation that a bio-terrorism attack has occurred.

7. Incidents that involve biological, chemical, or radiological agents or materials may require special handling of the remains.

8. During a mass fatality incident, media representatives will quickly attempt to establish a strong on-scene presence.

9. As resources become depleted, neighboring counties, the state, and/or federal authorities may be asked to provide additional resources. In a localized, acute event, mutual aid may be available; however, for an incident with regional or national impacts and a high number of fatalities, the mutual aid available to Tennessee may be extremely limited or not available.

10. The incident may have a significant impact on Tennessee employees and resources rendering them unavailable and as such it may be necessary to depend heavily on mutual aid resources.

11. Tennessee divisions and organizations will provide support as outlined in the "Assignment of Responsibilities" section of this plan and as assigned by the Tennessee Emergency Management Plant (TEMP) and functional annexes.

12. Tennessee and private organizations will develop supporting plans and procedures necessary to accomplish their assigned roles and responsibilities under this plan.

13. A mass fatality incident that is the result of a transportation accident or involves the transportation system will be managed by the county ME in cooperation with the NTSB and coordinated with Tennessee authorities.

14. Funeral homes with just-in-time inventory plus reduced industrial capacity due to illness and death will result in shortages of all products and capabilities.

15. When mass fatalities are the result of an infectious disease event:

    a. Usual funeral/memorial practices may need to be modified in order to reduce disease transmission.
    b. Social distancing factors should be considered (e.g., use of internet-based services, limiting number of attendees).
    c. Family members living in the same household as the deceased may be in isolation and/or quarantine.

16. Deaths not related to the mass fatality incident will be ongoing and the mortuary affairs system will have to continue to respond to these needs.

17. Local funeral home and cemetery resources may be overwhelmed and families may not have the ability to choose the funeral home that handles the final disposition of their loved one.

18. Customary funeral/memorial practices may need to be adapted. Religious and cultural leaders should work with funeral service personnel to create strategies to manage the surge of deaths such as abbreviated or group funerals, rapid burial/cremation with postponed memorial services, etc.

19. Family members and loved ones will report to the incident location, local hospitals, or other medical facilities in the region seeking information even if there are no known survivors.

20. The incident may dictate the need for actions such as temporary interment, disinterment, and alternate death certificate processes for which authority is not clearly defined in state or local law.

21. Agencies with roles and responsibilities in mass fatality operations will develop internal policies and procedures that provide further detail on the execution of those responsibilities.

V. Concept of Operations

A. *General Information, Activation, and Trigger Points*

1. Activation of this plan is authorized by State executive leadership and the Commissioner of Health and will include the Director of TEMA, and may include appropriate State executive leadership. Appropriate declarations and Executive Orders empowering the Commissioner of Health (State Health Officer) will be executed to activate the Mass Fatalities Plan.

2. The Mass Fatalities Plan will be executed when there is Recognition of a mass casualty/fatality event that results in more deaths than the local mortuary affairs system capacity can handle on a daily basis. The triggers may include:

    a. Recognition that a naturally occurring disease is resulting in increasing numbers of deaths that may exceed local mortuary affairs system capability.

    b. Notification to the health department from local hospital(s) and/or funeral homes that their capacity to transport, process, store, and funeralize bodies has been exceeded.

    c. Recognition of any mass fatality event as defined by the CME: Any incident with fatalities which exceed or overwhelm usual local resources.

3. Upon activation of this plan, the organizations identified herein will function to address the entire spectrum of operations that provides for the care of the decedent. This includes (as applicable to an incident):

    a. Recovery and tracking of the decedents
    b. Examination of the deceased
    c. Determination of the nature and extent of injuries
    d. Recovery of forensic, medical, and physical evidence
    e. Establishing personal identification of the decedent(s)
    f. Law enforcement investigation of criminal acts and suspicious deaths
    g. Certification of the cause and manner of death
    h. Decontamination of decedent bodies and personal effects
    i. Processing of decedent's personal effects
    j. Transportation of the deceased
    k. Temporary storage of decedent bodies
    l. Notification of the next of kin
    m. Release of remains and personal effects to families
    n. Funeral and/or burial services
    o. Temporary or permanent interment
    p. Behavioral health support
    q. Provision of other information assistance to families of the deceased
    r. Processing of the death certificate records

4. In addition to the activation of the TEMP, the health department may establish a public health command post to coordinate public health response operations. Other entities may establish their own operations centers/command posts to support the overall mass fatality operation.

5. The Director of the TEMA, in consultation with the Commissioner of Health or designee, and the City/County Mayor(s), will determine if a local emergency declaration is necessary and will initiate the request.

6. In the event that state and/or federal assistance is needed, the Governor of the State of Tennessee will initiate requests for state and federal declarations.

7. Standard universal precautions will be recommended for personnel responsible for the management of the deceased (retrieval, transport, storage and final disposition) unless more advanced personal protective equipment is otherwise recommended or required.

8. This plan acknowledges the fact that there are mass fatality events that will fall under the jurisdiction of the CME and those that will not. Therefore the determination and establishment of jurisdictional authority is a critical decision that should be addressed early in the event to allow for notification of all pertinent agencies and reduce response time and set up.

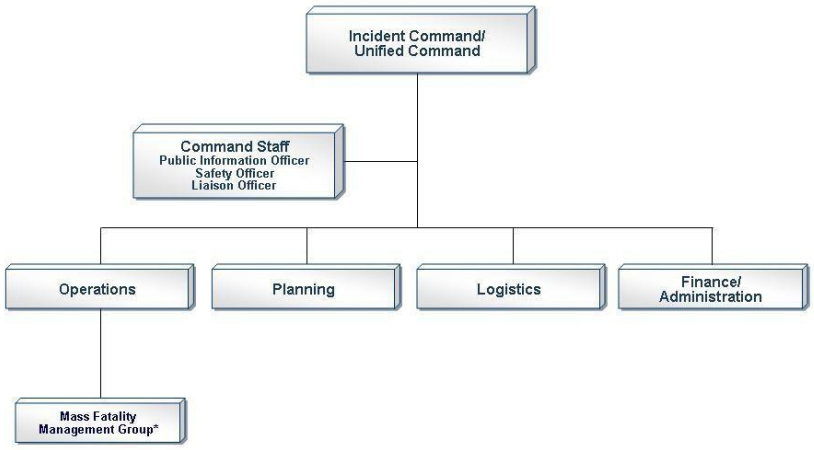
9. The Commissioner of Health in consultation with the CME and other appropriate state executives, such as in the case of naturally occurring communicable diseases, will coordinate the management and storage of remains exceeding the capacity of the local mortuary affairs system. The TDH will be the lead agency for coordinating the public health and medical response to naturally occurring infectious diseases and will establish appropriate incident or unified command. Other Tennessee government and private organizations may be requested to provide support in accordance with their assigned functional roles and responsibilities in the TEMP and supporting annexes.

B. ***Incidents Under CME Jurisdiction***

1. The CME has jurisdiction over the death of any person from violence or trauma of any type, suddenly when in apparent health, sudden unexpected death of infants and children, deaths of prisoners or persons in state custody, deaths on the job or related to employment, deaths believed to represent a threat to public health, deaths where neglect or abuse of extended care residents are suspected or confirmed, deaths where the identity of the person is unknown or unclear, deaths in any suspicious/unusual/unnatural manner, found dead, or where the body is to be cremated, shall immediately notify the county medical examiner or the district attorney general, the local police or the county sheriff, who in turn shall notify the county medical examiner. The notification shall be directed to the county medical examiner in the county in which the death occurred.

2. CME notification in most mass fatality incidents will be initiated through the local incident command – law enforcement and/or fire and rescue in accordance with established protocols and procedures. In biological incidents, the CME may be the agency that identifies the initial suspected cases and informs the health department of an emerging incident.

3. The CME will be the lead agency for managing the recovery, processing and disposition of decedent bodies and will conduct operations in accordance with the TDH Mass Fatality Plan. CME staff will integrate within the established incident or unified command structure in order to oversee the recovery, processing and disposition of remains. A Mass Fatality Management Group (MFMG), headed by the CME, may be established, likely under the Operations Section, as depicted below to manage the handling and processing of fatalities.



4. As applicable, the CME may also be represented at the EOC or public health command post. The TDH and TEMA will provide support to the CME as necessary to include but not limited to:

   a. Providing security of the scene.
   b. Procuring refrigerated trucks/units and other resources such as body bags.
   c. Procuring space for temporary collection points or a temporary autopsy facility.
   d. Handling personal effects, photography, and fingerprinting.
   e. Conducting investigations to confirm identification of the deceased.
   f. Assist in conducting an assessment of the scene to develop an understanding of the response and recovery needs.
   g. Notification of Next of Kin.

5. The CME will request assistance through the IC/UC. As necessary the IC/UC will convey requests for resources as outlined in TEMP.

6. The CME will coordinate with the appropriate executive management for the State of Tennessee, requests for federal resources such as DMORT or other federal assets available through the NDMS.

7. The site and/or decedent bodies as defined by the CME and other agencies deemed appropriate by the CME, may constitute a crime scene, making all remains and personal effects associated with the event forensic evidence. When the incident is the result of a chemical, biological, radiological or nuclear event the FBI will be the lead investigative agency. Law enforcement and the CME will work concurrently with the FBI and other appropriate agencies to ensure proper fatality management operations.

8. Depending upon the nature and number of fatalities involved, a decision may be made by the CME to establish a temporary autopsy facility. This facility may be used to store bodies prior to transport, serve as a facility for visual identification or serve as a substitute location for the routine processing, autopsy and related activities which normally would occur at the ME facilities. A temporary autopsy facility may serve all or a combination of these functions. Establishing a temporary autopsy facility and what functions it will serve is a decision of the CME. The location of this facility will be incident dependent on the incident and availability of facilities.

9. In the event a temporary autopsy facility is established, the CME will request assistance via TEMA to provide management and staff and may request law enforcement to provide security.

10. The Unified Command in coordination with the CME will determine the need to establish a Family Assistance Center (FAC). If activated, the FAC will be established and managed by an appropriate jurisdiction authority. The purpose of the FAC will be to obtain information from families used to identify victims, to provide information to families affected by the incident and to assist with the re-unification of families with the decedent. Family assistance center operations will be coordinated with TEMA and the CME.

11. In the event of a transportation incident, the NTSB will be the lead agency for investigating the cause of the incident and facilitating support to the victims' families. In an aviation incident, the airline is primarily responsible for family notification of the incident (they may give death notification if it is known all have died but airlines will not notify the families of positive identification – this is the responsibility of law enforcement) and all aspects of victim and family logistical support. The airline will establish a Joint Family Support Operations Center (JFSOC)—(Family Assistance Center) -- to coordinate providing support to the families. The CME with the NTSB will collect ante mortem data and provide the families updates on morgue operations and decedent identification. TEMA and/or TDH will provide a liaison to the JFSOC to facilitate information sharing, coordination of requested resources to support the operation and coordination with the EOC and the on-scene command. In some instances, TDH may be requested to/or it may become necessary for the TDH to provide services/support within the JFSOC.

12. The FBI will investigate all commercial plane crashes to determine if the incident was terrorist related. If so, the FBI will be the lead criminal investigative agency with support from local law enforcement, and the scene and remains will be designated a crime scene. In coordination with the FBI, the State CME will be the lead for managing the collection, processing, and disposition of the fatalities.

C. ***Incidents Not Under CME Jurisdiction***

1. The CME may be asked to consult and/or assist in mass fatality management as described below. If the jurisdiction does not fall under the CME, such as in the case of naturally occurring communicable disease outbreak, the local EMA may coordinate the management and storage of the fatalities exceeding the capacity of the local mortuary affairs system.

2. TDH is the lead agency for coordinating the public health and medical response to communicable diseases. An event involving a communicable disease will not normally have an "incident site" at which on-scene command would be established. For these events, the health department will activate their public health command post and establish IC/UC as appropriate.

3. The appropriate local law enforcement agency will be the lead local agency for coordinating on-scene incident response and will establish the on-scene command structure if applicable. It is likely that a unified command will be established that includes law enforcement, fire and rescue, CME, emergency management, and other entities, such as the health department, TBI, and FBI.

4. In these incidents, an initial assessment will be conducted by on-scene law enforcement in coordination with fire and rescue to determine the scope of the incident and the need for additional resources.

5. The TDH (including local health departments) provides active disease surveillance in coordination with neighboring state health departments, and the healthcare community. Upon recognition of an emerging event caused by a naturally occurring communicable disease, an initial and ongoing assessment of the case fatality rate will be done by the health department to determine the need for temporary storage sites to store decedent bodies and to predict the available local mortuary affairs system capacity.

6. The CME may have some initial responsibility and jurisdiction in the identification and confirmation of the communicable disease and will continue to be responsible

for certain categories of cases that fit criteria established by law (e.g. deaths for which there is no attending physician, unidentified decedents). The investigating law enforcement agency is responsible for determining the identity of unidentified decedents.

7. TEMA may be activated to serve as the direction and control facility depending upon the scope and magnitude of the incident. The TEMA will coordinate the overall response and provide support to the IC/UC.

8. The following are the general actions that will be taken or considered:

    a. Ensure that the TDH and TEMA have been notified.
    b. Ensure that the funeral home directors, cemeteries, local health care providers, and local hospitals are notified of potential increase in fatalities and to notify them of any new procedures, identify current capacity and capability and establish information management criteria.
    c. Coordinate with primary partners on the operational and logistical needs required to manage decedents.
    d. Ensure that the state vital statistics administration has been notified of the pending surge in death certificate processing.
    e. Identify and track decedents via a joint effort between CME, TDH, and law enforcement.
    f. Select and procure mortuary affairs collection point(s).
    g. Identify and procure sources for refrigerated truck or cold storage facilities.
    h. Identify transportation assets that may be used for the recovery of decedents.
    i. The CME and the executive staff of TDH shall develop and distribute safety criteria for managing the decedents. Information specific to the incident for first responders will be established and disseminated by the incident safety officer. Safety related information for the general public will be established by the JIC and disseminated through appropriate PIOs.
    j. As applicable, TDH will provide prophylactic medication or vaccine to those responders who have not yet received it.
    k. Establish a FAC and/or a call center.
    l. The agency in charge of the incident will establish a public information plan.

9. During day-to-day operations and during smaller, more contained emergencies, the transportation of the deceased is accomplished by a funeral home or livery service. However it is possible during a mass fatality incident that transportation resources may be scarce or overwhelmed and alternative resources will need to be identified and used to support transportation of decedent bodies. Transportation needs will be coordinated by the local EMA, if possible, or through TEMA, if necessary. As needed, local EMA and/or TEMA will provide support by contracting with or otherwise acquiring from private sources.

10. When the mortuary affairs system processing capacity or local funeral home capacity is exceeded the health department will request assistance, through the CME or the TEMA, from the State Funeral Directors' Association. Note that this assistance may be limited or unavailable if the event is widespread with regional impacts. Potential assistance from the State Funeral Directors' Association may include:

    a. Assist with transportation and storage of decedent bodies.
    b. Provide experienced staff in a variety of areas (such as medical, legal, and financial expertise)
    c. Assume responsibility for communication with immediate survivors.
    d. Coordinate details for post-death activities culminating in final disposition.
    e. Recognize the need for personal resolution of stress after participation in disaster relief.

11. Based upon the number of fatalities within the jurisdiction and the availability of mortuary affairs services in neighboring jurisdictions, one or more Mortuary Affairs Collection Points (MACPs) may need to be established by the jurisdiction. MACPs are locations where non-contaminated remains are collected, stored and preserved before being transported or released to the funeral home chosen by the family as capacity permits. Staffing for the MACPs will be provided by the jurisdiction employees with technical assistance and support from local funeral homes and the CME if applicable. The local EMA will be the lead agency with support provided from other government divisions in accordance with their assigned responsibilities under the EOP and functional annexes as necessary.

12. Considerations for a MACP include the following:
    a. The facility will be available for the timeframe necessary. For a flu pandemic this may be as long as six months.
    b. The capability to retrofit the facility and the associated costs.
    c. Non-porous or disposable flooring.
    d. Room for office space.
    e. The site/facility should be accessible to tractor-trailers.
    f. Shower facilities should be available.
    g. Hot and cold running water.
    h. Heating or air conditioning dependent upon the season.
    i. Electricity available (110 volt, 300 amps as a minimum).
    j. Floor drainage for decontamination.
    k. Restrooms.
    l. Space for support staff and rest areas.
    m. Parking space for staff and trucks.
    n. Communications capabilities including multiple telephone and fax lines.
    o. Secure entrances into the general area and into the entrance of the facility with uniformed guards.
    p. Security for the entire site.
    q. Removed from public view.

13. Decedent bodies will be tracked from the point of recovery through final disposition of the remains. It is imperative that tracking is maintained and validated throughout the process.

    a. Fire and rescue and/or law enforcement responders will affix the triage tag and associated bar code stickers to the deceased and/or remains and to their known personal effects recovered at the scene.
    b. Fire and rescue responders affix triage tag to casualties prior to transport for medical evaluation and services.
    c. EMA may enter the triage tag number into their electronic database or paper record when casualties are received.
    d. Funeral Directors will be asked to record the triage tag number in their records.
    e. Law enforcement will be asked to record the triage tag number in their records.
    f. Family Assistance Center operations will incorporate the triage tag information in their records.

D. ***Body Recovery/Extrication and Collection***

1. Recovery (extrication) and collection are two distinct processes generally supported by separate agencies. Recovery generally involves the extraction or extrication of a person from the disaster debris and is associated with a search and rescue operation and/or fire and rescue department operations. Collection generally refers to the movement of a body from the location of death to a temporary storage site or funeral home generally conducted by a funeral home or contracted livery service.

2. Body recovery is the first step in managing fatalities. The process of body recovery is a critical step in the investigatory phase and the identification process and therefore must be coordinated effectively. If the incident falls under CME jurisdiction, the fire and rescue department, in consultation with law enforcement, and the CME will coordinate body recovery. None of the decedent bodies shall be moved or touched by workers until direction and approval has been given by the on-scene CME representative. In non-CME jurisdiction cases, decedent bodies shall not be moved or touched until direction and approval have been given by the responsible county ME representative.

3. During an infectious disease outbreak, the county medical examiner and medical death investigators will determine the need for the CME. If it is determined the death is not a CME case, the local first responders may assist the family in making proper transportation arrangements for the decedent body.

4. All information required for the investigation must be collected prior to the movement and collection of the body.

5. Recovery of bodies should not interrupt other interventions aimed at helping survivors.

6. Body recovery may last a few hours, a few days, a few weeks, or may be prolonged dependent on the circumstances of the incident.

7. Rapid recovery is a priority because it aids identification and reduces the psychological burden on survivors.

8. The collection of body parts and personal belongings is the responsibility of the CME and/or the investigating police authority. Body parts should be treated as individual bodies. Recovery teams should not attempt to match the body parts at the scene. Personal belongings, jewelry, and documents should not be separated from the corresponding decedent bodies during recovery.

9. Proper protective equipment should be worn during recovery and retrieval.

10. Medical treatment should be available in case of injury to recovery workers.

11. Conditions and circumstances sometimes preclude the recovery of remains in spite of exhaustive efforts and resources expended by those involved. Once the determination has been made that one or more decedent bodies are unrecoverable, non-denominational memorial services may be arranged. If more than one, all efforts should be made to notify and include the surviving family members of this service. Assistance in post-death activities should be extended to the surviving family members. The family should be given the opportunity to select the location of the non-denominational service if so desired.

E. ***Storage***

1. As previously indicated, the CME may determine that a temporary autopsy site is necessary when the number of decedents exceeds the resources of the medical examiner's office. In non-CME cases, the county ME may establish MACPs when the number of decedents exceeds the daily capabilities of the local mortuary affairs system.

2. A temporary autopsy facility may be used for the temporary storage of the bodies, identification, sanitation, preservation (as authorized), and autopsy, as well as the distribution point for release of the decedent body to their next of kin or their agent.

3. Where the numbers of decedent remains are in excess of the capacity to maintain bodies under refrigeration, alternate means of cold storage such as refrigerated trucks may be necessary. Without cold storage decomposition advances rapidly. Cold storage slows the rate of decomposition and preserves the body for identification.

4. Embalming may be considered as a means of preservation of human remains in instances where extended storage time is deemed necessary.

5. The county ME through local EMA will notify TEMA who will notify the TDH ESC and CME if refrigeration for decedent remains is unavailable.

6. Temporary burial will only be used when the numbers of decedent bodies exceed

the cold storage and embalming capacities or in cases where the bodies may pose a public health risk due to contamination by a chemical, biological or radiological substance. Allowance for disinterment of contaminated bodies will be determined by subject matter experts in public health and hazardous materials. Temporary burial sites should be constructed in such a manner to help ensure future location and disinterment of bodies.

7. Consideration should be given to long-term storage needs and/or disposal if there are unidentified bodies. Burial is the most practical method as it preserves evidence for future forensic investigation if required.

8. Using local businesses facilities or vehicles for the storage of decedent bodies is not recommended and should only be considered as a last resort. The implications of storing bodies at these sites can be very serious, and may result in negative impacts on business with ensuing liabilities.

9. The established tracking system will be utilized to verify, validate, and maintain the identity of the decedent throughout the storage process.

10. There should be no media, families, friends or other onlookers permitted in the temporary storage areas. The exception to this will be if/when there is a need to have families view the decedent for identification purposes. If this is necessary a private and dignified area should be identified and dedicated to this process.

F. ***Tracking and Identification***

Tracking

1. Tracking is a shared responsibility among the responding law enforcement agencies, fire and rescue services, hospitals, CME, and funeral homes.

2. When managing remains each decedent body must be tracked from the retrieval, transportation, processing through storage and identification processes, and transfer to the funeral homes for final disposition. Currently Tennessee does not have a standardized process for tracking fatalities from the scene of death to final disposition. Agencies have different methods and systems. Fire and rescue will implement the triage tag procedure on-scene and the associated triage tag number will be incorporated in other agency records (hospital(s), CME, funeral homes, etc., when possible for consistency in tracking. It is critical that the decedent tracking is verified, validated, and maintained throughout the entire process.

Identification

1. In order for a death certificate to be completed and remains returned to the appropriate next of kin proper identification of the decedent must be made.

2. The authority ordering the autopsy (CME, District Attorney General, or county ME) is

responsible for identification and notification of the next of kin. Localities or agencies that have custody of the body are responsible for the identification of the dead and the notification of the death to the next of kin (TCA-38-7-103). The hospital performs this function if the death occurs in the facility.

3. During naturally occurring disease outbreaks when a death occurs in a residence reporting by the public will be through the local first responder agency (law, EMS, etc.). All deaths occurring in residential homes and public places will be attended by a law enforcement officer unless hospice has been involved. The attending officer will follow established investigatory operating procedures.

4. In traumatic mass fatality incidents, identification may done by matching the deceased (physical features, clothes, etc.) with similar information about individuals who are missing or presumed dead. In some cases, it will be impossible to utilize the conventional means to identify the dead because of the lack of identification on the body or reliable witnesses, decomposition, or mitigating purposes. If identification is unsuccessful, identification support from the CME may be requested by the county ME.

5. Ante mortem data collection is a coordinated effort between law enforcement, the CME, the county ME and medical death investigators and supporting organizations such as DMORT or the Tennessee State Funeral Directors Association or other organization approved by the CME. Ante mortem data collection may be conducted in a Family Assistance Center using a standard protocol approved by the CME.

6. Identification of foreign, undocumented nationals and homeless individuals may require much greater effort. Coordination with the State Department or other government entities may be required. It may be necessary for those not easily identified to be placed in temporary storage or temporarily interred while waiting for identification at a later date.

7. It may not be possible to identify all of the remains. Disposition of unidentified remains and/or tissue is the responsibility of and determined by the CME (TCA 68-4-102). When planning for the disposition of unidentified remains the following should be considered:

    a. Under no circumstances should unidentified or unassociated remains or tissue be commingled with identified remains.
    b. Political pressures should not be allowed to influence the disposition decisions.

8. If an identified body remains unclaimed for 96 hours (TCA 68-4-103b) the CME must be notified and may take custody of the unclaimed body (per TCA 68-4-103b1 and b2) within 24 hours of notification.

G. ***Public Information***

1. In cases where the CME has jurisdiction, TDH will be the lead agency for disseminating public information. TDH will coordinate with the involved counties and may determine the need to establish a Joint Information Center (JIC). All public information officers at all levels of the incident will use the CME as the only source of information for fatality specific information.

2. In non-CME jurisdiction events, the county ME request the establishment of a JIC based upon the scope and magnitude of the event, to coordinate the development and release of public information.

3. Effective communication with the public and the families of the decedents will be critical during mass fatality incidents. Good public communication contributes to a successful victim recovery and identification process. Accurate, clear, timely, and updated information can reduce the stress experienced by those affected, defuse rumors, and clarify incorrect information.

4. Fatality information is very sensitive and requires knowledgeable and well-versed communications. TDH in coordination with the CME in events where the CME has jurisdiction and will provide the necessary incident related information to the media in a manner that respects the privacy of the families involved and does not compromise the investigation of the event.

5. The information sharing process for providing families of the missing and the decedent's current information should be established as soon as possible. This may be done through the Family Assistance Center if established or through an information center for families. The information provided should include the process of the recovery, identification, storage, death certification and other incident specific information. When possible, families should be provided access to this information prior to its release to the media and general public.

H. ***Disposition***

1. The authority and directions of any next of kin shall govern the disposal of the body (TCA § 62-4). However, the State Health Commissioner, in consultation with the Governor, shall have the authority to determine if human remains are hazardous to the public health. If the officials determine that such remains are hazardous, the jurisdiction, with direction from the local health department, shall be charged with the safe handling, identification, and disposition of the remains, and shall erect a memorial, as appropriate, at any disposition site. "Hazardous human remains" means those remains so contaminated with or other dangerous agent that they may not be safely handled. It is not anticipated that a natural disease outbreak such as influenza will meet the criteria of "hazardous" because there has never been an influenza virus strain which has in the past been demonstrated to be hazardous. However, since the etiology of the natural disease outbreak may not be known, universal standard precautions should always be followed.

2. Generally, funeral and interment or cremation expenses of a decedent are obligations of the decedent's estate or next of kin however, in Tennessee indigent cases are paid by the counties and the funeral homes perform these on a rotation schedule (TCA 68-4-102, and 103).

3. Each funeral home has different processing capabilities and the number of decedents each can handle will vary at the time of the mass fatality incident.

4. In general, funeral homes do not "stockpile" supplies, rather they practice just in time ordering of supplies and equipment necessary to maintain their services. During a mass fatality event additional supplies and equipment will be obtained through existing ordering processes as well as through "mutual aid/shared resources" with other less impacted funeral homes in the region.

5. Crematory services are not available at all funeral homes. Many funeral homes contract these services with independent crematories in the region.

6. Cremation services are limited by standard practices that limit the number of cremations allowed during a specific time frame and then the equipment requires a cool down period as well as a standard daily shut down process. During a mass fatality event cremation services may be a delay point in the disposition process depending on the demand for these services.

7. Each cemetery has different processing capabilities and the number of decedents that can be buried will vary at the time of the mass fatality incident. The ability of a cemetery to accept a burial will impact the storage capacity of the decedent if there is a delay in the burial process.

8. The import into Tennessee or the export from Tennessee of human remains is prohibited except in the following instances:
    a. Import or export by hospitals, medical schools, colleges or universities for education or research purposes;
    b. Import for burial or reburial in Tennessee or export for burial or reburial in another state or country; or
    c. Import or export for preparation for burial or reburial; or
    d. Import or export for use as evidence in any judicial proceeding.

    A violation of this subsection is a Class E felony. Any remains so imported or exported shall be confiscated and subject to disposition as provided in §§ 11-6-104 and 11-6-119. [Acts 1990, ch. 852, § 11; 2006, ch. 896, Part 2]

9. In order to proceed with burial, the mortician must secure completion of the medical certification prior to taking possession of the body and prior to final burial or removal from the State. Without this authorization, the manager of a cemetery "may not permit final disposition." When the manager of the cemetery is presented with the burial-transit permit, the manager must write upon it the date of final

disposition, sign the permit, and return it to Vital Records within 5 days

I. ***Disinterment***

In Tennessee, disinterment is outside of the scope of the CME. Per TCA 38-7-107, all the CME has authority to do is recommend a disinterment. The CME doesn't have the authority to order one. Re-interment practices are also outside of the scope of the CME.

1. Regulations for the disinterment and reinternment of human remains and are set out in TCA 68-3-508 which allows that the disinterment and reinternment will be allowed in limited instances:

    a. to ascertain the cause of death of the person whose remains are to be removed;
    b. to determine whether the human remains were interred erroneously;
    c. to move an entire cemetery
    d. to move part of a cemetery
    e. to reunite families

    Disinterment can also be indicated to perform an autopsy when a person's death occurred under circumstances that fall under the circumstances outlined in TCA 38 and the person was interred before an autopsy could be performed (38-7-107).

2. When human remains are to be removed from a cemetery or other final resting place and transferred to another cemetery or location, a disinterment and reinternment permit shall be obtained from Vital Records.

3. When it is required to disinter human remains for an autopsy purpose, even though the human remains are to be reinterred in the same cemetery, an application for a disinterment and reinternment permit shall be made to Vital Records, or by the State's Attorney any county when acting in the State's Attorney's official capacity in investigating the death.

4. The application for a disinterment and reinternment permit shall be made on a form prescribed by Vital Records.

5. The disinterment and reinternment permit shall be endorsed by the cemetery authority from which the human remains are disinterred, and also by the cemetery authority in which the human remains are reinterred.

J. ***Logistics***

<u>Transportation</u>

1. Transportation resource requests will be coordinated as described in the Tennessee Mass Fatality Plan and/or TEMP.

2. In general, the following guidelines are recommended when providing transportation services:

a. Transfer of decedent remains to other locations should be handled discreetly, with respect and sensitive care of the remains.
b. Transport vehicles should be "closed" (i.e. no pick-up trucks) wherever possible and all names or identifying information on transport vehicles should be covered or removed whenever possible.
c. Vehicles should travel the same route from the incident site to the CME facility, MACP, or funeral home. These routes should be established in coordination with law enforcement.
d. Vehicles should travel at a moderate speed, in convoy style, maintaining order and dignity. At no time should a vehicle make unnecessary stops while transporting.
e. Loading and unloading of the vehicle shall be accomplished discretely. Tarps or other ways of blocking the view may be used. The top should also be covered to prevent observance from the air.

Supply Management

1. Requests for resources will be coordinated as described in the TEMP.

2. In a pandemic situation, it is recommended that funeral directors not order excessive amounts of supplies such as embalming fluids, human remains pouches, etc., but have enough on hand in a rotating inventory to handle the first wave of the pandemic (that is enough for six months of normal operation). Fluids can be stored for years, but human remains pouches and other supplies may have a limited shelf life. Cremations generally require fewer supplies since embalming is not required.

3. Families experiencing multiple deaths are unlikely to be able to afford multiple higher-end products or arrangements. Funeral homes could quickly exhaust lower-cost items (e.g. inexpensive caskets) and should be prepared to provide alternatives.

K. ***Vital Records***

1. Under the Tennessee Vital Records Act of 1977 (TCA 68-3-101) established the Office of Vital Records charged with the responsibility for administering the requirements of vital records throughout the state.

2. Under current law, the authorization county medical examiner is responsible for signing the death certificate in ME cases.

   TDH rule 1200-07-.05 and TCA 38 State that medical certification of death be provided by the person responsible for such certification. Since the county ME is the center of the medical examiner system, then the county me is the person responsible for death certification of autopsied cases. In practice, there are some county ME's who have agreements with forensic pathologists to sign the dc on autopsied cases, but this is inconsistent throughout the state.

The medical certification shall be completed within 24 hours after receipt of the death certificate by the physician of last attendance in charge of the patient's care for the illness or condition which resulted in death, except when inquiry is required by the medical examiner. In the event that there are numerous deaths from natural causes and they occur outside the health facilities and / or there are decedents without private attending physicians, the hospital will designate hospital physicians, and others as permitted by law at the time, to sign the death certificate.

3. The original death certificate is first filed with the local health department who may issue copies of the certificate up until 30 days after the date of death. The original copy must be filed with TDH Vital Statistics Administration within 7 days.

4. The efficient and proper completion of the required documentation for death certification is an essential step in the processing of fatalities. It is important that those authorized to complete death certificates (CME, and physicians) are educated on this process and available to complete them in a timely manner.

5. During a mass fatality event, the TDH Division of Vital Statistics Administration may determine that it is necessary or more practical to provide an alternative death certificate that can be pre-populated with known information to minimize processing time

6. The State regulates that human remains may not be transported within or out of Tennessee without a valid burial-transit permit (form PH-3774), and the permit must remain with the human remains until it reaches its final destination. Approval of receiving state(s) may be needed. Transportation across international lines (Canada and Mexico) may require State Department approval and the receiving nation's approval.

L. ***Demobilization***

1. The need for continued storage and processing of the deceased may extend beyond the life of the initial incident. This is because of difficulty in body identification, locating the next of kin, and the backlog in achieving a final disposition for each decedent.

2. The regional forensic centers, county ME, and county law enforcement should be prepared to provide ongoing support to mass fatality management in partnership with the CME, if the CME has been involved, to work toward a respectful resolution with decedent bodies. The following are actions to be considered in the aftermath of a mass fatality incident:

    a. If established, move remains from the temporary interment location to the final resting place.
    b. Closing, cleanup and restoration of temporary morgue and/or MACP sites.
    c. Plan for a return to normal operating procedures.
    d. Provide critical incident stress counseling for the staff who worked the mass

fatality functions.

e. Redeploy staff and other resources as needed.
f. Provide for the disposition of personal effects.
g. Complete and process all records kept during the course of the incident.
h. Evaluate and revise the mass fatality plan and associated policies and procedures based on lessons learned.

3. Demobilization plans will generally be prepared by the Planning Sections of the IC/UC and the EOC as applicable.

4. Local EMA will facilitate an after-action review to identify issues related to the mass fatality operations and to initiate appropriate corrective actions.

VI. Organization and Assignment of Responsibilities

A. ***Organization***

1. All operations in response to a mass fatality event will be handled within the management structure defined in the Mass Fatalities Plan of the TEMP using incident management principles.

2. The impacted jurisdiction will establish an IC/UC to coordinate the response operations. Depending upon the nature of the incident, IC/UC will be established on-scene, at the EOC, or at the public health command post.

3. The EOC may be activated to coordinate support to the IC/UC and to coordinate requests for state and federal assistance.

B. ***Assignment of Responsibilities***

1. Emergency Management:

a. Activate and manage the EOC and coordinate support to the IC/UC.

b. In consultation with the IC/UC determine the need to activate a JIC.

c. Determine the need for a local emergency declaration in coordination with the City/County Mayor(s), and county ME.

d. Notify and coordinate with the TEMA to request state and federal assistance as applicable.

e. Facilitate an after-action review as soon as possible after the end of operations.

f. Determine the need to establish and operate FAC.

2. Health Department:

a. Develop and maintain the Mass Fatality Plan and supporting plans and procedures

in coordination with the supporting organizations.

b. Serve as the lead organization for coordination with the state health department.

c. Ensure that appropriate vaccines and/or medication are provided to responding agency personnel supporting victim recovery and identification.

d. In coordination with emergency management determine the need to establish/support a FAC.

e. Coordinate with funeral home directors and cemetery managers to assist them in dealing with the surge of fatalities.

f. Provide initial notification of an infection disease outbreak to the CME as appropriate.

g. Provide information and guidance to the Safety Officer on the appropriate and necessary personal protective equipment.

h. Enter death certificates provided by funeral directors into the State Vital Records system.

3. Law enforcement:

a. Serve as the lead local agency for investigation of suspected criminal incidents occurring within their jurisdiction.

b. Develop and maintain internal plans and procedures for mass fatality incidents.

c. Provide access control and protection at various locations as necessary.

d. Provide initial notification to CME as appropriate.

e. Coordinate the investigation of the incident.

f. Provide for traffic management and control.

g. Provide security as requested for temporary facilities such as autopsy facilities or FAC and/or MACP.

h. Locate, collect, protect, and document non-human evidence.

i. Provide support to CME in processing of bodies (fingerprinting, collecting personal effects and documentation of injuries).

j. Provide security to the CME operation.

k. Perform decedent identification.

l. Conduct investigations.

m. Conduct next of kin notifications.

n. Attend autopsy for collection of evidence if appropriate.

o. As appropriate conduct event reconstruction.

4. Fire and Rescue Services:

   a. Coordinate rescue and recovery operations for location of decedents.

   b. Recommend protective measures for responders, including the CME, to protect against exposure to hazardous materials and blood borne pathogens.

   c. Provide emergency medical services.

   d. Conduct decontamination of responders, the deceased, and remains.

5. District Attorney:

   a. Prepare documents to initiate, extend, modify, or end local declarations.

   b. Advise government officials concerning legal responsibilities, powers, and liabilities regarding emergency operations related to mass fatality incidents.

   c. Assist with the preparation of applications, legal interpretations, or opinions, and briefing packages regarding emergency operations.

6. Other departments and organizations:

   a. Provide support for the procurement of resources.

   b. Coordinate the lease of facilities as necessary to support operations. c.

   Develop and maintain support for the Family Assistance Center Plan. d.

   Establish and operate a Family Assistance Center if activated.

   e. Acquire, store and distribute resources in support of operations.

   f. Coordinate logistical support as requested for establishing and operating facilities.

   g. Provide support as outlined in the Emergency Operations Plan including but not limited to:
      1. Debris removal (in the cold zone)

      2. Provide equipment and personnel support

      3. Assist with traffic control

4. Coordinate contracts and provide management for additional public works services such as heavy construction equipment

7. State agencies will provide resources to supplement support operations when requested through established protocols.

   a. The Office of the Chief Medical Examiner will:

      1. Coordinate with the lead investigating authority and regional forensic centers to document, collect and recover the deceased.

      2. Investigate and determine the cause of sudden, unexpected, violent, suspicious, and non-natural deaths.

      3. Determine the nature and extent of injuries.

      4. Assist in technical decontamination of the deceased as required.

      5. Provide technical assistance to the County ME in requesting Federal DMORTs.

      6. Prepare death certificates in cases where the CME has investigative jurisdiction.

      7. Order or conduct autopsies if necessary.

      8. Authorize removal of bodies from incident sites to a temporary storage facility, autopsy facility or morgue.

      9. Determine the need for and establish a temporary storage and/or autopsy facility for incidents where CME has jurisdiction.

      10. Coordinate requests for federal resources as necessary through TEMA

      11. Provide technical assistance to the County ME.

      12. Assist the local law enforcement agency with identification when requested.

      13. Through the PIO in coordination with the event PIO provide information to the news media for the dissemination of public advisories, as needed.

   b. TDH Office of Vital Records:

      1. Register all deaths occurring in the state.

      2. Issue copies of death certificates.

      3. Compile and analyze vital statistics data.

   c. Local funeral homes:

1. Provide support, such as facility/storage space to the CME as requested.

2. Provide support, such as facility/storage space for bodies not under the jurisdiction of CME.

d. TEMA:

1. Serve as the coordination point for requests for state and federal resources.

2. Prepare for the Governors' signature an official request for an emergency or major disaster declaration if local and state resources are overwhelmed.

3. Work with CME to establish staff and maintain a family assistance center when requested.

e. Tennessee Bureau of Investigation (TBI):

1. Provide the crime lab facility and investigation teams to assist the CME if requested.

2. Maintain on-call list for and dispatch Forensic Investigators when requested.

8. Funeral Directors Association:

a. Respond as requested by the CME, and/or TEMA.

b. Coordinate with the CME and the local jurisdiction authorities to establish the means and methods for the sensitive, respectful care and handling of deceased human remains in multi-death disaster, including but not limited to; post-incident identification, embalming (as authorized), counseling and facilitating the release of identified remains to the next of kin or their representatives as so authorized.

c. Identify and request as necessary local, regional, and state-wide funeral home resources such as, transportation, personnel, equipment and supplies, to assist with the mass fatality and family assistance operations.

d. At the request of CME, provide representatives to the family assistance center operations for the collection of victim ante mortem data and provision of information to victims' families.

9. American Red Cross (ARC):

a. Support family assistance operations.

b. Provide support to the NTSB in transportation incidents in accordance with the established Statement of Understanding. This may include support services such as mass care feeding and crisis and grief counseling.

10. Other agencies that may be listed with roles and responsibilities include:

    a. Volunteer Centers

    b. Hospitals

VII. Direction and Control

A. The direction and control function for a mass fatality incident will be performed by the IC/UC with support provided through the EOC if activated.

B. Effective exchange of critical information between the EOC and the Incident Command Post (ICP) is essential for overall response efforts to succeed.

    1. In incidents in which there is an incident site, the IC/UC will concentrate on the immediate response at the incident site—isolating the area, implementing traffic control in the immediate area, employing resources to conduct appropriate response operations and formulating and implementing protective actions for emergency responders and the public near the incident site. The IC/UC will direct the activities of deployed emergency response elements.

    2. The EOC will handle incident support activities and other tasks, which cannot be easily accomplished by the ICP. Such tasks may include notifications to state and federal agencies and utilities, requests for external resources, activation of shelters (if determined necessary), coordinating wide area traffic control, emergency public information, and similar activities. The Emergency Management Director or designee shall direct operations of the EOC.

    3. In incidents in which there is no discernible incident site, such as in a naturally occurring communicable disease, and area command may be established with support provided through the EOC.

C. The County/City Mayor, in coordination with the Emergency Management Director, shall provide general guidance for and oversee the operation of the local response.

VIII. Readiness Levels

A. TEMA SEOC Level 5—Normal Conditions

    Actions

    1. Develop supporting plans and procedures.

    2. Conduct training and exercises.

    3. Address corrective action issues.

B. TEMA SEOC Level 4 and 3— Elevated/Declaration of State of Emergency

Actions

1. Monitor the situation.
2. Alert key staff, divisions and agencies, municipalities and non-profit and volunteer organizations of the current situation.
3. Provide appropriate information to the public.
4. Activate or prepare to activate, as applicable, the public health command post and the EOC.

C. TEMA SEOC Level 2—Major Disaster

Actions

1. Notify CME/SEOC of the situation.
2. Alert key staff, divisions and agencies, municipalities and non-profit and volunteer organizations of the current situation.
3. As appropriate to the situation, activate the public health command post and/or the EOC.
4. Alert personnel for possible emergency duty.
5. Issue public warnings and provide public information, if necessary.

D. TEMA SEOC Level 1—Catastrophic Disaster

Actions

1. Provide situation updates to and notify the CME/SEOC as applicable.
2. Alert key staff, divisions and agencies, municipalities and non-profit and volunteer organizations of the current situation.
3. Review status of the EOC and activate as applicable.
4. Issue public warnings and providing public information, if necessary.

IX. Administration and Support

A. **Reports**

1. Initial emergency and situation reports will be written and submitted to appropriate staff.

2. The impacted jurisdiction will continue to establish a system for the identification and tracking of decedents for mass fatality incidents not under the jurisdiction of the CME (e.g. naturally occurring communicable diseases).

3. The CME may require additional reports based upon the nature of the incident. The responsible entity, i.e. law enforcement, health department, will compile and submit the reports as required through the EOC.

4. The local/regional health department has primary responsibility for gathering information concerning injuries and fatalities resulting from emergencies and disasters.

B. **Records**

Each division or agency will keep detailed records on incident related expenses, including:

1. Labor
    a. Dollars paid (regular and overtime)
    b. Volunteer
2. Equipment Used
    a. Dollar value, description, and operational costs of owned equipment
    b. Dollar value, description, and operational costs of rented/leased equipment
    c. Equivalent dollar value, description, and operational costs of volunteered/donated equipment
    d. Dollars and description of equipment in 2.a-c above that has been damaged and/or destroyed during the disaster and/or recovery efforts.
3. Materials
    a. Purchased
    b. Taken from inventory
    c. Donated to/from others
4. Contracts (see below)

a. Services

b. Repairs

C. **Contracts**

1. The local EMA or TEMA will monitor all contracts relating to the recovery process. Contracts that will be paid from Federal funds must meet the following criteria:

   a. Meet or exceed Federal and State Procurement Standards and must follow local procurement standards if they exceed the Federal and state criteria.

   b. Be reasonable.

   c. Contain right to audit and retention of records clauses.

   d. Contain standards of performance and monitoring provisions.

   e. Fall within the scope of work of each FEMA project.

   f. Use line items to identify each FEMA project for multiple project contracts.

2. The following contract-related documents must be kept:

   a. Copy of contract

   b. Copies of requests for bids

   c. Bid documents

   d. Bid advertisement

   e. List of bidders

   f. Contract let out

   g. Invoices, cancelled checks, and inspection records

D. **Training**

1. Under TCA 38-7-104-h, county ME's and medical investigators are required to receive initial training and regular continuing education and operate according to death investigation guidelines.

2. The local EMA may schedule and conduct training for employees and representatives from other organizations who may participate in EOC operations. The local EMA will notify the county ME and the regional forensic center of upcoming mass fatality exercises.

3. Drills, tabletop exercises, functional exercises, or full-scale exercises dealing with mass fatality incidents will be included in the exercise schedule. This plan should be reviewed and revised, if required, based on the results of exercise critiques.

X. Plan and Development and Maintenance

A. Development

The health department is responsible for developing and maintaining this Mass Fatality Plan.

B. Maintenance

This plan will be reviewed annually and updated as lessons learned from actual incidents, exercises, or new best practices are identified.

C. Procedures

Jurisdictions with assigned responsibilities under this plan will develop the necessary operational plans and procedures to carry out those responsibilities.

XI. References

1. Mass Fatality Plan of the Chief Medical Examiner of Tennessee.
2. Tennessee Emergency Operations Plan 2011
3. State Funeral Directors Association Plan
4. National Transportation Safety Board Federal Family Assistance Plan for Aviation Disasters (December 2008).
5. State of Tennessee Postmortem Examiner's Law and Regulations Governing Medical Examiner Cases, Postmortem Act TCA chapter 38.
6. Pan American health Organization, Management of Dead Bodies after Disasters: a Field Manual for first Responders (2006)
7. Santa Clara County Public Health Department Managing Mass Fatalities: A Toolkit for Planning.

Attachment 1 - Religious and Cultural Practices

**Adapted from the Santa Clara County Public Health Department Managing Mass Fatalities: A Toolkit for Planning*

All societies have funeral rituals that have developed over many generations to help people cope with death and loss. Family members and loved ones will have a strong psychological need to identify lost loved ones and to grieve for them in customary ways. Religious and cultural beliefs and practices surrounding death will be important to survivors. There will likely be specific concerns regarding:

- Autopsies.
- Timeframe and handling of the body, including ceremonial washing of the deceased.
- Religious ceremonies and/or items to be left with the dead.

During a disaster, the Chief Medical Examiner will need to determine to what extent he/she is able to accommodate various religious beliefs and practices.

Approaches to Being Aware of Survivors' Religious and Cultural Attitudes Surrounding Death

Mass fatality's victims may be local residents, a combination of local residents and residents of other communities and/or countries, or predominantly residents of other communities and/or countries. There is no way to predict this beforehand. Strategies for getting information on religious and cultural beliefs and death practices of victims' families will be important to demonstrating cultural competence and sensitivity in a mass fatality event—even when it is impossible to meet family requests. Your jurisdiction's population may be very diverse and the CME may be culturally competent and sensitive.

- Begin by exploring the CME approach to handling family member requests related to family religious and cultural beliefs and practices.

- Identify approaches and sources the CME uses to access this kind of information. Examples may include experience of CME personnel, specific resources or Web sites, contact with leaders of faith communities in the jurisdiction, and/or meetings with representatives of immigrant communities.

Additional strategies for ensuring cultural sensitivity in a mass fatality are:

- To note information when families are interviewed to collect ante mortem data at the family assistance center about the family's religious or cultural beliefs, including practices and rituals, daily prayer times, important dates, beliefs about autopsy, and other information that may be relevant to the rescue, recovery and disposition of their loved ones.

- To consult with leaders of the appropriate religious or ethnic communities for guidance on practices and beliefs concerning death as mass fatality victims are identified and cultural/religious backgrounds becomes known.

When Requests Cannot Be Met

A mass fatality is, by nature, a traumatic large-scale event for a jurisdiction that will place extraordinary demands on the OCME. If the mass fatality is the result of a crime or terrorism, that will further complicate and expand CME responsibilities. As a result, religious and cultural beliefs and practices will most likely lead to requests irreconcilable with the demands on the CME. Whether the CME is unable to meet requests at all or can only meet some requests partially, it is critical to convey this information with compassion and sensitivity.

- Communicate with families. Explain why requests cannot be met and assure them of the CME commitment to treating their loved ones with dignity and respect.

- Consider having representatives of impacted faith communities bless the incident site and morgue daily.

- Inform appropriate faith and ethnic community leaders about the role of the CME in a mass fatality:
  - Commitment to treating the dead with dignity and respect.
  - Determination of the deceased's identification.
  - Determination of the cause of death.
  - Death notification.

- Explain the reasons why requests cannot be met or can be only partially met with compassion and sensitivity. Affirm the CME's professionalism and commitment to treating the dead with dignity and respect.

- Seek the support and leadership of appropriate faith/cultural/ethnic communities during this difficult time in providing information to families/communities that are impacted.

- Keep the Joint Information Center informed of these concerns so that public communications are culturally competent and respectful.

Resources

Providing Relief to Families After a Mass Fatality: Roles of the Medical Examiner's Office and the Family Assistance Center, published by the Department of Justice, Office for Victims of Crime. This publication is available at:
http://www.ojp.usdoj.gov/ovc/publications/bulletins/prfmf_11_2001/welcome.html

King County's Chief Medical Examiner Speaks on Issues of Cultures, Communities and the Medical Examiner's Office is available at:
http://ethnomed.org/ethnomed/clin_topics/death/me_interview.html

EthnoMed is a joint project of University of Washington Health Sciences Library and the Harborview Medical Center's Community House Calls Program. It is a website containing medical and cultural information on immigrant and refugee groups. While it contains information specific to groups in the Seattle area, but much of the cultural and health information is of interest and applicable in other geographic areas.

Attachment 2 - ***Death Management Process***

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Local Issues
Death Reporting / Missing Persons	- If death occurs in the home, business, or community then a call in system needs to be established - Citizens call local 911 and report. Often called a check on the welfare call - 911 or other system needs to be identified as the lead to perform this task	- Availability of people able to do this task normally 911 operators - Availability of communications equipment to receive and manage large volumes of calls/inquires - Availability of trained "investigators" to check into the circumstances of each report and to verify death is natural or other	- Provide public education about the call centers, what information to have available when they call, and what to expect from authorities when a death or missing persons report is made -Consider planning an on call system 24/7 specifically for this task to free up operators for 911 calls on the living	
Search for Remains	- If death occurs in the home/business then law enforcement will need to be contacted - Person legally authorized to perform this task	- Law enforcement officers' availability	- Consider deputization and training (through the investigations units of law enforcement) of people whose sole responsibility is to search for the dead and report their findings - Consider having community attorneys involved in the legal issues training for the groups identified	

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Local Issues
			- Attorney General must answer question of who can enter private property to search or whether this can be done at all. - All search and recovery/rescue groups must come to a standard search assessment marking system for buildings searched in the community. (Ref: Urban Search and Rescue Response System in Federal Disaster Operations, Operations Manual of January 2000.)	
Recovering Remains	- Personnel trained in recovery operations and the documentation required to be collected at the "scene" - Personal Protection equipment such as coveralls, gloves and surgical masks Equipment such as stretchers and human remains pouches	- Availability of trained people to perform this task - Availability of transportation assets - Availability of interim storage facility	- Consider training volunteers ahead of time - Consider refrigerated warehouses or other cold storage as an interim facility until remains can be transferred to the family's funeral service provider for final disposition	✓ Availability of PPE __Availability of medicolegal death investigators

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Local Issues
Death Certified	-Person legally authorized to perform this task - If a death due to a natural disease and decedent has a physician, physician notified of death - If trauma, poisoning, homicide, suicide, etc., Medical Examiner case.	- The lack of availability or willingness of primary treating physicians to certify deaths for their patients - Physicians assessing and requiring a fee for service for signing a death certificate ✓People will have trouble getting an appointment examiner's primary practice duties with medical examiner duties	- When possible, arrange for "batch" processing of death certificates for medical facilities and treating physicians. - Induce fines equal to the Local Medical Examiner's fees for those treating physicians who refuse to sign for their patients or charge a family (funeral home) for such services. - Prohibition on requiring a fee for death certificates.	✓Fewer doctors to certify more deaths
Decedent Transportation to the Morgues	-In hospital: trained staff and stretcher -Outside hospital: informed person(s), stretcher and vehicle suitable for this purpose	- Availability of human and physical resources - Existing workload of local funeral directors and transport staff	-In hospital: consider training additional staff working within the facility -Consider keeping old stretchers in storage instead of discarding -Look for alternate suppliers of equipment that could be used as stretchers in an emergency e.g.,trolley manufacturer	✓Likely shortage of Litters and Transportation vehicles and staff

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Local Issues
			-Outside hospital: provide public education or specific instructions through a toll-free phone service on where to take remains and other mortuary affairs (MA) information	
Transportation	-To cold storage, remains holding location and/ or burial site to morgues, funeral homes or other locations -Suitable covered refrigerated vehicle and driver	-Availability of human and physical resources -Existing workload of local funeral directors and transport staff	-Identify alternative vehicles that could be used for this purpose -Identify ways to remove or completely cover (with a cover that won't come off) company markings of vehicles used for Mortuary Affairs operations -Consider use of volunteer drivers. -Consider setting up a pickup and delivery service for all the hospitals with set times, operating 24/7 -Consider finding resources to assist funeral homes in transporting remains so they can concentrate on remains preparations for the families	✓Likely shortage of Litters and Transportation vehicles and staff
Cold storage	-Suitable facility that	-Availability of facilities and demand	-Develop a regional	✓ cold storage

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Local Issues
	can be maintained at 34 to 37 degrees F	for like resources from multiple localities -Capacity of such facilities -Inability to utilize food storage or preparation facilities after the event	planning group and identify possible temporary cold storage sites and/or equipment	resources limited
Autopsy *if required or requested*	-Forensic pathologist in a NAME accredited facility	-Availability of human physical resources -Circumstances Forensic centers need to accommodate regular case work in addition to event casework -Availability of case management software for identification and tracking	-Ensure that physicians and families are aware that an autopsy is not required for confirmation of influenza as cause of death when the outbreak is identified	
Funeral service	-Appropriate location(s), casket (if not cremated) -Funeral director availability -Clergy availability cultural leader's availability.	-Identify the local resources of funeral service resources Availability of caskets -Availability of location for service and visitation	-Contact suppliers to determine lead time for casket manufacturing and discuss possibilities for rotating 6 month inventory -Consult with the Tennessee funeral Directors Association to determine surge capacity and possibly the need for additional sites (use of religious facilities, cultural centers etc.)	✓Likely shortage of Caskets, embalming supplies and associated hardware ✓ Reduced staff and increase work load

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Local Issues
Body Preparation	-Person(s) trained and licensed to perform this task	-Supply of human and material resources -Supply of human remains pouches -If death occurs in the home: the availability of these requirements	-Consider developing a rotating 6 month inventory of human remains pouches and other supplies, given their shelf life -Consider training or expanding the role of current staff to include this task -Provide public education on the funeral service choices during a pandemic	✓Shortage of Human Remain Pouches ✓ Reduced staff and increase work load
Cremation	-Suitable vehicle of transportation from morgue to crematorium. -Availability of cremation service	-Capacity of Crematorium and speed of process -Availability of county medical examiner to sign cremation permit	-Identify alternate vehicles to be used for mass transport -Examine capacity of crematoriums within the jurisdiction -Discuss and plan for appropriate storage options if the crematoriums are backlogged -Discuss and plan expedited cremation certificate completion processes	✓ Shortage of vaults ✓Cremation is a slow process and a backlog of remains awaiting cremation will likely require temporary storage until they can be cremated ✓Urns

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Local Issues
			processes	
Embalming	-Suitable vehicle for transportation from morgue -Trained person to perform Embalming equipment and supplies -Suitable location	-Availability of human and physical resources -Capacity of facility and speed of process -Determination if embalming is required for interstate transport	-Consult with service provided regarding the availability of supplies and potential need to stockpile or develop a rotating 6 month inventory of essential equipment/supplies -Discuss capacity and potential alternate sources of human resources to perform this task such as retired workers or students in training programs -Consider "recruiting" workers that would be willing to provide this service in an emergency	✓Likely shortage of Embalming supplies and equipment ✓ Reduced staff and increase work load
Temporary storage	-Access to and space in a temporary vault -Use of refrigerated warehouses, or other cold storage facilities	-Temporary vault capacity and accessibility	-Expand capacity by increasing temporary vault sites	✓Regional coordination needed for scarce resources for refrigerated storage.

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Local Issues
Final Disposition	-Grave digger and equipment -Space at cemetery	- Availability of grave diggers and cemetery space	- Identify alternate sites for cemeteries or ways to expand cemeteries - Identify sources of supplementary workers - Identify sources of equipment such as backhoes and coffin lowering machinery	✓ Cemetery space is limited
Temporary Interment	-Person to authorize temporary interment -Location for temporary interment -Grave diggers and equipment	- Availability of grave diggers and temporary interment space - Availability of funeral directors, clergy, and cultural leaders for guidance and community acceptance - Specific criteria as to when authorization may occur and procedures to follow prior to the interment. - A complete and reliable tracking system for individual remains - Availability of resources after the event to dis-inter and to place remains into family plots	-Identify locations that will be suitable for temporary interment space -Consider using the global positioning system for individual remains location Body containers for individual burials with metal tags or other non- degrading identification tags.	
Behavioral Health	-Prepare public and responders for mass fatality possibilities	-The pandemic will virtually affect the entire nation. -A shortage of mental health	-Train first responders and some Citizen Corps people in crisis intervention	

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Local Issues
	prior to pandemic -Assist responders and other MA workers during pandemic and in post pandemic periods	people will complicate the ability to assist people -Many people will be doing MA tasks that they are mentally unprepared for and will require assistance	techniques to assist MA teams during the pandemic -Set up clinics to assist the public separate from the MA workers and first responders	
Event and Community Recovery	-Persons to authorize reinternment -Grave digger and equipment -Clergy and cultural leaders	-Availability of funeral directors, clergy, and cultural leaders for guidance -Existing code requirements to have a court order for the dis-interment of human remains	-Consider that the public may want to erect a monument at the temporary interment site(s) after the pandemic is over. -Consider establishing a memorial day for the event.	

Attachment 3 - Equipment and Supply Considerations

The following information is a list of the equipment and supplies that will be necessary to effectively respond to a mass fatality incident. It is intended as a planning tool only and may not be an exhaustive list of necessary resources.

Human remains pouches
Plastic zip-lock bags
Waterproof marking pens
Cloth evidence bags with wire tags
Stakes, at least four feet in length
Transfer cases or litters
White bed sheets
Workman's cowhide leather gloves
Personal effects bags
Rubber gloves
Surgical masks
Photographic equipment
Tags (paper with strings)
Hammer
Spray paint
Face masks or respirators
Rakes (garden type)
Shovels

Administrative Supplies:
Telephone equipment (hard line and cellular)
Facsimile machine
Photocopy machine
Forms
Files
Desks, tables and chairs
Pens, pencils, paper, etc.
File folders
Masking tape
Plastic tape with dispenser
Computers (Desk and lap top)

Attachment 4 - Temporary Autopsy Facility and Equipment Requirements

*Partially adapted from New York State Guidance County Mass Fatality Annex, January 2009

Guidelines for Temporary Morgue Sites[1]

One or more temporary morgues may need to be established when human remains exceed existing storage and processing capacity and to manage remains from unattended deaths, unidentified remains, and remains requiring autopsies.

The following guidelines may help determine the best alternative(s) available for temporary morgue sites.

Any temporary facility must meet certain requirements for size, layout, and support infrastructure.

- Airplane hangars and abandoned warehouses have served well as incident morgues.
  Do NOT use school gymnasiums, public auditoriums, or similar facilities used by the general public.
  Facility should NOT have adjacent occupied office or work space.
- Proximity to incident scene should be considered.
- Limited/Secure Access
- Security (based on access points and incident needs)

Structure Type

• Hard, weather-tight roofed structure
• Separate accessible office space for IRC
• Separate space for administrative needs/personnel
• Non-porous floors, preferably concrete
• Floors capable of being decontaminated (hardwood and tile floors are porous and not usable)

Size

• Minimal size of 10,000 - 12,000 square feet
• More square footage may be necessary for casket storage or other mission-specific needs

Accessibility

• Tractor trailer accessible
• 10-foot by 10-foot door (loading dock access (preferable) or ground level)
• Convenient to scene
• Completely secure (away from families)
• Easy access for vehicles & equipment

[1] Adapted from DMORT standards at http://www.dmort.org/dpmupublic/dpmurequirements.htm

Electrical

• Electrical equipment using standard household current (110-120 volts)
• Power obtained from accessible on site distribution panel (200-amp service)
• Electrical connections to distribution panels made by local licensed electricians

Water Supply

• Single source of cold and hot water with standard hose bib connection
• Water hoses, hot water heaters, sinks and connectors

Communications Access

• Existing telephone lines for telephone/fax capabilities
• Expansion of telephone lines may occur as the mission dictates
• Broadband Internet connectivity

Sanitation/Drainage

• Pre-existing rest rooms within the facility are preferable
• Gray water will be disposed of using existing drainage
• Biological hazardous waste, liquid or dry, produced as a result of morgue operations, will be disposed of according to local/State requirements

Facility Requirements

Proximity to incident scene
Limited/Secure Access
Security (based on access points and incident needs)

Communications

Incoming phone line(s)
Outgoing phone line(s)
Fax machine (dedicated line if possible)
Fax paper and tone

Information Technology

Laptop or desktop computers
Internet access
Established system access

Office Supplies

Notepads/paper
Sticky notes
Clipboards
Pens, pencils, markers, highlighters
Stapler, staple remover
Tape
Duct tape

White out
Paper clips
Pencil Sharpener
Extension cords
Power strips
Surge Protectors
Printer and copier
Copier paper
Toner
Tables
Chairs

Autopsy Materials

Human remains pouches
Plastic zip-lock bags
Waterproof marking pens
Cloth evidence bags with wire tags
Transfer cases or litters
White bed sheets
Personal effects bags
Rubber gloves
Surgical masks
Photographic equipment
Tags (paper with strings)
Face masks or respirators

Forms and Documents

Mass Fatality Plan
Decedent Information and tracking form
Fatality tracking form
Internal and external contact lists

Attachment 5- Guidelines for Temporary Interment

*Reference New York State Guidance County Mass Fatality Annex, January 2009

One or more temporary interment sites may need to be activated to focus resources required for the rapid interment of human remains. After the emergency has passed, families may choose to authorize disinterment to an alternate site.

During a mass fatality event, burial in a traditional cemetery plot or cremation is a viable solution as long as resources can keep up with demand. When resource tracking indicates that resources are overwhelmed, alternative methods must be deployed.

While refrigeration is considered a viable alternative for single site mass fatality events, it is not recommended during a pandemic influenza emergency. It is unlikely that a sufficient number of trucks meeting the necessary standards would be available to accommodate the volume needed for the time the human remains will need to be stored. Trucks are also susceptible to shortages of fuel and labor to keep the refrigeration functioning properly. Ice rinks and similar facilities are often suggested as alternate storage facilities because they are kept cold to preserve the ice. Social customs, however, make it likely that once a community uses a facility to house the dead, it will no longer use the facility for its original purpose. Therefore, after traditional burial and/or crematory resources are exhausted, temporary interment is the preferred alternative. Several locations should be pre-identified as potential sites for temporary interment. Existing nonsectarian cemeteries, parks, and other available land that could accommodate multiple, uniquely identified graves within a grid pattern that would allow for rapid excavation and burial, and effective disinterment if requested by the family after the emergency is over should be considered. This strategy would focus all supporting resources and processes on a limited number of sites.

Ideally, a selected site(s) should meet the following requirements:

- Cemetery/Crematory should either be those regulated by the NYS Department of State, Division of Cemeteries or should be a municipal nonsectarian cemetery/crematory.
- Cemetery/Crematory should be capable of delivering services 7 days a week.
- Cemetery/Crematory should have a Business Continuity Plan in place, adopted by the trustees of the cemetery/crematory and deliverable to any government agency in both hard copy and electronic format.
- Cemetery/Crematory should have 24 hour on-call administrative staffing.
- Cemetery/Crematory should have roadways (preferably paved or stone) and entrances able to accept heavy equipment, e.g. tractor trailers, refrigerated trailers, excavators, etc.
- Cemetery/Crematory operations should not be publicly visible and preferably be secured by fencing that would allow for security at entrances.
- All utilities should be on-site or able to be quickly brought on-site, including gas, electric, cable, and telephone.
- Cemetery should have an accurate survey of all grounds developed and un-developed.

- Cemetery should have the ability to survey additional burial spaces and to record spaces and burials quickly and accurately.
- Cemetery/Crematory should have well-maintained equipment and sufficient fuel storage capacity to handle “normal” number of services.
- Cemetery must be able to perform services 12 months a year.
- Cemetery/Crematory should have multiple layers of staffing that can be called upon to provide full cemetery/crematory services, as well as routine property and equipment maintenance.
- Cemetery/Crematory should have capacity to increase all form and manner of electronic communications, as well as standard equipment to process large numbers of interments and cremations, e.g. copiers, faxes, scanners, networked computers, pagers, in-house or secured file server, and typewriters, etc.

The necessary agreements to assure that resources are reimbursed should be established. These resources include, but are not limited to, space, services, equipment, and staffing.

Disinterment Considerations

- While business as usual continues, families will continue to make choices about the disposition of their next of kin and will incur financial liability for services provided.
- Once family choice is curtailed, counties will incur the financial responsibility for temporary interments and any subsequent dis-internments.
- Families or prepaid irrevocable trusts should carry the financial responsibility for re-interment costs.
- If a person with a prepaid irrevocable trust is not disinterred, the jurisdiction may claim the funds.

Annex H.

VOLUNTEER MANAGEMENT

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DEFINITIONS

Hospital Preparedness Program (HPP): The threat of Mass Casualty Incidents (MCIs) or Medical Surges to the Nation's hospital and healthcare system has always been present. For many trauma systems and emergency departments, it is simply part of normal day-to-day operations. Preparing hospitals, healthcare systems and their ESF #8 partners to prevent, respond to, and rapidly recover from these threats is critical for protecting and securing our Nation's healthcare system and public health infrastructure.

The 2009 H1N1 influenza pandemic and Hurricane Katrina highlighted the importance of hospitals and healthcare systems being prepared for potential threats and the consequences that occur when a community is ill-prepared. The Office of the Assistant Secretary for Preparedness and Response (ASPR) plays a leading role in ensuring the healthcare systems in the Nation are prepared to respond to these threats and other incidents. Through the Hospital Preparedness Program (HPP) Cooperative Agreement, ASPR provides funding and technical assistance to state, local and territorial public health departments to prepare the healthcare systems for disasters. The HPP Cooperative Agreement funding provides approximately $350 million annually to 50 states, four localities, and eight U.S. territories and freely associated states for building and strengthening their abilities to respond to incidents. (Refer to the Healthcare Preparedness Capabilities: National Guidance for Healthcare System Preparedness)

Public Health Emergency Preparedness (PHEP): The Public Health Emergency Preparedness (PHEP) cooperative agreement is a critical source of funding for state, local, tribal and territorial public health departments. Since 2002, the PHEP cooperative agreement has provided nearly $9 billion to public health departments across the nation to upgrade their ability to effectively respond to a range of public health threats, including infectious diseases, natural disasters, and biological, chemical, nuclear, and radiological events. Preparedness activities funded by the PHEP cooperative agreement are targeted specifically for the development of emergency-ready public health departments that are flexible and adaptable. (Refer to the 2012 PHEP Cooperative Agreement Guidance/Budget Period 1)

Medical Countermeasures Operational Readiness Review (McMORR): The Centers for Disease Control and Prevention's (CDC) Division of Strategic National Stockpile (DSNS) Mc MO R R , is a planning element to be assessed annually for evidence of overall readiness to manage, distribute and dispense SNS materiel during a public health emergency. Each area being assessed will receive a score of 0 to 1 based on requirements. The categories that Regional Medical Reserve Corps Coordinator's (here forward referred to as Coordinator) are required to participate under the State of Tennessee, Emergency Preparedness, SNS, are Staffing, Call Down, Staff Management, POD Staffing, Volunteer Mobilizer, Volunteer Training, Volunteers Integrated Into Local Plans to satisfy the following guidance as the McMORR Review Tool, **(See Appendix D)**:

- **Plans related to volunteer registration systems, pre-incident screening, credentials verification, and pre-incident training have been exercised within the last five years.**
- **Jurisdiction conducts annual call-down drill of all volunteers required to support an MCM mission.**

- **Plans include a process for 1) badging volunteers, 2) managing spontaneous volunteers, and 3) coordinating with emergency management, or other jurisdictional lead, for support of public health volunteers.**

- **Plans include procedures (manual or electronic system) for 1) tracking, 2) out-processing, and 3) providing follow-up services to volunteers.**

Tennessee Department of Health: Emergency Preparedness (EP): The EP program coordinates with federal, state and regional partner agencies such as the Centers for Disease Control and Prevention, the Tennessee Emergency Management Agency and local health departments to identify resource and planning needs. EP utilizes the Program Guidance for Emergency Preparedness. The purpose of the guidance document is to provide a concise framework to assist Tennessee Regional and Metropolitan EP programs to:

1. Enhance daily preparedness activities;
2. Refine operational plans for responding to and recovering from recovering any public health emergency;
3. Be cognizant of timelines and reporting expectations; and
4. Recognize specific accountability requirements imposed upon TDH EP that impact funding streams from the Assistant Secretary for Preparedness and Response (ASPR) and the Centers for Disease Control and Prevention (CDC).

(Refer to the State of Tennessee Department of Health Program Guidance for Emergency Preparedness)

OVERVIEW

Recent natural and man-made catastrophic events have demonstrated the need for volunteer healthcare professionals and lay volunteers to supplement and enhance response and recovery capabilities during and after such events. Additionally, the potential for widespread consequences from these events often cross jurisdictional lines. As a result, public health preparedness initiatives that include pre-credentialed and pre-trained volunteers have been developed to address local, regional, multi-state and federal collaboration.

Congress passed the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 to facilitate the effective use of volunteer health professionals during public health emergencies. Section 107 of the Act directs the Health and Human Services Secretary to "establish and maintain a system for the advance registration of health professionals for the purpose of verifying the credentials, licenses, accreditations, and hospital privileges of such professionals when, during public health emergencies, the professionals volunteer to provide health services."

The Health Resources and Services Administration (HRSA) of the United States Department of Health and Human Services (HHS) was delegated the responsibility for assisting each state in establishing a standardized state-wide registry of volunteer health professionals which would include readily available, verifiable, up-to-date information including identity, licensing, credentialing, accreditation, and privileging in hospitals or other facilities. As a result, the Emergency Systems for Advance Registration of Volunteer Health Professions (ESAR-VHP) was implemented. In 2006, the Pandemic and All Hazards Preparedness Act (PAHPA) transferred the responsibility for ESAR-VHP to the Office of the Assistant Secretary for Preparedness and Response (ASPR).

Implementation of an ESAR-VHP program became a required ASPR Level One Sub-capability during the 2007 grant funding year. Compliance requirements for ESAR-VHP were included in

the Centers for Disease Control (CDC) Program Announcement for the 2008 grant funding year. Eligibility for grant funds required participation in the ESAR-VHP program. As a recipient of federal funding from both CDC and ASPR, the Tennessee Department of Health (TDH), Emergency Preparedness Program (EP), implemented ***Volunteer Mobilizer (VM)*** as the statewide ESAR-VHP compliant volunteer registry for the State of Tennessee.

In 2002, President George W. Bush's State of the Union address launched the Medical Reserve Corps (MRC) as a demonstration project. The MRC is a national initiative of the Department of Health and Human Services, is housed in the Division of Civilian Volunteer Medical Reserve Corps. The MRC is a national network of local groups of volunteers committed to improving the health, safety, and resiliency of their communities. The MRC organizes teams of medical and other volunteers to support public health activities in preparing for, responding to, and recovering from public health emergencies. While this is a community-based program focused on local needs, they are also a critical resource for regional, multi-state, and federal collaboration. In 2003, the Shelby County Public Health MRC Unit became the first in Tennessee. Since then, the MRC has grown significantly, with 13 Public Health units across the state.

In 2010, the Tennessee Medical Reserve Corps and Volunteer Mobilizer announced that both organizations integrated to form a united organization known as Tennessee Volunteer Mobilizer (TNVM), the sole registration and volunteer management system for health emergency response in Tennessee. This system is used by each Medical Reserve Corps unit statewide. The Medical Reserve Corps units have become a standard program for utilizing volunteers. TNVM (ESAR-VHP) and MRC integration to TNVM, develops a unified and systematic approach for local, state, and federal coordination of volunteer health professionals, in support of existing resources, to improve the health, safety and resilience of local communities, states, and the nation in public health and medical emergency responses.

PURPOSE

This Volunteer Management Operational Plan – Standard Operation Guide (SOG) has been developed to unite all guidance manuals for the TNVM registry – the Tennessee Department of Health's (TDH) Statewide Emergency Systems for Advance Registration of Volunteer Health Professionals (ESAR-VHP) compliant volunteer registry. This SOG outlines requirements for MRC coordinator responsibilities, reporting, recruitment and engagement, and deployment procedures that occur before, during and after a public health emergency/disaster or in support of a public health initiative (i.e. administering flu vaccine or Points of Dispensing (POD) support), as it pertains to the Hospital Preparedness Program (HPP), the Public Health Emergency Preparedness Program, and the Strategic National Stockpile (SNS) Medical Countermeasure Operational Readiness Review (McMORR)

The ESAR-VHP program is guided by five fundamental objectives to ensure the proper development and operation of each ESAR-VHP system. These objectives are:

1. Recruit and register medical and non-medical volunteers;
2. Apply ESAR-VHP credentialing standards to registered volunteers;
3. Allow for the verification of the identity, credentials, and qualifications of registered volunteers prior to an emergency or disaster;
4. Automatically notify and confirm the availability of registered health care professionals and lay volunteers at the beginning of an emergency/disaster event; and
5. Provide deployment information to available volunteers and track/document their service from deployment through demobilization.

This SOG provides the processes and protocols to address these fundamental goals and objectives. Additionally, it outlines roles and responsibilities for TNVM registry staff to implement preparedness initiatives for volunteers to better prepare themselves and their families in the event of deployment.

MISSION STATEMENT

The Mission of TNVM is:

"To provide leadership, encouragement and support for the continued efforts to develop, implement and sustain a community-based network of volunteers interested in helping their community prepare and respond to man-made or natural public health/medical emergencies or disasters."

The TNVM goals are to:

- Ensure an adequate and competent volunteer force of healthcare professionals and lay volunteers
- Enable efficient and effective public health emergency operations
- Allow sharing of healthcare professionals and lay volunteers across regional and state lines
- Provide guidance on the legal protections that are available to volunteer healthcare professionals and lay volunteers who serve through the registry

- Establish clear protections for health professionals and lay volunteers

STATE MRC/ESAR-VHP COORDINATOR RESPONSIBILITIES

The State MRC/ESAR-VHP Coordinator is the state level liaison with Medical Reserve Corp Units' Coordinators. The State MRC/ESAR-VP Coordinator will work with the Coordinators to help achieve the goals and objectives set forth by the regional MRC/ESAR-VHP/SNS organization, the statewide MRC/ESAR-VHP/SNS goals, and the national MRC/ESAR-VHP/SNS program.

The State MRC/ESAR-VHP Coordinator will be the point of contact (POC) between the TN MRC units and the OSG Region 4 MRC office when statewide or regional coordination is needed and should advocate for the MRC/ESAR- VHP Program, provide research on issues vital to establishing and maintaining a MRC unit, and provide information on resources available through state and federal volunteer programs and partner agencies.

The responsibility of the State MRC/ESAR-VHP Coordinator is to facilitate coordination and information-sharing between:

- the regional MRC units and State agencies
- between MRC Regional Coordinators and OSG Region 4 Coordinator
- encourage collaboration between state MRC units
- advocate for the MRC Program.
- coordinate Statewide Advisory Committee formation.
- provide best practices on issues vital to establishing and maintaining a MRC unit.
- maintain integration of ESAR-VHP with MRC in conjunction with national initiative.

The State MRC/ESAR-VHP Coordinator is required to complete the following National Incident Management System (NIMS) courses located on the Federal Emergency Management Agency (FEMA) training site – http://training.fema.gov/IS/:

NIMS-related courses offered online/classroom setting by EMI include but are not limited to:

- IS-100.b - (ICS 100) Introduction to Incident Command System
- IS-200.b (ICS 200) ICS for Single Resources and Initial Action Incidents
- IS-244.a Developing and Managing Volunteers
- ICS 300 - Intermediate Incident Command System (Classroom setting)
- ICS 400 - Advanced ICS for Command and General Staff, Complex Incidents and MACS for
  Operational First Responders (H-467)
  (Classroom setting)
- IS-700.a National Incident Management System (NIMS), An Introduction
- IS-800.b National Response Framework, An Introduction

The MRC/ESAR-VHP Coordinator should seek the Certified in Volunteer Administration (CVA) certification offered through The Council for Certification in Volunteer Administration (CCVA) – www.cvacert.org

STATE COORDINATOR PARTICIPATION REQUIREMENTS

The State Coordinator is required to participate in several activities over the course of each grant year. The following includes, but are not limited to those required activities:

- Coordinate and participate in quarterly conference calls with Coordinators.
- Chair Conference Committee to develop agenda for a face-to-face meeting with the Coordinators and/or designated representative conducted during the fiscal year. Participation is required.
- Develop agenda for two web-training meetings with the Coordinators and/or designated representative conducted during the fiscal year.
- Attend national and regional MRC meetings as funding permits.
- Participate in Region IV MRC Quarterly Conference Calls
- Chair Statewide Advisory Committee.
- Maintain communication with TNVM vendor (Intermedix) regarding issues.
- Provide resolution to operational and functional issues experienced in TNVM

REGIONAL MRC COORDINATOR RESPONSIBILITIES

The Coordinator works in coordination with or under the supervision of the (County or Regional) Emergency Response Coordinator (ERC) in the Public Health Department's Office of Emergency Preparedness, or sponsoring organization. The Coordinator will usually work directly with Public Health, All Health Hazard Regions (AHHR) regional planning councils, or Emergency Management Agency (EMA). MRC involvement in these activities will be guided by the purpose and objectives of the individual MRC unit and the AHHR and State ESF#8 coordinator. The Coordinator is responsible for developing, implementing, and administering a local Medical Reserve Corps site following state and national guidelines. This involves the necessary administrative and operational activities associated with the community-based program designed to organize and utilize volunteers who want to donate their time and professional skills to promote healthy living throughout the year, as well as, to prepare and respond to public health emergencies. The Coordinator will be responsible for coordinating local MRC volunteers and activities with local emergency response plans and teams.

The Coordinator is required to complete the following NIMS courses located on the FEMA training site - http://training.fema.gov/IS/:

NIMS-related courses offered online/classroom by EMI include:

- IS-100.b - (ICS 100) Introduction to Incident Command System
- IS-200.b (ICS 200) ICS for Single Resources and Initial Action Incidents
- IS-244.a Developing and Managing Volunteers
- ICS 300 - Intermediate Incident Command System (Classroom setting)
- IS-700.a National Incident Management System (NIMS), An Introduction
- IS-800.b National Response Framework, An Introduction

The Coordinator is required to verify that all documentation for their sites are put in place and accessible to other Emergency Management Personnel in their absence. The Coordinator will ensure that all MRC sites under their jurisdiction will have:

- A Mission Statement that clearly defines what they are and what they do;
- An Action Plan – goals and objectives that are measurable and reflect the State EP/MRC Program Strategic Plan - that guides all annual activities;
- Objectives are to include action steps necessary in achieving the objective, a time frame for completing, and an evaluation strategy to measure these efforts
- Regional MRC site plans should assist the state effort in achieving the Tennessee Medical Reserve Corps Strategic Plan for 2013-2018.

REPORTING

Providing adequate information to determine viability is imperative to the continued support of the MRC/ESAR- VHP program and McMORR requirements. Therefore, the Coordinator will be required to submit, activities individually or in a summary report of the previous three (3) months of volunteer training, recruitment, and engagement efforts four times a year. The due dates for activity review are July 31st, October 31st, January 31st and April 30th, every year. These activities shall be submitted on the National Medical Reserve Corps website and exported for placement in the REDCap activity reporting, Capability (Cap) 15 section

.

Activities should include any volunteer recruitment, training, retention, notification, credentialing, deployment or demobilization function utilized by the Coordinator and may be submitted in the following methods;

- As a part of a larger exercise or activity After Action Report (AAR), which refers to and identifies the Capability 15 component
- As individual activities recorded into the National MRC site and exported for submission in the REDCap activity Cap. 15 section
- As a summarized report to REDCap, containing all individual volunteer activities for the previous 3 months and submitted in accordance with the dates shown in paragraph 1 of this reporting section
- To capture volunteer activity in TNVM, Coordinators will fill in the active volunteer #'s at the beginning and end of each 3 month reporting period. These fields will be in the REDCap, Cap. 15 activities area.
    - As a part of the MRC requirements, Coordinators will complete their Technical Assessments (TA), and Factors for Success forms in the National MRC site. The State Coordinator will have access to these records for grant reporting purposes.

To ensure that volunteers receive liability coverage during training, exercises/drills, and actual events under Tennessee Code Annotated (TCA 8-42-101, 58-2-811, & 58-2-812), the Coordinator will be required to submit a Board of Claims Form and Volunteer Sign-in sheet to the State Coordinator. These documents will be captured within REDCap, Cap 15 activities area and entered into the National MRC Site for purposes of satisfying State and

Federal requirements.)

RECRUITMENT AND ENGAGEMENT

The Coordinator is the point of contact for the MRC Program. The Coordinator will work with the State MRC/ESAR- VHP Coordinator to ensure Tennessee's volunteer recruitment efforts meet the State's current medical credentialing as well as, the Strategic National Stockpile (SNS) McMORR requirements.

The Coordinator will determine a target goal of new volunteers that will be recruited within the fiscal year, and identify strategies or activities for increasing volunteer counts, targeting recruitment efforts, and developing strategies to engage volunteers. These details are to be included in the annual action plan to meet PHEP, EP, HPP, and McMORR guidance requirements. The Coordinator will record the total number of medical, non- medical and affiliation volunteer numbers, within REDCap Activities section, Capability
15. The Coordinator will update these volunteer numbers on a quarterly basis; by July 31st, October 31st, January 31st, and April 30th.

The Coordinator will verify that procedures are put in place for volunteer screening and selection, including an application (provided by the TNVM system), interview process for potential volunteers, volunteer reference checks, and credentialing. **(See Appendix C)**

Volunteer information should be reviewed and updated at least once a year to ensure all information is still valid. Utilize TNVM to perform credentialing for all new medical volunteers. Utilize TNVM to perform annual credential status checks on existing medical volunteers. Perform background checks from the National Sex Offender Public Website at http://www.nsopw.gov/core/about.aspx?AspxAutoDetectCookieSupport=1, and the TN State Abuse Registry at https://apps.health.tn.gov/abuseregistry/, , for all new medical volunteers as part of the initial approval process, and during re-credentialing annually. Ensure all required electronic fields have been completed for the purposes of performing successful credentialing. For detailed information, refer to the Responder Management System Administrator Guide.

Utilize TNVM to perform background check on all new non-medical volunteers from the National Sex Offender Public Website at http://www.nsopw.gov/core/about.aspx?AspxAutoDetectCookieSupport=1, Utilize TNVM to perform 12 month status checks on existing non-medical volunteers.

In order to ensure better communications with volunteers, utilize email, telephone, or other verifiable communication options for confirmation of alerts.

All MRC sites must utilize the Tennessee Volunteer Registry (TNVM) as the volunteer management tool for volunteer counts, verifying licenses, and maintaining completed training by volunteers.

VOLUNTEER STAFFING MANAGEMENT

Coordinator staffing plans are to address volunteer staffing management (for example, work

breaks, shift schedules, meals/snacks, lodging, family care, etc.). Emergency responses will require the coordinated efforts of many local volunteers with diverse backgrounds. It is vital to protect the essential volunteer responsible for various SNS functions to ensure an efficient and effective response during an emergency.

The Coordinator must have volunteers available to staff dispensing/POD sites. The Coordinator is to provide documentation that volunteers/partners are available to assist Public Health in staffing dispensing sites at 100%. Volunteers are the backbone of any mass prophylaxis/dispensing campaign. Refer to local McMORR requirements for POD staffing statistics. Examples of required documentation:

- Printouts from database/other electronic tracking system
- Spreadsheet
- Volunteer registry
- MOU's/Letter of Commitment

TRAINING

VOLUNTEERS

Each volunteer is required to complete the following NIMS-related courses offered online by EMI, as well as, a general orientation conducted by the MRC site.

- IS-22 Are You Ready? An In-depth Guide to Citizen Preparedness
- IS-100.B - (ICS 100) Introduction to Incident Command System
- IS-200.b (ICS 200) ICS for Single Resources and Initial Action Incidents
- IS-200.HCa Applying ICS to Healthcare Organizations (Health Care Professionals only)
- IS-700.a National Incident Management System (NIMS), An Introduction

Minimum training includes an overview of MRC core competencies and an overview of Department of Health rules and regulations regarding all hazards ESF-8 Health and medical responsibilities. Volunteer training is conducted in three tiers based upon the volunteer's interest and involvement (refer to the Volunteer Handbook). It is also recommended that MRC sites participate in local exercises/drills annually to maintain essential skills in emergency response.

The Coordinator is required to include job-action sheets and just-in-time training materials for all roles identified in the plan. Sample volunteer job descriptions should be available as a reference for volunteers on their roles during planned activities.

Although training may occur for volunteers, often just-in-time training and job aids are needed to refresh certain aspects of each position at the time of an event. This also may be the only method of training available for some volunteers who have not previously attended courses or exercises.

Training materials and Job-action sheets for each role can include, but are not limited to:

- Checklists
- Guides
- Position descriptions
- Training videos
- Power point slides
- Lesson plans for training materials to be used at time of event

MAINTAINING PARTNERSHIPS/RELATIONSHIPS

The Coordinator should work with other volunteer health care professional/emergency preparedness entities in determining and meeting community needs. New partnerships, that fulfill an unmet need for an all-hazard response, should be included in the annual action plan.

In working with organizational management and local partners, the Coordinator should ensure local plans address volunteer management (for example, work breaks, shift schedules, meals/snacks, lodging, family care, etc.). Volunteer management issues are to be incorporated in the plan along with written agreements between local organizations that provide services during an emergency.[1]

MANAGING MRC SITE

The Coordinator must maintain and keep current the TNVM system of registered volunteers and/or staff. Since volunteers and staff are the lifeblood of several EP Programs, it is vitally important to be able to maintain current contact information to reach them quickly during activation.

REGIONAL MRC COORDINATOR PARTICIPATION REQUIREMENTS

The Coordinator is required to participate in several activities over the course of each grant year. The following includes, but are not limited to those required activities:

- Coordinator(s) or a designated representative shall participate in quarterly conference calls.
- One face-to-face meetings with the Coordinator(s) or designated representative will be conducted during the fiscal year. Participation is encouraged and based on funding and/or travel restrictions.
- Two web-training meetings with the Coordinator(s) and/or designated representative will be conducted during the fiscal year.
- As travel funds and guidelines allow, the Coordinator should attend national and regional MRC meetings.
- The Coordinator is required to update their site profile on the National MRC website at www.medicalreservecorps.gov during the last week of each quarter.
- The Coordinator is required to enter a minimum of 2 monthly volunteer activities, trainings, events, exercises, etc. in the National MRC website, in order to meet MRC Unit requirements.
- The Coordinator is required to participate in an annual Technical Assistance

Assessment (TA) with the Region IV MRC Coordinator or designated representative from the Division of the Civilian Volunteer Medical Reserve Corps (DCVMRC)

- The Coordinator is required to submit reports on volunteer activities, trainings, events, exercises, etc. in the State's REDCap database for capability activity reporting (https://redcap.health.tn.gov/redcap/).

  Reports showing MRC unit activities can be exported from the National MRC website unit activities database, in Excel or PDF and placed in the State's

  REDCap activities database. The due dates for budget period activities are July 31st, October 31th, January 31st and April 30th.

- The Coordinator(s), using TNVM, should know deployment availability of all volunteers – local, in- state, or federal deployment.

- The Coordinator(s) must put in place call down rosters for 24/7 operations for all TNVM volunteers. These rosters are to be reviewed for accuracy and tested at least quarterly. It is critical to certain events (i.e. warehouse operations, dispensing clinics, POD sites, etc.) to be able to reach trained leads and other staff quickly.

  Coordinators should record call down results in the National MRC site and in REDCap Activities, Cap. 15, as required by State and Federal requirements. Examples:

  - Call logs
  - Computer tracking mechanisms
  - AARs
  - DSNS metric sheets
  - Memos for record

TNVM PRE-DEPLOYMENT CONSIDERATIONS

The final roster of deployable TNVM registered volunteers will be managed by the liaison, who will manage the roster which includes deployment, tracking, and demobilization of TNVM registered volunteers during a particular incident or event.

The liaison will collect as much available information regarding a request for volunteers prior to contacting TNVM volunteers to determine their availability to serve. However, volunteers should be aware that situations can rapidly change and that they should plan for worst case scenarios when considering volunteering for a deployment.

RESPONDING TO AN EMERGENCY ACTIVATION IN STATE

In the event of a public health emergency in the State, the liaison will notify volunteers via the TNVM alerting module. Notifications will include all pertinent information such as the nature of the emergency; sleeping, eating and travel arrangements; and expectations of the length of deployment and hours of operation. Volunteers will also be provided with a TNVM deployment packet. **(See Appendix F)**

Volunteers will follow the following procedures:

- Volunteers will report to the designated staging area specified by the liaison and present their deployment papers to the onsite volunteer

coordinator.

- Once a volunteer arrives at the staging area they will log in; as a verified TNVM volunteer, fill out any required paper work; receive deployment papers, badge, and briefing; and receive assignment to a position and work location. *(Only volunteers holding a TNVM badge and that are able to show proof of deployment will be allowed on the site.)*
- In addition, non TNVM, spontaneous volunteers will be required to fill out additional paperwork to facilitate TNVM entry, verify identity and consent to a sexual background check. All spontaneous volunteer data will need to be added to the list of volunteer's for Board of Claims submission purposes.
- Once a volunteer arrives at the site of deployment, additional paperwork may be required to receive assignment to an area Supervisor. The Supervisor will give the volunteer further instructions. It is very important for every volunteer to sign in and out each day (including lunch) and keep track of all hours worked on the required form that must be signed by the Supervisor.
- Before leaving the site, volunteers will brief replacement volunteers on all pertinent information needed to perform the job and continue smooth operations.
- After demobilization, volunteers will be asked to report back to the check-in area to log out, turn in a Volunteer Feedback Form and return any assigned equipment. **(See Appendices E, F)**

RESPONDING TO AN EMERGENCY ACTIVATION OUT OF STATE

TNVM will follow the same protocols for in and out of state deployments. The only difference is that an official request will flow through the EMAC system or federal deployment protocols. **(See Appendix H)** provides additional information on how the EMAC coordination system operates among state. In order to remain consistent with other Emergency Management Organizations and NIMS, this SOG will utilize the *Standard Volunteer Management System for Public Health & Medical Emergency Response & Recovery* model produced by the George Washington University Institute for Crisis, Disaster and Risk Management.

DEPLOYMENT OF TNMRC VOLUNTEERS

TNMRC employs generally accepted protocols when gathering mobilization information; identifying and disseminating information to volunteers; processing and tracking deployed volunteers; and demobilization of volunteers. In order to remain consistent with other Emergency Management Organizations and NIMS, this SOG will reference the *Standard Volunteer Management System for Public Health & Medical Emergency Response & Recovery* model

produced by the George Washington University Institute for Crisis, Disaster and Risk Management.
This model is specifically designed to address the processing and support of volunteers who may be assigned to response and recovery positions across the range of *public health and medical tasks* required during an incident.
(See Appendix G)

DEPLOYMENT PROTOCOLS FOR NON-EMERGENCY EVENTS

Requests for TN MRC registered volunteers to support community events, public health events such as health fairs, exercises, POD's, and immunization clinics will be made directly to the Regional MRC Units.

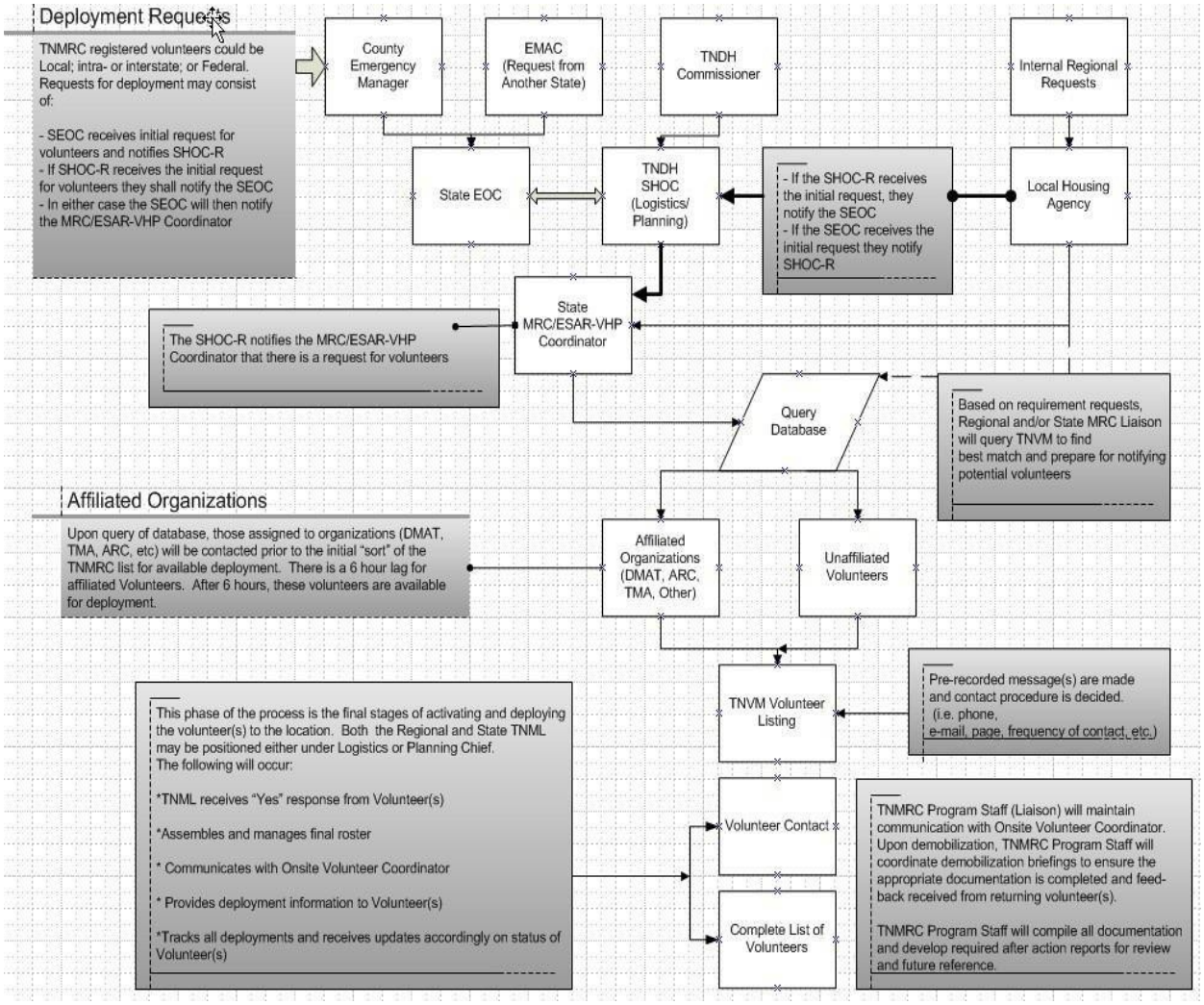
DEPLOYMENT PROTOCOLS FOR AN EMERGENCY/DISASTER

Deployment requests for TNMRC volunteers could be local; intra- or interstate; or federal. All requests should be directed through the State Emergency Operations Center (SEOC). If a request is received by the State Health Emergency Operations Center-Representative (SHOC-R), that individual will coordinate with the personnel at SEOC. Requests for deployment are handled as follows:

- SEOC receives the initial request for volunteers and notifies the SHOC-R.
- If the SHOC-R receives the initial request for volunteers, the SEOC is notified by the SHOC-R.
- In either case, the SHOC-R notifies the State MRC/ESAR-VHP Coordinator or TN MRC Liaison (Liaison), a TDH State Health Operations Center (SHOC) position under the Logistics Section.

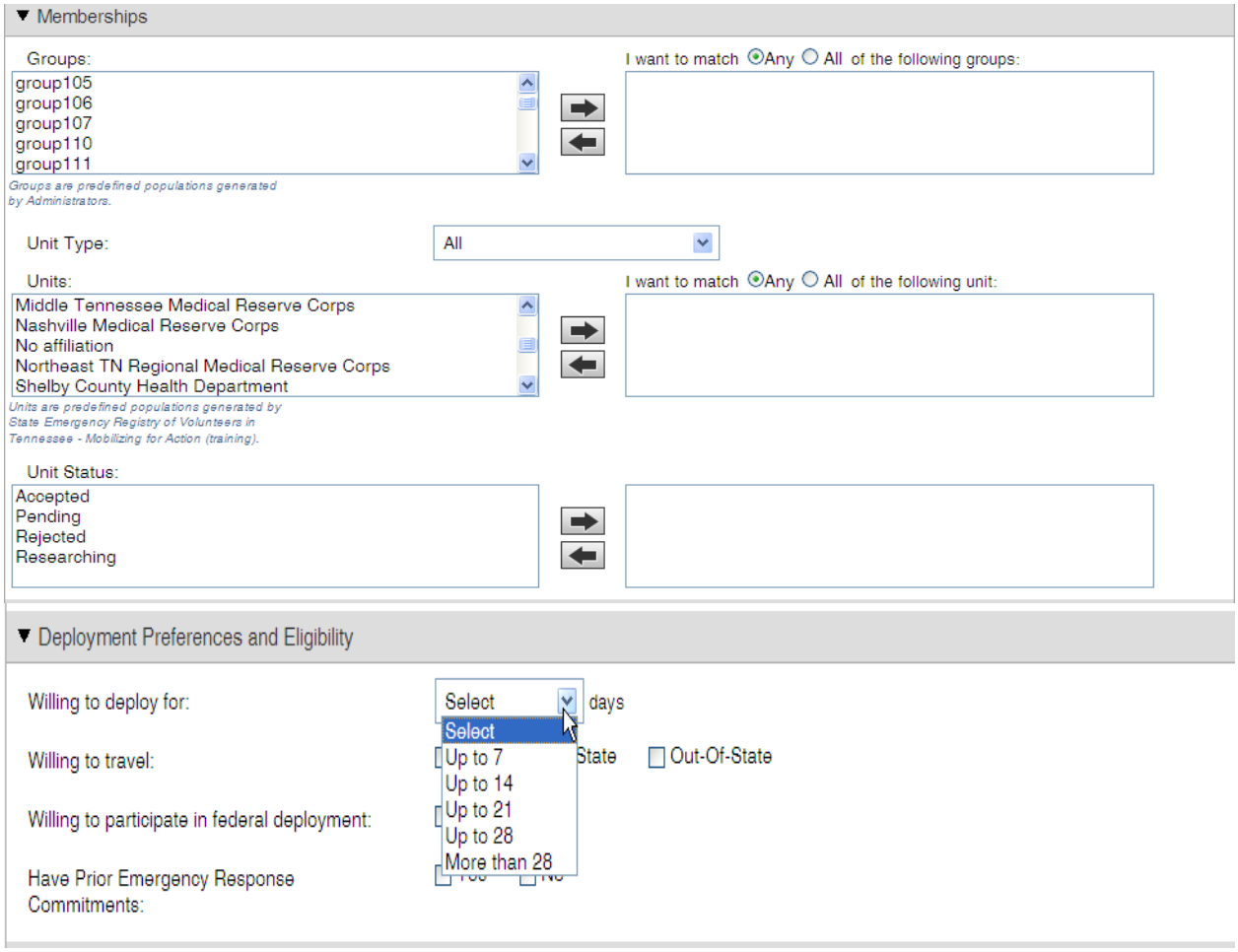
1. Requests for TNMRC volunteers from within the state could originate from local/county/state emergency managers, as well as the Commissioner of the Department of Health. Requests from outside the state will be pursuant to the Emergency Medical Assistance Compact (EMAC) or a federal request for assistance. Figure 1 outlines the process for requesting TNMRC volunteers.
2. A "*volunteer,*" as used in this model, is defined as a person agreeing to provide service outside the scope of his/her employer and/or employed position, without additional or specific compensation for this voluntary commitment. This differentiates the "volunteer" from personnel who provide service as part of their job position in an assigned resource. An individual offering or providing this service is a "volunteer" even if the volunteer's time is compensated through his/her usual employer and employment rate.
3. EMAC, the Emergency Management Assistance Compact, is a congressionally ratified organization that provides form and structure for interstate mutual aid. Through EMAC, a disaster impacted state can request and receive assistance from other member states quickly and efficiently.

Figure 1: Requesting TNVM Volunteers



Upon receipt of an official request for volunteers, the Regional or State MRC Liaison or unit leader will search the TNVM registry for the types of volunteers being requested. The TNVM registry database may be searched using different criteria such as profession, professional license, or geographic location **(See Figure 2, TNVM Database**

Figure 2: TNVM Database



In keeping with the ESAR-VHP requirements, upon receipt of a request for volunteers, TNVM registry staff will: (1) produce a list of requested volunteers within 2 hours of the request; (2) contact potential volunteers; (3) within 12 hours, respond with an initial list of volunteers available to deploy; and (4) within 24 hours, provide the requestor with a verified list of volunteers for deployment.

TNVM registered volunteers affiliated with other volunteer organizations, such as Disaster Medical Assistance Team (DMAT), will not be activated for 6 hours in the event such other volunteer organizations would need to roster a team for deployment. After the expiration of the 6 hour window, these volunteers are considered to have been released for deployment through TNVM.

ONSITE VOLUNTEER COORDINATOR/MRC UNIT LEADER RESPONSIBILITIES

Onsite volunteer coordinators/MRC Unit Leaders play a very important role in managing volunteers. These responsibilities include, but are not limited to:

- Processing incoming/outgoing volunteers

- Conducting/providing "Just-in-Time" training as necessary or required
- Assigning volunteers to positions commensurate with their skills and training
- Maintaining emergency/disaster volunteer records for the Board of Claims (BOC)
- Administrative assistance as required.

VOLUNTEER TRACKING

DURING VOLUNTEER DEPLOYMENT

Volunteers who are deployed must be accounted for from the initiation of assignments through demobilization. Depending on the situation, reporting protocols will be established for either "once a day" or "every 12 hours". The liaison will coordinate the required tracking mechanism with the onsite volunteer coordinator/MRC Unit Leader at the duty station. **(See Appendices E, F)**

RESOURCE STATUS AND EQUIPMENT RETURN POLICY

During an event or incident it is required that a resource tracking system be in place under the direction of the Unit Leader, or the Onsite Volunteer Manager, or designee, i.e. Logistics Chief. There are many resource tracking systems, ranging from simple status sheets to sophisticated computer-based systems. The type of system – manual, card, status board, or computer – will be at the discretion of the Logistics Chief or designee.

NONEXPENDABLE RESOURCES

Nonexpendable resources (such as personnel and durable equipment) must be fully accounted for both during the incident and when they are returned to the providing organization. Broken or lost items should be replaced through the appropriate resupply process, by the organization with invoicing responsibility for the incident, or as defined in existing agreements. It is critical that fixed-facility resources also be restored to their full functional capability in order to ensure readiness for the next mobilization.

EXPENDABLE RESOURCES

Expendable resources (such as water, food, and other one-time-use-supplies) must be fully accounted for. The incident management organization bears the costs of expendable resources, as authorized in financial agreements executed by preparedness organizations.

All resources used to respond to an event or an incident that **do not** belong to MRC volunteers, i.e. radios, hard hats, medical supplies, etc., must be returned immediately following an event or incident. The final disposition of all resources, including those located at the incident site and at fixed facilities will be directed by the Unit Leader or the Onsite Volunteer Manager. Resources will then be rehabilitated, replenished, disposed of, and/or retrograded.

DEMOBILIZATION

Volunteer deployment protocols will be communicated by the onsite Coordinator or designated representative. TNVM registry staff (liaison) will coordinate with the onsite Coordinator to determine when TNVM volunteers have been deactivated.

The liaison will:

- Contact the volunteer to assure return to their home base
- Ensure the volunteer received a debriefing and any requested assistance (i.e., behavioral health programs)
- Provide the volunteer with a TNVM Volunteer Feedback Form – Activation/Deployment to complete and return **(See Appendix E, F, G-Pages 25- 40)**

Annex I
Crisis Standards of Care

Guidance for the Ethical Allocation of Scarce Resources during a Community-Wide Public Health Emergency as Declared by the Governor of Tennessee

Developed by the Tennessee Altered Standards of Care Workgroup

Version 1.6
July 2016

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