

SOUTHWEST
UTAH PUBLIC
HEALTH
DEPARTMENT



ANNEX 2

PANDEMIC INFLUENZA RESPONSE PLAN

Southwest Utah

Updated

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I. INTRODUCTION

Severe influenza pandemics represent one of the greatest potential threats to the public's health. Pandemics are distinct from seasonal influenza epidemics that happen nearly every year, causing an average of 36,000 deaths annually in the United States. Seasonal influenza epidemics are caused by influenza viruses which circulate around the world. Over time, people develop some degree of immunity to these viruses, and vaccines are developed annually to protect people from serious illness. Pandemic influenza refers to a worldwide epidemic due to a new, dramatically different strain of a novel influenza virus. A pandemic virus strain can spread rapidly from person to person and, if severe, can cause high levels of disease and death around the world.

The creation of a novel virus means that most, if not all, people in the world may have never been exposed to the new strain and have no immunity to the disease. It also means that new vaccines must be developed and therefore are not likely to be available for a time, during which many people could become infected, seriously ill or pass away. During the 20th century, three pandemics occurred that spread worldwide within a year. The influenza pandemic of 1918 was especially virulent, killing a large number of young, otherwise healthy adults. It is now known that this pandemic was caused by an avian influenza virus that suddenly developed the ability to infect humans and to easily spread from person to person. The pandemic caused more than 500,000 deaths in the United States and more than 40 million deaths around the world. Subsequent pandemics in 1957-58 and 1968-69 caused far fewer fatalities in the U.S., 70,000 and 34,000 deaths respectively, but caused significant morbidity and mortality around the world. These two pandemics were caused by an influenza virus that arose from genetic re-assortment between human and avian viruses.

The Centers for Disease Control and Prevention (CDC) estimates that in the U.S. alone, an influenza pandemic could infect up to 200 million people and cause between 200,000 and 1,900,000 deaths. The worldwide public health and scientific community is increasingly concerned about the potential for a pandemic to arise from the widespread and growing avian influenza A (H5N1) outbreak across several continents. Although many officials believe it is inevitable that future influenza pandemics may occur, it is impossible to predict the exact timing of these outbreaks.

Table 1

Estimated number of Episodes of Illness, Healthcare Utilization, and Deaths Associated with Moderate and Severe Pandemic Influenza Scenarios for the US Population and Southwest Utah District

Southwest Utah District (2013 data)
■ Assumption: 213,382 population
■ Symptomatic (30%): 64,146
■ Seek Care (50%): 32,073
■ Hospitalized (25%): 8,018
■ ICU (15%): 1202
■ Ventilator (50%): 601
■ Death (2.5%): 5,334
■ Average 533 per week (10 week course)

1. Estimates are based on extrapolation from past pandemics in the US, and do not include the potential impacts of interventions not available during the 20th Century pandemics.

2. The calculations used to determine the figures in Table one are based on the following assumptions:
 - a. Southwest District Population base as of 2013
 - b. Susceptibility to the pandemic influenza subtype may be universal.
 - c. The clinical disease attack rate may be 30% in the overall population. Illness rates may be highest among school-aged children (about 40%) and decline with age. Among working adults, an average of 20% may become ill during a community outbreak.
 - d. Of those who become ill with influenza, 50% may seek outpatient medical care. 25% may be hospitalized. 15% requiring Intensive Care Unit. 50% of ICU patients may need a ventilator.

There are several characteristics of influenza pandemic that differentiate it from other public health emergencies. First, it has the potential to suddenly cause illness in a very large number of people, who could easily overwhelm the health care system throughout the nation. A pandemic outbreak could also jeopardize essential community services by causing high levels of absenteeism in critical positions in every workforce. It is likely that vaccines against the new virus may not be available for six to eight months following the emergence of the virus. Basic services, such as health care, law enforcement, fire, emergency response, communications, transportation, and utilities, could be disrupted during a pandemic. Finally, the pandemic, unlike many other emergency events, could last for several weeks, if not months.

II. Summary:

Key Pandemic Preparedness and Response Principles Addressed in this Plan

1. **Develop Southwest Region-wide disease surveillance programs, coordinated with state and federal efforts, to detect pandemic influenza strains in humans and animals.**
 - Global surveillance networks identify circulating influenza strains, including novel strains that have the potential for causing a pandemic outbreak among domestic animals and persons in several countries.
 - Heightened local surveillance system, coupled with state, national and international surveillance efforts and laboratory testing, serves as an early warning system for potential pandemics and a critical component of pandemic response plans.
 - Local surveillance during a pandemic outbreak provides important information regarding the severity of disease, characteristics of the affected population, and impacts on the health care system.
2. **Mass vaccination plans and protocols are in place to rapidly administer vaccine and monitor vaccine effectiveness and safety.**
 - upon detection of a pandemic virus vaccine may not be available for a few months or more.
 - Demand for vaccine may significantly exceed supply during the pandemic, and may not be available at all for the first several months. Therefore, priority groups must be established by Southwest Utah Public Health Department (SWUPHD), based on national recommendations from the Center for Disease Control (CDC) and in collaboration with The Utah Department of Health (UDOH), and the Community Health Emergency Response Coalition (ESF 8/SW COALITION), coordinate with district partners to vaccinate the entire district population.
3. **Guideline established for the utilization of antiviral medications by medical staff for treatment and prevention of influenza.**
 - Antiviral medications may both prevent and treat influenza infection. Prophylaxis of individuals would need to continue throughout the period of exposure, possibly weeks to months. Treatment can decrease the severity of illness and resulting complications of infection. For optimal impact, treatment needs to be started as soon as possible and within 48 hours of the onset of illness.

- the current supply of influenza antiviral medications is extremely limited and production cannot be rapidly expanded.
- Educating physicians, nurses, and other health care workers before and during the pandemic on the appropriate use of antiviral drugs may be important to maximize the effective use of antiviral medications.
- Local protocols for prioritizing the use of antiviral medicines has been developed by SWUPHD in consultation with local partners in a medical subcommittee for pandemic planning and with the Utah Department of Health (UDOH), and may be based on federal guidelines from the Centers for Disease Control (CDC). The guidelines adapted are attached to this document as Appendix A.

4. Capabilities developed to implement non-medical measures to decrease the spread of disease throughout Southwest Utah District as guided by the epidemiology of the pandemic.

- Emphasizing infection control measures in health care facilities, including hospitals, out-patient care settings and long-term care facilities, as well as workplaces, other community settings and the home can limit the spread of influenza among high-risk populations and health care workers.
- Voluntary isolation of ill persons either in a health care facility or at home is an infection control measure that may be implemented throughout all stages of a pandemic.
- Due to the fact that influenza is highly infectious and can be transmitted by people who appear to be well, quarantine of exposed individuals is likely to be a viable strategy for preventing the spread of the disease in the community only during the first stages of a pandemic.
- Social distancing measures such as limiting public gatherings and closing schools, colleges, universities, large child care centers, libraries, houses of worship, stadiums, and recreational facilities are intended to decrease opportunities for close contact among persons in the community, thereby decreasing the potential for influenza transmission among people and possibly slowing the spread of a pandemic. Decision makers will consider the scope of their legal authorities, social and economic impacts, anticipated effectiveness and current epidemiology of the pandemic prior to implementing these measures.

5. This plan will assist local health care system partners, response agencies, elected leaders, the business community, and community based organizations with pandemic preparedness planning aimed at maintaining the provision of health care services, sustaining essential community services, and limiting the spread of disease throughout the duration of a pandemic.

- an influenza pandemic may place a substantial burden on inpatient and outpatient health care services. Demands for medical supplies, equipment, and hospital beds may exceed available resources for several weeks or months.
- Strategies to increase hospital bed availability during a pandemic include deferring elective procedures, implementing more stringent criteria for hospital admission, earlier discharge of patients with follow-up by home health care personnel, and establishing alternate care facilities in nontraditional sites.
- as demands for health care resources and services increase sharply, illness and absenteeism among health care workers may further strain the ability to provide quality care.
- Absenteeism during a pandemic among critical infrastructure agencies, first response agencies, businesses, and community based organizations must be accounted for in business continuity plans.

6. Communication with and education of the public, health care providers, local government and community leaders, and the media about the consequences of influenza pandemic and what each person can do to prepare.

- Influencing public behavior toward basic infection control measures (hand washing, using alcohol hand gel, respiratory etiquette, stay at home when sick, and avoiding unnecessary contact with other persons during a pandemic) may be key factors in limiting the spread of influenza during a pandemic.

- Communicate clear, concise and accurate information about influenza, the course of the pandemic, and response activities may increase awareness, limit public panic and speculation, and sustain confidence in the public health system.

III. PURPOSE OF THE PLAN

The Pandemic Influenza Response Plan for Southwest Utah District (Plan) provides guidance to Public Health – (SWUPHD) and district partners regarding detection, response and recovery from an influenza pandemic. The Plan describes the unique challenges posed by a pandemic that may necessitate specific leadership decisions, response actions, and communications mechanisms. Specifically, the purpose of the plan is to:

- Define preparedness activities that should be undertaken before a pandemic occurs that may enhance the effectiveness of response measures.
- Describe the response, coordination and decision making structure that may incorporate SWUPHD, the health care system in Southwest Utah District, other local response agencies, and state and federal agencies during a pandemic.
- Define roles and responsibilities for SWUPHD, local health care partners and local response agencies during all phases of a pandemic.
- Describe public health interventions in a pandemic response and the timing of such interventions.
- Serve as a guide for local health care system partners, response agencies and businesses in the development of pandemic influenza response plans.
- Provide technical support and information on which preparedness and response actions are based.

During an influenza pandemic, SWUPHD and district partners may utilize the plan to achieve the following goals:

- Limit the number of illnesses and deaths
- Preserve continuity of essential government functions
- Minimize social disruption
- Minimize economic losses

The plan may be coordinated with other SWUPHD preparedness plans and activities, and may be coordinated with the plans of community, state and federal partners.

IV. SCOPE OF THE PLAN

The Plan is an annex to Emergency Support Function 8 (Health and Medical Services) of the County Emergency Operation Plan. Emergency Support Function 8 and its annexes are referenced in the Plan as they provide a broad description of the responsibilities, authorities, and actions associated with public health emergencies.

The Plan primarily focuses on the roles, responsibilities, and activities of SWUPHD. However, specific responsibilities for key response partners are included to highlight points of coordination between agencies during a pandemic. It is expected that health care facilities and health care professionals, essential service providers, local government officials, and business leaders may develop and incorporate procedures and protocols addressing influenza preparedness and response activities into their emergency response plans.

This plan currently does not address measures that would be taken to contain an outbreak of the avian influenza virus in birds or other animal populations occurring in Southwest Utah District.

Federal and state departments of agriculture are primarily responsible for surveillance and control of influenza outbreaks in domestic animals, although agricultural control measures interface with public health actions to prevent transmission into humans. SWUPHD may develop an annex to this plan that may identify the roles and responsibilities of local, state and federal agencies in response to an avian influenza threat to Southwest Utah District.

While some activities are routine, few disasters are routine, including pandemic. It is often necessary to adapt what may be perceived as “standard” procedures to fit the situation and these decisions are often made under pressure. The SWUPHD Emergency Operation Center (EOC) Commander or designee has the authority to deviate from standardized procedures and is responsible to document this decision.

V. PLANNING ASSUMPTIONS

1. An influenza pandemic may result in the rapid spread of the infection with outbreaks throughout the world. Communities across the state and the country may be impacted simultaneously.

2. There may be a need for heightened global, national and local surveillance.

3. Birds with an avian influenza strain may arrive and cause avian outbreaks in Southwest Utah prior to the onset of a pandemic, significantly impacting domestic poultry, wild and exotic birds, and other species.

4. Southwest Utah District may not be able to rely on mutual aid resources, State or Federal assistance to support local response efforts. SWUPHD may use altered standards of care in providing the most expedient medical care possible. This might include using non-licensed, non-screened or certified, non-pharmacy persons trained in dispensing medication.

5. Antiviral medications may be in extremely short supply. Local supplies of antiviral medications may be prioritized by SWUPHD for use in hospitalized influenza patients, health care workers providing care for patients, and other priority groups based on current national guidelines and in consultation with the Utah Department of Health (UDOH).

6. A vaccine for the pandemic influenza strain may likely not be available for 6 to 8 months following the emergence of a novel virus.

a. As vaccine becomes available, it may be distributed and administered by SWUPHD and other community partners based on current national guidelines and in consultation with the UDOH and CDC.

b. Insufficient supplies of vaccines and antiviral medicines may place greater emphasis on social distancing strategies and public education to control the spread of the disease in the county.

7. The number of ill people requiring outpatient medical care and hospitalization could overwhelm the local health care system.

a. Hospitals and clinics may have to modify their operational structure to respond to high patient volumes and maintain functionality of critical systems.

b. The health care system may have to respond to increased demands for service while the medical workforce experiences 25-35% absenteeism due to illness.

c. Demand for inpatient beds and assisted ventilators may increase by 25% or more, and prioritization criteria for access to limited services and resources may be needed.

d. There may be tremendous demand for urgent medical care services.

e. Infection control measures specific to management of influenza patients may need to be developed and implemented at health care facilities, out-patient care settings and long-term care facilities.

- f. The health care system may need to develop alternative care sites (designated “flu clinics”) to relieve demand on hospital emergency rooms and care for persons not ill enough to merit hospitalization but who cannot be cared for at home.
 - g. Emergency Medical Service (EMS) responders may face extremely high call volumes for several weeks, and may face 25% - 35% reduction in available staff.
 - h. The number of fatalities experienced during the first few weeks of a pandemic could overwhelm the resources of the local funeral homes.
 - i. The demand for home care and social services may increase dramatically.
8. There could be significant disruption of public and privately-owned critical infrastructure including commerce, utilities, public safety, agriculture and communications.
9. Social distancing strategies aimed at reducing the spread of infection such as closing schools, churches, community centers, and other public gather points and canceling public events may be implemented during a pandemic.
10. Some persons may be unable or unwilling to comply with isolation and quarantine directives. For others, social distancing strategies may be less feasible (for example, homeless populations who live in congregate settings). It may be important to develop and disseminate strategies for infection control appropriate for these environments and populations.
11. It may be important to coordinate pandemic response strategies throughout counties in the Southwest Utah District due to the mobility of the population.
12. The general public, health care system, response agencies, and elected leaders will need continuous updates on the status of the pandemic outbreak, impacts on critical services, the steps SWUPHD is taking to address the incident, and steps response partners and the public can take to protect themselves.

VI. AUTHORITIES

Various state and local public officials have overlapping authorities with regard to protecting public health and safety. The Governor, the State Board of Health, the State Director of Health, the County Commissioners, the local Board of Health, the executive heads of cities and towns, and the Local Health Officer each can implement authorities within the scope of their jurisdiction aimed at protecting public health, including increasing social distancing by closing public or private facilities. During a pandemic, the presence of overlapping authorities may necessitate close communication and coordination between elected leaders and the Local Health Officer to ensure decisions and response actions are clear and consistent.

Governor of the State of Utah

The Governor has authority to proclaim a state of emergency after finding that a disaster affects life, health, property, or the public peace. The Governor may assume direct operational control over all or part of local emergency management functions if the disaster is beyond local control. After proclaiming a state of emergency, the Governor has the authority to restrict public assembly, order periods of curfew, and prohibit activities that he or she believes should be prohibited in order to maintain life and health.

State Board of Health

The State Board of Health has authority to adopt rules to protect the public health, including rules for the imposition and use of isolation and quarantine and for the prevention and control of infectious diseases. Local boards of health, health officials, law enforcement officials, and all other officers of the state or any county, city, or town shall enforce all rules that are adopted by the State Board of Health.

The Director of Utah Department of Health

The Director of Health shall enforce all laws for the protection of the public health, and all rules, regulations, and orders of the State Board of Health. The Director also shall investigate outbreaks and epidemics of disease and advise Local Health Officers about measures to prevent and control outbreaks. The Director shall enforce public health laws, rules, regulations, and orders in local matters when there is an emergency and the local board of health has failed to act with sufficient promptness or efficiency, or is unable to act for reasons beyond its control. The Director has the same authority as local health officers but may not exercise that authority unless:

- (a) The Local Health Officer fails or is unable to do so;
- (b) By agreement with the Local Health Officer or local board of health; or
- (c) When in an emergency the safety of the public health demands it.

Southwest Utah Region County Commissioners

The Southwest Utah District County Commissioners may proclaim a state of emergency within the County (Beaver, Garfield, Iron, Kane, or Washington) they reside when, in the judgment of the Commissioners, extraordinary measures are necessary to protect public peace, safety and welfare. Under a state of emergency, the Commissioner may impose curfews, close any or all private businesses, close any or all public buildings and places including streets, alleys, schools, parks, beaches and amusement areas, and proclaim any such orders as are imminently necessary for the protection of life and Property.

Southwest Utah Region Board of Health

The jurisdiction of local Board of Health is coextensive with the boundaries of the county. The local Board of Health shall supervise all matters pertaining to the preservation of the life and health of the people within its jurisdiction. The Board shall enforce through the Local Health Officer the public health statutes of the state and the rules promulgated by the State Board of Health and the Secretary of Health. The Board may also enact such local rules and regulations as are necessary to preserve and promote the public health and to provide the enforcement of those rules and regulations.

Mayor of Cities or other elected officials within Southwest Utah Region

The respective Mayors or other designated elected officials may proclaim a state of civil emergency within their City when, in the judgment of the Mayor or designee, extraordinary measures are necessary to protect public peace, safety and welfare. Under a state of civil emergency, the Mayor may impose curfews, close any or all business establishments, close any or all public buildings and places including streets, alleys, schools, parks, beaches and amusement areas, direct the use of all public and private health, medical and convalescent facilities and equipment to provide emergency health and medical care for injured persons, and proclaim any such orders as are imminently necessary for the protection of life and property.

Local Health Officer

The Local Health Officer acts under the direction of the local Board of Health. The Local Health Officer enforces the public health statutes, rules and regulations of the state and the local Board of Health. The Local Health Officer has the authority to control and prevent the spread of any dangerous, contagious or infectious diseases that may occur within his or her jurisdiction. The Local Health Officer shall, when necessary, conduct investigations and institute disease control measures, including medical examination, testing, counseling, treatment, and vaccination, decontamination of persons or animals, isolation, quarantine, and inspection and closure of facilities. The Local Health Officer may initiate involuntary detention for isolation and quarantine of individuals or groups pursuant to provisions of state regulations.

The Local Health Officer has the authority to carry out steps needed to verify a diagnosis reported by a health care provider, and to require any person suspected of having a reportable disease or condition to submit to examinations to determine the presence of the disease. The Local Health Officer may also investigate any suspected case of a reportable disease or other condition if necessary, and require notification of additional conditions of public health importance occurring within the jurisdiction.

The Local Health Officer may establish, in consultation with local health care providers, health facilities, emergency management personnel, law enforcement agencies, and other entities deemed necessary, plans, policies, and procedures for instituting emergency measures to prevent the spread of communicable disease.

The Local Health Officer may take all necessary actions to protect the public health in the event of a contagious disease occurring in a school or day care center. Those actions may include, but are not limited to, closing the affected school, closing other schools, ordering cessation of certain activities, and excluding persons who are infected with the disease. Prior to taking action, the Local Health Officer shall consult with the State Director of Health, the superintendent of the school district or the chief administrator of the day care center, and provide them and their board of directors a written decision directing them to take action.

The Local Health Officer's powers are not contingent on a proclamation of emergency by the county Executive or an executive head of a city or town.

VII. PHASES OF A PANDEMIC

The World Health Organization (WHO) has developed a global influenza preparedness plan that includes a classification system for guiding planning and response activities for an influenza pandemic. This classification system is comprised of six phases of increasing public health risk associated with the emergence and spread of a new influenza virus subtype that may lead to a pandemic. The Director General of WHO formally declares the current global pandemic phase and would adjust the phase level to correspond with pandemic conditions around the world. For each phase, the global influenza preparedness plan identifies response measures WHO may take, and recommends actions that countries around the world should implement.

Pandemic Phases- Public Health Goals

Inter-pandemic Period

Phase 1 – No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.

Phase 2 – No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

Pandemic Alert Period

Phase 3 – Human infection(s) with a new subtype but no human-to-human spread, or at most rare instances of spread to a close contact.

Phase 4 – Small cluster(s) of human infection with limited human-to-human transmission but spread is highly localized suggesting that the virus is not well adapted to humans.

Phase 5 – Larger cluster(s) but human-to-human spread localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).

Pandemic Period

Phase 6 – Increased and sustained transmission in the general population is confirmed.

The SWUPHD Pandemic Influenza Response Plan corresponds to the WHO pandemic phases. Appropriate preparedness and response measures are identified for each phase, with implementation based in part on whether SWUPHD District is affected

Once the Pandemic has been announced by CDC or the WHO, the Strategic National Stockpile (SNS) will begin deployment of state allocated quantities of antivirals and none will be retained in reserve. The antiviral distribution will be followed by deployment of state allocated quantities of respirators and masks. Finally, up to 90% of the on hand quantities of remaining Personal Protective Equipment (PPE) (gloves, gowns, face shields) and ventilators will be shipped.

Pandemic response vaccine will also be shipped when developed.

PANDEMIC SEVERITY INDEX for use during Pandemic Period Phase 6					
Severity Category	1	2	3	4	5
Projected # of deaths in Southwest Utah est. population of 185,000	<0.1% =<185	<0.1%-0.5% =<925	<0.5%-1.0%=<1850	<1.0%-2.0%=<3700	>2.0%= >3700
Home Voluntary isolation – of ill at home (adult and children); combine with use of antiviral treatment as available and indicated.	Recommended – many sick individuals who are not critically ill may be managed safely at home	Recommended	Recommended	Prolonged – up to 12 weeks	Prolonged – up to 12 weeks
Voluntary quarantine – of household members in homes with ill persons (adults and children); consider combining with antiviral prophylaxis if effective, feasible, and quantities sufficient.	Generally not recommended – for entire populations as the consequences may outweigh the benefits.	Consider - < 4 weeks	Consider - < 4 weeks	Prolonged – up to 12 weeks	Prolonged – up to 12 weeks
School/child care closing – dismissal of students from schools and school based activities, and closure of child care programs. Reduce out-of-school contacts and community mixing.	Generally not recommended	Consider - Short term - < 4 weeks	Short term - < 4 weeks	Prolonged – up to 12 weeks	Prolonged – up to 12 weeks
Workplace / Community Adult social distancing – decrease number of social contacts (encourage teleconferences, alternatives to face-to-face meetings) Increase distance between persons.	Generally not recommended	Consider	Consider	Prolonged – up to 12 weeks	Prolonged – up to 12 weeks

VIII. MITIGATION INTERVENTIONS

1. Isolation and treatment (as appropriate) with influenza antiviral medications all persons with confirmed or probable pandemic influenza. Isolation may occur in the home or healthcare setting, depending on the severity of illness and current capacity of healthcare infrastructure. Increase disinfectant precautions.
2. Voluntary home quarantine of members of households with confirmed or probable influenza case(s) exposure and consideration of combining this intervention with prophylactic use of antiviral medications upon first onset of symptoms, providing sufficient quantities of effective medications exist and that a feasible means of distributing them is in place.
3. Dismissal of students from school (including public and private schools as well as colleges and universities) and school-based activities and closure of childcare programs, coupled with protecting children and teenagers through social distancing in the community to achieve reductions of out-of-school social contacts and community mixing. This step even though controversial will be needed to save lives during severe pandemics.
4. Use of social distancing measures to reduce contact between adults in the community and workplace, including, for example, cancellation of large public gatherings and alteration of workplace environments and schedules to decrease social density and preserve a health workplace to the greatest extent possible without disrupting essential services.

These non-pharmaceutical interventions have three major goals:

- 1) Delay the exponential growth in incident cases in order to “buy time” for production and distribution of a well-matched pandemic strain vaccine
- 2) Decrease the influenza transmission by reducing contact between sick and uninfected persons
- 3) Reduce the total number of incident cases, thus reducing community need for healthcare services as well as morbidity and mortality.

All these interventions should be used in combination with other infection control measures, including hand hygiene, cough etiquette and personal protective equipment such as face masks. Additional information on infection control measures is available at www.pandemicflu.gov

IX. RESPONSIBILITIES

Southwest Utah Public Health Department (SWUPHD)

1. Facilitate district wide pandemic planning and preparedness efforts.
2. Coordinate the community’s emergency public health response through Emergency Support Function 8 (Health and Medical Services), and the County Emergency Operation Plans.
3. Educate the public, health care system partners, response partners, businesses, community based organizations and elected leaders about influenza pandemics, expected impacts and consequences, and preventive measures.
4. Conduct district-wide surveillance to track the spread of the human disease and its impact on the community. Through liaison with agriculture and wildlife agencies, facilitate influenza surveillance in animals in the Southwest Utah District and monitor surveillance data.
5. Identify and declare diseases of public health significance, and communicate such declarations to health system partners.
6. Coordinate planning for and implementation of disease containment strategies and authorities. Including the use of antivirals for treatment of pandemic with the following policies:
 - a. Public and Private Entities may be able to purchase treatment doses through regular pharmacy supplies.
 - b. Antiviral purchased using private funds may be stockpiled by the SWUPHD and used only in the event of a declared pandemic.
 - c. In the event of a declared pandemic, the courses purchased by public and private entities for their own preparedness plans may be used for treatment based on the needs of the individual organizations that purchased the antiviral stockpiles. It is understood that the use of antivirals by these organizations will be individualized to each organizations needs and may or may not follow the priority group recommendations.

- d. Doses from the Strategic National Stockpile (SNS) and those purchased by the State Legislature for use by residents of the SWUPHD will be utilized according to established protocol.
 - e. All antiviral stockpiled at the SWUPHD will be stored in accordance with federal requirements.
7. Provide ongoing technical support to the health care system including current surveillance guidelines, recommendations for clinical case management, infection control measures and laboratory testing.
 8. Support the health care system's planning and response efforts for medical surge capacity including mass casualty and mass fatality incidents.
 9. Support the development and management of local antiviral medication stockpiles.
 10. Develop and implement protocols for the use of limited supplies of influenza vaccine and antiviral medicines consistent with national guidelines and in consultation with the UDOH.
 11. Direct distribution and administration of vaccine, including mass vaccination efforts.
 12. Provide effective communications to the public, the media, elected officials, health care providers, business and community leaders throughout public health emergencies.

Local Hospitals, Clinics, Providers and other Health System Partners

1. Health care system partners should participate in ESF 8/SW Coalition facilitated by SWUPHD to maximize the health care system's ability to provide medical care during a pandemic. Specific steps include:
 - a. Identify and prioritize response issues affecting the county-wide health system during a pandemic.
 - b. Develop mechanisms to efficiently share information and resources between health system partners, and to communicate with SWUPHD and relevant emergency operations centers, as appropriate.
 - c. Coordinate with the Local Health Officer regarding policy level decisions regarding the operations of the local health system.
 - d. Assure that health care professionals receive relevant communications from SWUPHD in a timely manner.
2. Hospitals and other health care facilities may develop pandemic response plans consistent with the health care planning guidance contained in the Health and Human Services (HHS) Pandemic Influenza Plan. Health care facility pandemic response plans may address medical surge capacity to sustain health care delivery capabilities when routine systems are overwhelmed.
3. Health care facilities and health care providers may participate in local influenza surveillance activities.
4. Hospitals should develop infection control plans to triage and isolate infectious patients and protect staff from disease transmission.

Utah State Department of Health (UDOH)

1. Coordinate statewide pandemic planning and preparedness efforts.
2. Coordinate statewide surveillance activities.
3. Operate a CDC Laboratory Response Network public health reference laboratory for novel influenza virus testing.
4. Coordinate submission of pandemic epidemiological data to CDC and disseminate statewide data and situation updates to local health jurisdictions.
5. Coordinate development and implementation of disease containment strategies across multiple counties and regions within the state.
6. Request federal assistance to support the local health and medical response, including antiviral medicines and vaccines from the Strategic National Stockpile (SNS), when local and state resources are exceeded.
7. Assist in education and information to public on the course of the pandemic and preventive measures.

Department of Health and Human Services (HHS)

1. Provide overall guidance on pandemic influenza planning within the United States.
2. Coordinate the national response to an influenza pandemic.
3. Provide guidance and tools to promote pandemic preparedness planning and coordination for States and local jurisdictions.
4. Provide guidance to state and local health departments regarding prioritization of limited supplies of antiviral medications and vaccines.
5. Determine and communicate the pandemic phase for the U.S. based on the global pandemic phase (established by WHOM) and the extent of disease spread throughout the country.

Centers for Disease Control and Prevention (CDC)

1. Conduct national and international disease surveillance.
2. Serve as a liaison to the WHO.
3. Develop reference strains for vaccines and conduct research to understand transmission and pathogenicity of viruses with pandemic potential.
4. Develop, evaluate, and modify disease control and prevention strategies.
5. Support vaccination programs; monitor vaccine safety.
6. Investigate pandemic outbreaks; define the epidemiology of the disease.

7. Monitor the nation-wide impact of a pandemic.
8. Coordinate the stockpiling of antiviral drugs and other essential materials within the SNS.
9. Coordinate the implementation of international – U.S. travel restrictions.
10. Under federal authority, implement isolation, quarantine and social distancing measures on tribal lands, as needed.

World Health Organization (WHO)

1. Monitor global pandemic conditions and provide information updates.
2. Facilitate enhanced global pandemic preparedness, surveillance, vaccine development, and health response.
3. Declare global pandemic phase and adjust phases based on current outbreak conditions.

Association of Funeral Directors

- Work with SWUPHD in leading mass fatality planning and response efforts.
- Coordinate with and support hospitals regarding mass fatalities planning and response.
- Incorporate funeral home directors into planning efforts for pandemic response.
- In conjunction with community partners, coordinate planning and development of victim assistance centers.

Local Emergency Preparedness Committee (LEPC) in Southwest Utah District (Beaver, Garfield, Iron, Kane and Washington Counties) with City and County Emergency Manager

- Facilitate pandemic planning and response activities with district wide EMS providers, 911 dispatch centers and Hospitals in the jurisdiction.
- Develop protocols for maintaining critical EMS response capability during a pandemic generating high call volumes and reducing available EMS resources.

Southwest Utah Medical Reserve Corps

- SWUPHD may utilize the Southwest Medical Reserve Corps (MRC) according to the Pandemic Flu Planning Guidance for MRC Units.
- Deployment of MRC will be facilitated by SWUPHD.
- Pandemic influenza planning and response actions may be community-specific and MRC units should engage in pandemic influenza planning and response actions which are within the purview, scope, training and capabilities of the unit and community which it serves.

Specific Responsibilities of SWUPHD Divisions

Director and Local Health Officer (Local Health Officer)

- Communicate and coordinate directly with the Southwest Utah District County Commissioners, executive heads of cities and towns, and the Emergency Support Function 8 for Health and Medical Southwest Coalition (ESF 8/SW COALITION) regarding pandemic preparedness and response activities.
- Coordinate directly with ESF 8/SW COALITION partners and make decisions regarding strategies, thresholds and methods for reallocating resources and temporally restructuring health system operations in response to a pandemic.
- Authorize and communicate public health directives regarding social distancing strategies and other protective actions to elected leaders, the business community, schools, the health care coalition and other partners.
- Assign responsibilities to SWUPHD staff for planning and responding to the pandemic.
- Ensure business continuity of critical SWUPHD functions during all phases of the pandemic.
- Direct isolation and quarantine of individuals and groups, as needed, based on recommendations from the Center for Disease Control (CDC)

Public Information Officer (PIO)

- Provide accurate, timely information to the public regarding preparations for a pandemic, the impacts of the outbreak, local response actions and disease control recommendations.
- Educate the public on how they can protect themselves from becoming infected and infecting others.
- Activate and direct the management of public information call centers focused on providing health information to the public.

Emergency Preparedness and Response Department (EPR)

Emergency Preparedness and Response Director

- Lead pandemic planning and preparedness efforts for SWUPHD in conjunction with local, state and federal response partners.
- Conduct training, drills and exercises to enhance SWUPHD's readiness to respond to a pandemic.
- Coordinate planning and response activities with hospitals and community health clinics in collaboration with ESF 8/SW COALITION, Communicable Disease Director, Nursing Division, and Immunization Supervisors of SWUPHD.
- Coordinate activation and management of the Southwest District Emergency Operations Center.

- Advise the Local Health Officer regarding the potential social and economic impacts of social distancing measures, and the extent to which implementation of such measures is feasible.
- Coordinate district-wide business continuity efforts specific to the potential impacts of a pandemic.
- Coordinate district-wide pandemic planning, education and outreach efforts with:
 - School systems
 - Business communities
 - Community based organizations
- Coordinate with economic development agencies and chambers of commerce regarding the economic consequences of a pandemic.

Communicable Disease Program Manager

- Carry out district-wide surveillance, epidemiological investigation and disease control activities.
- Provide information and technical support on surveillance, epidemiology and clinical issues, including case identification, laboratory testing, management, and infection control to health care providers and facilities.
- Advise the Local Health Officer in decisions regarding the need for individual and group isolation and quarantine.
- Work with the SWUPHD staff to develop and disseminate risk communications messages to the public.
- Develop infection control plans for SWUPHD sites, with technical assistance from the Communicable Disease Control Section, to protect staff and clients.
- Provide recommendations to the Local Health Officer regarding measures to sustain the functionality of the local health care system.
- Advise the Local Health Officer regarding the need for and potential consequences of social distancing measures.
- Coordinate receipt of vaccines in conjunction with the Nursing Director and County Nursing Supervisors, and develop strategies for storage, distribution and allocation of vaccines among health care system partners.
- Develop protocols for prioritizing limited supplies of antiviral medicines and vaccines in the Southwest Utah District.

Nursing Director and County Nursing Supervisors

- Participate in planning activities focused to develop capacity for community-based influenza evaluation and treatment clinics.
- Lead and coordinate all mass vaccination response activities in the county.
- Lead efforts with community partners to manage a client care call center.
- Lead efforts with community partners to manage isolation and quarantine under the advisement of the Epi and Surveillance Staff and the Local Health Officer.
- Through the Epi and Surveillance Staff, coordinate district-wide pandemic planning, education and outreach efforts with homeless service agencies.
- Provide technical assistance to licensed child care centers regarding preparedness for pandemic influenza.

Environmental Health Services Division

- Assist in surveillance for animal influenza viruses through liaison with the State Departments of Agriculture and Fish & Wildlife.
- Work with the SWUPHD PIO to develop and disseminate risk communications messages to the public concerning zoonotic influenza virus transmission, food safety, and animal waste disposal issues.

- Take the lead if assigned for Southwest Utah SNS Regional Staging and Distribution Site

All other Divisions of SWUPHD

- Identify mission critical functions that must be maintained during all hazards including a pandemic.
- Identify staff that can be cross-trained to perform emergency response functions.
- Identify functions that could be temporarily discontinued or performed via telecommuting for several weeks.
- Be prepared to mobilize all necessary staff to support the SWUPHD pandemic influenza response, as directed by the SWUPHD Incident Commander.

X. CONCEPT OF OPERATIONS

A. Overview

1. SWUPHD will be the lead agency in coordinating the local health and medical response to a pandemic with state, federal, and local agencies and officials. SWUPHD may work through ESF 8/SW COALITION to monitor and, if necessary, direct the use of health care system resources and restructuring of health care system operations.

2. SWUPHD may authorize the acquisition of state or federal medical resources in support of health care system partners.

3. SWUPHD may coordinate response actions with the UDOH and neighboring local health jurisdictions, including Nevada and Arizona.

4. SWUPHD may respond under the auspices of this plan as well as the Department Emergency Operations Plan, Emergency Support Function (ESF) 8 (Health and Medical Services) and the County Emergency Operations Plans.

5. SWUPHD's response actions may emphasize disease surveillance and investigation, social distancing measures to reduce the spread of infection, and providing frequent communication and education to the public about the pandemic, the public health response, and steps the public can take to reduce the risks of infection.

6. Throughout a pandemic, the Director of Environmental Health Division, Director of Communicable Disease and Emergency Preparedness, Communicable Disease Program Manager, Nursing Director and the Public Information Officer may advise the Local Health Officer regarding public health response activities, social distancing measures and management of SWUPHD resources.

7. SWUPHD may facilitate ESF 8/SW Coalition with representatives from hospitals, out-patient medical groups, private physicians, emergency medical providers, mental health providers, long-term care facilities, home health agencies, and pharmacists. ESF 8/SW Coalition may develop strategies for:
 - a. Coordinating the health care system response during a pandemic and other public health emergencies
 - b. Assuring the most effective use of available health care system resources during health emergencies
 - c. Advising the Local Health Officer regarding the impacts of the pandemic on the health care system, on the need for changes in health care system operations to respond to the pandemic, and on strategies to implement necessary changes.

B. Direction and Control

1. The public health response may be managed per the guidance and protocols included in this Plan and ESF 8 of the Southwest Counties (Beaver, Garfield, Iron, Kane and Washington) Emergency Operation Plans.

2. SWUPHD and all response partners may operate under the Incident Command System as stated in the SWUPHD All-Hazards Emergency Operation Plan throughout the duration of the pandemic response.

3. SWUPHD may activate the Public Health Department Emergency Operations Center (DOC) to coordinate the district wide public health and medical response during a pandemic.

4. Beaver, Garfield, Iron, Kane and Washington Counties, and Cedar City, Kanab, Panguitch, St. George, and other district cities may activate their Emergency Operation Centers EOCs during a pandemic to coordinate consequence response.

5. Other counties in the state of Utah may activate their EOC during a pandemic to coordinate consequence response.

6. During Pandemic Phases 1, 2 and 3 where Southwest Utah is not directly affected, SWUPHD may lead health and medical system preparedness efforts and district-wide education efforts for pandemic response coordination for this planning should come through the ESF 8/SW Coalition.

7. During Pandemic Phases 4, 5 and 6 SWUPHD may communicate with health system partners through ESF 8/SW Coalition and other communication measures to coordinate management of health care system resources and information.

8. SWUPHD may assess the viability of social distancing measures and establish criteria for their implementation.

9. Upon reaching Pandemic Phase 4 (global) SWUPHD may:

- a. assesses whether to activate the Pandemic Influenza Response Plan and ESF 8 to coordinate the health care system response.

- b. provides regular briefings to the Emergency Response Managers, County Commissioners, the Mayors of local communities, other local elected officials, and regional response partners. Briefings may address the nature of the disease, its communicability and virulence, availability of vaccines and antivirals, actions that are being taken to minimize the impact, actions that response partners should implement to protect critical functions, and health information being shared with the public and health care providers.

c. use altered standards of care to provide the most expedient medical care possible, this may include using non-licensed, non-certified, or non-pharmacy trained personnel to dispense medication.

C. Communications

1. SWUPHD serves as the lead agency in Southwest Utah District for risk communications messaging and public education regarding pandemic influenza. All County jurisdictions may coordinate with SWUPHD to insure consistency of communications and education messaging regarding pandemic influenza.
2. Communications with the public and health care providers may be a critical component of the pandemic response, including managing the utilization of health care services. This plan's communications goals are to:
 - a. Provide accurate, consistent, and comprehensive information about pandemic influenza including case definitions, treatment options, infection control measures, and reporting requirements.
 - b. Instill and maintain public confidence in the District's public health and health care systems and their ability to respond to and manage an influenza pandemic.
 - c. Ensure an efficient mechanism for managing information between SWUPHD, health system partners and response agencies.
 - d. Contribute to maintaining order, minimizing public panic and fear, and facilitating public compliance by providing accurate, rapid, and complete information.
 - e. Address rumors, inaccuracies, and misperceptions as quickly as possible, and prevent the stigmatization of affected groups.
3. Communications during Pandemic Phases 1, 2, 3
 - a. The SWUPHD Communications Section may:
 - i. Assess the information needs of health care providers.
 - ii. Assess the information needs of the general public.
 - iii. Identify any logistical constraints to effective communications, such as communications staffing and equipment needs, and public information call center staffing and capacity.
 - iv. Intensify public education efforts about influenza pandemics and steps that can be taken to reduce exposure to infection. Information may be disseminated via web site postings, newspaper editorials, flyers and billboards, television and radio broadcasts.
 - v. Coordinate with CDC, UDOH, and health departments in adjacent jurisdictions in and out of the state to develop common health messages and education materials.
 - vi. The SWUPHD along with ESF 8/SW Coalition may educate providers, public officials, businesses and emergency responders about influenza pandemics and steps they should take to plan for pandemic outbreaks.
 - vii. The SWUPHD Nursing Director may convene appropriate internal Divisions to develop a communications strategy for vulnerable populations including identifying appropriate community partners for reaching and educating diverse communities such as limited English speaking and homeless citizens.
4. Communications during Phases 4, 5, 6
 - a. SWUPHD Public Information Officer (PIO) may evaluate the need to establish a Joint Information Center (JIC) in conjunction with appropriate health system and response partners. A JIC may be activated when the SWUPHD PIO deems it necessary based on specific characteristics of the pandemic.

- b. The SWUPHD PIO may evaluate the need to establish a public information call center to respond to public inquiries. SWUPHD may work in conjunction with local volunteer centers to man the hotline.
- c. The SWUPHD PIO may work with the Epi and Surveillance staff to develop public information messages related to the utilization of the health care system and other resources (triage centers, call centers, hospitals etc).
- d. The Epi and Surveillance staff may initiate regular communication briefings on appropriate recommendations on people with Influenza Like Illness (ILI) with hospital emergency rooms, infection control practitioners, infectious disease specialists, and community providers as necessary and in collaboration with ESF 8/SW Coalition. SWUPHD may make available the “Stay at Home” booklet for distribution through the triage centers. The Epi and Surveillance Staff may also regularly communicate with experts at the CDC and the UDOH.
- e. The SWUPHD may conduct regular briefings with key response partners to inform EOC staff, business leaders, community based organizations, first response agencies and critical infrastructure agencies on the status of the pandemic and local response actions.
- f. As the pandemic expands, the SWUPHD PIO may provide daily updates on the pandemic and may organize regular media briefings.
- g. The SWUPHD PIO may keep the public informed about steps that should be taken to protect against infection, treatment options for individuals who are infected, the status of the spread of the outbreak in the community, and the disease control and containment strategies that are being implemented.

XI. Mitigation

Mitigation activities are taken in advance of an influenza pandemic to prevent or temper its impact. Mitigation efforts that may occur primarily during pandemic phases 1-3

SWUPHD’s pre-event mitigation activities include:

1. Planning, exercising, evaluating and revising the Pandemic Influenza Response Plan.
2. Training and equipping SWUPHD staff to assure competencies and capacities needed to respond to a pandemic outbreak.
3. Developing strategic partnerships and facilitating capacity building with local hospitals, non-hospital-based health care providers and agencies, other health care system stakeholders, and local, state and federal response agencies and their staff.
4. Educating response partners, the media and public about the consequences of influenza pandemics and recommended preparedness measures through Pandemic Preparedness Summits held in each county.
5. Educating, informing and updating local elected officials about the potential impacts of an influenza pandemic on essential services and infrastructure in Southwest Utah District.
6. Stockpiling necessary medications and equipment that may be needed to respond to an influenza pandemic.

XII. Surveillance

1. Hospitalized cases of Influenza are a mandated notifiable disease under Utah Administrative Code. During a pandemic response, the Epi and Surveillance staff may declare the circulating strain of influenza causing the pandemic a Disease of Public Health Significance, requiring health care providers and/or laboratories to report cases.

2. As a pandemic outbreak progresses, the Epi and surveillance staff may enhance existing surveillance efforts, including gathering relevant available clinical data (i.e. admission and discharge diagnose) from hospitals in the district and from selected large medical group practices, such as St. George Clinic.

3. Surveillance during Pandemic Phases 1, 2, 3

a. The Epi and surveillance staff conduct daily influenza tracking activities [reports regarding school absenteeism, pneumonia and influenza deaths submitted by Vital Statistics, nursing home reports, homeless shelter reports and sentinel providers and other surveillance tracking systems.

b. The Epi and surveillance staff coordinates surveillance activities with the disease control activities of the CDC, state agencies, and health departments in adjacent jurisdictions.

c. Surveillance data collected and assessed may include information from infection control nurses' or Infection Control Practitioners (ICP) reports about hospital admission and discharge data, when available, from hospitals in the Southwest district, Emergency Medical Service dispatch data, and daily death reports from the Medical Examiner's Office.

d. SWUPHD work with clinicians, hospitals, and infectious disease specialists to enhance case detection, according to CDC screening criteria, among persons who have recently traveled to outbreak areas and present with illnesses meeting the clinical criteria for influenza.

e. SWUPHD develops partnerships with key employers to track absenteeism in the event of a flu pandemic [City and county government, school districts, universities and other large employers].

f. The Utah Public Health Laboratory (UPHL) supports SWUPHD in conducting influenza testing, as requested.

4. Surveillance during Pandemic Phases 4, 5, 6

a. SWUPHD will require health care providers and institutions to report influenza and to send specimens from these cases to the UPHL for testing, as requested, specimen sampling may be deterred in the later phases.

b. SWUPHD informs community health care providers regarding recommendations for influenza laboratory testing based on consultation with UDOH and CDC.

c. The Epi and surveillance staff will keep up to date with CDC and UDOH guidelines to facilitate monitoring of the influenza pandemic strain for antiviral resistance.

d. The Epi and surveillance continue to monitor absenteeism with schools and certain sentinel employers, where feasible.

XIII. Public Education

1. Public education through all phases of a pandemic may involve any or all of the following elements:

a. Dissemination of printed and web-based information in multiple languages.

b. Active outreach to traditionally underserved populations, in cooperation with community organizations.

c. Frequent use of radio, television and print media.

- d. Coordination with other health care providers and care-givers to ensure consistent messaging.
 - e. Implementation of a public information call center.
 - f. Holding Pandemic Preparedness Education events in all five counties (Beaver, Garfield, Iron, Kane and Washington) to educate Southwest Utah District communities.
2. Government agencies, businesses, schools, health care system partners, community based organizations and other agencies within Southwest Utah District may promote and disseminate pandemic influenza educational messages to their staff.
3. SWUPHD leads efforts to strengthen support, outreach and training for vulnerable populations in Southwest Utah District. Specific actions include:
- a. Conduct needs assessments identifying types of resources and information vulnerable populations need during emergencies.
 - b. Provide training for cultural leaders and medical interpreters to serve as information conduits to vulnerable populations during emergencies.
 - c. Partner with cultural leaders and medical interpreters across the district to build sustainable preparedness capabilities within communities.
 - d. Hold a Spanish Pandemic Preparedness Summit in Washington County to meet the need for education of the large Hispanic population base in that county.
 - e. Distribute Plan 9 material through the Home Health, Hospice, and Assisted Living and facilities to reach those vulnerable population focus groups and encourage personal preparedness activities to sustain themselves until help can arrive.

XIV. Vaccine and Antiviral Medications

1. Vaccine serves as the most effective preventive strategy against outbreaks of influenza, including pandemics. However, dissemination of an effective influenza vaccine during a pandemic faces several challenges:
- a. A pandemic strain could be detected at any time, and production of vaccine could take six to nine months after the virus first emerges.
 - b. The target population for vaccination may ultimately include the entire U.S. population.
 - c. It is expected that demand for vaccine may initially outstrip supply and administration of limited vaccine may need to be prioritized based on national guidelines and in consultation with the UDOH.
 - d. It is likely that two doses of vaccine occurring two to four weeks apart may be required.
2. Antiviral medications may be useful for controlling and preventing influenza prior to the availability of vaccines. However, there is a limited supply of antiviral drugs effective against pandemic strains.
- a. Once the Pandemic has been announced by the WHO, the Strategic National Stockpile (SNS) will begin deployment of state allocated quantities of antivirals and none will be retained in reserve. SNS dispensing will be done according the SWUPHD SNS Plan.
 - b. Distribution of Antivirals stockpiled and purchased by individuals for first responders and critical infrastructure organizations will be done as soon as declaration of pandemic has been made.
 - c. Altered standards of care may be implemented to expedite dispensing of medications. This may include using non-licensed, non-certified, or non-pharmacy trained personnel to dispense medication.

3. Vaccine Management during Phases 1, 2, 3
 - a. The SWUPHD, in consultation the Southwest Utah Medical Sub-Committee, UDOH and based on national guidelines, is developing and refining recommendations for use of available vaccine based on local priority groups.
 - b. The Flu Coalition with SWUPHD may develop plans for administration of vaccine to priority groups, and eventually the entire district population, including activation of mass vaccination clinics.
 - c. The SWUPHD may coordinate with UDOH to determine how adverse reactions to the vaccine may be tracked and reported.
 - d. The SWUPHD and ESF 8/SW COALITION may collaborate with key stakeholders to identify essential personnel to be included in priority groups for vaccinations.
 - e. The Flu Coalition may coordinate vaccination planning with SWUPHD, ESF 8/SW COALITION and private sector health care providers.

4. Vaccine Management during Phases 4, 5, 6
 - a. In consultation with UDOH, the Medical Sub-Committee may provide updated recommendations to the Local Health Officer regarding priority groups to receive vaccination based on CDC guidelines.
 - b. The Flu Coalition and SWUPHD may finalize mass vaccination plans with regional partners.
 - c. The Nursing Director and County Nursing Supervisors, in collaboration with the EPI AND SURVEILLANCE STAFF Division, may prepare to receive, store and transport vaccine as needed.
 - d. SWUPHD may distribute and administer vaccine as soon as possible after receipt according to local priorities and CDC guidelines, including activation of mass vaccination plans as appropriate.

SWUPHD Population totals 2013

Beaver –	6459
Garfield –	5083
Iron -	46780
Kane -	7260
Washington	147800
TOTAL	210013

Dividing vaccine and other supplies using the following formula

Washington County	69.9%
Iron County	21.9%
Beaver County	3.1%
Kane County	3.1%
Garfield County	2.3%

5. Antiviral Medication Management during Phases 1, 2, 3
 - a. The SWUPHD in coordination with the medical sub-committee may identify priority groups and estimate the number of people in each priority group, based on national guidelines, to receive limited supplies of antiviral medications during a pandemic.
 - b. The Local Health Officer may coordinate with appropriate health care system partners and elected leaders to form strategies for acquiring antiviral medications.
 - c. The Communicable Disease and Emergency Preparedness Director is developing an antiviral medication distribution plan in conjunction with the Medical Sub-committee, EPI AND SURVEILLANCE STAFF Division, the Flu Coalition, and appropriate members of ESF 8/SW COALITION.
 - d. The EPI AND SURVEILLANCE STAFF Division is developing and may distribute guidelines for medical providers regarding the use of antiviral medications.

6. Antiviral Medication Management during Phases 4, 5, 6

- a. SWUPHD may ensure that staff and resources are in place to distribute antiviral medications, as supplies allow.
- b. SWUPHD may activate its plans for requesting medications from the SNS.
- c. SWUPHD may fully activate antiviral medication distribution plans.

SWUPHD Population totals 2013

Beaver –	6459
Garfield –	5083
Iron -	46780
Kane -	7260
Washington	147800
TOTAL	210013

Dividing Anti-viral and other supplies using the following formula

Washington County	69.9%
Iron County	21.9%
Beaver County	3.1%
Kane County	3.1%
Garfield County	2.3%

XV. Isolation and Quarantine

1. During all phases of a pandemic, person's ill with influenza may be directed to remain in isolation in health care settings or at home, to the extent possible.
2. Hospitals may implement isolation protocols for all patients suspected of being infected with pandemic influenza.
3. Once person-to-person transmission is established locally, quarantine of individuals exposed to influenza cases may be of limited value in preventing further spread of the disease.
4. Voluntary quarantine of contacts of influenza cases may be beneficial during the earliest phases of a pandemic, and in response to an influenza virus that has not achieved the ability to spread easily from person-to-person.
5. SWUPHD may work collaboratively with the CDC Division of Quarantine on management of persons requiring isolation, quarantine or follow-up.
6. Isolation and Quarantine during Phases 1, 2, 3
 - a. The SWUPHD EPI AND SURVEILLANCE STAFF Division may coordinate planning efforts for isolation and quarantine with UDOH, neighboring local health jurisdictions, community based organizations and local law enforcement.
 - b. SWUPHD is following CDC guidelines in developing and implementing isolation and quarantine procedures for individuals traveling from areas in which a novel influenza virus is present.
7. Isolation and Quarantine during Phases 4, 5, 6
 - a. The SWUPHD may coordinate with health care providers and hospitals to ensure that influenza patients are isolated in appropriate facilities based on their medical condition (homes, hospital, and alternate care facility).
 - b. The SWUPHD may develop protocols for quarantine of close contacts of persons infected with a potential pandemic strain.

c. The SWUPHD may provide technical assistance to health care providers and hospitals regarding options for management of health care workers who come in contact with influenza patients or who develop influenza.

d. The SWUPHD Isolation and Quarantine Response Plan may be activated as needed to ensure availability of isolation and quarantine facilities and support systems for patients.

XVI. Social Distancing Strategies

1. Social distancing strategies are non-medical measures intended to reduce the spread of disease from person-to-person by discouraging or preventing people from coming in close contact with each other. These strategies could include closing public and private schools; minimizing social interactions at colleges, universities and libraries; closing nonessential government functions; implementing emergency staffing plans for the public and private sector and businesses including increasing telecommuting, flex scheduling and other options; and closing public gathering places including stadiums, theaters, churches, tourist facilities, community centers, sporting events and other facilities.
 - a. The effectiveness of social distancing strategies is not known with certainty, nor is the degree of public compliance with measures that is necessary for success.
 - b. Implementation of social distancing strategies in Southwest Utah District may create social disruption and significant, long-term economic impacts. It is unknown how the public may respond to these measures.
 - c. It is assumed that social distancing strategies must be applied on a county-wide or state-wide basis in order to maximize effectiveness.
2. The Local Health Officer may consult with the Director of Communicable Disease and Emergency Preparedness as well as the Communicable Disease Program Manager throughout all phases of a pandemic regarding the epidemiology and impact of the pandemic in and around Southwest Utah District.
3. The Local Health Officer may review social distancing strategies and current epidemiological data during each phase and coordinate with the Southwest District County Commissioners, the Mayors of major district cities, and executive heads of other cities and towns regarding social distancing actions that should be implemented to limit the spread of the disease.
4. Decisions regarding the implementation of social distancing measures including suspending large public gatherings and closing stadiums, theaters, churches, tourist facilities, community centers, and other facilities where large numbers of people gather may be made jointly and with concurrence by the Local Health Officer and the Southwest District County Commissioners and coordinated with all executive heads of cities and towns in Southwest District.
5. Decisions regarding the closing of all public and private schools, and minimizing social interaction at colleges, universities and libraries in Southwest District may be made by the Local Health Officer after consultation with local school superintendents, school board president university administration and elected officials.
6. The Local Health Officer may coordinate in advance the timing and implementation of social distancing decisions in Southwest District with Beaver, Garfield, Kane, Iron and Washington Counties as well as UDOH and the HHS.
7. Social Distancing Strategies (See Southwest Utah Social Distancing Plan) during Phases 1, 2,
 - a. The Director of Communicable Disease and Emergency Preparedness Division is coordinating with the SWUPHD PIO to educate elected officials, government leaders, school officials, response partners, homeless services agencies, businesses, the media

- and the public regarding the consequences of pandemics, the use of social distancing strategies, the associated impacts they cause and the process for implementing these measures.
- b. SWUPHD may coordinate with the Nursing Director to provide guidance and instructions regarding infection control strategies to homeless service agencies that operate congregate care facilities.
 - c. The Local Health Officer may confirm the decision making process and criteria for recommending social distancing strategies with the Southwest District County Commissioners, the Mayor of St. George, and Cedar City and all other executive heads of cities and towns.
8. Social Distancing Strategies during Phases 4, 5, 6
 - a. The Local Health Officer may coordinate with elected officials regarding decision making and implementation of social distancing strategies that are commensurate with the severity of illness and societal impact of the pandemic.
 - b. Specific, district-wide strategies that may be identified by the Local Health Officer include:
 - i. Encouraging government agencies and the private sector to implement emergency staffing plans to maintain critical business functions while maximizing the use of telecommuting, flex schedules, and alternate work site option.
 - ii. Recommending that the public use public transit only for essential travel.
 - iii. Advising Southwest District residents to defer non-essential travel to other areas of the country and the world affected by pandemic influenza outbreaks.
 - iv. Suspending public events where large numbers of people congregate including sporting events, concerts, theaters, and parades.
 - v. Closing public and private schools, and large child care centers
 - vi. Implementing measures to limit social interaction at libraries, colleges and universities
 - vii. Close all churches, community centers, and other places where large groups gather.
 - viii. Suspend government functions not involved in pandemic response or maintaining critical continuity functions.
 - c. The Local Health Officer may participate in conference calls with neighboring counties and states, UDOH, and the U.S. Department of Health and Human Services (HHS) to coordinate the timing, public announcement, and impacts of social distancing measures in the Southwest Utah Region.
 - d. The Local Health Officer may monitor the effectiveness of social distancing strategies in controlling the spread of disease and may advise appropriate decision-makers when social distancing strategies should be relaxed or ended.
 9. Upon request of the hospital the Community Information and Support Centers CISCs maybe set up in designated locations through coordination of the Emergency Operation Center (EOC)

XVII. Health and Medical Response

Health Care System Response

1. A severe influenza pandemic is expected to significantly increase the demand for health care services at a time when the availability of health care workers may be reduced due to illness. In a severe pandemic, the imbalance between supply and demand is likely to overwhelm current health care

system capacity and necessitate implementation of alternate strategies to manage the demand on health system resources.

2. During a pandemic impacting Southwest District, all efforts may be employed to sustain the functionality of the health care system while maintaining an acceptable level of medical care. In order to accomplish this, health care delivery system partners may need to:
 - a. reserves the provision of health care services to patients with urgent, health problems requiring hospitalization;
 - b. takes steps to increase hospital bed capacity to care for large numbers of influenza patients;
 - c. mobilizes, reassign and deploy staff within and between health care facilities to address critical shortfalls;
 - d. implement pandemic-specific patient triage and management procedures;
 - e. provide alternative mechanisms for patients to address non-urgent health care needs such as telephone and internet-based consultation.
3. During a pandemic, alternate care facilities may be identified and activated to provide additional health care system medical surge capacity.
 - a. These facilities would add to the existing bed capacity in the county and provide supportive care to influenza patients, or could serve as flu clinics to relieve the burden on hospital emergency departments.
 - b. Locating, staffing and supplying these sites may be accomplished through a coordinated effort between SWUPHD, ESF 8/SW COALITION, and local emergency managers.
4. Emergency Medical and Health Care System Response during Phases 1, 2, 3
 - a. SWUPHD may educate health care providers about influenza pandemics and involve them in community pandemic response planning through the ESF 8/SW COALITION
 - b. SWUPHD may incorporate existing groups, such as ESF 8/SW COALITION and the Region Hospitals Emergency Preparedness Coalitions, into pandemic planning efforts.
 - c. Hospitals and health care organizations are developing pandemic influenza response plans addressing at a minimum medical surge capacity, triage, infection control, communications, and staffing issues.
 - d. SWUPHD provides technical assistance to health system partners regarding development of a Medical Reserve Corps and other strategies to expand staffing resources.
 - e. The EPI AND SURVEILLANCE STAFF Division may facilitate development of a Continuity of Operations Plan (COOP) for protocols in reprioritizing SWUPHD functions during a pandemic and mobilizing staff to support maintenance of critical public health and medical needs.
 - f. SWUPHD may provide regular briefings to ESF 8/SW COALITION members regarding the status of a novel virus and its potential for causing a pandemic.
 - g. SWUPHD is coordinating with the Region Hospitals Emergency Preparedness Coalitions to ensure systems are in place to track the following items during a pandemic outbreak:
 - i. Number of available Intensive Care Unit and medical beds (adults and pediatrics)
 - ii. Number of available emergency department beds (monitored and non-monitored)
 - iii. Number of patients and / or waiting times in emergency departments
 - iv. Number of patients waiting for inpatient beds (in emergency departments and clinics)
 - v. Number of hospitals on emergency department divert status
 - vi. Hospital capacity
 - vii. Shortages of medical supplies or equipment
 - viii. Staff absenteeism at hospitals, clinics
5. Emergency Medical and Health Care System Response during Phases 4, 5, 6
 - a. SWUPHD may work with ESF 8/SW Coalition to heighten preparedness activities and monitor the impact of a pandemic on health care facilities and systems.

- b. The EPI AND SURVEILLANCE STAFF Division may provide case identification criteria, laboratory testing and treatment protocols, and other case management resources to health care providers in the region.
- c. The EPI AND SURVEILLANCE STAFF Division may coordinate with health care system members to assure appropriate use of antiviral medicines.
- d. The SWUPHD Local Health Officer may develop and disseminate instructions for the care of patients who can be treated at home.
- e. ESF 8/SW Coalition may evaluate the need for and feasibility of establishing a system separate from hospital emergency departments for patient triage and clinical evaluation. ESF 8/SW Coalition may develop criteria for activating and deactivating such facilities. Specific tasks may include:
 - i. Hospitals may establish separate triage areas for 1) persons presenting with possible influenza, fever or respiratory disease, and 2) persons at high risk for severe complications such as pregnant women and immune-compromised persons.
 - ii. ESF 8/SW COALITION may, through coordination between SWUPHD, hospitals, the large medical group practices and the community health centers, identify specific facilities in different geographic areas within Southwest Utah District to serve as “flu clinics”.
 - iii. SWUPHD may work through ESF 8/SW COALITION to establish and promote a 24-hour telephone consulting nurse service to provide information and advice to ill persons on management of illness and accessing health care.
- f. ESF 8/SW COALITION may develop standardized criteria for implementing the following strategies district-wide, and may recommend implementation of any or all of these strategies to the Local Health Officer when pandemic conditions warrant:
 - i. Cancel elective admissions and elective surgeries
 - ii. Require all hospitals in the district to receive and treat any patient whose condition warrants hospitalization, regardless of medical insurance coverage.
 - iii. Implement protocols to expand internal hospital bed capacity.
 - iv. Activate alternate care facilities to conduct triage of flu patients or to provide expanded bed capacity.
 - v. Implement early discharge protocols for patient’s not requiring inpatient care.
 - vi. Implement protocols for enhanced infection control in all medical facilities.
 - vii. Monitoring and reporting of hospital-acquired influenza infections.
- g. ESF 8/SW COALITION members may identify and prioritize staff to receive antiviral medications and influenza vaccine according to the protocols established by SWUPHD.
- h. Through a Public Health Order, the Local Health Officer may direct the compliance of health care providers with SWUPHD protocols for use of antiviral medications and influenza vaccine.
- i. SWUPHD may coordinate with and support ESF 8/SW COALITION in acquiring additional medical supplies and equipment in support of medical facilities throughout the district.
- j. Requests for State and Federal resource support, including resources from the Strategic National Stockpile (SNS), may be managed by SWUPHD through local Emergency Operations Centers.

Public Health Services

1. During a pandemic, SWUPHD may suspend routine Department operations to provide staff for pandemic response services.
2. The Local Health Officer may assess the need to reprioritize Department functions and may direct the mobilization of staff to meet emerging needs of the pandemic.
3. SWUPHD staff with clinical training and licensure may be reassigned by the Nursing Director to support the Department’s critical functions during a pandemic, or to alleviate staffing shortages.

4. Public Health Services during Phases 1, 2, 3
 - a. SWUPHD EPI AND SURVEILLANCE STAFF Division may:
 - i. Participate in business continuity planning to identify mission critical systems and functions that must remain operational during a pandemic.
 - ii. Identify SWUPHD services and functions that can be suspended during a pandemic thereby freeing up staff members for reassignment
 - iii. Participate in ongoing planning efforts to assess skills needed during public health emergencies and identify staff training needs to fill critical positions.
 - b. The Senior Leadership of SWUPHD may identify sites and functions within the Department's clinical services that may remain operational during a pandemic and specify the minimum level of resources needed to remain operational.
 - c. The Utah State Medical Examiner's Office should be coordinating mass fatality planning efforts with hospitals and funeral homes through the UDOH and the Utah Funeral Directors Association.

5. Public Health Services during Phases 4, 5, 6
 - a. The Local Health Officer may determine the need to suspend routine Department operations in order to reassign staff to critical duties. The timing of this decision may be coordinated with similar actions taken by other clinical facilities in the health care system.
 - b. Critical functions activated within SWUPHD may:
 - i. Establish and supporting a public call center that provides information and medical advice over the telephone, including information on how to access the health care system.
 - ii. Distribute vaccine if available to health care system facilities and activating mass vaccination clinics to vaccinate priority groups.
 - c. The Utah State Medical Examiner's Office, County Deputy Medical Examiner and UDOH may activate the Public Health Mass Fatalities Plan. Activation of the plan may be coordinated with hospitals and funeral homes throughout the state.
 - d. Based on the numbers of actual or anticipated fatalities during a pandemic, the Utah State Medical Examiner's Office, County Deputy Medical Examiners and UDOH may implement emergency protocols regarding:
 - i. Identification and documentation of victims
 - ii. Activation and management of temporary temperature controlled holding facilities
 - iii. Release of remains to family members
 - iv. Temporary internment of mass fatalities
 - v. Cremation and burial of mass fatalities

Maintenance of Essential Services

1. One of the critical needs during a flu pandemic may be to maintain essential community services.
 - a. With the possibility that 25-35% of the workforce could be absent due to illness during a pandemic, it may be difficult to maintain adequate staffing for certain critical functions.
 - b. There is the possibility that services could be disrupted if significant numbers of public health, law enforcement, fire and emergency response, medical care, transportation, communications, and public works personnel are unable to carry out critical functions due to illness.

2. Government agencies and private businesses, particularly those that provide essential services to the public, may develop and maintain continuity of operations plans (COOP) and protocols that address the unique consequences of a pandemic.

3. Local emergency preparedness Committees (LEPCs) in Southwest District may lead continuity of government planning and preparedness within their jurisdictions with technical support provided by SWUPHD.

4. The LEPC's in Southwest District may participate in and support logistical and non-medical infrastructure planning with hospital facilities within their jurisdictions.
5. SWUPHD may develop continuity of operations plans that address, at a minimum:
 - a. Line of Succession for the agency.
 - b. Approval of continuity of operations plans by the Southwest Utah Board of Health.
 - c. Identification of mission essential services and priorities.
 - d. Procedures for the reassignment of employees to support public health functions essential during a public health emergency.
 - e. Redundancy of mission critical communication and information systems.
 - f. Physical relocation of critical SWUPHD functions including the SWUPHD Emergency Operations Center.
6. Maintenance of Essential Services during Phases 1, 2, 3
 - a. Emergency Preparedness Coordinator may work with all divisions in SWUPHD to develop plans for maintaining essential departmental services during a pandemic.
 - b. Emergency Preparedness Coordinator may continue to educate government agencies, non-profit organizations and businesses that provide essential community services about the need for continuity planning in advance of a pandemic.
7. Maintenance of Essential Services during Phases 4, 5, 6
 - a. SWUPHD may update its essential services plans and may request that its community partners update their plans.
 - b. The Local Health Officer may determine the appropriate time to implement the Department's continuity of operations plans and protocols and may advise community partners to implement their plans as needed.

Planning for pandemic influenza is critical for the Southwest Utah District. The preceding plan identifies important, specific activities for community partners and how they can prepare for such an event. Many activities mentioned are specific to pandemic influenza, but a number also pertain to any public health or other emergency. The Plan may be used as an annex to Local County or City Emergency Response Plans and is a living changing document. The guidance is not intended to set forth mandatory requirements but rather, each entity listed should determine for itself whether it is adequately prepared for disease outbreaks in accordance with the laws, plans, and procedures of its local jurisdiction and the state of Utah. Concerns or suggestions may be address by contacting the Director of Emergency Preparedness and Response at the Southwest Utah Public Health Department (435) 986-2579.

GLOSSARY OF ACCRONYMS

Center for Disease Control and Prevention	CDC
Communicable Disease and Emergency Response	EPI AND SURVEILLANCE STAFF
Emergency Support Function 8 (health and medical coalition)	ESF 8/SW COALITION
Continuity of Operations Plan	COOP
Department of Health and Human Services	HHS
Emergency Management Services	EMS
Emergency Response Coordinator	ERC
Emergency Operation Center	EOC
Emergency Support Function	ESF
Incident Command System	ICS
Joint Information Center	JIC
Local Emergency Planning Committee	LEPC
Medical Reserve Corps	MRC
Public Information Officer	PIO
Southwest Utah Public Health Department	SWUPHD
Strategic National Stockpile	SNS
Utah Department of Health	UDOH
Utah Health Public Laboratory	UHPL
World Health Organization	WHO