

## Chapter 4

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# Developing a Systematic Pandemic Influenza Program for Preparing a State

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## Abstract

From a planning perspective, this chapter discusses how to effectively mitigate the spread of an extensive viral infection on a large scale, which requires timely, sensible and highly sound planning. The focus is on state level planning under the federal model for developing good operational plans. The chapter clarifies terminology, as “epidemic” rather than “pandemic,” as the preferred term for a local or state response. However, after that is explained, “pandemic,” which is the common and more frequently used name and in the chapter’s title, is referenced thereafter in quotation marks. Post the introduction, this study presents a brief history of “pandemic influenza,” how a state prepares to develop a plan, agreements and trigger points which must be decided, the planning process itself, the operational plan with its important template for local use, and conclusions. Tracing a common operating picture from the federal, to the state, and to the city/county levels for “pandemic influenza,” planning is the first theme. How to incorporate continuity of government and continuity of operations into a plan, in the face of a rapidly spreading “pandemic,” is the second one. Last, how to deliver from the state to the county level, one workable document called an Operational Plan (OPLAN) with a county template for local use, is the last theme. That template gives counties a “pandemic influenza” model for planning that is the same as states and regions use, which they can directly apply locally. Thus this planning process saves lives during a “pandemic.”

**Key Words:** Pandemic Planning, Preparedness, State Level, Homeland Security

Commencing in 1918....Influenza killed more people in a year than the Black Death of the Middle Ages killed in a century; it killed more people in twenty- four weeks than AIDS killed in twenty-four years.” And it killed many millions more in its World War I outbreak, than the War itself (Barry, 2005, p. 5).

## Introduction

“Pandemic influenza” has produced horrible and tragic results in the United States, as well as worldwide. Vulnerable rural populations in the past have suffered from unknown pathogens, and larger and denser urban populations even more so. Thus mitigation planning for a state with a reasonably large population requires exceptional collaboration, plus some very extensive and systematic work, to produce an effective plan. Using Indiana as a model, this chapter discusses preparing a state for a “pandemic influenza.” How to create a workable plan involving state homeland security, state public health, the federal sector and the private sector within a state is the focus of this chapter. In summary, all of the above agencies and sectors

effectively collaborated and cooperated to produce an outstanding outcome. First, though some terminology needs to be clarified.

Three terms from public health, specifically epidemiology, are frequently used interchangeably or as synonyms to describe distributions of morbidity (e.g., influenza or other diseases). These three terms are pandemic, epidemic, and outbreak. If all the terms meant the same thing, then only one term would be used and the other two could be discarded. As in any field such as homeland security and public health, it is important to use terms correctly because each term has precise meanings, which are used to plan suitable actions. For example, at the state level, the most appropriate term is epidemic influenza where “the number of observed cases in a community, state, or region is greater than the expected number of cases.” Conversely, pandemic influenza is the proper term at federal or national level where “the number of cases observed is greater than the expected number of cases.” Different from an epidemic, a pandemic affects large geographic areas, as an entire “country, continent, or portions of the world.” An outbreak is localized and confined to restaurants, schools, hotels, etc., and as in the other two instances, the observed must be greater than the expected or endemic state (baseline). Sadly, pandemic influenza or pan flu planning became the catchall phrase for mitigating dangerous or deadly influenzas at all levels of government. When the government develops plans for a pandemic, each state must translate these principles and refine them for its state and develop an epidemic and/or outbreak plan. In other words, states or regions or even particular institutions and facilities should have their own epidemic plan. References to pandemic in almost all instances in this chapter should really read epidemic, but will be left as pandemic as this is what the then literature unfortunately called it. However, pandemic will be in quotations, to indicate that epidemic is the correct term to use (Black, Smock and Ardaugh 2011, slides 55- 83).

Indiana serves as a good model because the state was nationally recognized for creating inventive programs to combat this dreaded disease. Nationally, the Center for Infectious Disease Research and Policy (CIDRP) cited the Indiana State Department of Health’s (ISDH) pandemic influenza “tool kit,” designed for the local public health director’s use with county level health constituents, as a best practice and adopted its format as a model. A video simulation online initiated by ISDH was accepted in the Midwestern public health circles as a best practice for training healthcare providers and mental health caseworkers regarding influenza pandemic. And the Indiana Department of Homeland Security’s (IDHS) five-paragraph, three-phased operational plan (OPLAN) for “pandemic influenza” (pan flu) along with its county template and 15 state emergency support functions’ specific to pan flu, were accepted and endorsed by the Department of Homeland Security’s (DHS) Federal Emergency Management Agency (FEMA) Region V Regional Interagency Steering Committee (RISC). This was in June 2006, and it was applauded as a FEMA V state best practice. The latter was published for the RISC and distributed region-wide in a fine study compiled by the Department

of Emergency Management of the State of Minnesota (Minnesota Division of Homeland Security and Emergency Management 2007, p. 2). Other accolades followed for the IDHS plan and this chapter discusses those top practices.

Under the national response framework, the key phases of disaster mitigation are “prepare,” “respond,” and “recover,” but for “pandemic influenza” prepare—plan, prevent, and protect—is the most critical. Without proper preparation, situational awareness, then mitigation control, can be lost and rather quickly. Along with the Department of Homeland Security’s (DHS) Federal Emergency Management Agency’s (FEMA) Region V in Chicago, Indiana’s preparation is analyzed using the efforts of the Indiana Department of Homeland Security to support the Indiana State Department of Public Health, and other major emergency management agencies. Private sector involvements for battling the effects of pandemic influenza are discussed as well.

Initially, a brief discussion explains the history of Indiana’s experience with pandemic influenza. Following that, the composition and development of the plan is elaborated upon; then its implementation is examined. Last, the product itself and its consequences are discussed.

## “Pan Flu” Strikes in the Recent Past

Pandemic flu is exceptionally dangerous, has haunted and infected humans for ages, and Indiana’s population has been no exception. The most recent, serious, world-wide pandemic, which was extremely lethal, took place in 1918, killing from 60 to 100 million across the globe and 695,000 in the US. In Indiana, it struck at once in the fall of 1918, infecting 350,000 Hoosiers, and killing 10,243 citizens, including nearly 1,000 in Indianapolis in a short period of time (Wheeler 2006).. Then as now, no comprehensive “cure” existed and only different forms of “mitigation” were available. Consequently, the key was to be prepared.

When pandemic influenza struck the US in the fall of 1918, the first and third “waves” of the illness were weak, while the second wave horribly assailed its victims. In 1918, striking during the height of American involvement in World War I, the initial onslaught of pan flu arrived in the US that April, and the third surge occurred from December 1918 through March 1919. But the second lethal wave struck with chilling ferocity in October and November of 1918, unfortunately killing babies and the elderly, but also uniquely healthy young adults. In Indiana, Dr. John Hurty (then the Indiana state department of health commissioner), attempted everything, from ordering “Public No Spitting Laws;” to woolen masks for everyone; to open air hospitals; to suspension of public gatherings in schools, churches, saloons, and early movies, to isolation of the infected, but nothing except the latter worked. In rural Indiana, many families tried “homespun” rumors and remedies like placing a young captured, live deer in the bedroom of their children to ward off the influenza; to temporarily burying their children in clothes up to their necks; to

wearing garlic necklaces, which were all designed to ward off the sickness. Masks at that time were woolen and had no effect on the deadly pathogens, as no one then knew it was a virus, which was not discovered until 1953. As the virus mutated and spread, the lungs would scar, internal bleeding occurred, the bladder filled with blood and fatal pneumonia quickly follows. Larger cities like Philadelphia often burned 7,500 bodies daily, but rural Indiana fared much better during the great pandemic. This was chiefly due to both the isolation of the state and the geographic isolation of its population (Wheeler 2006.)

Since then, other waves of different kinds of flu have spread across the United States with varying degrees of severity. The 1943 swine, 1957 Asian and 1968 Hong Kong influenza viruses visited America. One common theme prevailed as all these occurred in times of either high troop deployment or war. Global mobility and encounters have spread disease over many past centuries (Aaltonen 2009.)

## **Preparing to Develop a Plan**

The sequence of developing a systematic plan was initiated by determining the desired outcome, and then using backward planning from that outcome to build a framework for plan development. To accomplish this, a synchronization matrix of key and essential interagency tasks and timeline was developed. Along that timeline, intermediate goals or progress review points were set with dates (Department of the Army 2001, pp. 6-1 through 6-7). Last, a homeland security “tool kit,” which provided organized federal guidance, was carefully utilized.

As early as December 21, 2003, Indiana readied itself to start pandemic influenza planning. A catastrophic incident response working group of senior planners met to discuss courses of action (COAs) for all-hazards threats, including pandemic influenza. No significant response or recovery plans existed then, save for a large collection of state “how to do it” manuals and county comprehensive emergency management plans (CEMPs), all kept in a library in the then Indiana Department of Emergency Management, now the Indiana Department of Homeland Security. Those early CEMPs were not operational plans, but rather descriptions of what to do in separate incidents by type (Dietz, Wojtalewicz, and Mack 2006).. It also was recognized that the healthcare and public health missions were the central issues for controlling disease of any kind in what was then termed “crisis and consequence management,” and plans were quickly needed. It was further recognized that the public judges governmental success or failure in a serious disease outbreak based on its perception of fast and effective government response. Plans must provide the right response; at the right time and place; they must effectively train and exercise the responders; and plans must be designed to anticipate local needs, because every disaster is local (Dietz, Wojtalewicz, and Mack 2006).

However, it was not until March 2006 that Indiana began the comprehensive pandemic planning process in earnest. The overall goal then was to build a

successful preparation and response cycle that had as an implied task prepositioned locations for dispensing mitigation drugs fully known and readily available. These would be locally supported by the state's two largest agencies. This was kicked off by a major conference involving the Indiana Department of Homeland Security and the Indiana State Department of Health. Key emergency management personnel from allied state agencies were invited, and the Indiana Economic Development Corporation and the Indiana Chamber of Commerce covered the private sector. The conference's opening statement proclaimed, "The purpose is to share information ... concerning the state's plan for responding to and coping with a future outbreak of influenza" (Dietz, Wojtalewicz, and Mack 2006).

Basic assumptions were drawn, facts presented and issues were addressed. It was determined that an H5N1 avian influenza of a highly pathologic variety could result in an approximately 50 percent human mortality rate. In its best case scenario, only a 15 percent illness rate would be the consequence. On average, a 35 percent infection rate would not be uncommon, yet any of these consequences would be catastrophic in a state of more than six million residents (D'Araujo nd). As well, it was noted that an influenza epidemic could be resistant to most antivirals and the influenza might strike the state in more than one wave of disease. The estimated impact on Indiana was based on "FluSurge" software, and simulations and modeling from the Department of Health and Human Services (HHS) through the Centers for Disease Control (CDC). It was asserted that the duration of any given transmission period and resultant illnesses might last from six to eight weeks, causing extreme shortages of hospital beds, ventilators, antivirals, and other necessary items, supplies and a logistical nightmare (Department of Health and Human Services, CDC, 2007, pp. 1-3).

It was critically noted that among the ill would be healthcare workers, first responders (fire, law enforcement, and emergency medical services), and second responders—health and hospital personnel and emergency support function workers, including public works, emergency management, homeland security, transportation and volunteer agencies). Additionally, it was stressed that the situation could worsen rapidly causing significant social and economic disruption, particularly within the six larger cities of the state.

Thus, with the little planning that had been completed previously, pandemic influenza became the responsibility of the IDHS and ISDH "tiger teams," identified as groups of key individuals to initiate the process. Tasks were assigned and follow-up meetings were initially conducted within IDHS' Homeland Security Team (HST)—a body encompassing all state emergency support functions (ESFs) agencies, plus other interested agencies. The planning process began in late April 2006, and the federal "tool kit" of homeland security and public health information was readily used, along with the two state agency directors' guidance.

Developed over time and simultaneously with Indiana's plan, this federal tool kit provided direction and format to the state for framing its plan. It was particu-

larly helpful in developing the operational or homeland security support side to and for public health's effort in locating and organizing the critical dispensing sites.

In May 2006, *The National Strategy for Pandemic Influenza: Implementation Plan* was released by the federal Homeland Security Council, a body that parallels the National Security Council, where the number two and three cabinet level secretaries concentrate on domestic response. *The Implementation Plan* provided excellent planning direction for Indiana (Homeland Security Council 2006, pp. 1-5). Additionally and specifically *Pandemic Planning Status for Response* was drafted by the Department of Homeland Security's Coast Guard Rear Admiral Mary E. Landry and shared with the states (Landry nd).. This publication helped states prioritize the sequence of tasks. Following that, the *National Preparedness Guidelines* of the federal government were reviewed. Originally promulgated as part of Homeland Security Presidential Directive 8, Annex 1, 2003 and then revised in 2007, the *Guidelines* addressed four aspects for preparedness and planning.

They provided a national preparedness vision, which stated that America must be "a nation prepared with coordinated capabilities to prevent, protect against, respond to, and recover from all hazards in a way that balances risk with resources against need." Following that and as a separate publication, the *Fifteen National Planning Scenarios* pinpoint and discuss the 15 "highest consequence threat scenarios," including pandemic influenza. From those scenarios, 1,600 unique tasks were listed in a universal task list which, if preformed effectively and on time, could help mitigate the effects of a disaster prompting faster recovery. Last, a target capabilities list discussed 37 critical capabilities which "communities, the private sector and all levels of government" must accomplish to respond effectively to disasters. Figure 4.1 shows "The Guidelines" version of the planning cycle which was applied at the state level (Department of Homeland Security 2007, pp. iii, 22).

All guidance for epidemic influenza planning from the tool kit then was translated into *State Planning Guidance* by the collaborative efforts of the state homeland security community and the state public health community. The key focus was how the state could best serve its citizens to honor the social contract it has with them, in times of endemic outbreak. That planning called for a comprehensive and integrated plan, with assigned roles and responsibilities, producing a tiered and integrated template. The template was for pandemic influenza mitigation, which counties and local communities could use. The latter, along with effective points of dispensing were absolutely critical pieces of the architecture.

This template constituted the heart of the plan, providing local government with a guide that set planning priorities and established response criteria. If the 92 county emergency management agencies and their matching 93 local health departments could not utilize it, the template was worthless. It became the state's main effort for the communities regarding epidemic flu planning. The template's overall outcome was a public health preparedness operational plan for all 10 Indiana emergency management and public health districts and the respective 92 counties, which established a common model or template that could be adapted to local use.



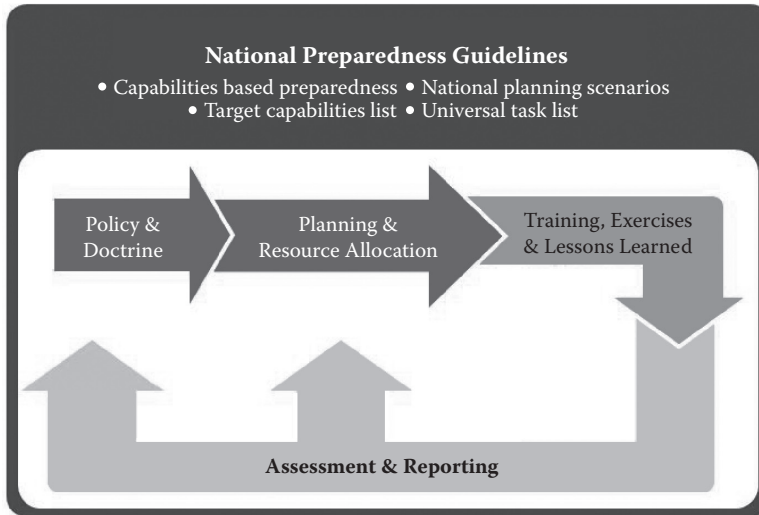


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The state enumerated its goals and how it supports the 10 districts and 92 counties and each was then asked to send back to the state their parallel plan. Thus with a common operating picture, the results would show unity of effort for all jurisdictions with enumerated federal, state and local levels of responsibility. Emphasis was placed on the medical stockpiles to be dispensed at specific, known locations where citizens could receive appropriate medicines and personal protective equipment (PPE). These sites called points of dispensing (PODs) were locations that merged the support of the 92 emergency management agencies with the needs of the 93 local health departments to assist more than six million Hoosiers.

Additionally *State Guidance* shed light on what state agencies would serve as “lead, coordinating, and supporting state agencies.” How that would be woven into the seamless plan was key. Tricky, specific problems were tackled as was the all-important continuing education during a pandemic and how best to assist special needs populations. Additionally, how to execute social distancing at government work sites and how shifting and staffing there would be accomplished was another difficult issue. Keeping government functioning was both a continuity of government (COG) and continuity of operations (COOP) issue and plans were written addressing that. Then plans for the private sector were drafted concerning the same matters. These systematic plans were then phased in for timely execution and sensible goal attainment, by the homeland security team (HST). Last, it was recognized that preparations must be inserted to accept mass casualties. The roles and responsibilities of state agencies, using rational response frame-



work phases of “prepare, respond, and recover” included mass casualty planning (Members HST, 2006).

For this kind of natural disaster, the state also mirrored some of the *National Strategy for Homeland Security*, and afterward published its own *Indiana Strategy for Homeland Security*. Running through several drafts by January 2008, the *Indiana Strategy* included the visions, strategic goals, missions, and enumerated specific information for disaster mitigation including pandemic influenza. Updated annually, eight strategic goals were published which included the state’s target capabilities listed within (Dietz and Mack, 2008, pp. 25-53). Costs plus funding sources also were presented in this document.

Additionally as the *National Response Plan* transitioned into the *National Response Framework* commencing February 2007 and the state developed its own *Indiana State Response Plan* (Framework, 2007). That *State Response Plan* consisted of three main segments: the base overview discussion; the operational plans (five of them in number) and the roles of state agencies within the 15 state emergency support functions (ESFs) keyed to each operational plan. Pandemic influenza was the first, and *The Indiana State Response Plan* detailed how, among other things, resources will be pushed through the 10 districts and 92 counties to victims. The director of the Indiana Department of Homeland Security (IDHS) took the 15 separate national planning scenarios and determined that those 15 actually fell into five broad, all-hazards categories: natural disasters, biological outbreaks, radiological catastrophes, chemical issues, and cyber complications. If five good, systematic, model plans were drawn up, each could cover its respective five plans in an all-hazards way, and 15 separate operational plans could give way to five only. Consequently, one plan respectively could become the cornerstone of a grouping of five plans in the same family. Accordingly those 15 national planning scenarios (NPSs) were grouped in the *State Response Plan* into five broad classifications of disasters: natural hazards (for Indiana—the New Madrid Seismic Zone), biological (here pan flu), radiological improvised nuclear device due to a major homeland defense exercise planned in Indianapolis in 2007, chemical (VX nerve agent because of stores of that agent at Newport, Indiana), and cyber (communications). This blending was an important piece, as for example, a good pandemic influenza plan with only slight modification could accommodate plague, food contamination, foot and mouth disease and anthrax, and other NPSs of the biological disease grouping. This process permitted the state to focus on both the most likely to happen and most dangerous scenarios readily, by writing only five major all-hazards plans rather than 15 (*State Response Plan*, 2006, pp. 9-15). Figure 4.2 shows how this was accomplished. As a consequence, these five plans served as the *State Response Plan’s* operational section. The process of effectively accomplishing this follows.

**Operations Plans (OPLANs)**

- 15 National planning scenarios
  - Nuclear detonation –10-kiloton improvised nuclear device
  - Biological attack - aerosol anthrax
  - Biological disease outbreak - pandemic influenza
  - Biological attack - plague
  - Chemical attack - blister agent
  - Chemical attack - toxia industrial chemicals
  - Chemical attack - nerve agent
  - Chemical attack - chlorine tank explosion
  - Natural disaster - major earthquake
  - Natural disaster - major hurricane
  - Radiological attack - radiological dispersal devices
  - Explosives attack - bombing using improvised explosive devices
  - Biological attack - food contamination
  - Biological attack - foreign animal disease (foot and mouth disease)
  - Cyber attack

- IDHS Planning efforts focused on five scenarios most likely to affect Indiana – blends in 15 NPS

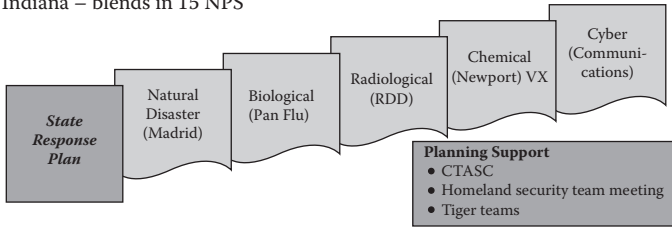


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## Agreements and Trigger Points

Meetings between Indiana’s two chief agencies involved with pandemic influenza planning, homeland security and the state department of health, produced benchmark agreements on cooperation, then on action points or trigger points needed for execution. It was universally concluded these needed to be agreed upon before the planning cycle was initiated. Trigger points would be mutually approved where events require or cause needed actions to take place. Assisted by ideas from the Department of Homeland Security (DHS), the Department of Health and Human Services (HHS), the Federal Emergency Management Agency (FEMA), and the Centers for Disease Control and Prevention (CDC), a list of key questions that had to be answered was created. Through FEMA Region V in Chicago the state of Minnesota’s Emergency Management Department also contributed some ideas (State Department Health, 2007, pp. 1-20).

The first issue was to address the agreements that must develop. It was agreed the Indiana Department of Homeland Security would serve as the state coordinating agency (SCA) for all-hazards disaster response, including pandemic influenza. This was an important benchmark that had to be agreed upon before other real trigger points could be established.

Another IDHS benchmark was to begin with avian influenza, operating under a three-phased operations plan (entitled the Pan Flu OPLAN) similar to the Federal Department of Homeland Security and the Federal Emergency Management Agency plan. The public health plan began with a human-to-human transmission

phase (anywhere in the world) and abided by the six phases of the World Health Organization (WHO), as approved by the Department of Health and Human Services (HHS) and the Center for Disease Control (CDC). ISDH also would field its own comprehensive pandemic influenza plan which integrated these WHO phases. Happily, both Indiana departments followed the guidelines of the *National Strategy for Pandemic Influenza Implementation Plan* from the Homeland Security Council (May 2006), through their respective DHS and HHS organizational structures. Both departments worked together through the state, then down to the district and further to the county levels with unparalleled cooperation.

The trigger points for collaborative state action during an avian influenza epidemic were easier to determine. It was decided that trigger points differ slightly by state agency view and by influenza type, but common ground could be found. Common ground would be where all agreed events required action by both first- and second-level responders.

Trigger points specifically for IDHS occur when an infected bird enters the state, dies and spreads a high pathogen H5N1 to other wild or domestic fowl or animals. That implies potential danger exists to humans via avian influenza, and a series of actions would be taken by the state Department of Natural Resources (DNR) (in surveillance) and by the Board of Animal Health (BOAH) (in bird quarantine and euthanasia), if required. IDHS' second trigger point would be when H5N1 spreads from birds to humans; and a third would be human-to-human transmission along with a morphed virus. Public health readily recognized that action was immediately necessary when human-to-human transmission took place anywhere in the world. All the following were necessary—conduct increased surveillance, public awareness, education, monitoring, school surveillance, and airport surveillance. Both state agencies agreed they would merge their respective actions when any form of influenza spreads from birds to humans within the state itself. This became a continuous process then, where homeland security and public health worked together on continuous trigger points.

Departmental cooperation was connected directly to trigger points. To do so, roles and responsibilities had to be determined. First, the Indiana Board of Animal Health (BOAH) would handle the agriculture piece for avian influenza for the state. Beyond that, a chain of command was set. It went from IDHS and ISDH under the *National Strategy for Pandemic Influenza Implementation Plan*, through FEMA V and CDC respectively to DHS and HHSs. Simultaneously it went to the governor and the director of public health then back through the director of homeland security and director of public health, to the 10 state districts (and District Planning Councils), to the 92 parallel county emergency management agencies (EMAs) and 93 county local health departments (LHDs). Accordingly IDHS as the lead coordinating state agency, and ISDH as the primary state agency needed close cooperation and liaison.

It also was determined that non-pharmaceutical intervention trigger points were needed as key resources for critical infrastructure. It was recommended schools be

closed last due to educational requirements, but they would be carefully monitored by ISDH through syndromic surveillance. It was further and roundly agreed they would be closed before the arrival of a pandemic.

The sequence for school closure would be by virtue of a declaration of a public health emergency from the commissioner of public health (a doctor of medicine), the governor would follow with a declaration of a state of emergency, and the state response plan would then be placed into effect, with all schools closed. But the authority still remained local and with the school corporations, both public and private, leaving many issues to be ironed out. A policy process for school closure and a communication plan for this decision were developed. The state superintendent of public instruction asked each school system in the state to plan for a pandemic. Local health departments met with school districts to assist in their planning. Defining and refining a statewide policy on the closure of schools to include defining authority and responsibilities, trigger points, duration of closure, plans to re-open, and social consequences of implementing school closures was a must. As a trigger point, Indiana would follow the CDC guidance for school closure as outlined in the *Interim Pre-Pandemic Planning Guidance* published in February 2007 and revised in February 2009. Depending upon how rapidly the virus spread, schools might be closed in increments throughout the state or entire school systems might be closed simultaneously. There was complete agreement that schools would be closed prior to the arrival of a pandemic. Lists of individuals with the authorities, roles, and responsibilities to officially declare schools closed and authorize their reopening were pinpointed. They assisted by their emergency management agency counterparts, and local health officers, had the authority to close and eventually reopen schools within their jurisdiction. The state health commissioner had the authority to close all schools in the state and clear them for reopening. By law, the state health commissioner's directives supersede local authorities.

At any time, closure could be announced through official homeland security channels as well as through the media, Indiana Health Alert Network, and notices on the state websites. Online distance education and educational drop-off sites, where books and lessons could be distributed and collected with minimal contact, were also to be established, covering major testing requirements also. Each school system in the state could choose to offer continuing education. Trigger points for closing significant public venues, such as sports, civic, social, and other gatherings, were established using the same policies as those developed for the schools. This applied to public transportation, with syndromic surveillance being key, then a gradual shut-down would occur as needed. Trigger points for staffing the various emergency operations centers were resolved, and plans were laid out to form common operating pictures (COPs) between levels of government for disaster management. The latter included when continuity of government (COG) and continuity of operations (COOP) plans would be placed into effect and how this would be done. Trigger points for activating

or updating the state's websites were agreed upon and websites established and updated.

Further points of action were decided upon for state assistance to business and for assisting the private sector in activating their plans for this kind of event. Private sector concepts were developed on how this would be executed. These were written by the Indiana State Chamber of Commerce, the Indiana Economic Development Corporation, and the Indiana Office of Community and Rural Affairs, plus through ISDH's business collaboration partnership. Universities and colleges in the state developed policies and procedures and shared those with the state agencies.

Last, caution was addressed between the IDHS and ISDH working on this because it was realized rather that Indiana's trigger points might activate rapidly and even all at once. "Pandemic influenza" could come quickly to this state. Chicago's airports, particularly O'Hare International Airport, have a huge Asian air transportation footprint affecting northern Indiana. The Indianapolis International Airport does heavy freight commerce with Canada, Mexico, and the Caribbean through FEDEX. CDC monitors these sites. Moreover, global avian wild bird pathways extend across the length of Indiana and a huge federal interstate highway system of five major national roads blankets the state, adding heavy interstate trucking traffic. Additionally, Interstate 69, halting now in Indianapolis and known as the "North American Free Trade Area" highway, when completed, will pass through all of Indiana reaching from east-central Canada to central Mexico (State Department Health, pp. 13-17).

## The Planning Process

First, characteristics of a successful plan were needed. The plan had to synchronize capabilities to needs. How to do things needed to be spelled out and last, the plan should draw a "roadmap" for execution of all-hazards operational response. Further, characteristics of a successful operation plan included that the plan both implements higher level mission guidance while also providing intent, tasks, activities, constraints, and coordinating information for successful mission completion from the state. Good plans focus on the mission to be completed while clearly providing the necessary mission completion guidance. A well-drawn-up plan spells out urgent factors needed for success up front, along with the details, all in a standard, recognizable, clear, and simple language. Plan development must take into consideration the best efforts of the multi-agency deliberate planning process and the results were officially called an operational plan (OPLAN), which came with a local template version for use at the county level. Using the national planning and operations system (NPOS) as a guide, which the Department of Homeland Security borrowed from the Department of Defense, the Indiana systematic planning sequence commenced in May 2006.

Overall, three phases were established: prepare, respond, and recover. Tasks as mentioned previously from the federal *Universal Task Lists* were woven into these phases, along with what duties state agencies must perform. Critically and by phase, representatives from lead state agencies, coordinating state agencies and supporting state agencies were appointed to help draft this. Annexes would cover in more detail what the OPLANs did not, adding additional data in certain emergency support functions and tasks. The state annexes were patterned after the federal *Catastrophic Incident Supplemental Annexes*.

For “pandemic influenza” planning, states must establish memorandums of agreement on how to utilize key resources and equipment, and for positioning critical personnel to accept antivirals. Further emergency management assistance compacts (EMACs), under the National Emergency Management Association (NEMA) framework within DHS-FEMA Region V, were written to share personnel and resources among Midwestern states should a pandemic occur. Admittedly though, by the nature of pandemics, it was recognized chances were slim that these would ever be executed, as generally in pandemics a medical surge already is blanketing an entire FEMA region.

The planning cycle itself was inaugurated to include the following tasks: establish responsibilities, build a timeline, draw a synchronization matrix, develop priorities for planning (mission essential task list), plan relationships (with other agencies), and use interim progress reviews (IPRs) to monitor progress.

The deliberate planning process was used to write the plan and consisted of six phases. Phase 1 included plan initiation. Planning tasks were assigned and resources for planning identified. Groundwork for planning was laid. Phase 2 is concept development, which highlights factors that significantly affect mission accomplishment. Data are collected and analyzed, and as the mission statement is written, subordinate tasks are assigned and courses of action determined. Phase 3 is concept review where the concept is reviewed and approved. Phase 4 is plan development, where the plan is drafted as an operational plan (OPLAN). Here resource shortfalls are identified. Courses of action are tested and one is selected that is the best. Phase 5 is the plan review and approval. Phase 6 includes all the major supporting annexes where appropriate (Department of Defense 2006, pp. III-19 to III-41).

The last three phases (plan development, plan review, and supporting annexes) required the most time. By their nature, operational plans (OPLANs) must be fully collaborative state agency documents. Often, gaining approval for a course of action takes the most significant amount of time. Each task is essential to mission accomplishment and had to be carefully delineated in the OPLAN, both as specified tasks and implied tasks. Then all of this had to be placed into three sequential phases consisting of prepare, respond, and recover. Next, all key agencies involved had to agree. When it came to select and approve the preferred course of action, careful negotiation was required. The 15 primary state ESF agencies, often joined by as many as 37 other city-county ones, had to approve as well.

Further the plan had to meet the common-sense test. The plan overall had to be acceptable, complete, feasible, workable, and easy to communicate and implement. The objective was that successful plans could be easily used by the local health department (LHD) and emergency management agencies (EMAs) (Department of Defense 2006, pp. III-28 to III-32).

The operational plans were collectively written in extended brainstorming sessions of the state homeland security team (HST) (Indiana Department of Homeland Security 2006). Realizing the seriousness of the situation, in a series of lengthy HST meetings at the Indiana Government Center South (IGCS), the plan was hammered out in less than six weeks, in spite of demanding HST member schedules. Because the leadership was good, completing the plan went quickly and Governor Mitch Daniels and Lieutenant Governor Rebecca Skillman helped nudge a few state agencies in the right direction. Public Health sent some of their best planners, and most knowledgeable healthcare providers and practitioners. The State Homeland Security Department did the same and leadership from Dr. Eric Dietz of the Indiana Department of Homeland Security and Dr. Judy Monroe of the Indiana State Department of Health was consistently excellent. Butcher block paper, computers, cameras and recording devices captured the main ingredients and ideas of the plan as discussed and laid out. All kept in mind rather the admonition that “We have not had a Pandemic since 1968, and we have one in the United States about every 40 years...and we are due...overdue.” Determining constraints (limitations) and restraints (curbs on actions) were the last things completed (Monroe 2006). This was summer 2006, and this was serious business. Compelling arguments for worst-case scenarios often interrupted discussions adding to the importance and validity of the plan as crafted.

### ***Formatting the OPLAN***

The arrangement or format of the operational plan consisted of the standard five-paragraph operational plan (OPLAN), adopted from the American military by the Department of Homeland Security (Department of the Army 1993, pp. 1-5, 4-6, 6-1). Regarding phasing, it should be noted that these OPLANs can be written in two ways: the first incorporates phasing “prepare, respond and recover” with all three phases in one document. The second way is to have one individual OPLAN for each phase of prepare, respond and recover. To provide more detail, the original state OPLAN was written in the latter fashion, but for simplicity, the county template was written as the former.

Yet for any OPLAN, regardless of how it is formatted, it consists of five segments called paragraphs. Paragraph 1 is the situation, where a clear statement appears of what kind of an event is being confronted and the circumstances. “Who” serves as the lead state agency (the Indiana Department of Homeland Security) and supporting whom (the Indiana Department of Health) are both noted in this first paragraph.



Paragraph 2 consists of the mission statement, which clearly explains what has to be completed, when it needs to be accomplished and where all this will be enacted. A clearly written mission statement is paramount to having a successful plan.

Paragraph 3 is the most important and contains detailed information about the execution of the mission. It clarifies for the last time why this is taking place and how this will happen. “How” encompasses the means to accomplish the operation, and is discussed in four areas: 1. The director’s intent (what is critical), 2. the concept of the operation (how it will be done), 3. phasing (either prepare, respond, and recover), and 4. tasks to supporting agencies (which include coordinating instructions).

Paragraph 4 covers support, which does not include actions of lead, coordinating, or supporting state agencies, but rather what resources are needed to support the mission to foster success. This paragraph highlights from where those materials or items will come.

Paragraph 5, called “command and signal,” encompasses the chain of authority or responsibility for the operation, where those in charge are located, and how they can be reached electronically or by radio communications. Under the incident command system (ICS), this is generally known, and under the national incident management system (NIMS), the levels of the disaster and kinds of equipment needed are clear. The particulars of communications often are not well known and those are specified in this paragraph. A media plan, plus the safety plan, can also be placed here.

## The OPLAN

As previously mentioned, the original state OPLAN was written with each phase (prepare, respond, and recover) constituting separate documents. The county template is Enclosure 1 with all phases as one document. Both are in their original formats as issued on June 15, 2006 at the beginning of the “pandemic flu” operational plan execution. Discussing these in detail and what they accomplished comprises the remainder of this chapter (Indiana OPLAN, Pan Flu, 2006).

In the state OPLAN, blending the public health and the homeland security response through one seamless effort in three phases was critical. Homeland Security remained the “lead state agency” and Public Health served as the coordinating or executing state agency.

Phase 1 was Prepare: Plan, Protect, and Prevent. Prepare meant warning citizens; being prepared to euthanize huge flocks of domestic fowl, if needed; and preparing points of dispensing (PODs) for humans. As mentioned, because public health and homeland security differed somewhat on how to address “pandemic influenza” OPLAN phases, the mutually agreed upon trigger points for when action would take place were written into the three phases of the OPLAN. Counties, after receiving the template, were expected to establish their own plans based on it. When a bird died in Indiana and was identified as having Type A

high pathogenic H5N1, Phase 1 opened for homeland security. Infected birds fly through the Aleutians to Alaska, and then south to the United States and eventually Indiana. In Phase 1, the Board of Animal Health (BOAH) played a large role with assistance from the Department of Natural Resources (DNR) and the Indiana Department of Environmental Management (IDEM). BOAH would coordinate investigations, conduct surveillance, and epidemiologic activities on suspected wild and domestic fowl populations to include domestic poultry, ducks and geese to determine to severity of an epidemic. Agricultural security emergency response teams (ASERTs) in the affected counties would be activated to identify, locate, test and isolate infected fowl and animal populations. Animal testing and facility monitoring would be conducted and warnings to animal owners given. The Indiana Department of Environmental Management would, in conjunction with BOAH, prepare for the euthanasia of large flocks of domestic fowl if need be.

In Phase 1, the Department of Public Health concurrently would be preparing its hundreds of points of dispensing to receive antivirals and mitigation drugs, plus personal protective equipment (PPE). As well in Phase 1, the websites of public health and homeland security agencies would inform the citizens of what personal and collective actions they could take to mitigate this potential epidemic, and where sites for dispensing antivirals were located. Symptoms of the influenza would be made broadly known to the public. People traveling from infected areas of the world, who could bring the disease here, most likely from Asian-based air routes from O'Hare International Airport in Chicago, would be monitored. Phase 1 consisted of syndromic surveillance of both birds and humans thought to be high risk in bringing the influenza to the state. Last, homeland security also in this phase planned with the state Department of Transportation, the Indiana state police and the Indiana National Guard to ensure its distribution and dispensing system was in place for the mitigation drugs. In essence trucks would deliver antivirals to PODs, escorted by state police to ensure they got there safely and were assisted where appropriate by the Indiana National Guard and local law enforcement.

Response, which is Phase 2 of the "pandemic influenza" operational plan, started when avian and/or animal influenza was transmitted to humans. Normally each response phase has three sub-phases: regain command and control, stage for life-saving, and life-saving. With "pandemic influenza" it is different as influenza comes in waves. Some of response phase thus overlapped into the early stage of recovery phase.

In Phase 2, transmission to human beings in Indiana has taken place resulting in an H5N1 highly pathological virus characterized as highly dangerous. The duration of the increased transmission period and resultant illnesses would be from six to eight weeks, but could be as long as 10 to 12 weeks.

Thus response phase required maintaining continuous trigger point surveillance between IDHS and ISDH while increasing public awareness, plus the full activation of the points of dispensing and the numerous prepared public information messages. Shifting additional responsibility to the Department of Public

Health would take place in the response phase. Based on the situation, ISDH will employ courses of action articulated in their pandemic influenza plan and the governor would issue a statement of public health emergency based upon the recommendation of the ISDH state health commissioner. The State Department of Administration would execute continuity of government (COG) and continuity of operations (COOP) plans in this phase. Agencies were asked to update rosters of essential personnel and contact information. Policies to address work responsibilities for ill, but essential, employees and contractors were written. Social distancing guidelines were prepared for those still at work, and. Other protocols were executed such as, hand washing and respiratory etiquette. If domestic and/or wild fowl euthanasia took place, IDEM would address mass disposal and decontamination issues. As well, IDEM would protect state drinking water and the wastewater infrastructure. The Indiana state police would provide law enforcement support to state agencies as needed and assist local law enforcement at selected ISDH resource distribution locations, while providing support and escorts for the distribution of basic and essential supplies such as food, water, and medical supplies as needed to appropriate sites. In this phases also, the state Department of Education would publicize and initiate necessary school and school event closure with selected school districts and/or superintendents. In Phase 2, plans to initiate distance-learning procedures, while preparing selected schools so they also can be used as mass care facilities, would be executed.

Phase 3, Recovery, has two sub-phases: short-term and long-term recovery. Tasks in short-term recovery overlapped the response phase some as “pan flu” comes in waves and over time. In Phase 3, human-to-human transmission of influenza has occurred and disruption of services and activities has started. All Indiana’s COP and COOP plans are in effect and it is expected the “pandemic” will cause economic hardship on residents and severe economic disruption to the state.

Symptoms and infections may vary between the different waves but absenteeism will eventually include those who are ill with “pandemic influenza,” then increase numerically as those caring for sick household members grow. Concerned that they may have influenza, some workers will stay home to avoid contaminating healthy workers. Most will stay home because they are sick. The numbers of well persons who remain at home to care for children due to school or daycare closure will increase as will the actual ill with other infections or diseases. Those in bereavement due to the loss of life of family members or significant others will grow as well.

Utilizing points of dispensing (PODs) were written into Response Phase 2 and also Recovery Phase 3. It was decided by the nature of “pandemic influenza” that both phases could provide appropriate guidance for second and third responders. Each county may have from one to 100 PODs, depending on population, and PODs are set to known locations, with easy access, and established with basic medical dispensing capabilities and offered some semblance of protection, should there be a rush or riot to get anti-virals. Schools, heated fairgrounds buildings and sites near shopping centers were most commonly selected. Hospitals were avoided

**Table 4.1 Annexes**

Annex A Command and Control and Task Forces	Annex B Intelligence
Annex C Resources.	Annex D Public Information
Annex E Medical Mass Casualities	Annex F State Legal Authorities
Annex G Education	Annex H Communications
Annex I Strategic National Stockpile	Annex J Mass Care and Mass Shelter
Annex K Evacuation	Annex L Law Enforcement Authorities
Annex M Mortuary	Annex N Damage and Debris Management
Annex O Training	Annex P Exercise
Annex Q Definitions	Annex R Reporting and Situational Reports

as PODs as the general public hoping to receive an antiviral or PPE item, need not burden hospitals with that kind of a problem.

Also in Phase 3 of the OPLAN, the timing of “pandemic influenza” and the probable effects on the workforce were analyzed. The “facts and assumptions” section discussed a serious situation. At that time it was thought a serious “pandemic influenza” outbreak would activate the strategic national stockpile and energize its regional stockpiles into action. With one of those nearby, antivirals would be distributed to the vulnerable and special needs populations, then to first- and second-responders and finally to the general population as a whole. The Indiana Department of Homeland Security spelled out what it would do to support public health. ISDH wrote into their separate plan guidelines for the issues below and published them. Those were: social distancing, hand washing, respiratory etiquette, signs, symptoms, and transmission routes of infection, treatment guidelines, infection control procedures, school closure issues, cancellation of public mass gatherings, mental health support, procedures for sending specimens to the ISDH laboratory, antiviral prioritization and distribution policy, hospital resource availability, vaccine prioritization and distribution (when vaccine is available), altered standards of care, and requirements to provide daily status reports to IDHS.

Plans of 20 other state agencies were consolidated into final response and recovery phases, and what emergency operations centers (EOCs) would be open and who would be in charge of those agency EOC operations was discussed.

### ENCLOSURE 1. COUNTY TEMPLATE

Pan Flu OPLAN (Template) (Includes Phases 1, 2, and 3 of the State Plan, in one County Annex) Annex \_\_\_\_\_ to **(County Name)** Emergency Response Plan (County /Local Agency Title/Name can be inserted in areas marked in bold)

#### I. SITUATION

- A. References: Indiana State Department of Health website – [www.isdh.in.gov](http://www.isdh.in.gov)
- B. (County Name) local health department influenza plan (accessed via hyperlink)
- C. (County Name) Emergency Management Agency is designated as the incident command and shall coordinate county support.
- D. Definitions:
  - 1. Phase 1 – Avian and/or animal influenza of a subtype causing high avian/animal mortality has been identified in US wildlife flocks, domestic birds, domestic farm animals or other wildlife. Indiana initiates selected response plans and procedures.
  - 2. Phase 2 – Avian and/or animal Influenza has been transmitted to humans; disruption of services may occur. Indiana’s continuity of operations plans are initiated.
  - 3. Phase 3 – Human-to-human transmission of influenza has occurred; disruption of services and activities is likely. Indiana’s continuity of operations plan (COOP) is initiated.

#### Phase 1

- E. Phase 1 is the arrival of an infected bird(s) in Indiana.
- F. Overall, the following scenario describes the fundamental situation involving avian flu arriving in Indiana via infected birds, spreading from infected birds to humans, and being transferred from one human to another in Indiana, and as this reaches endemic proportions Nationally, simultaneously world-wide viral infections rates soar resulting in a global pandemic influenza. Mitigating this in Indiana is divided into three phases, paralleling the above scenario.
- G. Overall, commencing in Asia, influenza A virus subtype H5N1, with a bird strain of H5N1 called Highly Pathogenic Avian Influenza (HPAI) A, currently persists as a problem in wild and domestic birds in several countries and can be dangerous to humans. Slowly this is spreading.
- H. Overall, as a virus transmission from birds to humans, then humans to humans is of very serious concern. In limited numbers

this has already begun, since the fall of 2003, and the World Health Organization (WHO) using six phases, states globally we are in the third phase of this progression.

- I. If this comes to the United States and subsequently Indiana, it is likely infected birds could come through the Aleutians to Alaska, and then south to the United States and eventually Indiana, or people traveling from infected areas could bring it here, most likely from Asian-based air routes coming into O'Hare International Airport in Chicago and spreading to District 1 through Lake County.
- J. Variations of this flu infected human populations in 1918-1919, 1957-1958 and in 1968, with the 1918 pandemic killing 60 to 100 million worldwide, including 695,000 Americans and 10,243 Hoosiers that counted nearly 1,000 Indianapolis residents.
- K. Currently, there are no reports of the progression of HPAI through H5N1 to any further morphing, found in Indiana, but this OPLAN is designed to mitigate that should it happen.
- L. Refer to [www.fluinfo.in.gov](http://www.fluinfo.in.gov) for more information.
- M. IDHS is designated as the lead state agency for the pan flu for all three phases. A primary state agency (PSA-that agency coordinating for the lead state agency) and supporting state agencies (those assisting the primary state agency) are designated for each phase as well.

Phase 2

- N. General references are the Indiana State Department of Health website – [www.isdh.in.gov](http://www.isdh.in.gov) ; National Strategy for Pandemic Influenza, Implementation Plan (May 2006) <http://www.white-house.gov/homeland/pandemic-influenza-implementation.html> ; Agency specific continuity of operations plans (COOP) or [www.fluinfo.in.gov](http://www.fluinfo.in.gov) for more information on avian/animal influenza.
- O. Transmission to human beings in Indiana has taken place resulting in an H5N1 virus that has been characterized as highly dangerous.
- P. The duration of the increased transmission period and resultant illnesses would likely range from six to eight weeks to up to 10 to 12 weeks.
- Q. Efforts to mitigate this from becoming an outbreak are initiated.
- R. IDHS is designated as the lead state agency for all three phases. A primary state agency (PSA-that agency coordinating for the lead state agency) and supporting state agencies (those assisting the primary state agency) are designated for each phase as well.

## Phase 3

- S. References are the Indiana State Department of Health website – [www.isdh.in.gov](http://www.isdh.in.gov) ; National Strategy for Pandemic Influenza, Implementation Plan (May 2006) <http://www.whitehouse.gov/homeland/pandemic-influenza-implementation.html> Agency specific continuity of operations plans (COOP); or [www.fluinfo.in.gov](http://www.fluinfo.in.gov) for more information.
  - T. H5N1 virus has been initiated in humans, morphs and spreads, both in the United States and worldwide, into a pandemic influenza.
  - U. The duration of the increased transmission period and resultant illnesses would likely range from six to eight weeks to up to 10 to 12 weeks, with anticipated shortages of hospital beds, ventilators, antiviral, and other necessary supplies.
  - V. Among the ill would be health care workers, first responders (fire, law enforcement, emergency medical services) and emergency support function personnel (public works, emergency management, transportation). The situation would result in significant social and economic disruption.
  - W. IDHS is designated as the lead state agency for the pan flu for all three phases. A primary state agency (PSA-that agency coordinating for the lead state agency) and supporting state agencies (those assisting the primary state agency) are designated for each phase as well.
- II. MISSION: Selected County Agencies respond to the arrival, transfer, and outbreak of pan flu in a manner that protects the health of Indiana citizens and safeguards the state's agriculture and economy.
- III. EXECUTION: Concept of Operations –
- A. (County Name) Animal Control will be designated as the lead response agency for a Phase 1 outbreak of avian/animal borne influenza. (County Name) Board of Health will be designated the lead response agency for Phase 2, with support from (County Name) Animal Control. (County Name) Board of Health will be designated as the lead response agency for a Phase 3 response.
  - B. Tasks to selected county agencies or subordinate elements –
    1. County EMAs in conjunction with the county Board of Health provide information on social distancing which refers to methods to reduce the frequency and closeness of contact between people, to include:



- a. Keep distance from those coughing or sneezing by at least three feet.
- b. Avoid meeting people face to face; use the telephone and Internet for communications as much as possible.
- c. Avoid unnecessary travel, crowded places, public transportation and crowded restaurants

And EMAs will coordinate training requirements for:

1. Assessing hazards and consequences: Recognize, identify, analyze, confirm and evaluate the immediate consequences of an incident.
2. Response functions A.2; sequence #1 through 1.5 – establish procedures for the immediate incident scene.
3. HAZWOPER 29 CFR 1910.120(q), awareness level training 229 CFR 1910.1030 (g) (2) (i) Bloodborne Pathogens; Information and Training
  - d. Written exposure control plans
  - e. Using engineering controls to isolate or remove bloodborne pathogen hazards from the workplace
  - f. Emplacing and enforcing administrative work practice controls to include hand washing, sharps disposal, lab specimen packaging, laundry handling and contaminated material cleaning.
  - g. Providing personal protective clothing and training in its usage
2. County Animal Control – ESF # 11
  - a. Phase 1 - Be prepared to coordinate and interface with state BOAH and ASERTs to perform investigative, surveillance or epidemiologic activities on suspected domestic animal populations; identify, locate, test and quarantine affected animal populations.
  - b. Phase 2 – Identify locations from which the influenza passed from avian to human. Establish contact with county Board of Health and county EOC. Provide regular status reports.
  - c. Phase 3 – Monitor.
3. County Board of Health (ISDH) – ESF # 8
  - a. Phases 1, 2 & 3 – Be prepared to employ one or more courses of action articulated in the county level public health pan flu response plan (refer to the county website for a copy of this plan).

4. Indiana Department of Environmental Management (IDEM) (County level) – ESF # 3 & 10
  - a. Phase 1 through 3 - Be prepared to address mass disposal issues of infected wild or domestic animals with the county EMA director(s). Be prepared to activate variances temporarily suspending environmental regulations (provide reg code # and other pertinent info) to expedite mass disposal.
5. County Law Enforcement – ESF # 13
  - a. Phases 1 through 3 – Be prepared to provide law enforcement support to county agencies.
  - b. Be prepared to assist county Board of Health resource distribution locations TBD.
  - c. Be prepared to support distribution of basic and essential supplies – food, water, medical supplies.
  - d. Be prepared to provide escort services for convoys carrying resources for distribution.
  - e. Be prepared to provide dignitary protection to selected members of the county government.
  - f. Be prepared to provide site security and traffic/parking control at the county governmental center and campus grounds area; provide security at the county EOC.
6. County Agents - ESF # 11
  - a. Phases 1, 2, 3 - Be prepared to provide support to BOAH
7. Office of the County Auditor
  - a. Phases 1, 2, 3 - Establish a budget account to support this OPLAN
8. School District Superintendents
  - a. Phase 2 & 3 – Be prepared to address school and school event closure issues with selected schools and districts. Be prepared to initiate distance learning procedures.
  - b. Phase 3 - Identify closed schools that can be used as mass care and staging facilities.
  - c. Be prepared to adjust dates, time and location of critical testing, e.g., ISTEP, SAT.
9. County Department of Administration – ESF 7
  - a. Phase 2 - Initiate expedited procurement procedures to identify, locate and distribute needed personal protective equipment (PPE). Establish a PPE distribution point for selected agencies.
  - b. Phase 2 & 3 – Be prepared to have selected personnel perform the following:

- c. Cleaning and disinfecting ingress/egress points at city/county government centers and other locations. Ensure adequate stockpile of disinfection agents, supplies and PPE.
  10. County Budget Agency
    - a. Phase 1 through 3 – Be prepared to support selected county agencies.
    - b. Be prepared to provide finance and administration staff to the county EOC
  11. County Chambers of Commerce, Rotary Clubs, Faith Based Organizations
    - a. Lead agencies for emergency support function (ESF) # 14 – Long-Term Community Recovery and Mitigation.
    - b. Interface with the private sector and provide feedback to the county EMA director concerning the private sector's ability to perform continuity of operations for selected critical infrastructures – water, gas, electric, and food.
  12. County Department of Personnel
    - a. Phase 1 - Be prepared to implement flex-hour scheduling and other personnel issues for state employees and selected contractors.
    - b. Other workforce-related issues need to be addressed here.
    - c. Be prepared to assist with the expedited establishment and fill of XX number of positions at no later than XX hours following this tasking.
  13. County Highway Department – ESF 1
    - a. On order personnel, resources and equipment to support this plan
  14. Intelligence
    - a. GIS – Regular support.
    - b. All incoming field observations that include location will be promptly forwarded to the GIS staff in the EOC.
    - c. The EOC GIS staff will task local agencies for data, services and subject matter expertise to maintain an updated common operating picture and to best reflect the real world situation at the incident location.
    - d. If the county's mobile incident command vehicle is mobilized, locational data will be reported to the GIS staff in that vehicle for incorporation into the common operating picture.
- C. Coordinating Instructions

1. All supporting agencies listed in this OPLAN will follow their internal standard operating procedures and respective emergency support functions in order to accomplish the mission.

#### IV. SUPPORT

##### A. Logistics

1. County EOC will coordinate support as needed.
2. Personal Protective Equipment
  - a. Phase 2 - Each county agency shall draw from their pan flu stockpile of PPE and provide the following item: individual deployment kits - N 95 masks, surgical gloves, disinfectant, and information sheets.

##### B. Finance/Administration

1. In all phases, ensure proper budget and personnel are available.

#### V. INCIDENT COMMAND

##### A. Command

1. The County EOC is located at: \_\_\_\_\_.

##### B. Signal

1. Hoosier SAFE-T

##### C. Public Information

1. Phase 1 through 3 – Until further notice, Joint Information Center (JIC) will issue a statement concerning the incident daily at XXXX hours from the JIC location which is: \_\_\_\_\_.
2. Phase 1 through 3 - JIC media conferences will be scheduled daily at XXXX hours
3. Incident website:
4. Incident email:
5. County PIO will provide TV news updates as needed.
6. Agency emergency support functions (ESFs) for OPLAN with the ESF Coordinator for each listed.
  - # 1 Transportation – County Highway Department
  - # 2 Communications – County EMA
  - # 3 Public Works and Engineering – County Public Works
  - # 4 Firefighting \_\_\_\_\_.
  - # 5 Emergency Management – EMA
  - # 6 Mass Care/Housing/Human Services – County EMA or American Red Cross
  - # 7 Resource Support – EMA

- # 8 Public Health and Medical Services – county Board of Public Health or local
- # 9 Urban search and rescue \_\_\_\_\_.
- # 10 Hazardous Materials Response – county/city fire departments or local IDEM
- # 11 Agriculture/Natural Resources – county animal control
- # 12 Energy – REMC or CINERGY
- # 13 Public Safety and Security – county sheriff/city police
- # 14 Long Term Recovery – chambers of commerce
- # 15 External Affairs – county PIO

Finally annexes spelled out specified information not covered in the OPLAN, which gave greater guidance to the concept of support. They appear in Table 4.1. The OPLAN was sent to the 92 county emergency management directors as a package, in mid-June 2006. The information contained a copy of the Indiana Historical Society's lecture explaining past spread of influenza pan flu in this state, a letter of instruction from the chief of staff of the Indiana Department of Homeland Security on what to do, a timeline, and a template for the counties to facilitate their local plan. It asked them to use the template included here.

This template blended all three phases of the pan flu OPLAN into one singular document, formatted as an OPLAN, but allowed counties to pattern their local OPLAN after the state model. It requested they meet with their respective county councils, local health departments, and all 15 emergency support functions holders at the local level to draft a local OPLAN. As an electronic template, each county needed only fill in their agency responses, and their five paragraphs of information using the same electronic template, and return it to the state by a certain date. Thus the template was a usable, "living" document that formed a common operating picture (COP) from the local level to the state agencies, telling in the same format and same language what would be done to mitigate "pandemic influenza." This, along with an aggressive public education program at the behest of the state homeland security organization and state public health staff provided extensive preparedness to the state. Coupled with the extensive strategic national stockpile program of the federal government and state implementation, it provided a good blend of government assistance to support citizens. It was now time to implement.

Through the 10 districts of the state, on June 16, 2006 everything was sent to the 92 counties, and using the template, asking them to return to the state their county plan by September 30, 2006. It was expected each county plan would include all the essential concepts of operations and support, on how each county would serve its citizens. This then was a workable and comprehensive formula. The plans at the local level included law enforcement, fire, emergency medical support, hospitals,

public health, nonprofit, faith-based community organizations, schools, institutions of higher education, and other healthcare organizations and volunteer entities.

In June 2006, Indiana's program was introduced at the Regional Interagency Steering Committee (RISC) of DHS FEMA Region V in Chicago and also discussed in there September 2007; in both instances it was warmly received. At these meetings, from the six states of DHS FEMA Region V ranging from state police, Coast Guard, postal inspectors, to state nursing organizations, emergency management personnel, public health organizations, to the defense Coordinating Element; all wanted copies of the Indiana template and ideas about the concept, what the process entailed. In April 2007 in Minneapolis, this idea was also discussed by state representatives at the National Governor's Association, Center for Best Practices, Regional Workshop on Pandemic Preparedness in the States (RISC 2006 and Governor's Association, 2007).

A number of exercises have been conducted to test these plans both at state and local levels. Ten district tabletop exercises were conducted in 2006. These exercises included first responders, schools, businesses, hospitals, faith-based community, nonprofit organizations, institutions of higher education, and other healthcare organizations/entities. Functional exercises at the county level also were conducted and those tested the strategic national stockpile delivery. A statewide tabletop exercise was conducted in October 2006 and a statewide school closure exercise was completed in February 2007. Other exercises followed to test this plan through 2008. Numerous local exercises also have been conducted along with an ongoing training and awareness program. Since implementation, local public health departments conducted 290 town hall meetings around the state and the Indiana Department of Homeland Security conducted a statewide epidemic tabletop exercise that brought all the state and local agencies together.

The real test came on April 26, 2009, when seasonal and H1N1 influenza antivirals were to be distributed through the strategic national stockpile network. Seventeen large semi-tractor trailers were used and the entire system was exercised. In one day, all appropriate PODs were filled at the right time with the right mix of medicines and people. Rated at 100 percent effective, the preparedness, response and recovery plan as developed, designed, implemented and evaluated was shown to be successful in protecting the citizens of the state. Originally accomplished in only six months and perfected in less than two years, this represented what operative planning can accomplish. Julian Huxley once wrote that there are two parts of duty, "one to ourselves...and an additional one...to others to be fulfilled in service to the community and in promoting the welfare of the generations to come." This effort met that standard (Frank 1999, p. 225).

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