

**NorthStar's Avian Flu Pandemic Plan**  
**Draft Updated May 18, 2006**

## **Executive Summary**

The anticipated and overdue “Bird Flu” or Avian Flu pandemic (H5N1) is expected to resemble characteristics of the Spanish Flu Epidemic of 1918 both in genetic structure and in severity (mortality and morbidity). It is unknown whether the virus will mutate and cross over to human to human contagiousness this year, the year after, or 5 years from now. But the expectation is that it will cross over and, in this age of world travel, once passed on from human to human, the speed of the infection will be rapid worldwide. Descriptions from “overwhelming”, “unpredictable”, and “panic filled” have all been applied to the event. Although this strain of flu has circulated among birds since 1961, it is only recently that human cases have been identified. Most cases involve bird to human passage. There have been very limited human to human exchanges.

### **I. What Characterizes Avian Pandemic Flu**

Every year, some strain of flu makes the rounds. The current strains, however, are mutations of other strains and most adults have built immunity to the essential makeup of the strain. What is different about the Avian flu is that it is virulent and of a genetic makeup not seen previously in the human flu. Thus there is no tolerance and the entire population is at risk. Furthermore, the H5N1 strain has shown to be resistant to antiviral drugs. The complications are more severe and more rapid.

Although more severe than the flu, the treatment protocols are the same. Bring the fever down (aspirin, Tylenol, tepid baths), keep the patient comfortable, breathing and hydrated. We will likely see an increase in breathing problems as lungs become inflamed and other fever inducing complications. Pneumonia and diarrhea will take their tolls as well.

### **II. What can be expected**

#### **A. Timeframes**

Preparation window estimates range from one and six months from confirmed human to human exchange to pandemic level outbreak in the United States.

Incubation can be as little as 2 days or as long as 10 days. Normally flu is contagious 1 day before symptoms and 2 days after. However, the mutation of this virus is unknown so it is expected that health officials will react cautiously and initially assume as much as a 10 day contagious period until it is determined what the time period actually is. It is assumed that as much as 50% of the population will become infected and about 25% of the population will actually become sick with half of these seeking treatment. In the Greater Franklin County area, that means about 5,000 people will seek medical attention over the 6-8 week period of the first wave. Interestingly, it will be the 25-40 year olds who will be most susceptible as there is no immunity.

## B. Effects

Onset of the symptoms will be within 12 hours of infection. The flu is characterized by aching, extremely high fevers (104+)(40 C), and higher mortality rates. The accepted “trigger point” is 38C (100.4F) with cough, sore throat or difficulty breathing.

We can expect a surge at hospitals and physician offices as people panic. Once the flu is confirmed, health officials may establish isolation and quarantine in an attempt to contain the spread. Schools and meetings will likely be suspended. Workers that are not sick will likely stay at home to care for family members who are sick. Thus essential services (food stores, fuel deliveries, gas stations, health care workers) will be in short supply. Non-essential travel may be banned. The good news is that the technological infrastructure should remain intact and computers and telephones will continue to work and be a method of communication.

In a quarantine situation, decisions will need to be made on who can pass the quarantine line, how will food and essential services be delivered to a quarantined family (remember, the isolation period may be up to 10 days – or more as the flu passes from family member to family member). Most people do not have more than a couple days of food supplies.

Health care workers that are not affected either by the flu or by caring for family members will be expected to be out in the community assisting in treatment outside of the hospital environment. The Hospital will only be used for the most acute cases. Staff will be needed to handle phones for people calling in for information and assistance.

The pandemic will last for several months as up to three waves can be expected. During the initial time period, medications will be in short supply. There is no known prophylaxis and it is unknown at this time whether Tamiflu will be effective. Illnesses will cause higher than normal mortality and thus one can expect panic among the population as funeral homes, hospitals and health facilities are quickly overwhelmed.

Because the pandemic will be widespread, all areas will need to be self sufficient as there will be no help from other states or communities like in other disasters as they will be dealing with the same effects themselves.

## III. Incident Command Structure

In a disaster, the Federal Emergency Management Agency (FEMA), in conjunction with the Maine governor’s office, will coordinate with Maine EMA (MEMA). MEMA, in turn, will communicate and coordinate through the County EMA office (Tim Hardy) who will coordinate services (police, fire, EMS) in Franklin County. And he will be coordinating with other county EMA offices as well. NorthStar’s director will be directly responsible for NorthStar’s activities during this time but will take his lead from the needs of the NorthStar staff, the community, FMH and EMA.

The Health Alert Network (HAN) communications from the Maine Bureau of Health will likely be the first indication that the pandemic has entered this country and will track its progress, probably starting in the high population and travel hubs of New York, Boston, Philadelphia, and Atlanta on the east coast. FMH surveillance will be vigilant and communication continuous. And the media can be depended on to sensationalize the issue!

#### **IV. Action Plans**

##### **PrePandemic (Maine “Pre Alert” stage)**

- ◆ Begin to stockpile items expected to be in short supply (surgical masks, gloves, gowns, oxygen masks, IV catheters, disinfectants, isolation kits, tissues, basins, Tylenol, etc).
- ◆ Stockpiles will be placed throughout the 5 bases.

##### **Maine Levels I, II and III - “Alert” Stage through “Pandemic in US” Stage**

- ◆ Business as usual
- ◆ Monitor situation for status changes
- ◆ Diligence in practicing personal/hand hygiene
- ◆ Be aware of treating people who exhibit signs of flu and immediately take precautions
- ◆ Stockpile appropriate goods, medical supplies, food and water for your family
- ◆ Assure that all employee telephone lists are updated/current
- ◆ Staff should arrange for alternate day care for children as schools and other centers may be closed
- ◆ Make sure that Dispatch has training on how to discourage transports unless truly needed.

##### **Maine Level IV – “Local Outbreaks” Stage**

- ◆ Business as usual just a lot busier and more intense
- ◆ Keep spirits up, get sleep when you can
- ◆ Make sure every staff members knows what is in the FMH Pandemic Plan (currently posted on [www.mainebirdflu.org](http://www.mainebirdflu.org))
- ◆ Know that there is EAP/mental health assistance available
- ◆ Identify supply issues long before they become critical
- ◆ Licensing protocols may be suspended or modified by State officials. Flexibility will be required with appropriate attention to legalities and protocols
- ◆ Fuel should be obtained from local commercial retailers wherever possible. If fuel is not available and school is not in session, NorthStar will have an agreement with the local SADs to use their fuel supplies as needed.
- ◆ NorthStar staff may be called upon to make home visits for recent discharges as the hospital will need to discharge a quickly as possible during surge periods
- ◆ EMTs may be asked to handle roles not normally done (both clinically and administratively) and will need to be flexible and responsive. (EMTs may also be called upon to help with phone work at FMH, assist visiting nurses, assist at quarantined facilities (such as dormitories), deliver food and other essentials to isolated patients, deliver medications to other facilities and homes.)

- ◆ Frequent information updates will be shown on the “Director’s Updates” page on [www.fchn.org/NorthStar](http://www.fchn.org/NorthStar) (or, if necessary, a page devoted to the flu). Stay alert to changes in information.
- ◆ Normal and stringent hygiene will be required. Hands will be washed frequently and when soap and water is not available, hand disinfectants will be used.
- ◆ EMS staff will be among the first to get vaccinated when vaccines become available. Make sure that all staff takes advantage of this opportunity.
- ◆ To protect the EMTs, masks (surgical type), gloves, and gowns will be worn for all patient contacts even slightly suspected of having the flu during this period.
- ◆ Trucks will be regularly disinfected
- ◆ Make sure that linens are regularly returned for washing to keep cycling them through the system
- ◆ Staffing during outbreak. The following series will be followed during reducing circumstances:
  - ◆ Keep current ambulance schedules and crews at all bases, then...
  - ◆ Staff with lower levels (e.g. 2 EMTs), then...
  - ◆ Staff with EMT + driver (drivers from fire companies, first responders, former EMS staff in area). Drivers may also come from the ranks of SAD58 and SAD9 bus drivers, then...
  - ◆ Begin to inactivate bases – consolidate staffing resources (even if requiring longer distances)
  - ◆ Staff will be required to go to base where needed
  - ◆ Mandatory overtime
  - ◆ Mutual aid calls to United, MedCare, AMS, Winthrop for staff and/or backup
- ◆ Staff must make a personal decision as to ability to work appreciating that the workforce will be compromised and EMTs will be the first line of defense for many people. But also appreciating that care of one’s family may take precedence. And having respect for possibly infecting co-workers and patients. Such decisions will not be easy.
- ◆ Farmington Base employees **MUST** go through screening at the hospital at the beginning of each shift. The other four bases must screen coworkers. Screening procedures are in the FMH plan.
- ◆ Scene triage
  - ◆ Normal MEMS protocols (unless changed by emergency order)
  - ◆ Discourage transport – encourage refusals for patients with caregivers and supplies available – most can be treated at home with Tylenol, hydration)
  - ◆ Give out brochure on flu with instructions for taking care of oneself. Give out masks, encourage hygiene
  - ◆ When necessary, contact OLMC for permission to refuse transport
  - ◆ If someone really wants to go to the hospital, encourage private vehicle transport
  - ◆ Transport only if last resort (this saves linens, time and materials disinfecting truck, time out of service, saves space at FMH for the most critical cases)

### **Post Pandemic**

- ◆ Critique
- ◆ Catch up on run sheets and sleep