

Gould Academy Pandemic Plan
Status report
Harry H. Dresser, Jr., Ed.D.
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All reporting authorities state clearly that acting as a pandemic unfolds is most effective if done in consort with regional organizations. Maine is beginning to seriously consider trigger events and responses to an emerging pandemic; its *Pandemic Influenza Plan* is helpful to those thinking about how their groups should respond to rising levels of threat. Oxford County has no pandemic plan to date, and talks with officials there leave one suspecting a plan is not imminent.

The case

The H5N1 virus, already widespread in Asia, is spreading rapidly across Europe in March 2006 in populations of migrating swans. Recently it was discovered on the African continent and its arrival on the North American continent during the summer of 2006 is widely predicted. It is hard to imagine the virus won't be globally distributed in the foreseeable future. That said, the virus as yet has demonstrated little efficiency moving from bird to human populations and even less efficiency moving from human to human. As of spring 2006, fewer than two hundred human cases have been documented as opposed to millions of cases of infection in bird populations. Of those two hundred human cases fewer than one hundred have resulted in death.

While it is clear to all that regional response is likely to be much more meaningful than any local or institutional responses, it is important that our institution have some preconsidered plans of action. Surely this plan will be a dynamic document changing continually as regional planning advances and our place in that regional plan becomes clearer.

The current situation

Gould Academy is currently responsibly meeting its obligation to be as well prepared as it can be in this time of Level I (Phase 3) influenza conditions by

- understanding the nature of the risk of pandemic influenza;
- monitoring risk levels as provided by the World Health Organization through the Maine Department of Health and Human Service; and,
- creating a pandemic plan within the school to include health, economic, and educational components, and trigger events and trigger-related decisions.

Health considerations

present situation definition

The World Health Organization places the world in a Level I (Phase 3) condition relative to H5N1. In the five level, six phase influenza rating system, this condition is one in which there have been human infections with a new viral subtype, but no human-to-human spread, or, at most, rare instances of human-to-human spread through close contact.

impending situations

The next two phases of influenza development indicate gradual increases in the virus's success in human-to-human transmission; phase 6 represents the pandemic during which there is increased and sustained transmission of the virus in the general population.

Predictions of infection penetration rates, hospitalizations, consumption of medical resources, morbidity rates, and the like, are widely available today, but all have such high margins of error as to be largely speculative.

State agency activity will begin to be noticeable to local groups and individuals as the WHO description of influenza development reaches Level III (Phase 5). "Larger clusters [of infection] but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible."

WHO/Maine DHHS placement of the environment at this level should certainly trigger preplanned decision-making at Gould Academy. It is anticipated that there will be one to six months between pandemic imminent declaration and pandemic conditions for our region.

responses

- anticipate scarce medical services, materials;
- notify parents/students of stage of alert and intended responses;
- vaccinate as possible; highest risk first;
- check availability of antivirals and administer as and where appropriate;
- ensure health care providers and procedures/facilities understood on-line;
- make quarantine in place, isolate and evacuate decision using pre-established guidelines (quarantine could be mandated by the Bureau of Health legally), could be asked to serve as regional center given our rooms and

feeding capability.

Educational considerations

In anticipation of pandemic conditions, Gould Academy should take two educational actions:

- position itself with student/parent contracts so that calendars can be rearranged without financial consequence to the school; and ,
- develop a core distance learning system and expertise that allows the school to carry on with students dispersed. Gould currently has the URL www.cyberacademy.org and some preliminary distance learning material there from the distance learning experiments Dutch and Nikki conducted six or seven years ago. *Moodle*, a widely used on-line teaching/learning tool is currently available on the Gould system as well.

The projections of influenza infection density created by Los Alamos Epidemic Simulations show our region of the country adversely effected by infection for 30 – 60 days beginning 120 – 150 days after virus entry, presumably on the West Coast.

Economic considerations

The school would likely be exposed to a number of years of population rebuilding as old connections with US and international students are re-established and new connections made where old ones are lost.

- anticipate deficit budgets for several years once post-pandemic conditions are established;
- position school with student/parent contracts so that calendars can be rearranged without financial consequence;
- begin immediate planning about re-establishment or replacement of Asian student population. Currently Asian students account for >20% of annual tuition income. It is likely that existing connections to those students would be disrupted or lost in the event of an influenza pandemic arising in Asia;
- anticipate protracted critical personnel absences or losses and plan for job redundancy

Immediate actions

Gould Academy personnel might well continue to try to catalyze regional planning through Sally Farrand (621-0677) who is with Maine Primary Care Association, the parent organization of the Bethel Family Health Center. When that planning begins it should involve a committee of people from Gould Academy, including health services, facilities, and business people at a minimum.

To give the school some immediate response options should the threat level increase before such planning has reached useful ends, I offer a series of trigger events and recommended responses to those events for your consideration.

Trigger events and scenarios

Below are trigger events that might well provoke response from us and some response scenarios to be considered. I would suggest that these proposals be considered, edited, and sequenced by an upper level administrative/board team at the school, and adopted as initial operating policy in the near future. Immediate implementation efforts should include the production of a plan and its dissemination to parents so they will know what to expect from Gould Academy in the face of growing possibility of global pandemic.

Trigger event condition designations are for internal use only and refer solely to the scenarios that follow. The World Health Organization maintains a phase/stage analysis of the world situation relative to an impending pandemic. The table used is reproduced below. The WHO and the US CDC currently place the world at stage 3 in this rubric. I have included WHO phase/stage categorizations with the trigger events listed, but the trigger events list is more specific than the six stage WHO table.

WHO Table of influenza risk

Phase	Attributes	Stage
Pandemic interphase	Low risk of human cases	1
New animal virus, no human cases	Higher risk of human cases	2
Pandemic alert	No, or very limited, human to human transmission	3
New virus causes human cases	Evidence of increased human to human transmission	4

Phase	Attributes	Stage
Pandemic	Evidence of significant human to human transmission	5
	Efficient and sustained human to human transmission	6

Gould Academy table of trigger events

<i>Local condition</i>	<i>WHO/DCD</i>	<i>Explanation</i>
condition a	WHO Stage 2	there is widespread belief that a pandemic is conceivable in the foreseeable future
condition b	WHO Stage 3	H5N1, or some other widespread, virulent pathogen, becomes substrate to human transmissible
condition c1	WHO Stage 4	H5N1, or some other widespread, virulent pathogen, becomes human to human transmissible
condition c2	WHO Stage 5	a virulent pathogen begins to infect noteworthy populations outside the US
condition c3	WHO Stage 4,5	the WHO or the CDC issues warnings about impending widespread infections in the US
condition d1	WHO Stage 5.6	a virulent pathogen begins to infect any US populations
condition d1	WHO Stage 6	a virulent pathogen begins to infect significant US populations
condition d2	WHO Stage 6	a virulent pathogen begins to infect any Northeastern populations
condition d3	WHO Stage 6	a virulent pathogen begins to infect significant Northeastern populations
condition d3	WHO Stage 6	pandemic conditions exist in the US
condition d3	WHO Stage 6	pandemic conditions exist in the Northeast
condition e		WHO/Maine DHHS announce post-pandemic conditions

Response scenarios

These are provided as bases for discussion among members of Gould Academy's upper administration and Board. **It is fundamentally important that key Gould Academy personnel remain in close contact with regional pandemic response planning efforts and catalyze those efforts should they not arise spontaneously in the near future.**

- (condition a) It is now commonly believed the conditions exist for the emergence of the planet's next influenza pandemic arising from the H5N1 avian flu virus. H5N1 is now prevalent throughout Asia and in much of Europe in both wild and domestic bird populations and has recently appeared in Cameroon. This would be the first influenza pandemic in nearly forty years; statistically, the world experiences three per century.

Gould Academy should adopt and disseminate to all of its constituent populations a pandemic plan outlining those steps it anticipates taking in response to various pathogenic and governing and health agency triggers. Contracts with students and teachers should be altered with the addition of a Force Majeure paragraph that permits spontaneous reconfiguration of the academic and contractual years to allow for a hiatus.

- (condition b) To date H5N1 has shown very limited ability to pass from the avian to the human population. Only in instances of very close physical contact has the virus crossed the species boundary.

Should a mutant of the H5N1 strain show increased efficiency in passing the avian/human boundary, Gould Academy should remind its constituents of the existing pandemic policy and should publish any changes in plan that have emerged between original notification and time of the recognized mutation.

- (conditions c2, c3) Infection of significant populations of humans outside the US of H5N1, or any other widespread, virulent pathogen, will likely signal the imminence of an impending worldwide pandemic and will surely trigger published raises in risk status by the WHO and CDC.

This is major decision time for the school. If the school and region have escaped infection, I recommend that the school shut down for an indeterminate period sending all students home and making school facilities available for the regional health care needs that are likely to arise.

The risk in not moving smartly at this time is that infection in one of the dormitories will result in the need to quarantine and obligation on the part of the school to care for sick students, probably with faculty and health services populations diminished by illness.

- (conditions d1, d2, d3) The existence of pandemic conditions in the US will create an untenable position for Gould Academy if it hasn't already acted.

The Academy will be faced with rising illness rates, increased need to quarantine or isolate, overwhelmed health care services, anxious parents, and, possibly, failing communications and transportations systems. Should the school still have its students in place when pandemic conditions emerge it will likely be forced to take significant responsibility for many ill people and make many difficult ethical decision on an ad hoc basis. This situation should be avoided.

- (condition e) As the prevalence of flu infection subsides, the WHO and CDC will declare an end to the pandemic. This is likely to occur four to six months after the outbreak of the pandemic in the US.

When pandemic conditions have subsided, Gould Academy should increase the level of communication between the school and its enrolled student population to understand the health of the population. When faculty and students populations have enough healthy members, school should resume with the missed time to be covered in full, or abbreviated, fashion upon resumption.

Future planning

This document is preliminary, somewhat generalizable, and should be dynamic. With that in mind, Gould should be in touch with regional officials and entities to either become aware of developing cooperative efforts or to catalyze such efforts. They are clearly important. In my exploration, Sally Farrand at the Maine Primary Care Association (621-0677) seemed to be the best connected, best informed, and most anxious to be helpful. Communication with her should begin immediately. She is willing to work with our region, through their affiliation with the Bethel Health Center, if we find that regional activity is wanting. It is.

Steven Trockman (662-5142) at the Southern Maine Regional Resource Center at Maine Medical Center has been interested in our process, and has provided the small book *Jane's School Safety Handbook*, which I pass along with this report. Steve is part of the planning activity among emergency service providers in the Portland area. Despite the state of planning for a pandemic, Steve was unaware of any residential schools with plans in place, even with colleges considered.

We are a member of the Central Maine Regional Resource Center at Central Maine Medical Center. Repeated efforts to reach them have gone unanswered. I have spoken with Bethel town officials and with Scott Parker, who handles emergency management for Oxford County. There was vague awareness of the risk in both places on both fronts, but no immediate plans, or plans for planning.

This leaves us exploring as we can what other schools might have done as we develop our own plans beyond what is offered here.

It seems clear that once a pandemic is in full bloom, support services outside the school will be in short supply. Hospitals are expected to be full to overflowing, emergency responders overwhelmed, and anti-virals available only for the most threatened categories of patients.

I think our plan ought to focus on what we do when/if it becomes evident that pandemic conditions are likely. Early communication with necessary constituents about our intentions will be imperative, as it's conceivable that communications will be disrupted as critical personnel become sick across the land.

Categories for study and action

I recommend that the following topics receive study as you continue to evolve this plan:

- Communication: timeline, substance of planned releases, and responsibility for them;
- Distance education: this could be a good solution to keep students going while they're away and some 'Net savvy teachers are well. Moodle is installed locally and is available.
- Schedule scenarios: create some schedule scenarios so that doesn't have to be done while in the throes of a mounting pandemic
- Responsibility for plan modification and implementation: develop scenarios assuming various key people are unable to participate in decision-making
- Share general health information with constituents as permissible.

Summary

The current concern over H5N1 could well go the way of Y2K fears, but the organizational gains associated with planning for a pandemic could be significant. While this plan provides initial recommendations for facing a pandemic, the recommendations are somewhat generalizable for other catastrophic circumstances. If time and human resources permit, purposefully making the plan generalizable as it develops would give it greater usefulness.

Respectfully submitted,

“Dutch” Dresser

Appendices

Appendix A, *Frequently Asked Questions about Pandemic Influenza*, PandemicFlu.gov

Appendix B, *WHO checklist for influenza pandemic preparedness planning*, World Health Organization, Department of Communicable Diseases

Appendix C, *Responding to the avian influenza pandemic threat*, World Health Organization, Department of Communicable Diseases

Appendix D, *Maine Pandemic Influenza Plan*, State of Maine, Department of Health and Human Services

Appendix E, *HHS Pandemic Influenza Plan*, US Dept of Health and Human Services

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