

APPENDIX P
PANDEMIC PLANNING

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Executive Summary

The following plan should be read in the context of the University's broader Emergency Response Plan. A pandemic is simply one of a possible range of emergencies for which the University must be prepared. However, a pandemic brings with it unique challenges, in that it will not be of short duration, but will occur over an extended period of time, and potentially in more than one wave. Given the concerns raised by health officials around that world that a pandemic is likely, all major institutions as well as countries and municipalities are being asked to prepare specific pandemic plans. This report identifies for the university issues of primary concern and those units that perform essential functions.

The report identifies the characteristics of a pandemic and the unique challenges it presents. The report identifies actions that need to be taken up to the most extreme of pandemics – very contagious with a high mortality rate. However, the pandemic may also present as a contagious influenza with limited serious health consequences. In this instance, not all of the actions identified in this report will need to be implemented.

Pandemic Influenza: An influenza is a common and highly contagious viral respiratory illness which presents with acute onset of fever, cough and one or more of the following: sore throat, fatigue, and sore joints. Influenza epidemics occur in our community almost every year, usually in the winter. A pandemic is declared when a new strain of influenza virus appears in which people have little or no immunity and there is no immediate vaccine. It spreads over a large area, crossing international boundaries and usually affects a large number of people. It will cause serious clinical illness or death, but the percentage of the population affected seriously could be very small or large dependant upon the nature of the strain.

Challenges: Challenges unique to a pandemic include: 1) high absenteeism (over the course of a moderate pandemic, 15 – 30% of the population may become ill; 2) the cyclical nature of a pandemic (e.g., not a single occurrence and each occurrence lasting up to eight weeks); 3) Close involvement and co-ordination with the city response team and public health; and, 4) possible supply chain disruption; and communication (many different health units as well as other bodies will be communicating making consistent messages difficult).

Authority: As in any emergency, the Campus Control Group (CCG) has full decision making authority and responsibility. However, in a pandemic, the City or our Public Health unit may assume responsibility over the CCG. The University Emergency Plan identifies the authority of the CCG.

Looking After Those Affected: As a residentially intensive university, plans must be developed to support those students who are affected, both medically and personally. In addition, our faculty and staff must also be provided with support, where appropriate, both those who are working as well as those who are home.

Department Plans: The report identifies the essential functions of the University. All departments identified in this plan as performing essential functions will develop individual plans to ensure they meet these commitments.

OBJECTIVE

The objective of this plan is to direct the members of the University of Guelph Community to respond effectively in the event of an influenza pandemic. The University of Guelph will take steps necessary to strengthen influenza pandemic preparedness; minimize the risk of transmission in order to contain or reduce the spread of the virus; communicate clearly the status of cases on campus and action being taken by the University; and, to minimize the impact of the pandemic on the University of Guelph community. The main goal of this plan is to minimize illness during an influenza pandemic and limit the impact on the University's ability to achieve its mission of research and teaching. The goals of the Pandemic Plan for the University of Guelph are consistent with the Provincial and Wellington-Dufferin-Guelph Public Health's goals

DEFINITION OF A PANDEMIC

Pandemic Influenza

A pandemic is declared when a new strain of influenza appears in which people have little or no immunity and this is no immediate vaccine. In contrast to the pattern of spread for some infectious diseases, the appearance of a pandemic may be abrupt and the spread rapid. In addition, the influenza will work in waves rather than one incident that dissipates. Except for very early index cases, quarantine will not provide adequate isolation or prevent the spread of the virus. It is unknown how much advance warning there will be, how long the pandemic will last, how many cycles of illness will occur, the age group that will be affected, or what percentage of those who become ill will be seriously affected.

The table below shows the phases of a pandemic as determined by the World Health Organization (WHO). The University will most likely become more active in its education and containment programs at level 5, and engaged in more detailed planning and response at level 5 or 6. It must be recognized that a level 6 pandemic could be called and the immediate danger to the Guelph community relatively minimal. Therefore, decisions must be made based on the location, severity, and spread of the pandemic.

Table 2. 1. Phases of a Pandemic¹

New Phases	Overarching Public Health Goals	University of Guelph Goals
<p><u>Interpandemic period</u></p> <p><i>Phase 1.</i> no viruses circulating among animals have been reported to cause infections in humans.</p> <p><i>Phase 2.</i> an animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans.</p>	<p>Strengthen influenza pandemic preparedness at the global, regional, national and If present in animals, the subnational levels.</p> <p>Minimize the risk of transmission to humans; detect and report such transmission rapidly if it occurs.</p>	<p>Normal Business Operations; Regular Self-Care campaigns; Reminder re: Basic Infection Control (e.g., handwashing); Normal Flu Clinics</p>
<p><u>Pandemic alert period</u></p> <p><i>Phase 3.</i> an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks</p> <p><i>Phase 4.</i> human-to-human transmission of an animal or human-animal influenza reassortant virus able to cause “community-level outbreaks</p> <p><i>Phase 5.</i> human-to-human spread of the virus into at least two countries in one WHO region</p>	<p>Ensure rapid characterization of the new virus subtype and early detection, notification and response to additional cases.</p> <p>Contain the new virus within limited foci or delay spread to gain time to implement preparedness measures, including vaccine development.</p> <p>Maximize efforts to contain or delay spread, to possibly avert a pandemic, and to gain time to implement pandemic response measures.</p>	<p>Normal Business Operations Student Health Services will receive updates from Wellington-Dufferin-Guelph Public Health Unit of any pertinent information or warnings received.</p> <p>Increase self-care campaigns re: hand washing, proper coughing/sneezing protocol; Campus Control Group (CCG) may be assembled (Refer to Appendix A.3 Emergency Management Responsibilities)</p>
<p><u>Pandemic period</u></p> <p><i>Phase 6.</i> Pandemic: community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5.</p>	<p>Minimize the impact of the pandemic.</p>	<p>Assemble Campus Control Group (CCG) to assess the situation and make decisions as appropriate; Increase communications; enhance communication with Wellington-Dufferin- Guelph Health Unit</p>
<p><u>Post Pandemic Period</u></p> <p>pandemic activity appears to be decreasing; however, it is uncertain if additional waves will occur and countries will need to be prepared for a second wave.</p>		

CHALLENGES DURING A PANDEMIC

¹ The role of WHO and recommendations for national measures before and during pandemics
http://www.who.int/csr/resources/publications/influenza/GIP_2005_5Eweb.pdf

Challenges to the Broader Community

Employee Absenteeism

The epidemiological characteristics of the pandemic strain will be similar to seasonal influenza with respect to incubation period, period of communicability and mode of transmission. Health Canada estimates that 15% to 35% of the population will become ill during the course of a pandemic and will be unable to work for a period of time (a minimum of half a day). Individuals may experience symptoms from mild to severe. Many people who are not ill may stay home to care for children, other family members, or friends who are ill. As well, some people may stay home due to concerns or fears about potential exposure to influenza in the workplace. The resulting high rates of employee absenteeism will affect every sector and every part of the City. Individuals who recover from illness with the pandemic strain will be considered immune to that strain.

A vaccine for pandemic influenza will not be available for four to six months following the identification of the pandemic virus and will not be available for the first and possibly the second wave. Once a vaccine is available it will initially be in short supply and high demand. Antiviral medications which are used for treatment and prevention of seasonal influenza will be in limited supplies.

Communication

Regular mediums of communication may be affected due to absenteeism and increased demand.

Supply Chain Disruption

High absenteeism will likely affect the delivery of services and goods, nationally and internationally, as transportation and manufacturing staff will be ill. The pandemic will affect countries around the world, with some regions hit earlier, longer, and harder than others. If border crossings or transportation systems are disrupted, the delivery of supplies may be delayed. It is anticipated that a pandemic will result in interruption of services and a shortage of supplies and fuel. Identifying contingency plans for sustaining basic functions in case of loss of telecommunications, utilities, and IT capability needs to be included.

Social Issues

The psychological impact on the public will likely be significant.

Public Health Measures

Public health measures are non-medical interventions that may be imposed by provincial or local Public Health Care Officials to reduce the spread of the influenza virus in the community. These measures may include public education, case and contact management, and community-based disease control measures such as cancellation of public gatherings (e.g., conferences, classes or sporting events) or closure of schools and day nurseries. In addition, the federal government may issue travel restrictions and screening of travelers.

The Provincial Chief Medical Officer of Health will make specific recommendations about the measures recommended for use province wide. This will help to ensure that the types of public health measures implemented across Ontario are consistent.

Changes in Demand for and Access to Services

During an influenza pandemic, the people of Guelph may be demanding in greater numbers access to information and City services that could help reduce the impacts of the pandemic on their health (e.g. emergency services, public health services, and clean water) and daily activities (e.g., public transit). However, the services may actually be limited.

Challenges to the University of Guelph

The University of Guelph will face a number of significant challenges as a result of the widespread pandemic that will affect business continuity and the health and safety of students, staff and faculty. The University will focus on the following areas to reduce and/or overcome the challenges caused by the pandemic.

Employee Absenteeism

High absenteeism will present challenges to campus leadership and delivery of services as human resources will be strained in all aspects of the operations. In some sectors (eg Student Housing Services) there is high reliance on students to provide support to other students. In such an environment the challenge will be that these students live directly with the population they service and will be experiencing the outbreak at the same time. Strategies to manage staffing shortages including canceling non-critical activities will need to be developed. Procedures will need to be established to allow for the redeployment of staff from non-urgent activities to essential services, or drawing on additional workers such as recent retirees, students, or volunteers.

Residential Intensive University

Given the highly residential nature of the U of G campus, social distancing and interaction will be a factor due to the density and relative youth and inexperience of the population in managing their own health and the perceived need to attend class and other functions.

Compliance

While the University may recommend that members of the community who are ill stay home, compliance is likely to be an issue. This is particularly true for students with exams or labs or seminars.

Communication

Communication will be critical to an effective response to the pandemic. The University of Guelph will have to plan to ensure accurate and effective communication to students, staff, faculty and visitors. Strategies should also be developed for communicating with parents, alumni and community stakeholders about changes to, or disruptions in, services.

Education and Training

Education and training sessions will need to be developed and provided to staff, faculty and students regarding emergency and service continuity plans, so they will know their roles and responsibilities. Staff, faculty and students should also be oriented in infection control precautions and, where applicable, the proper use of personal protective equipment (*Refer to Appendices 4 & 5*).

Supply Chain Disruption

Supply chains may be interrupted. The pandemic will affect countries around the world, with some regions hit earlier, longer, and harder than others. If border crossings or transportation systems are disrupted, the delivery of supplies may be delayed. Planning is required to ensure that critical supplies are determined and stockpiled (six to eight weeks), alternate suppliers are identified. In addition, there needs to be an adequate supply of disposable tissues, hand sanitizers and hand-washing supplies.

Service Continuity Plan

The University of Guelph will need a plan to reduce the negative impact of the pandemic on its operations and to ensure continuation of services wherever possible. The University must also prepare for the specific disruptions that could be faced during a pandemic and develop a business continuity plan. Service continuity planning includes:

1. Service impact analysis
2. Service continuity plan
3. Readiness procedures
4. Quality assurance

PLANNING AND PREPAREDNESS

Authority and Control

The many complex decisions that will be made during a pandemic must be co-ordinated and carefully managed. If the situation moves to phase 5, the University may assemble the Campus Control Group (CCG) which will have overall authority in this regard. If the situation moves to phase 6, the University will assemble the CCG. Actions taken by the CCG will depend upon the location and severity of the outbreak, and advice from Public Health. See Appendix 6.

The Campus Control Group

The University's response to a pandemic will be directed and controlled by the Campus Control Group (CCG) expanded to include the Director of Student Health Services and the Manager of Occupational Health and Wellness. Additional personnel may be called or added to the CCG including:

- Community Emergency Management Coordinator – City of Guelph;
- Guelph City Police Representative
- Public Health Representative

All members of the CCG will identify to ensure continuity in the event of member illness. If an outbreak appears imminent on campus, planning should occur to have as many meetings by conference call, to avoid close contact.

The CCG will determine the decision making structure including incident command, accountability and legal and ethical issues. The CCG will work closely with representatives of the major stakeholder groups on campus (employee and student groups) as communication and consistent messaging will be very important.

The members of the Campus Control Group (CCG) will follow the guidelines for an emergency crisis response. However it must also consider additional issues unique to a pandemic including:

- Confirming that a pandemic is potentially going to impact campus and declaring that the CCG is assuming responsibility for the coordinated response
- Ensuring that actions taken to mitigate impact of the pandemic are not contrary to law
- Identifying protocols for using volunteers to perform critical functions
- Authorizing and coordinating the evacuation and/or quarantine of part, or all, of the University
- Notifying, assistance from and/or liaison with various levels of government and any university or public agencies, as considered necessary
- Confirming that the pandemic, within the University jurisdiction is over and noting that the CCG is relinquishing its responsibility

Emergency Operating Committee

The CCG will establish the Emergency Operating Committee and the Operations Manager will act as the liaison between the two. The Group will normally meet by conference call to prevent transmission of the illness to the group.

Role of Wellington-Dufferin-Guelph Public Health During a Pandemic

Wellington-Dufferin-Guelph Public Health takes the lead in developing a local pandemic influenza plan for the City of Guelph. Although local planning is critical, many decisions made at the federal or provincial levels must be followed locally, such as establishing who has priority in receiving vaccination once a pandemic vaccine becomes available.

The specific Wellington-Dufferin-Guelph Public Health roles during a pandemic influenza emergency response will include:

- Disease surveillance and reporting
- Case investigation and management
- Identification and follow-up of close contacts
- Health risk assessment and communications
- Liaison with the hospitals and other agencies
- Community-based disease control strategies
- Vaccine and antiviral medication administration and distribution

ROLE OF THE UNIVERSITY OF GUELPH DURING A PANDEMIC

The University of Guelph has two primary functions that it must consider during a pandemic:

1. the health and safety of its students, staff and faculty.
2. business continuity

1. HEALTH AND SAFETY OF THE UNIVERSITY COMMUNITY

There are three components to caring for our university community: 1) education to minimize the number who become ill; 2) containment of the influenza once on campus; and 3) caring for those affected.

Education and Training

In order to be proactive, education and training regarding Pandemic Planning is paramount to the success of the University of Guelph minimizing the impact of a pandemic on the community.

Student Health Services and Occupational Health and Wellness will need to assemble and distribute information to increase awareness of pandemic influenza and other infectious diseases. Materials will be shared freely with all members of the campus community using a variety of media tools including: Internet Websites, emails, contests, posters and presentations. All groups should be advised early on in the process to purchase a Survival Kit for home (Appendix 5).

Containment and Infection Control

1. Training

All personnel who come in contact with significant numbers of individuals (work-term students, receptionists, secretaries, administrative staff, nurses and physicians), Fire Prevention, members of First Response Team (FRT), and student volunteers will need to be trained in infection control procedures, the use of protective equipment, biological waste disposal procedures and the U of G pandemic plan.

2. Cleaning Workplaces

People with influenza may contaminate their surroundings with respiratory secretions from their nose and mouth. During an outbreak on campus, surfaces that are touched frequently by people (e.g., door knobs, computer terminals, bathroom faucets or other shared equipment) should be cleaned more often than usual during a pandemic, if possible.

3. Social Distancing

During a pandemic social distancing (reducing or avoiding contact with other people) should be practiced as much as possible. Generally it is recommended that individuals be 2 meters apart, where possible.

4. Infection Control Supplies and Estimating Requirements

The use of masks and N95 respirators during a pandemic is determined based on a risk assessment of the level of care one would provide to a person exhibiting influenza-like symptoms or the frequency of necessary and unavoidable face-to-face interactions between two individuals. According to the Canadian Pandemic Influenza Plan, there is no evidence that the use of masks in public will protect an individual from infection when the influenza virus is circulating widely in the community. The use of respirators/masks or any other form of personal protective equipment is always considered the last line of defense used only when other hazard control options have been evaluated. Once a pandemic influenza virus is circulating widely, masks will have little impact on the risk of infection in the community as the number of potential sources of infection

and exposure circumstances will be too numerous. N95 respirators/masks are most beneficial when used to protect an individual during a specific exposure situation such as a health care worker caring for an individual possibly infected with influenza. Departments providing essential functions will work with the Environmental Health and Safety Department to determine the need for masks and/or respirators. The University will work closely with Public Health when making these decisions. The University will need to have sufficient supplies for those individuals who are performing essential services.

5. Vaccination and Antiviral Drugs

Canada has trivalent influenza vaccine available and uses approximately 10 million doses a year.² In the event of a Pandemic, Public Health will be responsible for the distribution of the vaccine on a priority basis.

Information on Containment is found in Appendix 3, and Infection Control in Appendix 4

Caring for Affected Members of the Community

University of Guelph Students

Students will be of primary concern to the University. Unlike faculty and staff, most students do not have family in the city or a family doctor. With approximately 18,000 registered students, and over 5,000 students in residence, student safety will be a primary issue. Reducing the number of students on campus during an epidemic is the most advantageous option so the first preference is to send them home. This assumes that classes are cancelled. If not, or “if many students fall ill, the institution would be expected to provide the resources and care for those students throughout the pandemic...”³

It is assumed that in the event of pandemic influenza some students will return home to rejoin their families. Many factors will contribute to the decision to leave campus including: whether classes are cancelled; number of sick students on campus, perceived risk of infection, nature of living arrangement (residence, off campus, living alone or with roommates), loss of academic courses or year, lack of available campus services, family situation, distance from home, ability to travel, ability to cross borders, to name but a few.

Student Health Services:

There will be many ill students that will require the support of Student Health Services. Numerous issues need to be addressed:

1. A clinic schedule needs to be developed based on 24/7 operations to determine staffing needs.

² Canadian Pandemic Influenza Plan, February 2004

³ American College Health Association Guidelines, Guidelines for Pandemic Planning, July 1, 2006

2. Develop a protocol for transport of students to the hospital if 911 if traditional methods are not available.
3. Develop a plan for setting up an infirmary and expanding clinical space, including identification of alternate locations and equipment and supply and staffing needs.
4. Develop a contingency plan for managing health care needs in the event that human resources and supplies are exhausted.
5. If unable to provide infirmary care due to limited resources, identify community resources that students could access.
6. Develop a communication plan to give ill students directions about access services.
7. Develop a protocol for monitoring cases residing on and off campus apartments/residences.
8. Develop a protocol for care of the deceased that addresses storage until transfer and notification of the family.
9. Develop a plan for conducting mass immunization clinics.

Student Housing Services

Students with mild flu symptoms will be advised to return home and to remain home until the period of communicability has elapsed. For students with roommates, returning home will create problems both real and perceived. Because of the close contact with roommates, it is reasonable to assume an increased risk of infection exposure despite all practical protective measures. However, because the period of communicability can predate the first appearance of symptoms, it is possible that roommates will have already been infected. In the atmosphere of anxiety surrounding an influenza pandemic it is unlikely that the logic of the preceding statement will be recognized let alone acted on. It may be necessary to relocate some if not all, students with symptoms during the period of communicability. One possible approach would be setting aside residence blocks for students who are ill and unable to return home. However, this will require moving healthy students to other areas.

Numerous challenges exist for residence staff in supporting ill students. Such challenges include infection control, housekeeping, food distribution, isolation and cleaning of eating utensils, periodic checks on sick students, medical assessment, controlling anxiety levels of other students and staff and coping with reduced staff numbers.

Significant planning needs to occur for residence students:

1. Identify rooms and buildings that could be used for quarantine, isolation, and residence for students who cannot go home. Public health authorities may suggest utilizing residential space that does not have a centralized ventilation system to avoid spread of aerosolized pathogens. Residential space with self-contained heating and cooling in individual rooms or suites may be more desirable settings in which to isolate or quarantine persons (Refer to Appendix 3. *Containment*).

2. Develop a procedure for closure and evacuation of campus residence halls and houses in use.
3. Develop a monitoring system for students to know who has gone home, who is ill and being taken care of and who has been isolated.
4. Develop procedures for notifying and relocating students.
5. Develop plans for continuation of housekeeping services and stockpiling items such as cleaning and disinfecting supplies, toilet paper, disposable towels.
6. Identify communication protocols between housing services and residence life staff as well as with custodial staff, building mechanics and Campus Police.
7. Establish communication protocols with student health for surveillance and reporting illness in the residence halls.
8. Formulate and rehearse plans to address anticipated student needs ranging from delivery of food and medication to providing emotional support.

Neighbourhood Relations

Off-campus students, and particularly those students living alone, will require assistance. Monitoring the health and status of these students will present a formidable challenge and the establishment of a campus-based helpline will need to be undertaken. Volunteers could be used to assist these students. Returning home with the assistance of parents or other family members may be advisable for some of these students.

International Student and Study Abroad Student Services

During an influenza pandemic, the federal government or international governments may impose travel restrictions to delay the spread of influenza to other areas. This may prevent out-of-province and international students from returning home. It may also impact the ability of Canadian students to return home. The Centre for International Programs and the International Student Advisor will:

1. Develop procedures for monitoring student travelers entering the campus from affected regions and providing information to health services as well as a plan for communicating with international students and their families regarding travel restrictions and re-entry.
2. Develop procedures of cancelling the arrival of exchange students to Guelph from countries abroad if the government has decided to restrict travel from that area.
3. Develop a plan for communicating with students who are studying abroad or plan to study abroad.
4. Develop guidelines for temporary closure of study abroad programs.
5. Communicate with study abroad program leaders about planning procedures for shelter-in-place, closure decisions, and resources for assisting students who cannot go home

The decision to call students home or to cancel semester abroad or exchange programs will rest with the CCG. When making this decision, CCG will refer to the Department of Foreign Affairs and International Trade (DFAIT) recommendations regarding travel

Counselling Services

There will be a significant call on Counselling Services as students deal with illness and possible death of friends and family, and anxiety. The unit needs to:

1. Develop a plan for providing 24/7 counseling services for students, including protocols for providing services via telephone and internet.
2. Plan for recovery:

Occupational Health and Wellness

A pandemic will likely cause a high level of fear and anxiety among the general population. Employees will be concerned about their own health and the health of their families. They may be concerned about potential exposure to influenza in the workplace and, as a result of these concerns, some may refuse to work. Employees will have questions relating to occupational health and safety. Informing employees of their rights, providing training and equipment as appropriate, and communicating openly about emergency planning processes will help to alleviate anxiety. Working with faculty and staff Occupational Health and Wellness will need to provide advice on:

1. Absenteeism and back to work protocols
2. Employee Assistance programs
3. Supplies and containment protocols
4. Appropriate methods for masking and gowning.

2. BUSINESS CONTINUITY

The University must take steps to ensure its core business – research and teaching - continue to the extent possible. There will be significant challenges and difficult decisions to be made. Every attempt will be made to keep critical functions operating. If at all possible, staff need to be paid; supplies need to be purchased; buildings need to be maintained; technology infrastructures need to be protected. Decisions may need to be made regarding the cancellation of classes or the closing of research labs.

Business Continuity Issues

Identify Essential Functions and Personnel

One of the key elements in any plan is to define the essential functions that are critical to maintain. These services are identified in Appendix 1 *Essential Services*. Some of these critical functions and personnel will vary according to the extent of the illnesses in the city on campus. In addition, it will depend upon whether classes are cancelled. All essential services need to be reviewed to determine which can be performed from off-site. At all times, minimizing human to human contact should be a goal.

Develop a Communication Strategy

A spokesperson for the University will be identified by the CCG to communicate to the community. The messages will be informative, factual and clear and aim to minimize undue panic in the community. A central reporting plan will be established that monitors the phase of

illness, number of reported cases, employee absences, students in isolation, and transports to hospital. Phone trees or email lists will be employed to ensure rapid and efficient communication with a large number of students, staff and faculty. The university will communicate early in the pandemic and as often as possible to keep the information current and reduce anxiety.⁴ Details on communication issues are identified in Appendix 2 - *Communicating*.

Respond to Issues of Absenteeism

High rates of absenteeism may result in changes to staffing, chains of command, hours of work, or employee responsibilities. During an emergency, the University may need to delegate new job functions to employees or move employees to other job sites where they are most needed. During a pandemic, some employees will develop symptoms of influenza while at work. These individuals should immediately leave the workplace to help slow the transmission of the virus. Ill employees should be requested by their manager or supervisor to leave work even if they do not have sick day credits. There are numerous policies that will need to be considered. Human Resources, working in consultation with the employee groups will need to:

1. Review with list of essential personnel and essential functions
2. Encourage staff and faculty to update emergency contact information.
3. Review vacation/sick leave guidelines for applicability
4. Develop and articulate clearly the University's position on employee requirements for those who are ill, and for those who have ill members at home.
5. Establish return-to-work guidelines consistent with the case definition.
6. Prepare communications for supervisors and the campus work force addressing guidelines related to reporting of ill, business travel procedures, information to persons returning from affected areas, and access to mental health resources. (i.e., Employee Assistance Programs).
7. Develop work-at-home guidelines that address telecommunicating issues.
8. Assist in the recruitment of a volunteer work force and identification of cross-training needs.
9. Develop procedures for changes to hours of work (i.e., work outside of normal business hours)
10. Cross training

Maintaining the Class Schedule

The University of Guelph will work hard to maintain classes. However, Public Health will likely close large gatherings if many are developing symptoms on-campus. Every attempt should be made to offer courses on-line so students do not lose their year.

Adhering to Safety Issues

During a pandemic, there will be increased incidents of emergency calls, students needing support, and individuals looking for information on students. Campus Police will need to:

1. Develop procedures for securing buildings, protecting stored supplies, and restricting access to campus.
2. Establish ongoing communication with local police, fire, and emergency response personnel in order to coordinate efforts for managing safety issues.

⁴ American College Health Association Guidelines, Guidelines for Pandemic Planning, July 1, 2006

3. Develop triage protocols for responding to students in distress or requesting calls for transport
4. Establish a communication plan with student health and counseling services, residence life, and student affairs for reporting calls and transport in the case of emergency.

Building Maintenance

Buildings will need to continue to be lit, heated and cleaned. Physical Resources will need to:

1. Develop a contingency plan for maintaining the central utilities plant in times of high employee absenteeism. This may be particularly difficult due to the specialized nature of some of these positions.
2. Discuss contingency plans in case of fuel, water, and energy shortages including the availability of emergency generators.
3. Identify building ventilation systems especially in those areas considered for quarantine, isolation, and health care delivery.

Academic Affairs

Students will miss class as will faculty. In addition, there is the potential that classes will need to be cancelled. The Provost, working with the deans will need to:

1. Develop a policy regarding student academic status and accommodation for students missing classes, assignments, labs and exams due to illness or absence due to the risk of illness.
Requests for physician notes will contribute to the demands on the health care sector unnecessarily. Current policies that may pose a barrier to effective disease control and prevention should be suspended or revised as appropriate.
3. Develop a procedure for students who are in isolation or quarantine to obtain class notes.
4. Develop and disseminate alternative procedures for completing course work (i.e., web-based instruction, lessons and assignments delivered via snail mail).
5. Develop back-up plans to offer the course if faculty are ill.
6. Determine the criteria to be employed to determine when classes should be cancelled.
7. Identify ways to continue classes on-line.

Research

Some researchers may be able to continue working during a pandemic, especially if they are working alone or in small groups in spacious labs and buildings have not been closed. The ability to continue research will to some extent be dependent upon safety issues and the availability of other support services such as Environmental Health and Safety and Physical Plant. The Office of Research, working with the deans will need to:

1. Determine campus buildings that may remain open for research.
2. Establish a plan for maintaining security in laboratory spaces.
3. Establish a plan for care of laboratory animals if research ceases due to safety issue or high absenteeism among the animal handlers.
4. Establish a plan for specimen storage and managing experiments in process.

Business and Finance

The University will need to continue to operate, although many services will be reduced or discontinued. Issues arising to consider include:

- Identification of emergency funding to cover purchases for stockpiling and costs of rapid procurement and payment for supplies, equipment, and services.
- additional expenses that arise due to the loss of service
- intangible expenses such as loss of image or reputation
- identification of any insurance requirements

Health Services Supplies

Once a pandemic starts, it will be difficult, if not impossible, to obtain medical supplies; therefore, Occupational Health and Wellness and Student Health Services will pool their resources and supplies. Purchasing ahead and storing nonperishable goods is a prudent strategy. Quantities should be based on a best estimate of the number of students and employees (i.e., RA's) who may not be able to leave campus and the attack rate discussed earlier. Supplies will need to be controlled and items such as masks provided to essential personnel and those using Health Services only. The University will not have the capacity to provide supplies for all members of its community. Community members will be urged to purchase home survival kits well in advance of stage 5 of a pandemic.

1. Compile a list of supplies that would be needed, such as respiratory protection equipment, gloves, gowns, protective eyewear, medications (antibiotics), disinfectants, and IV fluids.
2. Identify supply sources and a storage area.
3. Provide administration with a cost estimate for securing supplies.
4. Maintain a stock supply of necessary medications and equipment; inventory and rotate supplies as appropriate.
5. Investigate the feasibility of establishing negative pressure rooms in the clinic, equipment necessary, and cost/benefit. Consult with the Environmental Health and Safety Department for assistance in this area.
6. Establish a plan for continuation of cleaning services and waste removal services including triggers to increase the frequency of the scheduling of these services.

Hospitality Services

During an influenza pandemic, Hospitality Services will need to continue to operate, but primarily for residence students. Consideration should be given to:

1. Determine non-perishable foodstuffs and drinks that can be stockpiled and stored.
2. Develop a procedure for delivery of foodstuffs to residential areas, quarantined students, and the infirmary.
3. Consider moving to disposable cutlery and pre-packaged pre-heated food to reduce need for staff.

Legal Issues

Legal counsel will be called on to provide advice on legal issues (e.g., restricting access or travel, isolation/quarantine, liability, compulsory vaccination for students, and prohibition of mass gatherings). Other issues include insurance issues and labour and employment law issues.⁵

- Address liability, insurance and temporary licensing issues for retired health-care workers and volunteers who may be working in areas outside their training and competence in health and emergency services.
- Ensure a legislative framework for compliance with the International Health Regulations.

Biological Waste Disposal

Plans need to be developed in the event that the Waste Disposal Company does not have sufficient staff to do normal pick-up.

⁵ Canadian Pandemic Influenza Plan, February 2004

Appendix 1

Essential Functions

The following is a list of essential functions. In the event of a pandemic that is impacting significantly the health of the university's faculty, staff and students, the University will stop doing much of its business and focus on essential functions. Members of the community who are well will be asked to support the essential functions. Efforts will be made to perform many of these functions from off-site in an effort to contain the pandemic. All departments that perform essential functions will be required to develop departmental plans that identify how such functions could continue with 30% of the work force away. The plans will involve a detailed list of response and recovery activities and arrangements to ensure that all necessary actions are taken to provide services during an emergency. In planning for service continuity of essential functions, the department should:

- identify risks that might threaten the service and develop methods to eliminate or reduce the risk
- analyze current recovery capabilities and review current recovery plans
- create business continuity plans that can be changed as the severity of the emergency changes

Once developed it is important that staff with specific functions outlined in the plan are trained in those functions as well as individuals who have been identified as being able to perform the tasks if the regular staff are ill.

Communication and Public Affairs

Communications and Public Affairs will:

- maintain at a minimum a news service that will be capable of developing and sending out update news releases as required.
- manage and supervise a telephone inquiry services for public telephone inquiries coming to the University regarding the outbreak.
- establish a protocol regarding the gathering and vetting of main messages and "official statements" regarding any outbreak.

Counselling Services

There are three main areas of essential services that would require continued vigilance and management during the presence of a pandemic.

1. Crisis Management...
 - Dealing with aftermath of a death on or off-campus
 - Individuals engaging in behaviours of significant self-harm
2. Safety
 - Assisting in confrontations (e.g. wanting to break quarantine)
3. Anxiety Management
 - Working with anxious students

Occupational Health and Wellness will:

- Establish communication protocols with faculty/staff and employee groups for surveillance and reporting illness in the workplace.
- Establish procedures to safely transfer infected employees home or for admission to hospital.
- Monitor employee illness to control the transmission of disease by keeping the infected person off work.
- Maintain the confidentiality of the medical information.
- Provide medical clearance regarding return to work and accommodation.
- Assist employees in accessing the Employee Assistance Program (EAP) as well as refer employees for grievance counseling.
- Collaborate with the Insurance Carrier (Sun Life) regarding the pandemic absentee plan.

Student Health Services

The following activities are deemed essential:

1. Patient care- those with influenza and those with non-elective medical needs
2. Co-ordination with Wellington-Dufferin-Guelph Public Health for infection control protocols, medical decision making and health messaging on and off campus
3. Self-care and pandemic health education messaging for patients, U of G employees and campus community.

Human Resources

Human Resources would focus its attention on two primary functions.

1. Payroll

This would be the most critical area within Human Resources to keep operational.

2. Pension and Benefits

During the time leading up to the pandemic and during, there would be an increased demand in this area. Human Resources will establish policies for employee leave, compensation, evacuating employees in and near infected areas, how to deal with those exposed to pandemic influenza and those who become ill (i.e. immediate mandatory sick leave).

Computing Systems Services

The following functions need to be continued:

- All services that provide external connectivity to the campus. It will be crucial to permit people who are physically able to work to do so from home, forgoing the need to gather in large groups.
- All electronic communication methods, including telephone, e-mail, web pages.
- All campus computing servers need to be kept operational.
- The Telephone Switchboard.

- Providing technical support for those areas of the University whose work is essential and support is required for them to fulfill their responsibilities. Examples include: troubleshooting, repairing, and replacing computing equipment that was essential to the ongoing operation of the University.
- All major applications need to remain functional at some level. In addition, each area will need to have access to some level of expertise & authority within each functional unit (HR, Registrar, Communications & Public Affairs and Finance).

Office of Registrarial Services

- UoG Dir would need to remain available, with appropriate interfaces and some manual updates as required.
- Ensure tuition deposits are made
- Monitor OUAC and MTCU data transmissions related to admissions and OSAP
- Maintain admissions website
- Offers of admission (electronic only)
- Transcript production and distribution to external agencies only
- Limited enrolment verification/to whom it may concern letters
- Management of grades and promotions activity if overall academic integrity is intact
- Future timetable development
- Management of OSAP loads
- Disbursing government and local aid

Library

- As long as classes are running, most core services would still be required.

Financial Services

- Ensuring the institution remains solvent (paying necessary bills, monitoring cash flow)

Physical Resources

- 24/7 emergency response service would be limited to situations creating extreme safety hazards or property damage.
- Minimal housekeeping, particularly in high risk areas (health services, residences)
- Keeping roadways and parking lots clear
- Keeping heat and hydro operational

Environmental Health and Safety

- Emergency Response: injury/illness, and hazardous materials spill
- Hazardous Materials Storage: Biohazardous (Medical) Wastes

- Advise University employees of their rights and responsibilities relating to health and safety in the workplace (work refusals, work stoppages, Joint Health and Safety Committee involvement, etc)
- Monitor Ministry of Labour communications regarding pandemic procedures and guidelines.
- Ensure that biohazardous and medical wastes are picked-up and will monitor schedules and communicate with contractors to ensure continuation of service.
- Provide training: on Universal Precautions, personal protective equipment and hygiene precautions.
- Perform fits testing for staff wearing N95 respirators.
-

Campus Community Police, Parking Services, and Fire Prevention

The following services are essential:

- Respond to calls for service.
- Provide 24/7 coverage
- Respond to emergency situations, as reported
- Transport to Hospital if possible

Residences

- As long as classes are in operation, residences will need to remain open. Once classes are cancelled, residences may be closed. However, the family housing units will remain open and will need to be supported. In addition, we will need to find accommodation and support those who cannot go home.

Hospitality Services

- As long as classes are in operation, food services will need to remain open, particularly for those in residence.

Animal Facilities

- Animals will need to be cared for. Research can be delayed.

Laboratory Services Division

- Critical tests will need to be continued.

Appendix 2 Communication

Communication strategies are an important component in managing any infectious disease outbreak, and are essential in the event of a pandemic. Accurate and timely information at all levels is critical in order to minimize unwanted and unforeseen social disruption and economic consequences and to maximize the effective outcome of the response. Every effort must be made to avoid creating undue anxiety and panic by focusing on factual information and avoiding hyperbole and speculation. The messages should be repeated frequently and presented in a variety of formats.

Planning that needs to occur:

- Identify who will be in charge of communications, as well as one or two persons in backup positions in case the key person(s) falls ill.
- Establish a central reporting plan for daily monitoring of the prevalence of illness on campus, including: employee absences, number of students in isolation and quarantine, number of lab confirmed cases, and number of student transports to the hospital.
- Determine a time each day when the communication will be updated (consistent with Public Health communication strategy).
- Establish a calling tree for notification/alerts to essential personnel.
- Develop a communication plan that addresses different target groups (e.g. press, general public, health-care workers, parliament, specific risk groups), key messages to be put across, possible materials that are needed (web sites, leaflets, information in different languages, etc.) and distribution mechanisms to reach the target groups.
- Identify individuals who can act as translators and consider translating materials into different languages as appropriate for student population.
- Provide information to the campus community on: the status of disease on campus; travel advice; self-care; personal preparedness planning; proper hand washing techniques and cough etiquette; federal, state, and local public health resources; and how/when to access services in case of illness.
- Ensure a good relation with professionals with expertise in a pandemic to help with the development of accurate and timely messages, before and during a pandemic. Designate a group (preferably an already existing one) within the department or ministry of health responsible for coordinating the collection and dissemination of information related to the pandemic on all its phases and levels. Members may include representatives of departments or ministries of health, agriculture and emergency services, medical colleges, general practice organizations. A representative of this group should be part of the national pandemic planning committee.
- During the inter-pandemic period, develop fact sheets or other general information on pandemic preparedness for distribution to various target groups,

- including professional and community groups. Ensure national consistency of locally produced fact sheets and that they are regularly reviewed and updated.
- Ensure that during events, media briefings are held regularly. Daily briefings will be necessary when the pandemic is established locally, and may also be appropriate sooner.

Appendix 3

Containment

With the first occurrences of human to human pandemic influenza transmission it may be possible to isolate infected individuals until they are no longer able to spread the virus.

Social distancing refers to actions taken to discourage close social contact between individuals, including cancellation of classes, sporting events, worship services, and other social events. This intervention would be most effective when instituted early in the pandemic and before infection takes hold in a community.

Isolation refers to separating individuals with illness from the general population and restricting their movement within the general population until they are no longer contagious. Plans for isolating ill students and providing care for them by either utilizing campus resources or partnering with community resources will be necessary for most schools, in that, some students may not be able to go home. Hospital resources will be strained and decisions for admission will be made based on assessment of those most in need.

Provisions should be made to care for students who are not ill enough to require hospital care but are too ill to take care of themselves

Quarantine is the separation and restriction of movement of those who are not ill but believed to have been exposed. Enforcement of quarantine is an issue that must be discussed with local government authorities and Campus Police.

Appendix 4

Infection Control Measures

The following simple infection control measures are applicable to a wide range of infectious diseases including the common cold, influenza and infectious diarrhea. **These measures should be adopted as everyday practices.**

Hand washing for fifteen seconds with soap (pump source) and warm water

Use hand sanitizers containing 70% alcohol

Cover coughs and sneezes

Avoid touching face, mouth, nose and eyes

Keep back at least one metre from persons coughing or sneezing

Stay home if ill during period of communicability

- 5 days for adults
- 7 days for children

Maintain a clean environment

- the virus remains infectious on hard, non-porous surfaces for up to 48 hours
- use disinfectants for door handles, railings, buttons, keyboards, service counters, telephones, etc.

Limit social interaction

- avoid handshaking, hugging, kissing
- maintain one metre distancing
- sharing of straws, cups, etc.

Several initiatives have been undertaken already and include: signage in washrooms encouraging hand washing, replacement with 'non-contact' or 'pull-down' hand towel dispensers, provision of alcohol hand sanitizer in some areas, campaigns to raise awareness of the importance of hand washing and covering coughs and sneezes. Mass immunization for seasonal flu has been helpful in reducing the number of seasonal influenza cases. Immunization for seasonal flu is thought to be of no **direct** value in preventing pandemic. However, reducing the number of patients exhibiting seasonal flu symptoms will reduce the demands on medical services in the event of an influenza pandemic. All of these measures need to be stepped up.

Appendix 5

Emergency Survival Kit

Appendix 6
Examples of Departmental Plans

Appendix 6

Emergency Management Responsibilities

Pandemic Emergency Phase 5/6

Once the Director of UoG Health Services is advised that Pandemic Influenza Alert Phase 5 has been reached or is advised by the Wellington-Dufferin-Guelph Public Health Unit that an emergency situation exists, the chain of the Campus Control Group (CCG) must be notified.

CCG Responsibilities:

- Assemble the Advisory and Support Team (A&S Team)
- Assemble in Emergency Operations Centre (EOC)
- Determine an operating cycle
- Determine if building access should be modified (need predetermined plan to reduce and/or eliminate entrance to buildings)
- Determine if any building should be closed (due to staffing) (need a list of essential buildings for services to be provided)
- Determine if any services should be stopped or modified
- Determine if persons entering and/or leaving the campus/buildings should be controlled
- Establish communications with the Wellington-Dufferin-Guelph Public Health Unit and/or the City of Guelph's Emergency Operations Control Group
- Determine whether or not to continue clinical experience opportunities

Operations Manager Responsibilities:

- Ensure make-up of team is capable of gathering and acting on information (UoG Health Services, Information Technology Services, Housing)
- Determine health monitoring points
- Determine hand washing station locations
- Determine building access restrictions

Communications & Public Affairs Responsibilities:

- Coordinate communications plan with Incident Command/CCG
- Initiate communications with President, Vice-Presidents and Board of Governors

UoG Health Services Responsibilities:

- Provide triage for students, staff, faculty
- Maintain communication with the Wellington-Dufferin-Guelph Public Health Unit and obtain information on actions recommended or needed