

**INFLUENZA PANDEMIC: PRE-PANDEMIC, PANDEMIC,
POST-PANDEMIC PREPAREDNESS FOR MARGINALIZED
COMMUNITIES**



**INFLUENZA PANDEMIC:
PRE-PANDEMIC, PANDEMIC, POST-PANDEMIC
PREPAREDNESS**

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PREFACE FROM THE AUTHORS

Population health is influenced by many factors such as income and social status, social support networks, education, employment and working conditions, safe and clean physical environments, biology and genetic make-up, personal health practices and coping skills, childhood development and health services (Federal, Provincial and Territorial Advisory Committee on Population Health, 1994). To that end it is vital that any health-related planning address, either implicitly or explicitly, each of these determinants of health. In addition, in the seminal document, *Achieving health for all: A framework for health promotion* (2001), Health Canada acknowledged that disadvantaged groups have significantly lower life expectancy, poorer health and a higher prevalence of disability than the average Canadian. That being said, it is imperative that any new health initiative addresses the needs of the vulnerable within our population. The following influenza pandemic plan will accomplish such a task.

Globally, there have been three pandemics within the last century that have affected Canadians: the *Spanish Flu* (1918 to 1919), which affected healthy young adults 20 to 50 years old; the *Asian Flu* (1957 to 1958), which affected the very young and the very old; and the *Hong Kong Flu* (1968 to 1969), which affected the very old and those with underlying health conditions (Alberta Health and Wellness, 2003; Calgary Health Region, 2005).

Based on the last two pandemics, it is estimated that the next pandemic will arrive in Canada within three months after it emerges in another part of the world with the understanding that this time could be shorter due to the impact air travel (BC Centre for Disease Control, 2005). The *first peak* of illness in Canada will most likely occur within two to four months after the virus arrives in Canada, and the first peak of mortality will be approximately one month after the peak in illness (BC Centre for Disease Control, 2005). A pandemic usually has two or more waves, either in the same year or in successive influenza seasons. A *second wave* will occur within three to nine months of the initial outbreak wave and may cause more serious illnesses and deaths than the first (BC Centre for Disease Control, 2005), where each wave of illness will last six to eight weeks (BC Centre for Disease Control, 2005).

During an influenza pandemic, it is predicted that 15-35% of the population will become clinically ill. A large portion of the workforce (approximately 20-35%) will be incapacitated for some time due to their own illness or because of illness in their family members (Public Health Agency of Canada, 2006). The majority of illnesses and deaths will tend to occur over a six to eight week period. As a consequence, the number of persons visiting the emergency rooms and hospitalizations will rise well beyond our current capacity (BC Centre for Disease Control, 2005). Effective preventive and therapeutic resources will most likely be in short supply and essential community services are likely to be disrupted (BC Centre for Disease Control, 2005).

The *scope* of this plan is to focus on local and provincial pandemic planning specifically targeting vulnerable populations and does not detail federal responsibilities, which are addressed in the Canadian Pandemic Influenza Plan

(Public Health Agency of Canada, 2004), The *purpose* of this plan, is to inform non-governmental agencies in Alberta about the global and local risks of an influenza pandemic and to provide generic strategies and guidelines needed to help those vulnerable populations. The main body of this plan is arranged in three sections, representing the three pandemic phases: pre-pandemic, pandemic, and post-pandemic.

Since pandemics are global events, this plan is consistent with other provincial, national and international plans for pandemic influenza preparedness and response, and follows the following regional, provincial, and international plans, such as: *Alberta's Plan for Pandemic Influenza* (2003) (Alberta Health and Wellness); *British Columbia Pandemic Influenza Consequence Management Plan* (2004); *Canadian Pandemic Influenza Plan* (2004) (Public Health Agency of Canada); *Manitoba's Pandemic Influenza Plan* (2006) (Manitoba Health); and *Influenza Pandemic Plan* (1999) and *WHO Global Influenza Preparedness Plan* (2005) [both from the World Health Organization (WHO)].

ABOUT THE AUTHORS

KELLY ROCCO BScN, Project Coordinator, Boyle Street Community Services. Kelly Rocco graduated from the University of Alberta's Faculty of Nursing in 2002. She has spent most of her career in HIV prevention, working both in Edmonton's inner city at Streetworks as well as in the city of Esteli, Nicaragua. In Central America she worked in a clinic that focused on HIV/AIDS, human rights and woman's issues. She has also worked with the Sexual Assault Response Team (SART) in Edmonton, providing care for victims of sexual assault. Kelly has had a longstanding interest in Community Development, Primary Health Care and underserved/marginalized communities.

DIANE BILLAY, RN, BN, MN, and Doctoral Student (Faculty of Nursing, University of Alberta), Nurse Educator, Boyle Street Community Services. Diane has nearly 20 years nursing experience working with a variety of *populations*, such as First Nations, Geriatrics, people who use drugs, people living with HIV/Hepatitis C, sex trade workers, pediatrics, orthopedics, and war veterans, and has worked within a variety of nursing careers, such as staff nurse (acute care and long-term care), home care (inner city), community health (inner city of Edmonton), clinical nurse specialist (Northern Alberta Regional Geriatrics program-NARG), nurse practitioner (Outpost nursing and inner city of Edmonton), wound care consultant (NARG), nurse educator (Streetworks), research assistant (Faculty of Nursing, Edmonton), and sessional teaching instructor (Faculty of Nursing, Edmonton). Currently she is working towards completing her doctoral degree focusing on the teaching and learning processes involved in preceptoring nurse practitioner students. At the end of her studies she hopes she can get some much needed sleep.

TERESA PENNER, Graduate Nurse, BScN, Boyle Street Community Services. Originally from Kenora, Ontario, Teresa is a recent graduate from the University of Alberta's Faculty of Nursing. Teresa's job as Outreach Worker for the Influenza Project has involved a high level of one-on-one and group activities with the target population, providing a keen insight into the issues which needed to be addressed throughout this project. Teresa's specialty in nursing school was Health Promotion, Primary Health Care and Community Health. Teresa also has experience working in Home Care and has always had a passion for working with underserved communities.

ABOUT THE PANDEMIC PROJECT

This project is the culmination of the vision and drive of several parties. In response to pandemic planning initiated by a regional health authority, a dialogue began between the Executive Director of the Boyle Street Community Services and the Program Manager of Streetworks. This dialogue addressed the issues unique to pandemic planning and influenza self care in the downtown core. It was recognized that often non-profit inner city agencies do not have the benefit of being affiliated with larger organizations that have the resources to create awareness and respond to a pandemic situation. This collaboration laid the groundwork for the project.

The purpose of the project is to better prepare inner city/marginalized populations in Alberta for annual influenza season and a potential pandemic, through the implementation of a culturally appropriate influenza self-care strategy. Developing a culturally appropriate strategy was of utmost importance, as often resources are targeted towards 'mainstream' culture and do not fully consider the unique circumstances present in the downtown core.

ACKNOWLEDGEMENTS

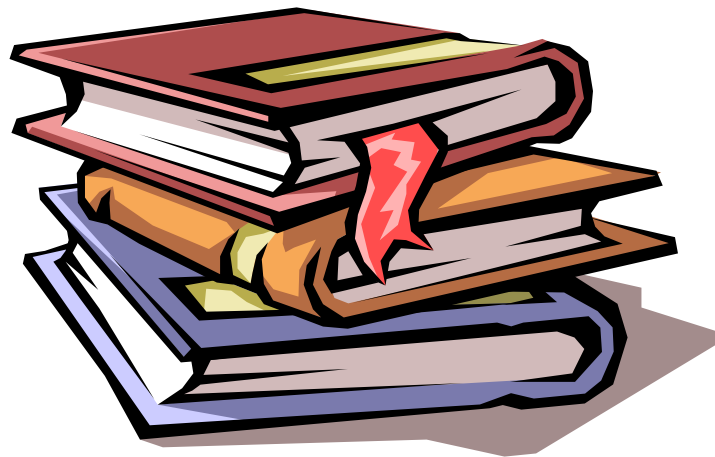
This project was funded by Alberta Health and Wellness. It could not have occurred without the invaluable input from the natural helpers of the inner city of Edmonton; Marliss Taylor, Program Manager, Streetworks; Hope Hunter, Executive Director, Boyle Street Community Services; Susan Irvine, Executive Director, Urban Manor; Sherry McKibben, Past Director, HIV Edmonton; Shawna Hohendorff, Kindred House; and Anita Hanrahan, Director of Communicable Disease Control, Capital Health. Thanks to each of you for your knowledge and expertise.

GLOSSARY OF TERMS

- Epidemic:** An outbreak of infection that spreads rapidly and affects many individuals in a given area or population at the same time.
- H5N1:** A strain of influenza type A virus that moved in 1997 from poultry to humans. While the outbreak of this virus was rapidly contained, it produced significant morbidity and mortality in persons who became infected, probably from direct contact with infected poultry.
- Health Care Workers (*Pandemic*):**
Health Care Workers are those persons whose functions are essential to the provision of patient care. They include health professionals, trainees and retirees, nonprofessionals and volunteers involved in direct patient care and/or those working/volunteering in designated health care facilities or services.
- High-Risk Groups:**
Those groups in which epidemiologic evidence indicates there is an increased risk of contracting a disease.
- Pandemic:** Referring to an epidemic disease of widespread prevalence around the globe.
- Symptoms:** Any perceptible, subjective change in the body or its functions that indicates disease or phases of disease, as reported by the patient.
- Vaccine:** A substance that contains antigenic components from an infectious organism. By stimulating an immune response (but not the disease), it protects against subsequent infection by that organism.
- Virus:** A group of infectious agents characterized by their inability to reproduce outside of a living host cell. Viruses may subvert the host cells' normal functions, causing the cell to behave in a manner determined by the virus. **A virus cannot be treated with antibiotics.**

[Source: Public Health Agency of Canada. (Reference from the web July 23, 2006). http://www.phac-aspc.gc.ca/cpip-pclcpi/app-a_e.html]

PRE-PANDEMIC

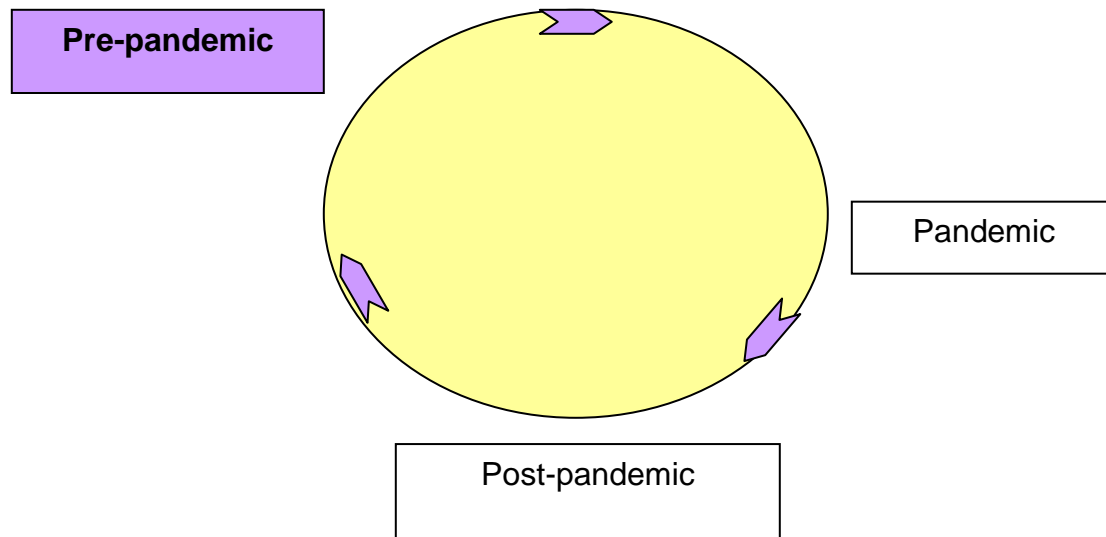


Planning for the Flu Pandemic: Pre-pandemic Phase

Policy and Procedures

Discussion

As world events are demonstrating to health care regions within Alberta, the Avian Flu (H5N1) is spreading from *birds to humans* in many countries across a number of continents including Asia, Europe and Africa. While human-to-human transfer remains a rare occurrence at the time of this publication health care experts, medical professionals and governments are concerned and have begun to increase their pandemic planning efforts including how to address the **prevention of the spread of a pandemic influenza should it arrive in Alberta.**



To date, many regional health authorities have undertaken considerable pandemic planning for their regions. However, this document will provide guidance for a more specific population: the underserved and homeless populations within Alberta. Because (*enter organization name*) works with populations whose immune systems are compromised and/or health needs necessitate considered health care, **this section will address influenza preparedness and prevention strategies.**

Inter-pandemic and pandemic alert policies and procedures are for the time leading up to the onset of an actual pandemic. Hand-washing and immunizations are good practices at all times and help to protect the health of staff and service users on a continuous basis. These phases address the preparedness of agencies to manage should an influenza pandemic occur. To help build pandemic preparedness capacity, consider utilizing service users and partnering with other agencies.

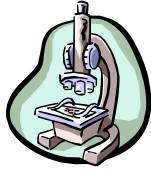
Capital Health has produced a document, *Capital Health Communicable Disease Outbreak Plan* (April, 2006) in which maximum downtimes are discussed. This document will serve as a template for pandemic preparedness for provincial pandemic planning. They delineate service levels as follows:

Level	Level Definition
0	➤ Increase full-service levels to higher than normal
1	➤ Full-service levels to be maintained with no disruptions
2	➤ Full-service disruption to a maximum of 24 hours
3	➤ Partial/reduced service for a defined period of time
4	➤ Partial/reduced service can be maintained for the duration of the event up to six (6) weeks. Then reassessed.
5	➤ Complete service can be suspended for the duration of the event up to six (6) weeks. Then reassessed.

For the purposes of planning for a provincial pandemic with vulnerable populations, we have adapted the RHA guidelines where the following shall apply:

(*Enter organization name*) falls within categories one (1), and/or two (2), in relation to **prevention**, as follows:

Program Area	Levels (1-3)	Service Provision
Administration	1-2	Service levels to be maintained with NO disruptions; full-service disruption to a maximum of 24 hours
Program administration	1-2	Same as above
Counseling	1-2	Same as above
Volunteers	1-2	Same as above
Organization-specific programming: E.g. home visits, <i>et cetera</i>	1-2	Same as above



General Policies: Pre-pandemic Phase

1. Where possible, (*enter name of organization*) will maintain regular office hours, although when less than (*enter appropriate staff compliment*) staff are available to work in the office, the office will be closed, or other appropriate measures will be used, such as communication via cell phones.
2. Provide immunizations to at-risk groups, such as the elderly and people with weak immune systems, for influenza and pneumonia (pneumovax vaccine); remember to reinforce to the general population to maintain immunizations.
3. Handwashing (Capital Health, 2005) (Please use the Influenza Self-Care Information booklet on handwashing):
 - a. Handwashing is the single most important procedure for preventing disease transmission in any setting. Handwashing with **plain soap** (anti-bacterial soap is NOT recommended) provides the mechanical removal of most germs.
 - b. The components of good handwashing include using an adequate amount of soap (the size of a dime), rubbing hands together for at least 15 seconds to create some friction, rinsing under running water and drying with a clean or disposable towel (Capital Health, 2005).
 - c. When you should wash (as proposed by a Natural Helper group in the inner city of Edmonton):
 - i. Use your judgement, but the basic expectations are:
 - ❖ *Wash before procedures:*
 - Direct, hand contact with the service user's skin
 - Before preparing, handling, serving or eating food
 - Health care procedures
 - ❖ *Wash hands after:*
 - Direct, hand contact with the service user's skin
 - Complete physical examination
 - Exposure to body fluids
 - Changing a diaper
 - Use of equipment/items potentially contaminated with blood and/or body fluids
 - After removing gloves
 - After personal use of toilet or wiping nose
 - When visibly dirty

- ◆ If available, use soap and water to clean hands, however, if you do not have access to soap/water, use a waterless handwashing agent such as *Microsan™* or *Purell™*.
- ◆ Capital Health, and perhaps other health regions, recommend taking *Cold FX™*, as well as other complementary medicines, to boost your immune system.
- ◆ Waterless handwashing is **not effective** if hands are dirty or heavily contaminated with blood or other organic material; follow manufacturer's recommendations for use; efficacy affected by concentration of alcohol in product (optimum strength 70% to 90% with added moisturizers); and, hand creams/lotions should be readily available and used to protect skin from dryness or cracking (Capital Health, 2005).
- ◆ **Signs and symptoms of Flu-comparison chart** (Influenza Self-Care Information booklet, Capital Health, 2005):

Symptoms/Description	Influenza	Common Cold	Stomach Flu
Fever	Usually high	Sometimes	Rare
Chills, aches, pain	Frequent	Slight	Common
Loss of appetite	Sometimes	Sometimes	Common
Cough	Usual	Sometimes	Rare
Sore throat	Sometimes	Sometimes	Rare
Sniffles or sneezes	Sometimes	Common	Rare
Involves whole body	Often	Never	Stomach/bowel only
Symptoms appear quickly	Always	More gradual	Fairly quickly
Really tired	Common	Rare	Sometimes
Worries	Pneumonia; can kill you	Sinus infection; ear infection	Dehydration



General Procedures: Pre-pandemic Phase

1. **“Educate the Educator”** package development and implementation.
Contents target marginalized populations and will include respiratory etiquette, handwashing, and maintaining a healthy lifestyle:
 - a. **Cover mouth/nose with a tissue** (*Kleenex*[™]) when coughing or sneezing, then discard the tissue in a trash can. | Wash your hands with soap and water as soon as possible, or if soap and water is not available and you are carrying a hand sanitizer (eg. *Purell*[™] or *Microsan*[™]) apply to hands
 - b. Remember to **wash your hands throughout the day** especially between service user/client visits or after having contact with people
 - c. Cleaning objects that come in contact with people. For example, door knobs, phones, computer mouse, toys, handrails, et cetera
 - d. **Avoid rubbing** eyes, nose, mouth, and/or face. This can transfer germs easily through the mucous membranes
 - e. **Ensure staff receive an influenza immunization every Fall, and a pneumovax vaccine if eligible.**
 - f. **Maintain a healthy life style**, through:
 1. Getting enough sleep
 2. Eating a nutritious diet, including fruits, vegetables, protein (meat, cheese, etc), and taking vitamins
 3. **Washing hands often with soap and water is the best defense against illness**
 4. Maintaining skin integrity: keep skin moisturized and intact to prevent skin break down, which will ensure a strong immune system. Keep band aids and hand lotion on hand
 5. Avoiding ill people, especially those with a cough or who are sneezing. If you can, stay 3 to 6 feet away from the ill person(s)
 6. Taking your medications as ordered by your doctor and have a three month stock on hand
2. ***Influenza Planning Checklist for businesses and families/individuals:***
(See **Appendices A & B**)
3. **Web sites related to pandemic** (See **Appendix C**)

PANDEMIC

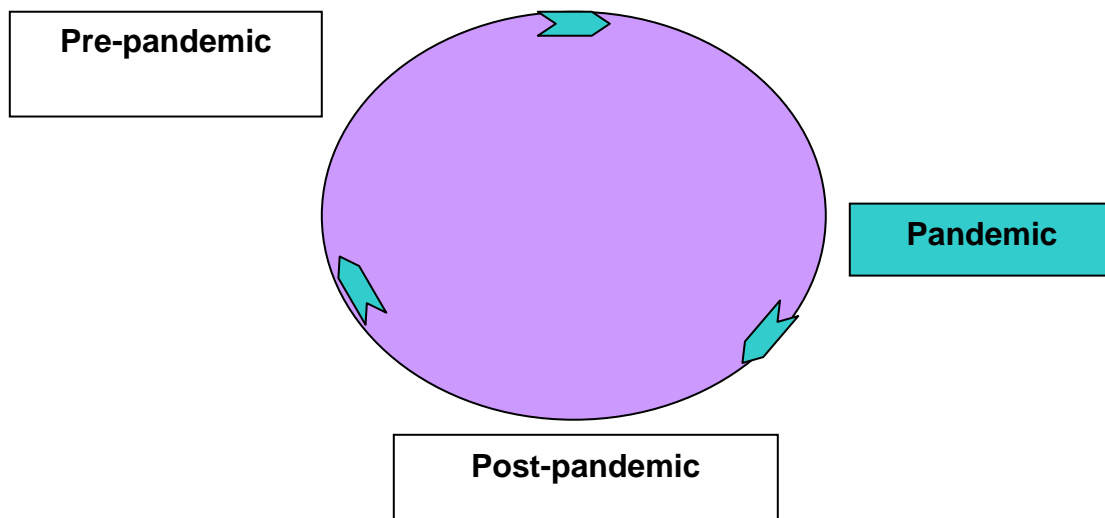


Planning for the Flu Pandemic: Pandemic Phase

Policies and Procedures

Discussion

An influenza pandemic may be very mild or very harsh. There is no way to predict such events until they occur. Agencies need to think about how to maintain operations, yet minimize influenza transmission to their staff and service users. Decisions will have to be made around such issues as closing an agency, versus paying staff. Agencies need to be prepared for changes in staffing levels; multiple ill service users; possible disruptions in supplies, utilities, and agency support systems (eg banking, other organizations); an overwhelmed health care system; changes at a societal level (eg. cancellation of events where people gather, such as in churches); and, potentially many deaths. Disruptions may last for up to 3 months or more.



To date various regional health agencies have undertaken considerable pandemic planning for their region. However, this document will provide guidance for a more specific population: the underserved and homeless. Because (*enter organization name*) works with populations whose immune systems are compromised and/or health needs necessitate considered health care, **this section will address measures needed to support all vulnerable persons within Alberta affected with the pandemic virus and minimize the spread of the disease during an influenza pandemic.**

Transmission of influenza can be **greatly decreased** by limiting movement of individuals within a community. Therefore, planning the distribution of basic necessities like food and shelter and other services to decrease movement amongst community members would be advantageous.

Capital Health has produced a document, *Capital Health Communicable Disease Outbreak Plan* (April, 2006) in which maximum downtimes are discussed. They delineate service levels as follows:

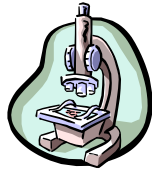
Level	Level Definition
0	➤ Increase full-service levels to higher than normal
1	➤ Full-service levels to be maintained with no disruptions
2	➤ Full-service disruption to a maximum of 24 hours
3	➤ Partial/reduced service for a defined period of time
4	➤ Partial/reduced service can be maintained for the duration of the event up to six (6) weeks. Then reassessed.
5	➤ Complete service can be suspended for the duration of the event up to six (6) weeks. However, where appropriate, services may continue using telephone, fax or email contact, and then be reassessed.

(Enter organization name) falls within categories three (3), four (4) and/or five (5), **in relation to treatment**, as follows:

Program Area	Level (4 or 5)	Service Provision
Administration	3, 4 or 5	Partial/reduced service for a defined period; reduced or complete suspension for duration of event
Program administration	3, 4 or 5	Partial/reduced service for a defined period; reduced or complete suspension for duration of event
Counseling	5	Complete face-to-face suspension for duration of event, unless by phone or other electronic means
Volunteers	3, 4 or 5	Partial/reduced service for a defined period; reduced or complete suspension for duration of event, agency specific

Organization-specific programming: E.g. home visits	3, 4 or 5	Partial/reduced service for a defined period; reduced or complete suspension for duration of event
Other (agency-specific):		
Other (agency specific):		

With this in mind, the following **general pandemic policies (strategies)** are suggested to enable continuation of services *for the duration of the pandemic*, and *each individual agency* should assess for and implement individualized pandemic strategies.



General Policies: Pandemic Phase

1. Where possible, (*enter name of organization*) will attempt to maintain regular office hours, although when less than (*enter appropriate staff compliment*) staff are available to work in the office, the office will be closed. However, agency-specific communication strategies will be enacted, such as using cell phones, land lines, email, etc.
2. Upon notification by the Medical Officer of Health (MOH), programs may be disrupted or reduced for a specific period of time.
3. On-going communications: monitor radios, television, CBs, internet for updated information. A battery operated or wind-up radio is recommended.
4. Vaccinations: Provide/encourage receipt of influenza and pneumovax vaccines, as advised by a nurse or doctor, and reinforce the need to keep updated on all other immunizations, such as Tetanus, and Measles/Mumps/Rubella.
5. *Discouraging* gatherings of large groups of people will help to decrease the spread of the influenza. Understand that this will be difficult to enforce, as this population travels a great deal throughout their normal routine.
6. Care of the sick (as proposed by a Natural Helpers group from the inner city area of Edmonton):
 - a. Ensure the sick individual receives fluids, either juice, water, *et cetera*
 - b. Keep them dry and warm
 - c. Monitor the temperature-if above 38⁰C, give Tylenol™ or Ibuprofen, as per directions on the bottle *If the liver is damaged because of Hepatitis, caution with taking any over the counter medication
 - d. If unable to move ensure they are turned every two hours to decrease the incidence of skin break-down; do leg stretches to decrease the incidence of blood clots in the legs
 - e. Encourage coughing to clear the lungs of phlegm
7. Handwashing (Capital Health, 2005):
 - a. **Handwashing is the single most important procedure for preventing disease transmission in any setting. Handwashing with plain soap (anti-bacterial soap is NOT recommended**

since it kills the normal flora-germs-found on the surface of hands) provides the mechanical removal of most germs.

- b. The components of good handwashing include using an adequate amount of soap (the size of a dime), rubbing hands together for at least 15 seconds to create some friction, rinsing under running water and drying with a clean or disposable towel (Capital Health, 2005).
 - c. When you should wash:
Use your judgement, but the basic expectations are:
 - ❖ *Wash before procedures:*
 - Direct, hand contact with the service user's skin
 - Before preparing, handling, serving or eating food
 - Health care procedures
 - ❖ *Wash hands after:*
 - Direct, hand contact with the service user's skin
 - Complete physical examination
 - Exposure to body fluids
 - Changing a diaper
 - Use of equipment/items potentially contaminated with blood and/or body fluids
 - After removing gloves
 - After personal use of toilet or wiping nose
 - When visibly dirty
 - d. If available, use soap and water to clean hands, however, if you do not have access to soap/water, use a waterless handwashing agent such as *Microsan™* or *Purell™*.
 - e. Waterless handwashing is **not effective** if hands are dirty or heavily contaminated with blood or other organic material; follow manufacturer's recommendations for use; efficacy affected by concentration of alcohol in product (optimum strength 70% to 90% with added moisturizers); and, hand creams/lotions should be readily available and used to protect skin integrity (Capital Health, 2005).
8. Capital Health recommends taking *Cold FX™* to help boost the immune system.
 9. Avoid touching eyes, nose and mouth.
 10. Refer to **Appendices A and B** for information specific to *planning checklists*.



General Procedures: Pandemic Phase

1. **“Educate the Educator”** packages: Follow guidelines stipulated in this document, *as amended by your agency*. Special emphasis shall focus on the following:
 - a) Regular hand-washing practices (See *Prevention section*)
 - b) Healthy living practices (See *Prevention document, Appendices A & B*)
 - i) Maintain nutrition
 - ii) Stay away (at least three to six feet) from those who display signs and symptoms of flu (See *Prevention section*). As difficult as this may be, it is important to decrease the further spread of this virus, so avoiding (as appropriate) those already ill with the virus is one of the best ways of keeping yourself, and those not yet infected around you, healthy
 - iii) Ensure you have a six week to 3-month stock of non-perishable supplies (See **Appendix C** for the list) and all necessary medications.
2. **Monitor communications: maintain access to updated information via cell phone, radio, television, CB radio, internet**
3. **Receive the immunizations recommended by the MOH and Regional Health Authority**
4. **If you or someone you are caring for has the following symptoms-** contact HealthLINK (Edmonton: 780-408 LINK; Calgary: (403) 943-Link (5465) and the toll free number. 1-866-408-5465); *for areas outside Edmonton and Calgary, check with your regional health authority for similar agency.* trouble breathing; coughing up blood; chest pains (not controlled by medications); fever over 38° C (adult or child); is seizing (and is not controlled by seizure medications); altered level of consciousness (“seems funny”, or “is acting really weird”, which is unusual behaviour for that person); severe headache; painful/very stiff neck

POST-PANDEMIC

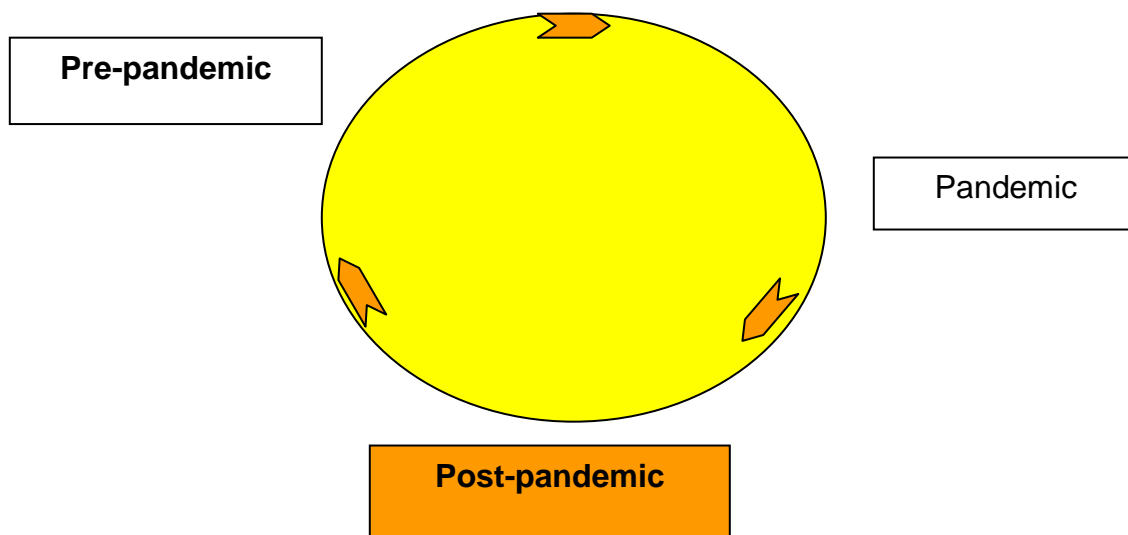


Planning for the Influenza Pandemic: Post-pandemic Phase

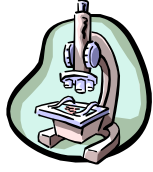
General Policies and Procedures

Discussion

This policy and procedure section delineates some of the Provincial strategies to successfully address the **after care measures** needed as a direct result of an influenza pandemic. The post-pandemic phase begins when the number of cases of influenza returns to pre-pandemic levels (Alberta Health and Wellness, 2003). This phase deals with assessing the impact of the pandemic, specifically issues related to the mental, physical, and financial health of these vulnerable populations post-pandemic, and evaluating the pandemic response (which will involve each agency conducting its own evaluation).



To date many health regions have undertaken considerable pandemic planning for their regions. However, this document will provide guidance for a more specific population: the underserved and homeless. Because (*enter organization name*) works with populations whose immune systems are compromised and/or health needs necessitate considered health care, **this section will address influenza pandemic after care, with an emphasis on the updating of immunizations and assessing for mental health concerns such as post traumatic stress disorder and the grieving process.**



Generic Policies and Procedures: Post-pandemic Phase

1. Assess mental health and health conditions resulting from the pandemic:
 - a. Post traumatic stress disorder: (See **Appendix D**)
 - b. Pneumonia-“lung care”:
 - i. See your physician or Nurse Practitioner for follow-up assessment and treatment
 - ii. Monitor yourself and others as needed for recurrent coughs; wheezing; temperatures over 37.5 °C; coughing up thick, green spit; painful lungs when breathing; throwing up; and other symptoms you may be concerned about
2. Grieving process (See **Appendix E**):
 - a. Funeral arrangements-depends on the wishes of the individual(s) involved
 - b. Community memorial-agency-specific
3. Communication: includes re-establishing contacts with loved ones, friends, employer, bank, physician, other agencies (social worker, outreach worker, lawyer, probation officer)
4. Rehabilitation: (re-establishing links)
5. Immunization: (keeping updated with vaccinations, such as Tetanus)
6. Hand washing and other prevention strategies-maintaining ongoing personal health practices
7. Contact Edmonton HealthLINK at (780) 408-LINK, or Calgary HealthLINK at (403) 943-Link (5465), and the toll free number. 1-866-408-5465, for any inquiries. Check local listings for other contact information, such as Public Health centres
8. Keeping current with community and national trends and outcomes.
9. Evaluation and “lessons learned” for future consideration

Formative Feedback

On a micro level, when the Natural Helpers were asked for ***their input*** as to what they thought of the project they stated unequivocally that they enjoyed the whole experience. For example, “I really liked working on the Influenza booklet...I learned a lot about what to do when the pandemic hits” (Darren, July 24, 2006, personal communication). One person stated, “this planning for the flu will help our community...we often get shit on...it is nice for our voices to be heard” (Percy, June 9, 2006, personal communication).

As well, the Natural Helpers appreciated ***being paid*** for their expertise, “I thank you for paying me for my knowledge...you respect us” (Raphael, July 24, 2006, personal communication). Another person noted, “thank you...the money will come in handy” (Stan, June 13, 2006, personal communication).

In terms of ***understanding the differences*** between the various strains of influenza, Benny stated, “I really liked the presentation where the various strains were explained, because now I know how the DNA from a human flu and an animal flu can cross-over and make a new strain of flu...this is harmful to people” (July 24, 2006, personal communication). Another natural helper noted he was surprised how complicated the science was behind the strains of flu and stated, “holy cow...this is serious shit...you can really get sick with this flu” (Derek, June 19, 2006, personal communication).

Comments were made by community members regarding the **pandemic posters (educational materials)** placed throughout the Boyle Street Community Services building. Specifically, Zelda noted, “I really like the flu posters I have seen in the building...I like the colors and the message” (July 14, 2006, personal communication). While Mary noted, “Gee, I love Lucille...She rocks...and I never knew how important it is to wash my hands after going to the john” (July 18, 2006, personal communication). Regarding the **influenza booklet**, Mark noted, “people with kids will like this booklet...it is not boring and has lots of cool pictures” (July 18, 2006, personal communication).

All names are pseudonyms.

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Appendix A

Influenza Planning Checklist for *Businesses*

(Place a checkmark in the appropriate column once complete)

Plan for the impact of a pandemic:			
Not started	In Progress	Completed	
			Identify a pandemic coordinator and/or team with defined roles and responsibilities for preparedness and response planning. The planning process should include input from all staff members. This person may ensure staff are up to date on immunizations and self-care strategies such as nutrition and handwashing techniques.
			Identify essential employees required to maintain business operations by location and function during a pandemic.
			Train and prepare all team members for a pandemic situation (agency-specific policies and procedures)
			Develop and plan for scenarios likely to result in an increase/decrease in demand for your services during a pandemic (eg. Effect of restriction on mass gatherings, hygiene supplies)
			Find up-to-date, reliable pandemic information from community health, emergency management, and other sources and make sustainable links (See Appendix C for possible web addresses)
			Establish an emergency communications plan and revise as needed. This plan includes identification of key contacts (with back ups), chain of communications (including suppliers and service users/customers), and processes for tracking and communicating business and staff status
			Implement an exercise to test your plan, and revise as needed

			Assess the ability of the service users to take on different roles within the agency. Begin capacity building within the population. Consider the possibility of partnering with another agency (should staffing levels become critically low) and begin discussions on how it could work.
			Stock up on whatever supplies are possible, given budget and storage space.

Plan for the impact of a pandemic on your employees and service users:

Not Started	In Progress	Complete	
			Forecast and allow for employee absences during a pandemic due to factors such as personal illness, family members ill, community containment measures and quarantines, school and/or business closures, and public transportation closures.
			Implement guidelines to modify the frequency and type of face-to-face contact (eg. Hand shaking, seating in meetings, office layout, shared workstations) among employees and between employees and service users.
			Evaluate employee access to and availability of healthcare services during pandemic, and improve services as needed.
			Identify employees and key service users with special needs, and incorporate the requirements of such persons into your preparedness plan.

Establish policies to be implemented during a pandemic:

Not started	In Progress	Completed	
			Establish polices for employees to return to work who have been previously ill but who are now no longer infectious. For example, an employee can return to work under these circumstances: no fever for 48 hours, no cough and not taking any medications to suppress fever or cough.
			Establish polices for flexible worksite (eg. Telecommuting) and flexible work hours (eg.

			Staggered shifts)
			Establish policies for preventing influenza spread at the worksite (eg. Coughing/sneezing etiquette, and prompt exclusion of employees/service users with influenza symptoms)

Allocate resources to protect your employees and service users during a pandemic:

Not started	In Progress	Completed	
			Provide sufficient and accessible infection control supplies (eg. Hand-hygiene products, tissues and receptacles for their disposal) in all locations
			Enhance communications as needed to support remote service user access
			Ensure availability of medical consultation and advice for emergency response(?LINK)

Communicate to and educate your employees:

Not started	In Progress	Completed	
			Develop and disseminate appropriate programs and materials covering pandemic fundamentals (eg. Signs and symptoms of influenza, modes of transmission), personal and family protection and response strategies (eg. Hand washing, coughing/sneezing etiquette, contingency plans)
			Anticipate employee fear and anxiety, rumors and misinformation and plan communications accordingly
			Ensure that communications are culturally and linguistically appropriate
			Disseminate information to employees about your pandemic preparedness and response plan on a regular basis via email, etc.
			Provide information for the at-home care of ill employees and family members
			Identify community sources for timely and

			accurate pandemic information (domestic and international, eg. web addresses see Appendix C) and resources for obtaining counter-measures (eg. Vaccines and antivirals) <i>as appropriate</i>
Coordinate with external organizations and help your community:			
Not started	In Progress	Completed	
			Collaborate with major healthcare organizations to share your pandemic plans and understand their capabilities and plans
			Collaborate with federal, provincial, and local public health agencies and/or emergency responders to participate in their planning processes, share your pandemic plans, and understand their capabilities and plans
			Share best practices with other businesses in your communities, chambers of commerce, and associations to improve community response efforts

(Source: *Department of Health and Human Services* and *the Centres for Disease Control and Prevention*, 2005; www.pandemicflu.gov/plan/checklists.html)

Appendix B

Influenza Planning Checklist for *Families/Individuals*

(Place a checkmark once task complete)

Plan for the impact of a pandemic:	
Completed	
	Store a <i>six week to three-month supply</i> of bottled water and non-perishable food. During a pandemic, if you cannot get to a store, or if stores are out of supplies, it will be important for you to have extra supplies on hand. This can be useful in other types of emergencies, such as power outages and disasters
	Ask your doctor if you can get an extra supply of your regular prescription drugs
	Have non-prescription drugs and other health supplies on hand, including pain medication, stomach medications, cough and cold medicines, fluids and electrolytes (eg. Gatorade™, Pedialyte™) and vitamins
	Talk with family members and loved ones about how they would be cared for if they got sick, or what will be needed to care for them in your home
	Teach your children to wash hands frequently and properly with soap and water, and model that behaviour
	Teach your children to cover coughs and sneezes with tissues and to wash hands afterwards, and be sure to model that behaviour
	Teach your children to stay away from others as much as possible if they are sick. Stay home from work and school if sick
Items to have on hand for an extended stay at home:	
Examples of food and non-perishables	Examples of medical, health, and emergency supplies
Ready to eat canned meats, fish, fruits, vegetables, beans, and soups	Prescribed medical supplies such as glucose and blood-pressure monitoring equipment
Protein or fruit bars	Prescribed medications
Peanut butter or nuts	Medicines for fever, such as acetaminophen (Tylenol™) or ibuprofen (Motrin™)
Dried fruit	Thermometer
Crackers	Anti-diarrhea medication
Canned juices (with <i>manual</i> can opener, if needed)	Vitamins
Bottled water	Fluids with electrolytes (Ask your pharmacist for suggestions, eg. Gatorade™, Pedialyte™)

Canned or jarred baby food and formula	Cleansing agent/soap (non-antibacterial)
Pet food	Flashlight and batteries
Other nonperishable foods:	Portable radio and batteries
	Garbage bags
	Tissues, toilet paper, disposable diapers
	Soap and water, or alcohol-based (60-95 %) hand wash
	Others:

Appendix C

Pandemic Web Sites as of July 24, 2006

(Update and add to as your organization sees fit)

<http://www.pandemicflu.gov/plan/checklists.html> \ an excellent site for pandemic preparedness, including checklists

<http://www.health.gov.au/internet/wcms/publishing.nsf/Content/phd-pandemic-plan.htm>
(Australian Department of Health-pandemic planning)

<http://www.phac-aspc.gc.ca/cpip-pclcpi/> (Public Health Agency of Canada)

<http://www.cbc.ca/fifth/nextpandemic/index.html> (The Fifth Estate site)

<http://www.cdc.gov/flu/pandemic/> (Centre for Disease Control-CDC)

<http://aolsvc.merriam-webster.aol.com/dictionary/pandemic> (Dictionary entry)

http://www.hc-sc.gc.ca/ahc-asc/intactiv/pandem-flu/index_e.html (Health Canada)

<http://www.whitehouse.gov/homeland/pandemic-influenza.html> (Whitehouse site)

<http://www.region.peel.on.ca/health/pandemic/> (Peel Region, Ontario, Pandemic Planning)

<http://www.dh.gov.uk/PolicyAndGuidance/EmergencyPlanning/PandemicFlu/fs/en>
United Kingdom Dept. of Health)

http://www.influenza.gc.ca/index_e.html (Government of Canada Influenza site)

<http://www.toronto.ca/health/pandemicflu/index.htm> (Toronto Influenza Plan)

<http://www.bccdc.org/content.php?item=150> (British Columbia CDC)

<http://www.hhs.gov/pandemicflu/plan/> (United States Health and Human Services)

<http://www.who.int/csr/disease/influenza/pandemic/en/> (World Health Organization)

http://news.nationalgeographic.com/news/2005/05/0525_050525_birdflu.html (National Geographic)

<http://www.bchealthguide.org/healthfiles/hfile94a.stm> (British Columbia Health Files)

<http://www.hlth.gov.bc.ca/pho/pandemic.html> (British Columbia Public Health)

<http://www.pep.bc.ca/index.html> (British Columbia Provincial Emergency Program)

Appendix D

Posttraumatic Stress Disorder (PTSD)

After a significant loss, a condition known as Posttraumatic Stress Disorder (PTSD) can occur within (approximately) three months to years after the event. This appendix will provide for you some valuable information regarding this serious condition.

Acronym DREAMS for symptomology of PTSD (Guess, 2006; Varcarolis, 2002):

D detachment (generally numb emotional responsiveness)
R re-experiencing the event (nightmares, flashbacks)
E emotional effects (emotional distress, helplessness, fear)
A avoidance (avoiding things that are reminders of the event)
M months of duration
S sympathetic hyperactivity & hypervigilance (insomnia, irritability, difficulty concentrating)

- Symptoms often begin within 3 months after trauma, but a delay of months or years is not uncommon
- Symptoms must last longer than a month:
 - Acute PTSD: symptoms last <3 months
 - Chronic PTSD: symptoms last > 3 months
 - Delayed PTSD: if onset of symptoms is at least 6 months after traumatic event
- PTSD is characterized by repeated re-experiencing of a highly traumatic event that involved actual or threatened death or serious injury to self or others
- Experiences recurrent and intrusive recollection of events, dreams, and flashbacks
- The person behaves as though he or she is experiencing the event at that time
- The person will often have difficulty with interpersonal, social, or occupational relationships and trust is almost always a concern

Acute Stress Response

- Lasts from 2 days to 4 weeks after traumatic event and occurs within 4 weeks after the event
- Symptoms include: reduced awareness to surroundings, de-realization, depersonalization, amnesia for an important aspect of the trauma
- Symptoms also include those of PTSD: experiencing a traumatic event and re-experiencing the event (nightmares, flashbacks), dissociative mood, avoidance of stimuli, and symptoms of anxiety (hypervigilance and hyperactivity)

[[Another excellent resource to access to educate yourself about PTSD is:](#)

Canadian Mental Health Association. (2004). *Posttraumatic stress disorder*. Toronto, ON: Author.]

Appendix E

Grief and Grieving

After a life-altering experience, such as the death of a loved one, the loss of a significant object (such as a house or your valuables), or a valued way of life, it is not unusual for someone to experience grief. To that end, it is important to understand basic concepts related to the grieving process. This appendix will address the following topics: (1) what is grief, (2) what is grieving, (3) common signs and symptoms of grief and grieving, and (3) treatment.

What is grief?

- ◆ Your emotional reaction to a significant loss
- ◆ Commonly used words used to describe grief are sorrow and heartache
- ◆ Anticipatory grief strikes in advance of an impending loss, such as what you would feel for a loved one who is sick and dying

What is grieving?

- ◆ The process of emotional and life adjustment you go through after a loss
- ◆ Also known as bereavement
- ◆ Is a personal experience
- ◆ Your process of grieving will be different from another person's experience
- ◆ There is no "normal or expected" period of time for grieving

Common signs and symptoms

- ◆ Shock
- ◆ Numbness
- ◆ Sadness
- ◆ Anger
- ◆ Guilt
- ◆ Anxiety
- ◆ Fear
- ◆ You may also find moments of relief, peace or happiness
- ◆ You may become depressed or hyper-anxious during the grieving process
- ◆ The stress of grief and grieving can take a physical toll on your body: sleeplessness is common, weakened immune system over time
- ◆ Unresolved grief can affect your quality of life and relationships with others

Treatment

- ◆ Social support
- ◆ Good self-care
- ◆ Passage of time
- ◆ Grief counselor or bereavement support group
- ◆ If depressed or anxious for more than a couple of weeks, speak with your doctor or nurse practitioner about medicine

(Source: National Mental Health Association (US). (2006). Coping with loss- Bereavement & grief. *web page*: www.nmha.org/infoctr/factsheets/42.cfm, accessed July 27, 2006).

[[Another valuable Canadian resource to educate yourself about grief is](#): Canadian Mental Health Association. (1993). *Grieving*. Toronto, ON: Author.]