Pan-Canadian Public Health Network Partners in Public Health

Participant Workbook

Preparing for an Influenza Pandemic:

A dialogue on the use of antivirals for prevention



## Acknowledgements

This publication has been developed by One World Inc. for the Pan Canadian Public Health Network Council.

One World Inc. acknowledges the contribution of many sources in the production of this workbook including:

- Members of the Task Group on Antivirals for Prophylaxis who worked on the content of this workbook;
- Participants in the focus group that met in September to help refine the dialogue approaches.

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## Additional information

For additional information on pandemic influenza and public health, please visit:

www.pandemicinfluenza.gc.ca

www.phac-aspc.gc.ca

www.who.int

## **Contact information**

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Dear Dialogue Participant,

# Thank you for agreeing to take part in the *Citizens' Dialogue on the Use of Antivirals for Prevention: Preparing for an Influenza Pandemic*

The purpose of this dialogue is to better understand the values and principles that Canadians believe should guide their governments as they develop policies and make decisions on how antiviral drugs should be used, if they should be used to prevent illness during an influenza pandemic and, if so, who should have priority for receiving them (priority recipients).

There is good scientific evidence that antivirals are effective in **treating** people who are sick with influenza. Under some conditions, they can also be effective when used to prevent illness. However, right now, we don't know enough about the use of antivirals for prevention to provide clear direction on this complex issue.

The Pan-Canadian Public Health Network Council, which is made up of senior public health authorities from federal, provincial and territorial governments, will make a recommendation to federal/provincial/territorial Deputy Ministers of Health about whether or not they should consider antivirals for prevention. Before it makes its recommendation, the Council wants to hear citizens' views. Your advice will be considered along with information being provided by scientific, legal, economic and ethical experts as well as advice from stakeholders and international bodies.

The Council has asked One World Inc. in collaboration with EKOS, to conduct dialogues with citizens and stakeholders across the country. One World Inc. has prepared this workbook to provide you with information to help you participate in the discussion. The information is up-todate as of early November 2006 when the workbook was produced. There will also be an information session the evening before the dialogue where you will have the opportunity to ask questions. During the dialogue, a process will be used that will help you as participants listen to each other and find common themes.

Through this process we will be asking you to think through the values, principles and other considerations that you believe should guide governments as they make decisions about the possibility of using publicly funded antivirals for prevention during an influenza pandemic. In this process there are no right or wrong answers. What we are looking for is a better sense of what you collectively value and why. We also hope that, through this process, we can help citizens better understand the nature of the challenge in front of us.

The findings from this process will be summarized in a report, highlighting what you, the participants, had to say. This report will be made public and you will receive a copy.

We sincerely appreciate the contribution you are making to this dialogue and hope you will find it to be a worthwhile and rewarding experience. Thank you for your participation.

Dr. David Butler-Jones, Chief Public Health Officer of Canada	Dr. Perry Kendall, Provincial Health Officer,
	British Columbia

Co-chairs of the Pan-Canadian Public Health Network Council



## Introduction to the Issue

The Government of Canada and its provincial and territorial counterparts have developed a *Canadian Pandemic Influenza Plan for the Health Sector* (the Plan) outlining a public health strategy on how to deal with an influenza pandemic (a worldwide outbreak of influenza affecting a large portion of the population). This national Plan, first published in 2004, was based on input from over 200 experts. It is updated on an ongoing basis as new developments and knowledge emerge.

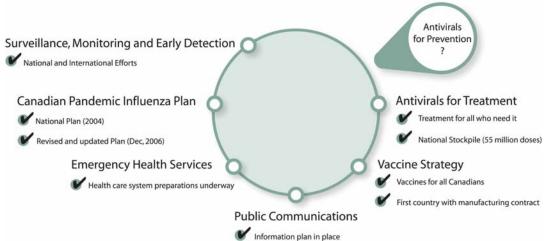
The Plan has two main goals:

- to minimize serious illness and overall deaths; and
- to minimize societal disruption by limiting the larger effects on society.

The Plan is complemented by other emergency response plans including those created by each level of government and individual health care institutions and those dealing with other important issues, such as the role and response of business in a public health emergency.

The Plan is based on what is known from science, public health principles, health care delivery and the ethical and legal implications of action. Canada is not the only country engaged in pandemic planning. Many other countries are involved in similar work. The World Health Organization (WHO) has encouraged all countries to develop plans to prepare for, and respond to, an influenza pandemic.

# **Canada's Pandemic Planning Strategy**



Canada is taking influenza pandemic preparedness very seriously. Federal and provincial/territorial governments are dedicating resources towards planning, research and ongoing surveillance in advance of a pandemic.

The following section gives you some information on influenza pandemics. There will also be presentations on the first evening where you will have the chance to hear the most up-to-date information and discuss your questions with experts. You may also wish to review the glossary at the back of this workbook.

## **Background Information**

### Understanding Pandemic Influenza

An influenza pandemic is a global outbreak that occurs when a new influenza virus strain appears that can spread easily from person to person with serious and sometimes even fatal consequences. Because it is caused by a new virus, everyone is susceptible to it and that is why the impact is seen globally.

The following provides a brief overview of the different types of influenza (or 'flu'), the connection among them and how they spread. A more detailed description will be provided in the evening information session.

- **Seasonal flu** is a human infection caused by influenza viruses carried and spread among humans.
  - People become infected as a result of breathing in the droplets that infected people cough or sneeze into the air or being exposed to them through shaking hands or touching contaminated surfaces, and then transferring the virus to their eyes, nose or mouth.
  - Seasonal flu can be a serious illness. Every year, about 4,000 people in Canada die from influenza and resulting complications.
  - Because seasonal flu is predictable, vaccines are prepared in advance of the arrival of the illness.
  - Several simple steps can help promote health and prevent the spread of influenza (whether seasonal or pandemic). These include:
    - wash your hands well and often;
    - cover up when you cough or sneeze;
    - keep shared surfaces clean;
    - get an annual flu shot; and
    - if you get sick stay home.
- **Pandemic flu** is a new strain of influenza that arises unpredictably and can spread quickly around the world.
  - It is carried and spread among humans.
  - Humans have little or no immunity against it.
  - Pandemic flu spreads from person to person like the common seasonal flu.

- Because it is a new flu strain, it will take at least 6 months, from the time the virus is identified, for vaccines to be available for most Canadians.
- **Avian (bird) flu** is predominantly a bird or animal disease caused by influenza viruses carried and spread by birds. Humans rarely get infected with avian influenza viruses; if they do, they experience an illness that can be mild to severe in nature
  - Wild birds are the main carriers of avian influenza viruses.
  - Domestic birds like chickens and turkeys get the virus from wild birds and may become seriously ill.
  - Humans do not easily contract avian flu viruses.
  - There is <u>no</u> evidence that avian flu is passed by eating poultry products that have been properly cooked.

What is the connection between the three types of flu? A pandemic flu virus could develop from an avian flu virus that either changes slightly or mixes with a seasonal (human) flu virus and as a result, is able to spread easily from human to human.

### History of Pandemics

A pandemic is a widespread outbreak that affects a large proportion of the population. It is often worldwide.

People are exposed to different strains of influenza during their lives and even though the virus changes, a previous case of flu may offer some protection against an infection caused by a similar strain.

However, in the case of a flu pandemic (which tends to occur three to four times each century) a completely new strain of influenza appears. Since people have no immunity against the new strain it can spread rapidly around the world. It is impossible to predict exactly when the next pandemic will hit, but experts agree that one will come.

Pandemics are not new – the first was recorded in 412 BC. In the last century, there were three major (and very different) pandemics:

- *The Spanish Flu* was a severe pandemic that took more than 40-50 million lives worldwide in 1918-19. During this pandemic an unusually high number of deaths occurred in young, healthy people.
- The Asian Flu was a moderately severe pandemic which caused approximately one to two million deaths worldwide in 1957. During



this pandemic the most vulnerable groups were infants and the elderly.

• The *Hong Kong Flu* pandemic was the least severe of these pandemics, though it still caused approximately one million deaths in 1968. During this pandemic the most vulnerable groups were also infants and the elderly.

It is not possible to know when the next pandemic will occur, how severe it will be, or which groups will be most affected. Human and avian influenza viruses continue to circulate and there is always a risk that a new virus with pandemic potential could arise. It is important however to recognize that most outbreaks of avian influenza in birds will <u>not</u> lead to a pandemic.

## Expected Impact

In general, experts believe that a pandemic virus will behave in much the same way as seasonal flu.

- The time between exposure to the virus and onset of symptoms will be 1-3 days.
- An infected person can be contagious:
  - starting the day before onset of symptoms and for 3 to 5 days after the onset of symptoms; and
  - transmission is more likely when the infected person is coughing.
- Not everyone who is exposed to the virus will get sick.

It is anticipated that:

- the pandemic virus will arrive in Canada within 3 months of the time it appears anywhere in the world;
- the pandemic will likely occur in 2 "waves";
- each pandemic wave will likely occur over a 6-8 week period in any given area;
- there will likely be regional differences in the timing of peak pandemic activity;
- the majority of the population over 70% will catch the virus over the course of the pandemic, but only 35% of the population will get sick; and
- in the first wave (before the vaccine is produced and distributed), up to 25% of the population could be ill enough to miss at least a half day of work/school.

If the pandemic is "moderately severe":

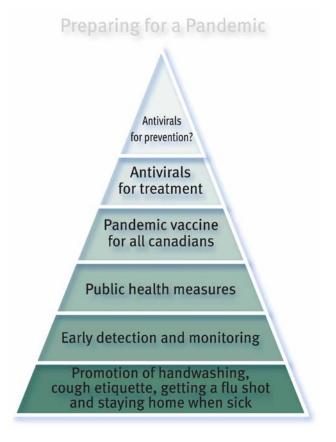


- Up to 20-25% of workers would be away from their jobs during the peak 2 weeks of the pandemic wave which could affect the delivery of essential services;
- 110,000 ± 30,000 would be hospitalized and recover, and
- about 40, 000 people ± 20,000 could die (many of whom would have been hospitalized prior to death). This is about 10 times more than in a regular flu season.

These predictions do not include the impact of vaccines, antivirals or other response measures. An actual pandemic could be more or less severe.

### Response to a Pandemic

Canada's comprehensive pandemic planning is recognized worldwide. As the pyramid below illustrates, the Plan is built on a foundation of basic prevention measures we all can take, such as hand washing and cough etiquette. Then we have early detection and monitoring, as well as other public health measures. Vaccines for prevention and antivirals for treatment appear near the top of this pyramid. At the very top is the question of using publicly funded antivirals for prevention. This measure is still being debated and is the focus of our dialogue.



Governments have made sure that contracts are in place to produce vaccines so that every Canadian can be vaccinated as soon as possible. Vaccines provide protection against a disease – they are not a treatment. Widespread vaccination not only protects individuals, it can also decrease the spread of disease in the population. While there will be enough vaccine for every person in Canada, it will take at least 6 months after the strain of virus causing the pandemic is identified, before the vaccine will be ready for most Canadians. Two doses would likely be required and protection may not be 100%.

#### Antivirals for treatment

The use of antiviral medication for treating people will be vital until a vaccine becomes available. A National Antiviral Stockpile of 55 million doses has been created to ensure every Canadian who needs treatment during a pandemic will get it. Currently we know that antivirals are an effective treatment for seasonal flu: people are not sick for as long as they would be without the medication and they have fewer complications. We expect that antivirals will also have this effect on a new pandemic influenza virus, although we cannot be certain until it arrives and we test the medication.

Antiviral medications come in 3 forms: pills, liquids/syrups and inhalers. Most of the supplies purchased by government (for the purpose of treatment) come in the form of a pill called "Tamiflu". Usually antiviral medications are prescribed by physicians and other health care professionals licensed to write prescriptions.

They are most effective if taken early on in the course of the illness (within the first 48 hours of onset of symptoms). Taking 2 pills a day for 5 days can shorten flu symptoms by about one day. Treatment can also reduce the severity and complications of influenza.



#### Antivirals for prevention

Studies have shown that antivirals can be used for prevention as well. Using antivirals to help prevent flu is relatively new–usually we use annual flu vaccines to protect large numbers of people. We do know that antivirals may be useful in controlling outbreaks of seasonal influenza in nursing homes and other facilities and they have been used in avian influenza outbreaks to protect workers whose job it is to kill infected birds. We don't know how effective antivirals will be for prevention in a pandemic, as they have never been used in this manner.

A person needs to take 1 pill a day when antivirals are used for prevention. However the length of time a person would need to take antivirals varies considerably. It can be 1 week if the medication is taken after exposure to someone who is ill, up to a maximum of 8 weeks if it is to provide protection for the duration of the first wave.

The only licensed use for antivirals for prevention in Canada is for healthy people over 1 year of age taking Tamiflu for 1 week after exposure to an infected person. The few studies done on taking preventive therapy for longer periods have shown that antivirals can prevent influenza in healthy people if taken daily for 4-6 weeks while the flu virus is circulating in the community. However, in these studies, since over 90% of people would not have come down with the flu anyway, a large amount of antivirals were taken by many people to prevent a small number of cases (i.e. Out of the 100 people who took the antivirals, the drugs helped prevent illness in 4-7 of them). In a pandemic, where the estimated percentage of people who will get sick is higher, these numbers may vary.

#### Possible risks

•Like all drugs, antiviral medications have possible side-effects. The most common are nausea, vomiting, abdominal pain and headache. These tend to occur more often when the drug is taken for treatment (2 pills/day) as opposed to prevention (one pill/day). More severe reactions have rarely been reported, but we do know that these sorts of events are underreported.

•These drugs have not been tested for safety in children less than one year of age or in pregnant women.

• There is a chance that an influenza virus could become resistant to these medications, particularly if they are not used as directed. If the virus develops resistance, the antiviral drugs would no longer be effective for prevention or treatment.

•Getting people to take the drug as prescribed could be a problem, especially for prevention, because they may need to remember to take a pill every day for many weeks.



There are significant cost and human resource implications to adding antivirals for prevention to our planning efforts. Using our resources in this way could mean there are other things we won't be able to do, both pandemic and non-pandemic related. The Public Health Network Council is examining the potential upsides and downsides of using antivirals for prevention, including the ethical and legal implications. As part of this process, the Council wants to hear from citizens about the values, principles and other factors that you believe should guide governments as they make decisions about the use of antivirals to prevent illness during a pandemic.

## Purpose of the Dialogue Session

You have been invited as part of a randomly chosen group of Canadians to explore the values, principles and other considerations that you believe should guide your governments as they develop policies and make decisions on how antiviral drugs should be used, if they should be used to prevent illness during an influenza pandemic and, if so, who should have priority for receiving them.

On the first evening, you will have the opportunity to listen to and ask questions of an expert on pandemic influenza and on antivirals.

The following day, you will consider three approaches that will help you think through the values and principles that governments should consider when they make decisions about whether or not to use antivirals for prevention during an influenza pandemic. These approaches stress different priorities and principles. You'll have a chance to work through them with other participants and talk together about which values, principles and other factors you would like to see reflected in the governments' decision-making.

By the end of the day you may think that the values and principles underlying one approach capture your views better than others. You may identify a different set of principles, you may have found common ground with others, or you may find that the group is sharply divided. We hope that, whatever the outcome, you have a good discussion and come away with a better understanding about what's involved in considering the possible use of antivirals for prevention during an influenza pandemic.



## Agenda for the Session:

## Day 1 Evening (6:30 pm - 9pm)

Welcome and Opening

Participant Introductions

Initial Questionnaire

Presentations: Learning About Pandemics and the Use of Antivirals

Discussion

## Day 2 (9am - 4:30pm)

Overview of the Process

Discussion: Personal Experiences of a Public Emergency

Dialogue Using Three Approaches:

On what basis should publicly funded antivirals for prevention be provided during an influenza pandemic?

## Buffet Lunch

Elaboration of "Common Ground" (shared values and views that could guide

decision-making)

Identification of Priority Recipients for Antivirals for Prevention:

Given your common ground, who should be the priority recipients to receive antivirals for prevention?

Final Considerations:

What else do governments need to consider in making a decision about whether or not to provide publicly funded antivirals for prevention?

Closing Questionnaire

Closing Comments – Participants

Closing Comments – Facilitators and Hosts



## What is Dialogue?

# Debate vs. Dialogue\*

The discussion that you and your fellow citizens will be having is designed to be a dialogue. Dialogue is a special kind of conversation that involves learning together and working to understand different points of view to try to build on common ground. Dialogue is very different from debate, as shown in the chart below.

Debate	Dialogue
Assumes that there is one right answer (and you have it)	Assumes that others have pieces of the answer
Attempts to prove the other side wrong	Attempts to find common understanding
Objective is to win	Objective is to find common ground
Listening to find flaws	Listening to understand
Defend your personal assumptions	Explores and tests personal assumptions
Criticizes the other's point of view	Examines all points of view
Defends one's views against others	Admits that others' thinking can improve one's own
Searches for weaknesses and flaws in the other's position	Searches for strengths and value in the other's position
Seeks an outcome that agrees with your position	Seeks an outcome that creates new common ground

\*Adapted from the version used by the Canadian Policy Research Networks



The following ground rules\* can help us engage in good dialogue.

# Principles & Ground Rules for Dialogue

- 1. The purpose of dialogue is to understand and to learn from one another (you cannot "win" a dialogue).
- 2. All dialogue participants speak for themselves, not as a representative of others' interests.
- 3. In a dialogue everyone is treated as an equal: leave status and stereotypes at the door.
- 4. Be open and listen to others especially when you disagree, Suspend judgment.
- 5. Identify and test assumptions (even your own).
- 6. Listen carefully and respectfully to the views of others: acknowledge you have heard the other, especially when you disagree.
- 7. Look for common ground.
- 8. Express disagreement with ideas, not with personalities or motives (disagree without being disagreeable).
- 9. Respect all points of view.

\*Adapted from the version used by the Canadian Policy Research Networks

# Pan-Canadian Public Health Network

# Glossary

(The following definitions are included to help citizens as they listen to presentations and read the workbook.)

**Antiviral drugs:** Medication used to treat (and in some cases prevent) influenza. Antivirals come in pills, syrup/liquids, and inhalers. Antivirals are <u>not</u> a vaccine.

**Avian** (bird) flu: A disease originating in birds caused by influenza virus that can occasionally spread to other animals and humans.

**Canadian Pandemic Influenza Plan for the Health Sector (CPIP):** A national pandemic plan produced by representatives from the federal, provincial and territorial governments. It has two main goals:

- to minimize serious illness and overall deaths; and
- to minimize societal disruption by limiting the larger effects on society.

*Ethics:* The moral principles governing or influencing conduct that helps identify how to "do the right thing".

*Flu (Influenza):* A popular term for influenza often misused to describe a cold (see Influenza).

*Health care sector:* Those agencies, organizations and practitioners who offer health services both at an individual level (patient care) and at a population level (public health).

*Health care worker:* Persons who work in settings where health care services are provided.

*Influenza:* A severe respiratory infection caused by an influenza virus usually associated with fever, cough and other symptoms such as sore throat or muscle aches.

**Pandemic flu:** A worldwide outbreak of influenza that affects a large portion of the population.

**Population-based health:** A type of health service that focuses on the health of populations through health promotion (how to make communities healthy), health protection (preventing infectious diseases and other health risks) and gathering health information (see **Surveillance**).

*Priority recipients:* Individuals or groups of people who would receive something before others (such as vaccines or antivirals for treatment or prevention).

**Prophylaxis:** Prevention. For the purposes of our dialogues, prophylaxis refers to the use of medication to prevent a disease (rather than treatment of a disease).



**Public health**: Public health focuses on the health of the population. It is made up of a range of efforts to protect and promote peoples' health. It includes activities like immunization; healthy eating and physical activity programs; infection control measures; and gathering information on both health and risk factors (see **Surveillance**). Public health interventions can relieve some of the pressure on the health care system.

**Public health emergency:** An imminent and serious threat to the public's health that is posed by a dangerous disease or health hazard. This can include natural disasters such as a tsunami, a widespread outbreak of an infectious disease or a large terrorist event.

**Public health measures:** Non-medical interventions (such as quarantine or nonsmoking legislation) that may be used to slow or stop the spread of the disease or promote a population's health.

**Publicly funded:** Paid for by the government. This money comes from individual taxpayers and other sources of income for governments (e.g., interest, corporate tax).

**Quarantine:** A public health measure that involves keeping people (or animals) who have been exposed to an infectious disease away from others for a short period of time to help prevent the spread of infection.

**Surveillance**: This is the intelligence-gathering function of public health. It involves the collection of data to describe the health of a population and identify patterns of disease, outbreaks and health risks. This information is then used to assess responses to diseases.

*Vaccine:* A preparation of a weakened or killed form of an infectious agent given in order to create antibody production and immunity. Vaccines are given to prevent disease. The vaccine itself does not cause the disease.

*Virus:* A microscopic particle that can infect the cells of a biological organism and cause an infectious disease. Colds and flus are caused by viruses. They do not respond to antibiotics.