



Canadian Red Cross



## How to Manage the Flu!

Prevention of Disease  
Transmission in  
Canadian Workplaces

November 2007



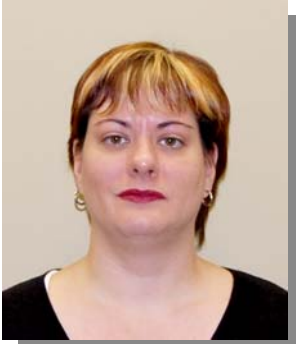
## Red Cross

- Largest humanitarian organization in the world
- Largest provider of First Aid education & training in 185 countries world wide
- In Canada, Red Cross has MOUs with:
  - Canadian Medical Association (CMA)
  - Public Safety Canada
- Partner with Public Health Agency of Canada

# Your Speakers Today



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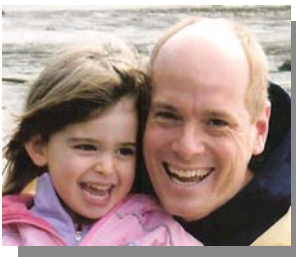
## Louise Geoffrion

Program Manager, Planning, Monitoring and Evaluation, Disaster Management  
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National Manager First Aid Programs  
Canadian Red Cross



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Chair, Canadian Red Cross National Medical Advisory Committee

Chief, Department of Emergency Medicine,  
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# Overview



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- What is Influenza?
- Pandemic Influenza
- Pandemic Preparedness
- Business Continuity Planning
- Personal Preparedness

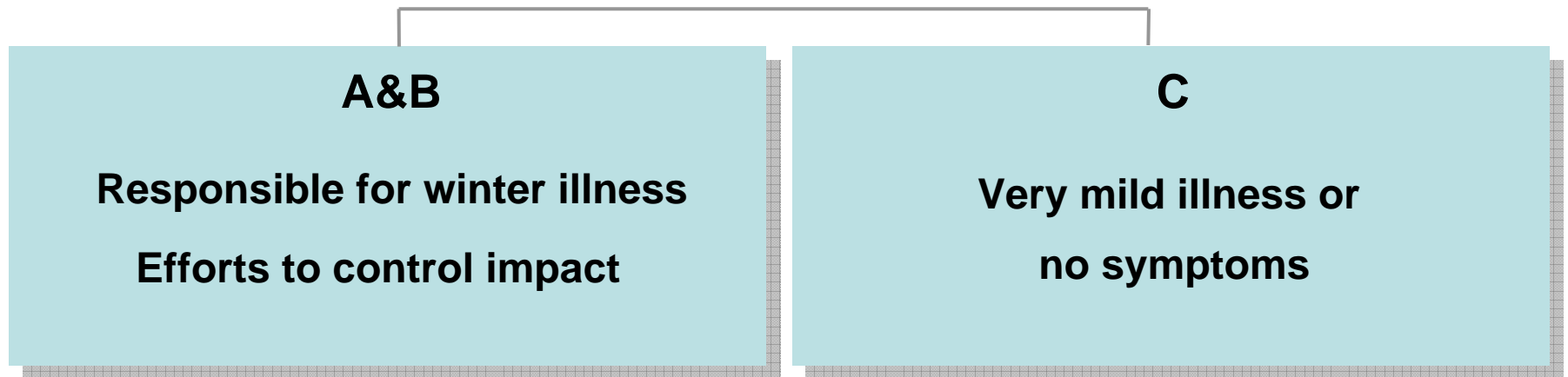
# Influenza



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- “The flu,” is caused by viruses that infect the respiratory tract
- Up to 10% of Canada’s population is affected every year
- Can be life threatening for those with high-risk conditions

## Influenza Virus Designation



Viruses continually change over time, usually by mutation. This enables the virus to evade the immune system of its host, so that people are susceptible to influenza virus infection throughout their life

# Prophylaxis vs. Treatment



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## Prophylaxis

### Vaccine

Injection of a killed microbe (virus or bacteria) in order to stimulate the immune system preventing or weakening the disease.

## Treatment

### Anti-viral agents

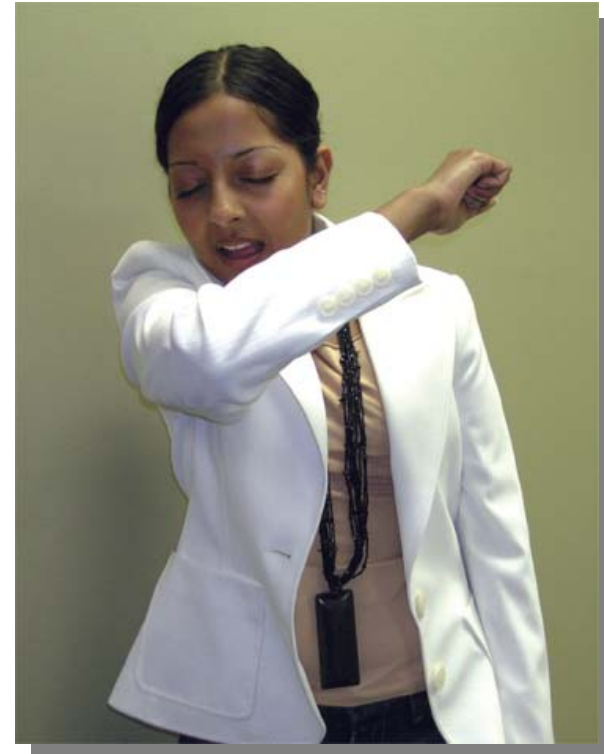
70% effective in reducing the severity and duration of symptoms when administered within 48 hours of illness onset.

# Signs & Symptoms of Flu



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- Fever (usually 37.8°C -39.4°C/ 100°F -103°F in adults, higher in children)
- Cough
- Sore throat
- Runny nose
- Headache
- Muscle aches and pains
- Extreme fatigue





# Sporadic/Epidemic/Pandemic



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- **Sporadic** - Individual cases of disease in widely separated geographic areas (independent cases)
- **Epidemic** - Sudden severe outbreak within a region or a group (Malaria in Africa)
- **Pandemic** - An epidemic becomes very widespread and affects a whole region, a continent, or the entire world

# Pandemic Influenza



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- May affect up to 35% of the Canadian population
- Every age may be at risk of serious illness
- Vaccine won't be available at the beginning of the pandemic
- Occurs about three times each century

# Recent Pandemics



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## 1918: “Spanish Flu”

40-50 million deaths

## 1957: “Asian Flu”

2-4 million deaths

## 1968: “Hong Kong Flu”

1 million deaths

# How Does An Influenza Pandemic Start?



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- Virus emerges that is so different that few people, if any, have any immunity to it
- Spreads widely and rapidly, affecting hundreds of thousands of people
- May be the result of an animal virus and a human virus mixing to produce a new strain
- Animal virus usually comes from birds

# Avian Influenza (Bird Flu)



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- Wild birds are the main carriers
- Domestic birds (chickens and turkeys) get the virus from wild birds and may become seriously ill
- Risk in Canada is currently very low
- Humans can only get avian influenza (bird flu) by handling infected birds or coming in contact with contaminated feces
- Since 2003, there have been 332 confirmed cases of human transfer of Avian Influenza A(H5N1) resulting in 204 deaths\*

\* *Cumulative number of confirmed human cases of Avian Influenza A/(H5N1) reported to WHO as of October 25, 2007*

# How Does An Influenza Pandemic Spread?



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- **Direct** contact (within 1 to 2 metres) airborne transmission
- **Indirect** contact (surfaces\*)

*\* Flu viruses can live on surfaces for up to 24 - 48 hours*



# How Many Canadians May Be Affected?



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- Up to three waves lasting 6-8 weeks
- 4.5 - 10.6 million could be affected
- 2 - 5 million could require medical care
- 138,000 could require hospitalization
- Up to 58,000 deaths could occur

# Bill C-12, The New Quarantine Act



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- Intended to prevent the introduction and spread of a communicable disease arriving in, or departing from, Canada
- The proposed Act would repeal and replace the existing *Quarantine Act (1872)*
- Airlines, cargo ships, etc., required to report an illness or the death of a passenger before arrival or departure
- Minister of Health could be issued special powers of appointment and seizure



# Public Preparedness



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- Government officials may impose restrictions on activity, movement or travel to prevent the flu virus from spreading
- Schools, workplaces and public gatherings such as sporting events or worship services, may be closed temporarily
- Mass transportation such as subways, buses, trains and air travel may be limited

# Business Continuity Planning



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- Up to 25% of staff may be absent at one time. Does your existing continuity plan account for this kind of human resource interruptions?
- The businesses you rely on may experience the same absentee rates
- Disruptions may occur in the supply chain for raw materials, goods and services
- Return-to-work and travel policies may have to be adapted to control the spread of the virus among employees

# Preparedness For Your Organization



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- Identify a pandemic coordinator/team
- Identify critical positions and other critical inputs
- Train & prepare an ancillary workforce
- Establish an emergency communications plan
- Exercise/drill/test your plan annually

# Preparedness For Employees/Customers



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- Forecast employee absences during a pandemic
- Evaluate employee access and availability of healthcare and social services during a pandemic
- Identify employees and key customers with special needs and incorporate them in your plan
- Provide emergency contacts and chain of command

# Establish Policies



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- Employee compensation and sick-leave absences
- Flexible worksite and work hours
- Preventing influenza spread at/off the worksite
- Triggers to activate or deactivate your organization's pandemic plan

# Employee Education



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- Inform employees on pandemic fundamentals
- Plan for addressing any fear and anxiety
- Establish a communication hotline or website
- Identify regional sources for accurate pandemic information

# Coordinate With External Organizations



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- Collaborate and communicate with regional health authorities
- Share best practices with other organizations
- Speak with suppliers, vendors and even competitors about how to collaborate

# Personal Preparedness



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- Wash your hands often, using plenty of soap and warm water
- Cover your mouth when you cough
- Use a tissue or a handkerchief when you sneeze
- If you become sick, stay at home
- Talk to your health care provider about the annual flu shot





# Personal Preparedness



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## Food - 2-week supply

- No refrigeration, preparation or cooking
- Formula for infants or special nutritional needs
- Pets

## Water - 2-4 litres/ person/day

- Use clean plastic containers
- No milk cartons or glass bottles

## Medical

- Have extra prescription and non-prescription drugs and supplies



*Red Cross Family First Aid Kit*

# Personal Preparedness



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- Store health/cleaning supplies
- Talk to family/loved ones about how they would be cared for if they get sick
- Find out now about your child's school/day-care



# Key Steps to Personal Preparedness



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Know the risks



Make a plan



Prepare a kit



*Red Cross Disaster Preparedness Kit*

# Disasters in Canada



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*Tornado, Manitoba, 2007*



*Hurricane Juan, Nova Scotia, 2003*



*Ice Storm, Quebec, 1998*



*Hurricane Juan, Nova Scotia, 2003*

# Resources Available



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**Preventing Disease Transmission**

How Does An Infection Spread From One Person to Another?

**Vector Transmission**  
For example, getting bitten by a mosquito that has already bitten an infected person

**Direct Contact**  
For example, touching the blood of someone infected

**Airborne Transmission**  
For example, breathing in germs from the sneeze of an infected person

**Indirect Contact**  
For example, picking up something an infected person has touched

**Proper Handwashing Prevents Infection from Spreading**

- 1. WET** your hands.
- 2. Apply** a small amount of SOAP, about the size of a dime or a quarter.
- 3. Make** sure you SCRUB between your fingers, under your fingernails, and around the backs and palm of your hands.
- 4. RINSE** your hands under warm running water. Leave the water running while you dry your hands.
- 5. DRY** your hands with a clean, disposable towel. Be careful not to touch the faucet handles or the towel holder with your clean hands.
- 6. Turn** the faucet off using the towel as a BARRIER between your hands and the faucet handle.

**Remember:**  
Always use some type of barrier device between you and possible infected material:

- Gloves (preferably non-latex, non-vinyl)
- Masks
- Workplace specific safety equipment

Red Cross First Aid. Prepare for Life.  
Canadian Red Cross 1-877-356-3226 | www.redcross.ca

OHS  
Nexcare  
First Aid

*Preventing Disease Transmission Poster*

**Preventing Disease Transmission FASTGUIDE**

Canadian Red Cross  
Red Cross Injury Prevention FASTGUIDES™

*Preventing Disease Transmission Fastguide*

# Additional information available



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## National/Federal

- **Public Health Agency of Canada**  
Canadian Pandemic Influenza Plan: [www.phac-aspc.gc.ca/cpip-pclcpi/index.html](http://www.phac-aspc.gc.ca/cpip-pclcpi/index.html)
- **Public Safety and Emergency Preparedness Canada**  
[www.psepc-sppcc.gc.ca](http://www.psepc-sppcc.gc.ca) or 1-800-484-8302
- **Health Canada – Latest Headlines, Advisories and Warnings**  
[www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## International

- **World Health Organization Epidemic and Pandemic Alert and Response (EPR)**  
[www.who.int](http://www.who.int)
- **U.S. Centre for Disease Control (CDC)**  
[www.cdc.gov/flu/pandemic](http://www.cdc.gov/flu/pandemic)

# Additional information available



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[www.redcross.ca/flu](http://www.redcross.ca/flu)

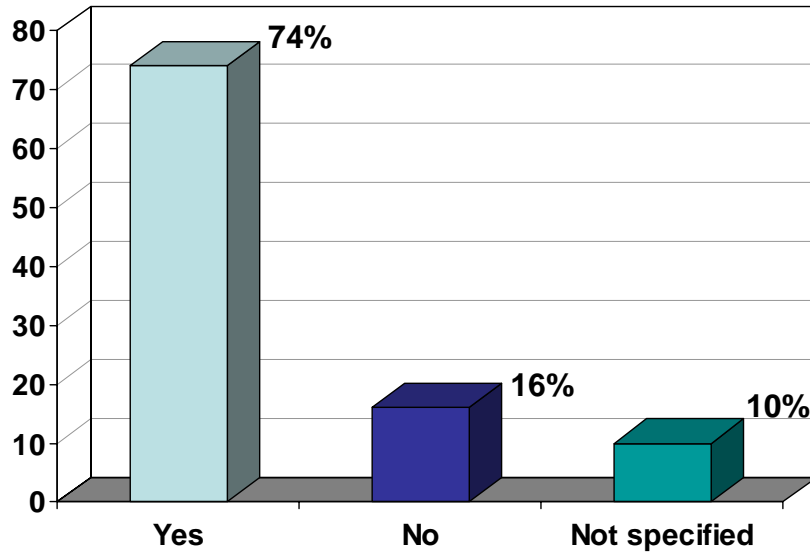
[www.redcross.ca/firstaid](http://www.redcross.ca/firstaid)

# Registration Poll Results

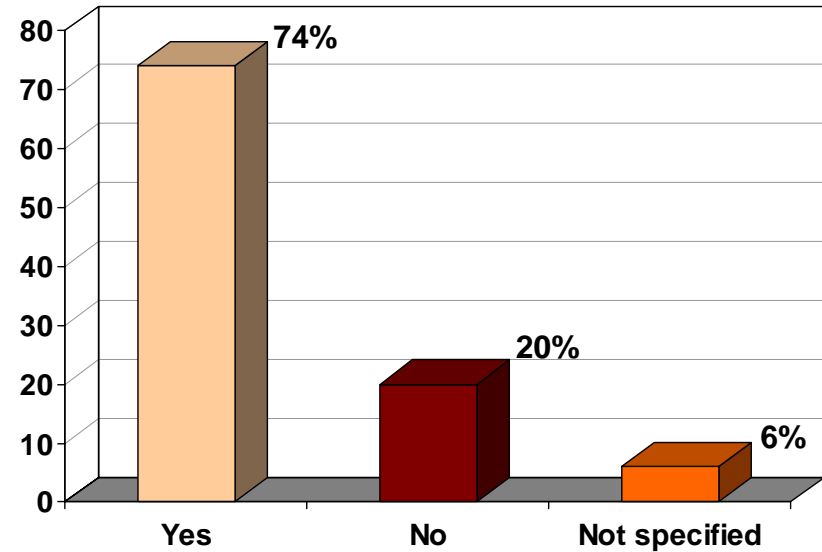


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## Business Continuity Plan for Disaster



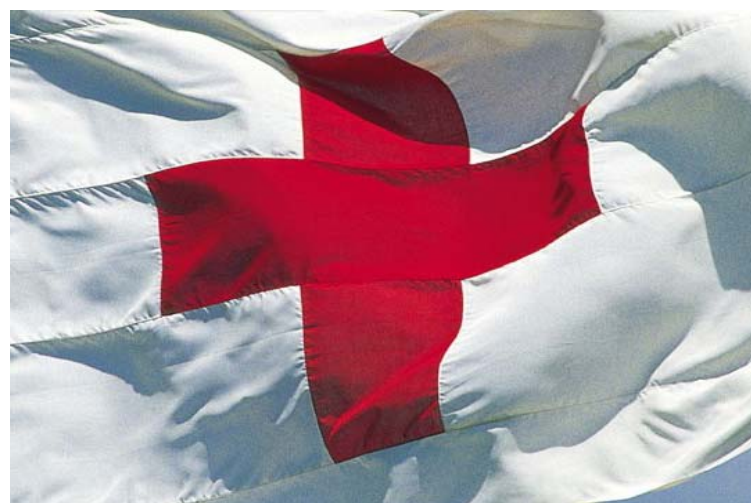
## Flu/illness Prevention Policies







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# Thank you!