

***PANDEMIC INFLUENZA:  
CURRENT THREAT AND  
CALL FOR ACTION***

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# ***NEW INFLUENZA VIRUS, NEW THREAT***

- NEW STRAIN OF FLU COULD KILL MILLIONS AROUND THE WORLD
- WORLD IS NOT READY FOR A FLU PANDEMIC
- PANDEMIC FIGHT FACES LIMITATIONS OF SCIENCE AND MANUFACTURING

# ***H5N1 IN HUMANS: SYMPTOMS***

- fever
- abdominal pain, bleeding from the gums and nose, chest pain, diarrhoea, vomiting
- pneumonia
- multi-organ dysfunction

# ***H5N1 IN HUMANS: TREATMENT***

- some anti-viral drugs (e.g. Tamiflu) may improve chance of survival
  - 48 hours
  - limited production capacity
  - prohibitively high cost
- older antivirals
- antibiotics
- the disease currently kills over 50% of its victims [192 cases, 109 deaths (06/04/06)]

# ***H5N1: THE CONCERN***

- is affecting new animal hosts
- is increasing its geographic range
- is highly pathogenic
- is mutating rapidly
  
- causes severe disease in humans

# *PANDEMICS*

- global epidemic due to a newly-emerged strain of flu
- few people, if any, will have immunity
- three pandemics in the last century
  - 1918
  - 1957
  - 1968

# *1918 SPANISH FLU*

- killed upwards of 50 million people
- horrifying death
  - faces turned black
  - victims drowned in their own lung fluid
- death could come very quickly

# *1918 SPANISH FLU: IMPACTS ON SOCIETY*

- sickened half the population
- churches, government ministries, schools closed
- private buildings were pressed into service as hospitals
- families disintegrated
- funerals became a common sight



# *1918 SPANISH FLU: IMPACTS ON BUSINESS*

- losses to business were staggering
  - customers were too ill to shop, staff were absent with flu, and transportation was halted
- pool halls, restaurants, and theatres all lost heavily
- the insurance industry was the hardest hit

# *PANDEMIC: PREDICTED IMPACTS*

- all countries will be affected
- widespread illness will occur
  - expected hospitalizations: 6.4-28.1 M
  - expected deaths: 2-50 M
- medical supplies will be inadequate
- large numbers of deaths will occur
- economic and social disruption will be great

# ***PREDICTED IMPACTS: HEALTH SERVICES***

- depletion of the workforce due to illness
  - in 1918, 25% of hospitalized victims were frontline health workers
- increased numbers of patients requiring treatment
  - in Toronto, over 700,000 could require outpatient care, 14,000 could need hospital care, and 4300 could die

# *VACCINES*

- Vaccines
  - 6 months may be required to produce an effective vaccine
  - once a vaccine is ready, who gets it?
    - healthcare workers?
    - essential services workers?
    - at-risk groups?
    - enclosed communities?
    - general public?

# ***PREDICTED IMPACTS: BUSINESS***

- public health authorities predict that up to 60% of the work force will be too ill or too frightened to leave home, and will not show for work
- employee absenteeism could ground planes, and close bars, daycares, grocery stores, schools, and other public places

# ***WHAT BUSINESS NEEDS TO DO***

- develop:
  - a pandemic team
  - emergency budget
  - pandemic scenarios
  - strategy
    - to reduce cases, hospitalizations and deaths
    - to reduce economic impacts

# ***WHAT BUSINESS NEEDS***

- education on pandemic influenza
- compliance with international, national, and local laws and regulations
- consistency with its industry's custom and norms
- ethical framework
  - whose values should prevail?
  - how should individual freedoms be balanced against the common good?

# ***ETHICAL FRAMEWORK***

- a sound ethical framework will help guide organizational policies regarding:
  - benefits and compensation packages
  - decisions to close a site
  - evacuation of employees working in or near an affected area
  - financial assistance
  - flexible worksite and work hours
  - preventive medical opportunities



# ***WHAT BUSINESS NEEDS***

- plan to maintain functionality
- pandemic-specific continuity procedures
- communication protocol
  - government, staff, suppliers, and customers
- employee health and well-being protective measures
- recovery plan

# ***WHAT CAN YOU DO?***

- store food and water
- stock medicines, non-prescription drugs, and other health supplies
- review public health measures to reduce the risk of contracting or spreading influenza
  - avoid non-essential travel and large crowds, clean hard surfaces, maintain good basic hygiene, etc.
- record health information for each family member in case of emergency
  - e.g. allergies, blood type, medications

# ***IF YOU DO CATCH THE FLU***

- stay at home and rest
- drink plenty of fluids
- take medications to relieve symptoms

# ***ARE CANADA AND THE WORLD READY?***

- **NO**
- only 40 of the world's countries have developed influenza preparedness plans
- only 30 of the world's countries are stockpiling drugs

# *CAN A PANDEMIC BE AVERTED?*

- the answer is unknown
- the best way to prevent a pandemic would be to eliminate the influenza virus from birds
- antiviral medications to treat early cases
- public interventions
  - e.g. school closures, travel restrictions, voluntary quarantine
- personal interventions

# ***RESPONSIBILITY***

- global problem
- global responsibility
- national responsibility
- organizational responsibility
- personal responsibility

# *IN THE END*

- extraordinary times call for extraordinary leaders
- after a pandemic, millions will be affected in profound ways—from depression due to the loss of friends and relatives to financial loss resulting to disruption to business
  - corporations, government, and society will have to ensure financial, psychological, and social support for affected families and companies and the rebuilding of society