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