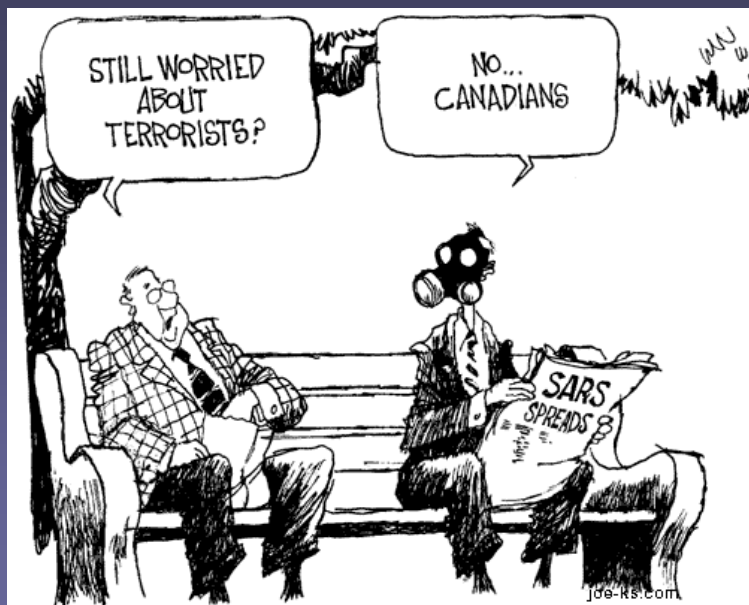


When Reality Kicks in: Crisis Management – SARS in Ontario

Dr. George Pasut
Executive Lead, Public Health System Transformation
Ontario Ministry of Health and Long-Term Care
Toronto, Ontario, Canada



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Toronto/Greater Toronto Area

- The People
 - 50% of population of Ontario
 - 56% speak English as their first language
 - >100 languages spoken
- Large homeless population: in 1996 26,000 used the shelter system
- The Economics
 - 17% of Canada's jobs
 - 14% of Canada's retail sales

SARS

- Unknown agent
- Uncertain incubation period
- Mode of transmission unclear
- Unknown period of communicability

- No diagnostic test
- No prophylaxis
- No vaccine
- No treatment

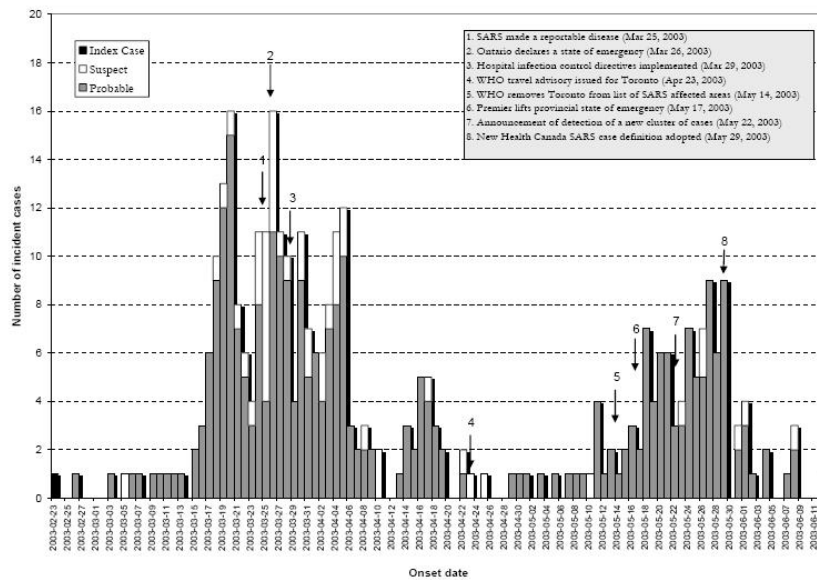


SARS in Ontario

- 375 Cases
 - 246 probable
 - 128 suspect
- 61% of cases in Toronto
- 43 deaths
 - 33 in hospital including
 - 1 healthcare worker
- By June 2003, over 7000 people had been in quarantine
 - 65 Medical Officer of Health Orders
 - 1 Court Order



Figure 1: Epidemic Curve of 2003 Ontario SARS Outbreak, by Case Type

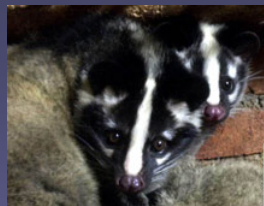


Crisis Management

- Crisis:
 - An unexpected event that threatens wellbeing
 - A significant disruption to normal operations that threaten clients, workers and the public.

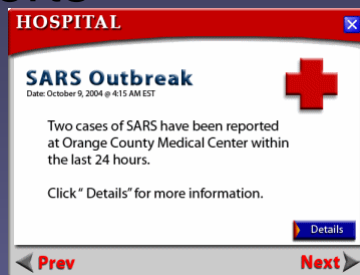
Zoonotic Origins

- Suspected to be a disease of animal origin
- Transmission to animal species?
- Transmission between animal species?
- Transmission from animal species to humans in Canada?
- Manifested as “simple” decisions regarding quarantine involving families with pets



Health Alerts

- Then
 - Limited ability to convey health alert information to target audiences
 - No consolidated lists of target audiences
 - Major operational impacts to use of administrative communication tools
- Now
 - Evolving health alert system with built in fail-safe mechanisms
- Still
 - Challenges of position, person, reach and message



Screening

- Then
 - Implementation of untested methodology to identify possible imported cases (to country, to an institution)
- Now
 - Enhanced appreciation for health care facility public access, visitation, and general triage and screening procedures.



Quarantine

- Then
 - Application of historic infectious disease control intervention in an effort to mitigate transmission
 - Legal and ethical issues abound
 - Profound level of voluntary compliance
- Now
 - Enhanced efforts to establish interoperable legal frameworks
 - Renewed appreciation of public health ethical issues



Singapore

Risk Management

- Then
 - Reactive decisions responding to new, slowly evolving or rapidly changing circumstances
- Now
 - Better systems in place (communication, decision-making, employee health, etc)
 - Business continuity plans for pandemic influenza

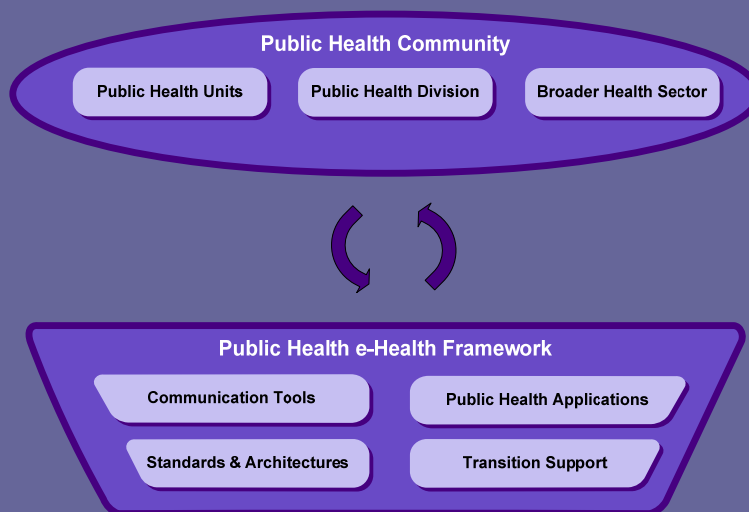


Epidemiologic Tools

- Then
 - Paper files, epidemiology by post-it note,
 - 24/7 Teleconferences with people you don't know and can't trust
- Now
 - Improving integrated information systems but not yet tested in a crisis
 - Scalability untested
 - We haven't solved the teleconference challenge!



Public Health e-Health Framework




PublicHealthOntario.ca
Ontario's Public Health Information Exchange


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Laboratory Investigation

- Then
 - Provincial public health laboratory challenged to meet demand for testing
 - No information systems or electronic connectivity
- Now
 - Revitalization of provincial public health laboratories
 - Creation of new public health agency



Social Change

- Then
 - Profound societal impacts in countries with and without SARS
- Now
 - Collective memory is short, lessons are forgotten



Public Safety and Emergency Preparedness

- Then
 - First known declaration of a provincial emergency for a public health threat
 - Public safety culture vs Public health culture
- Now
 - Evolution of key positions (e.g., Commissioner of Emergency Management)



International Agencies

- Then
 - Less appreciation for the interaction with international agencies, and repercussions of decisions e.g., travel advisories
- Now
 - Global implications considered at all levels



Public Health Response

- Then
 - Depleted workforce, no surge capacity, limited mutual aid
 - Public health education
 - Case and contact investigation
 - Infection control guidance
 - Isolation and quarantine
 - Emergency preparedness and response
 - Mass media
 - Provider education
- Now
 - Early efforts to address health human resource challenges including mutual aid agreements



Mass Media

- Then
 - Media goals versus public health goals
 - Entertain vs educate
 - Reflect society vs change society
 - Personal concerns vs societal concerns
 - Short term vs long term
 - Two or more viewpoints vs dismissal of unsubstantiated claims
 - Certainty vs acknowledge uncertainty



Public. Provider and Policymaker Education

- Then and Now
 - Communicating to inform
 - Audience
 - Literacy and numeracy
 - Culture and language
 - Channels
 - Communicating uncertainty
 - Communicating to persuade
 - Behaviour change arsenal includes education, marketing, law, policy and regulation



Lessons Learned

Play The Hand You Are Dealt

- Limited human resources
 - Solicit help from other jurisdictions
 - Working quarantine
- Inadequate information gathering/sharing systems
 - Sticky notes
 - Lack of industry-wide distribution list
 - Conference calls
- Silo'd approach to service delivery
 - Public health and hospital interface
 - Reference groups
 - Ontario SARS Scientific Advisory Committee

Play The Hand You Are Dealt

- Declining attention to infection control
 - Directives
 - Standards/guidelines
 - Screening protocols
- Lack of appropriate personal protective equipment
 - Availability
 - Distribution systems in conjunction with hospitals
- Limited emergency management skills in health care system
 - Partner with champions including Emergency Management Ontario
- WHO Travel Advisory
 - advocacy

Celebrate the Successes

- Dedicated individuals working for a common goal
 - Ontario SARS Scientific Advisory Committee
 - Volunteers' leap of faith
 - Front-line health care providers
- Creative thinking
 - Provincial Transfer Authorization Centre (PTAC)
 - Designated Hospital
 - Emergency Medical Assistance Team (EMAT)
 - "Virtual" team
 - Dedicated office to coordinate health emergency management
- Technology
 - CritiCall
 - Fully integrated public health information systems

Celebrate the Successes

- Communication strategy
 - Accessible, transparent, familiar team of spokespersons
 - Important Health Notices
- Compassion
 - Final SARS patient
 - Income stabilization fund
 - Rolling Stones concert
- Infection control
 - Screening
 - Heightened focus
 - Standards/guidelines tailored to setting
- Clarity re roles and responsibilities

Perseverance Required

- Common emergency data set
- Public health renewal
- Local Health Integration Networks
- Regional Infection Control and Communicable Disease Networks
- Enhance number of infection control practitioners
- Stockpiles: centralized/de-centralized

Perseverance Required

- Use of private sector to augment distribution system
- Communication priorities: public v health care providers
- Mutual aid agreements with contiguous borders
- Commitments to emergency readiness wane in inverse relationship to time passed
- Address current health care workers' concerns regarding occupational health and safety



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