

# National Response to (SARS): Canada

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Health Canada



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- Recognition of the dedication of health workers in all sectors to the control of this disease
- Recognition of the vital part that the people of Ontario, in particular, Toronto, have played in fighting SARS
- There have been setbacks but this should not detract from these extraordinary efforts



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# Federal, Provincial/ Territorial, Responsibilities

- Federal:
  - National surveillance, investigation
  - Expertise in epidemiology/ laboratory science
  - Research
  - Public health guideline development
  - Community support and health promotion programs
  - International liaison
- Provincial/ Territorial
  - Health care
  - Public health



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# Population and Public Health

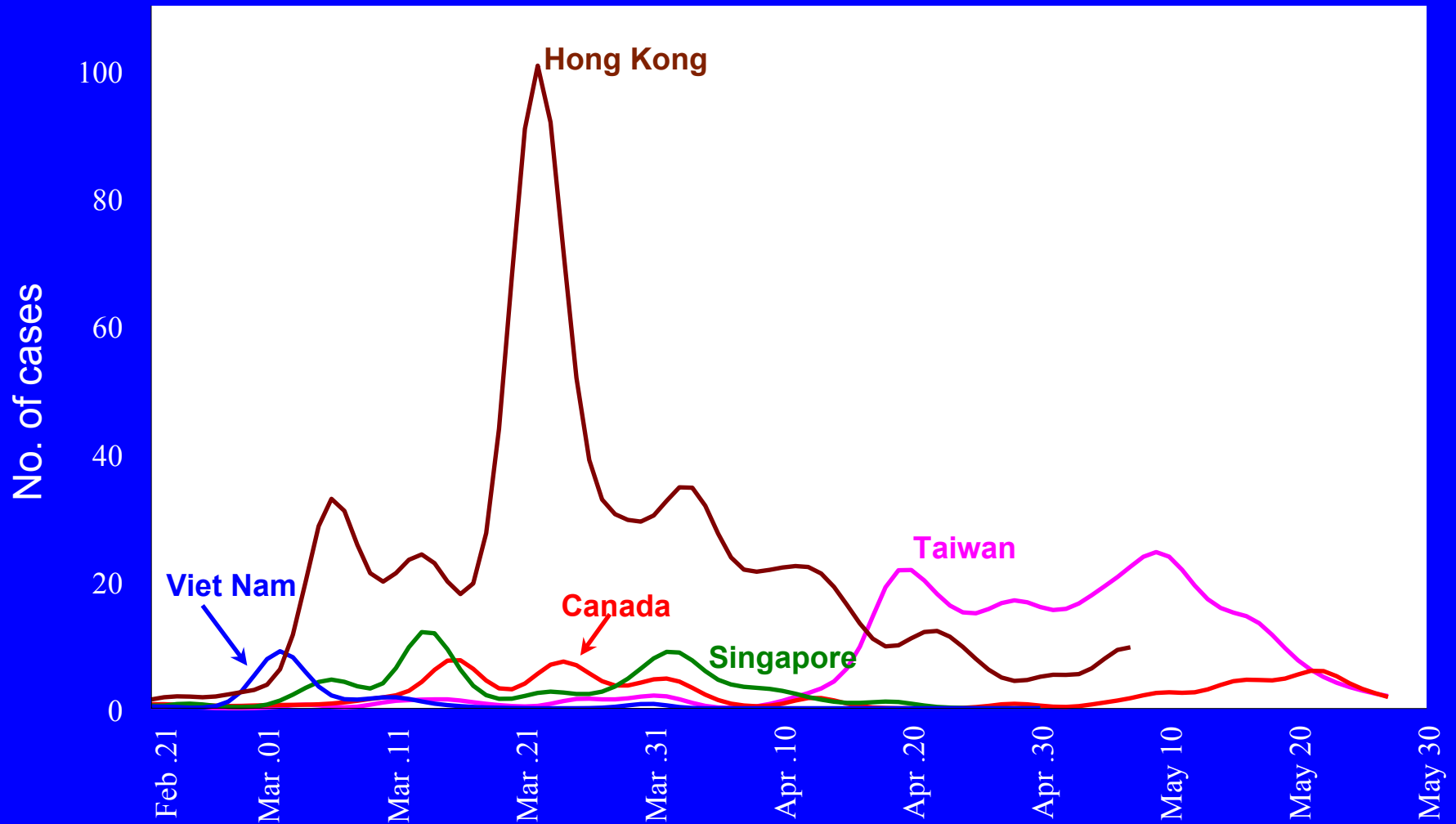
- Population health is the basis of the practice of public health
- Public health is vital across the health system
  - Acute care, primary care and in the community
- Determinants of health
- Disease as a determinant of ill health
  - Social integrity
  - Economic status
  - Health Services integrity



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# SARS - International comparison (excl. mainland China)



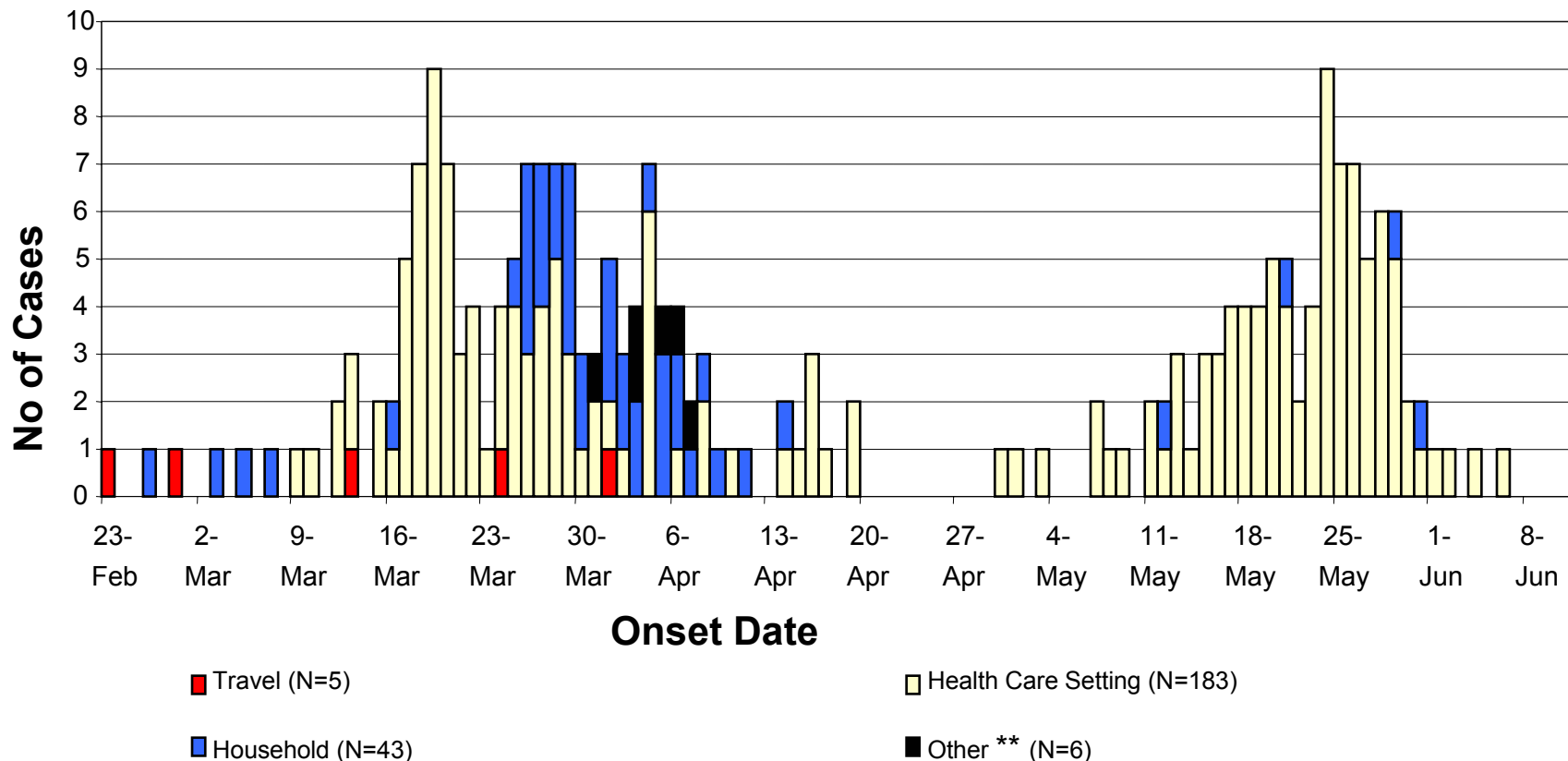
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Source: Ping Yan

# SARS - Probable Cases, Canada June 11, 2003

(N=237\*, excludes 1 for whom onset date is unknown)



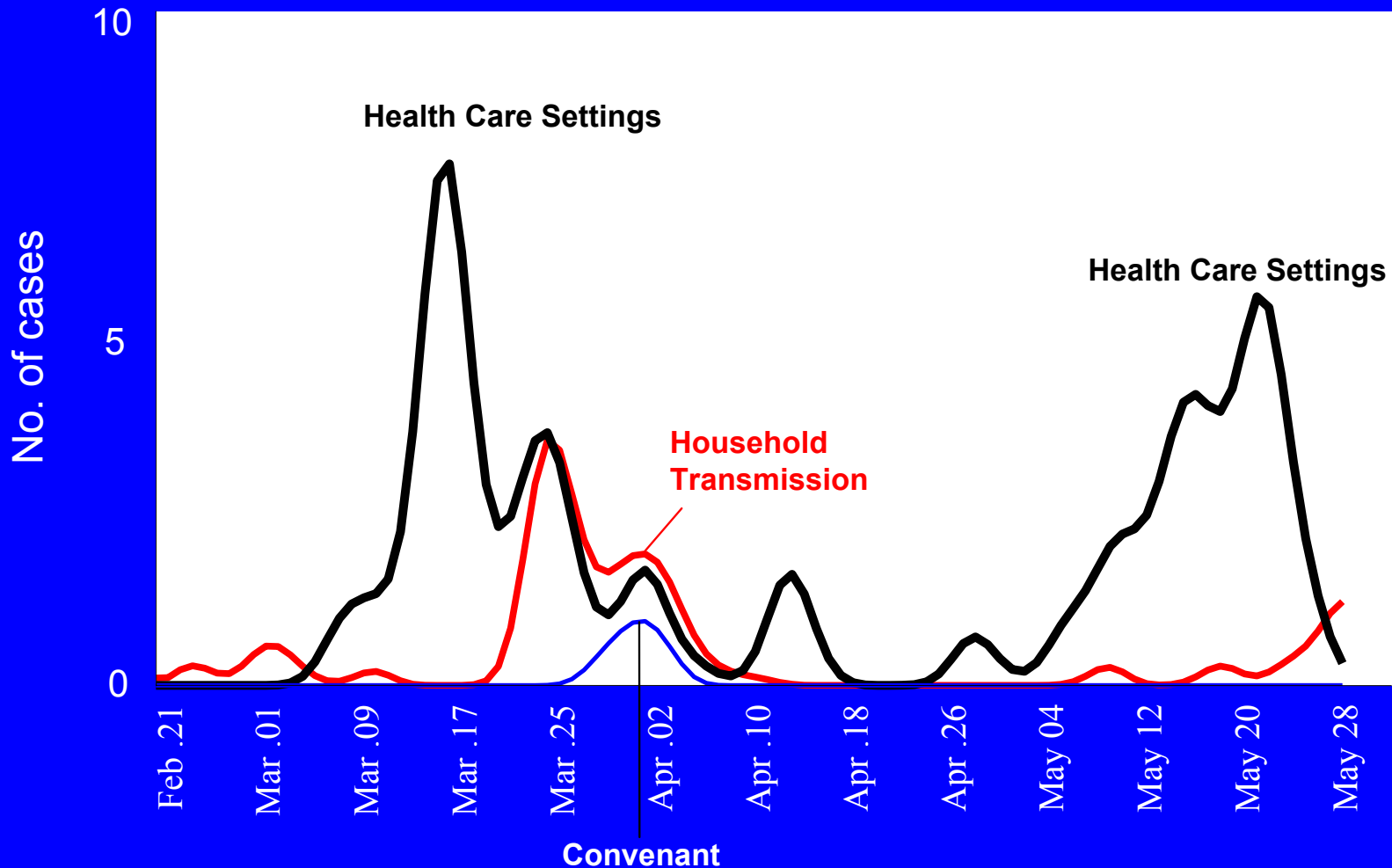
\*\* Includes 6 individuals associated with the Bukas LoobSa Diyos Covenant Community (BLD) group.



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# SARS- Canada – Trends by routes of transmission



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# Costs of SARS

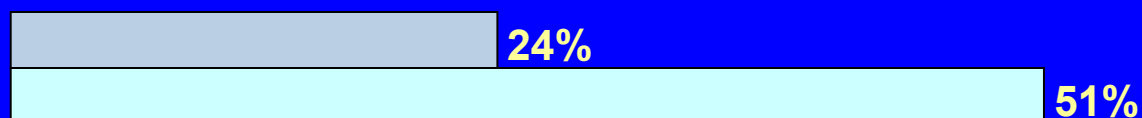
- Toronto – economic effects e.g., at least \$1B in GDP in 2003
- Air Canada – grounding of many planes
- Loss of income and job security
- Fear and panic
- Loss of confidence
  - Public health system
  - Health care system



# Percent experiencing problems while quarantined

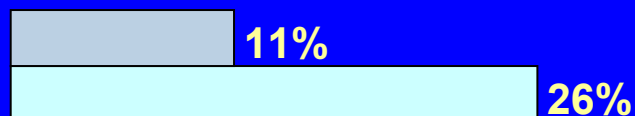
Toronto area residents who had been quarantined or had a friend or family member who had been quarantined (n=111)

In general, being quarantined was a problem



## Specific Problems

Emotional difficulties being confined



Not getting paid because they missed work



■ Major Problem  
■ Minor Problem



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Source: Harvard School of Public Health/Health Canada, June 2003

# Lessons 1

- Human Security can be threatened by infectious disease threats
  - Threats to social integrity, economic status and the health care system
  - Vulnerability to travel advisories



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# Lessons 2

- Complex health care system
  - Multiple specialized institutions
  - Transfers of patients, staff working in multiple institutions
  - Emergency room pressures
  - Pressures for long-term care beds
- Un-matched public health capacity
  - Surveillance, investigation, infection control, information management, research,



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# Lessons 5

- Surveillance
  - Needs to be integral to hospitals
- Contact tracing
  - Needs to be intensive and rapid
- Quarantine
  - Not clear how extensive needs to be in the community
- Infection control
  - Needs to consistent



# Lessons 4

- Strong public health infrastructure is essential
  - Within the health care system
  - In the community
  - At borders
- Public health response has to be balanced. In Canada SARS is primarily a nosocomial infection



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# Lessons 6

- Cross governmental response on health issues required
  - Federal: workplace health, drug approval, transport, missions abroad, income support, economic support for individuals and business, customs & immigration, national defence,
  - Federal, Provincial, Territorial
- Emergency preparedness e.g., pandemic influenza, assists greatly



# Lessons 7

- Clear communication of epidemiologic situation and control measures is essential to show control over situation
  - Within Canada and internationally
- Need for strong international cooperation is essential



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# Lessons 8

- Advances in technology not necessarily the answer to short-term public health management
  - Interpretation of test results for SARS-CoV still not clear
  - The groundwork for a vaccine i.e., sequencing, is only the first step



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# Future

- National action resulting from recognition of need to strengthen public health capacity and infrastructure
- Strengthening at all levels of government is vital
- Public health strengthening should benefit disease prevention and control of communicable and non-communicable diseases and injuries, and health promotion



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