



## SEVERE ACUTE RESPIRATORY SYNDROME

# NOTICE

Since 2004, there have not been any known cases of SARS reported anywhere in the world. The content in this PDF was developed for the 2003 SARS epidemic. But, some guidelines are still being used. Any new SARS updates will be posted on this Web site.



## Supplement C: Preparedness and Response in Healthcare Facilities

### I. Rationale and Goals

Transmission of SARS-CoV in healthcare facilities was a major factor in the spread of SARS during the 2003 global epidemic. In areas with extensive outbreaks, the virus spread most readily among hospital workers caring for SARS patients, other patients, and visitors. In Toronto, 77% of the patients in the first phase of the outbreak were infected in the hospital setting, and half of all SARS cases in Toronto were in healthcare workers (Booth 2003). Even in Hong Kong, where there was significant community transmission, 21% of all SARS cases occurred in healthcare workers (Ho 2003). Factors that likely contribute to the disproportionate rate of transmission in healthcare settings include: 1) a higher virus titer in respiratory secretions during the second week of illness when patients are likely to be hospitalized (Peiris 2003), 2) use of ventilators, nebulizers, endotracheal intubation, and other droplet- and aerosol-generating devices and procedures, and 3) frequent exposures of workers to patients, their secretions, and potentially contaminated environments (Varia 2003).

The large number of hospital personnel who contracted SARS-CoV disease demonstrates the importance of early detection, infection control, and contact tracing in limiting the spread of disease. In every region in which major outbreaks were reported, a substantial proportion of cases resulted from delays in clinical recognition and isolation of patients. SARS-CoV was also transmitted by infected visitors and by hospitalized patients with other medical conditions that masked the symptoms of SARS (Varia 2003). Case recognition and implementation of appropriate precautions greatly reduced the risks of SARS-CoV transmission. However, even with appropriate precautions, there were isolated reports of transmission to healthcare workers in the settings of aerosol-producing procedures and lapses in infection control technique (CDC 2003).

SARS-CoV transmission in a healthcare facility presents occupational and psychological challenges that, in the 2003 outbreaks, required heroic efforts to overcome. Experience also indicates, however, that early detection and isolation of cases, strict adherence to infection control precautions, and aggressive contact tracing and monitoring can minimize the impact of a SARS outbreak (Seto 2003). The success of these measures depends on exhaustive planning, clear communication, collaboration among disciplines, authoritative leadership, and provision of relevant support.

This Supplement provides recommendations for how to prepare for and respond to an introduction of SARS-CoV in a healthcare facility. It outlines basic response measures as well as the enhanced activities that may be needed to address larger outbreaks. **As preparedness and response activities for SARS are in many ways analogous to those required for other types of emergency and mass-casualty events, planning for SARS may only require integration of SARS-specific activities into existing preparedness plans and protocols.**

The goals of a preparedness and response plan in a healthcare facility are:

- Rapidly identify and isolate all potential SARS patients.
- Implement infection control practices and contact tracing to interrupt SARS-CoV transmission.
- Ensure rapid communication within healthcare facilities and between healthcare facilities and health departments.

For more information, visit [www.cdc.gov/ncidod/sars](http://www.cdc.gov/ncidod/sars) or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)