

this guidance to develop specific, institutional preparedness and response plans that will assist in minimizing the impact of future outbreaks, not just of SARS but of any potential infectious disease emergency.

REFERENCES

- World Health Organization. *WHO Issues a Global Alert About Cases of Atypical Pneumonia: Cases of Severe Respiratory Illness May Spread to Hospital Staff*. Geneva: World Health Organization; 2003. Available at www.who.org.
- Ksiazek TG, Erdman D, Goldsmith CS, et al. A novel coronavirus associated with severe acute respiratory syndrome. *N Engl J Med* 2003;348:1953-1966.
- Ho AS, Sung JY, Chan-Yeung M. An outbreak of severe acute respiratory syndrome among hospital workers in a community hospital in Hong Kong. *Ann Intern Med* 2003;139:564-567.
- Booth CM, Matukas LM, Tomlinson GA, et al. Clinical features and short-term outcomes of 144 patients with SARS in the greater Toronto area. *JAMA* 2003;289:2801-2809.
- Anonymous. Severe acute respiratory syndrome: Taiwan, 2003. *MMWR* 2003;52:461-466.
- Centers for Disease Control and Prevention. *Public Health Guidance for Community-Level Preparedness and Response to Severe Acute Respiratory Syndrome (SARS)*. Atlanta, GA: Centers for Disease Control and Prevention; 2003. Available at www.cdc.gov/ncidod/sars/sarsprepplan.htm.
- Varia M, Wilson S, Sarwal S, et al. Investigation of a nosocomial outbreak of severe acute respiratory syndrome (SARS) in Toronto, Canada. *Canadian Medical Association Journal* 2003;169:285-292.
- Anonymous. Update: severe acute respiratory syndrome—Toronto, Canada, 2003. *MMWR* 2003;52:547-550.
- Lingappa JR, McDonald LC, Simone P, Parashar UD. Wrestling SARS from uncertainty. *Emerg Infect Dis* 2004;10:167-170.
- Farquharson C, Baguley K. Responding to the severe acute respiratory syndrome (SARS) outbreak: lessons learned in a Toronto emergency department. *Journal of Emergency Nursing* 2003;29:222-228.
- Gopalakrishna G, Choo P, Leo YS, et al. SARS transmission and hospital containment. *Emerg Infect Dis* 2004;10:395-400.
- World Health Organization. *Consensus Document on the Epidemiology of Severe Acute Respiratory Syndrome*. Geneva: World Health Organization; 2003. Available at www.who.int/csr/sars/en/WHOconsensus.pdf.
- Seto WH, Tsang D, Yung RWH, et al. Effectiveness of precautions against droplets and contact in the prevention of nosocomial transmission of severe acute respiratory syndrome (SARS). *Lancet* 2003;361:1519-1520.
- Anonymous. Cluster of severe acute respiratory syndrome cases among protected health care workers: Toronto, Canada, April 2003. *MMWR* 2003;52:433-436.
- Anonymous. Severe acute respiratory syndrome: Singapore, 2003. *MMWR* 2003;52:405-411.
- Ignatius TS, Yu MB, Yuguo L, et al. Evidence of airborne transmission of the severe acute respiratory syndrome virus. *N Engl J Med* 2004;350:1731-1739.
- Fraser VJ, Johnson K, Primack J, Jones M, Medoff G, Dunagan WC. Evaluation of rooms with negative pressure ventilation used for respiratory isolation in seven midwestern hospitals. *Infect Control Hosp Epidemiol* 1993;14:619-622.
- Srinivasan A, Jernigan D, Liedtke L, Strausbaugh L. SARS preparedness plans and infrastructure in the United States: a survey of infectious disease specialists. Presented at the 41st Annual Meeting of the Infectious Diseases Society of America; October 9-12, 2003; San Diego, CA. Abstract LB-7.
- McDonald LC, Simone A, Su IJ, et al. SARS in healthcare facilities: Toronto and Taiwan. *Emerg Infect Dis* 2004;10:777-781.
- Lau JTF, Fung KS, Wong TW, et al. SARS transmission among hospital workers in Hong Kong. *Emerg Infect Dis* 2004;10:280-286.
- Anonymous. Will your ED have staff quarantined for SARS? Brace yourself for the worst. *ED Management* 2003;15(suppl 1):49-51.
- Centers for Disease Control and Prevention. *Guideline for Isolation Precautions in Hospitals*. Atlanta, GA: Centers for Disease Control and Prevention; 1994. Available at www.cdc.gov/ncidod/hip/ISOLAT/Isolat.htm.
- Centers for Disease Control and Prevention. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in healthcare facilities; 1994. Atlanta, GA: Centers for Disease Control and Prevention; 1994. Available at www.cdc.gov/mmwr/preview/mmwrhtml/00035909.htm.
- Karanfil LV, Conlon M, Lykens K, et al. Reducing the rate of nosocomially transmitted respiratory syncytial virus. *Am J Infect Control* 1999;27:91-96.
- Anonymous. Revised U.S. surveillance case definition for severe acute respiratory syndrome (SARS) and update on SARS cases United States and worldwide, December 2003. *MMWR* 2003;52:1202-1206.

Medical News

EDITED BY GINA PUGLIESE, RN, MS; MARTIN S. FAVERO, PHD

Are Hospital Surfaces Reservoirs for Nosocomial Infection?

Hota from the University Medical Center, Chicago, reviewed the subject of environmental transmission of infections that originate from the environment. He pointed out that despite documentation that the inanimate hospital environment (eg, surfaces and medical equipment) becomes contaminated with nosocomial pathogens, the data that suggest that contaminated fomites lead to nosocomial infections do so indirectly. Pathogens for which there is more compelling evidence of survival in environmental reservoirs include *Clostridium difficile*, vancomycin-resistant enterococci, and methicillin-resistant *Staphylococcus aureus*, and pathogens for which there is

evidence of probable survival in environmental reservoirs include norovirus, influenza virus, severe acute respiratory syndrome-associated coronavirus, and *Candida* species. Strategies to reduce the rates of nosocomial infection with these pathogens should conform to established guidelines, with an emphasis on thorough environmental cleaning and use of Environmental Protection Agency-approved detergent-disinfectants.

FROM: Hota B. Contamination, disinfection, and cross-colonization: are hospital surfaces reservoirs for nosocomial infection? *Clin Infect Dis* 2004;39:1182-1189.