

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Patient Safety Tools: SARS, Smallpox, Monkeypox, and Avian Flu

Marlene Fishman, MPH, CIC, Glenn G. Fort, MD, MPH, Gail Jackson, RN, BSN, CIC, Dennis J. Mikolich, MD, and Nancy Vallande, MSM, MT(ASCP), CIC

E mergency departments and clinics must be prepared not only to recognize individual patients who might have highly infectious diseases but to manage an influx of such cases. Previously we described case presentations and forms.¹ We now publish these forms to assist others in contagion containment (see Figures 1–5), exposure investigation (see Figures 6 and 7), and triage risk assessment (see Figure 8). Each of these documents can assist busy emergency staff in managing time efficiently while preventing the transmission of infection.

The isolation cards represent a means to implement Centers for Disease Control and Prevention (CDC) isolation guidelines. We have found that many health care workers prefer the old-fashioned Strict Isolation style card that combines all the requirements in one set of instructions. Others wish to retain the wording found for expanded precautions—the airborne infection isolation precautions and contact categories.² As we await final CDC guidelines, we recognize that there may be a need to revise again, but in the meantime, these tools are tried and proven.

Marlene Fishman is Infection Control Director, Our Lady of Fatima Hospital, Department of Nosocomial Infection, North Providence, Rhode Island. Glenn G. Fort, MD, MPH, is Chairman, Infection Control Committee at Our Lady of Fatima Hospital, North Providence, RI, and Clinical Associate Professor at Brown Medical School, Providence, RI. Gail Jackson, RN, BSN, CIC, is Infection Control Coordinator, Newport Hospital, Newport, RI. Dennis J. Mikolich, MD, is Infectious Disease Physician at Our Lady of Fatima Hospital, North Providence, RI, and Clinical Associate Professor at Brown Medical School, Providence, RI. Nancy Vallande, MSM, MT(ASCP), CIC, is Director Epidemiology and Infection Control, Miriam Hospital, Providence, RI.

For correspondence, write: Marlene Fishman, Department of Nosocomial Infection, Our Lady of Fatima Hospital, 200 High Service Ave, North Providence, RI 02904, E-mail: mfishman@saintjosephri.com.

Disaster Manage Response 2005;3:86-90.

1540-2487/\$30.00

Copyright © 2005 by the Emergency Nurses Association. doi:10.1016/j.dmr.2005.05.001



Figure I: This Restricted Room Entry Card ($8\frac{1}{2} \times 11$ inches, bordered) uses the internationally recognized "do not enter" symbol to prevent traffic into the patient's room.

ATTIRE

Everyone- Wear gown and gloves. Health Care Workers - Wear fitted respirator and eye protection with side shields. Discard respirator after each use. Disinfect eye goggles after each use, preferably by returning to Central Service (CS) in plastic containers provided by CS. <u>Visitor</u> - Wear surgical mask with face shield attached.

<u>**Transport</u>** - Patient wears surgical mask. <u>**Equipment**</u>- Ventilators must have HEPA filter on exhalation port.</u>

Negative Pressure Room Required.

Figure 2: This Attire Card ($8\frac{1}{2} \times 11$ inches, bordered) lists all personal protective equipment that is required before entering the patient's area. *HEPA*, High-efficiency particulate air.



Figure 3: This Strict Isolation Card (front and back) ($8\frac{1}{2} \times 11$ inches, bordered) uses the traditional style of combining all instructions onto one single bright yellow card.



Figure 4: This Special Cleaning Card ($5\frac{1}{2} \times 8\frac{1}{2}$ inches) consolidates disinfection instructions using simple terms that enable everyone to fulfill the requirements.



Figure 5: This Strict Airborne/Contact Isolation ($5\frac{1}{2} \times 8\frac{1}{2}$ inches) alternative purple card combines the traditional "strict isolation" approach with newer details of contact isolation and the respirator requirements for airborne infection isolation.

PLEASE SIGN IN

SIGN-IN SHEET FOR EMPLOYEES AND OTHER HEALTHCARE WORKERS

			CHECK EACH ITEM THAT WAS WORN				<u>OR</u>
NAME	DEPARTMENT	DATE	GOWN	GLOVES	FITTED RESPIRATOR	EYE GOGGLES	All Isolation Attire was Worn

Figure 6: This Employee/Staff Log tracks all health care workers who enter the patient's isolation area. This Log enables efficient collaboration with the Health Department to provide follow-up monitoring for control of potential secondary cases.

AUTHORIZED VISITOR REGISTER

VISITORS FOR PATIENT (Initials) MEDICAL RECORD# RM

- The purpose of this list is to be able to contact individuals who have had close contact • with the patient should an emergency prevail.
- This information will be kept confidential. It will be reported to the Rhode Island . Department of Health as required by State Regulations.

			CHECK IF APPLICABLE ISOLATION ATTIRE WAS WORN				_	
STAFF PLEASE PRINT VISITORS NAME	TELEPHONE NUMBER OR ALTERNATIVE METHOD OF BEING CONTACTED	DATE	GOWN	GLOVES	SURGICAL MASK	FACE SHIELD		OR ALL ITEMS WERE WORN

Figure 7: This Visitor Log tracks all persons other than employees and staff who enter the patient's isolation area.

XXXXX HOSPITAL Emergency Department/Infection Control Triage of Patients for SARS and Avian Influenza A

Place completed form in the medical record

Please ask the following questions if a patient presents with febrile illness and respiratory illness.

- 1. Do you have a febrile illness (greater than 100.4 F)? _
- 2. Do you have a respiratory illness (e.g., cough, shortness of breath, difficulty breathing? _
- a. Have you traveled (including transit in an airport) within 10 days of onset of symptoms to an area† with current or recently documented or suspected transmission of SARS? ______ OR
 b. Have you had close contact within 10 days of onset of symptoms with a person known or suspected to have SARS? ______ OR

c. Have you had contact with poultry (e.g., visited a poultry farm, a household raising poultry, or a bird market) or have you had contact with a known or suspected human case of influenza A in an Avian Flu affected country^{*} within 10 days of symptom onset?

If patient answered "yes" to all 3 questions:		
Was patient evaluated for SARS or Avian Flu?	Y	Ν
Was patient considered a suspect case?	Y	Ν

RN Signature_____ MD Signature _____

If the answer to all three questions is yes:

- Place a duckbill mask on the patient.
- Place the patient in a negative pressure room on Strict Airborne/Contact Precautions, including eye protection for all HCWs. (N95 mask must be discarded after each use)
- Notify Infection Control at ext. XXXX and send a copy of this form to Infection Control
- Notify the RI Department of Health at 222-2577 or after hours 272-5952
- Disinfect all contaminated surfaces with a hospital-approved disinfectant.
- Practice good hand hygiene following contact with all patients.
- Testing for SARS and Influenza A should be considered on a case-by-case basis in consultation with the RI DOH for **hospitalized or ambulatory** patients. <u>PLEASE</u> notify the laboratory with a suspected case as all specimens must be processed under stringent conditions.
- **†** Areas with documented or suspected community transmission of SARS: People's Republic of China (including Hong Kong); Hanoi, Vietnam; Singapore; Taiwan; and Toronto, Canada.
- * Areas with documented or suspected avian influenza in poultry and/or humans: Cambodia,

China, Indonesia, Japan, Laos, South Korea, Thailand, and Vietnam

Figure 8: This Triage Form documents and serves to inform the next health care provider whether CDC criteria have been met to suspect Severe Acute Respiratory Syndrome (SARS). It clearly lists instructions for personal protective equipment use, notifications, and infection control practices. *HCWs*, Health care workers.

References

- 1. Fishman M, Fort GG, Jackson G, Mikolich DJ, Vallande N. Patient safety tools to avoid disaster: healthcare facility management of biologic agents, SARS, and uncommon contagion. Am J Infect Control 2004;32: 421-3.
- Healthcare Infection Control Practices Advisory Committee. Centers for Disease Control and Prevention draft guideline for isolation precautions: preventing transmission of infectious agents in healthcare settings 2004 [online] [accessed 2004 June]. Formerly available from: URL: http://www.cdc.gov/ncidod/bip/ISOLAT/ 2004DraftIsoGuideline.pdf.