tions. Effects on resource utilization. JAMA 1993;269:379-383.

- Frieden TR, Fujiwara PI, Washko RM, Hamburg MA. Tuberculosis in New York City—turning the tide. N Engl J Med 1995;333:229-233.
- Arno PS, Murray CJL, Bonuck KA, Alcabes P. The economic impact of tuberculosis in hospitals in New York City: a preliminary analysis. J Law Med Ethics 1993;21:317-323.
- Craven RB, Wenzel RP, Atuk N. Minimizing tuberculosis risk to hospital personnel and students exposed to unsuspected disease. *Ann Intern Med* 1975;82:628-632.
- 31. Vogler DM, Burke JP. Tuberculosis screening for hospital employees: a five-year experience in a large community hospital. *Am Rev Respir Dis* 1978;117:227-232.
- 32. Macgregor RR. A year's experience with tuberculosis in a private urban teaching hospital in the post sanatorium era. Am J Med 1975;58:221-228.
- Menzies D, Fanning A, Yuan L. Fitzgerald M. Tuberculosis among health care workers. N Engl J Med 1995;332:92-98.
- 34. Pegues CF, Johnson DC, Pegues DA, Spencer M, Hopkins CC. Implementation and evaluation of an algorithm for isolation of patients with suspected pulmonary tuberculosis. *Infect Control Hosp Epidemiol* 1996;17:412-418.
- 35. Pitchenik AE, Cole C, Russell BW, Fischl MA, Spira TJ, Snider DE. Tuberculosis, atypical mycobacteriosis, and the acquired immunodeficiency syndrome among Haitian and non-Haitian patients in south Florida. *Ann Intern Med* 1984;101:641-645.

- Sunderam G, McDonald RJ, Maniatis T, Oleske J, Kapila R, Reichman LB. Tuberculosis as a manifestation of the acquired immunodeficiency syndrome (AIDS). *JAMA* 1986;256:363-366.
- Kramer F, Modilevsky T, Waliany AR, Leedom JM, Barnes PF. Delayed diagnosis of tuberculosis in patients with human immunodeficiency virus infection. *Am J Med* 1990;89:451-456.
- Modilevsky T, Sattler FR, Barnes PF. Mycobacterial disease in patients with human immunodeficiency virus infection. *Arch Intern Med* 1989;149:2201-2205.
- Barnes PF, Bloch AB, Davidson PT, Snider DE. Tuberculosis in patients with human immunodeficiency virus infection. *N Engl J Med* 1991;324:1644-1650.
- 40. Chaisson RE, Schecter GF, Theuer CP, Rutherford GW, Echenberg DF, Hopewell PC. Tuberculosis in patients with the acquired immunodeficiency syndrome: clinical features, response to therapy, and survival. *Am Rev Respir Dis* 1987;136:570-574.
- Hutton M, Stead W, Cauthen G, Bloch A, Ewing WM. Nosocomial transmission of tuberculosis associated with a draining abscess. J Infect Dis 1990;161:286-295.
- American Thoracic Society, Centers for Disease Control. Control of tuberculosis. Am Rev Respir Dis 1983;128:336-342.
- 43. Di Perri G, Cruciani M, Danzi MC, Luzzati R, DeChecchi G, Malena M, et al. Nosocomial epidemic of active tuberculosis among HIV-infected patients. *Lancet* 1989;2(8678-8679):1502-1504.

## **TB** Isolation Criteria

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The recent resurgence of tuberculosis (TB) in the United States is most marked in inner cities, where high-risk patients often turn for primary care to emergency departments (EDs) with long waiting times and limited respiratory isolation space. For this reason, the CDC suggests that EDs develop protocols for rapidly identifying and isolating possible TB patients, based on the prevalence and characteristics of TB in the population served by the specific facility. In response, two Columbia University researchers used data routinely available to ED physicians to develop a rapid decision instrument that consists of a simple 0-to-4 scale, with one point each for (1) abnormal chest radiograph; (2) temperature greater than 101° F; (3) current homeless shelter dwelling; and (4) history of active TB, positive skin test, or TB exposure.

Had the ED at Columbia's Presbyterian Hospital used this screen to make isolation decisions in the 547 ED patients who had sputum cultures for TB there during 1992, 54% of the culture-negative patients might not have been isolated, representing a potentially major savings of ED resources. One culture-positive patient would not have been isolated. The screen was more sensitive than a sputum acid-fast bacillus smear for identifying culture-positive cases.

Patients being evaluated for TB may be the most appropriate population for this decision instrument, allowing clinicians to exclude those with no possibility of disease and then apply the screen to improve isolation decisions for the remainder. The researchers caution, however, that the cutoff for predicting positive sputum must be set according to local needs. Indeed, an accompanying editorial points out that operational changes in an institution, such as inpatient services provided or catchment population, should prompt physicians to revisit institutional protocols based on past information.

FROM: Schuchat A. Annotation: hospital heal thyself. *Am J Public Health* 1997;87:1413-1414.

Redd J and Susser E. Controlling tuberculosis in an urban emergency department: a rapid decision instrument for patient population. *Am J Public Health* 1997;87:1543-1547.