

solution available in clinical settings, especially when current Centers for Disease Control and Prevention guidelines state that only solutions of PPD containing 5 TU/0.1 mL should be used.¹ We have discontinued the 250 TU formulation in our institution. We urge caution in the interpretation of tuberculin tests and suggest careful examination of the strength of the solution before administration.

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Elena Peeva, MD
 Connie Caputo, RN, CIC
 Victor Jimenez, MD, MSc
 Veterans' Affairs Medical Center
 Northport, New York
 State University of New York
 Stony Brook, New York

Prevention of Intravascular Catheter-Related Bloodstream Infections

To the Editor:

In his *Lancet* seminar, Raad¹ estimated that 400,000 intravascular catheter-related bloodstream infections (IVCR BSIs) with skinborne microorganisms now occur annually in US healthcare facilities. On the basis of 1995 data, Jarvis² summarized that such infections occurred then at a rate >100,000 annually, killed 16.3% to 35% of persons infected, and cost \$40,000 per survivor.² Pearson³ estimated that there were over 200,000 IVCR BSIs annually in 1996. Using 400,000 for current annual morbidity and 25% for mortality, IVCR BSIs will kill 100,000 Americans in 1998. For prevention, Raad recommended: (1) maximum sterile barriers (hand washing, sterile gloves, large drape, sterile gown, mask, and cap) during insertion and maintenance of intravenous (IV) catheters

by specialized infusion-therapy teams; and (2) supplementary cutaneous microbicides, tunneling catheters under skin, ionic silver cuffs, intraluminal antibiotic locks, antibiotic coating of catheters, and antiseptic hubs.

One must add that, during use in patients, each intravascular catheter requires a sterile IV infusion set with a port for reversible attachment to the catheter hub; some 6 feet of trailing tubing; one to three Y-ports for adding small-volume infusates; a trailing spike for repetitively attaching large-volume infusion bags; and added paraphernalia for controlling rates of flow and filtering and for preventing back flow. Depending on the duration of the infusion, soluble medications prescribed, and changes dictated by a patient's condition, the numbers of IV infusion sets, infusion bags, and Y-ports used with each IV catheter vary from several to many, all requiring sterile handling.

Precautions versus spread of bloodborne pathogens in healthcare facilities officially broadcast in 1987, 1988, and 1992³ had the following side effects: (1) burgeoning use of unsterile examination gloves, to an annual volume of some 10 billion in 1996⁴; (2) a decrease in hand washing before donning examination gloves, to about 25%;⁴ (3) use of unsterile exam gloves for handling IV sets and patients³; and (4) use of needleless infusion systems employing blunt cannulae instead of sharp needles to service Y-ports.³ Since 1995, we've seen a 3- to 10-fold increase of IVCR BSIs in patients infused via needleless systems that have Y-port recesses that are suitable for microbial colonization and that require more manipulation than standard systems.⁵ Thus, to Raad's recommendations one might add that needleless IV infusion systems should be eliminated, and healthcare workers should use sterile gloves when handling needles and related paraphernalia in standard IV infusion systems.

Supply of IV infusion systems safer for patients and healthcare workers currently is limited by manufacturers, purchasing consortia, and managed-care organizations whose bottom line is profit (*Business Week*, March 16;1998:75; *San Francisco Chronicle*, April 13-15, 1998:A-1). A simple remedy can be found in the Healthcare Worker Protection Act (HR 2754) now under consideration in Congress. The gist is that Medicare (and we, the taxpayers) will

not reimburse providers for needles and paraphernalia proven unsafe by qualified experts.

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Jack W. Shields, MD, MS
 Santa Barbara, California
 Dr. Shields is a retired hematologist.

Pseudo-epidemic in an Acute-Care Teaching Hospital

To the Editor:

Cronin et al's Concise Communication¹ is of importance, not only in showing the unnecessary treatment of false-positive patients but also in demonstrating that pseudo-epidemics are expensive and time-consuming.

We would like to report a pseudo-outbreak of *Pseudomonas putida* in our facility. *Pseudomonas putida* is a common inhabitant of soil, plants, and water. It is infrequently isolated from the hospital environment. It is of low virulence and usually not of clinical significance. Occasionally, it is part of the normal oropharyngeal flora. *P putida* usually is regarded as an environmental contaminant.

P putida was isolated between February 7 and March 25, 1991, from urine of 23 patients in an acute-care, 400-bed community teaching hospital located in Virginia (Table). These cases were from medical and surgical units, an outpatient clinic, emergency room, and nursery. Patients were admitted with various diagnoses. The cases were distributed in all age groups from <1 to >90 years of age, in both genders and from both catheterized and noncatheterized patients. In each case, the implicated organism had an identical antibiotic susceptibil-