

lenge. Filter retention efficiency possibly was higher than reported, given that no *M bovis* was detected downstream of the test filters. In conjunction with the considerable documentation of microbial removal by these filters<sup>6-8</sup> and the demonstration of clinical effectiveness in maintaining circuit cleanliness,<sup>5</sup> the data presented here provide further evidence that these breathing circuit filters would limit transmission or spread (to equipment) of microbial pathogens and suggest that these filters could provide protection against the transmission of *Mycobacterium* species in a respiratory-care setting.

Presented at the Fifth Annual Meeting of the Society for Healthcare Epidemiology of America, April 2-4, 1995, San Diego, California.

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## Two VRE Morphotypes in Six Detroit Hospitals

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Researchers at the Henry Ford Health System in Detroit, Michigan, recently reported the results of study where they chronicled the appearance of vancomycin-resistant *Enterococcus faecium* in a tertiary-care medical facility over a 32-month period and characterized the isolates according to *van* genotype and relatedness based on repetitive-sequence polymerase chain reaction (rep-PCR) typing. They also compared these isolates to vancomycin-resistant *E faecium* isolates recovered from five other medical facilities in the same metropolitan area. In all, 32 isolates

were recovered from 25 patients hospitalized at six hospitals over a 32-month period. All isolates were shown to carry the *vanA* gene by PCR. The rep-PCR patterns generated from each isolate showed that the first three VRE isolates obtained from one hospital between June 1992 and February 1994 were distinct strains. Subsequently, all vancomycin-resistant *Enterococcus* isolated originating from the first hospital, and those collected from the other five in the same area, were shown to have identical rep-PCR patterns. Even more interesting was the finding that 25 of the 32 isolates were composed of two distinct subpopulations, characterized phenotypically by smooth and rough colony types, respectively.

This appears to be the first report to recognize multiple colonial morphotypes among vancomycin-resistant *E faecium*. Both colony types retained the *vanA* locus and the rep-PCR pattern of the primary isolate. The authors concluded that a single strain of vancomycin-resistant *Enterococcus* with the capacity to produce two colonial variants has been disseminated to several hospitals in the Detroit metropolitan area. The clinical significance of the colonial morphotypes is unclear.

FROM: Dunne WM, Wang W. Clonal dissemination and colony morphotype variation of vancomycin-resistant *Enterococcus faecium* isolates in Metropolitan Detroit, Michigan. *J Clin Microbiol* 1997;35:388-392.