

Antimicrobial Surfaces in the healthcare environment: Infection Control & Epidemiology assessment

Created by Infection Control & Epidemiology, January 2012

Position Statement: There is some data that shows that antimicrobial surfaces, such as silver (Agion), copper, brass, Microban (quaternary-ammonium compound) and fabrics impregnated with these and other substances do have an inhibitory effect on microbes. However, there is currently no data showing effects on clinical outcome (prevention of infection or colonization). The CDC and APIC do not have any recommendation regarding the use of these surfaces or materials. (see below)

There is no reason we have to prohibit use of these, in general. It seems to be a cost/benefit question where we do not have conclusive data. There may be new information that comes out over time.

If you are approached about use of antimicrobial environmental surfaces, important questions to ask are: "Is there data/studies showing infection prevention benefit," and "Is there microbial inhibition data?"

If there are studies available to answer these questions or to review products on an individual basis, please contact Infection Control and Epidemiology (936-6355). Examples: privacy or shower curtains, upholstery fabric, solid surfaces such as door handles or bed rails.

**Guidelines for Environmental Infection Control in Health-Care Facilities, 2003**

In the health-care setting, treated items may include children's pajamas, mattresses, and bed linens with label claims of antimicrobial properties. These claims require careful evaluation to determine whether they pertain to the use of antimicrobial chemicals as preservatives for the fabric or other components or whether they imply a health claim.<sup>1306, 1307</sup> **No evidence is available to suggest that use of these products will make consumers and patients healthier or prevent disease. No data support the use of these items as part of a sound infection-control strategy, and therefore, the additional expense of replacing a facility's bedding and sheets with these treated products is unwarranted.**

EPA has reaffirmed its position that manufacturers who make public health claims for articles containing antimicrobial chemicals must provide evidence to support those claims as part of the registration process.<sup>1308</sup> Current EPA regulations outlined in the Treated Articles Exemption of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) require manufacturers to register both the antimicrobial chemical used in or on the product and the finished product itself if a public health claim is maintained for the item. The exemption applies to the use of antimicrobial chemicals for the purpose of preserving the integrity of the product's raw material(s). The U.S. Federal Trade Commission (FTC) is evaluating manufacturer advertising of products with antimicrobial claims.<sup>1309</sup>

Signature of Hospital Epidemiologist C. Chenoweth MD

Date 5/1/12