

## Medical News

EDITED BY ELAINE LARSON, RN, PhD

### Changing Patterns of Infection

Since the advent of antibiotic therapy, efficacy, safety, and tolerance have been central issues when selecting the most appropriate agent against an infectious disease. For this reason, physicians prefer antibiotics with broad spectrums of activity that can be administered in small doses with few resulting side effects.

Over the same period, however, physicians have seen significant changes in the patterns of infection. While *Streptococcus pneumoniae* and *Haemophilus influenzae* remain the most common bacteria responsible for lower respiratory tract infections, recent studies have shown that atypical pathogens—intracellular bacteria once thought to be nonpathogenic—such as *Mycoplasma pneumoniae* and *Legionella pneumophila* also cause community-acquired pneumonia. According to recent reports, *M pneumoniae* alone may account for up to 33% of community-acquired pneumonia cases in the general population and up to 50% in closed populations such as college dormitories and military barracks.

Adding to the scope of this problem is the fact that *H influenzae* and *Moraxella catarrhalis* are becoming increasingly resistant to routinely administered antibiotics, such as penicillins and cephalosporins. Twenty-five percent to 30% of *Haemophilus* strains, for example, are resistant to amoxicillin and cephalothin. *M catarrhalis* has been reported to have 80% to 90% resistance to penicillins.

In recent years, researchers have been developing advanced macrolides with improved activity against a broader spectrum of pathogens including common traditional (e.g., *S pneumoniae*, *H influenzae*, *M catarrhalis*, and *Streptococcus pyogenes*) and atypical strains (e.g., *M pneumoniae*). Other attributes of these

advanced macrolides are enhanced tissue and serum concentration and improved tolerance. Biaxin (Abbot Laboratories, Chicago, Illinois) is indicated for the treatment of upper and lower respiratory tract infection and skin structure infections, and has been shown to be active against a broad range of common and atypical pathogens.

### Several Federal Agencies Take Action Against Medical Disinfecting Agents

The Food and Drug Administration (FDA), the Environmental Protection Agency (EPA), the Federal Trade Commission (FTC), and two United States Attorney's offices have taken action to remove from the market disinfecting agents manufactured by Sporidicin International (Rockville, Maryland) used to sterilize medical instruments. The agencies said the agents may pose a risk to public health.

On December 13, 1991, the FDA filed court actions to seize Sporidicin Cold Sterilizing Solution, Sporidicin-HD, Sporidicin Brand Disinfectant Solution, Sporidicin Brand Disinfectant Spray, and Sporidicin Disinfectant Towelettes.

The FDA also began a mandatory recall of Sporidicin Cold Sterilizing Solution and Sporidicin-HD, maintaining that the sterilizing solution does not work. The FTC filed a district court complaint for a preliminary injunction to prohibit false and misleading advertisement of the cold sterilizing solution.

The Centers for Disease Control is not aware of the occurrence or transmission of disease associated with the use of these products. However, use of an ineffective sterilant/disinfectant could be associated with an increased risk for disease transmission, specif-