

and explains how they affect the way all healthcare personnel handle hazardous chemical substances.

In the booklet, the two OSHA standards are described, along with hazards of commonly used materials, safety tips for working with hazardous materials, handling of regulated medical wastes, warning symbols for physical and health hazard, and a description of material safety data sheets.

The guide is edited by Robert Roy and is published by Genium Publishing Corporation in Schenectady, New York.

## **Changing Psychosocial Patterns Increase Americans' Risk for Infection**

Changing psychosocial patterns in the United States, coupled with advanced technology, are putting more Americans at risk for infection than ever before, according to Eugene B. Gallagher, PhD, professor of medical sociology at the University of Kentucky Medical Center, Lexington, Kentucky.

Speaking as a member of the newly formed Infection Control Council, sponsored by Lysol Brand Disinfectant, designed to identify infection control and prevention issues, he said that, in addition to the healthy, active population being at risk, there has been an increase in the numbers of disabled individuals at high risk.

### **KEY AREAS OF CHANGE**

During the first council meeting, Gallagher cited the major factors for high-risk infection:

■ Contemporary life calls for people to be on the move. They tend to relocate in greater numbers because of job considerations; they travel by plane more often and attend more public events. As a result, they are in closer proximity to sources of infection to which they have no acquired immunity.

■ The population is growing older, and elderly people have weaker immune systems than the young.

■ With the increasing numbers of women in the work force, more children are enrolled in daycare centers, potential breeding grounds for the extremely rapid transmission of infections.

■ There has been an increased risk for certain infectious diseases and an increase in certain types of bacteria and viruses. Not only are more individuals ill with such conditions, but social contact and movement puts the general population at high risk for becoming ill.

■ Advanced medical technology is keeping alive

seriously ill people. Coupled with this aspect of technology is the important practical problem of how to care for such people, who are at extremely high risk for infection because of weakened immune systems.

■ As part of the new medical revolution, there has been a growing number of people populating outpatient health facilities and rehabilitation and convalescent centers. The close proximity of people in these settings puts them at greater risk for contracting infections.

■ Pressure for more efficient use of hospital beds over the past ten years has led to the earlier discharge of patients, who are often still sick or whose immune systems are weakened. This phenomenon has resulted in more ill people being cared for in the home setting, which puts them at risk for contracting infection from family members, who also may contract disease from the recovering individual.

■ More elderly people are entering nursing homes, which are prime places for the transmission of disease. At the same time, the difficulties of access to nursing homes or related facilities has resulted in the elderly and infirm living in the home setting with other family members, frequently children. The risk of infection is great in these situations, partly because of the limited immunity of both the young and the old.

■ The modern workplace has seen a rise in the number of "sealed" buildings without adequate incoming fresh air and the circulation of existing air. Such environments, in which often-contaminated air is recirculated over and over again are particularly conducive to disease transmission.

### **SAFEGUARDING PUBLIC HEALTH**

To curb the spread of infection, according to Gallagher, public health officials, as well as all healthcare professionals, need to focus on:

■ Stepping up efforts to educate the public about how to prevent disease development and transmission. An emphasis should be placed on appropriate immunizations, avoidance of suspected sources of infection, and other preventive measures.

■ Employing more stringent methods of hygiene and infection control (including emphasizing hand-washing and use of disinfectants) in institutionalized settings, such as hospitals, nursing homes, daycare centers, and rehabilitation and convalescent centers.

■ Developing campaigns to raise public awareness about the need for good hygiene and disinfection in the home environment.

■ Encouraging city planners and industry to direct their attention to health-promoting aspects of design in public spaces, including hospitals, nursing homes, and office buildings.