Hand Sanitizing Gel Cuts Spread of Stomach Bugs

BY DIANA MAHONEY
New England Bureau

BOSTON — Regular use of an alcohol-based hand sanitizer in the home can reduce the spread of gastrointestinal infections among family members, Thomas J. Sandora, M.D., said at the annual meeting of the Infectious Diseases Society of America.

And, the more hand sanitizer used by a given family, the better the chances of reducing the spread of some organisms, according to the findings from the Healthy Hands, Healthy Families Study at Children’s Hospital Boston.

Dr. Sandora and his colleagues provided 195 families who had at least one child in day care for 10 hours or more per week with hand sanitizer and hand hygiene educational materials. The researchers instructed the families to place bottles of the sanitizer around the house, including in the bathroom, kitchen, and baby’s room, and told them to apply it to their hands after using the toilet, before preparing food, after diaper changes, and at other “key” times.

A control group of 137 day-care families with similar demographics was given materials about basic nutrition only.

The investigators tracked all of the families for 5 months, using biweekly phone calls to inquire about symptoms of respiratory and gastrointestinal illness. The primary outcome measures were the rates of transmission of both types of illnesses, reported as secondary illnesses per susceptible person-year.

During the observation period, 28 of 252 gastrointestinal illnesses recorded were classified as secondary transmissions (time of onset 2-7 days after onset in another family member), as were 443 of 1,802 respiratory illnesses. The use of hand sanitizer reduced the overall secondary transmission of gastrointestinal infections by 59%.

Alcohol-based hand sanitizer is effective at removing surface germs on the skin. The Centers for Disease Control and Prevention recommends routine use of these products by health care workers because they are easier and quicker to use than soap and water and they cause less skin irritation, Dr. Sandora said.

One significant advantage of the alcohol-based product is that it can kill organisms “without [one] worrying about the whole issue of resistance,” he said. “Alcohol doesn’t contain antibiotics, and you don’t develop resistance to it.”

The product is not being used in most homes despite its wide availability. Dr. Sandora said. “Providers should teach parents about hand sanitizer and its role in reducing the spread of infections in the home.”

GOJO Industries—the manufacturer of the hand sanitizer gel used in the study—funded the study. Dr. Sandora reported having no financial interests in the company.