## A Letter From the Chairman

Dear Hospital Decision-Maker or Medical Professional,

You are receiving this newsletter because you play an important role in enhancing patient safety. This newsletter is aimed at helping you. Four times a year the Committee to Reduce Infection Deaths (RID) will be alerting you to new products already in the marketplace, soon to be available, or in development that have the potential to help reduce infection risk.

Technological innovation is our most important partner in improving patient safety. The newsletter will also highlight recent peer-reviewed articles that everyone should see.

Be aware that RID does not endorse products. Our mission is simply to speed up the transfer of knowledge from bench to bedside, and help you be aware of important new tools for infection prevention.

Enjoy the newsletter, and please contact us with your ideas for products and research to be included in future issues. We'd like to hear from you.

Sincerely,
Betsy McCaughey, Ph.D.
Chairman
betsy@hospitalinfection.org

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# Innovative Products Newsletter

*Winter 2013 - Featuring:*



## GLOBAL LIFE TECHNOLOGIES CORP's NOZIN Nasal Sanitizer

**Like a long-acting hand sanitizer for your nose.**


**Learn More at: www.nozin.com**

The nose is believed to be the primary portal through which upper respiratory infection occurs. But our special interest in the NOZIN Nasal Sanitizer is its potential to reduce the transmission of MRSA and other bacteria in hospitals. This could be an important tool to reduce nasal carriage in healthcare settings.

NOZIN Nasal Sanitizer is an over-the-counter product with demonstrated microbial killing activity that is typically applied to the skin at the opening of each nostril. This vulnerable area of the nose is where germs colonize and are deposited by airborne droplets or soiled fingers. The patented formula combines the proven, safe antiseptic power of alcohol with the moisturizing, antioxidant benefits of natural oils.

In testing by independent FDA registered laboratories, NOZIN Nasal Sanitizer was shown in vitro to kill 99.99% of a broad spectrum of pathogenic organisms. Human testing demonstrated that the microbicidal activity persisted in the nose for at least 8 hours from the time of application.

The company has conducted research funded by the NIH in collaboration with researchers at the Johns Hopkins Bloomberg School of Public Health. Global Life Technologies Corp. is interested in partnering with hospitals to investigate the impact of NOZIN on reducing SA/MRSA colonization.

**Contact** John A. Willimann, President & Chief Science Officer

## OPERATOR INTERFACE TECHNOLOGY has teamed up with OLIN BRASS to produce the first Waterproof Copper Keyboard for computer use

The entire front surface and keys are solid EPA-approved CuVerro copper. We at RID found this product interesting because computer input devices are among the most heavily contaminated surfaces in intensive care units. There are many washable, even immersible keyboards, but this is the first inherently anti-microbial keyboard we are aware of at this time. As the push for electronic medical records continues, it is urgent that we develop ways to prevent keyboards from being vectors of disease.

Copper is inherently anti-microbial, meaning it will kill bacteria and viruses that settle on its surface quickly and completely. This should help solve the problem of caregivers who enter information in the bedside computer, then go back to the patient without cleaning hands first. The copper will continuously destroy pathogens on the surface of the keyboard.

**For More Information**:
**Contact** Bob Nolan, Operator Interface Technology at **www.oitkeypad.com**
**Contact** Bryony Samuel at the Copper Development Association at **www.antimicrobalcopper.org**


Cu+ certified copper keyboard (Operator Interface Technology)

## AGIENIC INC.'s Idea for Antimicrobial Polymers

AGIENIC INC. is a Tucson, Arizona based nanotechnology start-up with a patent-pending technology that in the future may be used to produce bulk polymers, ointments, implantable medical devices, and many other products that constantly destroy bacteria, viruses, molds and fungi, and even spores.

The technology can be used to produce coatings that will maintain their antimicrobial efficacy for months or longer, and at low cost.

The technology can also be used to produce bulk polymers used in manufacturing keyboards and other items. This might someday give copper keyboards a head-to-head competition.

The same technology, according to the research team at Agienic, will be usable to manufacture implantable medical devices, lotions and ointments.

The company looks forward to applying its materials in a hospital setting on items such as bedrails, and would welcome corporate and hospital collaborators.

**Contact them at www.agienic.com**

## LIFEROSE PRODUCTS, INC.'s Glove Delivery System

Too often caregivers pull gloves out of a box without cleaning their hands first. The obvious result is that their unclean hands contaminate the outside of the gloves. Gloves are no substitute for correct hand hygiene. But Liferose Products has developed a glove delivery system that enables caregivers to don gloves without touching the outside of the gloves. This technology is promising because it avoids having to change human behavior, one of the hardest things to do.

This is an early-stage product for which a patent has been applied.

John C. Howard is the Chairman and CEO of Liferose Products.
**Contact him** at **john.howard@liferoseproducts.com**

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## IF YOU HAVEN'T READ IT:

**"Novel Hospital Curtains with Antimicrobial Properties: A Randomized, Controlled Trial," Infection Control and Hospital Epidemiology, November 2012. This valuable article reviews the research on privacy curtain contamination, the role of privacy curtains as vectors of infectious disease, and the promising role that anti-microbial curtains may plan in helping to solve the problem. In many hospitals, privacy curtains are changed infrequently or only when visibly soiled. Yet they are the last thing touched before caregivers reach the patient and the first thing touched by a caregiver's contaminated hands after treating a patient. Hospital decision-makers need to consider using disposable privacy curtains or anti-microbial curtains. There is a wide variety of products available.**

William Santiago, Southampton Hospital Director of Environmental Services, standing alongside a disposable privacy curtain in the Hospital's Jenny and John Paulson Emergency Department. These curtains are one of the numerous infection elimination protocols that Southampton Hospital has implemented.

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## 15 STEPS YOU CAN TAKE TO REDUCE YOUR RISK OF A HOSPITAL INFECTION

Most of us will have to go into the hospital some day. Here are specific steps you can follow to protect yourself from deadly hospital infections:

**1. Ask that hospital staff clean their hands before treating you, and ask visitors to clean their hands too.** This is the single most important way to protect yourself in the hospital. If you're worried about being too aggressive, just remember your life could be at stake. All caregivers should clean their hands before treating you. Alcohol-based hand cleaners are more effective at removing most bacteria than soap and water. Do not hesitate to say: "Excuse me, but there's an alcohol dispenser right there. Would you mind using that before you touch me, so I can see it?" Don't be falsely assured by gloves. If caregivers have pulled on gloves without cleaning their hands first, the gloves are already contaminated before they touch you.

**2. Before your doctor uses a stethoscope, ask that the diaphragm (the flat surface) be wiped with alcohol.** Stethoscopes are often contaminated with *Staphylococcus aureus* and other dangerous bacteria, because caregivers seldom take the time to clean them in between patient use.

**3. If you need a "central line" catheter, ask your doctor about the benefits of one that is antibiotic-impregnated or silver-chlorhexidine coated to reduce infections.**

**4. If you need surgery, choose a surgeon with a low infection rate.** Surgeons know their rate of infection for various procedures. Don't be afraid to ask for it.

**5. Beginning three to five days before surgery, shower or bathe daily with chlorhexidine soap.** Various brands can be bought without a prescription. It will help remove any dangerous bacteria you may be carrying on your own skin.

**6. Ask your surgeon to have you tested for methicillin-resistant *Staphylococcus aureus* (MRSA) at least one week before you come into the hospital.** The test is simple, usually just a nasal swab. If you have it, extra precautions can be taken to protect you from infection.

**7. Stop smoking well in advance of your surgery.** Patients who smoke are three times as likely to develop a surgical site infection as nonsmokers, and have significantly slower recoveries and longer hospital stays.

**8. On the day of your operation, remind your doctor that you may need an antibiotic one hour before the first incision.** For many types of surgery, a pre-surgical antibiotic is the standard of care, but it is often overlooked by busy hospital staff.

**9. Ask your doctor about keeping you warm during surgery.** Operating rooms are often kept cold, but for many types of surgery, patients who are kept warm resist infection better. This can be done with special blankets, hats and booties, and warmed IV liquids.

**10. Do not shave the surgical site.** Razors can create small nicks in the skin, through which bacteria can enter. If hair must be removed before surgery, ask that clippers be used instead of a razor.

**11. Avoid touching your hands to your mouth, and do not set food or utensils on furniture or bed sheets.** Germs such as "C. Diff" can live for many days on surfaces and can cause infections if they get into your mouth.

**12. Ask your doctor about monitoring your glucose (sugar) levels continuously during and after surgery, especially if you are having cardiac surgery.** The stress of surgery often makes glucose levels spike erratically. When blood glucose levels are tightly controlled, heart patients resist infection better. Continue monitoring even when you are discharged from the hospital, because you are not fully healed yet.

**13. Avoid a urinary tract catheter if possible.** It is a common cause of infection. The tube allows urine to flow from your bladder out of your body. Sometimes catheters are used when busy hospital staff don't have time to walk patients to the bathroom. If you have a catheter, ask your caregiver to remove it as soon as possible.

**14. If you must have an IV, make sure that it's inserted and removed under clean conditions and changed every 3 to 4 days.** Your skin should be cleaned at the site of insertion, and the person treating you should be wearing clean gloves. Alert hospital staff immediately if any redness appears.

**15. If you are planning to have your baby by Cesarean section,** follow the steps listed above as if you were having any other type of surgery.

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## Visit Us At Our Website

To learn more about RID's lifesaving work, or to get involved with the innovative products featured in this newsletter, visit
**RID online at www.hospitalinfection.org**