The press is reporting drug-resistant staph bacteria picked up in ordinary community settings are increasingly acquiring "superbug" powers and causing far more serious illnesses than they have in the past, doctors reported Monday. These widespread germs used to be easier to treat than the dangerous forms of staph found in hospitals and nursing homes. "Until recently we rarely thought of it as a problem among healthy people in the community," said Dr. Rachel Gorwitz of the federal Centers for Disease Control and Prevention.

Dental practitioners are very concerned. Now, the germs causing outbreaks in schools, on sports teams and in other social situations are posing a growing threat. A CDC study found that at least 10 percent of cases involving the most common community strain were able to evade the antibiotics typically used to treat them. "They're becoming more resistant and they're coming into the hospitals," where they swap gene components with other bacteria and grow even more dangerous, said Dr. Keith Klugman, an infectious disease expert at Emory University. "It's really a major epidemic."

MRSA, Drug-Resistant Staph, and Viral Infection Solutions*

This 2005 scanning electron micrograph (SEM) depicted numerous clumps of methicillin-resistant *Staphylococcus aureus* bacteria, commonly referred to by the acronym, MRSA; Magnified 9560x.

Recently recognized outbreaks, or clusters of MRSA in community settings have been associated with strains that have some unique microbiologic and genetic properties, compared with the traditional hospital-based MRSA strains, which suggests some biologic properties, e.g., virulence factors like toxins, may allow the community strains to spread more easily, or cause more skin disease. A common strain named USA300-0114 has caused many such outbreaks in the United States. See PHIL 7821 for a black and white version of this micrograph.

Methicillin-resistant *Staphylococcus aureus* infections, e.g., bloodstream, pneumonia, bone infections, occur most frequently among persons in hospitals and healthcare facilities, including nursing homes, and dialysis centers. Those who acquire a MRSA infection usually have a weakened immune system, however, the manifestation of MRSA infections that are acquired by otherwise healthy individuals, who have not been recently hospitalized, or had a medical procedure such as dialysis, or surgery, first began to emerged in the mid- to late-1990's. These infections in the community are usually manifested as minor skin infections such as pimples and boils. Transmission of MRSA has been reported most frequently in certain populations, e.g., children, sports participants, or jail inmates.

*The germ [methicillin-resistant Staphylococcus aureus, or MRSA] can be carried by people on their skin or in their noses with no symptoms and still infect others* — the reason many hospitals isolate and test new patients to see if they harbor the bug. MRSA mostly causes skin infections. But the germ can be life-threatening if it gets into the
bloodstream, lungs or organs. Pneumonia, sinus infections and even "flesh-eating" wounds due to MRSA are on the rise, doctors reported Monday at an infectious diseases conference in Washington.

About 95,000 serious infections and 20,000 deaths due to drug-resistant staph bacteria occur in the United States each year. To treat them, "we've had to dust off antibiotics so old that they've lost their patent," said Dr. Robert Daum, a pediatrician at the University of Chicago. The old "antibiotic" is not being openly discussed due to special interests who cannot gain control of the ingredient - silver. The most advanced solution is in a category called UPCOSH (Uniform Picoscalar Concentrated Oligodynamic Silver Hydrosol).

The U.S. Centers for Disease Control and Prevention notes that some two-million patients become infected in American hospitals—and some 90,000 die as a result of their infections. Such hospital-derived conditions are known as "nosocomial infections." It has been recently reported that more people are dying from MRSA than AIDS. So why isn't the CDC speaking about Uniform Picoscalar Concentrated Oligodynamic Silver Hydrosol in their literature?

The number one culprit is a bacterium Staphylococcus aureus, which has developed resistance to almost every antibiotic we have to fight it. "Staph," says Dr. Jonathan Jacobs, of the Weill Cornell Medical Center, "is one of the most common infections that we encounter."

An investigation in the Chicago Tribune places much of the blame on dirty hospitals and health care workers who don't wash their hands. Doctors admit that poor hygiene on the part of hospital personnel is a factor in the infections. "It's very easy to transmit these organisms, and it doesn't take much of a lapse in hygiene to do it," says Dr. Jacobs.

Experts also note that hospitals should not be thought of as "safe havens" One expert, Victor Yu, M.D., of the VA Medical Center and University of Pittsburgh, says, "For the first time in perhaps maybe 50 years, the microbes probably have an edge. It's scary."

While antibiotics may have contributed to the return of the microbe, oligodynamic silver's track record at destroying over 100 strains of Staph is legendary. We shall see in a moment the evidence for this.

One hospital worker (who wishes to remain anonymous for job security) reported the following: "In one of the surgery centers I'm a principal in - we had an outbreak of MRSA among our postoperative patients a few years back. We went in with Chlorox and other disinfectants and swabbed every damned surface. Those we could not get to (underside of the OR table, underside of drawers, etc., we sprayed with a diluted version of the disinfectant solution.

The results were; the whole place tested "clean" when we did over 1000 swabs (to send to the lab) per area. We did random places ranging from the inside of a sink drain opening to the tops of trays on which a sterile drape and then instruments would be placed. We even checked the inside of our medical waste receptacles (the ones you line with the red bags) and
they were "clean". Not one hint of MRSA remained in the entire place. We shut down for four days, cancelled all surgery, and required that all staff come in for at least four hours during the period to undergo lectures and training, etc., while we were cleaning. When we were "done" with the cleaning process, we went in with steam units and blasted the whole place with 300 degree plus steam as the "final" step. Then we tested again. Still clean. So far, so good.

"The above is the CDC methodology for decontamination of a medical suite or a surgical suite once the pathogen has been discovered in patients or on the surfaces. We had it in four different patients but never found any on surfaces - but we did the super clean routine and decontamination anyway. Better safe than dead.

"Finally after our shutdown and cleaning we "swabbed" the staff. Everyone from secretaries to physicians was required to undergo swab samples from the deep nases (way back in the nose), as well as throat, and groin swabs. (The crease between the pubic mound and the leg are notoriously hard to clear of staff once it gets a foothold there.)

"Four surgeons were positive on their nasal swabs! We were in shock! Four of them! Seems their constant exposure to patients and being in and out of other facilities had turned them into carriers. All patients who'd turned up with the disease were former patients of one of these four. Three of the surgeons (one woman and two men) said - "fine - what do we do to fix it?

The docs could operate during this time but they could not have physical contact with a patient without protective gear - mask, gloves, gowns, etc. between them and the patient. They couldn't even shake hands with a patient ungloved. All three docs tested clear within one week but continued the treatment for another week just to be certain we'd knocked it out entirely. Eventually we did. It took an extra two weeks on one doc who was himself on Chemotherapy for a mild cancer and his immune system was impacted negatively. So for him, it took a little longer for the therapy to be effective."

Another prevalent infection is legionellosis. Numerous reports have been published within the past year regarding patient infections in long-term care facilities, nursing homes, rehabilitation centers, and pediatric hospitals, says Dr. Yu. "The institutional water supply has been the source in all reports."

In fact, many experts now consider silver to be essential to control of hospital-borne pathogens. Urinary catheters are impregnated with silver. The leading topical antibiotic today is silver sulfadiazine. Copper-silver ionization has displaced chlorination as the long-term disinfection modality of choice for prevention of legionellosis.

In the August 2000 issue of Current Opinions on Infectious Disease, Dr. D.J. Stickler of the Cardiff School of Biosciences, Cardiff University, Cardiff, Wales, United Kingdom, poses this provocative question, "Biomaterials to prevent nosocomial infections: is silver the gold standard?" 1 Why isn't the CDC talking about UPCOSH?

Oligodynamic silver’s performance (e.g., = 0.1 ppm concentration level)
at destroying legionellosis in the tap water is now firmly established.\(^2\), \(^3\)

In 1994, it was shown that silver could combat bacterial colonization by Staph. The “reduced bacterial growth” of Staph. pathogens “indicates that the release of silver in tissues over time cause antibacterial effects in vivo,” says Dr. M.K. Dasgupta, of the Walter McKenzie Health Sciences Center, University of Alberta, Edmonton, Canada.\(^4\)

**Today, technology has greatly improved over previous kinds of oligodynamic silver preparations. The rich content of oligodynamic silver, covalently bonded with oxygen, within uniform picoscalar concentrated oligodynamic silver hydrosol (UPCOSH) has not only proven efficacy against all the most common Staph infections, but notably destroys the most highly resistant ones as well.** Both in vitro and in vivo studies confirm oligodynamic silver’s lethal effects against:

- Staphylococcus spp. (20 Coagulase-negative strains)\(^5\)
- Staphylococcus aureus\(^6,7,8,9,10,11,12,13,14\)
- Staphylococcus aureus (97 MRSA strains)\(^15,16\)
- Staphylococcus epidermidis\(^17,18,19,20\)
- Staphylococcus maruslene\(^21\)
- Staphylococcus pyogenes\(^22\)
- Staphylococcus pyogens albus\(^23\)
- Staphylococcus pyogens aureus\(^24\)
- Staphylococcus systneriae\(^25\)

References

7. Larry C. Ford, MD. Department of Obstetrics and Gynecology, UCLA School of Medicine, Center for the Health Sciences, November 1, 1988.
11. Brigham Young University, Microbiology Department, May 13th, 1999; Ron W. Leavitt, PhD, Prof. Microbiology; ref: ASAP – 1.25 ppm to 10 ppm concentrate of Ag+.
16. Johns Hopkins University, Department of
Pathology, Division of Microbiology, Feb 14th, 1997, James D. Dick, PhD, Director of Bacteriology; Ref: Aqua Argentica.


19 Microbiochem, Inc., Laboratoire D’Analyse, Quebec, Canada, July 3rd, 1996; Real Ayotte, PhD, Ref: Aqua Argentica.


*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.