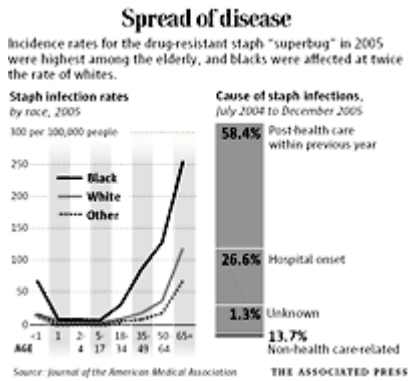


The Washington Post

Alarming spread of superbug "a very big deal"

By Rob Stein, The Washington Post / Seattle Times 10/17/07



WASHINGTON — A dangerous germ that has been spreading across the country **causes more life-threatening infections than public-health authorities had thought and is killing more people in the United States each year than AIDS**, federal health officials reported Tuesday. The microbe, a strain of a once innocuous staph bacterium that has become invulnerable to first-line antibiotics, is responsible for **more than 94,000 serious infections and nearly 19,000 deaths each year**, the Centers for Disease Control and Prevention (CDC) calculated.

Although evidence has been mounting that the infection is becoming more common, the estimate published today in the Journal of the American Medical Association marks the first national assessment of the toll from the pathogen, officials said. "This is the first study that's been able to capture the data in a comprehensive fashion," said Scott Fridkin, a medical epidemiologist at the CDC. "This is a significant public-health problem. We should be very worried." Other researchers noted that the estimate includes only the most serious infections caused by the bug, known as methicillin-resistant staphylococcus aureus, or **MRSA**. "It's really just the tip of the iceberg," said Elizabeth Bancroft, a Los Angeles Department of Public Health medical epidemiologist who wrote an editorial accompanying the new research. "It is astounding."

On Monday, a Lynch Station, Va., teenager, Ashton Bonds, 17, died of MRSA, prompting officials to shut down 21 Bedford County schools for cleaning to prevent further infections. The infection had spread to Bonds' kidneys, liver, lungs and the muscle around his heart. The MRSA estimate is being published with a report that a strain of another bacterium, which causes ear infections in children, has become impervious to every approved antibiotic for youngsters. "Taken together, what these two papers show is that we're increasingly facing antibiotic-resistant forms of these very common organisms," Bancroft said.

The reports highlight the **need to develop new antibiotics and curb unnecessary use of current ones**, experts said. They also should alert doctors to be on the lookout for antibiotic-resistant infections so patients can be treated with the few remaining effective drugs before they develop serious complications, experts said. MRSA is a strain of the widespread bacterium that usually causes "staph" infections, which are easily treated with common antibiotics in the

penicillin family, such as methicillin and amoxicillin. Resistant strains of the organism, however, increasingly have been turning up in hospitals and outside of health-care settings, such as among athletes, prison inmates and children.

The germ, spread by casual contact, rapidly turns minor abscesses and other skin infections into serious health problems, including painful, disfiguring "necrotizing" abscesses that eat away tissue. The infections often can be treated by lancing and draining sores and quickly administering other antibiotics, such as Bactrim. But the microbe enters the lungs in some cases, causing unusually serious pneumonia, or spreads into bone, vital organs and the bloodstream, triggering life-threatening complications. Those patients must be hospitalized and given intensive care, including intravenous antibiotics such as vancomycin.

In **Washington state, MRSA is not reportable to public-health officials** as are some other communicable diseases. However, some counties, such as Pierce, are tracking cases and trends through voluntary reports by hospitals, nursing homes and medical clinics. Rep. Tom Campbell, R-Roy, sponsored a law passed in the last legislative session requiring hospitals to report infections, but **MRSA and funding for its surveillance were stripped from the bill in its final days**. Campbell said he plans to propose new legislation that would require reporting of MRSA by hospitals, nursing homes, doctors' offices and other institutions. "We can't just take the narrow view that it's confined between the walls of the hospitals when it's coming in as much as it's going out," Campbell said.

In the new study, Fridkin and colleagues analyzed data collected in Connecticut, Georgia, California, Colorado, Oregon, New York, Tennessee, Minnesota and Maryland, identifying 5,287 cases of invasive MRSA infection and 988 deaths in 2005. Based on the findings, researchers calculated MRSA was striking 31 of every 100,000 Americans, which translates into 94,360 cases and 18,650 deaths nationwide. In comparison, AIDS killed about 12,500 Americans in 2005. "This indicates these life-threatening MRSA infections [are] much more common than we had thought," Fridkin said. The estimates make MRSA much more common than flesh-eating strep infections, bacterial pneumonia and meningitis combined, Bancroft noted. "These are some of the most dreaded invasive bacterial diseases out there," Bancroft said. "This is clearly a very big deal." The infection is **most common among African Americans and the elderly but also commonly strikes very young children**.

Studies have shown that **hospitals could do more to reduce the spread of the infection** through standard hygiene measures. Individuals can reduce their risk through common-sense measures, such as frequent hand-washing. In the second paper, Michael Pichichero and Janet Casey of the University of Rochester in New York documented the emergence of an antibiotic-resistant strain of another bacterium known as *Streptococcus pneumoniae*, which causes common ear infections. Although all 11 children identified in the Rochester area with the microbe so far were treated successfully, five required an antibiotic approved only for adults and one child was left with permanent hearing loss. Researchers attributed the emergence of the strain to a combination of the overuse of antibiotics and the introduction of a vaccine that protects against the infection. "The use of the vaccine created an ecological vacuum, and that combined with excessive use of antibiotics to create this new superbug," Pichichero said.

Keep it clean

Good hygiene is the best way to avoid infection from a potentially dangerous drug-resistant germ called methicillin-resistant staphylococcus aureus, or MRSA, including:

Keep hands clean by washing thoroughly with soap and water or using an alcohol-based hand cleaner.

Keep cuts and scrapes clean and covered with a bandage until healed.

Avoid contact with other people's wounds or bandages.

Avoid sharing personal items such as towels or razors.

Source: Centers for Disease Control and Prevention