

Seattle Post-Intelligencer

Staph 'superbug' multiplies fast, sickens 90,000 a year

By LINDSEY TANNER, THE ASSOCIATED PRESS / Seattle PI 10/17/07

CHICAGO -- It now appears that a dangerous type of staph infection is probably killing more Americans each year than AIDS. It's resistant to standard antibiotics, and the government reports in its first broad look at invasive disease caused by this superbug that more than 90,000 Americans are sickened by it annually. The drug-resistant germ goes by the nickname **MRSA**, short for methicillin-resistant Staphylococcus aureus.

"The rate of invasive MRSA was an astounding 31.8 per 100,000," according to an editorial published with the report in Wednesday's Journal of the American Medical Association. The study offers the broadest look yet at the pervasiveness of the most severe MRSA infections -- those that invade the bloodstream or destroy flesh. The bacteria can be carried by healthy people, living on their skin or in their noses. But they can be deadly when they spread inside the body.

This form of the disease is being blamed for the death Monday of a 17-year-old Virginia high school senior. Doctors said the germ had spread to his kidneys, liver, lungs and the muscles around his heart.

In recent years, MRSA has become more common in hospitals and it has been spreading through prisons, gyms and locker rooms, and in poor urban neighborhoods. Researchers found that **only about a quarter of invasive cases involved patients in hospitals. However, more than half were related to health care, occurring in people who had recently had surgery or were on kidney dialysis, for example. Open wounds and exposure to contaminated medical equipment are major ways the bug spreads.**

There were 988 reported deaths among infected people in the study, for a rate of 6.3 per 100,000. That would translate to 18,650 deaths annually, although the researchers don't know if MRSA was the cause in all cases. If the deaths all were related to staph infections, the total would exceed other better-known causes of death, including AIDS -- which killed an estimated 17,011 Americans in 2005 -- said Dr. Elizabeth Bancroft of the Los Angeles County Health Department, who wrote the editorial published with the study. The researchers' estimates are extrapolated from 2005 surveillance data from nine mostly urban regions considered representative of the country. There were 5,287 invasive infections reported that year in people living in those regions, which would translate to an estimated 94,360 cases nationally, the researchers said. Most cases were life-threatening bloodstream infections. However, about 10 percent involved so-called flesh-eating disease, according to the study led by researchers at the federal Centers for Disease Control and Prevention.

The results underscore the need for better prevention measures, including **curbing the overuse of antibiotics** and improving hand-washing and other hygiene procedures, especially among hospital workers, said the CDC's Dr. Scott Fridkin, a study co-author. Some hospitals have drastically cut infections by first isolating new patients until they are screened for MRSA. The bacteria don't respond to penicillin-related antibiotics once commonly used to treat them, partly because of overuse. They can be treated with other drugs, but health officials worry that their overuse could cause the germ to become resistant to those, too. A survey earlier this year suggested that **MRSA infections, including non-invasive mild forms, affect 46 out of every 1,000**

U.S. hospital and nursing home patients -- or as many as 5 percent. These patients are vulnerable because of open wounds and invasive medical equipment that can help the germ spread.

Dr. Buddy Creech, an infectious disease specialist at Vanderbilt University, said the JAMA study emphasizes the broad scope of the drug-resistant staph "epidemic," and highlights the need for a vaccine, which he called "the holy grail of staphylococcal research." The study involved data from July 2004 through December 2005, during which 8,897 cases of invasive MRSA disease were reported. The incidence rate and death rate were calculated based only on the 2005 data, which involved 5,287 cases. The regions studied were: the Atlanta metropolitan area; Baltimore, Connecticut; Davidson County, Tenn.; the Denver metropolitan area; Monroe County, N.Y.; the Portland metropolitan area; Ramsey County, Minn.; and the San Francisco metropolitan area. The study involved data from July 2004 through December 2005, during which 8,897 cases of invasive MRSA disease were reported. The incidence rate and death rate were calculated based only on the 2005 data, which involved 5,287 cases.

Because **there are no requirements to report these infections to local health authorities in Washington**, neither the Seattle-King County nor the state health departments could offer any numbers for the state. A spokesman for the state health department said the study "reflects what's happening all around the nation, including in Washington."

HOW TO PROTECT YOURSELF

Good hygiene is the best way to avoid infection from a potentially dangerous drug-resistant germ called methicillin-resistant *Staphylococcus aureus*, or MRSA. This staph infection sometimes first appears on the skin as a red, swollen pimple or boil that may be painful or have pus. It can be spread by close skin-to-skin contact or by touching surfaces contaminated with the germ.

The federal Centers for Disease Control and Prevention advises that you:

- Keep your 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.