



Rx: Health Care FYI #56

Subject: *Fighting Infections Resistant to Antibiotics*
From: *Rep. Tim Murphy (PA-18)*
Date: *June 5, 2007*

The problem: The Centers for Disease Control and Prevention (CDC) reports 70 percent of the bacteria that cause infections are resistant to at least one of the medications typically used to treat them and the number of these infections is rising.

How do infections become resistant to antibiotics?

- When a person takes an antibiotic for an infection, the drug kills the defenseless bacteria, leaving behind those that can resist it. These renegade bacteria then multiply, increasing their numbers a millionfold in a day, becoming the predominant microorganism.¹

What is MRSA?

- Methicillin-resistant staphylococcus aureus (MRSA) is the most prominent example of bacterial infections resistant to treatment with usual antibiotics. MRSA is a type of bacteria that causes “staph” infections.
- CDC estimates MRSA causes about 90,000 serious infections and kills 17,000 people a year. MRSA infections resistant to antibiotics treatment contracted in hospitals have increased from 35% in 1992 to over 64% in 2003.
- MRSA in healthcare settings commonly causes serious and potentially life threatening infections, such as bloodstream infections, surgical site infections, or pneumonia. The annual nationwide cost to treat the 120,000 hospitalized patients with MRSA is estimated to be up to \$4.2 billion annually.²
- People infected with antibiotic-resistant organisms like MRSA are more likely to have longer and more expensive hospital stays, and may be more likely to die as a result of the infection. The first step to prevent MRSA, is to prevent health care infections in general.

Hospitals and other health care providers have been able to drastically reduce infection rates by strict adherence to clean sanitation techniques, including:

- Handwashing before and after contact with any patient
- Sterilizing all equipment used with patients including stethoscopes, otoscopes, thermometers, etc.
- Clean up before and after medical procedures
- Proper use of antibiotics before and after surgery
- Pre-testing patients on admission to evaluate the presence of an infection (such as MRSA)
- Clean clothes/scrubs

¹ Lewis, Rick. The Rise of Antibiotic-Resistant Infections. FDA Consumer magazine.

² U.S. Outcomes Research Group of Pfizer Inc and presented at the ISPOR meeting during poster session I (Abstract ID# 9489). 2000.

- Masks worn by visitors to prevent respiratory infections
- Use of infection control boards at hospitals to monitor and manage procedures
- Empowering all staff to stop or intervene on any procedure when clean rules are violated
- Aggressive education campaigns to inform the public on the importance of following clean procedures

Examples of Success:

- Evanston Northwestern Healthcare in Illinois screens all patients for MRSA, which saves about \$25,000 in uncovered medical costs per patient for every prevented MRSA case. After implementation of the screening program, bloodstream infections decreased by 70 percent and pneumonia decreased by 50 percent.
- The VA Pittsburgh Healthcare System, tests all patients for MRSA upon admission and discharge and as a result cut infections down to two a year.

The states:

- 13 states to date this year have considered bills requiring hospitals to disclose infection rates to the public. Fourteen others have passed such laws over the past four years.³
- Pennsylvania, is the only state requiring full public reporting of individual hospitals healthcare-associated infection rates.

The federal government:

- While there have been steps taken administratively, there is no current federal law requiring hospitals to report infections.
- HHS Action Plan to combat Antimicrobial resistance: HHS has developed an interdepartmental task force across the federal government to track efforts to combat antimicrobial resistance including surveillance, prevention and control, research and product development.
- The CDC monitors invasive MRSA infections in nine sites across the United States representing a population of about 16.3 million persons.
- In August 2006, Veterans Affairs hospitals began a program to test all veterans seeking care for MRSA bacteria on admission and discharge with a nasal swab to test for MRSA.
- The Deficit Reduction Act contains a provision that by October 1, 2007 the U.S. Secretary of Health and Human Services will reduce payment rates or diagnosis related codes (DRGs) under Medicare for the two most costly healthcare-acquired infections to encourage providers to reduce these infections using evidence based guidelines.

Recommendations:

- Pass H.R. 1174, the Healthy Hospitals Act to require uniform and accurate public reporting of health care-associated infections by hospitals and ambulatory surgical centers for the public and health care providers can work to reduce healthcare-associated infections, enhance informed consumer choice of health care quality providers, reduce health care costs and save lives. H.R. 1174 will also provide grants to hospitals from the savings gained from reducing healthcare-associated infections to zero.
- Share information between the states, the CDC, health care providers and the armed forces on best practices to eliminate infections resistant to antibiotics.

³ Flowers, Erica. States Attack Hospital-Acquired Infections. The Heartland Institute. June 1, 2007,