Mission Critical: Preventing Antibiotic Resistance

Adapted from: http://www.cdc.gov/features/antibioticresistance/



Can you imagine a day when antibiotics don't work anymore? It's concerning to think that the antibiotics that we depend upon for everything from skin and ear infections to life-threatening bloodstream infections could no longer work. Unfortunately, the threat of untreatable infections is very real.

Antibiotic resistance occurs when germs outsmart drugs. In today's healthcare and community settings, we are already seeing germs stronger than the drugs we have to treat them. This is an extremely scary situation for patients and healthcare workers alike.

So, what is fueling antibiotic resistance, you may ask? We're finding that the widespread overuse and incorrect prescribing practices are significant problems. In addition to driving drug resistance, these poor practices introduce unnecessary side effects, allergic reactions, and serious diarrheal infections caused by *Clostridium difficile*. These complications of antibiotic therapy can have serious outcomes, even death.

According to the Center for Disease Control's (CDC) <u>National Healthcare Safety Network</u>, a growing number of healthcare-associated infections are caused by bacteria that are resistant to multiple antibiotics. These include:

- MRSA
- vancomycin-resistant *Enterococcus*
- extended-spectrum ephalosporin-resistant
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- E. coli and Enterobacter spp.
- carbapenem-resistant *P. aeruginosa*
- carbapenem-resistant K. pneumonia (and K. oxytoca)

So, what can we do to prevent antibiotic resistance in healthcare settings?

Patients, healthcare providers, healthcare facility administrators, and policy makers must work together to employ effective strategies for improving antibiotic use—ultimately improving medical care and saving lives.

Patients can:

- Ask if tests will be done to make sure the right antibiotic is prescribed.
- Take antibiotics exactly as the doctor prescribes. Do not skip doses. Complete the prescribed course of treatment, even when you start feeling better.
- Only take antibiotics prescribed for you; do not share or use leftover antibiotics. Antibiotics treat
 specific types of infections. Taking the wrong medicine may delay correct treatment and allow
 bacteria to multiply.
- Do not save antibiotics for the next illness. Discard any leftover medication once the prescribed course of treatment is completed.
- Do not ask for antibiotics when your doctor thinks you do not need them. Remember antibiotics have side effects.
- Prevent infections by practicing good hand hygiene and getting recommended vaccines.