Preserving antibiotics for the future

Did you know?
1. Antibiotic resistance is one of the world’s most pressing public health threats.
2. Antibiotics are the most important tool we have to combat life-threatening bacterial diseases, but antibiotics can have side effects.
3. Antibiotic overuse increases the development of drug-resistant germs.
4. Patients, healthcare providers, hospital administrators, and policy makers must work together to employ effective strategies for improving antibiotic use – ultimately improving medical care and saving lives.

Looking ahead at the problem

- No single strategy can solve the issue of antibiotic resistance; a multi-pronged approach is required.
- We must educate everyone about the growing threat of antibiotic resistance and the appropriate use of antibiotics.
- We must eliminate all inappropriate use of antibiotics – in human medicine, animal medicine, and agriculture.
- We must prevent the emergence and transmission of resistant infections through research into new vaccines and diagnostics and by implementing other effective infection prevention and control initiatives.
- Improving antibiotic use takes time and resources, but is well worth the investment.

Why we must act now

- The way we use antibiotics today or in one patient directly impacts how effective they will be tomorrow or in another patient; they are a shared resource.
- Antibiotic resistance is not just a problem for the person with the infection. Some resistant bacteria have the potential to spread to others – promoting antibiotic-resistant infections.
- Since it will be many years before new antibiotics are available to treat some resistant infections, we need to improve the use of antibiotics that are currently available.
Changing the way we think about antibiotics for the future

- Antibiotic use is a healthcare-quality issue that impacts patient safety.
- Investments in appropriate antibiotic use will pay off, saving lives and money.
- Healthcare facilities must have support for antibiotic stewardship interventions and programs in order to manage antibiotic use.
- Ensuring the success of antibiotic stewardship programs is a collective effort.
- Resistant organisms will continue to develop, so it is important that we continue to pursue the development of new antibiotics while preserving the ones we have today.

Vaccines as a tool for addressing antibiotic resistance

- Developing new vaccines can decrease rates of antibiotic-resistant infections. The first pneumococcal conjugate vaccine (PCV7) was licensed in the U.S. for use in infants and children in 2000.
- By 2010, cases of resistant pneumococcal disease decreased by 66% in children younger than 5 years of age.
- PCV13, licensed in 2010, provides an opportunity to prevent even more antibiotic-resistant infections of pneumococcal disease.