Three Keys to Curbing Antibiotic Resistance

by TIM REED

Through its rapid escalation, antibiotic resistance is leading to the global spread of untreatable infections and massive deterioration in health and loss of life. Every year, millions of people around the world are infected with antibiotic-resistant bacteria, and hundreds of thousands of them die.

During Antibiotics Awareness Week, as a member of the Antibiotic Resistance Coalition, we continue to urge national governments and the World Health Organization (WHO), World Organisation for Animal Health (OIE) and the Food and Agriculture Organization (FAO) to redouble their efforts to stopping the spread of antibiotic resistance by:

1. Curbing the excessive use of antibiotics while ensuring access for people in need.

Resistance to antibiotics is natural, but unrestrained marketing of antibiotics by the pharmaceutical industry has led to irrational use and expedited resistance. Policies and regulations must be put in place to stop antibiotics marketing. Further to this, we must educate healthcare professionals and patients to become more knowledgeable about when it's appropriate—or not—to use antibiotics. And better regulation and control of antibiotics is needed to ensure that antibiotics are available and affordable to people who really need them—no matter where they live.

- 2. Developing an effective innovation system for new antibiotics, diagnostics and other tools that support health, access and rational use.
 - Rapid diagnostic tools and techniques are needed to help reduce the inappropriate use of antibiotics. New antibiotics must also be developed. To achieve this, governments must support needs-driven R&D that is based on the principle of delinkage. This R&D should be publicly funded—and the public, rather than pharmaceutical companies' shareholders, should reap the rewards of this R&D.
- 3. Tackling excessive non-human use of antibiotics in food and agriculture.

 Antibiotics must only be used to treat animals when a genuine therapeutic need exists—never for commercial gain in food production. They should also be marked with warnings and clear distinctions between human and animal use. All countries should also participate in a global surveillance system that assesses animal antibiotic use and resistance patterns.

Immediate and concerted action can combat the looming antibiotic crisis, but each one of us must do our part. For more recommendations on curbing antibiotic resistance, see the Antibiotic Resistance Coalition's declaration.