

Her patient was going to die of something easily curable a few years earlier — an enterococcus bacterial infection. But this particular bacterium was now resistant to antibiotics; for nine months she had tried every antibiotic in her arsenal. The man, weakened as he was by disease, could not fight off bacteria that were impervious to pharmaceuticals. Several days later, he succumbed to a massive infection of the blood and heart.

This picture, inconceivable a decade ago, is growing ever more common. Some three million people a year are admitted to hospitals with difficult-to-treat resistant infections, and another two million (5 percent of hospital patients) become infected while visiting hospitals for routine medical procedures. More and more of these patients are succumbing to disease as the virulence and resistance of bacteria increase. In fact, as pathologist and author Marc Lappé of the University of Illinois College of Medicine observes, "by conservative estimate, such infections are responsible for at least a hundred thousand deaths a year, and the toll is mounting." The toll is mounting because the number of people infected by resistant bacteria is increasing, especially in places where the ill, the young or old, or the poor congregate, such as homeless shelters, hospitals, inner cities, prisons, and child-care centers. Perhaps the best-known and most-loved casualty to date is Jim Henson, the creator of Kermit the Frog, who died in 1990. In the face of the enormous inroads that resistant bacteria are making, world-renowned authority on bacterial resistance, Dr. Stuart Levy, comments, "This situation raises the staggering possibility that a time will come when antibiotics as a mode of therapy will be only a fact of historic interest." Marc Lappé is more blunt: "The period once euphemistically called the Age of Miracle Drugs is dead." Human-kind now faces the threat of epidemic diseases more powerful, and less treatable, than any known before.

We have let our profligate use of antibiotics reshape the evolution of the microbial world and wrest any hope of safe management from us. . . . Resistance to antibiotics has spread to so many different, and such unanticipated types of bacteria, that the only fair appraisal is that we have succeeded in upsetting the balance of nature.

MARC LAPPÉ, PH.D., AUTHOR OF  
WHEN ANTIBIOTICS FAIL