

US tries to stem antimicrobial resistance

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A new US Food and Drug Administration report finds that the use of medically important antibiotics for meat production increased by 16% from 2009 to 2012.

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Describing the rise of antibiotic-resistant bacteria as “a serious threat to public health and the economy,” United States President Barack Obama has launched a government-wide “strategic, coordinated and sustained effort” to tackle a problem US officials have linked to two million illnesses and 23 000 deaths annually in that country.

In a [Sept. 18 Executive Order](#) describing the fight against antibiotic-resistant bacteria as “a national security priority,” Obama created a Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria and a government-wide Task Force for Combating Antibiotic-Resistant Bacteria, which is co-chaired by the secretaries of defense, agriculture and health.

The new Task Force will draft a five-year National Action Plan by mid-February 2015. Meanwhile, Obama has ordered federal agencies to immediately step up efforts in surveillance, antibiotic stewardship and new drug development, and to collaborate with the World Health Organization in developing a global action plan for antimicrobial resistance.

In tackling antibiotic resistance, Obama acknowledged that success “depends on the engagement of governments, academia, industry, health care providers, the general public, and the agricultural community, as well as international partners.”

Obama’s instructions largely flow from two forceful federal reports, notes Amanda Jezek, vice president of public policy and government relations for the Infectious Diseases Society of America, which represents 10 000 infectious disease specialists in the US and abroad.

In a September [2013 report on antibiotic resistance threats](#), the US Centers for Disease Control warned that “up to 50 percent of all the antibiotics prescribed for people are not needed or are not prescribed appropriately.” A September 2014 follow-up [Report to the President on Combating Antibiotic Resistance](#) by Obama’s Council of Advisors on Science and Technology reinforced the need for federal leadership, says Jezek, who describes the Executive Order as a “fantastic first step.”

Jonathan Kaplan, director of the Food and Agriculture Program for the [Natural Resources Defense Council](#), a New York-based environmental group, also welcomed Obama’s decision to “elevate this issue as a national priority.” But Kaplan says he’s disappointed the Food and Drug Agency (FDA) isn’t adopting tougher measures against the use of antibiotics to prevent rather than to treat animal diseases. On October 2, the FDA revealed that the [use of medically important antibiotics for meat production grew by 16%](#) from 2009 to 2012. Cephalosporin use increased 37% in this period, including an 8% rise in 2012 despite restrictions imposed that year. “I worry we may see business as usual in the pharmaceutical and agricultural industries,” says Kaplan.

Efforts similar to those in the US are also underway in the UK, which adopted a national antimicrobial resistance strategy in 2013 and is slated to release an action plan in November. “The issue is finally getting traction internationally,” says Ramanan Laxminarayan, director of the Washington-based Center for Disease Dynamics, Economics & Policy.

Canadian report

Canadian antibiotic resistance experts have long pressed Ottawa to mount a more concerted federal response to the crisis. A June 2014 report, [Surveillance of Antimicrobial Resistance and Antimicrobial Utilization in Canada](#), written by the Association of Medical Microbiology and Infectious Disease Canada (AMMI) and published by the National Collaborating Centre for Infectious Diseases (NCCID) warns that Canadian surveillance

systems “do not track evolving [antimicrobial resistance] in the community or hospital and thus cannot support development of meaningful responses through better stewardship of antimicrobial use in community or hospital settings, or in veterinary and in food animal production.”

Lead author Dr. Lynora Saxinger, chair of the AMMI’s Antimicrobial Stewardship and Resistance Committee, says stronger federal leadership is long overdue. Their report strongly recommended creating an Office for Antimicrobial Resistance within the Public Health Agency of Canada. Reference to the existence of that recommendation was relegated to a publisher’s note directing readers to the AMMI website in the version of the report published by NCCID, however.

“The NCCID does not have a mandate to recommend specific policy or to advocate for specific government actions,” explains Dr. Joel Kettner, the Centre’s scientific director.

Dr. Michael Mulvey, chief of Antimicrobial Resistance and Nosocomial Infections at the National Microbiology Laboratory in Winnipeg, says federal surveillance of hospital-based antimicrobial resistance as well as drug resistance from “farm to fork” is “fairly robust.” Although acknowledging that the AMMI report accurately reveals a major gap in national surveillance of community-based resistance, especially for emerging highly drug-resistant pathogens such as carbapenem-resistant strains, Mulvey says Canada has “one of the better surveillance systems in the world today.” Substantial improvements in federal coordination of surveillance such as those recommended by AMMI are “not beyond our capacity,” Mulvey acknowledges. “We’re taking that report very seriously.”

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