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Canada behind in regulating farmyard antibiotics

New restrictions on the use of antibiotics on farm animals in both the United States and Canada may help mitigate risks to human health due to antibiotic resistance. However serious concerns remain — particularly in Canada. According to the [Ontario Medical Association](#) (OMA), Canada is trailing the US on control of antibiotic use on farms.

“It’s really unusual that Canada is lagging so far behind,” says Dr. Doug Weir, OMA’s past-president and its spokesperson on antibiotic resistance. “We’d like to see tougher legislation.” Both Canada and the US should follow Europe’s example by enacting comprehensive bans on non-therapeutic usage of antibiotics in animal husbandry, he says.

The US recently passed far-reaching measures to [curb the nonmedical use](#) of antibiotics in farming, but Canada is taking a piecemeal approach that lacks government enforcement. In December 2013, the Chicken Farmers of Canada, which regulates 2700 chicken farmers in conjunction with provincial chicken marketing boards, announced it will eliminate preventive use of medically important antibiotics, including cephalosporins and fluoroquinolones, by May 2014.

Fluoroquinolones are routinely used in chicken’s drinking water and cephalosporin is injected into eggs. The latter attracted controversy when federal investigators linked it to drug resistance in Quebec in 2005. In the US, both practices are already banned by federal regulators.

In addition to these steps, veterinary supervision of all drugs that Health Canada has designated medically critical will become mandatory.

However, these are industry rules, not government regulations, and the government will not be enforcing them. Instead, the Chicken Farmers of Canada will insist on compliance, says Steve Leech, who manages food safety, animal care and research for the association. “It will be enforced through our on-farm safety program.”

But the public will have no way of knowing whether that’s being done; as Leech acknowledges, his industry does not release information on its enforcement activities.

While this initiative is positive, according to Weir, self-regulation may not be sufficient.

Dr. Lynora Saxinger, chair of the Antimicrobial Stewardship and Resistance Committee of the Association of Medical Microbiology and Infectious Disease Canada, agrees; action from the federal government is long overdue, she says. “There is a lack of regulatory clarity. Ottawa has certainly studied the issue long enough.”

Saxinger is particularly concerned about loopholes in federal laws that allow large volumes of antibiotics to be imported and used on animals without surveillance or regulation, a problem the Ontario Medical Association recently rebuked. “We strongly urge the federal government to curtail these loopholes,” says Weir.

According to the [Public Health Agency of Canada](#), more than three-quarters of all antimicrobials consumed in Canada are used in animals, and approximately 90% of these are used to promote growth or to prophylactically guard against disease and infection. PHAC is concerned about resistance levels to the third-generation cephalosporins such as ceftiofur and ceftriaxone, and the fluoroquinolones such as enrofloxacin and ciprofloxacin detected in bacteria found on retail meat and poultry, says spokesman Stephane Shank.

He says 40% of samples taken from retail poultry in British Columbia in 2012 contained bacteria that were resistant to cephalosporins. In Ontario and Quebec, about 30% of samples showed resistance to cephalosporins.

In contrast to upcoming self-regulation measures in Canada, the US is systematically limiting farmyard antibiotic use. On Dec. 11, 2013, the US Food and Drug Administration (FDA) instructed pharmaceutical companies to voluntarily remove animal “growth enhancement” indications from medically important drugs including cephalosporins, penicillins and fluoroquinolones. This means the non-therapeutic use of these antibiotics will be stopped. The FDA states that this is as “an important step” in slowing the development of antimicrobial resistance.

The US agricultural industry uses an estimated 80% of all antibiotics in the country. More than 2 million Americans suffer from drug-resistant infections annually, resulting in 23 000 deaths, according to the US Centers for Disease Control and Prevention.

This latest regulation is the closest the US government can get to “pulling the drugs,” says Morgan Scott, a veterinary professor at Kansas State University College of Veterinary Medicine in Madison, Kansas. “The FDA cannot act to ban drug uses unless it can prove harm, which is extremely difficult,” says Scott, who researches the use of antibiotics in meat production. “Instead they can say that certain uses are imprudent which creates a dark cloud. It’s a shot across the bow.”

Not everyone thinks the FDA is being aggressive enough. Congresswoman Louise

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Slaughter, a microbiologist who proposes legislation to protect medically important antibiotics, acknowledged that the new guidance is “the biggest step the FDA has taken in a generation to combat the overuse of antibiotics in corporate agriculture” but added that it is an “inadequate response to the overuse of antibiotics on the farm with no mechanism for enforcement and no metric for success.” — Paul Christopher Webster, Toronto, Ont.

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