

# For the Record

November 2006

Straight talk about antibiotic use in food animal production presented by ALPHARMA Inc., Animal Health

## NEWS YOU MAY HAVE MISSED: A LITTLE SCIENCE

While talking heads, politicians, activists and some scientists editorialize away about the “proven” link between food-animal antibiotics and human drug failures, a few continue the long and thankless labor of actually trying to illuminate the issue through hard sci-



ence. This summer, the non-profit Institute of Food Technologists' (IFT) *Antimicrobial Resistance: Implications for the Food System* reviewed more than 750 published research studies that span two decades. The IFT's conclusions include the following:

■ **Simple, quick fixes risk failure.** How resistance transfers is a complex scientific phenomenon. Failure to respect that complexity can lead to decisions that are “draconian and without predictable results,” the panel says. Case in point: [Europe](#), where banning farmers' ability to use antibiotics for growth led to more animal disease and increased drug use for treatment.

■ **No “smoking gun.”** Granted, some evidence points to a possible human health threat related to animal antibiotic use, the study authors

write. But it does not prove that risk exists. In contrast, we do have proof that people face a measurably higher risk of catching a disease that resists antibiotic treatment if they've taken a human antibiotic in the recent past.

■ **Scientific risk assessment is critical.**

The panel cautions that the currently fashionable inclination to forbid an antibiotic based simply on how it's used—whether for routine disease prevention, growth promotion or “non-therapeutic” use—only takes our eye off the ball. Risk factors that predispose people to food poisoning caused by antibiotic-resistant bacteria tend to be the very same factors that predispose them to a case of food poisoning caused by bacteria that are not resistant. Preoccupation with antibiotics can distract from real solutions.

■ **You can't ignore antibiotics' benefits.**

Eliminating antibiotics for any purpose but treatment increases disease among animals, increases the need to treat animals—thus increasing the risk of creating resistant bacteria—and increases the amount of bacteria on carcasses as they enter the food chain.

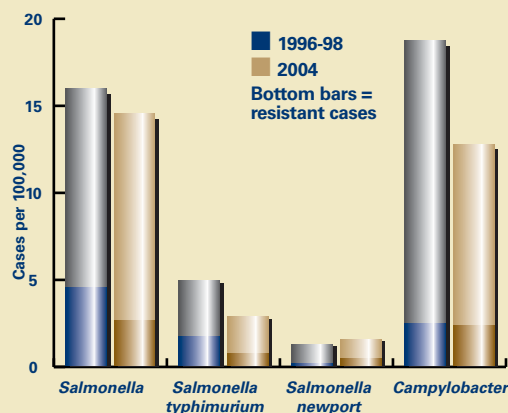
### Where's the harm in over-precaution?

Studies by the University of Georgia show that subclinical disease in chickens— which can be damped by low-level antibiotic feeding— **significantly impacts contamination** with illness-causing bacteria at processing. Other work conservatively estimates at least 40,000 human **sick days are prevented** yearly by the continuous use of only one antibiotic in chicken flocks. Banning use of those compounds would cause a real and measurable increase in disease.

### The bottom line: Foodborne illness continues to decline as food gets safer

Here's another important clarification made by the IFT report. Dwelling strictly on the percent of foodborne illnesses that can be attributed to antibiotic-resistant bacteria can obscure the progress the industry has made in reducing the overall number of foodborne illness cases over the last decade. Total *Salmonella* cases are down 8 percent, while *Campylobacter* cases have dropped by nearly one-third.

Foodborne illness: Resistant and non-resistant



Antibiotics prevent animal disease and improve meat, milk and egg production. These important, safe and proven tools remain absolutely necessary to meet the world's growing demand for affordable protein. ALPHARMA Inc., Animal Health sponsors this educational series to provide facts to help set the record straight. Comment or questions? [E-mail Steve Kopperud](mailto:skopperud@poldir.com) at [skopperud@poldir.com](mailto:skopperud@poldir.com) or [editor Mike Smith](mailto:editor@CustomMedia.com) at [CustomMedia@Food360.com](mailto:CustomMedia@Food360.com). To read past issues, see [www.alpharmaah.com](http://www.alpharmaah.com).