



FOOD ANIMAL CONCERNS TRUST

3525 W. Peterson Ave.

STE. #213

Chicago, Illinois 60659

U.S. policy consistently falls short when it comes to combatting antimicrobial resistance that results from antibiotic overuse in agriculture.

Comments for the December 20, 2023 meeting of the Presidential Advisory Council on Combatting Antibiotic-Resistant Bacteria

Steven Roach, Safe and Healthy Food Program Director, Food Animal Concerns Trust

The failure of the U.S. approach to addressing the threat of antibiotic resistance is reflected in key indicators of antimicrobial use and antimicrobial resistance. It is also reflected in policies promoted by the U.S. government in international venues.

Key Indicators

The International Tripartite Organizationsⁱ recommend indicators to measure the success of efforts to combat antimicrobial resistance.ⁱⁱ Several of these are listed below with U.S. values. In terms of antibiotic use and antibiotic resistance, the key indicators show U.S. efforts are not working. The U.S. does not publicly report on progress towards these indicators, but they can be calculated from data provided by the Food and Drug Administration (FDA). The failure to adopt and report on progress with indicators is a key failure of the U.S. approach to addressing resistance and to evaluating efforts to combat antibiotic resistance.

- **Total volume of sales/imports (or use), in mg/kg biomass, in food producing animals:** In 2022, FDA sales and biomass data show that U.S. biomass adjusted sales of medically important antibiotics increased by 5.5%.ⁱⁱⁱ In contrast, from 2021 to 2022, New Zealand saw a 23% decrease,^{iv} United Kingdom a 9% decrease^v, the European Union a 12.7% decrease^{vi}, and Canada a 2.6% decrease.^{vii}
- **Percentage of total sales/imports (or use) classified as WHO Highest Priority Critically Important Antimicrobial agents (HPCIAS):** Sales of HPCIAS increased by 8.11% and went from 9.6% of total sales to 10.0% from 2021 to 2022.^{viii}
- **Resistance in commensal *E.coli* from key food-producing animals:** Resistance to extended spectrum beta-lactamases in cattle and swine *E. coli* are increasing. Pan-susceptibility in *E. coli* from these livestock species is decreasing.^{ix}

While overall consumption of antibiotics for food-animal production is going up, the chicken industry continues to reduce use of medically important antibiotics despite using a fraction of antibiotics compared to other livestock species. Resistance in *E. coli* from chicken is also going down in contrast to other livestock species raised in the U.S.

The U.S. in international venues consistently seeks to weaken standards and recommendations related to antibiotic use in agriculture.

I represented Consumers International at the international standard-setting organization Codex Alimentarius during all eight meetings of the Codex Task Force on Antimicrobial Resistance^x and earlier during discussions on antibiotic resistance in the Codex Committee on Residues of Veterinary Drugs. I was a member of the World Health Organization Advisory Group on Integrated Surveillance of Antimicrobial Resistance. Food Animal Concerns Trust was a founding member and is an active participant in the Antibiotic Resistance Coalition, a global coalition of civil society organizations advocating for policy change related to antibiotic resistance.^{xi} Over these twenty years of engagement in international venues aimed at addressing the threat of antibiotic resistance, I have seen the U.S. government consistently act to weaken and undermine standards and recommendations related to antibiotic use in agriculture. From making sure that reductions in antibiotic use are never mentioned in Codex documents to working to shift all antibiotic resistance work from the Codex Alimentarius, which has a consumer protection focus, to the World Organization for Animal Health, which focuses on animal health, the U.S. while not always succeeding has undermined international standards and made the world less safe for consumers. In many cases, the U.S. even opposes international standards that are equivalent to U.S. policy.

Examples of U.S. policies aimed at weakening international standards related to antibiotic use in animals:

Second Round of Codex Ad hoc Task Force on Antimicrobial Resistance (2017-2021)

- U.S. opposed formation of the Task Force and attempted to keep all antibiotic resistance work in the World Organization for Animal Health.
- U.S. opposed the Task Force making recommendations on the collection of data on resistance and antibiotic use in plant agriculture despite an existing U.S. program collecting data on antibiotic use in plant agriculture.
- U.S. opposed inclusion of recommendations to restrict the use of critically important antibiotics for disease prevention that were consistent with recommendations adopted by the World Organization for Animal Health and consistent with existing U.S. policy.

U.S. participated in the Third Global High-Level Ministerial Conference on Antimicrobial Resistance (AMR) but did not endorse the resulting Muscat Manifesto that committed endorsers to adopting targets for reducing antibiotic use in agriculture.^{xii}

U.S. actively opposed^{xiii} the WHO Guidelines on Use of Medically Important Antimicrobials in Food-Producing Animals.^{xiv}

This are just a small sample of cases where the U.S. opposed international recommendations that would have strengthened consumer protections against antibiotic resistance.

Notes

ⁱ The Tripartite is made up of the World Health Organization, The World Organization for Animal Health, and the Food and Agricultural Organization of the United Nations. The United Nations Environment Program recently joined to form the Quadripartite. <https://www.who.int/groups/quadripartite-technical-group-on-integrated-surveillance-on-antimicrobial-use-and-resistance>

ⁱⁱ Monitoring and Evaluation of the Global Action Plan On Antimicrobial Resistance Framework and Recommended Indicators. <https://www.woah.org/app/uploads/2021/03/en-mande-gap-amr.pdf>

ⁱⁱⁱ Based on FDA 2022 antibiotic sales data and FDA animal biomass data. Includes only sales for which biomass is reported. Sales data: https://www.fda.gov/media/174326/download?attachment%3Asheet_sales_species, Biomass data: <https://www.fda.gov/animal-veterinary/antimicrobial-resistance/biomass-adjusted-antimicrobial-sales-and-distribution-data-food-producing-animals-interactive>. FDA does not follow international recommendations to report overall biomass adjusted sales so this was calculated by summing the species specific sales of antibiotics and dividing by the sum of the species specific biomasses.

^{iv} Sales of antibiotics used in animals and plants down by nearly a quarter. October 24, 2023.

<https://www.mpi.govt.nz/news/media-releases/sales-of-antibiotics-used-in-animals-and-plants-down-by-nearly-a-quarter>

^v Antimicrobial Resistance and Sales Surveillance 2022. November 2023.

<https://www.gov.uk/government/publications/veterinary-antimicrobial-resistance-and-sales-surveillance-2022>

^{vi} European Surveillance of Veterinary Antimicrobial Consumption (ESVAC): 2009 – 2023.

<https://www.ema.europa.eu/en/veterinary-regulatory-overview/antimicrobial-resistance-veterinary-medicine/european-surveillance-veterinary-antimicrobial-consumption-esvac-2009-2023>

^{vii} 2022 Veterinary Antimicrobial Sales Highlights Report Working towards the preservation of effective antimicrobials for humans and animals. <https://www.canada.ca/en/health-canada/services/publications/drugs-health-products/2022-veterinary-antimicrobial-sales-highlights-report.html>

^{viii} These numbers were calculated by comparing the summed sales of cephalosporins, fluoroquinolones, and macrolides between 2021 and 2022.

^{ix} FDA NARMS Now. <https://www.fda.gov/animal-veterinary/national-antimicrobial-resistance-monitoring-system/narms-now-integrated-data>

^x Ad hoc Codex Intergovernmental Task Force on Antimicrobial Resistance (TFAMR). <https://www.fao.org/fao-who-codexalimentarius/committees/committee/related-meetings/en/?committee=TFAMR>

^{xi} <https://www.ignitetheidea.org/about-arc>

^{xii} <https://amrconference2022.om/MuscatManifesto.html>

^{xiii} USDA Chief Scientist Statement on WHO Guidelines on Antibiotics. <https://www.usda.gov/media/press-releases/2017/11/07/usda-chief-scientist-statement-who-guidelines-antibiotics>

^{xiv} <https://aricjournal.biomedcentral.com/articles/10.1186/s13756-017-0294-9>