



EXTENSION

**New Guidelines for Use of Antibiotic Products in Beef
Production Systems**

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Overview

Part 1: What's Changing

Part 2: Why The Change

Part 3: How To Prepare



FDA Guidance for Industry #263



- June 11, 2023
- Voluntary by Companies
- Veterinary Prescription Required
- Medically Important Only
 - Only 4% of Products
 - Penicillin
 - Oxytetracycline

FDA Guidance for Industry #263



- Does Not Impact
 - Current VFDs
 - Anthelmintics
 - Oral Mineral
 - Ionophores
 - Monensin
 - Lasalocid

Pharmaceutical Stewardship

- Limited Options
- No New Classes
- New Strains of Organisms
- Resistance
 - Human Medicine
 - Animal Medicine



ANTIMICROBIAL SUSCEPTIBILITY PROFILES: BOVINES CY 2022 Oklahoma Animal Disease Diagnostic Laboratory

NOTE: Data reported as: % susceptible (# isolates tested)

ANTIBIOTIC	<i>Mannheimia haemolytica</i>	<i>Histophilus somni</i>	<i>Pasteurella multocida</i>
Ceftiofur	100% (18)	100% (18)	100% (8)
Danofloxacin	56% (18)	67% (18)	100% (8)
Enrofloxacin	44% (18)	67% (18)	100% (8)
Florfenicol	83% (18)	72% (18)	75% (8)
Gamithromycin	45% (11)	50% (14)	50% (6)
Penicillin	67% (18)	78% (18)	88% (8)

ANTIMICROBIAL SUSCEPTIBILITY PROFILES: BOVINES CY 2022 Oklahoma Animal Disease Diagnostic Laboratory

NOTE: Data reported as: % susceptible (# isolates tested)

ANTIBIOTIC	<i>Mannheimia haemolytica</i>	<i>Histophilus somni</i>	<i>Pasteurella multocida</i>
Spectinomycin	67% (18)	39% (18)	50% (8)
Tetracycline	27% (11)	43% (14)	50% (6)
Tildipirosin	82% (11)	100% (14)	83% (6)
Tilmicosin	44% (18)	33% (18)	50% (8)
Tulathromycin	50% (18)	50% (18)	63% (8)

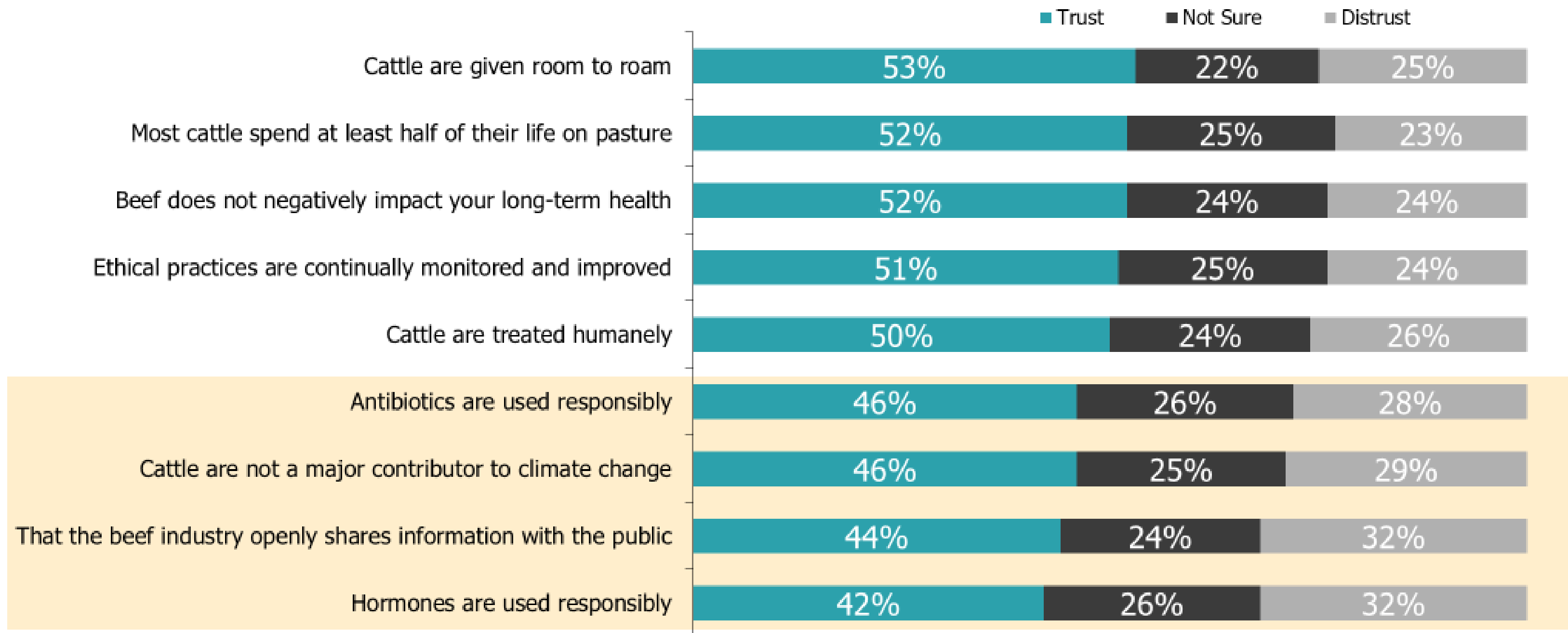
Consumers

- Perceptions
- Preferences
- Withdrawal Times



Trust Metrics (cont.)

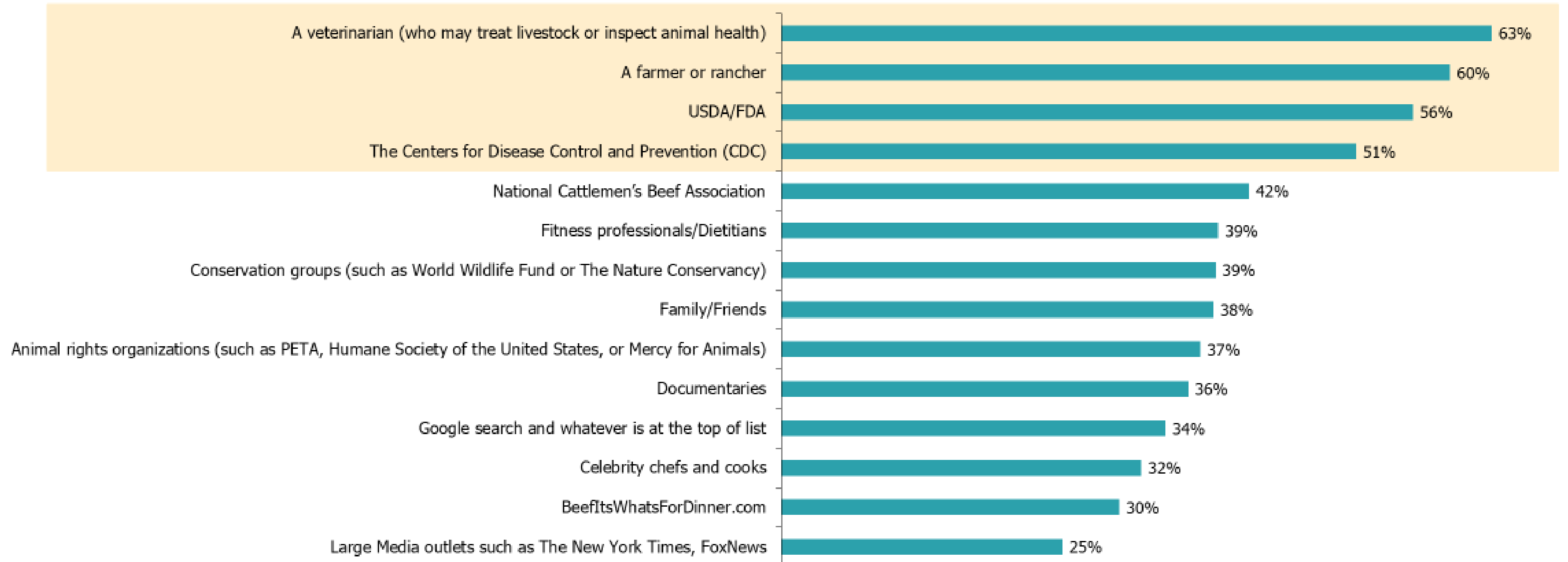
Consumer trust falls below 50% when asked to consider industry antibiotic and hormone usage, contributions to climate change, and sharing information openly.



Source: Consumer Beef Tracker January – December 2022. CR4: "Thinking about how cattle are raised for food in the U.S., please tell us how much you trust each of the following statements."
Analysis: National Cattlemen's Beef Association, a contractor to The Beef Checkoff.

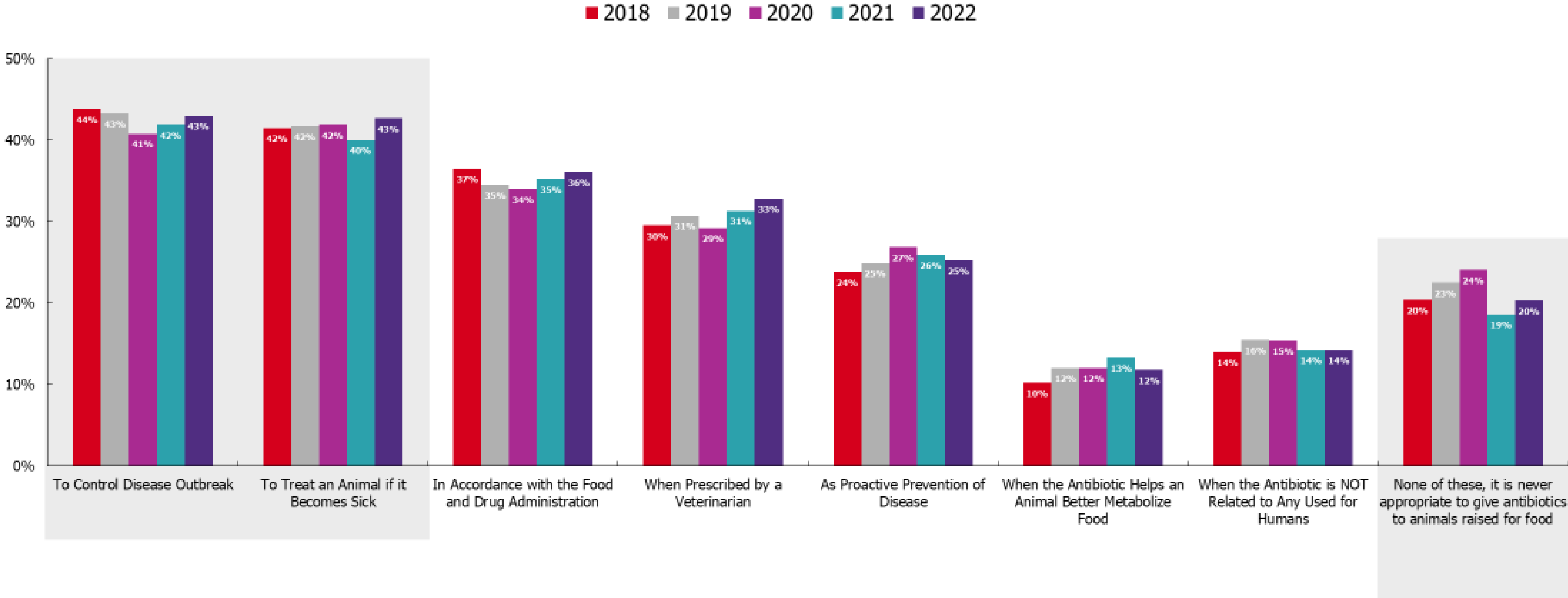
Credible Sources about Production Practices

Veterinarians and farmers and ranchers are viewed to be the most credible sources of information when it comes to production practices



Production Practices: Antibiotic Usage

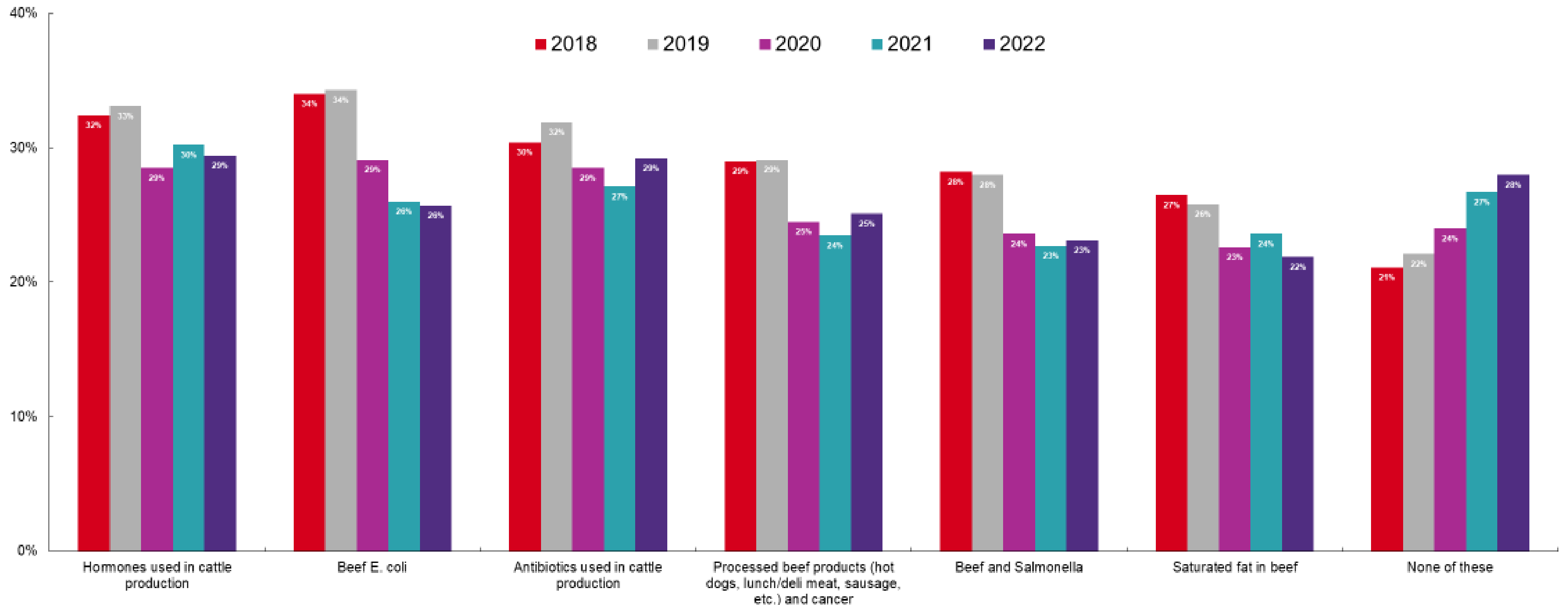
Roughly 20% of consumers indicate they are not ok with antibiotic use for any purpose in animal agriculture. Conversely, around 40% support its use to treat sick animals or control disease outbreak.



Source: Consumer Beef Tracker January – December 2022. AB1: In which, if any, of these situations are you comfortable with the use of antibiotics in raising animals for food?
 Analysis: National Cattlemen’s Beef Association, a contractor to The Beef Checkoff.

Considerations in Food Choices – Safety

Across the 5 years, use of hormones and antibiotics, E. coli, and processed meats are top of mind when it comes to beef-related food safety and health factors.



How to Prepare

- Establish/Maintain Veterinary-Client-Patient-Relationship
 - "medically appropriate and timely visits"
- Enhance Biosecurity
- Develop Herd Health Plans
- Recordkeeping



Veterinary-Client-Patient-Relationship

- DVM has assumed responsibility for making medical judgments about the health of an animal, or animals, and the need for medical treatment. In turn, the client (the owner or other animal caretaker) has agreed to follow your instructions;
- DVM has sufficient knowledge of the animal, or animals, to develop a general or preliminary diagnosis of the medical condition; and
- DVM is readily available for follow-up in case of adverse drug reactions or treatment failure.



125,465 U.S. Veterinarians

1.8% are Food Animal

4.9% are Mixed Animal

AVMA: 2023 Economic State of the Veterinary Profession

Other Veterinary Prescribing Challenges

- Extra-label Drug Use
- Recordkeeping Requirements
- Prohibited Extra-label Drugs
 - Fluoroquinolones
 - Cephalosporins
 - Others
- Backorders
- Illicit Use



Biosecurity Defined

Biosecurity is the development and implementation of management procedures to reduce or prevent unwanted diseases from entering the herd or population as well as limit or prevent the spread of disease within the farming operation.

Determining the State of Biosecurity knowledge and Implementation among Beef Cattle Producers

- Survey of Oklahoma Cow-Calf Producers, 2022
 - 1400 Responses
 - Drs. Hagerman, Currie-Raper, Whitworth, and Biggs
- USDA Animal Plant Health Inspection Service
Veterinary Services: National Animal Disease
Preparedness and Response Program Grant*

Recent Biosecurity Research

How familiar are you with this definition of biosecurity?

I have never heard of it 31%

13% I understand biosecurity and have implemented principles of biosecurity on my farm/ranch.

Biosecurity Plan Resources

- bqa.org
- OSU Beef Cattle Manual
- securebeefsupply.org



**BQA Advanced Education:
Biosecurity**

[LET'S GO](#) [DETAILS](#)

The primary goal of this Advanced Education Module on Biosecurity is to support employees at cattle operations with biosecurity principles and practical biosecurity applications. Cattle operation owners and managers will also build a biosecurity plan that can be implemented. The intended outcome of this course includes improvements in biosecurity and production practices among cattle



Herd Health Plans



- Coordinate with Veterinarian
- Risk Assessment
 - New Introduction Testing
 - Isolation/Quarantine
 - Treatment Plans

Recordkeeping



- Data Driven Decisions
- Individual Identification
- Herd Protection
- Economics

Summary

Understand Changes

Do Your Part

Be Prepared





VETERINARY MEDICINE EXTENSION

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