



Antimicrobial Use & Stewardship Activities at Veterinary Services

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Veterinary Services

USDA, APHIS



“You manage what you measure.”

-Dr. Temple Grandin



NATIONAL ACTION
PLAN FOR COMBATING
ANTIBIOTIC-RESISTANT
BACTERIA

MARCH 2015



USDA

United States Department of Agriculture



Antimicrobial Resistance
ACTION PLAN



National Animal Health Monitoring System

Hallmarks of a NAHMS National Study



National in scope

Collaborative

Voluntary


Privacy

Scientifically based
and statistically valid





2017 Antimicrobial Use Studies



Study Objectives

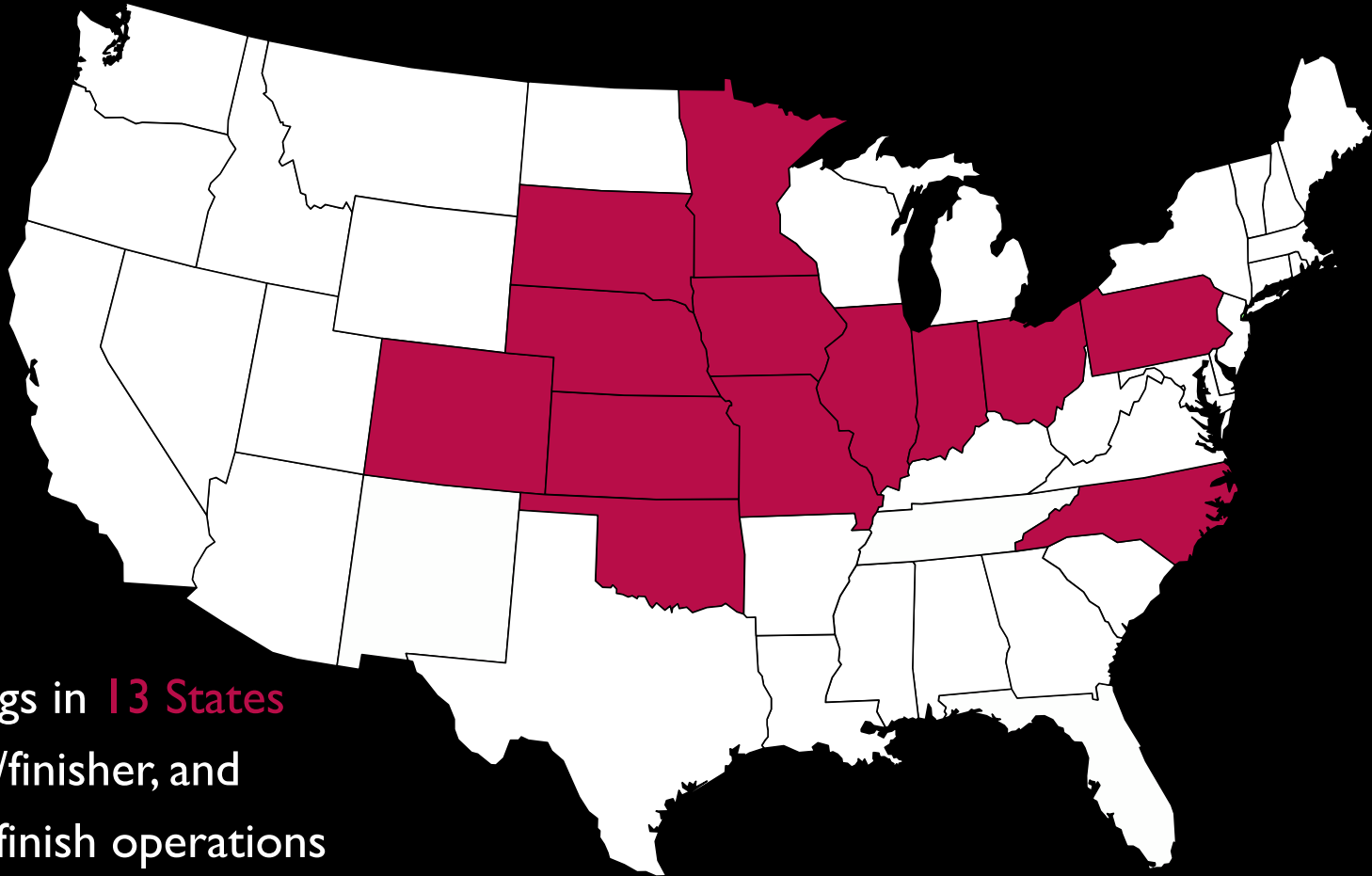
Describe **antimicrobial use practices** in feed and water

Estimate the **percentage of operations administering** and the **percentage of animals receiving** specific antimicrobials by reasons for use

Provide **baseline data** on antimicrobial use practices in 2016 in order to evaluate trends over time

Describe **antimicrobial stewardship practices** on production sites

Swine Antimicrobial Use 2017 Participating States

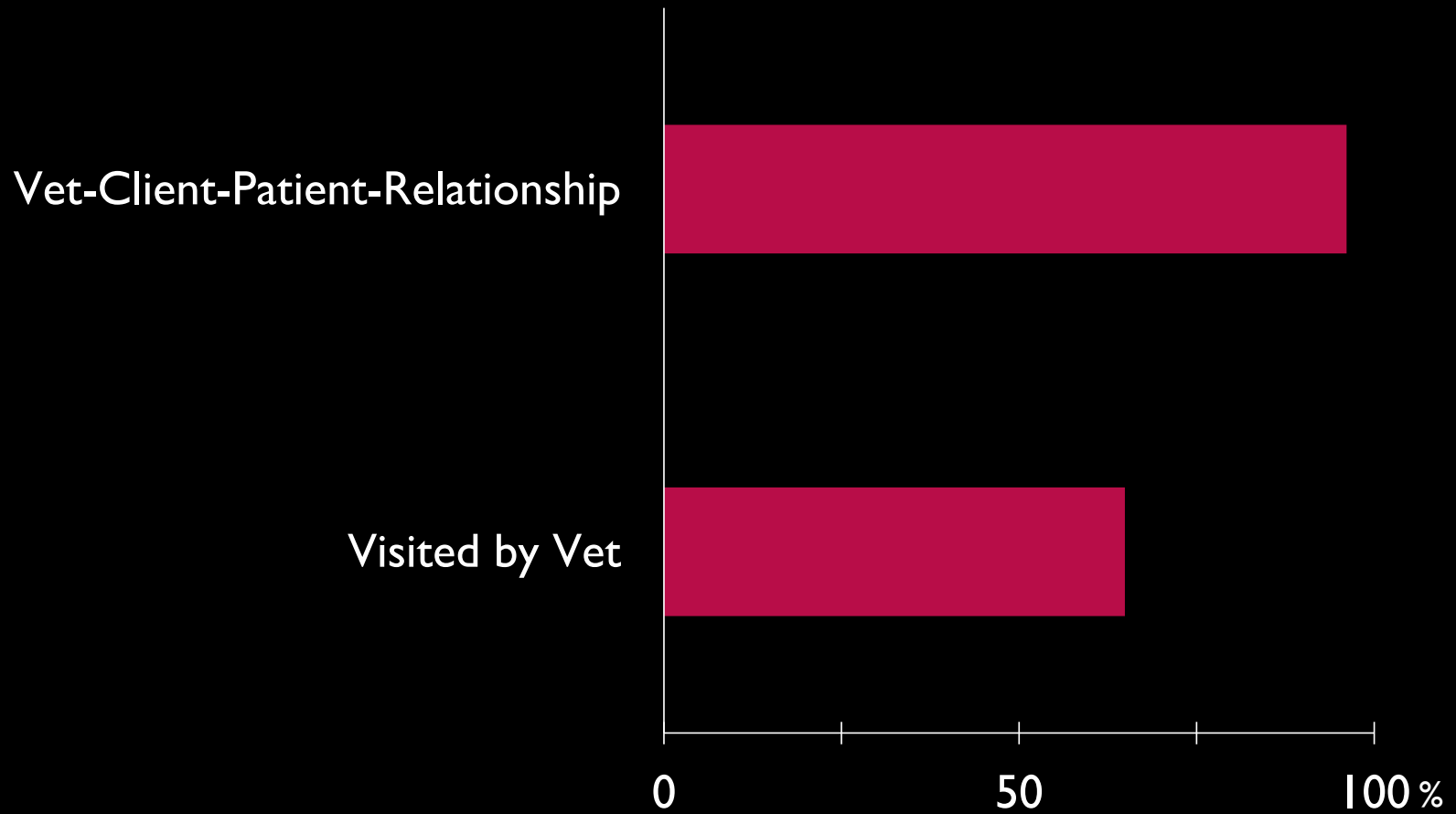


1000+ market pigs in **13 States**
Nursery, grower/finisher, and
wean-to-finish operations
July 1 through December 31, 2016



98%
of swine sites
used any
antimicrobials

Swine Stewardship: Veterinary Use

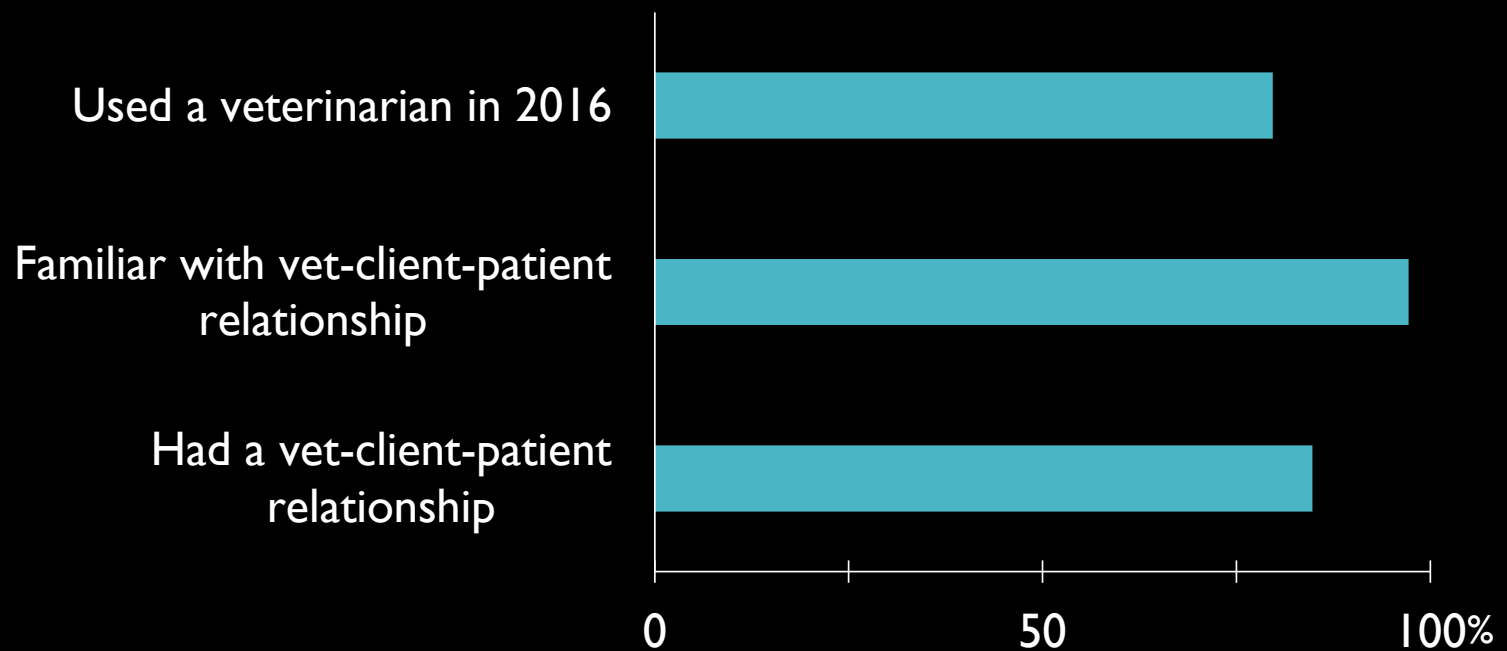


A close-up photograph of a brown cow's head, showing its eye and ear. The cow has thick, wavy brown fur. The background is blurred, suggesting an outdoor setting. A semi-transparent blue box is overlaid on the left side of the image, containing white text.

88%

of feedlots used
any antimicrobials
in 2016

Feedlot Stewardship: Veterinary Use



Historical
NAHMS
Studies



2017
Antimicrobial
Use Studies



Future
NAHMS
Studies

Swine 2020 Study





Health Management on U.S. Feedlots 2020 Study

Heifer Calf Fecal Metagenomics





Poultry Longitudinal Study

A petri dish containing a bacterial culture on a dark agar surface. Several circular wells are visible, each containing a small amount of white or light-colored material, likely antibiotic discs. The wells are arranged in a grid pattern. The background is dark, making the petri dish stand out.

National Animal Health Laboratory Network – Antimicrobial Resistance Pilot Project



National Veterinary Services Laboratories



National Veterinary Accreditation Program

Thank you

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