# How Antibiotic Resistance Happens

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# Antibiotic Use in Livestock



New CA rules take effect Jan 1, 2018

# **The Wonder Drug**

Antibiotics used to prevent and treat diseases in animals are a valuable tool that producers and veterinarians use to improve animal welfare and general animal health and well-being.

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3.
The drug-resistant bacteria are now allowed to grow and take over.

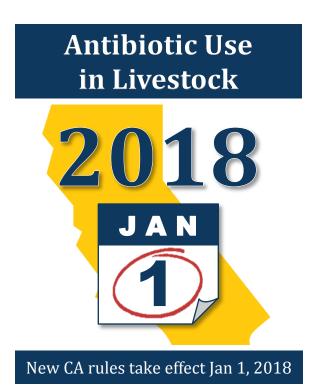
4.
Some bacteria give their drugresistance to other bacteria, causing more problems.

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#### New California Law

Effective January 1st of 2018, over the counter injectable and all other medically important antibiotics must be administered with a prescription or veterinary feed directive (VFD) ordered by a licensed veterinarian through a valid veterinarian-client-patient relationship (VCPR).



What is the difference?		
Source	Federal Law	California Republic
Drugs	Medically Important Antibiotics	Same
Formulations	Medicated feed and water	All (injectable, intra-mammary, feed, water, etc)
New Systems	Feed:VFD w/VCPR Water: Rx w/VCPR	Rx or VFD w/VCPR
Indications	Treatment, control and prevention	Same
Limitations	No use for growth promotion or feed efficiency	Same, plus "regular pattern" preventative use
Effective Date	Jan 1, 2017	Jan 1, 2018

# Antimicrobial Use and Stewardship (AUS)

The California Department of Food & Agriculture will provide voluntary antibiotic stewardship guidelines and best management practices to assist producers and veterinarians in minimizing the use of medically important antibiotics for the more than 20 livestock species and production types important to California. The guidelines will be an ongoing endeavor to incorporate scientifically validated practical alternatives to the use of medically important antibiotic drugs.



# California Animal Health Monitoring System (CAHMS)

Many reports (including human medical journals) use tonnage of antibiotics sold in the US in attempt to tie antibiotic use in livestock to resistance in humans. The link is weak, as the data does not reflect the purpose of use (production efficiency vs disease control, prevention, or treatment), region, animal weight, dose, frequency or duration of use, etc. CAHMS will be conducting voluntary surveys to more accurately represent antibiotic use in CA livestock. These surveys will assist in the development of guidelines for producers and veterinarians and is needed to establish accurate communication with the public. All information gathered will be held confidential per the statutory provisions of the law, including from FOIA or PRA requests.

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#### What is the difference? Source Federal Law California Law Medically Drugs **Important** Same Antibiotics All (injectable, Medicated feed Formulations intra-mammary. and water feed, water, etc) Feed:VFD w/VCPR Rx or VFD **New Systems** Water: Rx w/VCPR w/VCPR Treatment, control Indications Same and prevention Same, plus No use for Limitations growth promotion "regular pattern" or feed efficiency preventative use Effective Date Jan 1, 2018 Jan 1, 2017

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