Drug use in Calves

Food Armor®- The Proactive, Non-regulatory Approach VFD- The Regulatory Approach

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VCPR is the common thread

Veterinarian Client Patient Relationship

- VFD- Valid VCPR Team
 - Veterinarian of Record (VOR)/Owner/Feed distributor
 - Stake holders

- •Food Armor®- Valid VCPR
 - Veterinarian of Record/Client (Owner)/Patient (cow-side people)
 - Stake holders

The FDA expects justifiable drug use (Where does science stop and sales begin?) For the dairy we do economic justification

A Lawful VFD Has to Be Complete

What do I have to include in a VFD?

ust include the following information on the VFD for it to be lawfu

- veterinarian's name, address, and telephone number;
- client's name, business or home address, and telephone number.
- premises at which the animals specified in the VFD are located;
- date of VFD issuance;
- expiration date of the VFD:
- species and production class of animals to be fed the VFD feed:
- approximate number of animals to be fed the VFD feed by the expiration date of the VFD;
- indication for which the VFD is issued;

level of VFD drug in the feed and duration of use:

We must listen to semantics of our opponents

- · withdrawal time, special instructions, and cautionary statements necessary for use of the drug in conformance with the approval:
- number of reorders (refills) authorized, if permitted by the drug approval, conditional approval, or index listing;
- statement: "Use of feed containing this veterinary feed directive (VFD) drug in a manner other than as directed on the labeling (extralabel use), is not permitted";
- an affirmation of intent for combination VFD drugs as described in 21 CFR 558.6(b)(6); and
- veterinarian's electronic or written signature.

You may also include the following optional information on the VFD:

- a more specific description of the location of the animals (for example, by site, pen, barn, stall, tank, or other descriptor the veterinarian deems appropriate);
- the approximate age range of the animals;
- any other information the veterinarian deems appropriate to identify the animals at issue

The veterinarian must keep the original VFD for two years.

We have a similar list of must be included for prescription writing

> Should versus must May or Can **Choosing Semantics**

Veterinarians' Responsibilities

- · must be licensed to practice veterinary medicine;
- must be operating in the course of the veterinarian's professional practice and in compliance with all applicable veterinary licensing and practice requirements;
- must write VFD orders in the context of a valid client-patient relationship (VCPR);

Write VFD



- must prepare and sign a written VFD providing all required information;
- may enter additional discretionary information to more specifically identify the animals to be treated/fed the VFD feed:
- must include required information when a VFD drug is authorized for use in a drug combination that includes more than one VFD drug;
- must restrict or allow the use of the VFD drug in combination with one or more OTC drug(s);
- must provide the feed distributor with a copy of the VFD;
- must provide the client with a copy of the VFD order;
 - · must retain the original VFD for 2 years, and
 - must provide VFD orders for inspection and copying by FDA upon request.

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To Do – VFD compliance by 12/31/16

POOD ARMOR

Choose a Veterinarian of Record

- He/she has new set of regulations and labels to learn
- Set up an efficient way to communicate with VCPR team (Owner, Veterinarian, feed distributor)
- Establish a drug plan for your dairy

Choose a Feed Distributor

Secure signed VFD

You manage this team

Don't procrastinate, 12/31 will come soon

WHAT MATTERS®



Food Armor® for Proper Drug Use

VETERINARIANS AND DAIRY FARMERS WORKING TOGETHER TO ENSURE SAFE MEAT AND MILK

Kim Brown Pokorny Wisconsin Veterinary Medical Association 608-257-3665 kpokorny@wyma.orq Shelly Mayer Professional Dairy Producers of Wisconsin 262-644-0855 smayer@pdpw.org Dr. Katie Mrdutt Outreach Specialist WVMA Food Armor* Program 608-514-5089 mrdutt@wvma.org

The Fact Was ...

- · Wisconsin had the most dairy beef drug residues in the nation
- Drug screening in the slaughter plant had changed
- Failed EU (European Union) milk audit (passed meat)
- FDA (Food and Drug Administration) turned its attention to milk residues
 - 31 drugs are included in this plan
- Blind testing
 - 900+ repeat violator farms
 - 900+ farms with no meat violations

August 2010

Industry called to meeting at Wisconsin Department of Ag (DATCP)

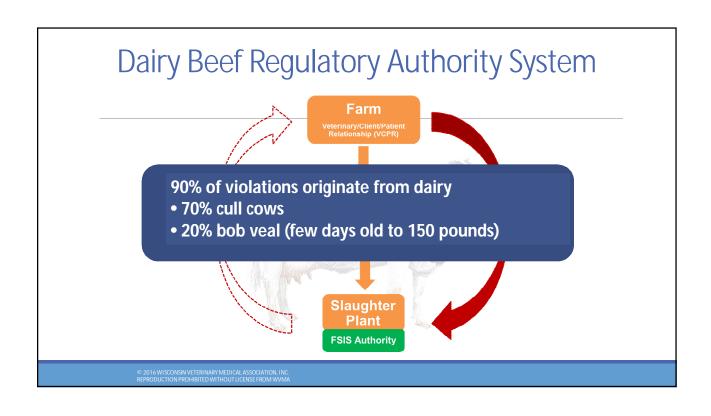
- Regulators
- Beef and dairy cattle producers
- Markets
- Meat processors
- Other stakeholders

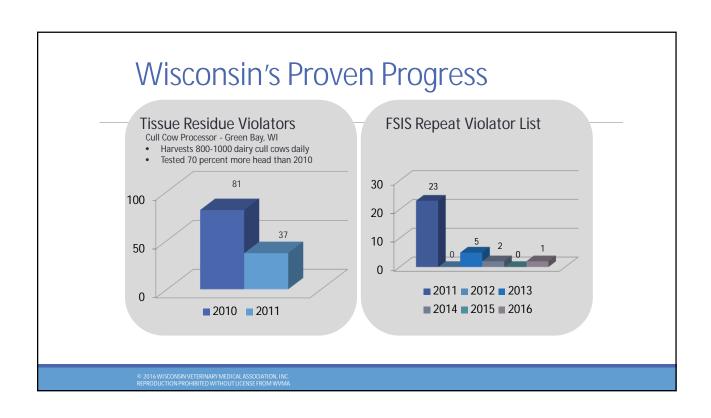
Call to action

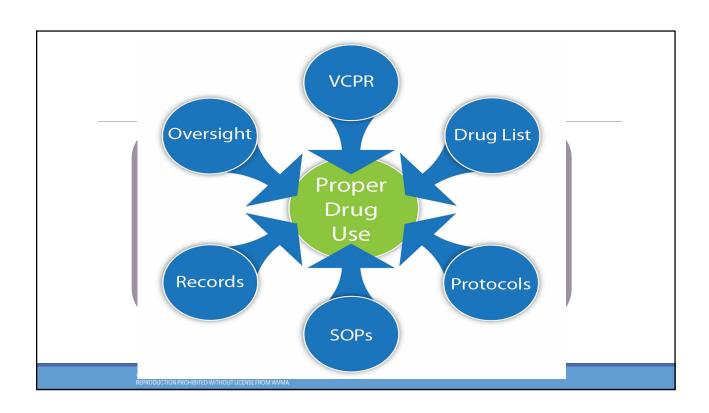
- More regulation for dairy producers
- Producers and veterinarians were singled out

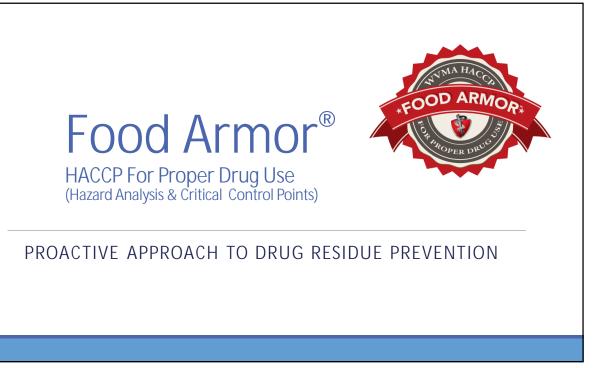
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Residues are not a drug problem. They are a people problem. 2.2016 MIXCONSINHETERMAY MEDICAL ASSOCIATION, INC. REPRODUCTION PROHIBITED WITHOUT LICENSE FROM WINNAMA.









What is a HACCP plan?

(Hazard Analysis and Critical Control Points)

A management system that ensures food safety from harvest to consumption

- A proactive approach: preventing problems by identifying risks
- Science-based and systematic: (science not semantics; actions and accountability)
- The concept of HACCP plans is applicable to all segments of the food industry:
 - Growing, producing, processing, manufacturing, distributing, and merchandising

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Food Armor® WVMA HACCP For Proper Drug Use

HACCP: Hazard Analysis & Critical Control Points

Traditional HACCP

Identify hazards

Establish critical control points

Monitors

Breakpoints

Action at breakpoint

Mandatory records

Verify the system

VCPR
VCPR
Drug List
Proper
Drug
Use
Records
Protocols
©

Meeting HACCP Principles

Identify Hazards:

Identify the VCPR team and farm drug list

Establish Critical Control Points:

VCPR responsibilities, protocols, SOPs

Breakpoints:

- Regulatory tolerances in milk and tissues
- Proper drug use (FDA guidelines)

Monitors

- · Records and Oversight
- · Change Control

Action at breakpoint:

On-the-job training (teachable moment)

Mandatory Records

VCRP agreement, drug list, treatment logs, permanent records

Verification

- · Milk processor oversight
- Veterinarian and producer oversight and records analysis

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Oversight Proper Drug Use Records Protocols SOPs

Two Areas of Focus

- 1. Milk and Meat residues
 - Food safety
- 2. Proper drug use
 - Label and extra label drug use
 - Accountability to treatability
 - Maintain freedoms to operate

Start with the End in Mind

What is Oversight?

Timely monitoring of proper drug use

Timely monitoring of effective drug use

Problem cow identification

Identifying economic opportunities for producers

Veterinarians and producers working together to ensure safe meat and milk

Oversight

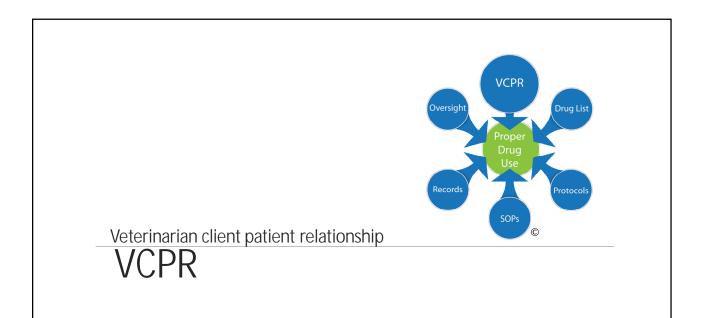
Proper
Drug
Use

Records

Protocols

SOPs

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How does VCPR fit into a HACCP plan?

The VCPR section, and therefore identifying the roles and responsibilities of people, is used to identify "hazards" on the farm.

Drug residues are not a drug problem.

They are a people problem.

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VCPR Objectives

Regulatory accountability

- Meet law requirements
 - Prescription drugs and ELDU require a valid VCPR

Non-regulatory approach

- Accomplish intent of law
 - Customized by farm and the accompanying skill sets of management/employees
 - Define each role within the VCPR team

Veterinarians and producers working together to ensure safe meat and milk



More Than a Signature

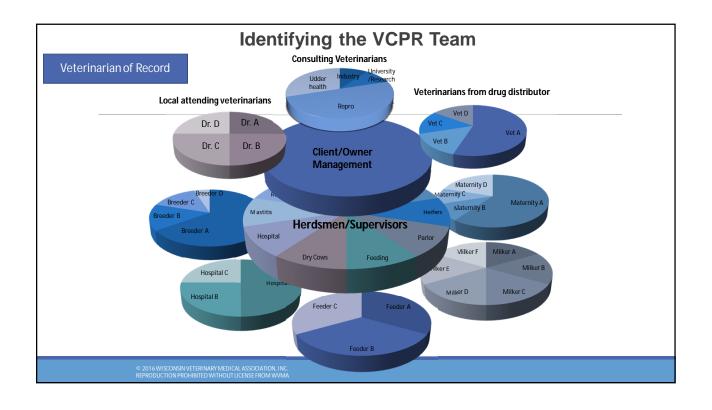
A valid VCPR provides producers the flexibility to use drugs without a veterinarian present for every treatment

FDA expects a valid VCPR in the utilization of drugs

Boundaries give us freedom

FDA has same level tolerance and sense of humor as the IRS

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First step for on-farm implementation

Determine Veterinarian of Record

- Ultimately decided by you, the Farm Owner
- $\,{}_{^{\circ}}$ Consensus among all veterinarians that service your farm



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How does Drug List fit into a HACCP plan?

The Drug List is used to identify "hazards" on the farm, specifically identifying all drugs that are used on your particular farm.

Target drugs that are a risk (ELDU, Unapproved for category of animal)

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Drug List Objectives

- Definitions
 - Over the counter (OTC) vs Prescription (R)
 - Label drug use (LDU) vs Extra label drug uses (ELDU)
 - Tolerance levels
- Purpose of the Drug List:
 - Identify all drugs specific to your individual farm (Added Feed Grade Antibiotics Requiring VFD)
 - · Identify extra label drug use
 - · Identify high risk drug use



Extra-label drug use

OTC and R

Intended use differs from label by:

- Species
- Production class
- Indication
- Dose
- Route
- Frequency
- Duration
- Withdrawal times

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				Veterinary Medical Associa hibited without license from			
Confirmed Violative Residue Detected							
Veterinary Drug	Confirmed Residue in Targeted Group	Confirmed Residue in Non-Targeted Group	Approved for use in lactating/dry cow	Approved for use in dairy cattle <20 months and/or beef cattle	Extra label drug use allowed		
Ciprofloxacin*	1	0	No	Yes	No		
Sulfamethazine	1	0	No	Yes	No		
Tilmicosin	1	0	No	Yes	Yes		
Tulathromycin	2	0	No	Yes	Yes		
Florfenicol	6	4	No	Yes	Yes		
Gentamicin	1	0	No	No	Yes		
Total	12 (1.15%)	4 (.42%)	No significant difference between target/non-target groups				
*Ciprofloxacin is a metabolite of Enrofloxacin, which the FDA test detects, therefore the test cannot distinguish which drug was given to the animal. Courtesy of National Milk Producers Federation							

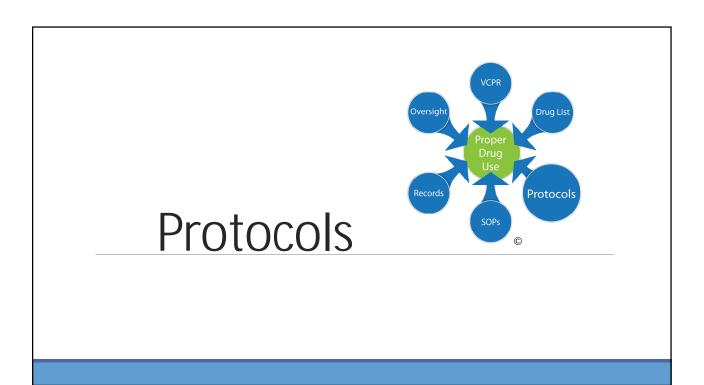
First step for on-farm implementation

Make a drug list specific to your farm

 The drug list for your farm should only include the drugs and medications specifically <u>used on your farm in your written</u> <u>treatment protocols</u>



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How do protocols fit into a HACCP plan?

Protocols are used to establish control points on your farm relative to how drugs are used

 Identify <u>farm-specific definitions</u> of disease conditions and <u>farm-specific treatment plans</u> for each of these conditions



Protocol Objectives

Treatments given in our name; in our absence

- 1. Define condition 2. Drug protocol 3. Records 4. Withdrawal times
- Identify label drug use opportunities first
- Plan food safety if ELDU (Extra Label Drug Use) is appropriate
 - Work with your Veterinarian of Record
- Plan how to change an individual cow recommendation without confusion that it is a change of protocol
- Develop a training plan

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First step for on-farm implementation

Working with your Veterinarian of Record to create customized written treatment protocols for pneumonia, mastitis, and metritis on your farm



Protocols vs. SOPs

Protocol - What to do

- Defined condition (situation)
- Drug treatment dose, route, duration
- Records to keep for verification of food safety and accountability for proper drug use
- Withdrawal for meat and milk

SOP - How to do it

- Steps to a process and procedure
- People responsibilities





How do SOPs fit into a HACCP plan?

SOP - The "How to Do"

- Steps to a process and procedure
- People responsibilities

Consistency, compliance, competency

Identifying people skills through the records

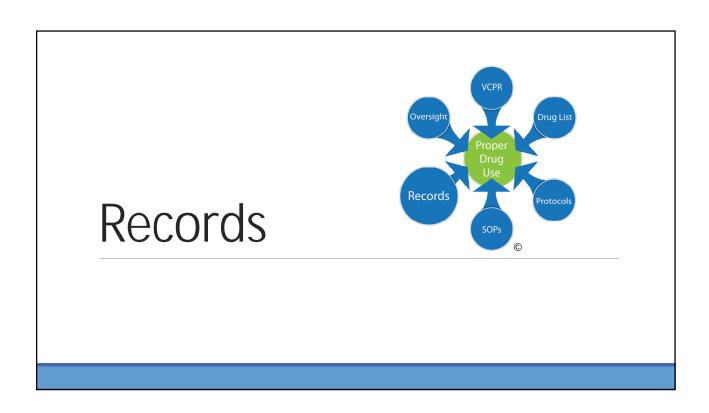
Allows on-going, on-the-job training at oversight

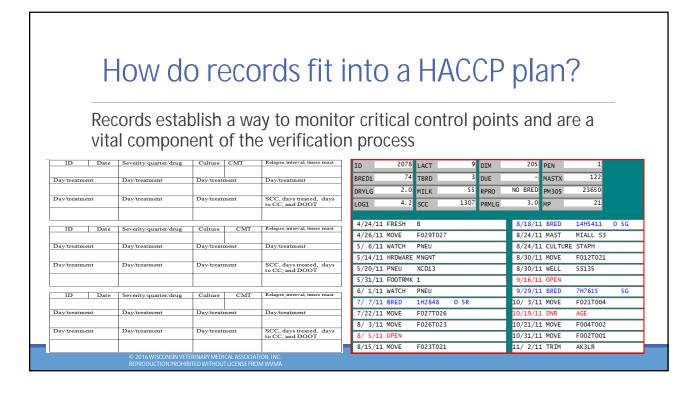
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First step for on-farm implementation

Working with your Veterinarian of Record to create customized written SOPs on your farm for returning treated animals back into the food supply

• Who's responsible?





Three Record Categories

No records for the herd or a management group

Treatment logs = logs/minimum records

- Manage the case and food safety
- ∘ Treatment logs ≠ WVMA Food Armor® HACCP Plan
- ID, date, condition, drug, dose, route, duration, withdrawal times, name of individual administering

Permanent records = permanent medical history of each animal

• Manage case, food safety, herd epidemiology, proper drug use, oversight and outcomes

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Plan What to Record So You Can...

Recognize SOP compliance and competency

Recognize protocol drift

Review epidemiology

Ensure food safety and proper drug use



Daily Treatment Log

THE OWNER OF THE OWNER OWN						-
619	1/3/12		Polyflex 500mg/ml	10ml IM	96 hr	120
842	1/3	Crash	Probios L7	oral/In	_	_
086	1/4	Crash/RIP	Pump Probios/ x/vB15	XIM	_	4
619	1157	A.	Flex	40		
842	174		47			
686	115		× pump 27	20 IM	_	41
619	1/5	₽.	Flex	10 EM	96 hr	Dd
842	1/5	No.	L7 B95	20 EM	-	_
686	116		×	20 IM	_	40
619			Flex	10 In	96	104
940	+		UB 150	20 Im	_	-
842	1/7	LDA	Poly flex Puny	DOIM	96	10d
619			./(DO TAI	96	10d

How many times is 619 listed? 842?

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Herd Category – Permanent Records

The next level of record keeping is individual cow permanent

The permanent record sets the stage for science-based appropriate drug use with consideration of medical history (Management Record)

Organizing individual permanent records is the basis for identifying epidemiology (disease patterns) and therefore prevention

Protect food supply and ensure proper drug use

First step for on-farm implementation

Review current treatment logs - ensure all sections are included

 Animal ID, date, condition, drug, dose, route, duration, withdrawal times (meat and milk) and person administering

BUCKER	CONTRACTOR OF THE	BURNESS REPORT OF THE PARTY OF			ALCOHOLD !	
619	1/3/12		Polyflex 500mg/ml	10ml IM	96 hr	120
842	1/3	Crash	Probios L7	oral/In	_	-
086	1/4	Crash/RIP	Pump Probios/ x/vB15	XIM	_	4
619	1/37	A	Flex			
842	174		47			
686	1/5		× pump 27	20 FM	_	41
619	1/5	Ð.	Flex	10 FM	96 km	Dd
842	1/5	No.	47 B9F	20 EM		_
686	116		×	20 IM	_	40
619			Flex	10 In	96	104
94B	+		UB150	20 Im	-	-
842	1/7	LDA	Poly Flex Puny	#OIM	96	100
619			./(DO TAI	96	10d

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How does Oversight fit into a HACCP plan?

Veterinary oversight provides for continual monitoring of the entire HACCP plan

 Routine veterinarian involvement satisfies the verification principle that validates all other sections of the plan



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Oversight – Is the "Key" Because...

It validates VCPR

It allows your veterinarian to monitor and refine protocols and SOP's

- Are people doing what we agreed? (drift)
- Are patients responding? (effectiveness)
- Did the pattern change? (epidemiology shift)

It allows your veterinarian to watch the drug list

It reinforces the value of keeping records

It reinforces the value of veterinary involvement in treatment decisions and drug use



Why Food Armor®?

Proactive

Non-regulatory approach

Raising the dairy industry's standard

Accountability and transparency

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Food Armor® - Progression

Food Armor® Certified Farm – requires involvement of a Food Armor® Accredited Veterinarian

Launched nationally

- AABP 2015 in New Orleans
- Public release to dairy industry in Fall 2015
- www.foodarmor.org



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