

DAIRY VETERINARY NEWSLETTER

September 2019

Veterinary Feed Directive After 30 Months - What Are the Results So Far?

The Veterinary Feed Directive (VFD) took effect on January 1, 2017. The FDA has recently released a report, “Summary Assessment of Veterinary Feed Directive Compliance Activities Conducted in Fiscal Years 2016 – 2018”. Compared with many government documents of this type, it is relatively short, 8 pages. The entire document can be found at: <https://www.fda.gov/media/130382/download>

This report focuses on inspection results and compliance with the rules of the VFD. Later in this newsletter I will summarize some information regarding the volume of antibiotics recorded as sold for use in various livestock species before and after the VFD was in place.

Through the end of fiscal year (probably June 30) 2018, I was surprised that the FDA had only reported 456 inspections to monitor compliance, including 57 made during 2016 during a pilot program before the VFD became a required program:

Table 1 (modified from 2018 FDA Summary Assessment of VFD Compliance)

VFD Final Inspection Classification Summary:

Action Indicated	FY 2016	FY 2017	FY 2018	Total
None	54	130	230	414
Voluntary	3	0	38	41
Official Action	0	0	1*	1
Total	57	130	269	456

* Official Action was issuance of a Warning Letter to a feed mill

Table 2 (modified from 2018 FDA Summary Assessment of VFD Compliance)

Finding	FY 2016	FY 2017	FY 2018
Distributor had notified FDA of intent to distribute	100% (25/25)	96% (51/53)	95% (253/267)
Distributors complied with terms of the VFD	N/A	83% (30/36)	91% (43/47)
Drug records showed the correct amount of drug was added to the feed	90% (28/31)	95% (37/39)	97% (323/334)

Table 3 (modified from 2018 FDA Summary Assessment of VFD Compliance)

Finding	FY 2016	FY 2017	FY 2018
Distributor labels and formulas matched the VFD information	97% (28/29)	87% (34/39)	91% (304/334)
VFD feed labels contained the VFD caution statement	89% (25/28)	74% (29/39)	77% (250/324)
Veterinarian had an active license in the state where VFD feed was fed	100% (18/18)	100% (35/35)	100% (16/16)
VFDs included veterinarians' electronic or written signature	100% (75/75)	99% (185/186)	99% (681/691)
VFDs included the withdrawal time, special instructions, and/or cautionary statements	100% (75/75)	98% (182/186)	95% (653/685)
Client followed the expiration date on the VFD	91.7% (11/12)	75% (15/20)	100% (9/9)
Client fed to animals authorized on the VFD (number, species, and/or production class)	100% (12/12)	90.0% (27/30)	100% (19/19)
Client observed the duration of the VFD	100% (12/12)	89% (25/28)	100% (18/18)
Client complied with special instructions on the VFD	100% (8/8)	91% (21/23)	100% (15/15)

A general pattern can be seen in the results above. Compared with the pilot program, compliance was lower during the first year of the VFD program (2017), but then improved, to 95% to 100% compliance with most requirements, during the second year, 2018.

Antimicrobial Use in Livestock

There is a thread on the internet regarding the “myth” to be dispelled that 80% of medically important antibiotic sales in the U.S. are for use in livestock. However, the stated “truth” about this says that 70% of medically important antibiotic sales in the U.S. are for use in livestock. In the many discussions and programs regarding antimicrobials in farm animals and birds I have been part of for more than 35 years, including the buildup to the VFD program during 2015 and 2016, I do not recall seeing it put in those terms before. The actual data including the raw numbers for this I could not find. Presuming this is accurate, or nearly so, that is indeed a large part of the total of U.S. medically important antibiotics being used for food animals and birds.

Has Use of Antimicrobials in Livestock Decreased Following the VFD?

According to the “Antimicrobials Sold or Distributed for Use in Food-Producing Animals, 2017”, FDA CVM report (there are no data for 2018 yet):

- Domestic sales and distribution of medically important antimicrobials approved for use in food producing animals:
 - decreased by 33% from 2016 through 2017. (From 8,356,340 kg to 5,559,212 kg of active ingredients)
 - decreased by 43% from 2015 (the year of peak sales) through 2017
 - decreased by 28% from 2009 (the first year of reported sales) through 2017

- Tetracyclines, which represent the largest volume of these domestic sales decreased by 40% from 2016 through 2017

• The domestic sales and distribution of medically important antimicrobials approved for use in food producing animals with an approved indication for production use decreased from 5,770,655 kg to 0 kg from 2016 through 2017 as a result of the implementation of [the VFD]. (Note: this just shows that it is no longer acceptable to label or prescribe antimicrobials for production purposes.)

• The domestic sales and distribution of medically important antimicrobials approved for use in food producing animals that were sold OTC decreased from 8,000,326 kg to 271,280 kg from 2016 through 2017 as a result of the implementation of [the VFD]. (Note: this is nearly a 97% reduction in OTC antimicrobial sales for livestock and poultry.) Table numbers below correspond to the 2017 report.

Table 2a (modified from 2017 FDA CVM report)
Medically important antimicrobial drugs approved for use in food producing animals marketed in 2017 by drug class

Drug class, % of medically important for human usage drugs sold in food animals and birds:

Tetracyclines 64%

Penicillins 12%

Macrolides 8%

Aminoglycosides 5%

Sulfas 5%

Lincosamides 3%

Amphenicols 1%

Cephalosporins <1%

Fluoroquinolones <1%

Other 1%

Total sales 5,559,212 kg of active ingredients

Tables 4a, 4b (modified and combined from 2017 FDA CVM report)
Medically important antimicrobial drugs approved for use in food producing animals marketed in 2017 by species and % change following implementation of VFD

Species-specific estimated sales, % change from 2016-2017:

Cattle 42% - 35%

Swine 36% - 35%

Turkey 12% - 47%

Chicken 5% - 11%

Other 5% - 25%

Total sales 5,559,212 kg of active ingredients

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**Tables 6a, 6b (modified and combined from 2017 FDA CVM report)
Medically important antimicrobial drugs approved for use in food producing animals marketed in 2017
by route of administration and % change following implementation of VFD**

Route of administration, % change from 2016-2017:

Feed 62%	- 43%
Water 30%	- 14% (oral drench, feed in fish water, syrup or dusting for bees)
Injection 6%	+ 3%
Oral or Topical 2%	+ 5%
Intramammary <1%	+ 9% (Note: Reducing antimicrobials in feed associated with increase in IMM infusion of antibiotics?)

The overall effect of the VFD seems to have been as intended, with very good compliance by feed distributors, veterinarians, and clients. The entire report above contains a lot of other detailed information and can be seen at: <https://www.fda.gov/media/119332/download>

Please let us know your comments and suggestions for future topics. I can be reached at (435) 760-3731 (Cell), or David.Wilson@usu.edu.



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