Impacts of the Veterinary Feed Directive (VFD) changes at the farm level



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Veterinary Feed Directive

- In 2016, MSU Extension conducted educational seminars on the upcoming VFD regulations.
- In 2018, we decided to find out the impact of the VFD changes on farmers.
- Asked Extension Educators in other states if it had already been done and if not, if they were interested in working with us.
- Survey was drafted and input was received.
- Survey developed in Qualtrics and also available as a paper copy.



Target audience:

- Commercial growers
- > age 18
- Communicated the survey link through newsletters, articles, emails, and talked about it at meetings.
- Worked with interested Extension Agents in other states as well.





VFD – One Year Later

- 1036 responses as of August 21, 2018
- Although only 708 recorded their state, responses from 48 US states (all except: AK and RI)
- Highest responding states:
 - MI (98)
 - NY (44)
 - NE (43)
 - SD (39)
 - PA (39)





Survey responses:

- Asked what species they raise.
- Also asked what their main species was, and instructed them to answer the survey based on main species.
- Sorted the results into 3 groups of responses by main species raised:
 - Beef & Dairy (365)
 - Poultry & Swine (48)
 - Sheep & Goats (462)



Response numbers tell a story:

- Poultry & Swine are highly vertically integrated enterprises and the growers are often following the instructions of the integrator.
- Sheep & Goats are "minor" species and may have fewer pharmaceuticals labeled for them.
 They may also not use a veterinarian regularly.
- Changes in medicated milk replacer (for dairy) were made in 2016.



Responses by topic across species groups:

Topics:

- Animal health
- Antibiotic use
- Management
- Relationships
- Economics





Health

Has the rate of animal sickness or death changed?

	Decr.	No change	Incr.	dnk
Beef & Dairy	2%	66%	31%	1%
Poultry & Swine	8	48	45	0
Sheep & Goats	4	65	29	2



Health

 Since implementation of the VFD, "medically important" antimicrobials cannot be purchased OTC, what has been the impact on the health of your animals?

No	impact	Slight	Moderate S	ubstantial
Beef & Dairy	45%	28%	15%	13%
Poultry & Swine	33	36	11	19
Sheep & Goats	44	22	18	16



Health

 Have the VFD changes impacted how you treat sick animals?

	Negatively	No impact	Positively
Beef & Dairy	29%	64%	6%
Poultry & Swine	45	45	9
Sheep & Goats	37	59	4



Health impact Summary

- Approx. 1/3 of farmers say that health of herd has been impacted negatively.
- Approx. 1/3 of farmers say that the effects on health have been "moderate" or "substantial".
- A little over 1/3 of farmers say that it has negatively impacted how they treat animals.



Antibiotic use

Has your use of feed grade antibiotics changed?

	Decr.	No change	Incr.	dnk
Beef & Dairy	35%	60%	5%	1%
Poultry & Swine	40	48	8	5
Sheep & Goats	21	75	1	3



Antibiotic use

 Has your use of individual animal treatments changed?

	Decr.	No change	Incr.	dnk
Beef & Dairy	7%	65%	26%	1%
Poultry & Swine	20	40	38	3
Sheep & Goats	11	72	16	1



Antibiotic use

 Has the VFD regulation improved the judicious use of antibiotics (avoiding overuse, especially for animals not sick) on your farm?

No	impact	Slight	Moderate	Substantial
Beef & Dairy	60%	25%	11%	4%
Poultry & Swine	45	28	18	10
Sheep & Goats	74	14	9	3



Antibiotic Use Impact Summary

- 48-75% of famers were not likely using feed grade antibiotics at the time of implementation of the VFD.
- For those, the VFD did not improve the judicious use of antibiotics.
- For those who decreased feed antibiotics (21-40%), many (7-20%) responded with increased individual animal treatments.



Management

 Have you changed the management of your farm to help prevent sickness or disease spread?

	No Changes	Some Changes	Substantial Changes
Beef & Dairy	59%	36%	4%
Poultry & Swine	82	15	3
Sheep & Goats	67	28	5



Management changes cited:

- Reduced risks ". . staggering breeding to prevent overcrowding", "More fly control measures", "Separating feeders from cow/calf group"
- Increased monitoring "I watch the herd closer for signs of illness and treat as necessary", "More attention to small details", "More aware at pen riding time to observe cattle"



Management changes cited:

- Increased/improved vaccination or treatment
 - "Added intranasal when moving 3-4 month calves to different barn", "Worked with our vet to improve our herd health plan"
- Increased biosecurity "Trying to keep facilities cleaner and isolating sick animals from healthy when possible", ". . Boot changes and hand washing between animal groups"



Management changes cited:

Increased selectivity

"Purchase less high risk cattle"

"Implementing a cull program and selective breeding for disease resistance"

"More attention paid to the source and history of incoming feeder cattle"





Management

 Have you physically changed your facilities or farm to help prevent sickness or disease spread?

	No	Minor	Major	Not yet,
	Changes	Changes	Changes	but planned
Beef & Dairy	76%	18%	4%	2%
Poultry & Swin	e 57	35	8	0
Sheep & Goats	s 67	24	5	4



Management

 As a result of the VFD regulation, have you changed your use of vaccines?

	Decr.	No change	Incr.	dnk
Beef & Dairy	2%	71%	26%	2%
Poultry & Swine	7	53	40	0
Sheep & Goats	5	75	19	1



Management Impact Summary

- Improved management to reduce risks, improved detection and support health, by 18-40% of producers.
- Facility changes are not major, but incremental (18-35%) to help implement management goals.
- Increased use of vaccination by a significant number of producers (19-40%).



Relationships

Did you have a VCPR prior to the VFD changes?

	No	Yes	dnk
Beef & Dairy	21%	76%	3%
Poultry & Swine	18	76	6
Sheep & Goats	26	68	5



Relationships

 Has VFD regulations increased how often you communicate with your veterinarian?

	No	Yes	dnk
Beef & Dairy	61%	38%	1%
Poultry & Swine	45	55	0
Sheep & Goats	66	32	2



Relationships

 Has the number of times your veterinarian visits your farm changed?

	Major	Slight	No	Slight	Major
	Decr.	Decr.	Change	Incr.	Incr.
Beef & Dairy	1%	2%	69%	24%	4%
Poultry & Swine	0	3	61	30	6
Sheep & Goats	2	1	70	19	8



Relationship Impact Summary

- In general, the VFD changes have pushed 32-55% of producers to involve vet more
- With some positive results:
 - "Work with vet to have prescriptions on hand and mentored in treatment protocol specific to goats"
- but producers also cite problems:
 - "now we have to wait longer to treat animals and have lost animals due to this"
 - "our vet is almost an hour away . . It costs too much to have the vet come out to the farm"



Economics

 Has your farm's expenses for animal health changed?

	Major	Slight	No	Slight	Major
	Decr.	Decr.	Change	Incr.	Incr.
Beef & Dairy	0%	4%	38%	39%	19%
Poultry & Swine	0	12	33	33	21
Sheep & Goats	1	1	38	36	25



Economics

Has VFD regulation had economic impacts to your farm?

N	o impact	Slight	Moderate Substantia	
Beef & Dairy	40%	31%	16%	13%
Poultry & Swine	29	32	26	13
Sheep & Goats	46	23	23	8



Economic Impact Summary

- The VFD rule changes have increased costs for many farms:
 - 19-25% reported "Major increase of expense for animal health"
 - 29-39% reported "Moderate or Substantial economic impact on the farm"



Economically impacted farms:

- Not related to main species type
- Does not appear to be by size related

Compared to all responders, more likely to have:

- Decreased use of feed grade antibiotics (49% vs. 28%),
- Increased use of individual animal treatments (45% vs. 22%)
- Experienced increased rate of animal sickness and death (65% vs. 31%)

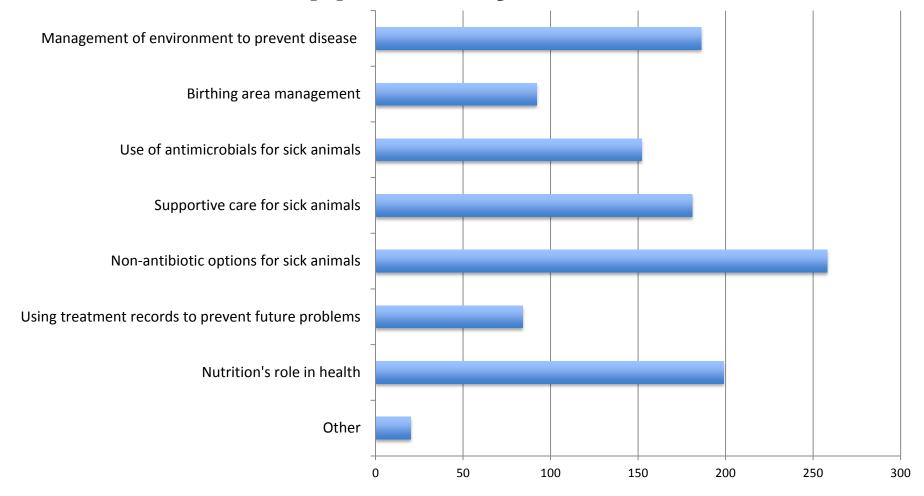


Educational opportunity

- We asked: With respect to antibiotics and health, what would you like to learn more about
- Provided a list of 7 areas and option for "other".
 (Select all that apply)
- The results were similar across animal species, so the data were combined.



Educational Opportunity





Additional Comments (by survey respondents):

Feelings of being somewhat insulted:

- "already did a good job on health issues"
- "... Thanks a lot. I wasn't an antibiotic residue violator"

Feelings of being overburdened by regulation:

 "I am no longer (able) to apply the theory of prevention is better than a pound of cure as I need to treat more animals, costing me time & money as my death loss has also increased due to govt. bureaucracy"



Identifying unintentional consequences:

- "We have a severe shortage of large animal vets. . For small producers like me, this has tied my hands and made it almost impossible to manage"
- "Due to the VFD changes, one veterinarian changed their practice to all small animals. . . My secondary veterinarian has changed. ."
- ". . at least for small farms, the VFD puts too much burden on vets, who are already too busy"



Identified situational issues:

- "VFD made us reduce fed antibiotics which is OK for older calves, but we have a lot of trouble with calves less than 2 months old"
- "The VFD has added more cost to the producer/farm in the midst of an economic downturn.."
- "The death loss on our farms had always been under 1%, it is now over 2% plus we have more calves with lung damage. Feed antibiotics were



Questioning whether it accomplishes anything:

- "While the VFD doesn't majorly affect my practices on a regular basis, it does limit the variety of options available to treat ailments and especially help newborns, which can be frustrating."
- "I'm very pleased the VFD is in effect. Has it decreased the use of medicated feed for animal growth? Or do veterinarians just go along with what their clients did in the past?"



Some positive views:

- "Very happy with the new policy! Does not impact my practices, but I think it's an improvement for all"
- VFD actually has helped us to find more preventative opportunities"





Land Grant Research & Extension

Research and educational opportunities:

- Animal health management
- Antimicrobial resistance and the impact of antibiotics used in food animals

Educational opportunities with the consuming public







Thank you!

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And thanks to my colleagues:

- E. Ferry, C. Eschbach, D. Grooms, M. Benjamin, K. Gould, D. Thompson,
- P. Bacigalupo, M. Metzger, R. Ehrhardt, R. Erskine





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