

# A Practitioner's Approach to Herd Health Programming

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There has been a drastic change in large animal veterinary medicine in the last 10 to 15 years. I feel that the livestock people are more aware of the need for herd health programming than we as veterinarians have shown. There is a definite trend for the demand for preventative medicine on a herd basis rather than the "fire engine" call for the individual animal.

The growing, progressing livestock operator is on the increase. By 1971 there will be a 20% increase in the livestock operator grossing over \$40,000. This type of operator is 82% more efficient than he was 12 years ago. By 1972 it is predicted that the beef industry will show a 25% increase over the 1967 level: this means a 13 billion dollar increase. This livestock operator is demanding more from his veterinarian and is willing to pay for the service if the veterinarian can prove himself. If we cannot prove ourselves in the beef industry, these livestock operators will go elsewhere for this service. This is what happened in the poultry industry.

In our practice we have been slow to get into herd health work. In years past we have had many requests to set up some of these programs but we were afraid of the word *contract*, afraid of a set fee etc.! Due to the demand, three years ago we sent out a feeler letter to those operators we thought might be interested in a herd health program. With those clients that had a sincere interest, we sat down and discussed their whole operation and how we as veterinarians might increase their efficiency and set up a herd health program to fit his particular operation. This is the way to sell herd health programming.

I feel that to do a good job in herd health work, we must know the industry, subscribe to their publications and keep well informed on all phases of the beef, swine or other industry with which you might be working. It is sad but true that much of the early research on drugs and vaccines will be published in the industry magazines long before we read it in our own professional journals. We are working for a well informed client that reads a lot and travels a lot. I find it very difficult to keep ahead of these operators.

This also points out the need for veterinarians to set up a very rigorous, continuing education pro-

gram for themselves, including short courses and seminars. This is a must in herd health work in setting it up and keeping it running as efficiently as possible.

I think it is necessary to maintain a good clinical laboratory in our clinics to do the routine laboratory work. I do not like laboratory work but do try to do a good job! I think this is an area where a good veterinary technician could really strengthen a practice. Also, I feel that we should maintain a good working relationship with a pathologist and try to use the same one as much as possible for more accurate results.

## *Herd Health Program Contract*

Here is a copy of our Herd Health Program Contract:

"A pre-planned program to give the livestock operator year-around veterinary supervision to aid greater production of better products.

1. Planning consultations are to be held periodically during the term of this contract to enable the veterinarians to fit their program to the operator's program as it develops and changes.
2. Consultation, treatment, training of personnel and other professional services shall be charged at the rate of \$15 per hour from the time the veterinarian leaves the clinic until he returns. Emergency calls, cases at the clinic and surgery will be charged at regular rates.
3. Twin Forks Clinic, Inc., agrees to provide all veterinary drugs, instruments and related items under this program at its cost, plus sales tax plus a handling charge of 10% to 25%. We have most of the smaller operators on a 25% markup.
4. All accounts for drugs and services are due on the last day of the month and are delinquent on the tenth day of the following month. We cannot operate on a 10% handling charge when we are paying 8% + interest on our operating money.
5. At least once annually, we expect to evaluate your program and have you evaluate our program. If we cannot make money for you, then

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this contract should be terminated and you should retain another veterinarian.

6. This contract is terminable by either party for the reason that the success of the program is entirely dependent upon the good faith and integrity of each party.”

Not every practitioner can adapt to a contract practice, nor is every client a potential contract client. I have some clients for whom I have worked for 10 years and have not helped yet and do not feel that I could help with a herd health program. The contract must be flexible, as no two livestock operators will have the same livestock program. We do not require a signed agreement. I feel that a man is no better than his word.

I feel that drugs will make or break a herd health program. My attitude toward drug sales has changed considerably since I started practice. I first tried a high mark up, 50% to 75%, and thought they would buy from me because I was a veterinarian. Then I tried the chain store approach with a low mark up on high volume, lead-in items. I also tried letting the livestock operator buy his drugs where he could get them the cheapest and I would advise him on how to use them correctly. This failed also because the livestock operator is not trained to evaluate drugs and handle the high pressure type salesman that is found throughout the country, selling out of the trunk of his car. The quality, especially of the vaccines, is questionable.

Now I feel we are obligated not only to diagnose a condition in a herd but to administer and provide the proper drugs and see that they are used correctly. I think we should provide good quality drugs at a reasonable cost. To do this, we must buy in volume, and this type of practice approach will give you the volume and buying power you need to compete. It will also enable you to buy the drugs you use at a cheaper rate.

We read that the ethical drug companies are on their way out. How would you like to practice with the drugs you could buy from some unethical companies? The herd health approach will give the ethical companies the volume they need to stay in business and continue their research programs.

The trend in drug buying today is back to the veterinarian. In 1969, one-half to three-fourths of the 150 million dollars worth of veterinary drugs sold were sold through the veterinarians.

An area that is often overlooked in herd health work is cattle handling equipment. It is up to us to advise and see that adequate facilities are built so that cattle can be handled with the least amount of stress and abuse. Here are a few tips in setting up these facilities:

1. The alley-way behind the chute should be at

least 30 feet long, bent 10 to 15 degrees in the middle, and headed down hill if at all possible.

2. Width of alley way: weanling calf to yearlings, only 20 inches wide: yearlings to fat cattle, 25 inches wide: cow-calf operation, 27 inches wide, narrowed by nailing on the inside an additional 2 x 8 to 23 inches wide below the 24 inch level.
3. All construction should be of 2 x 8 or better, treated lumber, with eight foot posts set four feet apart. This is expensive; but it will more than pay for itself in time saved and cattle injuries prevented in the future.

We have not been insistent on extensive record keeping. We try to adapt the records to the abilities of the operator and his help. We like to know the disease conditions present, number of treatments, cost per treatment, cause of deaths and death loss. We try to conduct as many post mortem examinations as possible. Also, in figuring death loss, we feel that it should be averaged over a five year period to give a more adequate figure. As we all know, in any operation there will be that year when a disease condition or conditions are more severe and the death loss will be higher in spite of all you can do. In our feedlots we like to know the rate of gain and feed efficiency of each pen of cattle.

I feel we need to know more about how much shrinkage we get in a sick pen of cattle and how much delay in marketing this causes. If these figures were known, I am sure this would be a greater expense than all the drugs, veterinary bills and death losses combined.

In our cow-calf operations, we shoot for a 100% calf crop with a 500 pound calf at weaning time. We feel that a 60 day breeding season is long enough in a good fertile herd of cows, and if done over a period of years with proper culling, you will have a fertile cow herd. Pregnancy testing at weaning time is a very necessary procedure, not only telling that the cow is bred but when she will calve. We insist that virgin bulls are purchased and that they be fertility tested yearly.

We have a vaccination program which we adjust to the diseases we know we have in the area. Vibrio vaccination is a must in our area unless the operator can maintain a closed herd. IBR (red nose) vaccination at the time the replacement heifers are Bangs' vaccinated has decreased our unexplained abortions. Autogenous bacterins have helped us in some of our calf scour problem herds. In some herds we are having to vaccinate our calves two months prior to weaning with shipping fever vaccine to help control a severe pneumonia in the big fat calf still nursing in early fall.

In the cow-calf operation, we like to supervise the calving. We like to work with the layman, in many cases the owner, and help as much as we can in getting a live calf. I think the biggest factor here is teaching them when to disqualify themselves and when to call us. This usually calls for a caesarean operation. Unless we are getting live calves, we as veterinarians are not paying our way.

In our calf to yearling, yearling and two-year-old to feed lot operations, we try to do some planning prior to the time they start receiving cattle. We go through rations, watering facilities, handling equipment, checking procedures, vaccination programs, and external and internal parasite control.

We set up routine procedures for identifying and treating sick cattle so that the operator knows and

we know how they have been treated the day before, also the pen they are to return to when they leave the sick pens.

When these lots are receiving cattle, we try to make periodic checks on the cattle and work closely with the man in charge of checking and treating the sick ones. We as veterinarians can be no better than the men we have working under us at these lots. We can learn a lot from these men that are checking the pens each day also. Again, we must train these men when to call us for assistance.

This type of approach will greatly increase the work load of the veterinarian; however, he will command the respect of the operator's accountant, lawyer, banker or nutritionist and give a more complete veterinary service.

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### An Appraisal of the "Partial-Hygiene" Dairy Program (Continued from page 17)

mechanism diminishes too! It then becomes imperative that prime management supplant that which has been taken away. Simply put—if she can't do it for herself—we'll have to do it for her!

This has been our experience. Not alone in our herd but several clients also. The partial-hygiene program (or some reasonable facsimile) has been followed with a measure of real success—until the pitfalls become evident! The "trigger" in many instances has been the use of injurious materials as teat dips. The proliferative lesions accumulate dirt and serve as foci of multiplication and infection. Random *Coliform* infections "pop." The higher cell count animals remain unaffected. After stopping the use of the particular dip, the incidence of describable lesions may decrease from near 90% of involved animals to 10%.

Similar lesions have been described before and generally attributed to milking machine factors—high vacuum and over-milking, and subsequent invasion by bacteria or fungi. However, in all of the cases referred to here, the teat ends had been dipped in a satisfactorily bactericidal material. The pH of the dips vary widely, but in these instances were measured at pH of 4.1. Such a low pH seems likely to be capable of dehydration of tender teat tissue.

The "tamed iodines" are recommended for use at 10,000 ppm, but with evaporation from the skin surface the concentration can increase to levels approximating 50,000 ppm. Osmotic pressures tend to dilute such a concentration from a moist-

ened surface as the lining of the teat canal. The teat surface is without hair follicles or sebaceous glands, so any dehydration leaves the tissue dry, and in the case of the canal—keratinized.

It is our judgement that the teat dips are not the sole contributing factor in the occurrence of the described lesions. Included within our "parameters" of normal management we would include:

1. vacuum level
2. pulsation rate and ratio
3. liner character, configuration and wear
4. teat shape, size, and condition
5. machine "on time"
6. sanitizing solutions
7. environment
8. nutrition (especially Vitamin A)

But the "trigger" or precipitant has—in many instances, been unduly harsh materials used as teat dips.

*Streptococci agalactiae* and *Staphylococcus aureus* make up approximately 90% of the presently occurring infections of the bovine mammary gland. We should be able to accomplish virtually 100% control of these two organisms through our diligent application of the partial-hygiene program. Indeed, prolonged application of these techniques can literally eradicate *Strep. agalactiae* from the dairy herd, and very nearly eliminate *Staphylococci* from the environment. *However, the non-agalactiae Strep forms and the members of the Coliform group are not so controlled and will become an increasing problem.*

Dairyman will have to be made aware of the possible difficulties they face, if in their eagerness, or over-eagerness, to eradicate *Strep agal.* and *Staphylococci*, they lower leukocyte counts to such levels that the host has an undue susceptibility to infections from the hostile environment into which she is almost certain to be thrust!

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**Study A—Cost of Gain Comparison Showing Effect In Cattle In Which Sickness Occurred**

	Nasalgen-P IBR-Lepto Vaccinates	IBR-Lepto Vaccinates
Number	648	617
Feedlot in weight	650 lb.	650 lb.
Feedlot out weight	913 lb.	888 lb.
Percent treated	3.4	7.5
Percent deaths	.3	2.6
*Dressing percentage	61.80	61.40
Cost of gain/CWT	\$22.79	\$24.17
**Total cost of gain	\$59.94	\$63.57
Cost of gain advantage	\$3.63 (\$1.38/CWT)	

**Study B—Cost of Gain Comparison Showing Effect In Cattle That Remained Healthy**

	Nasalgen-P IBR-Lepto Vaccinates	IBR-Lepto Vaccinates
Number	100	94
Feedlot in weight	600 lb.	600 lb.
Feedlot out weight	935 lb.	933 lb.
Percent treated	—	—
Percent deaths	—	—
*Dressing percentage	64.49	63.88
Cost of gain/CWT	\$20.48	\$21.13
**Total cost of gain	\$68.61	\$70.79
Cost of gain advantage	\$2.18 (\$0.65/CWT)	

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