Northwest Veterinary Associates, Inc.

Kent Henderson, DVM
Stephen Wadsworth, DVM
Peter Averill, DVM
Allison Maslack, DVM
Jennifer Hull, DVM
Blake Nguyen,DVM

6 FAIRFIELD HILL ROAD • ST. ALBANS, VERMONT 05478 • **(802) 524-3222** • FAX (802) 524-3177 • nwvavet@comcast.net

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Monitoring health, disease, and performance outcomes on dairy farms is important to efficiency and success. Still, observing, recording, and organizing this kind of information takes time and effort, and therefore must be used in a valuable way. Information that is collected and never looked back upon, or looked back upon and not used to make or monitor a management decision was a waste of time to collect.

Consider a process or practice on your farm that you have been thinking about changing, perhaps it is adding a step to your milking routine, a feed additive to your TMR, or a vaccine to your protocol. You wouldn't want to make this change if it was going to cost you time, money, or excessive stress. Now ask yourself if you have the information that is needed to actually figure out if such a change is costing you time and money once it is in place. You will need information from before the change is made, and information that is measured and organized *in the same way* after the change is made.

You may want to make an estimate of what impact a change, like a new vaccine, will have on your operation before investing in the vaccine and the time to administer it. This is where having accurate information on current conditions in your herd and some data from the vaccine manufacturer, or, better yet, independent research can help you make a decision. If a disease is present in 50% of your herd and a case costs you an average of $250 to treat, discard milk and maybe beef or bury, then you can estimate the cost of the disease. If you have the price of the vaccine and the management time required to organize animals and administer vaccine, you can estimate the cost of investing in vaccination. Your veterinarian can help you come up with a vaccine efficacy estimate based on research and manufacturer information. Remember that vaccine efficacy is not going to be 100%, but that vaccination may still have a good return on investment.

Suppose you milk 100 cows and have 50 cases per year of a disease that costs $250 per case. A new vaccine comes out at $1.95 per dose and the data from the vaccine manufacturer and trials conducted at a university estimate 80% vaccine efficacy. You can pay your employees or yourself at $15/hour to vaccinate 100 animals in about 2 hours. Now you can calculate the return on investment of vaccination.

Vaccine Return On Investment

= (cost of case * disease incidence * vaccine efficacy) – (product cost + labor cost)
= ($250 * 0.5 * 0.8) – ($1.95 + $30/100cows)
= $100 - $2.25
= $97.75 per cow per year, a very good ROI for this made-up vaccine

Remember the importance of monitoring the disease in your herd after the vaccine is in place so that true efficacy in your operation can be determined and the vaccine's place in your protocol re-evaluated if needed. Ask your veterinarian about disease monitoring plans such as treatment sheets, protocols, and computerized records that can help you not only record, but also put to use, performance information from your herd.