

by NICOLE LANE,

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Healthy cows raise healthy calves, a key driver in profitability for ranchers. Kevin Hill, veterinarian for Merck Animal Health, said he realizes there are things at the ranch with bigger dollar signs behind them than health, but unhealthy animals can put ranchers out of business.

As a form of insurance to help outweigh the risk health represents, Hill suggested having clear vaccine protocols and plans. The overall goal? Effective immunization.

Hill shared there is a big difference between immunization and vaccination. Vaccination involves putting a needle through the hide of cattle, while immunization — the desired outcome — involves getting the immune system to respond correctly to receive protection from disease.

"We want protection before we get exposure," Hill said.

Time it right

To achieve this, ranchers need to give the right product at the right time, and both can vary for different operations. For timing, Hill said vaccination can be done at birth, branding, before and after weaning, at the feedlot and prior to birth. The earlier in life a calf earns immunity, the less likely it is to fall ill. Hill recommended vaccinations while the calf is *in utero* to stimulate higher levels of antibodies in colostrum.



For the cow, it's important to time vaccinations to have optimal protection during time of conception. To accomplish this, vaccinating 30 days prior to the beginning of breeding season will provide the ideal window of defense against disease.

"Double-check the labels and that they've been researched and proven to work, because not all vaccines are the same," Hill recommended. "You need to consult with your veterinarian. You do a majority of the work, but it's important that you partner with him or her."

While many calves aren't vaccinated



until 1 to 3 months of age, Hill recommends vaccinating at birth.

"If we are handling them, we should be vaccinating them," he said.

However, this comes as a challenge as some vaccinations can be ineffective at birth due to colostrum antibodies. To overcome this, nasal sprays can be used as the immune response is in the nasal cavity instead of the bloodstream and is not affected by colostrum antibodies. To find which nasal spray will work in your herd, consult a veterinarian.

When is the best time to vaccinate? Hill said the most opportune time to administer vaccinations is two to four weeks before weaning. Vaccination prior to weaning provides protection during the most stressful time in a calf's life.

Online assistance

Vaccination protocols are complex, and Hill recommended using Merck's Herd Health Manager tool to create a plan prior to consulting a veterinarian. The tool can be accessed online at www.herd-health-manager.com or via an iPad app. The program will go through every part of a herd and assist a manager in creating a vaccination protocol tailored to individual operations. Hill recommended utilizing the tool to prepare for important consultations with a veterinarian before deciding on a health management protocol for a herd.

Hill spoke as part of Wednesday's Angus University featuring an exceptional lineup of speakers and panelists who explored "A Story of a Steak" and what it will take to supply high-quality beef to consumers worldwide. An extension of the awardwinning series of articles in the *High Plains Journal* and segments on *The Angus Report*, the convention series was sponsored by Merck Animal Health.

To listen to Hill's presentation and to view his PowerPoint, visit the convention newsroom at http://angusjournal.com/NCnTS/2015/index.html.



Editor's Note: This article is part of the online coverage of the Angus Means Business National Convention & Trade Show provided by Angus Media. Visit the convention newsroom available at http://angusjournal.com/NCnTS/2015/index.html to access additional summaries, PowerPoint presentations and the audio of the session.

