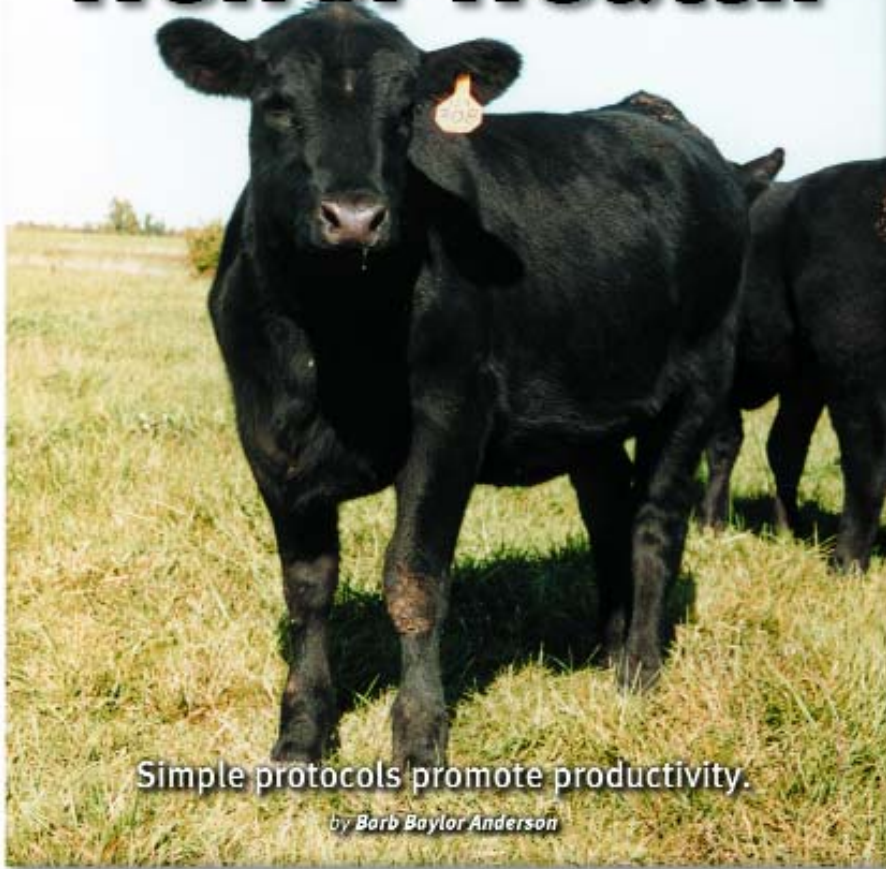


Hone in on Heifer Health



Simple protocols promote productivity.

by Barb Baylor Anderson

PHOTO BY SHAUNA ROSE HERMEL

You may already have a system in place for managing heifer health. But, Clifford Shipley, veterinarian with the University of Illinois College of Veterinary Medicine Farm Animal Reproduction, Medicine and Surgery (FARMS) Section, stresses that the most successful health programs for developing heifers must focus on a combination of nutrition, management, parasite control and the right vaccinations.

Management reminders

“In general, you want to ensure adequate growth, pregnancy and delivery of a healthy calf from developing heifers,” Shipley says. “You should also aim to get heifers rebred in a timely manner to assure that each has a long and productive life in the herd.”

Shipley says adequate growth rates are needed to achieve a targeted breeding weight and concurrent puberty of about 65% of adult body weight.

“Heifers should not be fat, because this will affect future milking ability. Heifers should also be targeted to breed approximately four weeks prior to the cow

breeding season so heifers can have extra attention, more time to recuperate from the birth process and be ready to rebreed,” he says. “Pick easy-calving bulls, since it is very hard on heifers to have assisted delivery or caesarean section and then be rebred in a timely manner.”

Parasite control should target internal worms and coccidia, as well as external lice, flies and grubs, from weaning to prebreeding. Shipley advises that heifers be on a feeding program that allows anticoccidial drugs to be added. Anticoccidial drugs can improve feed efficiency and allow some resistance to coccidia to develop while on the drug.

“Deworming at this phase is also generally cost-effective. The best program is one developed with a local veterinarian who is familiar with area parasites and individual management,” Shipley says. “Depending on heifer exposure, an additional dewormer may be needed prior to breeding. Lice and grub control should be done in the fall.”

Vaccinate with purpose

Shipley says vaccination programs for

heifers should cover diseases that cause abortion and infertility, as well as general heifer health and protection of newborn calves during the first months of life. Shipley encourages beef producers to focus on the following diseases, but actual programs will depend on operation location and setup.

Infectious bovine rhinotracheitis (IBR) causes respiratory and reproductive disease and is characterized in the respiratory form by a deep hacking cough with rapid spread throughout the herd. The abortion form typically hits in mid-gestation. Shipley advises vaccinating preweaning, at weaning, and 30 days or more prebreeding to assure best protection. Modified-live virus (MLV) and killed virus vaccines are both effective, but MLV gives better immunity at a lower price. MLV should not be given within 30 days of breeding, although the intranasal MLV is safe to use anytime for quick immunity.

Bovine viral diarrhea (BVD) is another viral disease that may cause diarrhea, pneumonia, abortion and fetal defects. BVD may also create persistently infected (PI) animals. MLV or killed vaccines should have both BVD strains included to provide more complete protection, and should follow the same vaccination timetable as IBR.

Parainfluenza virus (PI₃) is a viral respiratory disease that should be included in a vaccination program to ensure heifers don't get sick at critical times of development and breeding.

Bovine respiratory syncytial virus (BRSV) also falls into this classification. Shipley says MLV and killed viral vaccines are available, but the MLV form for BRSV gives the best protection. The vaccination should be timed with IBR and BVD vaccines.

Leptospirosis (lepto) can cause mastitis, abortions, stillbirths or infertility. Multivalent vaccines should be given at least twice a year. In instances where lepto is a severe problem or risk factors are high, more frequent vaccination (about every three months) is suggested. Shipley says the traditional five-way lepto vaccine and the newer *L. hardjo* form should be given in two doses at weaning and prebreeding for the best immunity.

Vibrio (campylobacter) causes early abortion, infertility and uterine infections characterized by a prolonged breeding and calving season. Two doses are necessary for good protection, and can be included with the lepto vaccination program.

Trichomoniasis (trich) causes early abortion, infertility, uterine infections, decreased calving rates and delayed conception, primarily in the West, but Shipley says it is creeping eastward. Shipley says the vaccine should only be used in infected or high-risk areas.

Neospora is a relatively new disease characterized by abortions, stillbirths, weak calves and poor conception rates. Neospora is spread to heifers on pasture primarily through contact with infected dog and coyote feces. Shipley says the vaccine's effectiveness is questionable, but there is no other option at this time if it is diagnosed in the herd. The vaccine is costly and requires two doses to confer immunity.

Brucellosis (Bang's disease), while close to eradication, is still a required vaccine for cattle crossing some state lines. Brucellosis causes abortion, infertility, retained fetal membranes and metritis. Shipley says to

follow state and federal guidelines for vaccination of eligible heifers.

Pasteurella multocida and ***Mannheimia haemolytica*** (formerly *P. haemolytica*) are both bacteria implicated in the bovine respiratory disease complex (BRDC). Shipley advises vaccination prior to and at weaning to prevent valuable breeding heifers from contracting respiratory disease that could set them back or affect their development.

Clostridial diseases, like blackleg, malignant edema and redwater, should be vaccinated for prior to and at weaning, with consideration given to an annual booster. This provides calves with adequate protection

through colostrum. Producers in high-risk pasture situations should routinely vaccinate calves at or close to birth. Likewise, pathogens that cause scours in baby calves should be controlled through precalving heifer vaccination.

Be effective

"Producers should work with local veterinarians for help with a total health program for their developing heifers," Shipley says. "They are most familiar with local conditions, your herd and management and will help you select the most cost-effective program." 