

David Hallauer
District Extension Agent, Crops & Soils

Proper Pesticide Application and Use

It's not uncommon for me to reference pesticides in this space when writing about any number of topics. Maybe it's a fungicide for wheat or corn diseases or insecticide for alfalfa weevil or a herbicide for weed or brush species. I often include a statement like 'always read and follow label directions'. It's a generic statement that deserves much greater explanation.

Each pesticide has a label associated with it. At its most basic, it outlines the product's active ingredient, on what crops it can be used, and what pests it controls – but there's a lot more to it than that.

For example, there are often reentry intervals (REI) noted. They are in place to prevent entry during a time when it could be dangerous to come in contact with the applied product.

There are also preharvest intervals (PHI), preplant restrictions, and even grazing restrictions. These are in place to ensure we don't harvest while product residue might still be in the plant and cause problems for consumers or animals or markets. It also provides guidelines to make sure we aren't trying to seed something back too soon following application.

Take the harvest restrictions on some of our common pasture and hay field herbicides for example. Many of them have very few restrictions for grazing by beef or non-lactating animals, but quite a few have restrictions when it comes to grazing by lactating dairy animals. They also have different restrictions for removal before slaughter as well. The restrictions before hay harvest are even greater, with many products requiring a minimum of a week or more between application and haying, that's an important point this time of year when we might be trying to control broadleaf weeds ahead of hay harvest.

The label is always the best place to look for information. The instructions and application rules on it are the law. Can't find a label? Many companies have labels available online and they are available from other sources (Greenbook, CDMS, etc...) as well. You can also get a quick look at some of the label requirements using our 2025 KSU Chemical Weed Control Guide. Available online or via any District Office, it provides a very brief snapshot of many labels and in the case of range and pasture products, a list that includes grazing, haying, and slaughter restriction intervals. Drop me a line if you are interested in a copy – and always read and follow label directions.

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Bovine Congestive Heart Failure

Leading edge writing is not likely what anyone expects to read from these articles, as I typically choose to go down the road of researched and proven topics. While this is likely not the first time of seeing the term Bovine Congestive Heart Failure in print for the astute cattleman, it is a developing topic that is gaining more attention and discussion within the industry. I serve on a national breed committee that discussed this topic this week, so it is fresh on my mind and seems worthwhile to write about. The January 2024 issue of NCBA National Cattlemen newsletter serves as the reference for this article.

According to the United States Department of Agriculture, Bovine Congestive Heart Failure (BCHF) is increasingly recognized as an emerging condition of cattle in the Western Great Plains of the United States and Canada. BCHF is an untreatable, fatal condition involving pulmonary hypertension that culminates in right ventricular failure. BCHF outbreaks are occurring in operations feeding well-managed, high genetic merit cattle. For some producers, it is the single most costly health-related problem with losses exceeding \$250,000 annually in individual operations, even surpassing those from bovine respiratory disease. Consequently, reducing the impact of BCHF is a high priority for the industry.

Congestive heart failure is the name given to the last stage of damage or dysfunction to the circulatory system which includes the heart, lungs, and blood vessels. At this end stage, blood flow around the body is significantly impaired and fluid management is no longer possible, leading to fluid buildup in multiple areas of the body. When cattle reach this stage of congestive heart failure, signs like brisket swelling (leading to these animals being called “brisket disease” cases) are evident. This accumulation of fluids in body cavities like the chest, abdomen, and even around the heart itself cause difficulty breathing, exercise intolerance, elbows distended away from the body, and other signs.

There are many causes of congestive heart failure, including the form that happens in feedlot cattle that are genetically predisposed. The complexity of how BCHF develops makes it difficult to prevent and treat. Prevention methods include doing a good job of putting up feed and maintaining equipment to reduce the probability of hardware disease. Another is developing good herd health programs to minimize the risk of cattle developing respiratory disease or chronic respiratory disease.

In many cases, there are no good prevention or treatment options. Treatments generally only address acute signs but do not provide long-term relief from BCHF effects. Once a case of heart failure develops, the disease is not reversible or treatable, as is considered a terminal disease. This has led to the investigation of genetic resistance to BCHF and is something breed associations and feedlots alike are investing in. Be watching for an Igenity (or other companies) BCHF scores on herdsires in the coming years. Some breeds are now finding some genetic vulnerability in certain populations and working to find genetic resistance through genetic testing.

Several reports show the doubling of BCHF deaths every ten years in feedlot settings. Reducing BCHF cases would improve sustainability of the cattle industry from a business and economic aspect, while mitigating animal welfare concerns from advanced stages of the disease. This is a problem that harms cattle, causes losses for livestock producers, and is becoming more common. It is important to continue to research the multiple causes that contribute to BCHF and determine how our industry can minimize its impact in the future.

May 23, 2025

Laura Phillips
District Extension Agent, Horticulture

No news this week.

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Know the Signs of Dementia

June is Alzheimer's and Brain Awareness Month. Our brain is truly quite remarkable. It comprises 2% of our body weight and uses 20 to 30% of our energy or calories daily. It is the so-called control center for our bodies. So, when things go wrong, the impact on our health is considerable. May was stroke awareness month. In June, we look at the warning signs of dementia.

Dementia is a scary topic, and most of us have people in our lives who have experienced some dementia. Dementia is an umbrella term that covers many types of dementia; examples include Alzheimer's disease, frontal temporal dementia, Lewy body dementia, and vascular dementia, to name a few. Currently, there is no cure for dementia. However, it is imperative to recognize the early warning signs and seek treatment as soon as possible. At the same time, treatment for dementia will not cure the disease, it can help manage the symptoms. The Alzheimer's Association lists ten signs to look out for.

1. **Memory Loss** that disrupts daily life includes forgetting recently learned information. Memory loss could mean forgetting important dates and events, asking the same question repeatedly, or increasing reliance on memory aids or family members for things they used to handle on their own.
2. **Having challenges in planning or solving problems:** Some people may experience challenges following a familiar recipe or keeping track of monthly bills. They may experience difficulties concentrating and take much longer to do things than they did before.
3. **Difficulty completing familiar tasks:** They find it hard to complete daily tasks. A person may have trouble driving to a familiar location, organizing a grocery list, or remembering the rules of a favorite game.
4. **Confusion with time or place:** People with dementia can lose track of dates, seasons, and the passage of time. They may have trouble understanding something if it does not happen immediately, and they may forget how they got somewhere.
5. **Trouble understanding visual images and spatial relationships:** Some people may experience vision changes. This may lead to difficulties with balance or trouble reading. They may also have problems judging distance and determining color or contrast.
6. **New problems with words in speaking or writing:** They may have trouble following or joining a conversation, stop in the middle of a conversation and not know how to continue, or repeat themselves. They may struggle with vocabulary, naming a familiar object, or using the wrong name.
7. **Misplacing things and losing the ability to retrace steps:** They may put things in unusual places. They lose things and are unable to retrace their steps. They might accuse others of stealing.
8. **Decreased or poor judgment:** People with dementia may experience a change in judgment or decision-making. For example, they may pay less attention to grooming or keeping themselves clean.
9. **Withdrawal from work or social activities:** They may experience changes in the ability to hold or follow a conversation, withdraw from hobbies, social activities, or other engagements.
10. **Changes in mood and personality:** They become confused, suspicious, depressed, fearful, or anxious. They can become easily upset at home, with friends, or outside their comfort zone.

People experiencing dementia may have one or more of these warning signs to different degrees. If you notice these signs in yourself or a loved one, please consult a healthcare professional immediately. There may be other causes for these signs besides dementia. It is best to check it out. Keep in mind that early detection has benefits.

References: Alzheimer's Association, K-State Research and Extension Publication MF3363

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Cindy Williams
District Extension Agent, Food, Nutrition, Health and Safety

No news this week.