Disbudding and dehorning considered

Preventing horn growth in calves is an important safety measure in preventing injuries to people and other animals. Using polled genetics is the best way to avoid having to remove horns. Although beef breeds are often polled, dairy breeds typically are not. Monitor calves during their first 6 weeks of life for the growth of horn buds and disbudd immediately as they are identified.

Disbudding Procedures Are Painful

Pain can be minimized by disbudding calves at a young age with proper training and disbudd earlier. Ideally, disbudding should be done before 6 weeks of age, and no later than 8 weeks of age. At around 8 weeks, the horn bud is attached to the calf’s skull. Removing the horn bud or horn at this age is painful and risks opening up the sinuses to infection.

In a 2019 survey by UW-Madison Extension, producers that used disbudding or dehorning methods for young calves in the context of a valid Veterinarian/Client/Patient Relationship (VCPR). Organic producers should consult their certifying agency for the list of approved products for local anesthesia and pain management in the context of the VCPR.

Disbudding Methods

To minimize pain and discomfort associated with hot iron disbudding, requiring dehorning at a later age. Proper restraint is needed when disbudding calves, regardless of whether they are housed individually or in pairs or groups. For pair- or group-housed calves, lose calves may interfere with the disbudding of other calves. In addition, calves housed in groups may transfer caustic paste on each other. An option is to administer a sedative in consultation with your veterinarian. Some farms initially house calves individually before forming pairs or moving them to groups. On those farms, an option is to disbud calves while they are still housed individually to reduce interference by other calves.

Steps for Using a Hot Iron

1. Non-steroidal anti-inflammatory drugs (NSAIDs) are recommended in addition to local anesthesia (see below) to reduce the inflammation and associated pain during disbudding.

   a. Meloxicam is an oral tablet available with a veterinary prescription. This is the recommended NSAID for disbudding and is easy to administer with a long duration of action. The peak action of Meloxicam occurs 12 hours after administration. This action is to administer at the milk feeding before disbudding. Meloxicam for pain management in animals is considered extra-label drug use through the VCPR.

   b. Consult your veterinarian for proper dosage. Use of oral meloxicam results in a 21-day meat withhold.

   c. Flunixin is an anti-inflammatory drug to help alleviate pain by reducing the inflammation caused by disbudding. To alleviate pain after the disbudding procedure, repeated dosing of flunixin is needed. Consult your veterinarian for proper dosage. This drug is given IV only and results in a 4-day meat withhold. Do not use it intramuscularly or subcutaneously. With oral dosage, drawal times have not been established in pre-ruminant calves. Flunixin should not be given to calves in the 5th day meat withhold.

2. Restrain the calf’s head using a halter or head restraint (Figure 1). Meanwhile, preheat the butane or electric calf dehorner. As the dehorner preheats, keep it away from all flammable material.

3. Clip the hair to expose each horn bud. Inoculate the cornual nerve, reducing pain during disbudding. To ensure proper placement and dosage, consult a veterinarian within the context of the VCPR.

4. Test the effectiveness of the nerve block before proceeding by pricking around the base of the horn bud with a needle. If the needle responds, wait a bit longer or inject more lidocaine.

5. Use a device with a diameter just larger than the horn base. This will cauterize the skin immediately surrounding the horn bud. Apply minimal pressure to the horn base. This will cauterize the skin immediately surrounding the horn bud. The injection should be done 5 to 20 minutes before application of the hot iron. Practice the injection technique with your veterinarian.

References

This factsheet was adapted from the Disbudding Calves factsheet written by Sandy Stuttgen and Jennifer Van Os, October 2020. https://livestock.extension.wisc.edu/articles/disbudding-calves/

Figure 1. Example of a proper calf head restraint

Steps for Using Caustic Paste

1. Use an NSAID as described in Step 1 above.

2. Restrain the calf’s head using a halter or head restraint.

3. Clip the hair to expose each horn bud.

4. Inject a nerve block as described in Step 4 above.

5. Apply petroleum jelly in a ring around the horn bud to keep the paste within the correct area.

6. Apply paste with gloved hands.

7. To prevent smearing after application, keep calves separated for at least 1 hour and out of the rain for at least 6 hours after applying paste. An additional option is to cover each pasted bud with duct tape or vet wrap.

8. Vinegar may be used to neutralize caustic paste inadvertently applied to the calf or the handler.

The 2021 Agriculture Outlook Forum will be held virtually this year on Tuesday, January 26, 2021
With the growing number of COVID-19 cases in our county and state, your safety is our top priority. We have made some changes and added some new options to this year’s private pesticide applicator training program (PAT) to help keep our communities safer. Here’s how this impacts you:

- In-person training will not be offered during winter 2020-2021;
- Online training will be available beginning December 1, 2020;
- If a person cannot complete the online training, self-study testing is currently the only option;
- Online testing and limited in-person testing are both available this year.

**PAT Manuals**

A manual must be purchased ahead of training and/or testing.

You can order manuals online at the PAT Store [https://patstore.wisc.edu](https://patstore.wisc.edu) with a credit card, or use a mail form available at [https://go.wisc.edu/patbook](https://go.wisc.edu/patbook) and send it with a check. You may also purchase a manual at the Kewaunee County Extension Office for $35, however, we ask you please schedule a purchase time by calling 920-388-7141. Our office is not fully staffed and not open to the public every day.

**Training:**

Online training is available. To access this, visit the PAT Store at [https://patstore.wisc.edu](https://patstore.wisc.edu). Scroll down to “Private Applicator Training” and select General Farming 100/101. Then chose B. “Online Private Applicator Training.”

Cost is $10 per person. Available trainings are:

- December 1-14, 2020
- January 1-14, 2021
- February 1-14, 2021
- March 1-14, 2021
- April 1-14, 2021
- May 1-14, 2021

After choosing a training from the PAT Store, you can begin anytime in the 14-day window you selected. However, just like the in-person training, you must complete it in one sitting. You will not be able to start and stop, except for the designated breaks that are built into the training. Allow yourself approximately 3.5 hours to complete the online training.

After successful completion of the online training, you will receive a receipt that allows eligibility of the passing rate of 50% when you take the test.

**Testing: Online or In-Person**

You may take the exam without attending the online training, but if you do so, you must achieve a score of 70% or higher to receive certification.

A limited amount of in-person testing will be held at the Kewaunee County Fairgrounds in Luxemburg and will be made available ONLY to individuals who don’t have online access to take the exam. This is to limit potential person-to-person exposure. It will be especially important this year to get your testing completed well ahead of when certification is needed. You may also consider the self-study option to get your testing completed sooner. We cannot guarantee in-person testing will be offered consistently between now and spring. To request an in-person exam, please contact the Kewaunee County Extension Office at 920-388-7141.

**Commercial testing**

A third option is to test as a commercial applicator with the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). Commercial testing is a closed-book test. To schedule a test with DATCP visit [https://pestexam.datcp.wi.gov/](https://pestexam.datcp.wi.gov/) or call 608-224-54548.

**Who needs to get certified?**

Be sure to see if you need to be certified. Please check the criteria below.

You must be certified if you apply, mix and load, or direct the use of:

- Restricted-use pesticides (RUPs)
- Any pesticide on a for-hire basis
- Any pesticide in or on public schools or school grounds (K-12 public schools)
- Any pesticide in aquatic environments (may also be a requirement of permit)

You also must be certified if you:

- Conduct pesticide-safety training for agricultural workers or pesticide handlers as required under the Worker Protection Standard (WPS)