

# HOW TO: Properly Castrate Beef Calves

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## HOW TO: Castrate Beef Calves

- **Objective:**
  - Prevent reproduction of inferior genetics
  - Improve marketability of calves
  - Improve carcass quality

  
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## HOW TO: Castrate Beef Calves

- **Goal:**
  - Minimize Pain/Stress
  - Minimize Risk of Infection
  - Complete the process successfully

  
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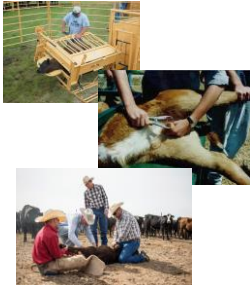
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## Minimize Pain/Stress of Calves



- Proper Restraint
  - Minimize Movement
  - Safety of calf
  - Safety of castrator



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## Minimize Pain/Stress of Calves



- Pain Management
  - Acute:
    - “Surgical Removal”
    - Short term/high intensity
    - Medication MAY help
  - Chronic:
    - “Bloodless Castration”
    - Long Term
    - Increased risk of complication
    - Medication not as effective

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## Minimize Risk of Infection/Complication



- ✓ Disinfectant for Equipment
  - ✓ Tub
  - ✓ Wipes
- ✓ Iodine/wound spray
- ✓ SHARP knives/scalpels
  - ✓ Sharpening stone
- ✓ Keep clamp on hand
- ✓ Tetanus in vaccine

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## Surgical Removal

- Advantages
  - Quick Recovery
  - Fewer Complications
  - Low Cost
  - Outcome success is known
  - And.....
- Disadvantages
  - Invasive
  - Causes Acute pain
  - If not done properly, excessive bleeding can result.
  - Requires some training
  - Requires proper sanitation



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## Knife Cut Technique



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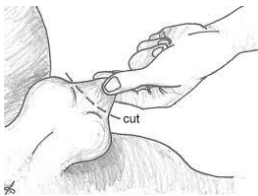
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### Step 1: Cut off the bottom 1/3 of scrotum



1. Must use a very sharp knife or scalpel
2. Push testicles up and out of the way
3. One or two quick cuts
4. Cut HORIZONTALLY
5. Careful not to cut fingers

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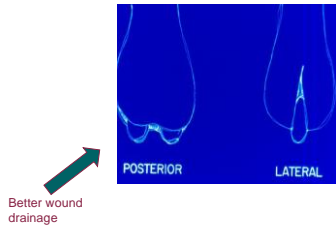
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## Knife Cut Technique Options




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## Step 2: Remove one testicle at a time.



1. Expose one testicle at a time.
2. If retracted into the body cavity, run your hand firmly from just before the scrotum to the base of the scrotum.




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## Step 3: Snapping the spermatic cord.



1. Strip excess tissue away from spermatic cord
2. Push/pinch the cord towards the calf's body with one hand, while firmly pulling the testicle away from the body with the other hand.
3. Continue the process until the cord snaps.
  1. This will allow blood vessels to seal
4. **DO NOT CUT THE cord AND BLOOD VESSELS!!!!!!**
5. Repeat with second testicle




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## Step 4: Cleaning the wound.



1. Trim any excess tissue hanging from the empty scrotum.
2. Evaluate level of bleeding
  1. If excessive, apply a clamp ACROSS the cords until bleeding slows significantly
3. Thoroughly clean wound with disinfectant or spray with iodine

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## Emasculator Technique



Emasculator

- ✓ Specialized equipment to cut the cords and crush the blood vessels closed.
- ✓ Still requires exposure of each testicle independently

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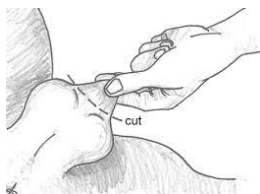
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## Step 1: Cut off the bottom 1/3 of scrotum



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## Step 3: Remove one testicle at a time.



1. Strip excess tissue away from spermatic cord
2. Apply the emasculator to the cord and close. The testicle will be severed.
3. HOLD CLOSED FOR AT LEAST 1 MIN.
  1. This will allow blood vessels to seal
4. Repeat with second testicle



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## Bloodless Removal

- Advantages

- Easier to administer
- Non Invasive



- Disadvantages

- Causes chronic pain
- If not done properly, sterilization is not complete.
- Tends to have more complications days following; particularly in older calves.

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## Banding



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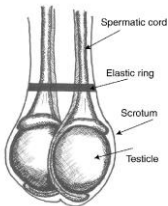
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Step 1: Make sure both testicles are out of the body cavity.



1. Slip expanded band over BOTH testicles to the base of the scrotum.



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Step 2: Make sure band is secure.



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## Burdizzo



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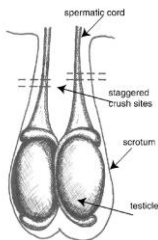
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Step 1: Make sure both testicles are out of the body cavity.



1. Palpate for ONE spermatic cord.
2. Open burdizzo and squeeze down and hold.
3. Repeat on second cord



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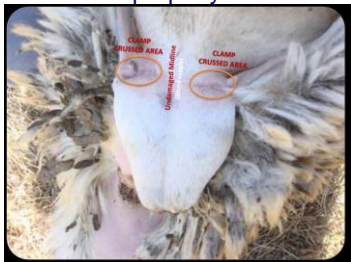
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Step 2: Palpate cords again to insure they have been properly closed.



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### When things go wrong...

- Death due to blood loss
- Infection can go septic (throughout the body)
- Tetanus

*Calves should be monitored to watch for infection and complications, regardless of method*

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### When things go wrong...



*Only one testicle was removed. The remaining testicle descended and adhered to the scrotum, leaving an open wound, swelling and infection.*

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## When things go wrong...



*Band either slipped or was placed too low, excessive swelling and an open wound resulted. These calves are very susceptible to tetanus and other bacterial infections.*



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## When things go wrong...



*Band broke or cords weren't properly crushed, allowing for unintended pregnancies.*



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## • Beef Quality Assurance:

- Castrate BEFORE 6 months of age.
  - Less stress on animal
  - Animals are easier to handle.
  - ↓ Complications ↑ Success
  - Does not impact performance long term



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