

**Counter irritants** - this involves injection of counter irritants such as iodine into the hernia ring to trigger tissue reaction leading to closure of the hernia ring. This method might not be effective for large hernia.

**Hernia belts** - this involves tying of huge belts around the abdomen of affected animals to keep the hernia contents in place and allow the hernia ring to close. This might pose challenges of the belts slipping from the intended area and thus failure to achieve its purpose.

**Surgical correction (herniorraphy)** - this refers to the surgical correction of a hernia by a veterinary surgeon. This procedure is the most conventional way of correcting a hernia although in some cases such as umbilical hernia there might be recurrence.

## How to Identify and Control Hernia in Livestock

### KCSAP Brochure No. 1E



Compiled by: Mutisya W., Mariita R., Njambi E. and Wanyona S.

#### For Further information contact:

Institute Director, Dairy Research Institute,  
P.O. Box 25-20117 Naivasha  
Director.dri@kalro.org  
Tel. No. 0202390930  
Website: www.kalro.org

Editorial and Publication coordinated by  
Knowledge, Information and Outreach Unit

FEBRUARY, 2023.



## Causes and management of hernia in farm animals for improved welfare and productivity

### Introduction

Hernia refers to an opening within the body wall that can occur as a result of a congenital defect or from trauma causing muscle tear thus allowing tissues such as fat or internal organs to be displaced but remain contained under the skin.

It comprises of the hernia ring, the contents and hernia sac (skin and peritoneum).

### Types of Hernia

**Umbilical hernia** - this is a congenital defect resulting from failure of closure of the umbilical ring post birth. This type of hernia can be passed from one animal to another through breeding of such affected animals (hereditary). It can also be acquired in cases of umbilical infection and is common in calves and pigs.



*A case of umbilical hernia in a piglet.*

**Scrotal/inguinal hernia** - this is a congenital defect resulting from failure of the inguinal canal to close leading to the intestines descending into the scrotal sac. The condition is hereditary and is common among the pigs. It can be unilateral or bilateral involving both testes.



*A case of unilateral scrotal hernia in a piglet.*

**Diaphragmatic hernia** - this is an acquired type of hernia resulting from trauma leading to tearing of the diaphragm thus allowing abdominal organs to enter the thoracic cavity.

**Ventral hernia** - these are acquired as a result of trauma and their location might vary depending on the site of injury. They are common among the goats and cattle as a result of trauma from fighting among the horned animals.



*A case of ventral hernia in a goat.*

**Perineal hernia** - this type of hernia result from traumatic tear of the perineal muscles leading to the abdominal organs entering the region bordering the anus. This type of hernia is rare but can still occur.

### Effects of hernia in animals

Hernia cause discomfort especially the excessively large ones and are a potential risk of injury. If left uncorrected the hernia contents may adhere to the hernia ring leading to strangulation and death.

### Diagnosis of hernia

*Using a hand to examine (palpation)*, presence of internal organs mostly intestines and the hernia ring will be felt. The organs easily go back through the ring when pressure is applied on the hernia swelling.



### Management of hernia

**Self-resolution** - depending on size, some hernia resolve on their own as the animal grows older. For example, in calves smaller umbilical hernia may resolve on their own without surgical intervention.