Bovine measles, or cysticercosis, is a parasitic infestation of cattle caused by Taenia saginata. This parasitic infection of cattle leads to the condemnation of carcasses from the food chain and the loss of millions of dollars each year to the cattle producer.

The life cycle of Taenia saginata starts with an infected human depositing an egg sac called a proglottid on the ground or onto the feed (Fig. 1). A proglottid is a segment of a tapeworm containing both male and female reproductive organs. Each proglottid can contain up to 100,000 infective eggs, and an infected human can shed between six to eight proglottides a day.

When these eggs find their way into cattle feed and are ingested by cattle, they migrate as larvae to various areas within the animal. Muscles of the cheek, heart, shoulder, tongue, and the diaphragm are common places for the larvae to form infective cysts (Fig. 2).

When these animals pass through the inspection process at the slaughter plant, inspectors can see these cysts, and the carcass is side railed. Freezing infected carcasses for 2 to 3 weeks is the standard mechanism to kill the cysts.

Fig. 1. Life cycle of Taenia saginata.

Fig. 2. Infected beef or pork shows cysts such as these.