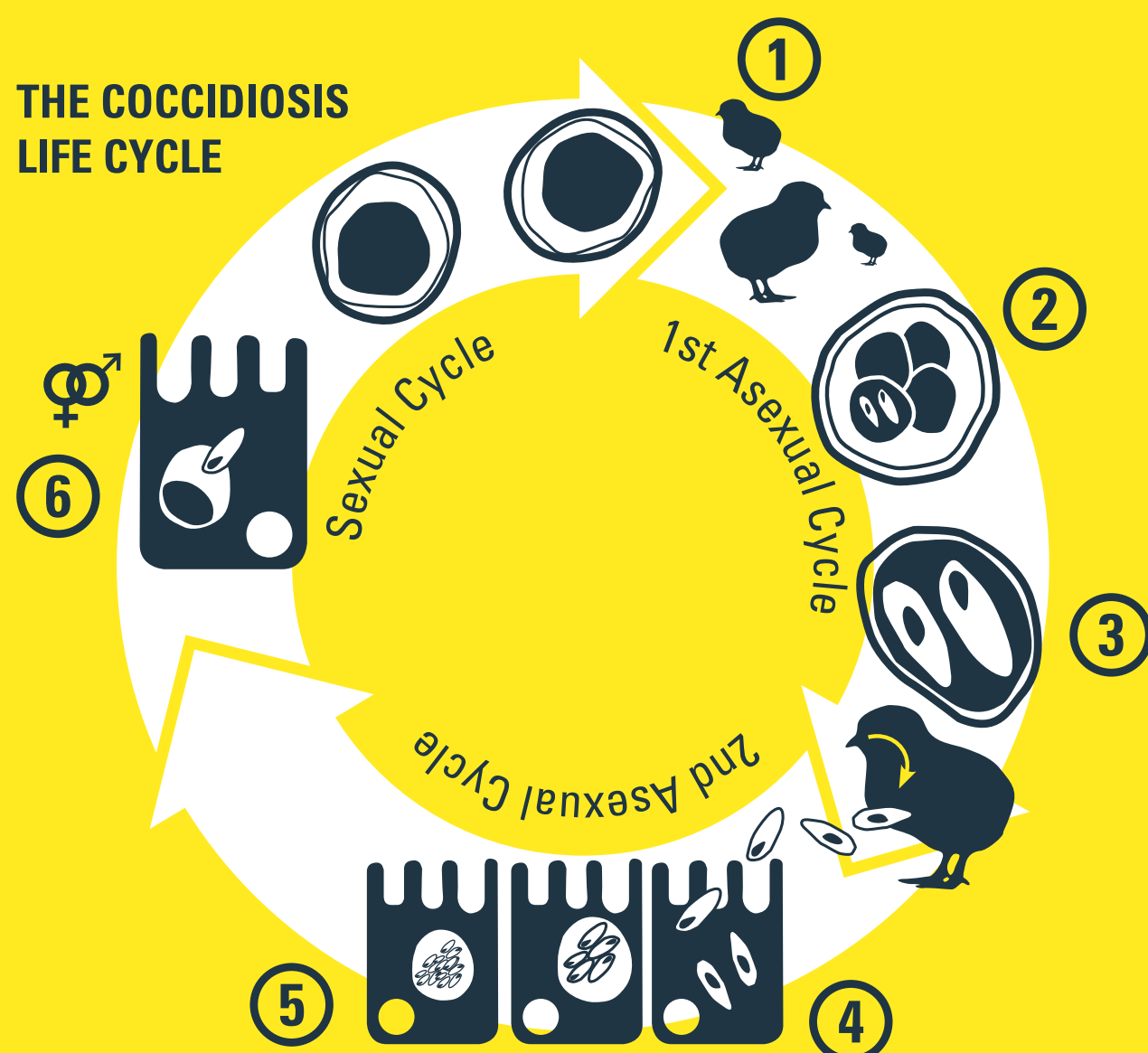


# WHAT IS COCCIDIOSIS?

## THE COCCIDIOSIS LIFE CYCLE



- DAY 1:** Unsporulated oocysts are shed in the litter.  
**DAY 2:** Oocysts sporulate and become infective.  
**DAY 3:** Oocysts (containing sporozoites) become ingested.  
**DAY 4:** Sporozoites penetrate gut cells and develop schizonts.  
**DAY 5:** Asexual multiplication.  
**DAY 6:** Sexual life cycle begins. Male and female gametes form zygote.

## WHAT CAN WE SEE IN CHICKENS INFECTED WITH COCCIDIOSIS?



Droppings from a bird with severe *E. tenella* infection



Broiler chicken suffering from coccidiosis

## CLINICAL SIGNS OF COCCIDIOSIS INCLUDE:

- Diarrhoea (bloody and/or mucoid)
- Anorexia
- Huddled with ruffled feathers
- Increase in mortality and morbidity

**While coccidiosis can appear at almost any age, the most severe outbreaks in chickens often occur between three to twelve weeks of age.**

## SOME IMPORTANT POST VACCINATION MANAGEMENT PRINCIPLES:

- A good base (6 to 8 cm) of absorbent fresh, dry bedding material such as wood shavings is highly recommended.
- Air and floor temperatures in the poultry house should encourage good bird activity at placement and not impair feed and water consumption.
- Do not use any anticoccidial drug or any antibiotic with anticoccidial activity during the first 3 to 4 weeks post vaccination (for standard broilers) and for at least 5 to 6 weeks following vaccine administration for all other long life birds.
- As the brooding area is opened, so bedding from the initial brooding area should be moved along with the birds to ensure that oocysts within the litter are present throughout the house.

In chickens, coccidiosis is a protozoan disease caused by various species of the genus *Eimeria*. The life cycle of the parasite is complex, involves both sexual and asexual reproductive phases, and is characterised by tremendous parasite multiplication in the cells lining the intestines. Dramatic and usually characteristic lesions in the intestinal tract occur because of this remarkable reproductive capacity.

In addition to the characteristic lesions, mortality and morbidity are seen in acute outbreaks. Less severe infections can cause significant economic losses due to interference with digestive and absorptive processes. Loss of blood or dehydration may also contribute to performance losses. Coccidiosis can occur in broilers, layers, and breeders.

## WHICH LESIONS CAN BE SEEN IN CHICKENS WITH COCCIDIOSIS?

The lesions seen in chickens that have coccidiosis will vary depending on the species of coccidiosis present in those chickens.

**SOME OF THE POULTRY EIMERIA SPECIES, THE SECTION OF THE INTESTINE THEY AFFECT AND THE LESIONS THAT THEY CAN CAUSE:**

<i>Eimeria acervulina</i>	<i>Eimeria maxima</i>	<i>Eimeria tenella</i>	<i>Eimeria necatrix</i>



## WHAT ACTION IS REQUIRED TO TRY AND PREVENT COCCIDIOSIS ON YOUR FARM?

### Biosecurity



- Thorough clean out and disinfection between flocks using the correct chemicals that are effective against coccidiosis oocysts; at the correct concentration for the correct amount of time.



### Vaccination

Live coccidiosis vaccines used in broilers and long-live birds.



- Purchase high quality chicks from a reputable hatchery where day old coccidiosis vaccines are administered.

## SUGGESTED COCCIDIOSIS VACCINATION PROGRAMS

Hatchery application for broilers and breeders.

Breeders may be vaccinated on farm in the drinking water between 6 and 9 days using certain vaccines.

## POST VACCINATION MANAGEMENT

Post vaccination management is very important for the cycling of the cocci vaccine to induce immunity to protect against natural infection.