

# Coccidia

By  
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Coccidia is one of the most common parasites of all animals. Coccidia does not spread from one species to another. No loft is free from this parasite. Coccidia are protozoa, a one celled organism. The life cycle is simple but important to understand. Oocysts (eggs) (both o's are pronounced "O O cyst") are shed in the stool, often by healthy pigeons. These eggs can survive outside the bird for months. For the life cycle to continue the egg must develop outside the pigeon for at least 2 days. It takes moisture, warmth and oxygen for the eggs to develop. The second stage of the life cycle occurs after a pigeon swallows the oocyst. It invades the cells of the small intestine and reproduces asexually. No oocysts are produced at first. Once the cell becomes full of the parasite, it explodes and the parasite spreads to thousands of other cells. This continues and a large portion of the intestine can be damaged. Diarrhea with mucus develops because digestion is impaired. Last, sexual reproduction occurs and eggs are passed in the feces. The whole life cycle, in the pigeon, takes 4-5 days. Partial immunity develops and once the bird recovers future infections are usually mild and cause no signs but spread the disease to the young or stressed. The damage to the cells also gives Salmonella (Paratyphoid) and E coli a chance to get started. These bacteria can contribute to the severity and the death loss. The disease is most common in young bird's three weeks of age and older. Often outbreaks occur in the young bird coop after weaning. Prevention is vital to successful pigeon raising. Coccidia's life cycle makes the basis of prevention obvious. A clean, dry, cold loft will stop transmission because the eggs are removed and any left behind can't develop. The waterer is the most obvious source for the eggs to develop and be swallowed. Cleaning the water daily will prevent transmission. Don't forget about water cups in show coops, they often become contaminated and are infrequently cleaned. Scraping if done less frequently than daily will be ineffective. A deep litter system will also help as the droppings fall into the litter and dry-up rapidly and can't develop. If the loft becomes wet later, the development can begin though. A floor system where the droppings fall through is probably best. Sunlight also helps destroy the oocysts. Spread can occur outside the loft as well, especially during wet times of the year.

The poultry industry is constantly developing new drugs, added to the feed, to prevent coccidiosis in both broilers and laying hen pullets. Broilers are on preventative additives their whole, very short life. Pullets are put on and off preventative drugs so resistance to the disease develops. I like this idea in pigeons after weaning, but am unfamiliar with any pellet for pigeons that has a coccidiostat in it. I would think that any of the drugs used in feed for other poultry would be safe and effective. If problems are expected, it is a good idea to use something in the water at weaning time and periodically thereafter. The disease is easy to diagnose with a fecal flotation just as for worms. If very small numbers are found then it is probably not causing disease. Treatment should also include

an antibiotic to clean up the E coli's and Salmonella. If death loss is rapid and high then Salmonella is probably involved. As in any disease outbreak the loft should be cleaned as completely as possible.

I suggest using Corid for three days in the breeding coop before the first eggs are laid to decrease the shedding of the oocysts. Also use in the water for 3-5 days as groups of young birds are weaned. If problems are met in the young before weaning, treat the old birds again to decrease the shedding. For sick birds the sulfas might be better as they also should help with the bacterial infections. Salmonella can easily be resistant to the sulfas.

Treatment:

Specific for coccidia: Use as a preventative or treatment.

Corid (Amprolium 20% powder) 1 teaspoon/gallon for 3-5 days

Corid(Amprolium 9.6% liquid) 4cc/gallon for 3-5 days

Baycox (Toltazuril) 4 cc/gallon for 2 days

Appartex 1 tablet/bird

Antibiotic that will treat coccidia and E coli +/- Salmonella: Do not use as a preventative.

Vetasulid (Sulfachlorpyridazine) 1 teaspoon/gallon for 5 days

Bactrim or Tribissen (Sulfa w/ Trimethaprim) 1 oz(30cc)/gallon for 5 days

Albon (Sulfadimethoxine) 1/2 teaspoon/gallon for 5 days

Sulmet (Sulfamethazine) 1 tablespoon/gallon for 5 days

Drug concentrations and availability change and are different in different parts of the world. Adjust dose for water intake. Increase the dose during cold weather as much as double.

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