

# CONCERNING POULTRY



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## RESPIRATORY DISEASES

Our chickens can catch a cold same as we do, and also more often in the autumn than in summer. A sneeze, a cough, nothing to get worried about immediately. However, sometimes this will develop into a rattling and coughing that won't stop. Or your chickens get really ill, with swollen head and eyes. By the hobby breeders, these symptoms are called by the collective noun of 'roup'. But what exactly is roup, and how can your chicken quickly recover from it?

I will try to explain it all to you. To begin with, there is a difference between chronic and acute respiratory disease, and both have a different etiologic agent.

### CRD

CRD is short for Chronic Respiratory Disease, or as is often said: 'chronic roup'. (Also called mycoplasmosis). The disease is caused by *Mycoplasma gallisepticum*, in short Mg.

*Mycoplasma gallisepticum* is a micro-organism that is found all over the world. It is the most sickening mycoplasma to affect bird species; not only chickens, but also turkeys, guinea fowl, pheasants and pigeons. Wild birds can be carriers without being sick.



Mg can be spread from the infected 'mother' to offspring through the egg. This is the most frequent way of spreading. Mg can also be spread by contact and indirectly by ourselves or by using Mg-contaminated equipment.

Mg is a very common poultry disease and most of our chickens will carry the organism or at a certain time get infected. Although the chicken will not always

show outward signs of sickness; to fall ill more 'complications' are needed.

Simply said, as soon as the resistance gets low, Mg can crop up. This can be during moulting time, or even when badly housed. Draft and humidity are disastrous! Bad hygiene, poor ventilation or over-crowding, resulting in ammonia build-up, will make things worse.

### Symptoms

Chickens can carry *Mycoplasma gallisepticum* asymptotically until they are stressed by other viral or bacterial respiratory diseases, like for instance an E.coli (*Escherichia coli*) infection, IB (Infectious Bronchitis) or NCD (Newcastle Disease). In combination with one of those infections, a serious respiratory infection can occur.



So it is understandable that the severity of the symptoms can vary very much depending on the symptoms of the other infection.

Rattling breathing can be heard, and sneezing and coughing. Discharge from nostrils, and even foam in the corner of the eyes can be seen. Other symptoms are lack of appetite, losing weight and decreased egg production.

Because the birds also inhale the bacteria, serious infections will develop. The upper airsacs are the most susceptible to infections, but with severe infections the lower airsacs and lungs will also be affected.

When a chicken is infected with Mg, the infection is of long duration; infected birds carry the organism for life. In some chickens it will only show intermittently, but others keep rattling all their life, in particular if the infection was not treated or treated too late. Those chickens will always walk around sounding like gurgling coffeepots. Especially during hot and sultry weather these

birds suffer and can be very sick. Some will have periods of well doing; others will be troubled constantly, particularly the heavy breeds.

### **Treatment**

The best thing to do is treatment with drugs for respiratory diseases; most of these can only be bought with a prescription from a veterinarian. The vet will prescribe 'on pre-sumable grounds' because a laboratory test will be necessary to be sure what causes the disease.



If you have had to deal with this disease before, you will recognise the symptoms quickly. If you don't treat or wait too long to start the treatment, this disease will become chronic in such a way that it will always give trouble.



I myself have made it a rule never to breed with chickens that show symptoms of Mycoplasmosis at an early age, as they will transmit it via the eggs.

**In the photos:**  
oedematous swellings around the eyes and discharge from the nose and eyes or even closed eyes; the typical symptoms of respiratory diseases.

**Infectious**

## **Coryza**

Acute roup is called (Infectious) Coryza and is caused by bacteria named *Haemophilus paragallinarum*.

This illness occurs worldwide and can affect chickens of all ages, although the susceptibility will decrease at with age.

Chickens can be carriers of this bacterium and spread the bacteria. It is a very contagious illness to other chickens which is transmitted by direct contact with infected or carrier birds, drinking water polluted by infective nasal exudates and in breeding. It is

NOT transmitted by the eggs, as in Mycoplasmosis.

As with Mg you can say that Coryza occurs as soon as the resistance of the chickens is low.

## **Symptoms**

The chickens give a generally sick impression with ruffled feathers, watery discharge from the nose and eyes or even foam on the eyes. The face can be a bit swollen around the eyes and wattles, but also severe swelling may be noticed, depending on the severity of the infection. These oedematous swellings can be seen on both sides of the head, as the sinuses and eyes



are infected and swollen, frequently even vision may be affected because of the swelling. This will often give a typical sweet sickly smell. The chickens will lose their appetite and also lose weight. The egg production will stop or slow down. Breathing will be gurgling and the chicken will be depressed. Most of time the swelling will reduce in about 2 weeks. When secondary infections occur, it also means that everything can get worse and it will take more time for the chicken to recover. Secondary infections commonly occur as a part of the classic air sac disease syndrome as a complication with *Mycoplasma gallisepticum* infections; the latter may cause a chronic sickness.

## **Treatment**

The treatment is more or less the same as in Mycoplasmosis; on supposition of Coryza the vet will prescribe an antibiotic.

## **Some things to keep in mind**

Sick birds must always be set apart from the others, especially because they will be contagious. Put them in a quiet and preferably warm place. Chickens have a

rather high body temperature that must be kept constant. When you can comfort it with some kind of heating source, like a hot-water bottle or a heating lamp, then the sick chicken won't have to put effort in maintaining the body temperature and can use all its energy in recovering. You do have to see to it that the chicken can get away from the heat if it wanted.

Medicines are often administered in the drinking water. However, you should keep in mind that really sick chickens, especially those whose nose is clogged and eyes are closed, will hardly drink at all. So you should ask your vet for a dose that you can administer directly to your chicken.



Except from seeing to it that the medicine is properly taken in, it is also important that the chicken gets some food and water inside. Sometimes it will do to put the beak into the drinking water or the feeder, but sometimes you will have to feed it.

This is another reason to ask your vet for an ointment for the swollen or infected eyes; it will speed up the curing, so that the chicken will soon be able to eat and drink by itself again.

Of course the chicken will recover sooner when you are alert and start treating at an early stage.

Still it will take a while for your chicken to recover, and even when it is looking rather poorly, don't give up hope too quickly, because with proper treatment, both infections can very well be cured.

Mention it to your vet when more than one chicken has symptoms; it can be wiser to treat all birds together then.

Apart from medical treatment, hygienic measures are of great importance! Both causative organisms are not very resistant and can be destroyed by sunlight, dryness and thorough cleaning/disinfecting.

### **To end with**

More than once we see people that have bought new chickens and several days later are dealing with a number of seriously ill chickens with 'roup'. It often turns out that the chickens were bought from poultry salesmen, which keep many sorts of poultry that are all kept in rather small pens, this being a very poor management, as there will always be contact between susceptible and infected birds.

Moving the birds to a new home will cause stress, and stress decreases resistance. So the birds will be extra susceptible and the infection will show.

You should really keep your new bought chickens apart from the others for some time. It always helps to supply a vitamin treatment; especially vitamin C helps in stress and increases resistance.

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