

Mycoplasma: What Is It?

Mycoplasma is a very small, slow-growing bacteria-like organism. There are lots of different types of Mycoplasma that affect different animals, humans, and even plants and insects. Several types of Mycoplasma affect chickens, turkeys, and other birds. Two types, *Mycoplasma gallisepticum* (MG) and *Mycoplasma synoviae* (MS), could make your birds sick and occasionally

some birds may die from it, especially if they have other infections. Mycoplasma spreads very easily between birds and because the bacteria grow slowly it may take a while before you even notice that your birds are sick. Once birds get Mycoplasma they will always have it, even after they recover and don't look sick. Even if only one bird has Mycoplasma, all the other birds will catch it; any new birds added to the flock will also catch it.

How could my birds get it?

Mycoplasma can spread in many ways. **From other birds:** Hens can spread Mycoplasma through their eggs, so some chicks may already have it when they hatch. Birds with Mycoplasma can spread it to other birds (even if they don't look sick yet). Birds do not have to be kept together to catch Mycoplasma; it can spread from any birds nearby. It can also be spread from the droppings and feathers of infected birds and through dust and droplets in the air. Cages, coops and tools, such as shovels, used around birds with Mycoplasma can spread it to other birds, even after the sick birds are removed.

From other animals: Although it doesn't make them sick, other animals such as rats and wild birds could carry Mycoplasma into the area around your birds and they could catch it.

From YOU: Mycoplasma will not make you sick, but you could be bringing it to your birds without even knowing it. If you have been around other birds that have Mycoplasma, even if you haven't touched them, you can bring Mycoplasma back to your own birds on your shoes, clothing, even on your own skin and hair. MG can live in your nose for up to 1 day, on straw, rubber, or cotton for 2 days, and in your hair for up to 3 days! This is one of the most common ways that birds will get Mycoplasma; if you have been around any other birds –at a show, auction, flea market, or a friend's or neighbor's house, do NOT go see your birds without showering and changing clothes first.

How to tell if my birds have it:

Remember, healthy looking birds may already have Mycoplasma, it may take up to 3 weeks before birds

start to look and act sick or they may never act sick but still carry the disease and infect other birds. Birds sick with MG may have similar signs to what people get with a cold: runny nose, cough or unusual breathing sounds, and swollen or puffy eyelids and face. Birds sick with MS may have problems standing or walking, a pale or discolored comb, blotchy skin, ruffled feathers and swollen joints and blisters. Also, birds may be quieter, eat less and lose weight or lay fewer eggs. You may see only





some of these signs in your birds or none at all. Just like the cold or flu in people, Mycoplasma will make some birds sicker than others. If you see these signs in your birds, a poultry veterinarian can test a blood sample, tracheal swab, or eggs to see if it is Mycoplasma.

If my birds have Mycoplasma, will it make me and my family sick?

No, Mycoplasma does not make humans sick. However, remember that if you're around sick birds you can spread the bacteria to other birds!

If my birds have Mycoplasma, can I still eat the eggs?

Yes, the eggs are still safe to eat, as long as the birds are NOT being treated with antibiotics.

How do I treat it?

Most birds will recover, but some birds can die from Mycoplasma. There is no cure for Mycoplasma and once a bird has it, they will have it for life and infect other birds. There are some antibiotics available through a veterinarian that may decrease the symptoms of Mycoplasma and speed up the bird's recovery but no treatment will prevent it from spreading to other birds. If your birds test positive for Mycoplasma, the lab or veterinarian can help you decide what to do.

What can I do to prevent it?

Don't let Mycoplasma walk in the door: Make sure you're not accidentally bringing Mycoplasma home to your birds. Easy steps you can take to prevent this include:

Have a set of **clothes or coveralls** to wear only when working with your own birds or use disposable coveralls (available at paint and hardware stores.)

Have a pair of **boots** that you only use in the area with your birds and use a footbath which is a shallow pan or bucket with disinfectant and a scrub brush that you can use to clean your shoes before AND after working with your birds. You can find these supplies at your local feed and farm supply store:

Disinfectant to kill bacteria (follow directions on label):



Nolvasan,

DC&R

Original Lysol concentrate

Bleach

Be sure to clean out and replace the footbaths often –they will not work if they sit out too long or fill up with dirt. If using bleach, replace daily and keep footbath covered when not in use.



Disposable shoe covers (also available at paint stores or Walmart) can be used and come in handy if you have friends visiting your birds.

Do not share any **tools, cages or other equipment** with other bird owners without cleaning and scrubbing it with disinfectant first.

If you have **visited other birds**, even if you did not touch them, gone to a show or auction, make sure to shower and change clothes before working with your own birds. Make sure that anyone in contact with your birds follows the same rules. It is a good idea to post signs outside where you keep your birds to keep people from entering the area ("do not enter" or "no trespassing" signs are available at farm supply stores).

Keep the **area where you keep your birds** clean and don't let extra feed pile up since it might attract rats or wild birds that could bring Mycoplasma in to your birds.

One bird is all it takes: Buying birds from auctions, neighbors, craigslist, or flea markets always carries the danger of getting a bird infected with Mycoplasma. Many sellers may be honestly unaware that their birds have it and, remember, a bird with Mycoplasma may



not show signs for over 3 weeks or never at all. If a seller states that they are certified by NPIP

(National Poultry Improvement Plan), their birds may have been tested for other diseases (Avian Influenza and Pullorum) but it does not guarantee they were tested for Mycoplasma.

The best thing you can do to protect your own birds when you bring home new ones is to **separate the new birds from the others for 30 days**. This must be a completely separate housing area with no contact allowed with the other birds. Also, remember to use different clothes, shoes, and tools with the new birds and always

visit and feed the new birds last. NEVER work with the new birds and then visit the rest of the flock afterwards. You may also get your new birds tested for Mycoplasma at very little or no cost to you (see information below).

While these steps may seem like a lot of work, remember that Mycoplasma is forever –once it's in your flock it's there to stay, that's why the best treatment is prevention!







Who to ask for more help:

If you have more questions about Mycoplasma, how to best protect your flock or would like your birds tested, please contact the **GA Poultry Laboratory Network**; they can answer any questions you may have about your birds' health and send a veterinarian to check on your birds and test them if necessary.

In North Georgia, call the Oakwood lab at 770-535-5996

In South Georgia, call the Tifton lab at 229-386-8491

or visit the GPLN website http://www.gapoultrylab.org

You may also call the **GA Dept. of Agriculture** at 404-656-3600 or **US Dept. of Agriculture** at 1-866-536-7593 to report sick birds. They will also provide veterinary help at no cost to you.

Website for the GA Dept. of Agriculture: http://agr.georgia.gov

USDA Biosecurity for the birds website –tips for keeping your poultry healthy, videos, games for children: <u>http://www.aphis.usda.gov/animal_health/birdbiosecurity/</u>

The **University of Georgia** has an extension office for poultry which can answer your questions on any poultry topic. They can be reached at 706-542-1325 in North Georgia or at 229-386-3363 in South Georgia or on their website which has info on lots of poultry topics including bird behavior, the best feed for your birds and housing your birds. <u>http://www.poultry.uga.edu/extension/</u>

For more prevention tips and tools, visit these sites:

How to set up and correctly use a footbath: http://ucanr.org/freepubs/finalpage.cfm?s=8281&cat=33&subcat=0

Biosecurity "Do Not Enter" signs to print and use on your own farm: http://vbs.psu.edu/extension/resources-repository/images/biosecurered.jpg/view

http://vbs.psu.edu/extension/resources-repository/images/biosecureyellow.jpg/view

Disposable plastic boot covers and other supplies : http://www.gemplers.com/product/WEBG32750/Disposable-Boot-Covers-Elastic-Top

http://www.enasco.com/product/C14019(Y)N?sku=C14019%28Y%29N&userZIPCODE=30605

Tractor Supply Co. "Know-How Central" section on poultry: <u>http://www.tractorsupply.com/content/knowhow/chicks/raising_chicks_contagious_disease_biosecurity_plan</u>





Mycoplasma Positive: What are my options?

If you decide to have your birds tested for Mycoplasma, a poultry veterinarian or technician will come and collect samples from your birds (blood, a tracheal or oropharyngeal swab, or eggs) or they may ask you to bring samples directly to the laboratory. These samples will then undergo several tests to look for Mycoplasma and then determine which type of Mycoplasma is present.

If your birds have been tested for Mycoplasma and are positive for either

MG or MS, there are a couple of options for how you choose to handle the disease. The laboratory that provided the testing and a poultry veterinarian will work with you to answer any questions you may have and help you decide what is the best option for your flock.

Start Over, Start Clean

Remember, once Mycoplasma is present it will always be in the flock; because of this, the best option for getting rid of the disease is to get rid of all the positive birds and start again with Mycoplasma negative birds. This entails depopulation of all the birds in the infected flock, cleaning and disinfecting the housing area and leaving it vacant for at least 2 weeks and then getting new birds that have been tested or certified Mycoplasma negative. If this is not a realistic option, there is another option for managing the disease, keeping in mind that it will have to be closely managed for the lifetime of the flock.

Treat and Manage

There are several antibiotics that may be used to treat Mycoplasma infections although none of them will cure the disease or completely prevent transmission to other birds. Treatment may decrease the birds' symptoms, help them recover faster, and help decrease transmission to new birds. Treatment may need to be repeated monthly to keep Mycoplasma at low levels since the positive birds will carry it for life.

The antibiotics used to treat Mycoplasma include erythromycin and tylosin, and tetracyclines, such as oxytetracycline and doxycycline. These are commonly available in feed stores, on the internet, and from poultry supply stores and catalogs under brand names such as Gallimycin, Tylan, Tylovet, OxyTet, BioMycin, ChlorTet, Duramycin, Terramycin, Doxyvet, and others. Most are available in either oral or injectable solution. It is very important to follow all instructions for poultry on the label and observe the withdrawal times listed.

In addition to treating the birds with antibiotics, the disease will have to be managed for the life time of the flock and any new birds may become infected. Strict biosecurity measures (separate clothing, shoes, and equipment, footbaths, restricting access, etc.) will help prevent spread of Mycoplasma from your flock to others. Also, no birds from a positive flock should be taken to shows, auctions, flea markets, or exchanged with friends and neighbors. It is important to remember that even if only a few individual birds test positive, any other birds in the flock may be carrying the disease and should be considered positive also.

If you decide to keep and treat your flock, keep in mind that the disease may reappear at any time and new birds added to your flock will eventually become positive. It is your responsibility to keep Mycoplasma from spreading to other flocks and especially to nearby neighboring flocks, including commercial poultry farms.

Mycoplasma

- 17 Tiny, slow-growing bacteria
- 13 Different types in different species
- 13 2 types: MG and MS seen in chickens and turkeys

Spread

- 17 Other birds: through eggs, feathers, droppings
- 17 Other animals: rats, wild birds
- 17 Tools used around infected birds
- 13 YOU-on clothing, shoes, and hair

LOOK

for Signs

- 17 swollen face and eyelids
- 13 MS: lameness. pale/discolored comb, swollen
- joints, ruffled feathers
- 17 Both: listlessness, weight loss. decreased appetite
- 17 May not appear for 3 weeks
- May see only some signs or none at all 17
- 17 Some birds may die
- 17 Birds with no signs can still carry and spread disease

Threat to People? NO.

- 17 Will not make humans sick
- 17 Eggs still safe to eat (as long as birds are NOT being treated with antibiotics).

Mycoplasma Quick Guide

Treatment

- 17 Have birds tested
 - Blood test or tracheal swab
- 13 Remove all positive birds OR
- 13 Treat infected birds with antibiotics available through vet or feed store
 - Tylosin, Tetracyclines
- 17 Recovered birds will infect any new additions

Prevention

- 17 Basic biosecurity
- Separate set of clothes and shoes to 17 work with birds
- 17 Footbaths: bucket, brush, disinfectant
 - DC&R, Nolvasan, 0
 - **Original Lysol, Bleach**
- Disposable shoe covers 17
- Do not share equipment/Always clean 17 and disinfect first!
- 13 Visited other birds \rightarrow shower and change clothes before working with own birds
- 17 Isolate new birds for 30 days
 - Completely separate housing
 - Separate clothes, shoes, 0 equipment
 - Always visit/feed new birds last 0
- 17 Test new birds

Information and





- **GA Poultry Lab Network** 17
 - www.gapoultrylab.org 0
 - N. GA (Oakwood) 770 535 5996 0
 - S. GA (Tifton) 229 386 8491 0
- GA Dept. of Agriculture 17
 - http://agr.georgia.gov 0
 - 404 656 3600 0
- 17 USDA
 - Biosecurity for the birds: 0 www.aphis.usda.gov/animal he alth/birdbiosecurity
 - Report sick birds: 0
 - 1 866 536 7593
- University of Georgia 17 **Poultry Extension**



Sick Birds

- o <u>www.poultry.uga</u>
 - .edu/extension
- 706 542 1325 (N. GA) 0
- 229 386 3363 (S. GA) 0





PROTECT

Your Birds

Signs MG: runny nose,