



Fuzzy Spirit

Perth Rat Rescue & Rehab



3 Month Spirit

Mycoplasmosis

Mycoplasmosis is one of the most seen respiratory illnesses seen in domestic Rats. To understand how Mycoplasmosis affects our Rats we need to explain where this bacteria is found in a naturally delivered Rat. (Most Rats that are Myco free are Lab Rats who have been delivered via c-section to stop the bacteria being passed to the young during birth).

Most domestic Rats that are available to the public via pet shops and home breeders generally carry a form of Mycoplasmosis (aka Myco) that is “dormant” until the Rats immune system is low due to stress, poor living condition, incorrect foods etc then the Myco Bacteria starts to take a hold resulting in a respiratory illness. Myco is carried in the upper respiratory system of Rats and Mice. Transmission is by direct contact between mother and babies, aerosol over short distances, sexual transfer, in the birth canal, and other animal carriers, including humans. We are capable of carrying it in our nasal passages. Myco is not pathogenetic to humans, but we may infect our Rats and Mice, just as we can pass Strep infection to them (Rats can not get human colds and flu, strep infections in Rats are usually fatal within 3 days without vigorous antibiotic treatment).

The first signs of a respiratory illness tends to be frequent sneezing (healthy Rat will sneeze occasionally, just like humans. Air pollutants and other allergens can also cause constant sneezing, even if the Rat does not have a respiratory illness.), or the Rat is producing irregular or regular sounds while breathing. Any breathing sounds made by your Rat is NOT normal and generally indicates a respiratory illness that will need to be treated by your vet as soon as possible to help avoid permanent damage to your Rats lungs.

The underlying cause of nearly all respiratory illness in Rats and Mice is Myco. Viral infections can also cause some forms of respiratory problems and can co-exist with Myco, where symptoms of one can overlay the symptoms of the other, making exact diagnosis of the pathogen causing the illness very difficult. Mycoplasmas are delicate and tend to have slow rates of growth. It is important to note that once Myco is allowed to take root in your Rats system, the organism may be nearly impossible to get rid of. Correct and prompt antibiotic treatment is essential whenever Myco is suspected. Only certain antibiotics have an effect on Myco, and that class of antibiotics may be inappropriate to combat other infections present.

Susceptibility to Myco can significantly be affected by environmental stress factors and pollutants; of special interest to pet owners is the increase of susceptibility by exposure to ammonia. Rat fecal material especially urine releases ammonia into the air, which in turn irritates the mucous membrane. Rats that are kept in aquarium type housing are generally affected the worst due to the enclosed nature of an aquarium and that ammonia is heavier than air most owners do not realise its presence unless they place their head inside the aquarium (please see our [Aquarium](#) page).

Some factors that can encourage Myco to become an issue in your Rat or Mouse are:

- Over Crowding,
- Poor Ventilation
- High Ammonia Levels
- Unclean Cage or Environment
- Pesticides (fly spray) or other aerosols.
- Phenols from Pine or Cedar Bedding (Some hardwood shavings and dust)

Signs that your Rat may have a respiratory infection due to Myco are generally slow to appear, very subtle to start with and gradually worsen over a few weeks to a few months. The first symptom is generally frequent sneezing but then this may go away and then there is generally an amount of time that passes without any other symptoms. However, Myco can cause lung damage even if there has not been any overt symptoms. Myco does not cause symptoms in animals under 3 months old, if younger animals contract a respiratory infection then this is not Myco and will need to be treated by your Vet as soon as possible.

Other signs to look out for if you suspect your Rat has a respiratory infection are:

- Head tilt (can progress to rolling behaviour)
- Mucous from eyes and nose
- Wheezing
- Breathing Sounds
- Laboured Breathing
- Weight Loss
- Loss of Appetite
- Poor Coat Condition

A Rat that is infected with Myco is usually active and eats normally until the disease is quite advanced however an acute secondary infection can cause rapid onset of symptoms which can include the above listed signs plus a hunched posture, porphyrin staining from runny eyes and nose and difficulty breathing. Prompt antibiotic treatment is required to save a Rat with acute respiratory infection. A Rat that refuses to eat or drink will generally be given medications via injection by your vet. Short term antibiotic treatment (2-3 weeks) is normally sufficient to combat secondary infections, but only long term (4-6 months) continuous antibiotic treatment will have any effect on arresting the underlying Myco infection. Long term treatment also requires special dietary consideration, vitamin and mineral supplementation which are depleted during such treatments together with probiotics. If prompt vet treatment has not been given to the affected Rats or Mice their death is generally slow and painful but almost always guaranteed.

Genital Mycoplasmosis

Genital Myco occurs more frequently in female rats. The infection is not usually apparent but reduced fertility, foetal deaths, embryonic reabsorption and small litters may result. Infection of the fallopian tubes and uterus frequently occurs in Rats that have respiratory Myco, but can also take place independently.

NB: None of the organisms causing respiratory infections in Rats are infectious to humans.

Some antibiotics that are regularly used to treat Myco and secondary infections are Baytril, Vibravet (doxycycline) and tetracycline. For more information about which product may help your pet please seek the medical advice from a vet that is well educated on Rat health.

*We would like to thank Mr D.Wiggerman for supplying us with reliable information regarding this and other matters.