

Respiratory disease in rodents is most commonly caused by a bacteria called *mycoplasma pulmonis*, which is very resistant to medications and often requires lifelong medication. Following infection with *mycoplasma pulmonis* rodents become more susceptible to other bacteria and viruses which can form a respiratory disease complex and because there are multiple organisms involved numerous medications are often required.

Clinical signs of respiratory disease include sneezing, wheezing, coughing, grunting, reduced activity levels, weight loss, reduced appetite, respiratory effort, excess nasal discharge and tears which may be red in colour (porphyrin stained discharge can be normal)

Most rodents will be treated with oral antibiotics to begin with and then a combination of medications may be used as the disease progresses. Anti-inflammatory medications are often used when activity levels and appetite are reduced and bronchodilators may be required in the early to mid stages of the disease. Steaming or nebulisation can be done to help clear the chest and to assist in the delivery of medications to the lungs. Pulse therapy (periods on medication followed by periods off medication) is often used to provide long term relief from symptoms and regular rechecks are required as the treatment regime may need to be frequently updated to suit the individual rodent.

Unfortunately very few rodents completely recover from this respiratory disease. Medications are used to slow the progression of the disease and improve the quality of life for as long as possible, however many rodents will decline after a number of months or years despite an initial response to medications. X-rays can be taken and may assist in determining the severity of the respiratory disease and may help to establish an expected prognosis.

Many rodents will contract *mycoplasma pulmonis* at a very young age and newly acquired rats are often already in the early non-symptomatic stages of the disease. To prevent the disease spreading make sure there is no contact between diseased and healthy rodents and quarantine all new rodents for at least two months before introducing them to any others.

Aim for a lean body condition and encourage daily physical activity as overweight rodents have more trouble coping with the disease than those at a healthy weight. Feed a well balanced low fat diet as well as fresh vegetables, with treats and fruit fed in lower quantities. We recommend Vetafarm Rodent Origins or Oxbow Garden Select for rats and mice and Oxbow Essentials for guinea pigs.

High levels of ammonia in the urine, odour from uncleaned enclosures as well as dust in the air will predispose rodents to developing respiratory problems. To maintain good air quality make sure to clean out enclosures regularly with a disinfectant solution such as F10, ensure adequate ventilation, keep away from drafts and do not use wood shavings or dusty substrates as litter. Newspaper, blankets and bath mats can be good alternatives to dusty substrates and many dust free litter options are available.