

Chronic Respiratory Disease (CRD) in Rats and Mice

Introduction

Chronic Respiratory Disease (CRD) is a common and complex infection that occurs in rats and occasionally mice. Animals may be infected as early as birth, and exhibit no clinical signs until later in life as the disease develops and progresses in severity. This infection cannot be cured and will often have periodic flare-ups. The goal of medical management is to control the signs and symptoms to maintain the animal's quality of life. Together with your veterinarian, the best plan for your pet can be established.

QUICK FACTS



- CRD is nonreversible and progressive
- Bacteria (such as *Mycoplasma*) and viruses are often involved
- On-going management is necessary for CRD

Clinical Signs

Affected animals may present with an upper- or lower-respiratory tract infections, ear infections or any combination of these.

Respiratory tract symptoms include:

- Sneezing
- Nasal and/or eye discharge
- Wheezing/crackling sound
- Red "tears" (porphyrin staining)
- Difficulty breathing



porphyrin staining

Inner or middle ear infection symptoms include:

- Circling
- Abnormal eye movement
- Incoordination
- Head tilt

Other symptoms include:

- Decreased appetite/weight loss
- Poor hair coat

Diagnostics

Key diagnostics include:

- Physical exam
- Chest X-rays (Radiographs)
- Bloodwork

Treatment(s)

Patient management at home may include:

Husbandry improvements

- Appropriate bedding
- Maintain ideal body weight
- Improved ventilation

Nebulization

Medications may include:

- Antibiotics
- Anti-inflammatories
- Immune support
- Medications to help open airways and improve breathing

Severe cases may require management in the hospital with oxygen support.

Working with your veterinarian will allow for the best course of treatment for your pet.

Risk to Others

This is an infectious and contagious disease to other rats and mice, but this does not necessarily mean separation from cage mates is required. Please speak to your veterinarian about what is best for your pet.

Risk Factors

Contact with other infected animals

Poor husbandry (overall care of the animal)

- Inadequate ventilation and sanitation
- Improper diet

Advanced age

Immune suppression

Photo credit: Dan Johnson, DVM