### Feline Upper Respiratory Disease Protocol TEMPLATE

Date Written:
Author:
Date Revised:
Date Implemented:
Persons Affected:

**Purpose:** The purpose of this document is to guide initial care for uncomplicated upper respiratory infections in cats.

#### **Definitions:**

- Feline Upper Respiratory Disease: Feline upper respiratory tract disease is a syndrome consisting of clinical signs that can include serous to mucopurulent ocular and nasal discharges, epistaxis, sneezing, and conjunctivitis. Clinical signs can be acute (≤10 days) or chronic (>10 days).
- Feline Upper Respiratory Infection: The term "upper respiratory infection (URI)" is reserved for cats with clinical signs of URTD that are directly associated with one or more of the known pathogenic viral, bacterial, or fungal organisms.

**Background:** Feline URTD is caused by a complex of viral and bacterial pathogens that are highly contagious among cats housed in high density/high turnover facilities. The most common feline respiratory pathogens include:

- Herpesvirus (FHV)
- Calicivirus (FCV)
- Bordetella bronchiseptica bacteria (Bordetella)
- Chlamydophila felis bacteria (Chlamydophila)
- Mycoplasma felis bacteria (Mycoplasma)
- Streptococcus zooepidemicus bacteria (Strep zoo)

While any of these pathogens can cause a primary infection, most cats frequently have mixed viral and bacterial co-infections. Recent studies in the U.S. and Europe have provided evidence that the viral pathogens are the more common primary cause of respiratory infections in cats in shelters.

If cats are otherwise healthy and are stable, a veterinarian need not be involved in treatment; treating cats in their areas may speed improvement as this limits stress. Any complicating factor, however, may require elevation to a veterinarian.

### **Procedures:**

When a cat has signs consistent with URI, a veterinary technician will perform a basic exam and document findings in the medical record.

The tech exam will include:

- Assessment of hydration
- Temperature, pulse, respiration, mucous membrane color and CRT
- Oral exam for ulcers
- Body condition assessment
- Appetite/history assessment
- Weight

Topical medications may be used in any age patient. Doxycycline should only be used at 4 weeks of age or greater (earlier is at veterinarian discretion).

If ocular discharge is present:

- If only clear ocular discharge, no treatment is needed. May monitor in place with appropriate use of PPE by staff.
- If conjunctivitis, begin erythromycin or oxytetracycline (Terramycin) ophthalmic ointment BID for 7 days and treat in place with appropriate use of PPE by staff.
- If discharge is yellow or opaque or is present, move cat to isolation and begin erythromycin or oxytetracycline (Terramycin) ophthalmic ointment BID for 7 days and doxycycline 10mg/kg SID x 7 days or until 3 days after resolution of signs (if greater than 4 weeks of age). Follow tablets with 6ml of water.

If nasal discharge and/or sneezing:

- For clear nasal discharge or sneezing, start nebulization with saline only (or steam treatments in the foster home if nebulization is not available). May treat in place in shelter kennel (do not need to be moved to isolation).
- For colored, bloody, or opaque nasal discharge, move to isolation and start doxycycline 10mg/kg SID x 7 days (if greater than 4 weeks of age) or until 3 days after resolution of signs. Follow tablets with 6ml of water.

For fever greater than 102.5 but less than 104 degrees:

- Move to isolation.
- Start doxycycline 10mg/kg SID (if greater than 4 weeks of age). Follow tablets with 6ml of water.
- Give subcutaneous fluids: LRS 20ml/kg 1-2 times daily (unless known heart disease or not absorbing fluids administered previously)

For mild clinical dehydration (tacky mucous membranes, slightly prolonged skin

tent):

• Give subcutaneous fluids once daily as needed: LRS 20ml/kg (unless known heart disease or not absorbing fluids previously administered)

For decreased appetite:

• Give mirtazapine 3.75mg (total dose per adult cat) PO every 72 hours as needed.

For oral ulceration and/or lameness in conjunction with URTD:

• Consult a veterinarian to begin buprenorphine and/or sucralfate depending on severity.

If any of the following are present, a veterinarian should be consulted in a timely manner:

- Complete anorexia for longer than 24 hours
- Vomiting more than once
- Fever > 104 degrees
- Significant lethargy
- Significant weight loss
- Patient is older than 10 years without history of previous URI (can suggest underlying condition causing immunosuppression)
- Any other exam findings or clinical signs suggestive of more complicated or severe disease
- Clinical signs persisting longer than 10 days without improvement
- Recurrence of URI within 5 days of completion of treatment

Cats not exhibiting clinical signs of URI for 3 or more days that have been isolated may be removed from isolation. Cats not exhibiting clinical signs of URI with PPE requirements (treatment or monitoring in place) may have PPE/handling restrictions lifted after 3 days.

### **References:**

Antimicrobial use Guidelines for Treatment of Respiratory Tract Disease in Dogs and Cats: Antimicrobial Guidelines Working Group of the International Society for Companion Animal Infectious Diseases. Lappin, et. al. https://www.vin.com/members/cms/project/defaultadv1.aspx?id=8150896&pid=604&

Feline Respiratory Infections in Animal Shelters. Crawford, Cynda. https://sheltermedicine.vetmed.ufl.edu/files/2017/01/Feline-respiratory-infections-inshelters.2018.pdf

Feline Upper Respiratory Infection (URI) Discussion, UC Davis Koret Shelter Medicine Program

https://www.sheltermedicine.com/library/resources/?utf8=%E2%9C%93&site=sheltermedicine& search%5Bslug%5D=feline-upper-respiratory-infection-uri-discussion