

Goal for URI treatment: Provide low-stress supportive care with a less is more approach; to ensure URI patients are moved through the fostering system as efficiently as possible through a focus on timely care.

Method of transmission: Feline upper respiratory tract infections can be spread via direct contact, droplet transmission, or fomite transmission on hands and clothes, but are primarily brought on by stress. Cats cannot sneeze very far, so airborne transmission is less common.

Disease transmission prevention:

- Wear gloves when intermittently handling URI patients throughout the day.
- Handle healthy animals before handling URI patients.

Responsibilities of the foster family within the foster home for URI patients:

1. Provide a hide box and areas for perching for all cats (i.e. the ASPCA cardboard carrier).
2. Offer wet, warmed up food frequently for kittens eating on their own.
3. Observe and record patient's response to treatment:
 - a. Weigh every day at the same time.
 - b. Assess patient daily for appetite, hydration, and progression of signs.
4. For ocular disease, gently wipe discharge away from eyes with warm water on cotton ball twice daily.
5. Wash hands after handling URI patients.

Scenarios in which an LA Foster team member should make appointment with a DVM: If patient was healthy on intake or initially had mild clinical signs (clear eye or nose discharge) but was otherwise healthy and is now getting worse (losing interest in eating, developed colored discharge, increased lethargy).

Scenarios in which an LA Foster team member should make a follow-up appointment with a DVM: If patient does not appear to respond to prescribed treatment after 5-7 days, schedule a veterinary recheck as soon as possible.

- Always perform an FeLV test on any patient with chronic/refractory disease.
 - If positive, ensure patient has been thoroughly examined for signs of active FeLV infection. Discuss case with primary attending veterinarian and the Director of Volunteer & Kitten Programs for case management.
- Patient may require alternate or additional medication(s). Ensure ASPCA LA Foster team member has checked on foster compliance with treatments and has assessed whether stress in foster home is contributing to prolonged disease.
- Mild dehydration may require subcutaneous fluids.
- Develops coughing or other signs indicating potential pneumonia. May require chest x-rays.
- Eye(s) are becoming progressively worse. May require antiviral ophthalmic drops and/or enucleation.
- Reduced appetite for longer than 3 days or is not gaining weight significantly, but is not anorexic and is not losing weight. May require syringe feeding training for fosters. May require examination for oral ulcers and associated treatment via pain medication, appetite stimulant, subcutaneous fluids, etc.

Treatment Categories:

Category 1 – mild URI with no secondary infection



Signs are limited to sneezing; no to minimal nasal or ocular discharge. If nasal or ocular discharge is present, it is clear. Cat is bright and alert, otherwise acting normally (playful, interacting with littermates, not hunched in a corner), has a good body condition score, and eating well on its own. These cats may not immediately require medication. These cats can be kept with littermates and should be monitored for worsening of signs (littermates should also be monitored for clinical signs).

Treatment:

- Use veterinary discretion to determine if treatment needs to be started. If patient is BAR and robust, consider avoiding or delaying treatment. This may reduce patient stress and therefore allow the virus to run its course without secondary bacterial complications. Oral and/or ophthalmic medication may be sent home with the patient along with indications and instructions on when to start these medications, if the likelihood of clinical progression to a higher URI category is high and/or if littermates are severely affected.

Category 2 – conjunctivitis with no other signs



Signs are limited to clear or colored ocular discharge and/or squinting with no evidence of nasal discharge or, if nasal discharge is present, it is clear. Cat is bright and alert, otherwise acting normally, has a good body condition score, and eating well on its own. These cats require ophthalmic medications. These cats can be kept with littermates and should be monitored for worsening of signs (littermates should also be monitored for clinical signs).

Treatment:

- Start Tobramycin, Tetracycline, or Erythromycin (*drops for kittens*) – refer to program veterinarian for dosing
- Oral medication may be sent home with the patient along with indications and instructions on when to start these medications, if the likelihood of clinical progression is high and/or if littermates are severely affected.

Category 3 – URI with secondary infection



Signs include sneezing, colored nasal discharge, congestion. Cat may be lethargic/quiet but remains responsive. Cat has reduced appetite but eats on its own with encouragement. These cats require oral antibiotics. Isolation from littermates based on veterinary discretion, impact on socialization and the ability of foster parents to realistically separate kittens.

Treatment:

- Start Doxycycline by mouth once daily for at least 7 days – refer to program veterinarian for dosing.
- Because Doxycycline has good ocular penetration, try to avoid ophthalmic drops to prevent additional stress on the patient and stress on the foster parent related to administering additional medications.
- Administer warmed LRS fluids subcutaneously in clinic during presenting exam – refer to program veterinarian for dosing

Category 4 – URI with secondary infection and progressive conjunctivitis



Signs same as Category 3 plus colored ocular discharge and swollen conjunctiva. Cat has decreased appetite and is starting to become anorexic. These cats require oral antibiotics, additional medications, and more frequent rechecks. Isolation from littermates based on veterinary discretion, impact on socialization and the ability of foster parents to realistically separate kittens.

Treatment:

- Start Doxycycline by mouth once daily for at least 7 days – refer to program veterinarian for dosing
- Start Tobramycin, Tetracycline, or Erythromycin (*drops for kittens*) – refer to program veterinarian for dosing
- Administer Mirtazapine by mouth during exam and repeat every 3 days; send home at least one additional dose until patient can be rechecked – refer to program veterinarian for dosing
- Administer warmed LRS fluids subcutaneously in clinic at presenting exam – refer to program veterinarian for dosing

Category 5 – Worsening URI despite treatment for over 7 days



Signs progressing. Cat has decreased appetite or anorexia, dehydration, and possibly open mouth breathing. These cats require oral antibiotics, nutritional support, more frequent rechecks, and potentially further diagnostics.

Treatment:

- If patient is severely compromised, use veterinary discretion to determine whether patient can return to foster home for continued supportive care, requires hospitalization, or if patient should be euthanized.
- If the animal has shown some response to Doxycycline, but is slower in recovery than the typical kitten, continue Doxycycline for another 5 days. Ensure ASPCA LA Foster team member has assessed foster compliance in medication administration and the role of stress as a contributing factor to prolonged disease.
- Other considerations:
 - If clinical signs do not appear responsive to Doxycycline within 5-7 days, consider additional or alternative medications:
 - Switch to Clavamox twice daily for 5-7 days – refer to program veterinarian for dosing. If switching to Clavamox while severe ocular disease is present, additional antibiotic ophthalmic drops are required as Clavamox does not have good ocular penetration.
 - If patient has prolonged disease that is not responsive to second line antibiotic treatment, use veterinary discretion to determine whether antiviral therapy should be initiated or if euthanasia should be considered. Antivirals should be reserved for kittens with the most severe illness, prolonged and refractory clinical signs, and/or kittens with severe ocular disease.
 - If only ocular disease is present, start Cidofovir antiviral ophthalmic drops twice daily for at least 7 days.
 - If additional clinical signs are present, start Famciclovir antiviral medication orally twice daily for at least 7 days. – refer to program veterinarian for dosing
 - If prescribing Famciclovir, avoid also prescribing Cidofovir since Famciclovir has good ocular penetration.
 - If patient has not eaten for over 2 days, see if patient is amenable to syringe feeding. If so, train foster on syringe feeding.
 - Administer Mirtazapine by mouth during exam and repeat every 3 days; send home at least one additional dose until patient can be rechecked – refer to program veterinarian for dosing
 - Administer warmed LRS fluids subcutaneously in clinic at presenting exam – refer to program veterinarian for dosing

After care for all 5 categories of URI:

Resolution of Clinical Signs:

- If patient has been medically treated for at least 5-7 days and has had no clinical signs for at least 2 days, patient may be spayed/neutered.
- Although patients may continue to shed URI pathogens, the risk to other cats is significantly decreased after resolution of clinical signs.

Miscellaneous Supportive Treatment of Feline URI for Veterinarian to Consider:

- Conjunctivitis
 - If cat is not improving after second line antibiotics, including ophthalmic drops, and/or ocular disease is rapidly worsening, prescribe Cidofovir.
- Dehydration
 - If severe and prolonged (increased skin tent, very crusted discharge), consider whether foster can provide subcutaneous fluids once daily at home.
- Congestion
 - Place triple antibiotic ointment, such as BNP, on nose if sores/irritation develop.
- Inappetance > 2 days
 - Use veterinary discretion to determine if patient should remain in foster home. If patient remains in foster home, ensure subcutaneous fluids are being administered at least once daily.
 - Attempt the following: warm food slightly, offer several varieties of stinky canned cat food, encourage the cat to eat by petting and talking softly.
 - If steps given above fail, give Mirtazapine orally every 3 days – refer to program veterinarian for dosing
 - If the cat has not eaten despite supportive care and appetite stimulants by day 2-3, use veterinary discretion to determine if patient should remain in foster home. If patient remains in foster home, then start syringe feeding canned A/D with a catheter tipped syringe. Syringe feeding must be initiated much sooner in kittens than adults.