

## Medication Usage Chart for Rat Respiratory Illnesses and Other Conditions

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From the July/August 2000 Rat & Mouse Gazette

DRUG	DOSAGE	USEFUL INFORMATION
<p><b>AMIKACIN</b></p> <p>BRAND: AMIGLYDE-V</p>	<p>5mg/lb BID or TID, SQ or IM .10cc/lb for 7 to 14 days</p>	<p>Bactericidal, broad-spectrum antibiotic. Good for respiratory infections. Can cause kidney damage, but it is not at all common, however, encourage the rat to drink plenty of liquids to be safe. Should be used for severe infections, or after other possible drugs have failed. Relatively expensive. Prescription needed.</p>
<p><b>AMINOPHYLLINE</b></p> <p>250mg/10mL solution</p>	<p>2.5 to 5mg/lb BID or TID, SQ .10 to .20cc/lb</p>	<p>Bronchodilator. Relaxes and expands bronchial tubes, helping rats to breathe easier in cases of pneumonia. However, it should be used with caution as it sometimes has a stimulant effect which can cause an already stressed rat to have a panic attack. Injectable and oral forms available. Inexpensive. Prescription needed.</p>
<p><b>AMOXICILLIN</b></p> <p>BRANDS: AMOXI-DROPS, BIOMOX, ROBAMOX</p>	<p>10mg/lb BID, PO .20cc/lb for 10 to 14 days</p>	<p>Bactericidal, mild broad-spectrum antibiotic. Good to prevent infection after surgery or injury, for urinary tract infections, or secondary infections. Does not attack <i>mycoplasma</i> directly, but in cases of multi-factorial infection, may kill off the secondary infection allowing the immune system to get the <i>mycoplasma</i> infection back in check. Works well in combination with Gentocin. Bubble Gum flavored most rats like it. Inexpensive. Prescription needed.</p>
<p><b>AMOXICILLIN/CLAVULANIC ACID</b></p> <p>BRAND: CLAVAMOX</p>	<p>6.25mg/lb BID, PO .15cc/lb for 10 to 14 days</p>	<p>Bactericidal, slightly more broad-spectrum antibiotic than amoxicillin. Good to prevent infection after surgery or injury, for urinary tract infections, or secondary infections. Does not attack <i>mycoplasma</i> directly, but in cases of multi-factorial infection, may kill off the secondary infection allowing the immune system to get the <i>mycoplasma</i> infection back in check. Works well in combination with Gentocin. Especially good for treating skin and soft tissue infections such as abscesses. Tasty and easy to give. Inexpensive. Prescription needed.</p>
<p><b>AZITHROMYCIN</b></p> <p>BRAND: ZITHROMAX PFIZER</p>	<p>4 to 8mg/lb BID-SID, PO .1 to .2cc/lb BID for the first 14 days, then .1 to .2cc/lb SID for another 14 days, if needed</p>	<p>Bacteriostatic, broad-spectrum antibiotic. Good for respiratory infections. Has been shown to have excellent results on younger rats, but is less effective on chronic, older rats. Use in combination with Doxycycline for better results in these cases. (Caution: there have been two reported cases of stroke using this combination, although they have not been definitively connected to use of either drug.) Does attack <i>mycoplasma</i> specifically. Cherry flavored most rats love it. Expensive. Prescription needed.</p>

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<p><b>CEFADROXIL</b></p> <p>BRAND: CEFA-DROPS FORT DODGE</p>	<p>10mg/lb BID, PO .20cc/lb for 10 to 30 days</p>	<p>Bactericidal, broad-spectrum antibiotic. Great to prevent infection after surgery or injury, for urinary tract infections, or secondary infections. Does not attack <i>mycoplasma</i> directly, but in cases of multi-factorial infection, may kill off the secondary infection allowing the immune system to get the <i>mycoplasma</i> infection back in check. Works well in combination with Gentocin. Pineapple-Orange flavored most rats love it. Relatively inexpensive. Prescription needed.</p>
<p><b>CHLORAMPHENICOL PALMITATE</b></p> <hr/> <p><b>CHLORAMPHENICOL SODIUM SUCCINATE</b></p>	<p>25 to 90mg/lb TID, PO Must be obtained from compounding pharmacy</p> <hr/> <p>15 to 25mg/lb BID, SQ or IM .15cc to .25cc/lb for 7 to 14 days</p>	<p>Bacteriostatic, broad-spectrum antibiotic that penetrates tissues other antibiotics cannot (e.g., central nervous system and eyes). Effective against <i>mycoplasma</i>. Should not be used in combination with Tylan, Erythromycin, or Zithromax. Use with caution. Oral form may be obtained from a compounding pharmacy. Mixed to order in any flavor you request. Expensive. Prescription needed.</p>
<p><b>CISAPRIDE</b></p>	<p>.2 to .4mg/lb</p>	<p>May be helpful in some cases of Megacolon (bloat). Success has been achieved in a small number of rats with this condition, however, there are still no known cases of it working for babies found to have megacolon. Prescription needed. Note: Rumor has it that this drug will soon be discontinued in the United States.</p>
<p><b>DEXAMETHASONE</b></p> <p>BRAND: AZIUM 2mg/mL solution</p>	<p>.05 to 1mg/lb SQ or IM .025 to .15cc/lb</p>	<p>Quick-acting anti-inflammatory corticosteroid which can be used as supportive therapy in inflammatory conditions such as pneumonia, inner-ear infections (wry neck/head-tilt), and injury. Use only for very short periods. Can be expensive if purchased as single injections in veterinary clinics. Prescription needed.</p>
<p><b>DOXYCYCLINE</b></p> <p>100 mg capsule in 4cc water/fresh daily</p>	<p>2.5mg/lb BID, PO .10cc/lb for 14 to 30 days</p>	<p>Bacteriostatic, broad-spectrum antibiotic related to tetracycline, but better. Active against <i>mycoplasma</i>. Great used in combination with Baytril or Zithromax. (Caution: there have been two reported cases of stroke using this combination, although they have not been definitively connected to use of either drug.) No milk products with this drug. Drug company will not guarantee drug stability beyond one day after mixing. Horrible taste when mixed with water, but there is some controversy over efficacy when mixed with VAL syrup. Inexpensive. Prescription needed.</p>
<p><b>ENROFLOXACIN</b></p> <p>BRAND: BAYTRIL 2.27% CIPROFLOXACIN (human equivalent)</p>	<p>5mg/lb BID, PO .20cc/lb for 14 to 30 days(INCREASED 4 TIMES) 2.5 to 5mg/lb BID, PO</p>	<p>Bactericidal, broad-spectrum antibiotic once touted as being the miracle drug for <i>mycoplasma</i>, but we've found that using the recommended dose, symptoms return very soon after ending treatment (although some rat owners report having excellent results). Better results have been achieved using much higher doses (as shown). Use in combination with Doxycycline for best results. Injectable form tastes horrible and must be mixed with something to make it palatable. Can also be nebulized. Relatively expensive. Prescription needed.</p>

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<p><b>ERYTHROMYCIN</b></p> <p>BRAND: ORNACYN PET SHOP BIRD MEDICATION</p>	<p>5 to 10mg/lb TID, PO 1/2 to 1 tablet in 2oz. water mixed fresh daily or 1/8 tablet mixed in food TID</p>	<p>Related to Tylosin, but common side effect is gastrointestinal upset so it's probably best to use Tylosin for <i>mycoplasma</i> symptoms. However, it can also be effective against <i>Strep</i>, <i>Staph</i>, and <i>Corynebacterium</i> infections. Should not be used with Chloramphenicol or the Lincosamides. Injectable form is painful. No prescription needed. Inexpensive. <b>NOTE: PET SHOP BIRD ANTIBIOTICS ARE NOT VETERINARIAN RECOMMENDED</b></p>
<p><b>GENTAMICIN</b></p> <p>BRAND: GENTOCIN 40 mg/mL solution Generics available</p>	<p>1 to 2mg/lb BID, SQ or IM .025 to .05cc/lb, BID for 7 to 14 days</p>	<p>Bactericidal, broad-spectrum antibiotic. Great for treating severe respiratory disease and secondary bacterial infections. Best used in combination with Cefa-Drops, Clavamox, or Amoxicillin. Can cause kidney damage, but it is not at all common, however, encourage the rat to drink plenty of liquids to be safe. Can also cause problems with the inner ear resulting in loss of coordination (also rare). <b>TOXICITY STUDIES: No toxic effects were observed in rats given gentamicin sulfate 9.09 mg/lb once daily for 24 days.</b></p>
<p><b>IVERMECTIN</b></p> <p>BRAND: IVOMEK Must be diluted</p> <hr/> <p><b>HORSE WORMER PASTE</b></p> <p>BRAND: ZIMECTERIN, ROTECTIN 1, EQUIMECTRIN</p> <hr/> <p><b>SELEMECTIN TOPICAL</b></p> <p>BRAND: REVOLUTION (mauve package labeled for kittens)</p>	<p>100 to 200 mcg/lb PO or SQ Once a week for 3 weeks</p> <hr/> <p>Once a week for 3 weeks</p> <hr/> <p>TOPICAL: .10mL Once per month</p>	<p>A systemic parasiticide used to rid rats of mites and lice and most internal parasites (pinworms, roundworms, etc. not effective against tapeworms). The Ivermectin gets into the bloodstream and when the mite or louse bites the rat and drinks the blood, the bug dies. Injectable form can be used by injection or orally, however, Ivermectin is safer to use orally. Non-prescription, inexpensive.</p> <hr/> <p>Use horse wormer paste orally, the size of an uncooked grain of white rice once a week for three weeks. Non-prescription, inexpensive.</p> <hr/> <p>TOPICAL: application of selamectin can be less stressful for rats than injection. Follow directions on package. Prescription needed, somewhat expensive.</p>
<p><b>PREDNISONER</b> ORAL SOLUTION 1mg/mL</p>	<p>.25 to 1mg/lb SID, PO .25 to 1cc/lb</p>	<p>Anti-inflammatory corticosteroid which can be used as supportive therapy in inflammatory conditions such as pneumonia, inner-ear infections (wry neck/head-tilt), injury and cases of pituitary tumors. Use only for short periods in most cases as it depresses the immune system. However, it can be used long-term for chronic or advanced cases of respiratory disease (reduces inflammation of lungs making breathing easier). Available in palatable pediatric oral solution. Can be relatively expensive. Prescription needed.</p>
<p><b>SULFAMETHOXAZOLE/ TRIMETHOPRIM</b></p> <p>BRANDS: TRIBRISSEN, COTRIM, BACTRIM, SEPTRA</p>	<p>15mg/lb BID, PO .15cc/lb</p>	<p>Bactericidal, broad-spectrum combination (antibiotic) active against many secondary infections, but not <i>mycoplasma</i>. Great for urinary tract infections. Tastes terrible, so is difficult to get rats to take. Prescription needed. Inexpensive. Note: Sulfonamides without Trimethoprim are bacteriostatic.</p>

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<p><b>TETRACYCLINE</b></p> <p>BRAND: PANMYCIN</p> <hr/> <p>BRAND: TERRAMYCIN SOLUBLE POWDER</p> <hr/> <p>TETRACYCLINE CAPSULES</p>	<p>5 to 10mg/lb TID, PO .05 to .10cc/lb</p> <hr/> <p>1/2 to 1 teaspoon/8 oz water/Fresh daily</p> <hr/> <p>500mg of powder from capsules mixed into 1 litre of water Treat for 14 to 30 days</p>	<p>Bacteriostatic, broad-spectrum antibiotic. Good for treating mild respiratory infections and to prevent infection after surgery or injury. Active against <i>mycoplasma</i>. No milk products with this drug. Panmycin is prescription only. Inexpensive.</p> <hr/> <p>When Terramycin is mixed in water bottle, be sure to cover the bottle as the drug is light sensitive. You can keep the mixture in the refrigerator for 3 days, changing the water bottles on the cages daily. Place once ounce per rat in the water bottle daily. No prescription needed. Can be found in feed/tack stores. Inexpensive, but treating in the water is not desired. Remove moist foods from diet while treating with medication in the water to encourage drinking.</p> <hr/> <p>When tetracycline capsules are emptied into water bottle, be sure to cover the bottle as the drug is light sensitive. You can keep the mixture in the refrigerator for 3 days, changing the water bottles on the cages daily. Place once ounce per rat in the water bottle daily. Prescription/non-prescription available. Inexpensive, but treating in the water is not desired. Remove moist foods from diet while treating with medication in the water to encourage drinking.</p>
<p><b>TYLOSIN</b></p> <p>BRAND: TYLAN SOLUBLE POWDER</p>	<p>4.5mg/lb BID, PO, SQ or IM 66mg per litre of water 1/8 teaspoon/8 oz water/Fresh every 3 days Treat for 14 to 30 days</p>	<p>Bacteriostatic antibiotic used for treating mild and chronic symptoms of respiratory disease caused by <i>mycoplasma pulmonis</i>. An injectable form is available, but pain and swelling occur at the injection site. Remove moist foods from diet while Tylan is in the water to encourage drinking. You may also add sugar to decrease bitterness (change daily in this case). Should not be used with Chloramphenicol or the Lincosamides. Not the drug of choice. Frequently has no effect on symptoms. No prescription necessary. Inexpensive, but treating in the water is not desired.</p>
<p>SID = ONCE DAILY PO = ORALLY BID = TWICE DAILY</p>	<p>IM = INTRAMUSCULARLY (IM - NOT RECOMMENDED) TID = THREE TIMES DAILY SQ = SUBCUTANEOUSLY (SQ - INJECTED UNDER THE SKIN)</p>	
<ul style="list-style-type: none"> <li>◆ <b>Bactericidal Antibiotics</b> Kills the invading bacteria. Bactericidal antibiotics are the choice for severe, acute infections.</li> <li>◆ <b>Bacteriostatic Antibiotics</b> Prevents invading bacteria from reproducing, allowing immune system to kill them.</li> <li>◆ <b>IMPORTANT NOTE</b> The effects of many bactericidal antibiotics may be impaired when used in combination with bacteriostatic antibiotics. Please take this into account when choosing your drug combinations.</li> </ul>		