



CARE625.01 Treating Mice for Infection with Sulfamethoxazole and Trimethoprim in Drinking Water

The intent of this standard operating procedure (SOP) is to describe the use of sulfamethoxazole and trimethoprim in drinking water for treatment of mice with susceptible bacterial infections. This SOP is intended for use by CARE staff, or investigators as advised by the CARE staff. This SOP is approved by the Cornell Institutional Animal Care and Use Committee (IACUC) and the Cornell Center for Animal Resources and Education (CARE). Any exemption must be approved by the IACUC prior to its application.

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1. Introduction

Sulfamethoxazole and trimethoprim is a combination antibiotic, used to treat infections caused by susceptible organisms in mice.

2. Materials

- a. Sulfamethoxazole and trimethoprim oral suspension
Each 5 mL of oral suspension (AKA Bactrim) contains 200 mg sulfamethoxazole and 40 mg trimethoprim.
- b. Drinking water
 - i. Use tap water if the animals usually receive tap water
 - ii. Use acidified water if the animals usually receive acidified water.
- c. Water bottles

3. Procedures

- a. Offer the medicated water as the sole source of drinking water.
- b. Label each bottle of medicated water and/or each cage receiving treatment.
- c. Re-suspend medication daily by shaking the water bottle.
- d. Mix the suspension as follows:
 - i. Add 6 mL of oral suspension to 250 mL of water
 - ii. Add 24 mL oral suspension to 1 L water
 - iii. Add 120 mL oral suspension to 5 L water
- e. Discard suspensions prepared for ad lib drinking water after 2 days.
- f. Maintain a record of treatment.
 - i. Include in the records:
 - when treatment begins
 - each time a fresh solution is prepared
 - each time a fresh solution is provided
 - the date the treatment ends
 - ii. For a small number of animals, record treatment on a Treatment Card placed on the cage/s or in animal's health record.
 - iii. For large groups, maintain a Treatment Log in the animal room.

4. Safety

Store suspension at room temperature and protected from light in manufacturer's bottle.

5. Contingencies

Consult CARE staff (pager 800-349-2456) for questions on the use of medicated water.

6. Reference

1. Harkness, J.E., Wagner, J.E. *The Biology and Medicine of Rodents and Rabbits*; 4th Edition; Lea & Febiger: Philadelphia, PA, 1995.
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3. Allergens prevention:
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4. CARE SOP 707 Animal Related Injury
<http://www.research.cornell.edu/care/documents/SOPs/CARE707.pdf>
5. McIntyre, A., Lipman, N.S. Amoxicillin-clavulanic acid and trimethoprim-sulfamethoxazole in rodent feed and water: effects of compounding on antibiotic stability. *JAALAS* 46(5): 26-32.

