

**Rat-bite fever:  
Reply to Fosse, Murison, and Ursin**

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We agree that the best way to eliminate rat-bite fever is to ensure that research animals do not contain the pathogen. Furthermore, purchasing animals from suppliers that maintain high standards of microbiological quality is also important. At smaller schools with smaller animal budgets, however, the ability to purchase animals from quality suppliers may not be possible, and this necessitates inhouse breeding. Moreover, small labs may not have access to the facilities or money needed to ensure that animals are pathogen-free via microbiological surveillance. Indeed, the "Guide for the Care and Use of Laboratory Animals" (U.S. Department of Health and Human Services, Animal Resources Program, NIH Publication No. 86-23, 1985 revision) recommends that:

Methods of prophylaxis, diagnosis, therapy, and disease control should follow currently accepted practice. Diagnostic laboratory services supplement physical examination and facilitate diagnosis of diseases. These services should include gross and microscopic pathology, clinical pathology, hematology, microbiology, clinical chemistry, and other appropriate laboratory procedures. (p. 36)

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My animal lab at New Mexico Tech has studied flavor-aversion learning for 11 years. In these studies we typically inject from 60 to 90 animals on a schedule of from 10 to 20 sec per animal (see, e.g., Etsorn et al., 1987). Over the years, we have tried many methods and have found that the towel technique calms the animal much more than holding it bare-handed. Rarely do rats "squeak" or struggle, even when they receive minimal handling before or during a study. Yes, it does require practice, as does any other animal-handling method. We have even introduced handling controls in some of our studies to assess the impact of our technique (Etsorn et al., 1986).

Having witnessed the aftereffects of an animal technician stricken with rat-bite fever (which went undiagnosed for quite some time due to unfamiliarity of the symptoms), we remain convinced that animal users cannot be overly cautious in avoiding this disease (or any other animal-transported disease). Users should either avoid being bitten or use microbiologic surveillance of research animals. Furthermore, we feel that being bitten should not be construed as an initiation into a unique brotherhood—any animal bite should be treated and monitored.

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