

U-M PROGRAM

FOR MONITORING ANIMAL FACILITY TEMPERATURE AND VENTILATION

According to the *Guide for the Care and Use of Laboratory Animals*, animal facility temperature and ventilation should meet the following criteria to ensure the comfort and well-being of animals and the reliability of research results:

- Animal housing rooms should receive 10-15 air changes per hour to supply adequate ventilation, remove thermal loads, and dilute gasses and particulate contaminants.
- Animal housing room temperature should be maintained with minimal fluctuation (+/-2°F) within an appropriate range for the species housed to avoid excessive demands on the animals' metabolic and behavioral processes.
- Stores of animal feed should be maintained at a temperature of 70°F or below to minimize premature deterioration of the nutritional content of feed.

Animal facility temperature and ventilation must be monitored daily by animal care and use personnel. Each animal housing and feed storage room must be equipped with a minimum-maximum thermometer or other comparable system, such as a computerized temperature monitoring system. Minimum/maximum temperature readings are useful to identify temperature extremes occurring during times when the rooms are not ordinarily occupied or checked by personnel. Daily, the current and minimum/maximum temperatures reached during the previous 24-hour period, must be recorded on an animal housing room activity log (see U-M Program for the Documentation of Animal Husbandry Activities Utilizing an Animal Housing Room Activity Log). Minimum-maximum thermometers must be reset daily after readings are taken. Rooms in which current or minimum/maximum temperature readings exceed the appropriate range (as published in the *Guide*) must be reported for temperature control evaluation and, if necessary, corrective action. A daily assessment of the ventilation in animal housing rooms must also be recorded on an animal housing room activity log. Animal housing rooms which seem stuffy, have an excessive odor level, or have frequent temperature fluctuations, must be reported for ventilation evaluation and, if necessary, corrective action. Additionally, the air changes per hour (ACH) and air pressure differential (+/-) of animal housing rooms must be measured at least every three years, and more frequently as needed (see attached information on technical services available). Measurements must be reported to the UCUCA Office when obtained, and retained in facility management files for at least three years.

Animal husbandry supervisors should review animal housing room logs on an appropriate schedule to ensure accuracy and compliance with the animal facility temperature and ventilation requirements of the *Guide*. In addition, UCUCA members will pay particular attention to possible ventilation problems, and to animal facility temperature and ventilation records during semi-annual facility inspection visits. Rooms that exhibit a continuing or chronic temperature control problem, seem stuffy, or have an excessive odor level will be noted in the inspection report. The responsible administrative unit will be required to have the questionable ventilation or temperature control evaluated and, if necessary, corrected. The responsible administrative unit must report findings, corrective actions, and measures taken to prevent recurrence to the UCUCA within 30 days of the issuance of the inspection report. The effectiveness of any necessary corrections will be re-assessed by the UCUCA during follow-up visits. If all rooms in an animal facility unit appear to have proper ventilation and temperature control, the finding will be so noted in the inspection report.