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## How loud is a mouse room?

Although ambient sound in animal rooms can affect the welfare and physiology of research subjects, sound level is rarely monitored as an environmental variable. Lauer *et al.* measured sound levels in two mouse housing rooms for three 24-h periods. The rooms were similar in size and layout but differed in the types of caging systems they contained, the numbers of cages they contained and the numbers of investigators who accessed them. In both rooms, background sound levels were usually about 80 dB, and transient noises (which occurred most frequently during work hours) caused sound levels to temporarily rise 30–40 dB above the baseline level. Noise peaks occurred most frequently in the room that was subject to heavy personnel traffic and contained a large number of mouse cages. Loud sounds and sound level variability were attributed mainly to personnel activities such as use of cage changing stations and opening or closing doors.

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## Prevalence of rodent pathogens

Information regarding the prevalence of specific infectious agents is essential for keeping health monitoring standards up to date. Mähler and Köhl evaluated current prevalence rates of 24 viruses and of the bacterium *Mycoplasma pulmonis* in lab rodents in western Europe. They retrospectively surveyed serological data that were obtained from mice and rats housed in more than 100 European institutions; serum samples were submitted to the authors' institution for testing between January 2007 and June 2008. In mice, the most prevalent pathogens were murine norovirus, mouse hepatitis virus, mouse rotavirus and parvoviruses (primarily mouse parvovirus). In rats, parvoviruses (primarily rat minute virus or Kilham rat virus) and *M. pulmonis* were the most prevalent infectious agents.

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## Models of myocardial ischemia

Myocardial ischemia, a disorder caused by an imbalance of oxygen supply and demand in the myocardium, has been extensively researched for more than a century. Traditional methods of inducing experimental myocardial ischemia in research animals generally involve a thoracotomy followed by surgical ligation of a coronary artery. This approach enables scientists to directly observe the myocardium, but the surgery can result in undesirable side effects. In recent years, alternative closed-chest models of myocardial ischemia have become more prevalent; most of these models involve injection of embolic or thrombogenic materials through percutaneous catheters. Mitsos *et al.* review open- and closed-chest models of myocardial ischemia and discuss the advantages and disadvantages of each approach.

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