Frequency Asked Questions: Per Diem Rates



Johns Hopkins University - Research Animal Resources (RAR)

How are animal per diem rates calculated?

A per diem rate represents the daily cost of caring for an animal or a cage of animals. The *Cost Analysis and Rate Setting (CARS) Manual for Animal Facilities* serves as the official NIH guidance for calculating these rates. RAR's per diem rate model adheres to a cost-based approach in alignment with federal NIH guidelines. The *CARS Manual* categorizes animal research costs into three main areas: 1) Direct Costs (includes husbandry labor, feed, bedding, enrichment, and cage wash expenses), 2) Support Costs (includes facility maintenance, general administration, training, and transportation between facilities), and 3) Institutional Facilities and Administrative (F&A; includes research space, institutional general administration, and regulatory compliance costs).

RAR identified all Direct and Support costs for fiscal year FY24 and assigned them to specific species. Certain expenses, including pass-through and unallowable costs such as capital equipment, animal purchases, directbilled healthcare costs, and costs related to IACUC and Technical Services labor, were excluded from RAR's total operating costs.

Costs were allocated into different cost pools based on their activity. For instance, all husbandry supplies were grouped together and then divided into specific sub-pools such as feed, bedding, and enrichment. Costs were then allocated to species using various methods depending on the expense type. For salaries and wages, which make up the majority of RAR's total costs, a two-week Time-and-Motion study was conducted to estimate and assign staff effort by task and species. For non-salary expenses, RAR identified costs suitable for direct allocation, such as enrichment, feed, bedding, and PPE. When direct allocation was not feasible, animal care days were used as the default allocation method.

The total estimated cost to maintain a given species for a fiscal year is calculated and then divided by the projected number of animal care days for that species. This calculation yields the daily cost of caring for an animal or cage.

Total Cost for the Species

Total Care Days

How do Johns Hopkins per diem rates compare to those of other animal facilities?

When comparing animal per diem rates across institutions, several key factors must be considered. While all institutions must adhere to the general principles outlined in the CARS Manual, significant differences exist in total operating costs, the services and supplies included in standard care, and how the costs institutions attempt to recover via the per diem rate. Diverse institutional characteristics —such as geography, facility size, species offerings, census, and funding mechanisms—create variability that can complicate direct comparisons. For example, some institutions exclude faculty veterinarian salaries from their animal facility budgets, and cost of living significantly affects overall salary and wage expenses. Moreover, census size plays a crucial role in per diem rates, as larger populations benefit from economies of scale.

A comparison of RAR's mouse per diem rates with national averages from surveys indicates that our rates are competitive. For other species, RAR's proposed rates remain at or below the average calculated rates of peer institutions.

There is growing federal pressure for universities to take on a larger share of research costs. Additionally, the overall demand for Facilities and Administrative (also referred to as the Indirect Cost Rate) dollars is outpacing the available funding. As other institutional funding sources diminish, many institutions are shifting these costs onto service center charges, which may result in widespread increases in per diem rates nationwide and reduced subsidies for animal facilities.

Do JHU's mice per diems subsidize the care of other species?

No, mouse per diem rates at JHU do not subsidize the care of other species. Whenever possible, RAR allocated expenses— including salaries and time spent on animal care—at the species level. The proposed FY26 per diem rate for mice is \$1.13, which reflects the calculated break-even cost for their care.

Because rodents represent the majority of RAR's animal population, they received the largest share of husbandry, administration, space, and maintenance costs. In FY24, mice in non-satellite facilities accounted for 86% of all care days and equated to 71% of RAR's total operating costs.

What husbandry and veterinary services does the standard per diem rate cover?

Currently, the per diem rate covers cover the following services:

- Husbandry care: Note that animal husbandry charges are reduced or eliminated for satellite facilities. Supplies and associated ordering fee are directly charged to labs and satellites, as appropriate.
 - Daily husbandry care: Includes health checks, feeding, watering, cage cleaning, environmental maintenance, recordkeeping, and carcass disposal. The provision of supplies such as feed, bedding, and personal protective equipment (PPE) are also included.
 - Cage Washing and/or Sanitation: Services are tailored to species-specific needs and may include routine cage changes, sterilization of cages and racks, preparation of bedding and accessories, and sanitation of animal rooms, pens, and equipment.
 - Enrichment: Routine enrichment activities and enrichment supplies for applicable species.
- Transportation: Vehicle maintenance and internal transfers of animals.
- Veterinary Care and Consultation:
 - Diagnosis (including pathology and laboratory testing), routine treatment, and prevention of infectious, and naturally and spontaneous diseases and injuries. Additional technical service and supplies charges apply for animal modelling and surgery services. All per diems include this aspect of veterinary care.
 - Pathogen Detection and Outbreak Management: Pathogen testing and outbreak management, including confirmatory testing, and animal and environmental treatment. This also includes the purchase of sentinel animals, sample collection, and testing through an external vendor. The program exists for mice and rats and will be implemented for other species such as fish, frogs, and other rodents.
- General Administration: IT support, billing and procurement services, and cage cards. Also covers administrative oversight to maintain compliance with regulatory bodies (e.g., AAALAC accreditation, USDA regulations, and appropriate licensing). Per diem rates do not include staff compensation for time spent on IACUC-related activities. All per diems include general administration fees.

Johns Hopkins receives indirect costs, which costs are covered by the animal per diem rates vs the F&A rate (also referred to as the Indirect Cost Rate) recovery?

Uniform Guidance 2 CFR 200 requires animal facilities to separate costs associated with research space from costs associated with service center space. Costs for space, including utilities and depreciation, which are associated with "service" areas like cage wash, storage spaces, and offices, are recovered via per diem charges. Conversely, expenses for "research" spaces within the animal facility, such as behavioral testing rooms or other

procedure/housing rooms, are included in the institution's F&A rate and do not need to be recovered through per diem charges.

Regulatory compliance expenses, such as those related to IACUC, are recovered through the institution's F&A rate or other methods.

In essence, the F&A rate includes the following components:

- Facilities costs -> Depreciation, Operations & Maintenance, Interest, Library
- Administration costs -> Department, General and Sponsored Programs Administration



Why is JHU experiencing a large increase in per diem rates for FY26?

To determine the proposed FY26 per diem rates, JHU conducted a comprehensive animal per diem rate study to assess the true cost of operating the Research Animal Resources (RAR) facility during FY24. This study included:

- A detailed review of RAR's financials and operating expenses
- A Time & Motion Study to assess staff effort required per species
- An analysis of past census data and projections for FY26 animal populations
- Peer benchmarking to compare JHU's rates with those of peer institutions nationwide

The study's findings revealed that, for most species, RAR had been significantly undercharging relative to the actual cost of care—resulting in operational deficits. Consistent with NIH guidance, RAR's goal is to establish per diem rates that cover, but do not exceed, the true cost of animal care.

For FY26, most species' per diems will increase to reflect the calculated break-even rates. For certain species with the largest discrepancies between current and calculated rates (e.g., monkeys, large swine, guinea pigs, ferrets), RAR is phasing in the increase over two to three years, with the goal of reaching full break-even rates by FY28.

What are RAR's projected per diem rates for future fiscal years?

RAR anticipates annual increases in per diem rates due to the rising costs of personnel, food, bedding, and other supplies. Based on historical cost trends, RAR estimates that per diem rates will increase by approximately 10% per year for FY27 through FY29.

For species where there is a significant gap between the current per diem and the calculated break-even rate —such as monkeys, large swine, guinea pigs, and ferrets—RAR is implementing a phased increase over two to three years. As a result, the annual rate increases for these species will exceed 10% to allow a transition toward full cost recovery by FY28.

If you have questions about which rates apply to your animal-based research, please contact the RAR Director or administration team.

Jason Villano, DVM, DACLAM

Attending Veterinarian Director, Research Animal Resources jvillano@jhmi.edu Karla McCarthy, MA Administrator, Research Animal Resources kmccarthy@ihu.edu