

PREPARE before you ARRIVE: Guidelines for Planning Animal Research and Testing

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As part of ongoing efforts to **reduce waste** and **increase the reproducibility** of animal research and testing, we have produced a set of guidelines for planning animal experiments:

PREPARE (Planning Research and Experimental Procedures on Animals: Recommendations for Excellence)
norecopa.no/PREPARE

The PREPARE guidelines for **planning** animal studies complement the ARRIVE guidelines and other similar guidance for **reporting**.

A large number of factors, rarely reported in scientific papers, can dramatically influence the validity and outcome of animal studies, as well as the health and safety of all those concerned. The PREPARE guidelines cover these and address all stages of quality assurance, from the animal facility or population to the individual procedures which make up the study.

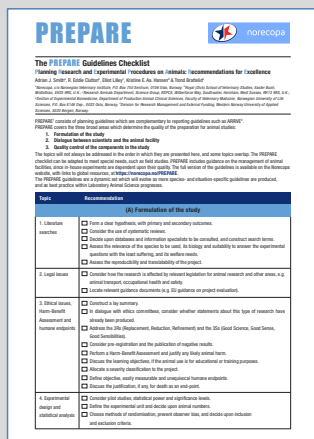
A manuscript describing the PREPARE guidelines is available free of charge under Open Access in *Laboratory Animals*, 2017. DOI: 10.1177/0023677217724823 and via norecopa.no/PREPARE

A two-page PREPARE checklist in 12 languages can be downloaded free of charge from: norecopa.no/PREPARE/prepare-checklist

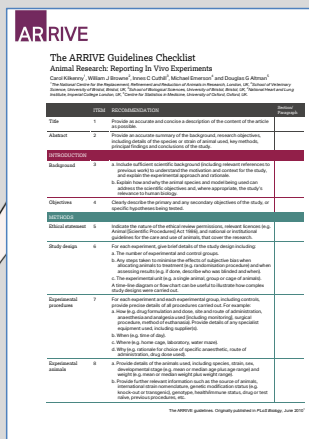
The PREPARE website also includes suggestions for a contract between scientists and animal facilities, to help division of labour, costs and responsibilities.

The PREPARE guidelines cover 15 topics, grouped in three main sections:

- A. Formulation of the study**
 1. Literature searches
 2. Legal issues
 3. Ethical issues, harm-benefit assessment and humane endpoints
 4. Experimental design and statistical analysis
- B. Dialogue between scientists and the animal facility**
 5. Objectives and timescale, funding and division of labour
 6. Facility evaluation
 7. Education and training
 8. Health risks, waste disposal and decontamination
- C. Quality control of the components in the study**
 9. Test substances and procedures
 10. Experimental animals
 11. Quarantine and health monitoring
 12. Housing and husbandry
 13. Experimental procedures
 14. Humane killing, release, reuse or rehoming
 15. Necropsy



The PREPARE Guidelines Checklist: Planning Research and Experimental Procedures on Animals: Recommendations for Excellence. It includes sections for 'Formulation of the study', 'Dialogue between scientists and the animal facility', and 'Quality control of the components in the study'.

The ARRIVE Guidelines Checklist: Animal Research: Reporting in Vivo Experiments. It includes sections for 'Title', 'Abstract', 'Introduction', 'Methods', 'Results', and 'Discussion'.

PREPARE contains numerous links to guidelines and other international resources, and uses the intelligent search engine of the Norecopa website (norecopa.no):

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The screenshot shows the Norecopa website interface with a search bar, navigation menu, and a section for 'Animals in research' with icons for Fish, Farm animals, Laboratory animals, Wildlife and wild fish, Cephalopods, and Other aquatic animals.

The PREPARE guidelines are not a static checklist:

The PREPARE website contains a dynamic set of recommendations which will evolve as more species- and situation-specific guidelines are produced, and as best practice within Laboratory Animal Science progresses.