ARRIVE Implementation Action Plan - Journals

This Action Plan sets out a series of steps that journals can undertake to support researchers to improve the reporting of animal research using the ARRIVE guidelines 2.0. The Plan focuses on highlighting the importance of the guidelines and transparent reporting practices to authors, reviewers and readers, and introducing adherence checks to ensure that a key gatekeeper role of journals in overseeing research quality and methodological rigour is achieved.

The items in the ARRIVE 2.0 guidelines are divided into the Essential 10 (i.e. the basic minimum that must be included in any manuscript describing animal research in order for readers and reviewers to assess the reliability of the findings) and the complementary Recommended Set (i.e. information that provides context for the study). The goal should be to ensure full compliance with the ARRIVE 2.0 guidelines, reporting in accordance with the Essential 10 and Recommended Set.

The Action Plan is divided into three sequential levels with increasing expectation of compliance with the ARRIVE 2.0 guidelines. Many journals will already be at Level 1 and should relatively quickly be able to move on to more active use of the guidelines as standard practice in the review and acceptance of manuscripts describing the use of animals.

### Level 1: Highlighting ARRIVE

The key actions at this level focus on raising the visibility of the guidelines by:

- Making a public statement endorsing the ARRIVE 2.0 guidelines and including this prominently in Instructions to Authors (ideally with links to the ARRIVE resources provided by the NC3Rs). There should be an expectation that authors consult and use the guidelines when writing manuscripts describing animal experiments.

- Encouraging all journal staff and editors to familiarise themselves with the ARRIVE guidelines 2.0 and the resources provided by the NC3Rs.

- Where the journal's software or manuscript workflow allows, a question on the authors’ compliance with ARRIVE in the manuscript submission process should be included.

- Highlighting the journal's support for the ARRIVE guidelines in instructions to peer reviewers.
Level 2: Supporting implementation of the ARRIVE Essential 10

The key actions at this level focus on signaling the journal's expectation of compliance with the ARRIVE 2.0 guidelines by:

- Requiring authors reporting the use of animals to submit alongside their manuscript a completed ARRIVE Essential 10 author checklist.
- Providing training (in-house or external) for journal staff to highlight the importance and benefits of transparent and complete reporting. This should cover the information included in the ARRIVE 2.0 guidelines, the rationale for reporting this information, and how it relates to the reliability of the results.
- Assessing (at an editorial or journal staff level), each manuscript describing animal research for compliance with the ARRIVE Essential 10. Ideally this should be done after peer review with authors required to provide any information that is missing as a condition of publication. To assist journals, the NC3Rs has provided a compliance questionnaire that allows for streamlined evaluation of how well a manuscript complies with the ARRIVE Essential 10.
- Flagging to peer reviewers that their assessment should include whether the manuscript complies with the ARRIVE Essential 10. This can be facilitated by providing peer reviewers with the ARRIVE Essential 10 author checklist or compliance questionnaire.

Level 3: Supporting implementation of the full ARRIVE 2.0 guidelines

The key actions at this level focus on actively enforcing the journal's requirement for complete compliance with the ARRIVE 2.0 guidelines in all manuscripts by:

- Requiring authors reporting animal research to submit alongside their manuscript a completed full ARRIVE guidelines author checklist (i.e. the Essential 10 and the Recommended Set checklists, rather than the Essential 10 checklist alone).
- Assessing (at an editorial or journal staff level) each manuscript describing animal research for compliance with the full ARRIVE guidelines. Ideally this should be done after peer review with authors required to provide any information that is missing as a condition of publication.

Useful links for Action plan implementation

- Details of the ARRIVE Essential 10 and Recommended Set, explanations of each item included in the guidelines, and examples of good reporting from the published literature.
- Webinar
- Translations
- Author Checklists
- Compliance Questionnaire