



Indicators, management and utilisation of data for monitoring laboratory animal use and 3R alternatives

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Commissioned by the Dutch Minister of Agriculture (EZ), the National Committee for the protection of animals used for scientific purposes (NCad) issued an advisory report on the management and use of data for monitoring laboratory animal use and 3R alternatives.

Challenges:

- data on laboratory animal use and the 3Rs is still insufficiently available
- lack of insight into developments and relationships with regards to laboratory animal use and the 3Rs
- incomplete picture among policymakers, researchers and the public of this topic > discussions are often held on the basis of inaccurate assumptions > misunderstandings
- opportunities can be missed because prior (scientific) experiences cannot be adequately used

The guiding principle of the advisory report, which was published in two parts, is the Minister's ambition to promote animal welfare and to minimize the number of animal procedures as much as possible.

Methods

- Desk research of existing reports and recommendations
- Individual consultation of experts and chain partners from the Netherlands and beyond
- Consultation of community groups that have an interest in animal procedures and the possibilities offered by the 3Rs (scientific institutions, umbrella and industry organisations, animal welfare organisations and anti-animal experimentation organisations). The recommendations from the organisations that were present during this meeting are listed in the advisory report, along with whether or not the NCad included these in its opinion.

Recommendations by the NCad

- Comply with Dutch government policy on open data: publish all information made available by the government on laboratory animal use, animal procedures, and 3R alternatives (subject to restrictions imposed by privacy sensitivity and the protection of intellectual property);
- Commit to a European open data policy > for establishing a level playing field;
- Set up a national central data warehouse to make open data publicly available and accessible:
 - build up in stages, government to take the initiative during the first stage;
 - structure data sets to enable matrix connections to be established;
 - ensure that links can be established with information about laboratory animal use held in the existing databases;
 - make it possible to generate regular, detailed trend analyses of laboratory animal use in prioritized categories of research.
- In the data warehouse, also include information provided by practitioners working in the field.

In order to do so, the following challenges will need to be overcome:

- Standardization of definitions used among the different sources;
- Prevent where possible an increased administrative burden with licensees;
- Agreement on ownership of data and responsibility for any computation that is required to make the data suitable for application within the data warehouse;
- Long-term investment required in terms of both time and money. In The Netherlands, European Directive 2010/63/EU was implemented late 2014. Only after a few years of gathering data, trends within laboratory animal use and 3R's can be made visible;
- Prepare the data warehouse for inclusion of more data sets/databases and for combining it with other existing initiatives.
- As part of its advisory report, the NCad also defined indicators for monitoring and for evaluation. These indicators will be helpful in gaining insight in trends and developments in laboratory animal use and 3Rs over the years.

Goals

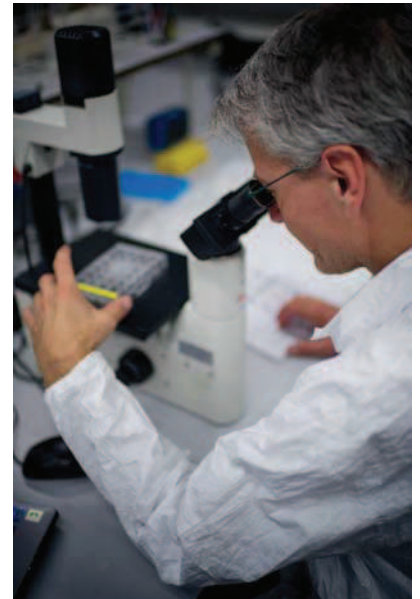
- improved insight into laboratory animal use, and the development and application of 3R alternatives;
- more efficient use of this information;
- improvement of policy management and study design;
- a better basis for the development and implementation of 3R alternatives.

Follow-up

The minister of Agriculture has embraced the opinion of the NCad and has commissioned the National Institute for Public Health (RIVM) to set up the centralized data warehouse.

The full report (both part 1 and 2) is available on the NCad website:

<https://www.ncadierproevenbeleid.nl/documenten/rapport/2015/11/26/ncad-advisory-report-data-and-monitoring>



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About the NCad

In 2014, The Netherlands National Committee for the protection of animals used for scientific purposes (NCad) was appointed by the Minister of Agriculture for the protection of animals used for scientific and educational purposes. NCad aims to make a significant contribution to minimizing laboratory animal use, both at national and international level. This will involve giving (policy) advice, exchanging knowledge, and developing both national and international networks. The ethical review of animal procedures is of pivotal importance in this regard, as are the 3Rs (Replacement, Reduction and Refinement).