

Expert information

from the Working Group on Hygiene

Harmonisation of Health Monitoring Reports

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**Authors: Werner Nicklas, Heidelberg
and Karin Seidel, Munich**

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The increasing international transfer of genetically modified mice is associated with higher risks pertaining to the dissemination of microorganisms. Although by now – also due to animal welfare reasons – preferentially cryo-conserved sperm or embryos are shipped, shipping of live animals is often the standard procedure, as many academic institutions do not have the infrastructure to conduct embryo transfer. Therefore, the exact review of the health status of mice as well as the documentation of this reviewing process is extremely important to prevent an introduction of unwanted microorganisms into an animal facility. For this, the receiving institutions need reliable information on the current health status of the animals. An interpretation based solely on laboratory reports holds many risks.

For a correct interpretation of health monitoring reports it is extremely important to likewise receive information on the health monitoring programme (2), e.g.,

- animal husbandry
- time of sampling
- approach (examination of colony vs. sentinel animals)
- sentinel system (species, strain, age, contact with animal population via dirty bedding, drinking bottles, food or direct contact, length of exposure etc.)
- animal number per sampling and number of animals tested over a period (e.g. from start of the colony, previous 24 or 18 months)
- testing of environmental samples
- testing of sick and moribund animals
- test methods
- frequency of scheduled sampling,
- introduction of biological materials into animal facility, testing of biological materials for microbial contamination
- definition of microbiological unit, risk factors for introduction of unwanted microorganisms etc.)

European animal facilities increasingly apply the recommendations of the Federation of European Laboratory Animal Science Associations (FELASA) for the health monitoring of rodents (1). A joint working group of FELASA and the American Association for Laboratory Animal Science (AALAS) has published a position statement to discuss the potential for an international harmonized health monitoring reporting format. This would be highly appreciated in an international context.

Both recommendations have similar objectives; slightly differ in some aspects however. The **FELASA recommendations** (1) give concrete information on the implementation of the testing programme whereas the requirements for the layout of the health monitoring report are less precise. In contrast to this the **FELASA-AALAS recommendation** (4) puts forward the creation and formatting of a health monitoring report. An easy to recognize layout as well as a precise list of microorganisms to be specified in a health monitoring report are compiled. These lists are not complete, however, as e.g. in immunodeficient animals or under certain circumstances additional microorganisms can be considered (e.g. opportunistic microorganisms, dermatophytes etc.).

Many formats for the description of health monitoring programmes as well as for the respective health monitoring reports exist nationally and internationally. In Europe, health monitoring reports are increasingly generated using the design of the FELASA recommendations for the health monitoring of rodents (1994, 1996, 2002, 2014). In particular, institutions in Non-European countries often supply test reports from testing laboratories without any explanation or summary. This inconsistent reporting holds many risks, i.a. creates uncertainty when interpreting results, wastes time in daily routine because of necessary further enquiries with senders and can therefore cause delays when importing important mouse strains. As the interpretation of health reports is very complex, respective experts are needed for a proper interpretation (4).

The format shall enable the compilation of a standardised health monitoring report and thus simplify its interpretation. The decision how and for which microorganisms tests will be performed is dependent on the respective institution and the use of the animals in research. In addition to that, a standardised health monitoring report shall facilitate to determine for which microorganisms was actually tested (3).

The proposed format for a health monitoring report by the AALAS–FELASA Working Group can be downloaded for [mice](#) and [rats](#) in an excel-format. The format can be adapted respectively.

The following important information shall be considered when using the format:

- The list of microorganisms and their respective order should be maintained.
- Additionally detected and relevant microorganisms as well as newly described and important microorganisms should be listed. They can be inserted e.g. under “additional agents”.
- If no tests were performed for some microorganisms, they should be listed and NOT TESTED should be noted.
- If microorganisms are detected, confirmation tests shall be noted and specified.
- Ideally, the health monitoring programme should be described precisely.
- A contact person should be specified.
- Changes in taxonomy and nomenclature should be adjusted, i.e. *Pasteurellaceae* (7, 8).

The GV-SOLAS Working Group on Hygiene explicitly recommends the use of this format in order to improve and facilitate the interpretation of health monitoring reports when importing rodents in an European and International context.

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