

RESEARCH AND ANIMAL EXPERIMENTATION IN SWITZERLAND: ANIMAL WELFARE

Animal welfare aims to ensure the wellbeing of animals. Respect for animals' welfare is based on the belief that humans who work with animals must consider their wellbeing and suffering because animals are recognised as sentient. Researchers must ensure a good quality of life, minimize distress and, in case the animals have to be euthanized, a humane death.

Legal framework protecting animal welfare and dignity¹

According to the ranking of the Animal Protection Index (API²), Switzerland together with Austria, Denmark, the Netherlands, Sweden and the United Kingdom are the countries with the strictest animal welfare policy and legislation in the world.

The Swiss Animal Welfare Act (AniWA)³ provides the legal framework to protect both the welfare and the dignity of animals. It is the only legislation worldwide that recognizes the concept of animal dignity. The Act states that, when dealing with an animal, its dignity, i.e. its inherent worth, must be respected. This also means that animals must not be exposed to anxiety or humiliation, there may not be any major interference with their appearance or abilities, and they may not be excessively instrumentalised. Any experiment involving animals must be authorised by the cantonal veterinary authorities. The aim of the Swiss authorisation procedure is to ensure that animal experiments that cause harm are restricted to those which are essential.

Researchers must apply the 3Rs principles (replacement, reduction and refinement) when asking for an authorisation for animal experimentation. The use of animals is authorised only if there are no alternative methods for answering their scientific questions. Researchers must also select the most appropriate and least harmful methods. In addition, the smallest number of animals allowing to get a statistically valid outcome must be used. Pain, suffering or harm to the animal must be limited to the indispensable extent. During animal experiments, pain must be prevented and/or treated with painkillers whenever possible. Only trained specialists, who have a valid animal research permit and undergo continuous further training, may conduct experiments under the control of the cantonal veterinary authorities.

A certain degree of constraint caused to animals during experiments can be justified by overriding interests for the society or the environment. All animal experiments must be ethically justifiable,

¹ For more detailed information on the regulatory framework and animal research in Switzerland, including key legal aspects concerning authorization, see the factsheet under <https://www.swissuniversities.ch/en/topics/research/animals-in-research>.

² <https://api.worldanimalprotection.org/>

³ <https://www.admin.ch/opc/en/classified-compilation/20022103/index.html>

meaning the researchers have to show that the expected gain for the society or the environment outweighs the burden caused to the animal. All applications to conduct animal experiments undergo this weighing of interest⁴. Researchers, federal and cantonal authorities as well as the cantonal commissions on animal experimentation, which evaluate applications for authorisations, must consider on the one hand the animals' interests to be protected from harm, and on the other hand, the legitimate interests of society or environment such as the protection of the life and health of human beings and animals, the protection of the environment, as well as the gain of new knowledge concerning fundamental biological processes (necessary to understand the basic mechanisms underlying diseases and to develop new therapies).

Control measures

Cantonal authorities and the cantonal commissions on animal experimentation may carry out unannounced inspections of animal facilities, laboratories and ongoing experiments. Any infringements of the Act's provisions may lead to a ban on keeping, breeding or handling animals.

Housing and care of laboratory animals

All institutions which keep and work with animals must comply with the requirements contained in the Swiss Animal Protection Ordinance (AniPO)⁵. Among other provisions, it stipulates the minimum dimensions and equipment of the enclosures, housing enrichments and social contacts, as well as the environmental conditions such as climatic or lighting conditions. Animal facilities are managed professionally to ensure that all requirements are met. The laboratory animals are either bred in the animal facilities of the higher education institutions, provided from partner academic institutions, or purchased from approved commercial breeders. Animals that have to be euthanized are euthanized by the researchers themselves or by the animal caretakers according to the methods recommended by the Federal Food Safety and Veterinary Office (FSVO) in order to cause as little stress as possible to these animals⁶. Animal facilities also count among their staff laboratory animal veterinarians who work to protect the welfare of the animals by carrying out clinical health checks, health screening, treatments of the animals, as well as providing instruction and training to the animal caretakers and the researchers.

Animal Welfare Officers

Since March 2018, in addition to a resource manager and a study director, and his/her substitute, all institutions and laboratories which conduct animal experiments or house laboratory animals must appoint an animal welfare officer (AWO) and his/her substitute. The AWOs are either veterinarians or biologists that have expertise in laboratory animal science and welfare. AWOs support the researchers in applying the legal requirements including the 3Rs principle in their research protocols, review all animal experimentation applications before they are submitted to the cantonal authority, promote basic and continuing education and check that the animal facilities and the experiments comply with the regulations.

⁴ <https://www.blv.admin.ch/blv/en/home/tiere/tierschutz/wuerde-des-tieres.html>

⁵ https://www.blv.admin.ch/dam/blv/en/dokumente/tiere/rechts-und-vollzugsgrundlagen/tschv-en.pdf_download.pdf/Animal%20Protection%20Ordinance%20455.1.pdf

⁶ https://www.blv.admin.ch/dam/blv/fr/dokumente/tiere/tierversuche/fachinformation-3-01-toeten-versuchstiere.pdf_download.pdf/Fachinformation-3.01-Fachgerechtes-tierschutzkonformes-Toeten-von-Versuchstieren.pdf

The Swiss Animal Welfare Officer Network (AWO-N) is an initiative set up to exchange knowledge, promote the 3Rs and share experiences about animal welfare in animal experiments within the scientific community. The AWO-N is an official partner of the Federal Food Safety and Veterinary Office (FSVO) as one of the expert groups in laboratory animal topics.

Culture of Care

A commitment to the culture of care indicates that researchers want to create a mentality and behaviour that continuously and proactively strives to promote laboratory animal welfare and the 3Rs principles; “to go beyond a culture of compliance, and to include a culture of challenge, i.e. go beyond the commonly done”⁷. A culture of care is critical to ensure the humane care and use of laboratory animals. Such a culture starts with committed people, assures their training and develops their sensitivity to animal welfare. With the help of all involved in the care and use of animals the higher education institutions implement a culture of care in animal research, which means that they promote compassion and respect for laboratory animals and the people who work with them.

3Rs and animal welfare

In 2011, the University of Bern and the Federal Food Safety and Veterinary Office (FSVO) established the first animal welfare chair, which covers the areas of animal welfare, applied ethology, and animal husbandry in teaching, research and services, and aims to establish and disseminate scientific knowledge about animal welfare. In 2018, the 3R Swiss Competence Centre (3RCC) was established under the patronage of swissuniversities. It aims to encourage research, training and communication related to the 3Rs principle in order to replace, reduce and refine animal experimentation. In 2021, the Federal Council launched a National Research Programme (NRP) "Advancing 3Rs - Animals, Research and Society" with a budget of CHF 20 million over five years. With its three research priorities (innovation; implementation: opportunities and obstacles; ethics and society), the NRP aims to reduce the number of animal experiments, to replace them when possible and to reduce the constraint on animals.

⁷ <https://www.swiss3rcc.org/de/culture-of-care>