# The Human Research Act and the Ethics Committees for Research

Factsheet by the Coordination Office for Human Research (kofam)



### Introduction

Before new therapeutic products, surgical operations or other health-related applications are made available in our healthcare system, they must normally be tested with research projects involving human subjects. The participants in such research projects are subject to potential health risks. They are also prepared to accept the possibility of discomfort and the disclosure of personal information.

This document on the Human Research Act (HRA) and the ethics committees for research provides interested persons with the opportunity to learn more about two of the important elements of human research in Switzerland: the HRA, which specifies the legal regulations governing research involving

human subjects, and the ethics committees, which are responsible for the thorough assessment and approval of all health-related research projects on humans before they start.

The document is the basis for the information in the comprehensive Annual Report of the ethics committees, which is prepared by the Coordination Office for Human Research (kofam) based on the annual reports of the individual ethics committees and is published on the kofam website www.kofam.ch.

### 1 The Human Research Act (HRA)

#### **Act and Ordinances**

In the past, the Swiss legislation regulating research on human subjects was unclear and partly incomplete. Uniform regulations were lacking at federal level, while international regulations were being developed as to how research involving human subjects should be carried out.

The Federal Council therefore drafted the HRA, the aim of which was to establish ethical and legal principles and limits to ensure that human subjects receive the best possible protection.

The HRA and the related ordinances took effect on 1 January 2014. The Act and the ordinances govern research on human diseases and on the structure and function of the human body. They apply to research conducted on human subjects and cadavers, on embryos and fetuses as well as on biological materials of human origin and with health-related personal data.

## Primary stakeholders in the area of human research

The following subsection provides an overview of the various stakeholders in human research.

Researchers prepare the documentation required for the execution of a research project that involves human subjects. These documents must be reviewed and approved by the ethics committees before the research project starts. Researchers are responsible for the practical conduct of the research project, which can start once the project has been approved. The term "researchers" covers both academics (e.g. physicians or psychologists) conducting research in their area of expertise, as well as companies conducting applied research on pharmaceuticals or medical products for commercial purposes. Researchers are primarily responsible for the protection of human subjects participating in their research projects.

The legislation on human research in Switzerland consists of the following elements:

- The Human Research Act (HRA) defines the principles that must be observed in relation to a research project involving human subjects. The primary objective of the legislation is to protect the individual's dignity, psychological integrity and health in the context of research. Secondary objectives of the HRA are to provide favourable conditions for research and to increase its quality and transparency.
- The Ordinance on Clinical Trials in Human Research (ClinO) includes regulations on clinical trials. A clinical trial is a research project involving human subjects to whom a particular health-related interven-

tion has been allocated, e.g. administration of a medication. The aim of a clinical trial is to investigate the effects of such an intervention on the health or structure and function of the human body.

- The Ordinance on Human Research with the Exception of Clinical Trials (HRO) governs all human research projects that are not classified as clinical trials. These include the collection of health-related data and research on biological material.
- The HRA Organisation Ordinance (OrgO-HRA) ultimately determines the organisation of the ethics committees and the Swiss Portal for Human Research (kofam).

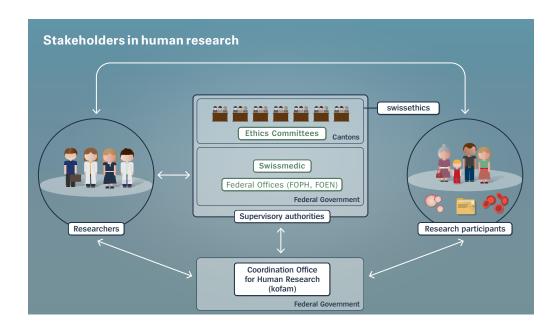
The human subjects participating in a research project do so on a voluntary basis. It is a vital prerequisite for the conduct of the research project that the dignity, psychological integrity and health of participants are maintained. Participants must be fully informed about the nature of the research project and must provide their written consent.

The *ethics committees* for research involving human subjects approve medical research projects after thoroughly reviewing the measures for protection of the participants, the relevance of the research, and its compliance with scientific requirements. The responsibilities and processes of the ethics committees are described in detail below.

The primary objective of *swissethics*, the umbrella organisation of Swiss ethics committees, is to support the standardisation of the ethics committee's procedures. It is responsible for the coordination and harmonisation of procedures of the various ethics committees, for their representation to third parties (e.g. Swissmedic, industry) and for the training of committee members.

Swissmedic, the Swiss agency for the approval of clinical ucts, reviews applications for the approval of clinical trials of therapeutic products with regard to their safety and quality, except for clinical trials in Category A. The classification of research projects will be addressed later.

At the federal level, the *Coordination Office for Human Research (kofam)* is an organ of the Federal Office of Public Health (FOPH), which is responsible for coordination between the supervisory authorities and provides information to the public. It publishes a list of the ethics committees and informs the public regularly of their activities, for example with the publication of a summary Annual Report of the ethics committees. It also provides interested persons and researchers with general information and a search function regarding ongoing clinical trials in Switzerland on its website www.kofam.ch.



The Federal Office of Public Health (FOPH) is directly involved in the assessment and approval process for certain research projects involving human subjects for example, research projects on transplantation and studies with radioactive substances or X-rays. Together with the Swiss Expert Committee for Biosafety (SECB) and the Federal Office for the Environment (FOEN), it also provides expert advice on trials of gene therapy, as well as experiments involving genetically modified or pathogenic (disease-causing) organisms. The FOPH is also responsible for evaluating the efficacy and utility of the HRA.

#### Key regulations of the HRA

The following sections cover specific topics and regulations that were introduced for the first time with the enactment of the HRA on 1 January 2014, or that are particularly relevant.

## The prime objective of the HRA: protective regulations

The HRA is based on the principal international protective regulations: The primary objective is to protect the individual's dignity, psychological integrity and health in the context of research. The HRA has a secondary function in providing favourable conditions for research and increasing its quality and transparency.

## Extending the scope of the Act: non-clinical trials

The scope of the HRA has been extended to cover non-clinical research involving human subjects. These include observational studies, research on cadavers, embryos or fetuses, research using human biological material (blood, urine, tissue, etc.) as well as research with health-related personal data.

## Increased transparency: obligation to register research projects

Swiss researchers have a legal obligation to publish the details of a proposed clinical trial in a publicly accessible international on-line register and on the Swiss National Clinical Trials Portal (SNCTP), the web-based register of the Confederation, before the start of the trial. Phase I clinical trials (i.e. trials of medications that are administered to humans for the first time) may be registered by researchers with a delay for purposes of patent protection.

## Risk-adapted regulations: categorisation of research projects

A major innovation in the field of human research legislation is the categorisation of research projects involving human subjects according to the extent of the anticipated risk for participants. This categorisation is carried out by researchers at the time of submission and is reviewed by the ethics committee. Depending on the category, requirements differ according to the documentation that needs to be submitted, the insurance required, the applicable approval procedure and the extent of event notification required during the period of the studies. The various categories of research projects involving human subjects are shown on the next page.

#### Categorisation of research projects involving human subjects

### Clinical trials\*

#### Clinical trials of medicinal products

#### Clinical trials of medical devices

#### Other clinical trials

#### Research projects not classified as clinical trials\*\*

#### Category A

The study product is authorised in Switzerland and its indication is consistent with the prescribing information. Minor, legally defined deviations from the prescribing information are permitted.

#### Category A

The investigated medical device bears the conformity marking (CE marking) and its application is consistent with the instructions.

#### Category A

The investigated treatment entails only minimal risks or discomfort, or is regarded as a standard treatment.

#### Category B

The investigated treatment entails significant risks or discomfort, and is not regarded as a standard treatment.

#### Category A

Measures for sampling biological material or for the collection of personal data entail only minimal risks and discomfort.

#### Category B

Measures for sampling biological material or collection of personal data entail significant risks or discomfort.

Category B

The study product is authorised in Switzerland. but its indication is not consistent with the prescribing information. Deviations from the prescribing information are significant.

#### Category C

The study product is not authorised in Switzerland.

#### Category C

The investigated medical device does not bear a conformity marking (CE marking), or the use of a CE-marked medical device deviates from the instructions, or the investigated medical devices is prohibited in Switzerland.

- In clinical trials, medicinal products, medical devices or other health-related interventions are used to actively influence the participants in a research project (e.g. via a surgical operation or a psychological treatment) in order to investigate the effect on the health or structure and function of the human body.
- \*\* Includes all research projects in which subjects are not prospectively allocated to a health-related intervention in order to study its effect on the health or structure of the human body. Only health-related data are collected from subjects, or biological samples (such as saliva or blood) are taken.

# Simplified and accelerated approval process: division of responsibilities between the assessing ethics committee and Swissmedic

Responsibility for complete ethical and scientific review of clinical trials (the "Good Clinical Practice" (GCP) review) was transferred from Swissmedic to the ethics committees with the enactment of the HRA. For clinical trials of therapeutic products in categories B and C, Swissmedic now reviews only the safety and quality aspects of the therapeutic product to be investigated. Clinical trials of category A are entirely exempt from a licence requirement by Swissmedic. Applications may be submitted simultaneously to the Ethics Committee and Swissmedic.

## More efficient approval procedures: procedures for multicentre trials

Multicentre research projects (i.e. projects that are carried out in several cantons in Switzerland) do not need to be fully reviewed and approved by each responsible ethics committee. The lead committee responsible for the chief investigator assumes responsibility for all issues related to the trial, and makes a decision on behalf of all participating trial sites. The local ethics committee "only" checks local conditions, such as whether the infrastructure at the centre it oversees is satisfactory for the trial and whether the researchers involved in the trial have the expertise necessary for its conduct.

## Acquisition of professional skills: scientific secretariat

With enactment of the HRA, all existing ethics committees were required to establish a scientific secretariat. The staff of the secretariat are required to have a university degree in medicine, pharmacy, science, psychology or law and have adequate training in Good Clinical Practice (GCP). They must also be familiar with the scientific methodology underlying research projects on human subjects and the associated statutory requirements. The organisation and operating principles of the ethics committees are publicly available in the Rules of Procedure.

# 2 Swiss ethics committees on research involving humans

## Overview of the ethics committees in Switzerland

In 2012, there were thirteen (supra)cantonal ethics committees, but on 1 January 2014, the date of the enactment of the HRA, there were only nine. This was because some smaller ethics committees merged with (or attached to) a larger ethics committee. This process of concentration of expertise is not yet complete. As of mid-2016, there are only 7 ethics committees remaining (see figure).

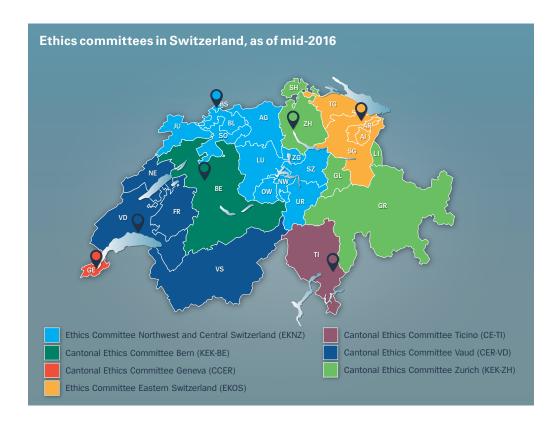
Each ethics committee is responsible for approving applications for research projects to be carried out in its canton (or in the respective cantons if ethics committees have merged). Approval is preceded by a detailed review of the protection of participants and the quality of the scientific proposals.

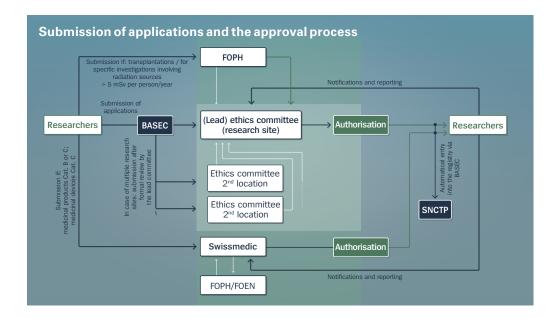
The responsibilities described in the following sections and the organisation of ethics committees ensue from the HRA (Art. 51–54) and from the HRA Organisation Ordinance (OrgO-HRA).

## Constitution, composition and organisation

The members of an ethics committee are usually professionally active in their respective fields and are co-opted for the purposes of the committee. The cantons are responsible for supervision of the ethics committees and selection of their members.

The ethics committees must be composed in such a way that they have the skills and experience needed to perform their tasks. The following areas of expertise must be covered by the members of the ethics committees: medicine, psychology, nursing, pharmacy/pharmaceutical medicine, biology, biostatistics, ethics and law (including data protection). The genders and areas of expertise must be represented in a balanced fashion. Knowledge of the research institutions and local conditions are a prerequisite for the estimation and assessment of the feasibility of the research. Members are required to undergo training and further education, and experts in the areas of medicine, psychology and nursing must have research experience.





Each ethics committee has a president and a scientific secretariat (see Section "Acquisition of professional skills: scientific secretariat").

#### Approval and notification procedures

## Research projects to be approved by ethics committees

The following types of research projects on human diseases as well as on the structure and function of the human body must be approved by an ethics committee:

- Research projects involving human subjects
- Research projects on cadavers
- Research projects on embryos and fetuses from terminated pregnancies
- Research projects with biological material or health-related personal data

Research projects with anonymised biological materials and anonymously collected or anonymous health-related personal data are exempt from the requirement for approval.

## Submission of applications and the approval process

Researchers must submit applications for approval of human research projects to the responsible ethics committee. The committee reviews the application and grants the researchers authorisation to conduct the project, provided that it satisfies the statutory requirements. The ethics committees may impose conditions on the applicants prior to approval or reject the research project. For projects that are con-

ducted at several locations in Switzerland (multicentre trials), researchers must submit their application to the lead ethics committee for an initial formal review, and then to the other relevant local ethics committees.

For clinical trials of therapeutic products in category B or C, approval must also be obtained from Swissmedic. Swissmedic only reviews safety and quality aspects of the therapeutic products. Applications may be submitted simultaneously to Swissmedic and the ethics committee.

In certain cases, such as clinical trials involving transplantation or research projects involving ionising radiation, the research project must also be submitted to the Federal Office of Public Health (FOPH) for opinion or approval. Together with the Swiss Expert Committee for Biosafety (SECB) and the Federal Office for the Environment (FOEN), the FOPH also provides expert advice on clinical trials involving gene therapy and clinical trials involving genetically modified or pathogenic organisms.

## Electronic system for submission of applications ("BASEC").

The electronic system for submission of applications (Business Administration System for Ethics Committees, BASEC) was activated by the ethics committees on 2 November 2015. From 2016, the ethics committees will use BASEC for the receipt, review and approval of all new applications. The traditional method of submitting applications to the ethics committees (paper, CDs, email) has been replaced by BASEC.

#### Types of approval procedure

The Ethics Commission determines whether research projects and their conduct comply with the ethical, statutory and scientific requirements of the Act, in particular whether protection of participants in clinical trials is ensured. Depending on risk and complexity, applications for approval of research projects are reviewed using the regular procedure (at least seven members), the simplified procedure (three members) or the presidential procedure; they are checked for form and content by the scientific secretariat.

In the *regular procedure*, at least seven members consult and make decisions on the application. Verbal consultation is the general rule while the written procedure is used in exceptional cases. The composition of the deciding committee body must ensure competent and interdisciplinary assessment. Decisions are made based on a simple majority of votes; the presiding member exercises a casting vote where necessary.

In certain cases, the *simplified procedure* may be used, with which a decision can be reached by a subcommittee of three members. The three-member subcommittee must include at least one representative of the presiding member and members from the various specified areas, such that there is an appropriate balance of areas of expertise. A written procedure is possible, unless a member of the subcommittee requests a verbal consultation.

Use of the *presidential procedure* by the President or his delegate to decide on a research proposal after the relevant preliminary review by the scientific secretariat is limited to proposals whose assessment is straightforward.

#### Outline of processing periods Within 7 days of receipt, the ethics committee advises the investigator that the application has been received and informs him/her of any formal deficiencies in the application documents. The decision of the ethics This period is extended to committee must be made within 45 days for multicentre research 30 days of confirmation that projects and certain studies with the formally correct application radiation sources. documents have been received. Significant amendments to research projects must also be approved by the ethics committee. The decision on such amendments must be made within 30 days of confirmation that the formally correct amendment documents have been received.

#### Processing periods for research proposals

Specific processing periods (deadlines) apply to the evaluation of research projects. The figure "Processing periods for research proposals" on page 10 gives simplified details of these processing periods.

#### Independence, bias and recusal

The ethics committee must act completely independently in making their decisions and must not be influenced by the advice of supervisory authorities. Vested interests of individual members such as positions in hospitals, affiliation with research funding organisations or association with commercial enterprises must be made transparent and publicly available. If there is a potential conflict of interest, the relevant member of the ethics committee must abstain from voting during consultation and decision-making.

## Obligations of the ethics committees after approval of a research project

During the conduct of research projects, the ethics committees receive regular reports on adverse events from the researchers, particularly with regard to the safety of participants in the research projects. If the health or safety of the persons concerned is endangered, the ethics committee may revoke the approval, suspend the research project or attach conditions to its continuation.

Significant amendments of the research project that are made during its execution must be reported to the ethics committee and be approved by it before the changes take effect.

#### **Fees and Funding**

The activities of the ethics committees are funded in part by fees charged to the researchers when they submit their application. The fees charged by the ethics committees are listed in a regulation drawn up by swissethics, although the regulation is not binding. The cantons may wish to contribute to the financing of the ethics committees, e.g. with a basic payment.

## Other responsibilities and activities of the ethics committees

In addition to their primary function in reviewing and approving human research projects, the ethics committees may accept other responsibilities. For example, they make decisions on research projects involving embryonic stem cells. They may also advise researchers on ethical or scientific issues, including research proposals for projects conducted abroad. They can also contribute to training programmes for researchers in the field of human research.

#### **Further Information**

Further information and links in the field of research on humans and about the ethics committees can be found on the website of the Coordination Office for Human Resarch kofam, www.kofam.ch.

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Coordination Office for Human Research (kofam) Federal Office of Public Health 3003 Bern

www.kofam.ch www.foph.admin.ch

