

List of Risk Factors

that may pose a high risk to the fundamental rights of participants in a research project involving the collection and processing of personal data

Certain types of data collection and processing in research—depending on their nature, scope, context, and purpose—may pose a high risk to the fundamental rights of participants. In such cases, a Data Protection Impact Assessment (DPIA) is legally required.

A DPIA is a structured and practical analysis that helps identify the measures needed to minimise potential risks, and to assess the severity of any remaining (residual) risks after mitigation.

To determine whether your research project may present a high risk, you can refer to this list. If you consider that your research project involves one or more risk factors, the DPOs can assist you in conducting the DPIA.

I. Risk factors related to Sensitive personal data

Sensitive personal data means:

- data relating to religious, philosophical, political or trade union-related views or activities;
- data relating to health, the private sphere or affiliation to a race or ethnicity;
- genetic data;
- biometric data that uniquely identifies a natural person;
- data relating to administrative and criminal proceedings or sanctions;
- data relating to social assistance measures.

Risk factor	Explanations
Is Sensitive personal data processed on a large scale or with a large number of research participants involved?	Large-scale processing refers to processing on a vast scale. Factors to be taken into account include, in particular, the number of data subjects concerned, the volume of data processed, the duration or ongoing nature of the processing activity, and the geographical scope of the processing activity. Processing is also considered to be large-scale where data are processed in a systematic manner. The term a large number of research participants may refer to an absolute number of individuals or a relative number as a proportion of the group of people who potentially meet the inclusion criteria for the research project. <u>Examples</u> : the personal data of all pupils in a canton, all patients in a hospital department, the entire dataset of social welfare recipients in a canton, or where personal data is collected from different sources or linked together.

Risk factor	Explanations
Does the processing involve Sensitive personal data related to persons in need of protection (vulnerable groups), or is there a significant imbalance of power between the data controller (research team members) and the research participants, favouring the data controller? <i>If the project is subject to approval by an ethics committee in accordance with the Human Research Act (HRA) or by an internal ethics committee, this risk should have been assessed by the committee in principle. Based on this criterion alone, a Data Protection Impact Assessment should not be necessary.</i>	<u>Examples</u> of vulnerable groups: children, people with disabilities, people in precarious circumstances, prisoners, people unable to give consent, etc. <u>Example</u> of a significant imbalance: the participants in the research project are also the students of a member of the research team
Are different datasets containing sensitive personal data matched or merged, particularly when they come from different processing operations or sources?	<u>Examples</u>: linking information about a person from one database with information from another; supplementing data collected directly from the participants with information about them that is available online

II. General risk factors related to Sensitive personal data

Risk factor	Explanations
Is any of the personal data used for profiling purposes, or could it be used for this purpose at later stages of the processing?	Profiling means any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person, in particular to analyse or predict aspects concerning that natural person's performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location or movements. In other words, it involves inferring information about individuals from the data being processed. Exemples : work performance, financial situation, health risk assessments, personal preferences, interests, behavioural and marketing profiles of website users, reliability, behaviour, location or movements of that person, etc.
Is personal data (even if it is pseudonymised) processed using new technologies, particularly AI, or new mechanisms?	New technologies, new mechanisms and new procedures means: the use of innovative new technologies or significant changes to existing technologies, the potential negative consequences of which for the data subjects or even for the data controller (Unifr; research team) cannot yet be fully assessed. <u>Examples</u>: the use of artificial intelligence (machine learning, deep learning, etc.), biometric procedures, automated analysis of video or audio recordings, certain applications of the Internet of Things (e.g. smart health), facial recognition systems, mobile phone tracking, etc.

Risk Factor	Explanations
Is personal data (even if it is pseudonymised) made available to, used, supplemented or processed by or in conjunction with third parties (outside the research team) ?	<u>Example</u> : collaboration with a private company that also has access to participants' personal data, planned publication of data in an online repository (open research data)
Is data processing carried out (in whole or in part) outside Switzerland in a country that does not guarantee an adequate level of data protection? Link to the list of States that guarantee an adequate level of data protection	<u>Examples</u> of data processing outside Switzerland: - data is stored or shared on a cloud server based abroad, accessible remotely, with servers managed by a third party - data is processed using software operated by an external IT service provider abroad and used by the data controller as a service (SaaS).
Are the research participants subject to systematic and extensive monitoring or surveillance, or is their behaviour recorded or assessed in any other way? Are large public spaces systematically monitored?	<u>Examples</u> : through the use of CCTV cameras, access controls, travel data, persistent cookies on websites, workplace monitoring, ongoing or ad hoc monitoring of emails, monitoring of network traffic, automatic recording of vehicle registration numbers in public car parks or parking spaces, surveillance at bus stations, etc.

III. Other risk factors

Are the various data processing operations planned as part of the research project highly complex and therefore difficult to assess in terms of their impact?
Could the processing of data have particularly harmful consequences for the research participants or be perceived as such?
Does the data being processed pose an increased risk of misuse if it falls into the wrong hands?
Is the processing of data likely to attract public criticism if it were to become known?
Could the proposed treatment inadvertently pose significant risks to the research participant for other reasons?