European Commission

# Making the use of animals in science more transparent

The EU is committed to phasing out the use of animals in science when it is scientifically possible to do so. It is working towards the ultimate goal of replacing all animals used for scientific purposes, but more time is needed to develop alternative approaches that do not involve animals.

## Why is it still necessary to use animals in research?

Animals have played key roles in nearly every major medical advance of the last century. Much progress has been made in the prevention and treatment of human and animal diseases. We would not enjoy better health, improved quality of life and longer life expectancy without the knowledge gained from animal research.

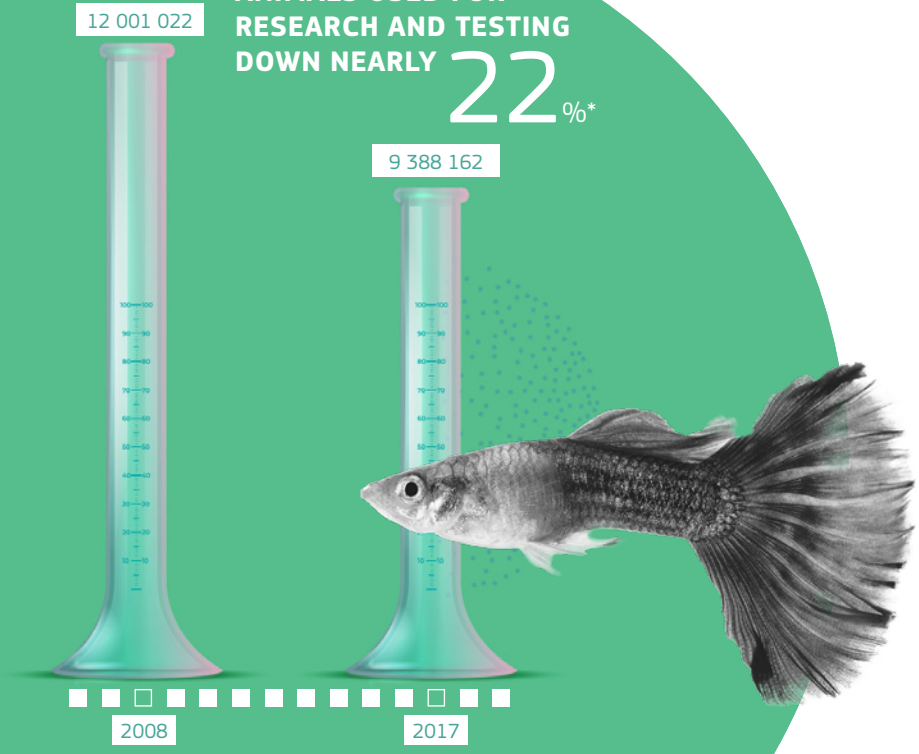
Technological advances, computer simulations and test tube methods already greatly reduce the number of animals used, but they are not yet able to fully replicate living organisms' complexities and reactions. Considerable scientific challenges remain and often alternative solutions are not available.

It is the European Commission's **ultimate goal to completely replace animals in science.** Until this becomes reality, it is committed to reducing the number of animals and respecting the welfare of the animals used for scientific purposes.

The safety and efficacy of several vaccines still need to first be tested on animals.


* Vaccines Europe

**ANIMALS USED FOR RESEARCH AND TESTING DOWN NEARLY 22%***




* indicative, extracted from comparable data

### WHAT ARE SCIENTIFIC PURPOSES?

All uses of animals for basic, translational and applied research, regulatory testing and production, education and training, as well as the creation and maintenance of genetically altered animal lines.

# **EU database ALURES** - World's most comprehensive repository on animal use statistics taking transparency to another level

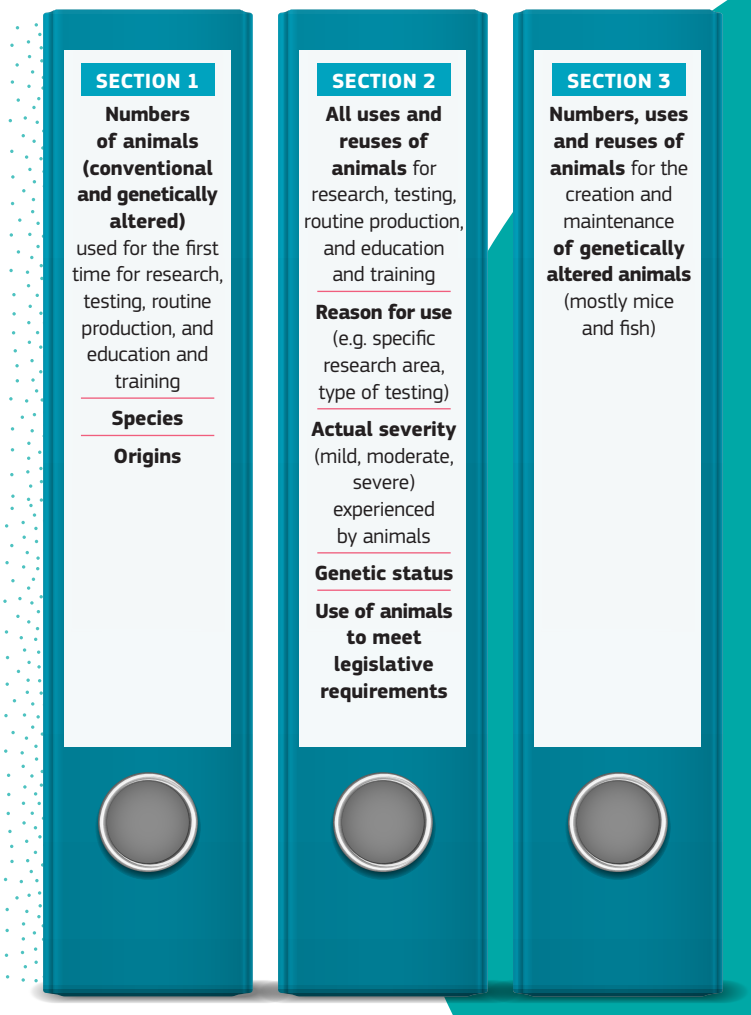
## ALURES DATABASE at a glance

- **EU's first public database** on the use of animals for scientific purposes.
- **Detailed and reliable statistics** on the animals used in science throughout Europe.
- **Complete data** available on each use of an animal and what type of procedures are carried out.
- **Free access** to all.

## What are the benefits of ALURES?

- Complete overview of when and how animals in Europe are being used in science.
- Understand the areas that still need animals in research and testing.
- Determine which areas use the most animals, in which procedures animals can experience severe suffering and which regulatory requirements result in animal use. This helps to identify where science urgently needs to develop alternative approaches.
- Determine where to focus R&D efforts and funding.

## What information is available in ALURES?




**ROUTINE PRODUCTION**
Animals used in the manufacturing process of products (e.g. vaccines, antibodies, blood-based products).

**REUSE**
Although most animals are used only once, they can be reused under strict conditions. Reuse can decrease the overall number of animals.

**GENETICALLY ALTERED ANIMAL**
Animal whose genetic material has been altered by adding, changing or removing certain DNA sequences to introduce a new trait or change a characteristic. Mostly used to better understand the roles of genes in health and disease.

# Protecting and improving the welfare of animals in scientific research

## How are animals protected?

In Europe, **all living animals used in science are protected by very strict legislation**. All animal studies must comply with this legislation. Animals cannot be used for scientific purposes without prior authorisation.

Authorities can **only allow the use of animals when there are no alternative, non-animal methods available.** In addition, the **use of the animals must be justified** by the expected benefits, also taking into account ethical considerations.

## Making the EU a global leader in transparency

**DIRECTIVE ON THE PROTECTION OF ANIMALS USED FOR SCIENTIFIC PURPOSES**

**REPLACE**
animal use with non-animal methods wherever possible.

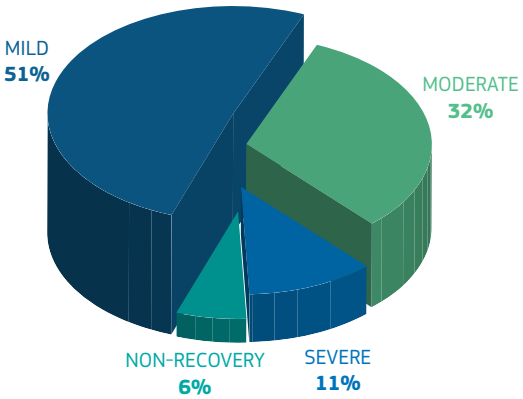
**REDUCE**
the number of animals by obtaining the same amount of data using fewer animals or obtaining more data by using the same amount of animals.

**REFINE**
the use to reduce pain, suffering and distress and to improve animal welfare.

## How EU legislation protects animals used for scientific purposes

- There is a legal obligation to eliminate or minimise pain, suffering, distress and lasting harm on animals to a minimum level possible.
- All efforts to minimise pain, suffering and distress have to be made from the planning stage.
- Every establishment must have a named person responsible for the welfare and care of animals, as well as a designated veterinarian.

**SEVERITY OF USES**



**1**
**MILD**

Minimal or no pain, suffering or distress.

*e.g. Non-invasive imaging.*

**2**
**MODERATE**

Short-term moderate pain, suffering or distress, or long-lasting mild pain, suffering or distress.

*e.g. Surgical procedures under general anaesthesia and with post-operative pain relief.*

**3**
**SEVERE**

Severe pain, suffering or distress, or long-lasting moderate pain, suffering or distress.

*e.g. Testing of devices (e.g. cardiac assist) where failure may cause severe pain, distress or death.*

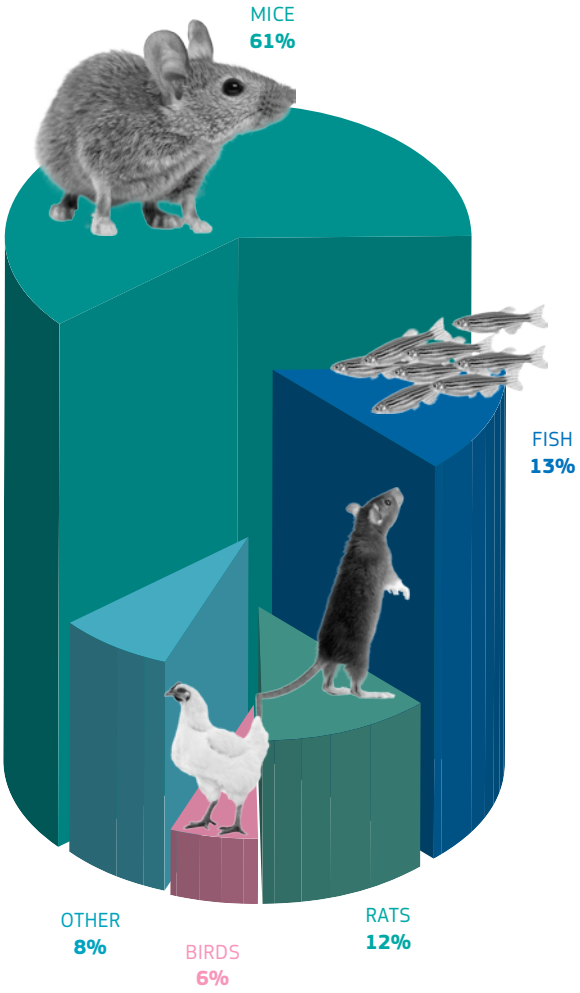
**4**
**NON-RECOVERY**

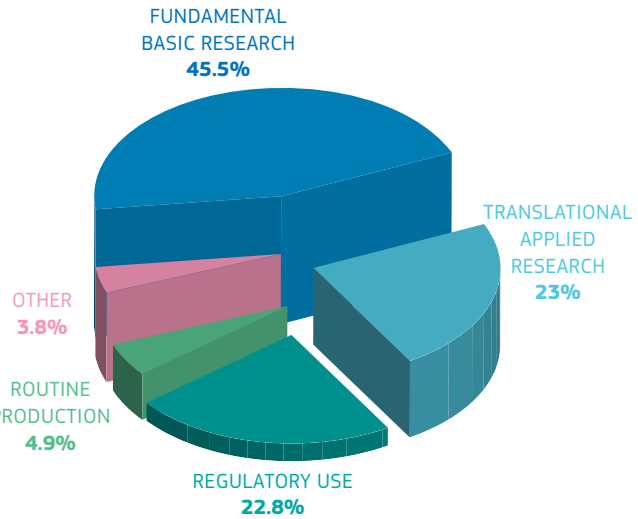
Does not regain consciousness when entire procedure carried out under general anaesthesia.

# Severity of all procedures in research and testing

EU countries are **required by law to report the actual severity** experienced by an animal at the end of each use (procedure).

## MOST COMMON ANIMALS USED IN RESEARCH AND TESTING




# What kind of research are animals used for?

**Basic or fundamental research** helps advance scientific knowledge about how animals and humans behave, develop and function biologically.

**Translational or applied research** helps scientific understanding of diseases leading to and including the development of new medicines and vaccines.

**Regulatory use** assesses the potential risks of harm to animals, humans or the environment. Evaluates human and veterinary medicines. Obtains quality and safety data from household and industrial chemicals, herbicides, fertilisers and food additives.

Figures in charts based on 2017 data

## Want to know more?

Website

Directive 2010/63/EU

Annex III to Commission Implementing Decision 2020/569/EU

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