

# Animal Testing

## 1. What is animal testing?

An animal test is any scientific experiment or test in which a living animal is forced to undergo something that is likely to cause them pain, suffering, distress or lasting harm.

Animal experiments are not the same as taking your family pet to the vet.

Animals used in laboratories are deliberately harmed, not for their own good, and are usually killed at the end of the experiment.



## Animal experiments include:

- injecting or force feeding animals with harmful substances
- surgically removing animals' organs or tissues to deliberately cause damage
- forcing animals to inhale toxic gases
- subjecting animals to frightening situations to create anxiety (*feeling scared/worried*) and depression (*severe sadness*)



Some experiments require the animal to die as part of the test. For example, regulatory tests for vaccines and some tests for chemical safety are essentially variations of the cruel **Lethal Dose 50 test** in which **50%** of the animals die or are killed just before the point of death.

## 2. What animals are used in testing?



The most common animals used in cruel testing are: rats, mice, rabbits, guinea pigs, monkeys, cats, and dogs.

**Beagle dogs** - The most common breed of dog used for experiments are beagles, but not because scientists view them as the best model for human disease.

Rather, beagles are convenient to use because they are docile (*cooperative*) and small, allowing for more animals to be housed together using less space and costing less money.



These dogs can be bred (*are born*) to be pathogen-free or genetically manipulated. The toxicity tests these beagles endure can be very painful. They suffer from vomiting, diarrhoea, convulsions (*fits/seizures*), respiratory distress (*difficulty in breathing*), appetite or weight loss, rashes, salivation (*drooling from their mouth*), paralysis (*unable to move*), lethargy (*extreme tiredness*), bleeding, organ abnormalities, tumours (*abnormal growths of tissue*), and death.



### 3. What are they testing, and why do they do testing?

- medicines
- chemicals - (*like household cleaning products like bleach*)
- products that we all buy in shops, such as shampoo (*unless they are cruelty free*)
- genetic modification of animals

- experimental curiosity
- outdated teaching practices - *(used in schools and universities)*



#### 4. Does using animals make medicines, chemicals and products safe for us?

Despite efforts to improve the predictability of animal testing (*through the use of genetic modification*), the failure rate has actually increased and is now closer to 96%. Therefore, animal testing only makes us feel safe when using anything that has been tested on animals. It does not make what we use safe, it has prevented medical progress and has held back science.

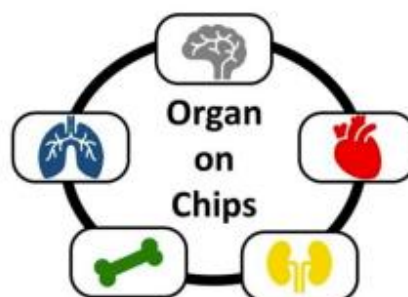




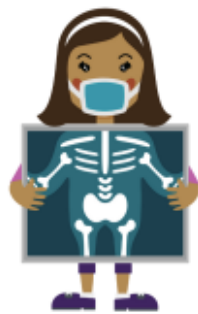
Laboratories are no place for any animal. They are typically indoor environments in which the animals are forced to live in cages, pens or boxes - denied complete freedom of movement and control over their lives. Some animals in laboratories are confined on their own, without the companionship of others.

## 5. What are **SOME** of the non-animal methods?

- **canine** (*dog*) and human patient simulators
- organ on a **chip** (*microchips - often used in computers*)



- computer modelling, virtual screening and 3D cell cultures
- human volunteers, human tissue and **micro-dosing** (*very tiny doses of a medicine*)
- medical imagery, **biobank** (*biomedical database*) and **in vitro** (*describes something "in glass" such as a test tube or petri dish*)



## 6. Key words:

- **Cordectomy** - is the surgical removal of both vocal cords, often for the purpose of preventing the animal (*like a dog*) from making any sound.



- **Gavage** - the administration of food, drugs or chemicals (*like products*) by force, especially to an animal, typically through a tube leading down their throat to their stomach.

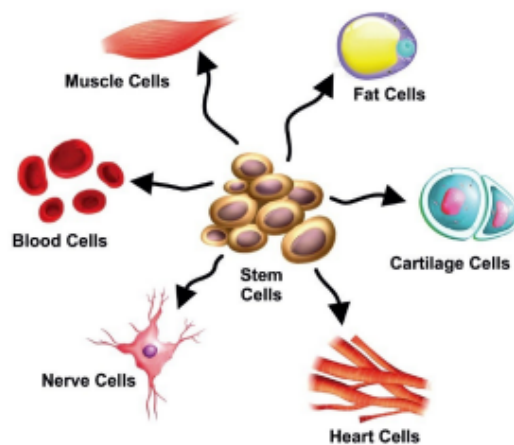


- **Inhalation** - this is where animals are forced to breathe in toxic gases.





- **Organs** - are collections of tissues with important functions for our bodies. Your heart, brain, lungs and skin, are all organs.
- **Tissues** (*of the body*) - are made up of cells, which all work together inside your body.
- **Cell** - Cells are the smallest and basic structures in all living things.



- **Pathogen** - an organism that can cause disease, such as viruses and bacteria.
- **Genetic modification** - is to change an animals' genetic material (*which plays a role in the structure of cells*) by adding, changing or removing certain **DNA** (*which carries genetic information*) sequences in a way that does not occur naturally.