

Frequently Asked Questions

I am a new investigator at AIIMS, New Delhi. What do I need to do if I want to do animal research?

Before you start working with animals you are required to submit an animal experimental protocol for approval by Institutional Animal Ethics Committee (IAEC) or you can become a co-investigator (which should be approved by IAEC) in an existing approved animal protocol .

Once you are part of an approved protocol you can have access to animal facilities and start working with the approved animal species.

If you are the Principal Investigator (P.I.) you will need to submit an animal protocol. Download an animal protocol form from our web site
http://www.aiims.edu/en/central_animal_intro.html.

Please fill out the form and submit the form to the IAEC office in person from Central Animal Facility). Phone number: 01126593289

If you are added to an existing protocol, the P.I. of the existing approved protocol needs to fill out and sign the change in personnel amendment and submit the completed personnel amendment request along with the IAEC approval.

Do I need to submit an IAEC protocol approval?

A detailed experimental research protocol must be submitted if you intend to conduct research for which you need to use live animals (all warm and cold-blooded vertebrates)

Am I eligible to submit an animal research protocol application?

Only persons with a faculty rank can be a P.I. Any other faculty, scientist or PhD,DM.MCh, MD, MS,MSc. students may be co-investigator

When can I submit a protocol?

A protocol can be submitted any time of the year.

Changes in personnel can be handled administratively and do not go through a formal review process.

Is there any need to renew the animal protocol approval?

Approval for a particular research protocol using animals is for maximum three years from the time the first batch of animals is used.

Is it my responsibility to renew protocol approval after the stipulated period of three years?

Yes

What if I need additional animals?

Proper justification/s should be provided in writing if you need additional number of animals.

How will you let us know if our protocols and/or amendments have been approved?

After a protocol, renewal, or amendment has been approved, a copy of the approval letter for the protocol is sent to the PI

How long does it take for a protocol to be approved?

As the IAEC consists of members from inside and outside AIIMS, New Delhi, the meetings for reviewing the application for approval are usually held once in two months.

Where can I find the application forms for IAEC approval?

All current forms used by the IAEC can be found on our website http://www.aiims.edu/en/central_animal_intro.html

OR personally from the CAF.

What kind of training is required for a researcher to use animals for research ?

All personnel should be aware of the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) guidelines for use of animals in research. (<http://caf.iisc.ernet.in/image/cpcsea-guidelines-latest.pdf>)

Is practical training in animal handling and/or surgery available?

The veterinary surgeon and technicians in CAF will help you in training in such cases. You can also take the help of other faculty members and scientists trained in the field for this purpose with intimation to IAEC.

Can I keep animals in my laboratory overnight?

You can, provided proper CPCSEA approved facilities are available. Presently they are available only in departments of Physiology, Pharmacology and Ocular Pharmacology, RP Centre.

Can rodents be brought into CAF from another research institution or vice versa?

NO.

Special permission is required from IAEC.

How to calculate the sample size of an animal experiment?

One of the most baffling questions faced by any researcher is how many animals should be used for an animal study. Because too small a sample size can fail to reveal the real effect of an experiment, and too large sample size causes unnecessary use of the resources and animals. Issue of sample size has not been addressed much in the case of animal studies as it has been for clinical studies.

A useful link has been provided below:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3826013/>

What are the approved methods for euthanasia of laboratory animals?

Euthanasia (as per CPCSEA guidelines) [Indian Journal of Pharmacology 2003; 35: 257-274]

- Euthanasia is resorted to events where an animal is required to be sacrificed on termination of an experiment or otherwise for ethical reasons.
- The procedure should be carried out quickly and painlessly in an atmosphere free from fear or anxiety.
- For accepting an euthanasia method as humane it should have an initial depressive action on the central nervous system for immediate insensitivity to pain.

The choice of a method will depend on the nature of study the method should in all cases meet the following requirements:

- (a) Death, without causing anxiety, pain or distress with minimum time lag phase.
- (b) Minimum physiological and psychological disturbances.
- (c) Compatibility with the purpose of study and minimum emotional effect on the operator.

(d) Location should be separate from animal rooms and free from environmental contaminants.

Euthanasia of laboratory animals.

(A- Methods Acceptable for species of animals indicate, NR- Not Recommended)

| Method | Mouse | Rat | Hamster | G. pig | Rabbit | Cat | Dog | Monkey |
|------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| A. Physical methods | | | | | | | | |
| • Electrocution | NR | NR | NR | NR | NR | NR | NR | NR |
| • Exsanguination | A | A | A | A | A | A | NR | NR |
| • Decapitation | A | A | NR | NR | NR | NR | NR | NR |
| • Cervical dislocation | A | A | A | NR | NR | NR | NR | NR |
| B. Inhalation of gases | | | | | | | | |
| • Carbon monoxide | A | A | A | A | A | A | A | A |
| • Carbon dioxide | A | A | A | A | A | A | NR | NR |
| • Chloroform/halothane | A | A | A | A | A | A | A | A |
| C. Drug administration | | | | | | | | |
| • Barbiturate overdose(route) | A(IP) | A(IP) | A(IP) | A(IP) | A(IV.IP) | A(IV.IP) | A(IV.IP) | A(IV.IP) |
| • Chloral hydrate overdose(route) | NR | NR | NR | NR | A(IV) | A(IV) | A(IV) | A(IV) |
| • Ketamine overdose(route) | A(IM/IP) | A(IM/IP) | A(IM/IP) | A(IM/IP) | A(IM/IV) | A(IM/IV) | A(IM/IV) | A(IM/IV) |
| • Sodium pentothal overdose(route) | IP | IP | IP | IP | IV | IV | IV | IV |

IP= intraperitoneal IV= Intravenous IM= Intramuscular

Methods **not Acceptable** for any species of animals

a) Physical methods;

Decompression

Stunning

b) Inhalation of gases

Nitrogen Flushing

Argon Flushing

c) Drug administration

- | | |
|--------------------------|---------------------|
| (i) Coraciiform drugs | (v) Strychnine |
| (ii) Nicotine sulphate | (vi) Paraquat |
| (iii) Magnesium sulphate | (vii) Dichlorvos |
| (iv) Potassium chloride | (viii) Air Embolism |