

भारतीय मानक
रेल, सड़क, वायु एवं समुद्री मार्ग द्वारा बन्दरों
का परिवहन — रीति संहिता
(दूसरा पुनरीक्षण)

Indian Standard

**TRANSPORT OF MONKEYS BY RAIL, ROAD,
AIR AND SEA — CODE OF PRACTICE**
(*Second Revision*)

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FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Livestock Husbandry Systems and Equipment Sectional Committee had been approved by the Food and Agriculture Division Council.

A large number of monkeys are being transported from one place to another for the purpose of medical research and vaccine production. The safe transit of these animals is of great importance on humanitarian as well as economic grounds. In order to achieve this objective, it was felt necessary that a code for the transport of monkeys be made available.

Earlier, there were three standards on code for the transport of monkeys: IS 3059 : 1981 'Code for transport of monkeys by air (*first revision*)', IS 3699 (Part 1) : 1978 'Code for transport of monkeys by land : Part 1 Transport from trapping area to the nearest rail-head (*first revision*)'; and IS 3699 (Part 2) : 1978 'Code for transport of monkeys by land : Part 2 Transport from rail-head to the nearest airport (*second revision*)'. While reviewing these standards, the Committee decided to incorporate the requirements of IS 3699 (Part 1) and IS 3699 (Part 2) in IS 3059. In addition code of transport of monkeys by sea has also been included in this revision of IS 3059. With the publication of this standard, IS 3699 (Part 1) and IS 3699 (Part 2) shall be withdrawn.

In the preparation of this standard, due consideration has been given to the *Prevention of Cruelty to Animals Act*, 1960 and rules framed thereunder. However, it is subject to the restrictions imposed under this Act wherever applicable and as amended from time to time.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

TRANSPORT OF MONKEYS BY RAIL, ROAD, AIR AND SEA — CODE OF PRACTICE (*Second Revision*)

1 SCOPE

This standard prescribes the conditions for the transport of monkeys by rail, road, air and sea with a view to ensuring proper care, immediately before and during their shipment. This code also includes recommendations in regard to the hygiene of the animal handlers and of the aircraft in which the animals are carried.

2 GENERAL REQUIREMENTS

2.1 The time in transit shall be as short as possible and factors causing stress to monkeys shall be reduced as much as possible.

2.2 Monkeys that are not completely weaned (which shall be determined according to age and species of animal) shall not be transported except when permitted by the Government of India.

2.3 Pregnant and nursing monkeys shall not be transported except when specifically indented for by the importer and permitted by the Government of India. Pregnant and nursing monkeys weighing over 5 kg shall be transported in specially designed individual cages (*see 5.3.1*).

2.4 All monkeys in the same cage shall be of the same species, sex and of approximately the same weight and size.

2.5 It is desirable that in view of the dangers of infection, only monkeys of the same species be transported in the same cabin or compartment of the aircraft/ship. Apparently sick or disabled monkeys exhibiting external injuries or infested with parasites shall not be transported. Transport of other species of animals, birds, fish, foodstuffs or poisonous materials, such as pesticides and insecticides in the same cabin or compartment shall not be permitted.

2.6 It is desirable to deworm the monkeys with suitable broad spectrum dewormer before transportation.

2.7 At no time during transit shall the monkeys be left unattended. At least one animal handler shall be present at all times during transit.

2.8 The carrier shall maintain the progress report of the animals carried by them in a form, a specimen of which is given in Annex A.

2.9 During transit, precautions shall be taken to protect the animals from extreme weather conditions.

2.10 Not more than two cages shall be placed one over the other. Gunny sacking shall be placed between the two cages, when placed one over the other.

2.11 Loading and unloading should be carried out quickly and efficiently. Cages shall be stowed in such a manner that ventilation is adequate and the monkeys are not exposed to draught and direct heat or cold.

2.12 While unloading the monkeys, care shall be taken not to throw, drop or mishandle cages in any manner, which might cause harm to or unnecessarily agitate the monkeys. Same precautions shall be taken while transferring the cages. No other material shall be carried in the trolley.

2.13 Monkeys found dead shall be removed for suitable disposal by deep burial or incineration.

3 FOOD AND WATER

3.1 The food and water containers shall be checked at every stop and refilled if necessary. A sufficient stock of food shall be available on transport and at likely stopping places. About 85 g of food per monkey is required daily. Suitable foods are dry cereal grains or gram. It is recommended that whole gram made into biscuits or wheatmeal bread should be fed.

3.2 A minimum of 140 ml of water shall be allowed for each monkey per day.

3.3 Due provision shall be made by the sender for a sufficient supply of food and water for journey. In case the journey is over 6 h, an attendant shall accompany the animals to supply them food, water, etc, enroute. The food and water containers should be checked at least every 6 h and refilled, if necessary. Monkeys shall not be disturbed during the night hours.

3.4 Monkeys shall be fed and watered immediately before and after loading.

3.5 If the travel time is longer than 6 h, provision shall be made to feed and water the animals enroute.

3.6 The monkeys should be provided with adequate food and water after unloading. This shall be the responsibility of the attendant who shall also see that passers by do not harass the monkeys in any way. The

veterinary surgeon who is called to attend to sick/injured animals should especially see to these.

4 EQUIPMENTS

4.1 The following equipments are required for animal handlers on each journey:

- a) White overall clothing — clean change daily;
- b) Minimum of two pairs of pants, vests and socks;
- c) Rubber boots;
- d) Cotton undergloves (which must be considered as disposable) and strong outer gloves of a material that can be easily washed before removing from the hands, such as rubber or plastics; these gloves should protect the handler from penetrating bites especially on the fingers;
- e) Skull cap — surgical type;
- f) Clean blankets; and
- g) First aid kit.

4.2 In freighter aircraft/ship, a separate portion shall be reserved for the animal handler to change and rest, and toilet facilities shall be provided. Smoking, if permitted, and eating shall be allowed only in this separate part of the aircraft/ship. Instructions shall be given to the animal handlers on the proper use and care of the protective equipment.

4.3 The following equipment shall be available on the freighter aircraft/ship and at the intermediate stations:

- a) Mop and bucket,
- b) Brush and dust pan,
- c) A suitable disinfectant,
- d) One tray scraper and bucket for each animal handler,
- e) Tongs for lifting dead monkeys,
- f) An ample supply of impervious disposal bags,
- g) Food scoop,
- h) Catching net,
- j) Long leather gauntlet gloves (elbow length) size 200 to 215 mm,
- k) Movable taps for watering,
- m) Toilet soap and paper towels,
- n) Hand sprayer along with a suitable insecticide (pyrethrum), and
- p) First aid kit.

5 TRANSPORT CAGES

5.1 The animals shall be transported in suitable cages made of acrylic/ultra high density polyethylene/aluminium, so constructed as not to allow the escape of the monkeys and shall allow sufficient passage of

air for ventilation; metallic projections or sharp edges shall not be exposed on the interior or exterior of such cages. Each cage shall be equipped with water and feed receptacles which shall be leak-proof and be capable of being cleaned and refilled during transit. A suitable absorbent material, such as sawdust shall be kept in the dropping trays.

5.2 The weight of any one loaded cage shall not exceed 45 kg.

5.3 The following two sizes of cages are recommended (see Fig. 1):

- a) 460 mm × 460 mm × 460 mm — to contain not more than 5 monkeys weighing from 1.8 to 3.0 kg or 4 monkeys weighing from 3.1 to 5.0 kg.
- b) 760 mm × 530 mm × 460 mm — to contain not more than 10 monkeys weighing from 1.8 to 3.0 kg or 8 monkeys weighing from 3.1 to 5.0 kg.

5.3.1 The construction details of the cage used for the transport of pregnant and nursing monkeys shall be as given in Fig. 2.

5.4 The sizes of cages for monkeys specially meant for transport by sea shall be adequately increased with cotton/dunlop pillow lining all along the inside of the cage to prevent the monkeys from getting hurt during rough weather.

6 CERTIFICATE OF FITNESS

6.1 All monkeys to be exported shall be tuberculin tested and shall give a negative reaction when tested according to the method prescribed in Annex B. Positive reactors shall not be transported.

6.2 A certificate of fitness for the monkeys to travel, by a qualified veterinary surgeon, shall accompany each consignment of monkeys. In the absence of such a certificate, the carrier shall refuse to accept the consignment for shipment. A specimen of the prescribed form is shown in Annex C.

6.3 All monkeys to be exported shall be vaccinated against rabies as per performa in Annex D.

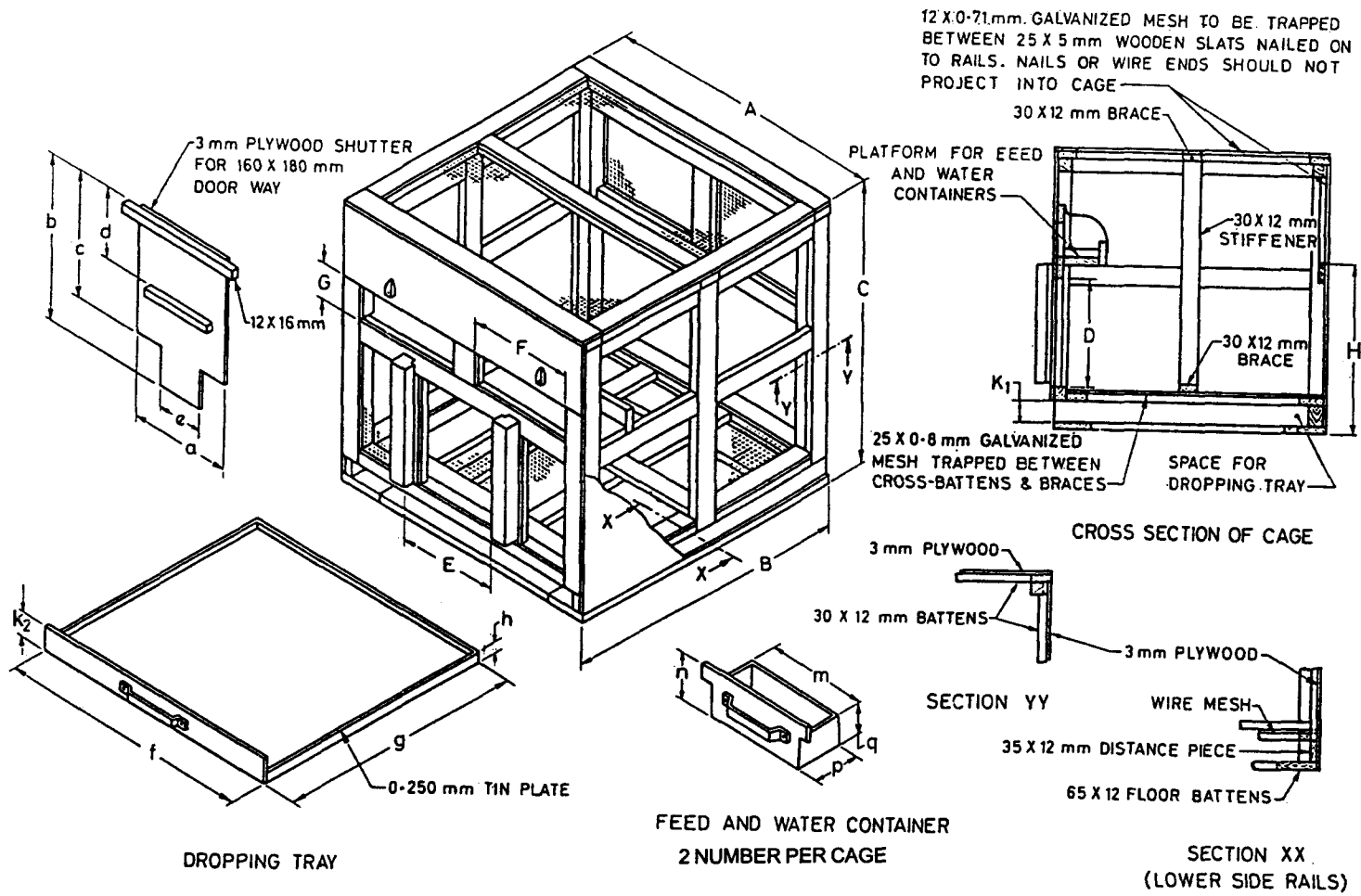
7 TRANSPORT BY ROAD

7.1 The vehicle employed for transport shall be properly cleaned and disinfected after each trip.

7.2 The carriage transporting the monkeys should be brought straight from one holding centre to another.

8 TRANSPORT BY RAIL

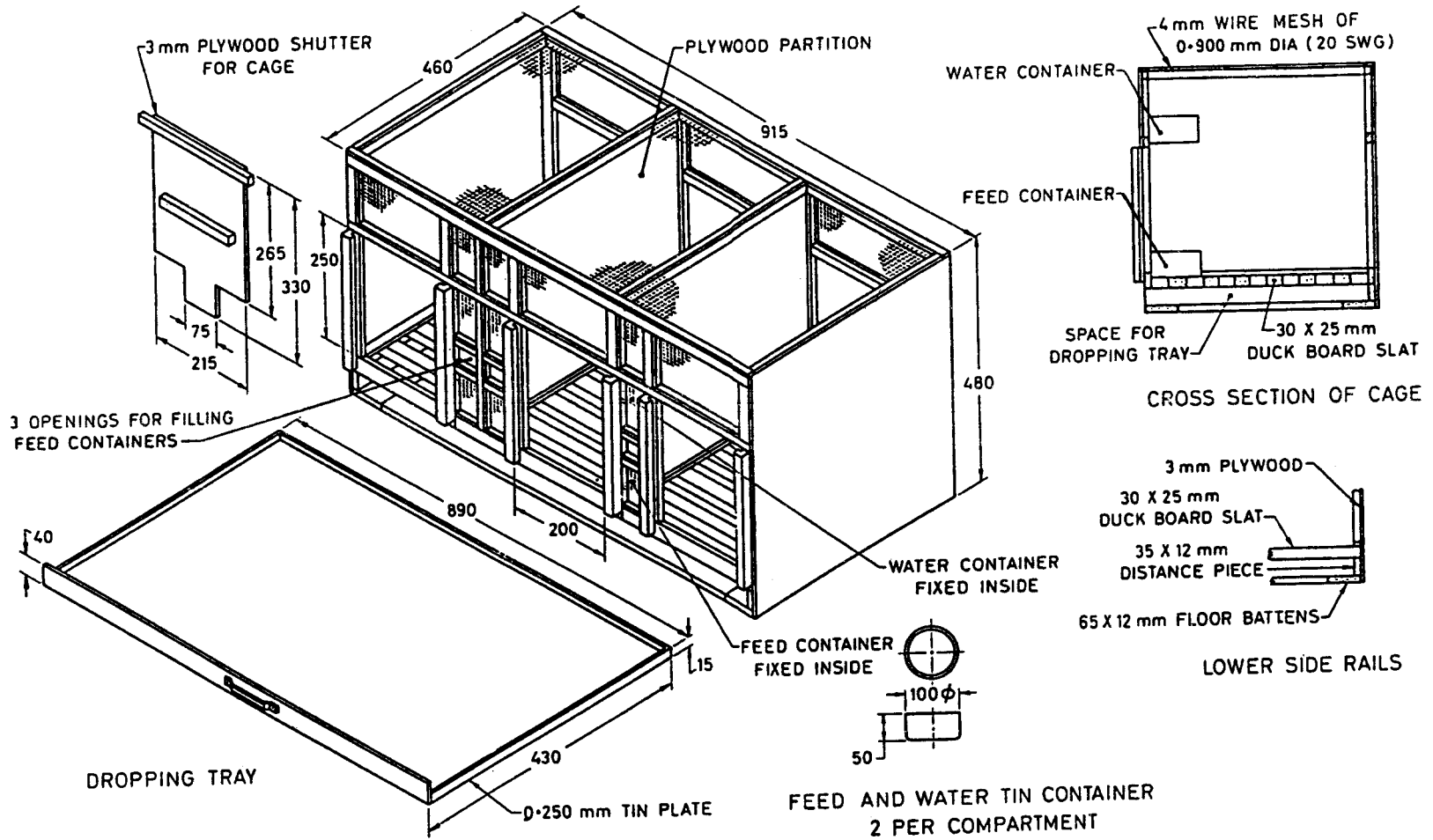
8.1 The railway staff shall give priority to booking and clearance for consignment of monkeys.



SIZES	A	B	C	D	E	F	G	H	K ₁	a	b	c	d	e	f	g	h	k ₂	m	n	p	q
1	460	460	460	180	160	180	55	280	35	170	255	190	100	75	430	430	16	40	170	75	75	50
2	530	760	460	180	160	215	55	280	35	170	255	190	100	75	510	730	16	40	210	75	75	50

All dimensions in millimetres.

FIG.1 MONKEY CAGES FOR AIR TRANSPORT



All dimensions in millimetres.

FIG. 2 MONKEY CAGE FOR AIR TRANSPORT (FOR PREGNANT AND NURSING MONKEYS AND MONKEYS WEIGHING OVER 5 kg)

8.2 Not more than one cage shall be placed over the other. Gunny sacking shall be placed between the two cages, when placed one over the other.

8.3 The railway authority shall not permit transport of other species of animals, such as birds and fish; and injurious/poisonous materials, such as pesticides and insecticides with monkeys in the same cabin or compartment of the train.

8.4 The railway authority should ensure that the wagon transporting the monkeys is adequately ventilated and it protects animals from exposure to draughts, direct heat or cold and rain.

9 TRANSPORT BY AIR

9.1 Ventilation, Temperature and Light

9.1.1 Ventilation

The air shall be changed not less than 12 times per hour, and draughts shall be avoided. There shall be no dead pockets of air.

9.1.2 The optimum temperature is considered to be 24°C, in practice equivalent to 16 changes of air per hour; the maximum is 27°C, that is, 20 changes of air per hour and the minimum is 18°C, that is, 12 changes of air per hour. The variation in temperature shall not be greater than 0.6°C every 5 minutes, and extremes of temperature shall be avoided.

9.1.3 The humidity shall be kept as low as possible.

9.1.4 A suitable means of recording the temperature shall be provided in the aircraft. The recording papers, such as a logbook shall be retained by the carrier.

9.1.5 In the case of non-pressurized aircraft, the carriage of monkeys will be permitted only in the cabins, which shall be well ventilated and the temperature shall remain between 22 to 24°C. The aircraft shall not fly more than 2 750 m (9 000 feet) above sea level.

9.1.6 Except when monkeys are being fed and watered, they shall travel in semi-darkness. This would make them quieter and less inclined to fight and thus give them better opportunities of resting.

9.1.7 A qualified veterinary surgeon shall examine the monkeys immediately before caging and also ensure that cages are sealed by the custom officer in his presence, and certify to that effect.

9.1.8 Packing shall be done sufficiently early to acclimatize the monkeys before actual flight.

9.1.9 Monkeys shall reach the airport sufficiently early, but not more than 2 h before the arrival of plane.

9.2 Handling

9.2.1 For the purpose of ensuring efficient care of monkeys during the journey, the owner of any freighter aircraft on which the monkeys are carried shall provide one senior handler and, where necessary, such number of assistants as will secure the proper care of monkeys during the journey. Animal handlers shall receive instructions for emergencies in flight. The senior animal handler shall have reasonable access to the Captain of the freighter aircraft.

9.2.2 The number of animal handlers to accompany the monkeys on freighter aircraft shall be decided by the Government of India.

9.2.3 In the case of passenger jet aircraft, the same provisions as for freighter aircraft, shall be available at the halting stations. The animal handler at the halting stations shall receive instructions from the airline representatives.

9.2.4 It is desirable that wherever habitual transshipment of monkeys takes place at intermediary airports, suitable accommodation should be provided during transit period.

9.3 Sickness and Injury of Monkeys

9.3.1 An empty cage of the usual dimensions with its sides covered except 50 mm at the top to allow for ventilation shall be provided in the freighter aircraft for housing the monkeys, which fall sick or injured during the journey.

9.3.2 On freighter aircraft, a metal cylindrical container (diameter 300 mm and height 480 mm) having airtight lid with rubber gasket and with fastening arrangements or impervious disposal bags shall be provided in the aircraft for segregating the monkeys that die during the journey. About 2.5 kg of saw dust and 0.25 kg of lysol or other disinfectant shall also be carried in the aircraft. After putting the dead animals into the container, a layer of sawdust shall cover the dead animals and the disinfectant shall be sprinkled over the sawdust.

9.3.3 In the case of passenger jet aircraft, necessary arrangements as in 9.3.1 and 9.3.2 shall be made at the intermediate airports.

9.4 Hygiene

It is recommended that any aircraft carrying monkeys shall be kept as tidy as possible during the flight. Cage trays shall be cleaned not less than once every 12 h and the refuse put in the impervious disposal bags which should be provided.

10 TRANSPORT BY SEA

10.1 All ships detailed for conveying animals shall be inspected for fittings by a board consisting of a marine and a veterinary officer.

10.2 The ship may preferably be of shelter deck type and have ample of mechanical ventilation, good drainage and arrangements for exercising of animals.

10.3 Ample ventilation shall be ensured by keeping portholes and providing permanent air trunks or electric blowers on all decks. Exhaust fans shall be installed to blow out foul air.

10.4 The pens shall be mucked out twice a day and decks scrubbed once every 24 h. This shall be done when monkeys are being exercised.

10.5 Passage between two rows of pens should be not less than 1.5 m.

10.6 Parting boards between pens should be 3.0 m.

10.7 To avoid distress especially during hot weather, the ship may go under way immediately after embarking. Disembarking may be done as early as possible after anchoring.

10.8 Pregnant and nursing monkeys shall not be transported by sea.

ANNEX A

(Clause 2.8)

SPECIMEN OF LIVESTOCK PROGRESS REPORT

Station of uplift _____

(Destination Station to return duplicate to station of uplift)

LIVESTOCK PROGRESS REPORT

Consignment Note No. _____ Service No. _____ Date _____

Number and description of livestock _____ Destination _____

Station	Fed, watered and cleaned (date and time GMT)	Mortality	Cause of mortality (if known)	General condition of livestock	Comments and suggestions 1. handling 2. feeding 3. packing	Signature

Additional remarks, if any:

ANNEX B*(Clause 6.1)***METHOD OF TUBERCULIN TESTING IN MONKEYS****B-1 APPARATUS****B-1.1 Tuberculin Syringe****B-2 REAGENTS**

B-2.1 Strain of Tuberculin — A strain of PNDT & C (human) type, prepared at the Indian Veterinary Research Institute, Mukteswar.

B-2.2 Sterile Physiological Saline Solution**B-3 PROCEDURE**

Dilute the tuberculin 100-fold in sterile physiological saline solution. Inoculate 0.1 ml of the tuberculin intradermally forearm (mid) of the monkey. Development of a swelling and erythema after 24 h and 48 h indicates that the animal is infected by tuberculosis. Animals showing a positive reaction shall not be exported.

ANNEX C*(Clause 6.2)***PROFORMA FOR CERTIFICATE OF FITNESS TO TRAVEL
(MONKEYS)**

This certificate shall be completed and signed by a duly authorized person (by a qualified veterinary surgeon).

Date and time of examination _____

Number of cages _____ Species _____

Number of animals _____ Species _____

Shipped from _____ to _____ Via _____

I hereby certify that I have read IS 3059 : 2001 'Transport of monkeys by rail, road, air and sea — Code of practice (*second revision*)':

- a) That, at the request of (consignor) _____ I examined the above mentioned animals in their travelling cages not more than 12 h before their departure.
- b) That each animal appears to be in good health, free from signs of injury, contagious and infectious diseases.
- c) That no animal appeared to be under 6 months of age, and that no animal appeared to be pregnant.
- d) That the animals were adequately fed and watered within 2 h of scheduled time of departure.
- *e) That the cages were sealed by the custom officer in my presence.

Signed _____

Address _____

Qualifications _____

* In case of transportation of monkeys by Air or Sea.

ANNEX D

(Clause 6.3)

**PROFORMA FOR CERTIFICATE OF VACCINATION
(MONKEYS)**

It is certified that consignment of _____ animals of _____ species have
been vaccinated against Rabies on _____ (date).

Signed _____

Address _____

Qualifications _____

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Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Handbook' and 'Standards: Monthly Additions'.

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