REVISED ANIMAL BIRTH CONTROL MODULE

FOR STREET DOG POPULATION MANAGEMENT, RABIES ERADICATION, REDUCING MAN-DOG CONFLICT

ANIMAL WELFARE BOARD OF INDIA

Ministry of Fisheries, Animal Husbandry and Dairying, Govt. of India

(Department of Animal Husbandry and Dairying)

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सत्यमेव जयते

पंचायती राज मंत्री
और मत्स्यपालन, पशुपालन एवं डेयरी मंत्री
भारत सरकार
Minister of Panchayati Raj and
Minister of Fisheries, Animal Husbandry and Dairying
Government of India

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Message

I am pleased to share that the Board has released an updated module on the neutering and vaccination of stray dogs, offering solutions to rising stray dog populations in the country.

Urban areas face increasing stray dog numbers and dog bite incidents due to population growth and improper waste management. The Animal Birth Control (ABC) Program provides a humane solution by promoting dog neutering and vaccination, which helps control populations, reduces disease transmission like rabies, and minimizes human-animal conflicts.

Local bodies play a vital role in implementing the ABC Program. Neutered and vaccinated dogs are healthier, less aggressive, and safer for the community. Regular awareness programs will further reduce concerns related to stray animals.

This module will guide veterinarians, local bodies, and communities in managing stray dog populations while fostering harmony with man's best friend.

(Rajiv Ranjan Singh)

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पंचायती राज मंत्रालय
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सत्यमेव जयते

Prof. S. P. Singh Baghel
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MESSAGE

It gives me immense pleasure to note that the Animal Welfare Board of India has brought out its *"Revised Module for Animal Birth Control (ABC)"* for the neutering of dogs. This revised module marks a significant milestone in reducing unnecessary pain and suffering in dogs by ensuring adherence to the Standard Operating Procedures (SOPs) outlined under the *Revised Module for Animal Birth Control (ABC)* in compliance with the *Animal Birth Control Rules, 2023*.

The revised module remains steadfast in its mission to address various issues related to the stray dog population across our nation in a humane and effective manner. This edition aims to strengthen approaches to neutering, vaccination, and community engagement, ensuring that local bodies, animal welfare organizations, and citizens work hand in hand to manage stray dog populations while safeguarding both animal welfare and public health.

The module prioritizes systematic neutering and anti-rabies vaccination drives, streamlined monitoring by local authorities, and clear guidelines for addressing human-animal conflicts with compassion. It serves as a call to action for every Local Authority, Animal Welfare Organization, Veterinary Officer, and concerned citizen to play their part in this collective effort. By diligently implementing these measures, the module aims to reduce stray dog numbers through proper neutering, prevent rabies incidences, and foster harmonious co-existence.

Let us move forward together with commitment and care. I hope the *Revised Module for Animal Birth Control (ABC)* for the neutering of dogs will emphasize effective neutering and immunization practices, leading to the control of street dog overpopulation and a reduction in rabies cases across the country.

(Prof. S. P. Singh Baghel)

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Message

It is notable that the Animal Welfare Board of India has brought out its revised Module for Animal Birth Control (ABC) for neutering of Dogs. The revised module will be a roadmap for the Local Bodies, Veterinarians, Animal Welfare Organizations will emphasize for better practices during the whole process of Animal Birth Control programme and enhance compassion towards the dogs. I hope that the implementation of this module will ensure that every step including capturing, neutering, vaccinating and releasing dogs back to their areas will be carried out with care and efficiency by adopting the practices. The module aims that all the stakeholders to implement these guidelines in letter and spirit as their shared responsibility to create safer, healthier atmosphere for both humans and animals resulting in better coexistence on our planet earth.

I believe that the revised module will be instrumental to carry out the Animal Birth Control surgeries safely and humanely to prioritize humane, scientific and sustainable management of stray dog populations by the Implementing Agency by abiding the Standard Operating Procedures in the Module in letter and spirit to reduce the pain and suffering of dogs during and after the neutering process which will ultimately mandates 100% neutering, anti-rabies vaccination, and ethical release of stray dogs, supported by GPS-tracked monitoring and decentralized implementation through local bodies and Animal Welfare Organizations.

I believe that the revised Animal Birth Control (ABC) Module for neutering of Dogs will be found suitable by all the stakeholder in rejecting cruelty to the dogs, support ABC efforts and enhance the harmonious coexistence.

(Alka Upadhyaya)

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Foreword

India's journey toward compassionate coexistence between humans and animals has always been a cornerstone of our cultural ethos and progressive governance. In this spirit, the Animal Welfare Board of India has released its **revised module for Animal Birth Control (ABC) for the neutering of dogs.** This updated module underscores collaboration, accountability, and compassion, ensuring that every step—from capturing and neutering to vaccinating and releasing dogs back into their areas—is carried out with care and efficiency.

I urge Local Authorities, Animal Welfare Organizations, Veterinary Officers, and concerned citizens to embrace these guidelines not merely as a duty but as a **shared responsibility** to create safer, healthier communities for both people and animals. Together, we can balance human safety with animal welfare, fostering coexistence that benefits us all.

The **revised ABC Module,** developed under the **ABC Rules, 2023,** will be instrumental in carrying out neutering procedures **safely and humanely,** prioritizing humane, scientific, and sustainable management of stray dog populations. The Implementing Agencies are expected to adhere to the **Standard Operating Procedures (SOPs)** outlined in the module in both letter and spirit, ensuring minimal pain and suffering for dogs during and after the neutering process. This approach mandates complete neutering, comprehensive anti-rabies vaccination, and the ethical release of stray dogs. These efforts will be supported by **GPS-tracked monitoring and decentralized implementation** through Local Bodies and Animal Welfare Organizations.

Let this revised module serve as a catalyst for a future where dogs are no longer marginalized but are **integrated into our communities** as protected, vaccinated, and neutered companions—**loyal watch guards and valued members of our urban ecosystems.** Together, let us build cities that truly embody **kindness, compassion, and safety** for humankind's best friend.

(Abhijit Mitra)

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PREFACE

The Animal Welfare Board of India (AWBI) has developed this **Revised Animal Birth Control (ABC) module for street dog population management, rabies eradication, and reducing man-dog conflict**. It serves as a simple yet powerful guide to help communities and authorities manage street animals with kindness, scientific understanding, and responsibility.

The ABC program has always aimed to balance the needs of people and animals. By humanely controlling the stray dog population through neutering procedures and vaccination, this program reduces conflicts, prevents the spread of diseases between animals and people, and creates safer neighborhoods for all. The module also highlights the interconnection between animal welfare, human health, and a clean environment.

This edition reflects advancements in surgical protocols, pre- and postoperative care, rabies vaccination strategies, and community engagement frameworks, emphasizing the One Health paradigm. It aligns with updated legal mandates and global best practices, ensuring India's approach remains humane and effective in animal management. This resource will inspire compliance with rules, promote kindness, and encourage collective action among all stakeholders.

Conceptualized, developed, authored, and edited by Ms. Anjali Gopalan, Ms. Gauri Maulekhi, Dr. Ravindra Sharma, Mrs. Prachi Jain, and Ms. Shreemoyee Chakraborty, this handbook represents a comprehensive resource for veterinarians working in the field.

(Dr. S. K. Dutta)
Secretary

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1. Abbreviations and Acronyms

ABC	Animal Birth Control
ARV	Anti Rabies Vaccine
AWBI	Animal Welfare Board of India
AWO	Animal Welfare Organization
CNR	Catch, Neuter and Release
FAO	Food and Agriculture Organization
MCGM	Municipal Corporation of Greater Mumbai
NGO	Non-Government Organization
NRCP	National Rabies Control Project
WOAH	World Organization for Animal Health
SARAH	Sikkim Anti Rabies and Animal Health program
SAWB	State Animal Welfare Board
SPCA	Society for Prevention of Cruelty to Animals
SPV	Special purpose Vehicle
UT	Union Territory
WHO	World Health Organization

2. Summary

Street dogs and cats have always been a part of Indian urban and rural life like many other developing countries in the world. Many of these animals live in close contact with human beings.

In India, for more than l50 years up to 200l, mass killing of street dogs through various forms, including electrocution, shooting and poisoning were seen as the only solution by the authorities to address the issue of over population of street dogs and deaths due to rabies. Some sporadic but illegal killings continue to take place in many parts of India.

Much of the research and experiences of internationally reputed organizations such as the World Health Organization (WHO), World Organization for Animal Health (WOAH), Food and Agriculture Organization of the United Nations, (FAO) and independent researchers suggest that killing street dogs can have no correlation with the objective of reducing their population, or reducing the number of dog-bites or deaths caused by rabies. Much of this research is collated and included in this module.

This Module is an attempt to give answers to the following questions:

- Why do street dogs exist? What are the causes of their existence?
- What is their impact on our society?
- Why did earlier attempt sat mass removal of street dogs not achieve

the desired results?

- What are the existing solutions and are they adequate?
- What recommendations are necessary to enhance the work ability of the existing solutions? What other solutions can supplement existing solutions?
- Which are the successful models from India and abroad that can be replicated to achieve the desired results?

The availability of more food waste due to changes in society such as urbanization and increased human densities, combined with a lack of responsible ownership are leading to an apparent increase of free-roaming dogs. There is a clear need to manage street dog populations efficiently to promote human and animal health and welfare, without causing animal suffering. The solutions to address this issue need to be beneficial to both animals as well as humans and in accordance with law.

This module lays down a road map for such a solution:

- Though the Animal Birth Control (Dogs) Rules were notified in 200l and superseded by the ABC Rules, 2023, yet they are still not mass implemented with the piousness they deserve.
- The One Health approach should be considered for better

implementation of street dog population management and rabies control and will lead to a better co-ordination between various stakeholders.

- Focus should also be on implementing the Prevention of Cruelty to Animals (Pet Shops) Rules, 2017 and Prevention of Cruelty to Animals (Dog Breeding) Rules 2018
- Although a legal framework exists in Animal Birth Control Rules, 2023 to address street dogs with documented cases of habitual biting or unprovoked aggression, the prescribed protocols are not being properly enforced.
- The module emphasizes appropriate feeding practices and care by designated caregivers in consultation with local communities, while maintaining cleanliness and addressing residents' concerns through proper documentation and communication.
- A comprehensive conflict resolution mechanism involving all stakeholders - caregivers, residential welfare associations, and municipal authorities - is essential for addressing disputes through dialogue and mutual understanding rather than confrontation.

Cat Population Management Guidelines:

Although the primary focus of this module is the management of street dog populations, it is also necessary to acknowledge the growing need for humane population control of free-roaming and community cats. Free-roaming cats, like street dogs, are an integral part of urban and rural ecosystems, however, their population often goes unmanaged, leading to overpopulation, public health concerns, and welfare issues for the cats themselves. Recognizing this, the Animal Welfare Board of India has introduced a section on cat sterilization in this revised module.

3. Background: Understanding the Issue

3.1 What are street dogs?

Most free-roaming dogs belong to an ancient canine race known as the

Pariah Dog. Dogs have existed all over Asia and Africa ever since humans started living in settlements. They were the first animals to be domesticated and their loyalty and love for their caregivers is what earned them the title of man's best friend. They are and have always been scavengers. In India, the breed has existed for perhaps l4,000 years or more. In addition to scavenging, they are widely kept as free roaming pet by rural and urban households.

The word 'stray' is used for street dogs in the context of the animal not being an 'owned' dog or a 'pet' dog. However, all dogs whether owned or stray/street share the same characteristics of being a loyal friend, a watch / guard dog, eager to please humans and exist in harmony with them.

A large proportion of the urban street dog population consists of mongrels or mixed breeds, i.e., dogs that have descended from pedigree dogs, which have been allowed by their owners to inter-breed with street dogs.

Not all street dogs are in fact stray or ownerless animals. There are street dogs which do not have owners or are feral but may still be accepted by the neighborhood as belonging to the community. These animals are 'community owned'. Members of the neighborhood assume occasional responsibility for these dogs by feeding them, treating them when they are ill and getting them vaccinated, and also by protecting them from people who intend to harm them.

3.2 Why do they exist?

The size of the street dog population usually corresponds to the size and character of the human population of the area, before an animal birth

control program is put into place. Some of the reasons which create and sustain street dog population are given below:

3.2.1 Large amounts of exposed garbage, which provide an abundant source of food.

"The abundance of dogs is dependent on the habitat, especially the availability of resources such as food, water and shelter. Access to these resources depends on settlement patterns, rubbish and waste disposal, rules for keeping animals and other cultural practices. To understand the population biology of the species, it is important to keep in mind the differences in owner ship status, degrees of restriction on their movement, social interaction, reproduction and levels of dependence on human care." (Wanderer et al, l993). It is clear to us that the population of street dogs is directly related to the amount of food and edible waste matter in an area. Areas of the city, which are kept clean, usually because they house affluent, influential people have a very low dog population. Areas of the city with dense, poor-quality housing and large amount so waste have a much higher population. The overall, ultimate answer to street dog population control is to control the availability of edible waste.

3.2.2 Large human populations living on the street soring slums who keep the dogs as free-roaming pets/neighborhood dogs

"In India, 60% of the dog population falls under the neighborhood dog category" (Reece JF and Chawla SK, 2006).

Local communities very often provide food to street dogs. In many cities and towns, many people live on th e street soring slums. Such people keep street dogs as pets and feed them. They work with animal welfare organizations to catch, sterilize, vaccinate, and treat. Them when they fall sick.

In return, the dogs give them security, love, and companion ship. Such dogs become easier to catch when they must be taken for sterilizations (ABC) and re-vaccinations against rabies (ARV).

3.2.3 Irresponsible Pet Ownership

Pet dogs that area band one continue to live on the streets if not rescued or killed in road accidents, thus inter-breeding and adding to the existing street dog population. Abandonment is linked to the unregulated and unchecked commercial dog breeding and trading industry comprising breeders and pet shops causing the street dog population. Some pet owners also allow their pets to mate with street dogs thus increasing their population.

3.3 Their impact on humans/society

Dogs play a number of important roles in human societies: they provide companionship and are used for a variety of activities including herding other animals and guarding property. Animals live in close contact with human beings. India has a large street dog population. The reasons for their existence have been enumerated in 3.2 above.

The availability of more food waste, due to changes in society such as urbanization and increased human densities, combined with a lack of responsible pet ownership and unregulated breeding are leading to an apparent increase of free-roaming dogs. There is a clear need to manage street dog populations efficiently to promote human and animal health and welfare, without causing animal suffering.



"The need to control the number of dogs, especially stray dogs, is motivated in part by public health concerns, particularly in relation to rabies transmission. In addition to disease transmission, dog bites and the fear of aggressive dogs also pose a risk to human health and well-being and can lead to panic and the inhumane culling of dogs. Promoting responsible dog ownership with emphasis on behavior and basic needs and ensuring that dogs are properly vaccinated and treated against diseases are, therefore, essential. Furthermore, educational and bite prevention programs for the public, especially children, should always include guidance on how to interact with animals and what to do when approached by dogs, particularly those that show signs of fear and / or aggression" (FAO, 20ll)

Dogs do not generally bite unless provoked.

We need to understand the reasons why dogs may bite. Animal behaviorists list out the following reasons, which could be classified as provoked bites:

1. Touching a dog when it is eating or sleeping.
2. Tea sing or hurting a dog
3. If the dog is ill or in pain
4. If the dog perceives that it is being attacked
5. If the dog perceives that its owners being attacked
6. If the dog is fighting with another dog over territory or mating and a person gets in their way
7. If a stranger touches a pet dog.

A female dog will bite if she perceives that her pups are being threatened.

"Dog bites were high in winter after the breeding season" (Prate *et al*., 2011, Reece JF, 2013) and this could be due to bites by female dogs protecting their litter.

Unprovoked bites might occur when:

1. Male dogs are chasing a female which is on heat, and may tend to bite passers-by. Sterilization eliminates this behavior.
2. Dogs in packs follow their leader (alpha male) and tend to behave accordingly. When the alpha male dogs are sterilized and cared for, they tend to become friendlier towards other dogs and people. In this manner, the pack usually calms down.

An extract from the research paper (Jackman, J., & Rowan, A) confirms the above theory that sterilized dogs display changes in behavior and reduction in aggression: "CNR programs also have the capacity to produce

behavioral changes in dogs that limit bite and disease risk. Sterilization also reduces roaming and aggressive behavior in male dogs (Lockwood 1995). Fewer escaping behaviors have been reported after gonadectomy (Spain, Scarlett, and Houpt, 2004). Fewer females in heat also reduce fighting and pack formation (Help in Suffering 2003; Nolan 2006). For 60 percent of dogs in one study, castration reduce during marking, roaming and mounting, and one third of dogs showed significant decreases in aggressive behavior" (Neilson, Eckstein, and Hart 1997).

A recent research paper regarding an extended study on the behavioral ecology of rearranging dogs in India, carried out by random sampling of dog behavior through surveys in two cities and one township of India, suggests that the general perception of these dogs as a nuisance is flawed. It suggests that the solution to man-dog conflict is not culling, but efficient management of garbage and rabies in the country, and a positive attitude towards the animals that are otherwise known to be man's best friend (Sreejani Sen et al, 2014).

3.4 Why removal of street dogs does not work

Most Indian civic bodies have been killing street dogs for decades, till the ABC (Dogs) Rule, 2001 were notified. The concept of culling or killing was imported from the developed countries without any understanding of the different urban and rural conditions in developing countries. In countries such as India, where exposed garbage and slums encourage the existence of street dogs, killing or removing them has proved ineffective in controlling rabies or the dog population.

This is because the street dogs that are removed or killed are easily replaced with new dogs from other territories. They are also highly territorial, with

each dog having its fixed niche.

Here is what happens when street dogs are taken away or removed from an area:

1. Their territories become vacant and street dogs from neighboring areas move in to occupy them.
2. The street dogs which escape the catching squad continue to multiply, and therefore the territorial vacuum is soon filled again.
3. Dog fights increase since every time a new street dog enters a territory; he is attacked by the dogs already in the neighborhood.
4. Dog fights continue to take place over mating.
5. Dog bites also increase as during dog fights passersby may get accidentally bitten.
6. Rabies may continue to spread, if vaccinated
7. Street dogs are removed, and their place is taken by unvaccinated dogs.
8. When street dogs are being removed en mass, it is usually the friendlier and sterilized dogs are caught / killed / dislocated first. The street dogs that are left may be unsterilized and unfriendly. This unintended trait selection may lead to an overall change in behavior of the street dog population in that area.

Thus, this only creates an unstable, constantly changing, rapidly multiplying and rabies carrying dog population. Man-dog conflict ultimately and invariably increases in areas from which street dogs are dislocated / removed / killed.

Listed below are some research papers and case studies that support the above-mentioned theory of removal having no impact on street dog populations or the number of human deaths due to rabies:

1. "It is pertinent that mass dog vaccination has repeatedly been shown to be effective in controlling canine rabies. On the other hand, there is no evidence that removal of dogs has a significant impact on the dog population density or the spread of rabies" (WHO, 2013)
2. "In fact, removal of dogs from their territories will open up the habitat for the entry of new, unvaccinated dogs which would become vectors for rabies if infected". (Clifton M, 2011).
3. "Considerable experience has been gained in projects coordinated by WHO in Ecuador, Nepal, Sri Lanka and Tunisia and other ecological studies conducted in South America and Asia. However, data collection needs to be continued in other areas and in countries with different social and ecological conditions. There is no evidence that removal of dogs alone has ever had a significant impact on dog population densities or the spread of rabies. The population turnover of dogs may be so high that even the highest recorded removal rates (about 15% of the dog population) are easily compensated for by increased survival rates. In addition, dog removal may be unacceptable to local communities" (WHO, 2005).
4. "Elimination of dogs would also increase fecundity of remaining adult dogs due to better nutrition, giving rise to more puppies, and their increased survival, resulting in a population with a younger age structure that is not immune to rabies" (Vindya Kumarapeli, Tamara Awerbuch-Friedlander, 2009)

5. "In countries such as Denmark, Korea and Israel, rabies was controlled through a vaccination programme when culling did not prevent the outbreak of rabies" (Morters et al., 2013)
6. "In Guayaquil and Sri Lanka, elimination level ranging from 12% to 55% of the estimated dog population did not durably affect the size of the dog population or the dog rabies incidence." (Kumarapeli V and Awerbuch-Friedlander T, 2009).
7. "The removal rate of l5% of dog population is easily compensated for by increased survival rates as the remaining dogs would have greater access to resources in the same area" (World Health Organization Expert Consultation on Rabies, 2004).

3.5 Dog Demographics

"Despite the fact that street dogs do not live in households, the distribution and number of street dogs found in a community is highly dependent on human behavior. Various studies examining dog population dynamics have found that the dog population size is a function of human factors" (Morters *et al*. 2014; Garde *et al*. 2012).

Radiocollared un-owned street dogs in Puerte Natales, Chile to assess home ranges found that the majority spent most of their time clustered around human houses and the places where humans provided food. Morters *et al* studied free-roaming dog populations in Bali, Indonesia and Johannesburg, South Africa and found that the majority of the street dogs were considered owned by survey participants (99% and 88% respectively).

"Dog populations (counting both pets and street dogs) around the world vary from 0. 1 dogs per 100. Humans to 50 dogs per 100 humans. This very

large range is not caused by differences in dog reproductive capacity (which would be more or less the same across the globe)"(Andrew N Rowan, PhD & Tamara Kartal, 2015)

4. The Solution: Animal Birth Control Program

The Animal Birth Control (ABC) Program is mandated by the Animal Birth Control (Dogs) Rules, 2001 and superseded by ABC Rules, 2023. The Supreme Court and several High Courts have, in their judgments, emphasized on the need for implementation of the ABC Rules, 2023, in letter and spirit. This section lays out various actions (Section 4.l-4.9) that need to be taken as part of the ABC program. Implementation of the actions will lead to:

1. Reduction in incidence of dog bites and rabies
2. Reduction of dog population
3. Tackling complaints related to dog issues from the general public.

4. Effective management of dogs at sensitive locations like airports and hospitals
5. Monitoring and impact assessment of the program.

Based on empirical as well as observational data, it has been found that ABC conducted in the prescribed manner works effectively for the following reasons:

1. Street dogs are sterilized and put back in the same territory.
2. Since territories are not left vacant, new dogs will not enter.
3. Mating and breeding also cease.
4. With no mating and no puppies, street dog fights and accidental bites to humans also reduces.
5. The street dogs are immunized and hence they cannot spread rabies.
6. Over time, street dogs die a natural death, and their number swindle.

As a result, the street dog population becomes stable, non-breeding, more friendly and rabies free, with a gradual decrease in numbers over a period of time.

4.1 Understanding the Legal Framework: Animal Birth Control Rules 2023

The management of street dog populations in India presents a complex challenge requiring humane, scientific, and legally

compliant solutions. As demonstrated by decades of evidence, Animal Birth Control programs stand as the only proven sustainable approach for managing street dog populations while addressing public health concerns like rabies. Traditional methods of mass removal or culling have consistently failed to achieve lasting results, instead creating unstable population dynamics that can worsen human-dog conflicts.

Understanding the legal framework governing ABC implementation is essential because it reflects years of evidence-based policy development aligned with India's constitutional and ethical values of compassion toward animals. The Animal Birth Control Rules, 2023, enacted under the Prevention of Cruelty to Animals Act, 1960, provide comprehensive regulatory structure that balances public health priorities with animal welfare considerations. This framework ensures standardized, humane, and effective implementation of ABC programs nationwide, with clear responsibilities assigned to various stakeholders from national to local levels. By working within this established legal structure, significant long-term reductions in street dog populations can be achieved while simultaneously decreasing rabies transmission and promoting harmonious coexistence between humans and animals.

4.1.1 Who Can Conduct ABC Programs?

According to Rule 3(1) the responsibility of conducting Animal Birth Control programs lies with the local authority. However, they may either:

- Carry out the program using their own veterinary officers, or
- Engage an Animal Welfare Organization already recognized by Animal Welfare Board of India and that has the necessary training, expertise, and human resources for conducting ABC programs.

Rule 3(2) and 3(3) make it mandatory to obtain a Certificate of Project Recognition from the Animal Welfare Board of India. No organization or local authority can conduct ABC programs without project recognition.

4.1.2 Special Provision for Local Authorities:

When local authorities conduct ABC program through their own veterinary staff, then local authorities:

- Must create a Special Purpose Vehicle(SPV) for implementation and inform the Board[Rule 3(5)].
- Can hire contractual or full time veterinarians, handlers, drivers and paraveterinarians for implementation of the ABC but shall not outsource any part of the program to other agencies [Rule 3(6)].
- Is responsible for ensuring that the staff hired by the Special Purpose Vehicle have are suitably trained and follow all legal mandates and the Project Incharge appointed by the local authority shall not be a part of the Special Purpose Vehicle [Rule 3(7)].

How Can Animal Welfare Organizations Apply for Project Recognition?

Rules 3(4) through 3(8) detail the application requirements for any Animal Welfare Organization seeking Project Recognition, they must:

- Already be recognized as an Animal Welfare Organisation by the Board
- Submit requisite form along with a non-refundable fee of ₹5,000
- Submit an attested copy of the Veterinary Council of India/State Veterinary Council registration certificate for each veterinarian involved.
- Apply separately for each ABC center they plan to operate.

4.1.3 Inspection Before Approval Process for Project Recognition

Once an application is submitted, the AWBI directs the State Animal Husbandry Department to inspect the proposed ABC center within 30 days. The inspection team will include:

- The Chief Veterinary Officer of the district
- A nodal officer from the State Animal Birth Control Monitoring Committee
- A representative from the AWBI or the State Animal Welfare Board
- An expert in veterinary surgery or ABC programs

The inspection report must be submitted within 10 days. Based on the report, the AWBI's Project Recognition Committee will decide whether to approve the application. If approved, the recognition certificate will be issued within 15 days and must be prominently displayed at the ABC center at all times and shall be produced during subsequent inspections.

4.1.4 Refusal of Recognition

Under Rule 4 AWBI can refuse project recognition for the following reasons: False information submission

- False information submission
- Prior convictions under animal protection laws
- Refusal to allow inspection
- Inadequate infrastructure or manpower

Rule 5 prohibits conducting ABC programs without recognition and mandates immediate discontinuation if recognition is refused.

4.1.5 Renewal of Recognition

According to Rule 6 Project Recognition Certificate is valid for three years and must be renewed before expiration. The renewal application must be submitted at least 60 days before expiry along with a renewal fee of ₹5,000. The same inspection and approval process applies as for new applications.

4.1.6 Formation of Monitoring Committees

According to Rule 9, different monitoring committees must be established to effectively implement Animal Birth Control programs. These committees help control street animal populations, eradicate rabies, and reduce human-animal conflicts. The committee structure includes:

- A Central Animal Birth Control Monitoring and Coordination Committee that coordinates between stakeholders at the Central Government level and between Central and State Governments

- A State Animal Birth Control Implementation and Monitoring Committee in each state/union territory to coordinate ABC programs across the state in a scientific, phase-wise manner
- A Local Animal Birth Control Monitoring Committee at each Local Authority level that meets at least once monthly to assess program implementation

All committees are constituted as provided in Schedule-II of the Rules, with specific functions assigned to each level.

4.1.7 Obligations of Local Authorities

Rule 10 outlines that Local Authorities must ensure each Animal Birth Control Center has:

- Sufficient kennels and veterinary hospital facilities (managed by either local authority or animal welfare organizations)
- Enough properly modified vans for safe dog handling and transportation
- Mobile Operation Theatre Vans equipped with surgical infrastructure for smaller local bodies
- Incinerators for organ and carcass disposal (or deep burial where incinerators aren't feasible)
- Regular maintenance and repairs of ABC Centers
- CCTV installed throughout the premises, especially in operation theaters and animal housing areas
- Video surveillance records maintained for at least one month
- Proper cleanliness and hygiene maintained at all times
- Comprehensive record-keeping for all animals (catching, release, medicine, surgery, feeding, vaccinations)

Local authorities must reimburse sterilization/immunization expenses regularly if animal welfare organizations are engaged. They can also conduct ABC programs through their own staff by creating a Special Purpose Vehicle, which must hire qualified veterinarians, handlers, drivers and paraveterinarians.

4.1.8 Capturing, Sterilization, Immunization, and Release Protocols

Rule 11 establishes that capturing street dogs can be done for:

- General population control (decided by local authority with Monitoring Committees)
- Specific complaints about dog bites or suspected rabies cases

Each dog capturing team must include:

- A van driver
- At least two trained local authority or Animal Welfare Organization employees
- One representative from a nominated Animal Welfare Organization

All team members must carry valid local authority ID cards. Before capture operations begin, public notices must be displayed informing residents about the upcoming capture for sterilization and immunization, explaining that dogs will be returned to the same area afterward.

Capture must use humane methods like net catching or hand catching. Tongs or wires are strictly prohibited. Only the number of animals that fit the ABC Center's capacity should be captured, and dogs from different areas shouldn't be mixed to avoid territorial conflicts.

Each captured dog receives a numbered collar corresponding to capture records to ensure proper return to their original location. Puppies under six months and nursing mothers with puppies under two months should not be captured for sterilization.

4.1.9 Animal Care Requirements

According to Rules 11 and 12, the ABC Center must provide:

- Properly marked kennels with each locality name written on kennel doors
- Individual kennels at least 3 feet wide, 4 feet deep, and 6 feet high

- Kennel doors with vertical iron bars (gaps no more than 2 inches between bars)
- Adequate roofing for shelter and to prevent escapes
- Sufficient cross-ventilation and raised areas for dogs to rest comfortably
- Proper drainage systems in all kennels
- Separate housing for male and female dogs
- Quarantine kennels where dogs stay for 12 hours before surgery (without food or water)
- Post-surgery care in kennels for at least 4 days
- Adequate nutritious food twice daily and clean drinking water available at all times

Dogs from the same family/social group may share kennels. The Center must have sufficient space for proper housing and free movement with good ventilation and natural lighting.

4.1.10 Surgical and Identification Procedures

Rule 11 specifies that sterilization surgery and vaccination must be performed by qualified veterinarians under supervision of Jurisdictional Veterinary Officers in well-equipped operation theaters. The Board's Module outlines approved surgical procedures and minimum requirements.

During sterilization, a 'V' shaped notch must be made on the right ear of each dog for identification purposes. This ear notch helps identify sterilized and immunized dogs once they return to the streets. Branding of dogs is not permitted under any circumstances.

4.1.11 Record-Keeping Requirements

Rule 12 mandates that Project In-charge of the local authority or Animal Welfare Organization must maintain daily updated records including:

- Capture details (area, date/time, capturing squad members, dog descriptions)

- Release information (date, time, location)
- Feeding records for each kennel and food inventory
- Treatment records for each dog
- Medicine and vaccine inventory
- Mortality records
- Equipment inventory including surgical equipment
- Dog van logbooks
- Staff attendance records
- Organ inspection records
- CCTV footage for the previous 30 days

4.1.12 Reporting Requirements

Under Rule 13, the Project In-charge or Veterinarian in-charge must submit:

- Monthly progress reports to the Local ABC Monitoring Committee showing numbers of dogs caught, sterilized, housed for observation, or that died
- Details of veterinarians involved (names, qualifications, number of surgeries performed)
- Information about post-operative complications and mortality rates
- Annual reports to the Board through the State ABC Monitoring Committee by May 31st each year
- Any additional information requested by the Board or State Board

4.1.13 Inspection Authority

Rule 14 gives the Animal Welfare Board of India authority to conduct inspections of ABC Centers either in response to complaints or for periodic assessment. Inspection teams can:

- Enter premises and access all areas, animals, and records
- Take pictures, record videos, and copy records
- Conduct surprise inspections without prior notice

Each recognized ABC Center must be inspected at least once per year, with reports submitted to both the Board and State Monitoring Committee.

4.1.14 Euthanasia Guidelines

According to Rule 15, euthanasia is permitted only for incurably ill and mortally wounded dogs, as diagnosed by a team appointed by the Local ABC Monitoring Committee. This team must include the Jurisdictional Veterinary Officer, Project In-Charge, and a Board/State Board Representative.

Euthanasia must be performed:

- During specified hours
- In a humane manner (intravenous sodium pentobarbital or other approved method)
- By a qualified veterinarian
- Never in the presence of another dog
- With verification of death before disposal
- With proper record-keeping stating reasons for euthanasia, signed by the appointed team

4.1.15 Managing Dog Bite Complaints and Rabid Dogs

Rule 16 recommends local authorities establish Animal Helplines for resolving dog bite complaints. When complaints are received:

- Details must be recorded in a permanent register (complainant name, address, date/time, nature of complaint)
- Dog bite information must be promptly shared with Government Medical Hospitals for post-bite treatment recommendations
- Dogs must be humanely captured and observed at the ABC Center
- Suspected rabid dogs must be examined by a panel including a veterinary surgeon and an Animal Welfare Organization representative

- Dogs with high probability of rabies must be isolated until natural death (typically within 10 days)
- Dogs found not to have rabies but other conditions must be treated and released after observation
- Carcasses of suspected rabid dogs must be properly disposed of via incineration or methods approved by the District's Chief Veterinary Officer
- Local authorities should display educational materials in prominent locations to sensitize people about street dogs

4.1.16 Organ Counting and Disposal

Rule 17 requires that reproductive organs removed during sterilizations be stored in 10% Formaldehyde at the ABC Center. These organs must be:

- Counted regularly (fortnightly or monthly) by a designated team
- Preserved in separate plastic boxes marked with organ counts and surgery dates
- Verified against progress reports
- Destroyed immediately after counting by spraying tattoo dye and then deep burial or incineration
- Documented through video recording and photographs with date/time stamps

The State ABC Monitoring Committee must conduct surprise inspections at least once yearly to verify compliance with these procedures.

4.1.17 Non-Compliance Consequences

Rule 18 outlines consequences for violating these rules:

- The Animal Welfare Board may issue show cause notices requiring responses within 15 days
- Recognition may be suspended pending investigation
- The Animal Welfare Board may direct District Magistrates or SPCAs to take appropriate legal action
- The Board can cancel registration of Animal Welfare Organizations found violating these rules

- Organizations may be blacklisted if they are repeat offenders or involved in heinous cruelty or corruption
- Violations are deemed offenses under the PCA Act, and office bearers or Project In-charges may face charges under applicable laws

4.2 Site of ABC Center:

- **Safe Distance from Landfills & Waste Sites:** Must be at least 500 **meters away** as per Solid Waste Management Rules, 2016, to prevent exposure to toxins and disease risks.
- **Non-Residential, Low-Disturbance Area:** Should ideally be away from crowded markets, schools, and busy roads to minimize noise stress and conflicts.
- **Accessible Location:** Must be well-connected by roads for smooth transport.
- **Proper Drainage & Waste Disposal:** Must be equipped with efficient drainage, sewage, and biomedical waste disposal systems to maintain hygiene and disease control.
- **Reliable Water & Power Supply:** Must have uninterrupted access to clean water and electricity for medical equipment, sterilization, and temperature regulation.
- **Flood & Climate Resilience:** Should ideally be located on elevated or well-drained land to prevent waterlogging, with provisions for climate control in extreme weather conditions.

4.3 Capture and Handling

General Principles

The catching method used by the ABC Implementing Agency should be humane and gentle. The street dogs must be treated with kindness to minimize stress to the animals. The catching method used for each street dog should be the least invasive, most humane method possible that can be safely applied for that particular animal and situation.

Street dog catchers employed by the ABC Implementing Agency need to be trained for fifteen days by a Training Agency recognized by the Animal Welfare Board of India in order to become skillful at catching the street dogs humanely.

Street dog catching staff must be vaccinated against rabies and the antibody titre may be assessed annually. They should also be dewormed regularly.

4.3.1 Catching Techniques

The technique used depends on the street dog, the situation and the expertise available.

The following four methods are acceptable for catching street dogs:

- By Hand
- Sack and Loop Method
- Use of Dog-catching hoops with nets (Butterfly Nets)

Use of tongs, wires, and chains to catch street dogs are strictly prohibited, since these cause injuries and extreme stress to the animal. Cruelty and cruel treatment are an offence in law.

4.3.2 By Hand Technique

Most ABC programs in India currently catch street dogs by poles, tongs (which are prohibited), nets or sack method. A pilot project in the city of Jamshedpur, from 2013-2016, demonstrated that approximately 40%-70% of street dogs, with variations between communities, will respond positively to offers of food and can be caught by hand with minimal use of force. Hand-catching technique should be used as the first Entry & Engagement phase of the project before transitioning to the use of nets in the latter phase.

Hand catching promotes compassion and positive human-street dog interactions. It is a demonstration of the street dogs' potential to be safe companion animals in the

community. Owners and caregivers of semi-owned "community" dogs are also more likely to support and engage with the ABC program when they see gentle and humane handling. It is also recommended that community participation be encourage in the ABC programme. In addition, street dogs do not run away from the catchers. In fact, more dogs appear when they realize there is food on offer, and it is therefore possible to catch a higher number of street dogs in a shorter period of time

Hand-catching requires patience, good understanding of street dog behavior, and a compassionate heart. The best handlers are people who genuinely like dogs. The handler's main purpose is to convince the street dog that he is a friend to be trusted through offer of food and physical contact (petting). The trust is established through humane handling then continues from catching, to transport, to handling in the clinic and the kennels, to release. The aim of the humane handling protocol is to ensure the highest standard of animal welfare and to promote positive human-street dog interactions in the community at the end of the ABC process. This is the most preferred method for catching dogs.

4.3.3 Sack and Loop Technique

In this technique, a specially designed gunny bag that has a rope at one end, which works like a draw string, is used. The sack is thrown over the street dog and the rope is pulled at one end, thus sealing the gunny bag

and trapping the street dog inside the bag. The sack is then lifted into the van and the rope loosened, gently releasing the street dog into the van.

Advantages

The chances of injury to the street dog by this method are minimal.

It is not so distressing for onlookers to watch street dogs being caught in this way.

Disadvantages

It is sometimes difficult to catch running street dogs using this method.

Dogs may struggle a lot when placed inside the sack.

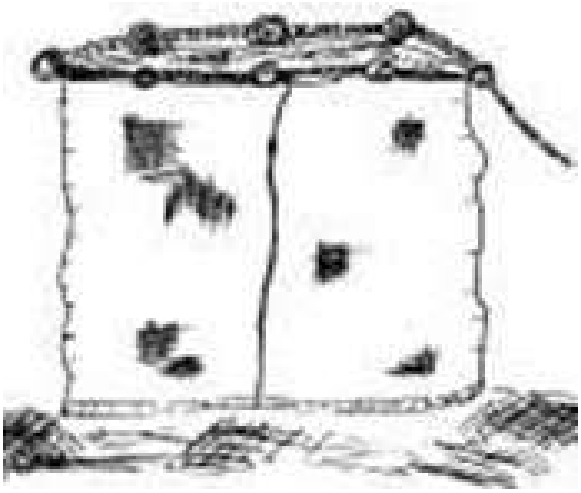


Illustration showing gunny bag with a rope attached at the top that works like a draw string.

4.3.4 Dog-catching Hoops with Nets (Butterfly type Nets) Technique

Large, deep, 2 ply polypropylene nets of about 5 feet in depth and 3 feet in diameter, secured to circular metal (preferably made of a light alloy) rims, attached to long handles may be used to 'scoop up' the street dogs. The street dog is then caught inside the net by twisting the mouth of the net. Once the street dog is securely placed

inside the net, the pole can be used to carry the street dog in the net. The street dog should then be gently placed into the dog catching van.

Advantages

- Once practiced correctly, the chances of the street dog being injured while being caught by this method is minimal.
- It is a safe and effective method for catching street dogs since in this method the safety of both, the street dog and the dog catcher is taken care of.
- This method is particularly useful for catching street dogs moving in large, open spaces and for also catching running street dogs.

Disadvantages

- If not practiced correctly, this method can cause injuries to the street dogs. The nets may require frequent repairs and have to be disinfected after every catch.
- This technique can be practiced only by catchers that are able bodied and physically fit.

4.3.5 Balinese Pole Net Technique

The Balinese net is essentially a very robust pole net and was originally designed, in 1998, by Mr. Nana Prayoga, a veterinary technician, who works for the Balinese Animal Welfare Society 'Yudisthira Street Dog Foundation'.

Originally intended for the small to medium sized (around 15 kg) dogs found in Bali, it has become more popular after a group of Balinese catchers went to Sri Lanka shortly after the Tsunami to assist with disaster relief. Balinese nets have been successfully introduced into India, especially in Ahmedabad and Jodhpur, where this technique of catching dogs has become quite popular.

Method: Catching is carried out by placing the ring, or hoop, over the street dog that then, usually, moves into the bottom of the net. The net is then continually twisted until the street dog is totally restrained.

Advantages:

- The unique aspect of the Bali net is that the pole of the net can then be removed and placed through the netting, this acts as a lock to secure the street dog, and serves as a handle to carry the street dog safely to the waiting transportation vehicle.
- Through this method, it is easier to sedate or vaccinate unfriendly street dogs that are difficult to approach with a pole or long reach syringe, as many street dogs can be caught and vaccinated through the netting.
- It is safest to catch suspected rabid dogs by the Balinese pole-net and the butterfly type nets.

Disadvantages:

- The net method may not be suitable for all situations or all catchers, but could be regarded as an additional tool to enable maximum capture of street dogs in the ABC programme.
- If the quality of the netting used for the net is not very good, then the net may tear while catching the street dog and dog catching may not be possible by using this technique.

4.3.7 Dos and Don'ts with regard to catching of street dogs

- Local bodies should develop an app to monitor pickup, surgery and release of street dogs.
- All street dog handlers and catchers must be given prophylactic vaccinations against rabies.

- Street dogs should be caught and released preferably in the early morning hours to avoid heat stress and to prevent the dog–catching vehicles being delayed by traffic jams.
- The street dogs must be released at the point of capture, ideally following the GPS app which is widely available in India. It is advisable not to release dogs amid heavy traffic.
- Street dogs must be handled gently. Tongs, wires and chains are not to be used at all for catching or restraining the dogs.
- Street dogs that are approximately 6 months and above may be caught for sterilization.
- Old street dogs and visibly pregnant bitches should not be caught.
- Street Dogs mange or scabies or those with signs of possible infectious diseases should not be caught along with healthy street dogs. It is recommended that these street dogs be treated on location, if possible, or captured for treatment at a facility having adequate space and infrastructure for the same.
- Additionally, these ailing street dogs should be housed separately from the street dogs that are caught for the Animal Birth Control Programme. If the ABC Implementing Agency does not have facilities for treating the street dogs that are ailing, such dogs should be transported to the nearest animal welfare shelter with veterinary facility, or to a veterinary hospital where proper treatment and care can be provided.
- A street dog that is scared and not very friendly is perceived to be aggressive and is usually branded as a street dog that may bite. However, this may not be the case and such street dogs need to be handled by veterinary staff and dealt with patience and compassion.
- If a street dog showing clinical signs of rabies is caught, then the most important point to be noted is the safety of the dog catcher and ensuring that they use proper wound treatment if bitten, followed by post-exposure treatment. As suspected rabid street dogs must always be transported separately and not with other healthy street dogs. Once the dog is transported

the transportation van must be disinfected. As suspected rabid street dogs must immediately be admitted to the quarantine ward of the ABC facility/campus. A team comprising the veterinarian of the concerned AHD, Municipal Corporation and NGO would decide for euthanasia and send the brain sample. No street dog can be pronounced rabid unless a scientific test is conducted to establish the same post death.

- The ABC Implementing Agency must work systematically to sterilize at least 70% of the dog population in a time bound and area based manner.
- There should be a repeat of the program in the same area after 03 months till the whole eligible population is sterilized. This would help in systematic combing of the area and the results of the program will be visible within 4-5 years.
- The RWA / AOA / care takers /animal feeders should be encouraged to bring street dogs to the ABC center. This will encourage community participation and strengthen the program.
- While planning an ABC programme for any city, town or village, the most effective technique of instituting rabies control as well as street dog population control would be to use a 'periphery to center approach' of catching street dogs. The reason being that, it is often the border areas of a city or town, i.e. those that are in close contact with neighboring forests, where the chances of rabies outbreaks are most likely.

4.4 Transportation

Key Concerns during Transportation of Street Dogs: Once caught, the street dogs must be safely transported to the Animal Birth Control facility / campus. The type of vehicles to be used will depend on the organization involved and the areas from which the street dogs are to be caught .The vehicle must be easily able to navigate small lanes and by ways in cities

and towns.

4.4.1 Vehicular design considerations

- The vehicle should be robustly constructed to hold and transport street dogs. Attention should be paid at the time of assembly and during maintenance that the street dog holding section of the vehicle is free from sharp edges, protruding screws, etc. so that the chances for injury during transport are prevented.
- The vehicle design needs to be such, that street dogs can be placed in the vehicle without allowing those already within to escape. For this purpose, a horizontally hinged, inward swinging, flap door has been found to be effective.
- The street dogs should also be transported in a manner that they do not fight with one another.
- The vehicle must be adequately ventilated.
- The vehicle must be cleaned, watered and disinfected on a daily basis. The material chosen for modification of the vehicle must be suitable for long term use.

4.4.2 Basics specifications for dog catching vans

- The dog van should have a closed body with windows (fitted with grills) on both sides for ventilation
- The van should have two separate compartments, i.e. the driver's compartment and the street dog-holding compartment.
- The driver's compartment should be able to accommodate a minimum of two street dog handlers, in addition to the driver.
- A sliding window at the back of the driver's seat should be fitted to allow viewing of the dogs in the holding area.
- It is recommended that at least one handler is seated with the dogs so as to prevent dog fights

4.4.3 Dog Transportation: Do's and Don'ts

- Street dogs must be picked up and released in the early morning hours to avoid heat and undue stress to the animals.
- There must be no over-crowding in the vans, both during pick up and during release.
- If the travel time is more than three hours, as top on the way to provide water for the dogs is mandatory.
- An attendant must periodically check the dogs in the vans when in transit.
- Dogs must not be tied to rings in the van.
- Vehicles must be cleaned and disinfected after every use for

transporting dogs.

- Great care must be taken during loading, transportation loaded and unloading. Rubber matting around the edges of the loading gate / flap / floor can assist in protecting the dogs when loaded.

4.5 Infrastructure for ABC Programs

Basic infrastructure for ABC Programs:

Before an ABC Program can be carried out, care must be taken to ensure that minimum standards of housing, feeding, hygiene and veterinary care are provided for the street dogs. The preparation room and operation theatre must be well equipped with necessary instruments, equipment's and medicines to adequately handle the volume of work as well as to ensure that surgery carried out on the dogs is free of any untoward complications. Care must also be taken to ensure that adequate number of personnel are available on duty to run the ABC Program efficiently. There must be provision for a doctor's room, pre-operative preparation room, post-operative recovery room, kitchen, medicine stockroom, attendants' quarters, suitable kennels, quarantine facility with a separate entrance etc.

4.5.1 Housing

It is essential that in addition to the general housing arrangement made for the street dogs selected to undergo the ABC Programme, arrangements are also made to provide a separate quarantine area to house dogs suspected to be rabid. Besides this, the ABC facility/campus must also have a separate isolation area to house individual dogs that show symptoms of illness. Arrangement must be made to

ensure that the drainage system is kept separate in the areas where dogs with suspected contagious disease or other ailing dogs are housed for observation or treatment.

i. General Considerations

- Open kennels in which a large number of dogs are kept loose is not as satisfactory arrangement. It is recommended that 3-5 dogs of the same area can be kept together. 12 sqft of area per dog is mandated. Males, females, sterilized and unsterilized dogs should be segregated. Care must be taken to ensure that dogs that fight must not be housed together.
- During the period of stay at the kennels, the dogs must be provided with access to clean drinking water at all times, and adequate food at least twice a day. Proper shelter to protect from extreme weather conditions must be ensured.

ii. Kennels

The kennels for individual dogs should be at least 3 feet wide, 4 feet length and 6 feet high. The kennel should be provided with a door or gate of vertical iron bars. The gaps between adjacent bars should be no more than 2 inches. Adequate roofing is necessary to provide shade and shelter from inclement weather and also to prevent the dogs from escaping. Care should be taken while designing the kennel to ensure that there is sufficient cross ventilation of air through the kennels.

iii. Doors, Windows, Doorways, Walkway & Verandah:

Doors

Doors (and windows, fences, etc.) should be well maintained and should preferably be made of SS welded rods and bars. Doors should open both inwards and outwards as this enables easier kennelling of dogs and easier checking of dogs post-operatively. Doors should be secured by bolts. Adding metal bolt hole plates on the door jamb to prevent bolt holes becoming enlarged is helpful as dogs attack the doors. The hole in the bolt hole plate should not be circular in shape but

of an elongated shape running vertically which will provide better support in the event that the door drops on its hinges overtime. Rather than using angle iron for the door frames, it is recommended that masonry pillars be used, which is why bolt hole plates are needed. A disadvantage of using angle iron is that, the doors can then be opened one way only. The walls and surrounding fences should be designed to make climbing difficult. No gap should exceed 2 inches to prevent pups escaping. This includes gaps between door frame and floor. Two inches are measured from the edge of one bar to the adjacent edge of the next bar, i.e. does not include the thickness of the bar.

Windows

Rear windows (barred as for doors with an inter-bar space of 2 inches) improve ventilation and light. If possible, such windows should have bars so positioned that there is no window ledge within the kennel. Again depending on location, windows may need verandahs /overhangs to prevent sun or rain entering the kennel. If rear windows are not possible, then air vents should be incorporated to allow inflow of fresh air.

Doorways

Doorways should be of adequate height to allow easy access and exit for the personnel of the ABC implementing agency. Gates from kennel areas should open in to the kennel enclosure and should be fitted with spring closing mechanisms to limit the possibility of dogs forcing the gate open, or of them being left open in advertently. Bolts securing the outside gates should have chains so that the bolt may be secured in the closed position to prevent the dogs from moving the bolt.

Walkway

Outside the kennels, a walkway of concrete is needed. Slope of the walkway should be away from the kennel.

Verandah

Depending on the situation, kennels should have an adequate verandah to shade the kennel from the sun.

Example: The example given below is from the kennels constructed at the Help in Suffering Shelter in Jaipur, Rajasthan and may be used as a guide to build the Kennels.

Dimensions of the two designs of kennels used at the Help in Suffering Shelter are given below:

'A' Kennel block (outside) Width: 4ft 10 in.

Depth 5ft

Height 7ft 6in.

Doors 3ft wide (total aperture) Platforms depth (front to back) 2 ft. height (above floor) 1 ft 5 in. (but would be better at 4 inches)

'N' Kennel block Width: 3 ft 6in

Depth: 4 ft 6 in

Height: 7 ft 6 in

Doors 2 ft 5 in (total aperture) Platforms depth (front to back) 1ft 9 in. height (above floor) 4 in

Fencing of Enclosure:

Fencing generally: 6 ft 10 in. high

Fencing at unloading area, and between shelter and street: 8 ft 3 in (with last foot as inward facing overhang)

iv. Flooring:

The floor should be of concrete with an adequate slope to facilitate easy cleaning. It should be sealed with a sealing material like Bond Crete or any other equivalent. The kennels should be designed to have a raised area at the rear of the kennel so that the dog may lie down comfortably there.

v. Drainage:

The floor must be designed with a slight slope so that fluids can be easily drained out and cleaning the floor of the kennel is easy. Drains must be covered by a secure, rust resistant grill or *jaali*. Drainage channels or pipes should be straight. Each kennel should have a separate drain (covered with jaali) leading to a main effluent drain. Drains should be kept straight and have well designed chambers with access from the surface to allow cleaning. PVC pipes of at least 4 inches diameter may be better than ceramic pipes. Adequate access chambers to drainage pipes are required for cleaning purposes. Run-off water from roofs should drain out separately and should not be allowed to enter the kennels.

Care should also be taken to ensure that all plug points, electrical switch boards and cables are located at a sufficient height above the ground. Dogs are naturally curious animals and have a tendency to bite wires and play with pieces of tubing. This should be taken into consideration when constructing kennels.

4.5.2 Unloading Areas

Separate areas for unloading dogs from vehicles and to allow secure examination of dogs must be provided.

4.5.3 Kennel Management

i. Cleaning:

Proper arrangements should be made to ensure that the kennels are efficiently cleaned. Cleaning and sanitizing products that are non-toxic should be used. The kennel should be thoroughly disinfected after releasing one patient and before admitting another one. Complete fumigation and disinfection of the kennels and the drains is recommended at least once a month to prevent parasites and communicable diseases from spreading.

ii. Water:

Supply, Storage and Drainage Arrangements for adequate water supply and sufficient number of storage tanks, taps and pipes should be made. Drains from each kennel and linking up to the common corridors and other spaces should be designed in such a way that they can be easily cleaned. Limiting the number of bends in drainage pipes will facilitate easier cleaning. While designing the drainage system care should be taken to ensure that access chambers are provided to allow access to the drains and to facilitate thorough cleaning of the drains in case there are any blocks. Kennel management requires the use of large volumes of water. Hence, good rain water harvesting and storage systems should be set up. Besides, the staff should be encouraged to follow good water conservation practices.

iii Food Supply, Storage, Preparation and Distribution:

Dogs must be fed nutritionally balanced food twice a day that is free of adulterants and obtained from a reliable food supplier / raw material supplier. Well balanced, nutritious food that combines a proper blend of carbohydrates, proteins and fats and is rich in vitamins and minerals should be fed to the dogs twice a day.

iv. Storage:

The food grains and cereals used for feeding the dogs must be stored in clean, airtight, moisture free containers so that no spoilage or contamination by fungi, yeast or bacteria can occur. The facility should be rodents/ pest free.

v. Cooking and Washing:

The utensils used for cooking and serving must not be washed in the same sink or place where the surgical instruments and drapes used for surgery are washed. This is because of the risk of transmission of infections, either via the surgical instruments or through the food utensils. The wash sinks for the food utensils must be separate and at a sufficient distance from the wash sinks for the surgical

instruments and drapes. After washing, the surgical drapes must be dried in a sunny, well-ventilated area.

vi. Ventilation:

Making provision for large windows and open corridors can also improve the circulation of air and increase the ventilation inside the ABC facility/campus. However, if the ABC Implementing Agency is working in a place where the climate is very cold, then care should be taken to keep the ABC facility/campus well insulated and warm.

vii. Number of Kennels:

While planning the ABC program, the population of the area to be covered must be calculated. Going by the estimate of dog population to be 3:100, the estimated number of dogs should be calculated. Considering that the area needs to be completely covered within 2 years, i.e. all dogs need to be sterilized, and each dog needs to be kept in the kennel for post-operative care for a minimum of 4 days, a total number of kennels required may be arrived at.

An example for calculating the number of kennels needed:

A town with a population of 1,00,000 will have approximately 3,000 dogs. To cover 3,000 dogs in 1 year, 250 dogs will need to be sterilized every month.

Considering that surgeries will be done for 25 days every month, at least 10 dog's everyday will need to be sterilized.

If 10 surgeries are conducted daily and the dogs are hospitalized for at least 4 days pre and post-operatively in individual kennels, then approximately 40 kennels will be needed to house the dogs, which are recuperating after surgery. A further 10 kennels will be required to house the next batch of street dogs that is brought in for ABC. Additionally, at least 5 kennels will be required as a separate

quarantine facility. Not every dog may be ready for release at the end of 4 days and may require longer period to recover from the surgery. This needs to be factored in while calculating the number of kennels to be constructed.

A set of 10 spare individual kennels must be available to house those dogs that fall ill after surgery as well as the dogs that take a long for healing. These spare kennels can also help the ABC Implementing Agency in dealing with emergencies.

Adherence to sound surgical protocols, especially aseptic techniques is mandatory and will reduce the duration of post-operative hospitalization.

4.5.4 Operating Facilities

The operation theatre must be separate from the preparation room and both the

operation theatre and preparation room should be adjacent to one another.

The preparation room should have an adequate source of water supply as well as good lighting. Besides, the room must be secure to prevent the dogs from escaping.

i. Minimal requirements of preparation room

- Cupboard to store sterilized surgical packs, sterile surgical instruments, sterile surgical gloves, mask, cap, and gown.
- Cupboard for storing suture materials, gauze, band ages, anesthetics, analgesics, antibiotics and other essential medicines and a weighing machine.
- Washing sink with adequate water taps with elbow activated handles.
- Good ventilation and lighting
- An autoclave (at least 20 liters) that can sterilize at least 8-10 surgical sets at a time. It would be best if the autoclave were to be kept in a separate room or at least in a well-ventilated space to minimize the chances of injuries in case of explosion. The use of autoclave indicate, or tape should been courage. The settings for the autoclave will depend on the manufacturers' instructions.

ii Requirements of an Operation Theatre

Well equipped: The Operation Theatre and associated preparation room should be well equipped with the basic surgical requirements necessary for the ABC Implementing Agency to function efficiently.

The Operation Theatre must have the following basic equipment:

- Steel surgical operating table
- Shadowless lights for each operating table

- Instrument trays
- Kidney Trays
- Trolleys for instruments
- Cupboards to stock essential medicines
- I/V stands.

- UV lamps
- Air conditioning systems
- Refrigerators
- Electricity backup
- Surgical scrub sinks and wash taps
- Surgical Waste Bin
- Emergency Medicine Kit

Other Key Requirements Appropriate Protocols

Both the Preparation room as well as the Operation Theatre should be kept as free of clutter and extraneous furniture as possible to ensure that the highest standards of hygiene are maintained. Conditions of asepsis and sterility must be maintained at the highest levels.

Good lighting:

The rooms should be adequately lit so that surgery can be carried out comfortably. Shadowless lights must be used for each O.T. table. Provision must also be made for power back up in the event of electricity failures.

Adequate water supply:

Care should also be taken to make sure that the operation theatre and preparation room have a sufficient number of functional sinks and elbow taps, with an adequate water supply. This is vital so that the surgical team can carry out 'scrubbing up' procedures diligently. In case, water supply is restricted to specific hours of the day, provision must be made for storing a sufficient volume of water in overhead tanks.

iii. Minimal Equipment needed to carry out the ABC Program

There should be sufficient sets of surgical equipments available. These may be calculated with reference to the number of surgeries to be performed per day. A minimum of one pack per operation is required. Color coding of surgical packs to distinguish between those used for spaying female dogs and those used for castrations may be helpful. Instruments used will depend on the surgeon's preference but sufficient instruments should be available to cope with any emergency that may occur while undertaking sterilization surgery. Color coding

of the different sterilized surgical drapes used for spays and castrations is recommended. Adequate facilities should be available to clean the surgical equipments. An autoclave is essential to sterilize instruments for surgery. The use of autoclave indicator tape is recommended to ensure that instruments are adequately sterilized. Surgical instruments and surgical drapes must be thoroughly washed and cleaned prior to autoclaving.

The surgical pack for female dogs should have at least the following:

- Straight scissors-1
- Metzenbaum scissors-1
- Adsons tissue forceps-1
- Babcock tissue forceps-1
- Kelly/Carmalt /Mosquito hemostatic forceps- 3 pairs of anyone

- Spay hook-1
- Towel clips-4
- Mayo-Hegar needle holder-1
- Scalpel handle No3-2
- Scalpel blades No10–2
- Sterile gauze swabs: 8 pieces
- Curved needle–1
- Straight needle-1
- Allis tissue forceps-2

Suture material:

- Catgut–1-0
- Vicryl–1-0 and Vicryl -2-0

The Surgical pack for male dogs should have at least the following:

- Straight scissors-1
- Metzenbaum scissors-1
- Adson tissue forceps-1
- Babcock tissue forceps-1
- Kelly/Carmalt/Mosquito hemostatic forceps-3 pairs of anyone
- Towel clips - 4
- Mayo-Hegar needle holder-1
- Scalpel handle No 3 - 2
- Scalpel blades No10 – 2
- Sterile gauze swabs: 4 pieces

Suture material:

- Catgut –1-0
- Vicryl –1-0

The Emergency Kit should contain at least the following:

- Atropine1ml ampoules 10ml vial (1box)
- Yohimbine (Xylazine reversal agent)10 ml: if available
- Adrenaline1ml ampoules 10 ml vial (1box)
- Ringer's lactate (450ml)– 5 bottles
- Dextrose normal saline(450ml) –5 bottles
- Dexamethasone 2 ml ampoules (10) /30 ml-(1vial)
- Diphenhydramine maleate-30 ml - (1vial)
- Terbutaline sulfate- 1ml ampoules (10)
- Doxapram - 20ml - (1vial)
- Methylprednisolone sodium succinate- 20ml -(1vial)
- Sodium bicarbonate 8.4% solution -100 ml (5 vials)
- Styptic like Boltropes 2ml ampoules (10)
- Chlorpheniramine maleate – 30ml vial (1)
- Gauze Rolls (sterilized) – 10cm –10
- Cotton Rolls -1
- Swabs -20
- Disposable syringes (10ml) -2
- Disposable Syringes (25ml) - 2
- Disposable Syringes (5ml) - 2
- Disposable Needles – (22 gauge) –1dozen
- Butterfly needle scalp vein–2
- Povidone iodine–450 ml bottle–(1)
- I/V sets – 2
- Torch –1
- Paper tape -1roll
- Stethoscope -1
- Forceps– 2 Pairs
- Scissors –2 Pairs
- Thermometer - 1

At least two sterile surgical kits must always be available to carry out any emergency surgeries.

Personnel:

The number of people to be employed by the ABC Implementing Agency must be calculated based on the volume of work that is to be done.

For example, an ABC Implementing Agency that undertakes 200 ABC surgeries and 200 anti-rabies vaccinations per month, the following personnel should be employed:

1. One Veterinary Surgeon who can do the FTE (full time equivalent) work of 40 hours/Week.
2. One Veterinary Surgical Assistant, para-vet, Veterinary Nurse, or an experienced Veterinary Assistant.
3. At least two dog handlers or attendants who will attend to the catching, transportation, feeding, exercise and post-operative care of the dogs.

4.5.5 Anti-Rabies Vaccines

i. Vaccination

It is vital that all staff involved in an ABC program are properly vaccinated against rabies. A pre-exposure prophylactic course consisting of tissue cell culture vaccine should be given on days 0, 7, 21 or 28.

Yearly boosters are recommended.

ii. First Aid for dog bites

The dog handling staff should be well trained in following proper guidelines on cleaning and dressing dog bite wounds.

The dog bite should be cleaned in the following manner:

Step1: The most important step is to allow a gentle stream of running water to flow through the dog bite wound for 10 minutes. This allows for the mechanical removal of any virus particles, if present.

Step2: Then, the wound must be given a thorough wash with a disinfectant soap, detergent, or povidone iodine. This should be followed by washing for 10 minutes of the affected area or swabbing the area with a gauze dipped in an iodine-based compound like povidone iodine or a chlorhexidine wash. It is not recommended to apply spirit on a raw area as it can cause a strong burning sensation.

Step 3: An immediate visit to the doctor for the releavent post-bite treatment with vaccine and immunoglobulins should be followed as per the WHO recommended regime.

iii. Vaccine Storage:

It is important to remember that for the anti-rabies vaccine to work effectively, the vaccine must be refrigerated. If the vaccine is kept at room temperature for more than a few minutes, the quality of the vaccine will deteriorate and it will not be effective. Care should be taken to ensure that the vaccine is kept refrigerated at all times, except just before use.

Provision for a continuous supply of power must bemade in the ABC facility/campus, with special regard to vaccine storage with provision of adequate backup power by inverter/generator.

4.6 Animal Birth Control (ABC) Program–Key Elements

4.6.1 Identification of street dogs while being caught

It is mandatory that the vaccinated and sterilized street dogs are released back to the exact location from where they were caught. This is the only way to ensure that the ABC programme is effective. Releasing the dogs at the very same locations from where they were originally caught also prevents territorial adjustment issues and dog fights. A robust and fool proof system is thus required

to ensure that each animal caught is correctly identified and released back into the territory that it belongs to.

The following methods of identifying the dogs at various stages of the ABC program must be adopted:

i. Numbered Tagging

In this system, each dog receives 'a unique number identification tag at the time of 'catching'. This number is then recorded in a log book along with details of the exact location from which the dog bearing that number came from.

ii. Written Descriptions

Each animal caught is identified based on tag number, coat coloring and type, sex and approximate age and these are recorded along with the detailed description of the location from where the dog was caught. Individual record sheets are mandatory for each dog that is brought to an ABC facility/campus. Catching history, particulars of referral care giver, tag number, coat coloring and type, sex and approximate age, general health details etc. must be mentioned in the record sheet. The same record sheet must be used to enter the details of ABC surgery and pre and post-operative treatment. Entries in the record sheets with respect to surgery, treatment and medication must be signed by a qualified and trained veterinarian. Date, Place and time of release must also be entered in the same. Record sheets must be maintained for street dogs that are kept under observation in quarantine wards / kennels.

iii. Permanent Identification

The identification methods referred to above serve to establish a correct association between the dogs caught and the locations from where the dogs were caught. A permanent method of identifying dogs is vital to prevent the same animal from being caught and subjected to surgery twice. This is especially essential with the female street dogs as no outward sign of the sterilization surgery will be visible once the animal has recovered fully and the coat has regrown. The tip of the right ear should be notched during surgery while the dog is under anaesthesia.

Illustration of notch on the pinna of the ear

Permanent identification of sterilized and vaccinated dogs in an ABC program must be done by making a distinctive notch on the pinna the right ear.This identification can be easily done by using sterile surgical clamps and a sterile surgical blade. A thermos cautery device must be used to cut and seal the notch. Ear notches should be visible but should not be too large so as to affect the anatomy of the ear. The notched ear should receive daily antiseptic dressing.
All dogs should be micro chipped and these should be recorded in a post operative and release register.

4.6.2 Record Keeping

i. General Considerations

It is imperative to maintain proper records to ensure that the ABC program being undertaken by the ABC Implementing Agency is functioning at the highest level of integrity, discipline, dedication and efficiency. Records must be maintained on a daily basis with all the data filled in accurately.

Records also enable specific aspects of the ABC programme to be examined in detail.

ii. Essential records that must be maintained by the ABC Implementing Agency are listed as below:

- Pick up and release records
- Operation Theater records duly signed by a qualified and trained veterinarian
- Post-operative care records
- Quarantine facility records
- Records of post mortem examination in the prescribed format for any dog deaths that may occur at the ABC facility/campus, duly signed by the jurisdictional veterinary officer
- Medicine inventory records
- Stock inventory records
- Attendance records and particulars of all persons working at the ABC facility/campus

All records must be updated daily. The concerned veterinarians must sign the Operation theatre records as well as the Pre and Post-operative care records daily. Invoices of all medical, surgical and other consumable items purchased must be maintained separately.

iii. Accounting Records

In addition to clinical records that detail out the progress of dogs through the ABC programme, medical stock records should be maintained and a suitable transparent and traceable system should be developed for recording the supply of medicines from stock. Accounts must be maintained and the monthly and yearly accounts must be drawn up according to the highest standards of accounting ethics and protocols.

4.6.3 Emphasis on systematic area wise efforts and female sterilization

i. Area-wise Effort

While carrying out the ABC Programme, sterilizations must be carried out in a well-planned, area wise, systematic manner. Evidence suggests that ABC programs will be most effective if undertaken area by area rather than spreading

Female Community Dog

the same efforts, thinly over all areas. Area wise catching allows for more efficient utilization of staff, vehicles and fuel resources during the coordination of both the catching as well as the release of the street dogs.

ii. Female-centered Approach

In order to rapidly control the population, an ABC programme should concentrate mainly on sterilization of the female street dogs. A ratio of 70% female sterilizations to 30% male sterilizations is advised.

Not with standing the female centred approach advocated above, males should also be castrated to limit rivalry and fighting, especially during the breeding season and to reduce the incidence of transmissible venereal tumour.

Every street dog that is sterilized must receive anti-rabies vaccination and should be dewormed.

4.6.4 Monitoring Program Effectiveness

Monitoring the ABC Program is critical to understand and evaluate the performance of the ABC Implementing Agency. This can be done at two levels: at the individual street dog level and at the dog population level.

i. Individual Monitoring

a. Monthly Average of Recovery Time:

Records should be maintained of all pertinent aspects of every dog's admission at and release from the ABC facility/campus. These should be compiled from the records mentioned above that have mandatorily to be maintained. Monthly average recovery time in days (i.e. admission to release) should be calculated. These figures must then be plotted graphically by sex and critically examined. By doing so, patterns or problems can be

seen as they arise.

b. Recovery Time of dogs operated by individual Veterinary Surgeons:

The ABC Monitoring Committee should review the surgeries that each individual Veterinary Surgeon has carried out periodically. Such reviews must be carried out on a quarterly basis. An excellent way to monitor the success of the ABC Programme from a surgical perspective would be to calculate the average recovery time of male and female dogs separately for each surgeon. The surgeries carried out by different veterinary surgeons should be reviewed separately to mark out clear differences in performance, efficiency between different veterinary surgeons conducting the ABC surgeries. For the ABC Implementing Agency carrying out the ABC Programme, such are view can serves a sound

clinical audit to evaluate efficiency at the operating table. The audit reports for such quarterly reviews must be sent to the AWBI for record.

c. Performance of Para vets and Veterinary Assistants:

Training, attendance and performance records must also be maintained of the involvement of the para vets and veterinary assistants participating in the ABC surgeries, whether as scrubbed operation assistants, or in the role of handlers. This should be done because if one of the para vets participating in the ABC Program does not follow prescribed conditions of asepsis, then the chance so abscesses and delayed wound healing occurring during his or her participation in the ABC surgery may be higher than a para vet who is following all the standard norms of hygiene and asepsis. By carefully analyzing these records therefore, it may be possible to determine the cause of problems inter firing with the smooth conduct of the ABC program, such as increased incidence of ear notch abscesses. Once the cause of the problems is identified, appropriate steps must be taken to rectify them.

d. Post Mortem Examination:

All dogs that die at the ABC facility/campus before, during, or after the surgery should be subjected to a post mortem examination. This helps in ascertaining whether the death can be attributed to the surgery (through surgical error), to the anesthetic or due to improper handling, housing, feeding, or some underlying or pre-existing disease. Reviews of surgical and other techniques must take into account the results of such post mortem examinations. Post Mortem to be conducted by JVO.

ii. Monitoring of the Population

This is done through regular population surveys and other methods to collate information about the population and the effects of the ABC programme upon it.

a. Breeding Information:

By recording the incidence of pregnancy, breeding, and litter size, some information on the breeding behavior of street dogs in each targeted area can be obtained.

b. Migration Data:

It may not be entirely uncommon to see that dogs that have been sterilized in one area have migrated to another area. Sometimes, the ABC Implementing Agency may catch the same dog again by mistake. If this happens, it should be used as an opportunity to note the identification number and correlate the data with the release site and release date of the dog. By recording this information, it may sometimes be possible to make inferences about the reasons for the possible migration of the dogs to different areas.

c. Population Monitoring:

The ABC Implementing Agency conducting the ABC program should carry out population survey before commencement of ABC program. This should be conducted after 5 years to gauge the efficiency of the ABC program, and its impact on dog population figures in the targeted areas.

d. Rabies Monitoring:

Records of the number of rabies cases reported in each targeted area should be maintained by the Health Department of each state, and these records must be analyzed annually to assess whether the incidence of rabies in the area has declined. Such analysis must be communicated to both the local authority and the state health authority for record. The case histories must be recorded accurately and it must be noted whether the animal in question was a pet dog, or a street dog, or any other animal. All suspected cases of Rabies must be confirmed through due procedures and tests.

e. Education and Public Awareness Monitoring: If the outreach and public awareness regarding the ABC Program has been successful, there will be a

marked increase in the number of volunteers, donors and members of the community visiting the ABC facility / campus to volunteer their time and resources. Besides, when an awarenesss programme has been successful, with each passing year a steady increase in the number of care-givers in the targeted areas will also be seen.

4.6 Surgery and Associated Procedures

General Consideration:

In winter , ABC Centers must implement strict protocols to ensure the well-being of dogs undergoing surgery. No surgeries shall be conducted below 10°C, and between 10°C-18°C, hourly hypothermia monitoring must be performed for at least four days post-surgery. Operation theatres must maintain a minimum of 20°C, and all temperature readings must be documented.

Vital Check points: Pre-surgical Checks, Pre-operative Preparation and Fluid Therapy

It must be ensured that the street dog to undergo the surgery is over six months in age, is not pregnant, or suffering from any disease or otherwise ailing.

If any street dog displays visible clinical signs of illness, such as extreme emaciation, pallor, weakness or skin conditions like mange, the dog should be first treated for the condition.

Every street dog must be subjected to a thorough check-up prior to the ABC surgery. This will also aid in filtering out the dogs that are unhealthy and are not fit for surgery, thus minimizing the chances of post-surgical deaths and delayed post-surgical healing.

Fluid loss during surgery can cause a great deal of stress to the animal and may cause severe dehydration and shock, even leading to death if there has been severe hemorrhaging from any of the legated blood vessels. Giving

an adequate quantity of fluids intravenously during the surgical procedure will help ensure that the dogs' tissues are adequately perfused, thus minimizing the risk of surgical shock.\

4.7.1 Preliminary Checks

Prior to commencing ABC surgery, the veterinary surgeon must ensure:

That the physical description of the dog matches with the corresponding records.

The clinical condition of dogs for surgery.

The preparedness of the operation theatre and preparation room.

The sterility of surgical instruments and equipment.

The availability of the required medications and

The physical environment in which the anaesthetized animals will recover because hypothermia is a severe problem in anaesthetized animals and it is essential that the dogs are kept warm during surgery the immediate post-operative recovery period.

If any of the above is found wanting or deficient, steps should be taken to improve the situation, or the surgeries should be postponed until the conditions are made acceptable.

4.7.2 Pre-Surgical Checks

Each dog must be examined prior to surgery to ensure that the concerned animal is in a state of fitness to undergo surgery.

The key clinical parameters to be monitored are as below:

- Temperature
- Respiration
- Pulse
- Color of the mucus membranes
- Palpation of lymph nodes

- Auscultation of chest to rule out any infection of the lungs as well as to identify cardiac rate and rhythm abnormalities.
- Signs of external injury e.g., fractures and wounds, skin conditions like mange and scabies etc.
- Abdominal palpation to rule out pregnancy, as cites, liver and splenic conditions.
- It is only after the veterinary surgeon has confirmed that the above parameters have been checked and found to be normal that the dog can be considered, 'ready for surgery'.
- Dogs assessed to be incurably ill or mortally wounded shall be dealt with in the manner prescribed in Rule l5 of the Animal Birth Control Rules, 2023.

4.7.3 Pre-Operative Preparation

Preparation of surgical packs:

- Dry instruments should be laid on a dry wrap. A useful technique is to feed one of the handles of all instruments with finger-loops, other than the towel-clips, through the shaft of the longest instrument (frequently the needle-driver)
- An appropriate number of swabs should be included in the kit. The swabs should be folded over the ends of the instruments to avoid puncture of the wrap.
- The wrap is then folded once, longitudinally.
- A hand towel is then laid.
- The final folding is performed, and the wrap secured with a small piece of autoclave tape.
- Ideally this inner wrap is then covered with a second wrap, and the autoclave tape applied as before.

- The pack is identified and dated (by writing on the tape) and placed in the autoclave.
- Time/temperature relationships for steam under pressure:

The following are times at which materials being sterilized must be maintained at the target temperature. This does not take in to account time for penetration by steam or 'heat-up lag'.

3 minutes at 134°C (273.2° F) 29.4 psi

15 minutes at 121°C (249.8°F) 15 psi

Preparation of the patient prior to surgery and withholding of food

The dogs to undergo surgery should not be given food for 12 hours to reduce the dogs' risk of vomiting and pulmonary aspiration. A shorter fasting time for weak dogs and puppies is recommended.

Pre-medication

Prior to anaesthesia, the dogs should be sedated. Doing so will help to reduce the total amount of anesthetic that is required and will also help to keep the animal calm and suitable for induction.

Analgesia

Prior to surgery, pre-emptive analgesia such as meloxicam should be administered. This is because pain relief given before painful stimuli is experienced, is more effective than pain relief given after pain has begun.

Antibiotic use

Pre-operative use of antibiotics can be considered. For sterilization surgery done under suitable conditions of asepsis, the use of antibiotics may not be necessary. In less than ideal conditions, a long acting antibiotic could be considered. The use of antibiotics has to be done judiciously and should be decided on a case-by-case basis by the veterinary surgeon.

General Anaesthesia

General anaesthesia should be administered and the dog must be monitored continuously to ensure that an adequate depth of anaesthesia is reached so that the surgery can be safely performed. Once an anaesthetized and throughout the anaesthesia, the patient must be protected against hypothermia. The maintenance dose should be kept ready for long procedures or in case any complications occur.

4.7.4 Preparation for Surgery

i. Patient Preparation for Surgery

- A clinical record sheet must be maintained for each dog, which must contain the physical information related to the dog in correlation with the drugs and dosage administered as per body weight. This record sheet must be kept with the dog as it moves from preparation room, to anaesthesia, to surgery room, in order to ensure that an accurate and comprehensive record of medicines, dosage and treatment is maintained.
- Anaesthetic induction, shaving and prepping must be performed on a separate table other than the surgery table to minimize contamination.
- If intravenous fluids are to be administered, the catheter site should be shaved and prepped as described for the surgical site below. The catheter is then inserted and the primed intravenous line connected.

- The bladder should be palpated and expressed if necessary and genitalia examined for presence of Transmissible Venereal Tumour (TVT).
- The surgical site should be widely and carefully shaved, avoiding trauma to the area because even small cuts can lead to wound infection.
- The site should be thoroughly cleaned with Chlorhexidine solution. Multiple pieces of cotton wool should be used in turn, commencing at the center of the area and moving towards the periphery of the shaved area and **NEVER** back into the center, otherwise the wound will be re-contaminated.
- Avoid wetting non-shaved areas of the patient.
- Once the shaved area appears free of gross dirt and hair and the pieces of cotton wool used come off the skin with no staining, then the site can be considered clean, but NOT disinfected at this point.
- Chemical disinfection of the site is achieved using three spray-applications of surgical spirit at one-minute gap between applications. A final spray of povidone iodine solution may also be applied, but only once after the spirit has evaporated and the skin is dry. Do not touch the skin during this process, otherwise adequate disinfection will not be achieved. Once again, avoid wetting the non–clipped areas as this may lead to 'run-off' and contamination of the site.
- The patient is then transferred to the surgery table . In so doing, take care not to contaminate the prepped area with your hands or non-disinfected parts of the patient.
- The prep table should then be carefully cleaned with an appropriated is infectant, such as Lysol solution.

ii. Preparation of Operating Table for Surgery

- A clean autoclaved fabric drape should be placed on top of the patient.

Care must be taken to ensure that the drape does not come in contact with the prepared area.

- If the surface of the table is exposed where the surgical kit is to be placed, a second sheet of drape should be laid, over lapping with the first. This is to stop 'strike-through' contamination of the surgical instruments (especially with urine or faeces).

iii. Preparation of the Surgeon for Surgery

- Clothing: The surgeon should wear clean and fluff-free, loose-fitting clothing. The top must be short-sleeved to enable appropriate scrubbing as far as the elbow.
- A surgical hat and mask should be worn; long hair must be tied-up and facial hair closely-trimmed.
- Finger nails must be cut short.
- Should the surgeon have an infected wound or sore on the hands or forearms, it is preferable that surgery be postponed until such time as this has healed.

iv Surgical Scrub

An acceptable germicidal preparation, e.g. Chlorhexidine or Betadine, must be used and scrubbing should be carried out for a minimum of 3 minutes with Chlorhexidine, followed by scrubbing with Povidone Iodine.

v Scrubbing:

- The hands and arms are washed first with the scrub mixture to remove any gross contamination.
- The nails are cleaned next, before the scrubbing procedure begins

- A sterile brush is used to scrub the fingers, the hands, and finally, the arms- in that order. Scrubbing should be over a period of no less than 3 minutes. Once the brush has been used on the arms, it should not return to the fingers. Each finger should receive ten strokes on each surface, making a total of forty strokes per finger. The finger nails and both surfaces of the hands should receive twenty strokes. The number of scrubbing strokes is far more important than the time spent scrubbing.

Rinsing:

When scrubbing is completed, the hands, arms and the brush should be rinsed in water, allowing the water to drip from the elbows to prevent contamination of the hands with drips from upper arms.

Drying of hands:

Two sterile hand towels are provided. The first towel is unfolded and used to dry thoroughly the fingers, hand and forearm (in that order) of one arm, taking care that the fingers of the hand holding the towel do not contact the skin of the other arm. The second towel is used to dry the other hand and forearm in identical fashion.

Alcohol Spray:

With the hands held above the level of the elbows, surgical spirit should then be sprayed on the hands and then the forearms and allowed to dry.

4.7.5 Opening of instrument pack

A non-scrubbed assistant will then present the kit to the surgeon in one of two ways, depending on whether the kit was double (preferable) or single-

wrapped:

Double-wrapped: The outer wrap will be held and opened by the assistant; the surgeon will then remove the pack, handling only the inner wrap, place it on the plastic sheeting/drape covering the table and patient and then unwrap the kit. Care must be taken, at all times, not to touch the plastic/drape, the table or the patient as these are not sterile areas.

Single-wrapped: the assistant will place the kit on the plastic/drape covering the table and will unwrap the first fold only. The surgeon may then completely unfold the wrap, taking care to handle only the sterile aspect of the wrap.

4.7.6 Preparation of surgical site

A large area around the site of the proposed surgical incision should be shaved (or clipped) and cleaned using chlorhexidine or povidone iodine solution. Thorough cleansing should be repeated a number of times before placing the autoclaved drapes.

4.7.7 Fluid Therapy Protocol

A careful inspection of the veins on the forelimb and hindlimb must be made. Once the vein to be used has been selected, the area around the vein must be thoroughly swabbed and cleaned with surgical spirit or povidone iodine. Care should be taken to see that the selected vein is properly dilated. It is good practice to use a catheter.

An intravenous line can also facilitate additional quantities of anesthetic to

be administered as and when required, without any time loss. The exact dose of the pre-medications, analgesic, antibiotics and i/v fluids given should be at the professional discretion of the veterinary surgeon, based upon local conditions and experience.

Intra-operative intravenous fluid administration: This generally works out to an average volume of l50-200 ml of Ringer's lactate solution or 0.9% Normal saline. Giving I/V fluids during surgery is recommended as it will minimize the risk of surgical shock.

Surgical shock may occur in the following cases:

- Debilitated patient
- Very young patient: poor homeostatic response
- Prolonged procedure
- Procedures associated with high risk of intra-operative complication
- Procedures likely to require intra-operative administration of intravenous medications

NB: Ideally fluids should be administered at body temperature

Choice of fluid: Ringers Lactate Solution

Rate of administration: Routine procedure: during surgery: 20-40 ml / kg / hour.

4.7.8 Anesthetic & Surgical Protocols

The particular combination of anesthetic and pre-medicant to be used is a choice that should be made by the Veterinary Surgeon in-charge of the

ABC Program at the Animal Welfare Organization.

i.Good anaesthetic protocol should achieve the following:

- Loss of consciousness that permits surgical procedures to be carried out
- Sufficient degree of sedation, analgesia and muscle relaxation
- Maintenance of adequate cardiac function at optimal levels
- Adequate ventilator and respiratory support

The cephalic vein of the forelimb or the saphenous vein of the hindlimb may be used to give intravenous anesthesia while medications to be given intra-muscularly may be given in the cranial thigh muscles, so as to avoid sciatic nerve injury. Administration of Meloxicam @0.l-0.2 mg/kg bw by intravenous route 20 minutes prior to induction of anesthesia can help to significantly reduce post-operative pain.

Anaesthetic protocols:

Some recommended combinations are listed as below:

Anaesthetic Protocol 1

Xylazine-Atropine-Ketamine-Diazepam Pre-medication.

- Xylazine @ l mg/kg bw (administered intramuscularly- maximum dose lml)
- Atropine @0.04mg/kg bw (however, there is increasing evidence that atropine should not be given as a pre medicant and should only be administered following induction to maintain cardiac output)

Induction:

To be given ten minutes after administration of Xylaxine and Atropine
Ketamine @ 2.5mg/kg bw + Diazepam @0.25mg/kg bw

Mix equal volumes of ketamine (50mg/ml) and diazepam (5mg/ml) and in

the same syringe Dose: lml of the mixture per l0kg bw, given slowly intravenously to sedated dog
(Ref: BSAVA Manual of Small Animal Anaesthesia & Analgesia)

Maintenance:
Increments to be given at half the induction dose

Fluid Therapy: Ringer's Lactate should be administered by I/V route throughout the surgical procedure.

Respiration:

Open mouthed with gag and spontaneous respiration / via endotracheal tube. Endotracheal tube inserted and cuff inflated if necessary.

Anesthetic Protocol 2

Triflupromazine / Atropine / Thiopentone or Xylazine / Atropine / Thiopentone

Pre-medication Triflupromazine@lmg / kg bw or Xylazine@lmg

/ kg bw Atropine@0.04mg / kg bw

Note: The combination of Xylazine-atropine-thiopent one is not considered safe for old, weak and young patients and it is recommended that Protocol 2 be used only by an experienced vet.

Induction:

Thiopentone@25mg / kg bw I/V

(Note: peri-venous administration of thiopentone sodium will causes ever local reaction and must be treated by local infusion of at least three times the volume of sterile saline; this risk can be reduced by the use of a 2.5% solution and by ensuring that thiopentone sodium is given by intra-venous

route only)

Maintenance:

I/V Thiopental neat half the induction dose may be repeated as small I/V boluses but will lead to prolonged anesthesia and longer recovery time.

Fluid Therapy:

Ringer's Lactate should be administered by I/V throughout the surgical procedure.

Respiration:

Open mouthed with gag and spontaneous respiration

Anesthetic Protocol 3

Use of inhalation anaesthesia Pre-medication Xylazine@lmg / kg bw
Atropine @ 0.04mg/kg bw I/V

Induction:

Ketamine @2.5 mg/kg bw + Diazepam @ 0.25 mg/kg bw or 4% Isoflurance or Thiopentone sodium @20 mg/kg bw I/V

Maintenance:

2% Isoflurane with Oxygen via Endotracheal Tube

Fluid Therapy:

Ringer's Lactate should be administered by I/V throughout the surgical procedure.

4.7.9 Ear Notching

All sterilized dogs, irrespective of their sex are to be compulsorily ear-notched with a visible 'V' cut on the pinna of the right ear on the dorsal margin, immediately after surgery by using an electric cauterizer for easy identification of the sterilized dogs after surgery. The size of the 'V' should be small, and sufficient only to identify the sterilization status of a dog from a distance The length of both arms of 'V' should be 20 to 25% of the total length of the ear. No other shapes such as 'U' are acceptable for ear notching.

4.7.10 Sterilization surgery: general considerations

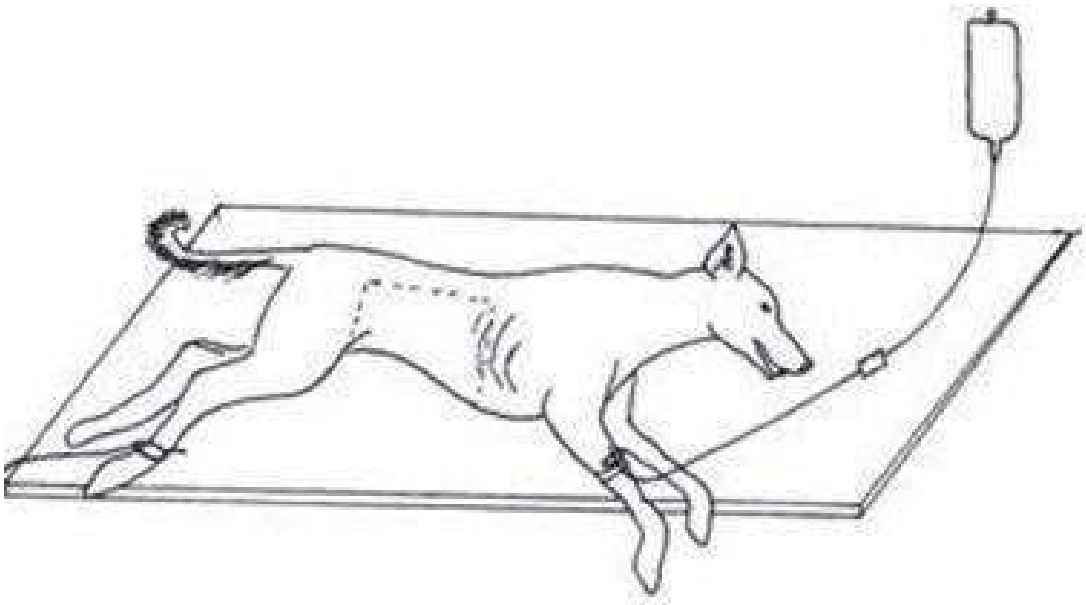
The choice of surgical approach is at the discretion of the veterinary surgeon. The veterinary surgeon must have received formal training in the most updated surgical technique for conducting an ABC surgery. The surgical technique to be adopted may be recommended by the AWBI or the Veterinary Council of India, from time to time. As with all surgery, great attention must be paid to ensure that Halsted's Surgical Principles are diligently followed which includes:

- Complete asepsis - Gentle tissue handling;
- Accurate haemostasis - Obliteration of dead space;
- Careful tissue apposition - Preservation of blood supply.
- Minimum tension on tissues;

It is unacceptable to say that strict asepsis is not required because street dogs have good immune systems. Lack of care during the preparation for surgery of both, patient and surgical team, and during surgery itself will lead to greater inflammation and infection than necessary and thus more pain and poorer welfare for the operated dogs.

To ensure asepsis, a fresh sterile surgical pack Should be used for each animal. It is recommended that sterilized drapes designed for sterilization surgery in female dogs be of a different color than those designed for use

in castrations. This is for easy identification and to prevent errors that can happen while preparing the surgical sets for autoclaving. It has been recommended to use green drapes for female surgical packs and blue drapes for male packs.



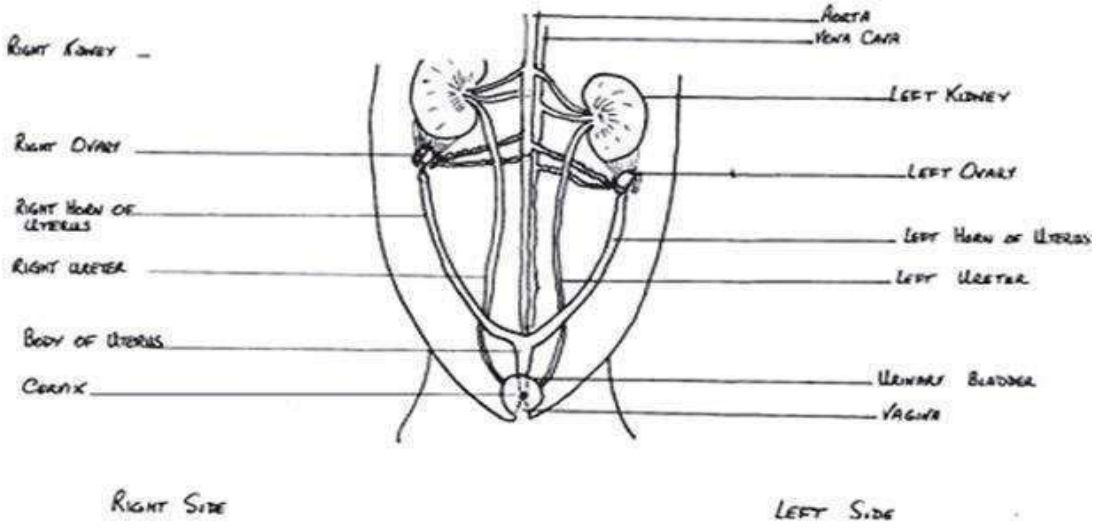
Position of female dog for Flank Spaying

4.7.11 Surgical Procedure for female dogs Ovariohysterectomy

Complete ovariohysterectomy (both ovaries and uterus) by conventional (not laproscopic) surgery is recommended. The use of trained scrubbed-up Para Vets greatly assists the surgeon saves time and aids in speedy recovery of the dogs besides helping to provide desired levels of asepsis. It is possible to sterilize dogs at any stage of the oestrous cycle. However, since oestrogen can delay blood clotting, it is vital to provide efficient haemostas is for female dogs that are operated, while in oestrus.

Two surgical approaches are generally recognized and includes the right

flank approach and mid line approach:

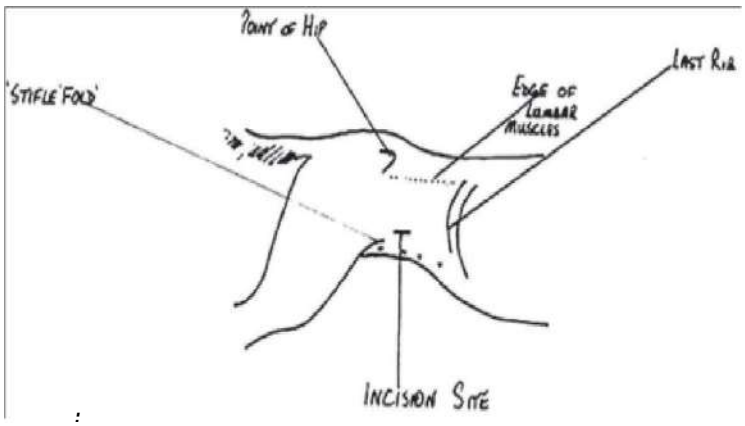


Diagrammatic Illustration of Female Surgical Anatomy of dogs as viewed from the ventral aspect

4.7.12 Right Flank Approach (Not recommended for pyometra cases)

The right flank method of surgery has been considered as the ideal and preferred method for spaying. The dog is positioned lying on its left side and the abdominal cavity is entered via the right flank with the ventral aspect of the dog directed towards the surgeon.

Location of Incision Site for Flank Spay: In adult female dogs the incision is located as indicated in the diagram below:-



In adult female dogs, the incision is made about 4 cms behind the most caudal curve of the last rib, parallel to the spine and about 9 cms ventral to the transverse processes of the lumbar vertebrae.

The incision often falls at the cranial end of the fold of skin connecting the stifle to the abdominal wall. In young female dogs (under 6 months), the incision is placed more caudally. Failure to do this in young dogs results in difficulties in exteriorizing the uterine body near the bifurcation/ cervix to allow identification and removal of the second uterine horn.

Note: The right ovary is more closely adhered to the right kidney and body wall than the left ovary and thus easier to exteriorize if incision is made in the right flank.

Tissues incised –

- Skin;
- Subcutaneous tissues/fascia;
- External abdominal oblique muscle;
- Internal abdominal oblique muscle;
- Transverse abdominal muscle to which the peritoneum is often attached.

The skin is cut with a scalpel. Subsequent layers are separated using scissors and blunt dissection. Incising the three muscle layers can cause haemorrhage. Splitting the muscles along their fibres reduces bleeding, causes less trauma and faster healing, but may result in a smaller aperture in which to work.

Inexperienced surgeons often find gaining entry to the abdominal cavity the most challenging part of this approach. Cutting these muscle layers is easiest if they are isolated using Allis tissue forceps by an assistant and if the surgeon's scissors are held perpendicular to the body wall.

The Procedure

Step 1: Locating the uterine horn and ovary.

The right uterine horn is located with a spay hook. This is easiest done if the hook is inserted along the inside of the right abdominal wall and, brought in contact with the body wall and directed towards the right kidney / cranial lumbar region. If the hook is then rotated and removed carefully, the uterus can be easily brought within the hook.

The horn is elevated so that the ovary can be grasped between the thumb and index finger of one hand. The body wall is then depressed to reduce the distance so that the ovary can be removed. The suspensory ligament is stretched or broken with the second finger of that hand. When breaking the suspensory ligament, direct the tension caudally to protect and avoid tearing the ovarian vascular complex and subsequent haemorrhage. The ovarian vascular complex is located and a window is made in the mesovarium immediately adjacent to the vasculature. The ovarian vascular complex is then clamped with artery forceps.

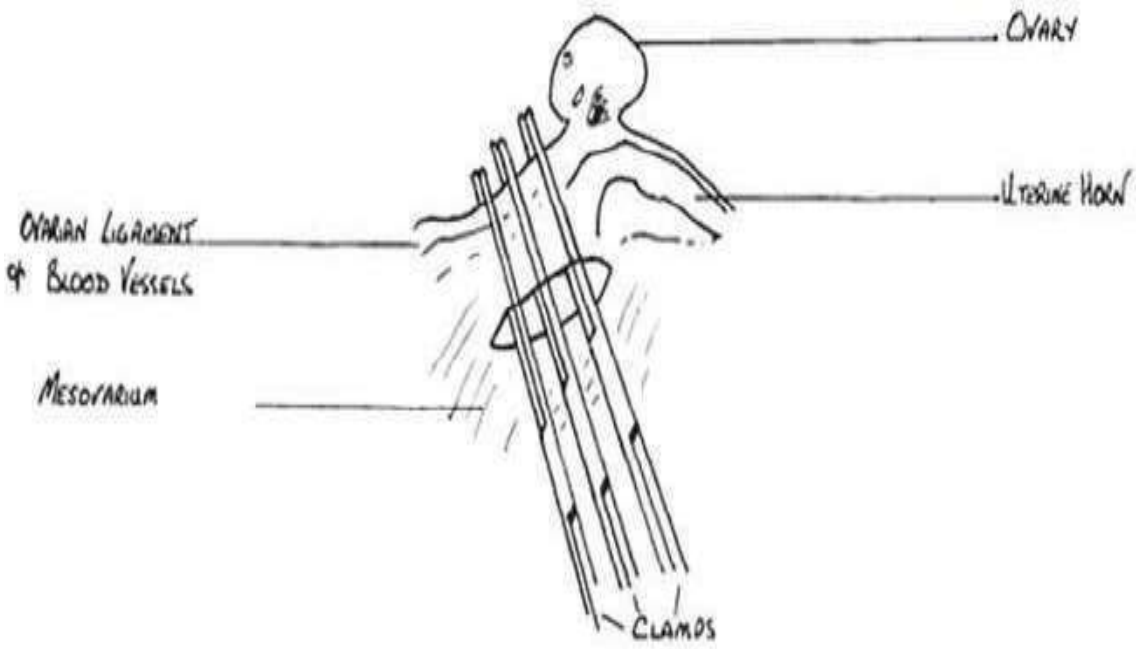


Illustration showing clamping of the ovarian blood vessels.

Step 2: Clamping the Ovarian Blood Vessels

The surgeon should keep hold of the ovary when applying the first clamp to ensure the clamp is placed below the ovary and thus that entire ovary is removed. Failure to remove all ovarian tissue may mean that the dog continues to show oestrous behaviour even if it cannot become pregnant. This is undesirable.

Step 3: Placing Ligature into Crush caused by Clamp

A circumferential suture is placed loosely around the pedicle at the clamp furthest from the ovary. The clamp is removed as the suture is tightened so that the suture lies in the groove of the crushed tissue created by the clamp ensuring greater ligature security. A trans-fixing suture (i.e. one where the suture material passes through the tissues rather than just around them) may be placed proximal to the ligature. This is prudent for inexperienced surgeons, and in bitches with large genitalia, in very fat female dogs etc.

Step 4: Securely Tightened Ligature in place around the Ovarian Vessels.
The ovarian stump is cut with scissors between the 2 clamps closest to the ovary. The excised ovary and ovarian bursa are examined to ensure that the entire ovary has been removed.

Step 5: The Ovarian Vessels are cut from the Ovary
The stump is grasped (without grasping the ligature) with thumb (rat toothed) forceps. The clamp on the stump is released. The stump is inspected for bleeding. If no bleeding is noted, keeping the ligature / stump still attached to a mosquito forceps, lower into the abdominal cavity to remove the stretch on the ovarian artery/vein complex and re-inspect for bleeding before final closure of abdomen. Care must be taken to ensure that a section of body wall has not been inadvertently incorporated in the ligature during tying.

The second (left) uterine horn is located by following the right horn distally to the bifurcation. Repeat procedure as for first ovary. Both horns of the uterus are exteriorized, along with the attached mesovarium and associated uterine blood vessels.

Step 6: Uterine Horns are exteriorized A window is then made in the mesovarium adjacent to the uterine artery and vein, and much of the mesovarium, broad ligament and associated fat is broken from the uterus. This procedure is done with both uterine horns. The remnants of the mesovarium, broad ligament and associated fat are returned to the abdominal cavity. Following this, the uterus is seen separate from other tissues except from the vascular structures which run parallel to the uterus.

The uterine body is exteriorized. The cervix is located, though it often cannot be visualized. Various techniques may be used to ligate and remove the uterine body

depending on the size of the uterus and the surgeon's preference. The triple clamp technique is generally used (as for ovarian attachments).

Care is required, particularly with bitches in season or which have recently whelped, as the uterine tissue may be friable and the clamps may cut rather than crush the tissue. In these cases, allowing a generous space between the clamps may reduce this risk. The three clamps are placed on the uterine side of the cervix. In smaller / non-pregnant dogs, it is possible to mass ligate uterine vasculature with just one ligature as, for the ovarian vascular pedicle.

Closure

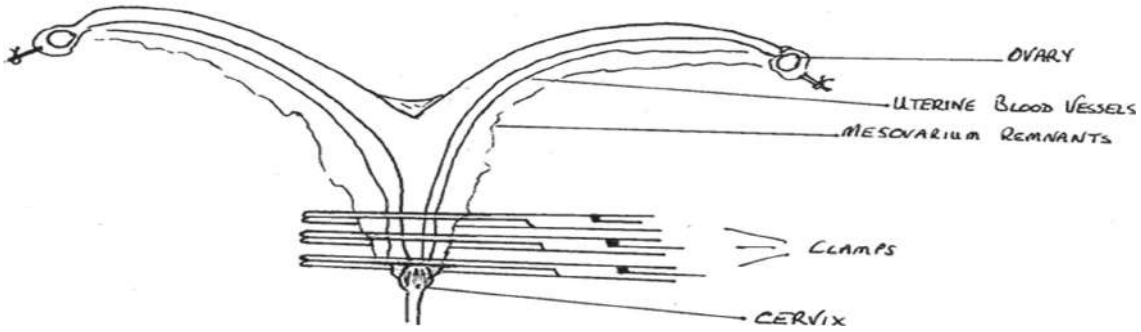


Illustration depicting clamping of the uterus and blood vessels just above the cervix

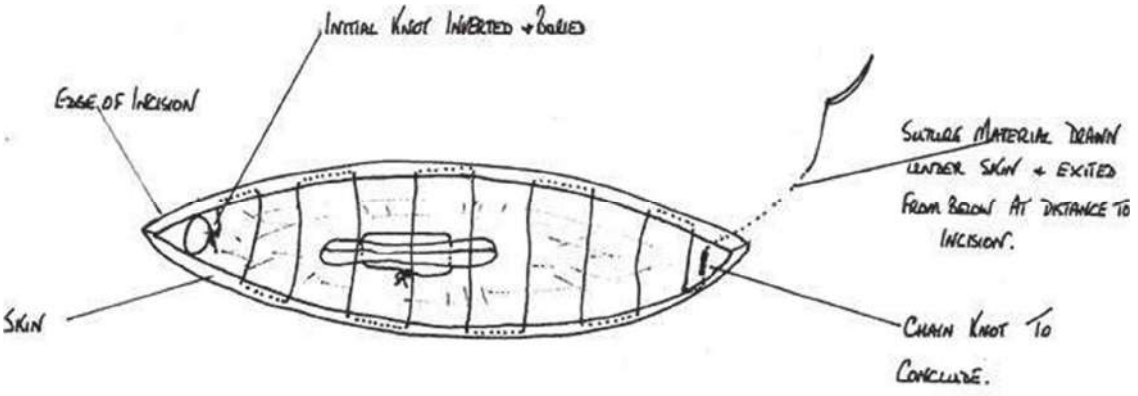
On abdominal closure, each muscle layer is sutured individually i.e. 3 separate layers (the peritoneum is incorporated with the closure of the transverse abdominus muscle). In young dogs, the peritoneum, transverse abdominus and internal abdominal oblique muscles are sutured with one suture and the external abdominal oblique is sutured separately with another suture.

Vicryl makes a very good suture material for this site. For longer incisions i.e. more than 2 cms in length, a continuous suture pattern can be used, such as Ford interlocking.

For smaller incisions, i.e. up to 2 cm in length, a horizontal mattress suture may be used. Horizontal mattress sutures appear to cause far fewer visible swellings, probably due to the reduction in the amount of catgut in the muscle layers.

When suturing the abdominal muscles, it is easier to work with an assistant who gently isolates the individual muscle layers. Allis tissue forceps may be placed on the very edge of the muscle layers but it is better to use Babcock forceps or rat tooth forceps as these are less traumatic to the tissues.

The subcutaneous tissues are closed and dead space eliminated using 3.0 Vicryl / either an interrupted, or continuous pattern. The skin is sutured with a simple interrupted or continuous intradermal suture pattern using Vicryl. The sutures are placed ensuring that all knots are buried.



4.7.13 Midline Spay Technique Approach

Tissues incised - skin; subcutaneous; linea alba – white, fibrous tissue plane (aponeurosis) and peritoneum.

If electing to perform surgery through a mid-line approach, it is important to ensure that it is the fibrous linea alba which is incised and not the adjacent muscles. Otherwise, the advantages of this midline approach are lost and the approach is then described as paramedian. The incision extends from about 1 inch caudal to the umbilical scar caudally, although some surgeons begin the incision at the caudal border of the umbilicus.

Spay

Routine spay is performed as described in the Flank Spay Technique.

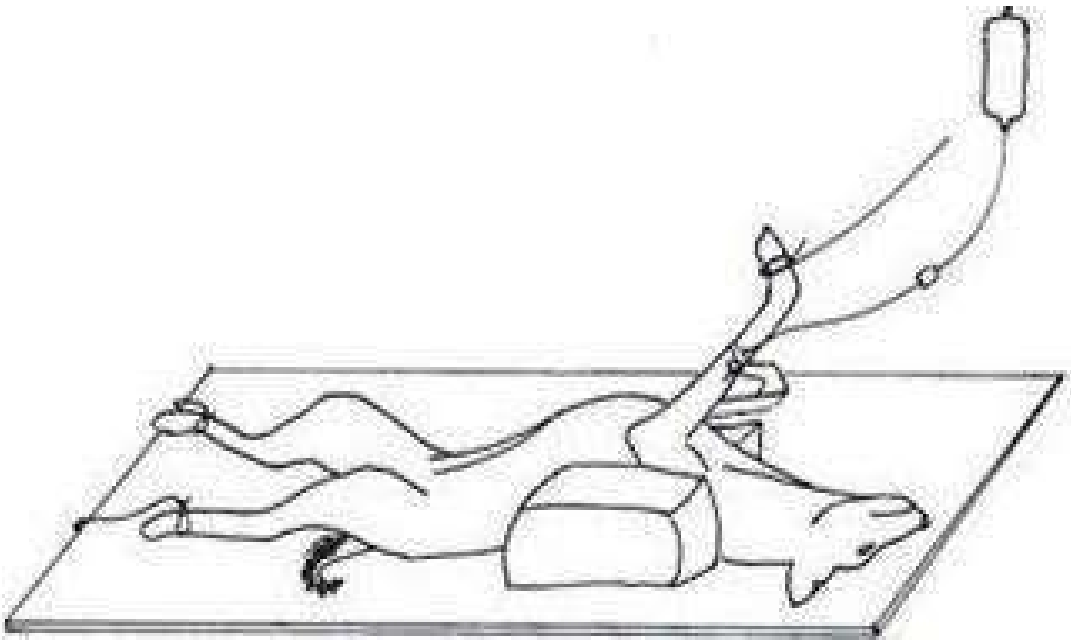


Illustration showing position of a female dog for Mid-Line Surgery

Closure

Abdominal closure is done in one layer. A simple, interrupted suture pattern is used in the linea alba. Sterile, heavy gauge, monofilament nylon is used. Subcutaneous tissue and skin are closed routinely as before. Catgut cannot be used to close the linear alba since it degrades too quickly to support the slower healing fibrous tissues of this structure.

Closure of the incision

The incision through the linea alba is closed incorporating the external rectus fascia. Catgut is not recommended in this site as its rate of degradation may be faster than the rate of healing leading to an increased risk of herniation. Most surgeons go for non-absorbable (vicryl) suture material in the midline. This option requires greater maintenance of asepsis. The fascia is closed and the skin incision is sutured according to the preferences of the veterinary surgeon and depending on the suture material available. Nylon sutures are recommended for skin closure.

4.7.14 Clinical Complications that may be seen following ovario-hysterectomy surgery

1. Haemorrhage:

During the surgery serious haemorrhage can arise from a number of places. It may occur by tearing of ovarian vascular complex whilst stretching / breaking suspensory ligament. This can be avoided by stretching rather than breaking the suspensory ligament and doing so in a caudal direction. Haemorrhage can result from tearing of uterine vessels by excessive tension on uterine body. Handling all tissues gently will reduce the risk of this, as will ensuring that the incision is of appropriate size for the uterus being removed.

Bleeding may happen when tearing other large vessels in broad ligament while stripping this off the uterine body prior to the clamping and ligation of the cervix. This danger can be avoided by individually ligating any large vessels (if present, e.g. fat dogs) in the broad ligament and mesovarium. Controlled separation of the broad ligament from the uterus working from the cervix to the ovary also reduces the risk of haemorrhage from this source. Ensuring all sutures are adequately placed and tied using proper surgeon's knots will help reduce the chance of intra-operative and postoperative haemorrhage.

Haemorrhage from muscles can be a problem, but will not normally be life threatening. With careful incision and dissection of each muscle layer, it is often possible to see and thus avoid major body wall blood vessels. Clamping vessels with haemostats will usually stop the bleeding with time. Female dogs in oestrus at the time of spaying may bleed more than expected due to the effects of oestrogen on the clotting cascade.

2. Recurrent signs of oestrus / heat:

Signs of oestrus result from functional remnants of ovarian tissue being left in the abdomen following an incomplete spay operation. The animal will still show signs of season. The surgeon must ensure all ovarian tissue is removed, by, for example, holding the ovary while clamps are applied, and by inspecting the excised tissue to check if it contains the whole ovary.

3. Uterine stump pyometra:

Uterine stump pyometra may occur if any portion of the uterus is not removed during the spaying. Due to the risk of the last two complications mentioned above, complete ovariohysterectomy must be performed rather than tubectomy or ovariectomy.

4.7.15 Surgical Procedure for Male Dogs Castration

Males are positioned in dorso-lateral recumbancy facing to the surgeon's right. The right hind leg is secured so that the pelvic region is exposed and the right stifle is not overlying the surgical site. The dog can be placed in dorsal recumbancy but this requires support at the thorax / axillae and also the straightening of the catheterized foreleg to ensure that the catheterized vein is not occluded at the flexed elbow.

These positioning and adjustments take extra time. The scrotal, penile, inguinal and perineal regions are shaved and prepared for surgery as described earlier.

Site of Incision for Castration: Males are castrated through a single pre-scrotal incision. One testicle, usually the lower testicle, is advanced cranially and the skin incision made over the tensed testicle. The sub- cutaneous tissues, and the tunica dartos and external spermatic fascia are incised. The testicle within the spermatic sac is then grasped and pulled free. The spermatic sac is then excised at its most ventral part. The vaginal tunic is reflected revealing the testicle and associated structures.

The vaginal tunic is separated from the tail of the epididymis by breaking the ligamentous attachment there. This leaves the testicle connected by only the spermatic vessels in one bundle and the deferent duct connected by the mesorchium.

Retraction of the Vaginal Tunic

The exact method of removal of the testicle varies between surgeons and also depends on the size of the testicle and its associated structures. The deferent duct and the spermatic vessels may be clamped and ligated as described for the ovarian attachments (using the 'triple clamp' method). This is the method of choice for large, well-developed testicles. For smaller testicular structures it is possible to tie the blood vessels and the duct to each other to ensure that haemostasis is maintained once the deferent duct has been broken from the epididymis.

Note: Once the vessels are ligated, the testicle can be severed from them. The spermatic vessels usually retract considerably once this has been done.

The contralateral testicle is now advanced into the skin incision and an incision made in the tissues surrounding the testicle as before to allow the testicle within the spermatic sac to be grasped and exteriorized. This testicle is then isolated and excised as before.

Suturing involves closing all dead spaces with a continuous 3-0 catgut suture. It is considered a good practice to place this suture through the vaginal tunics of the

two testicles to ensure that the potential opening into the abdominal cavity is closed and also to incorporate the septal midline tissues. The skin is closed with an intra-dermal suture as described for skin closure in the spay procedure for bitches.

Particular attention must be paid to ensure that haemostasis is maintained, in order to reduce the incidence of post-operative haematoma and possible ischaemia of the scrotum. Should this occur, scrotal ablation may be required. Considerable postoperative bruising and swelling are common especially in larger dogs. This may be further exacerbated by the dog licking at the area.

Potential Complications:

The risk of haemorrhage from spermatic vessels is much less likely if this double ligation technique is employed. However, if noted, an attempt should be made to locate the ends of the cord on the side from which the haemorrhage is occurring, by grasping the deep tissue with haemostats and applying gentle traction. Should this prove unsuccessful, the skin incision should be extended into the scrotal sac as this will improve access to the inguinal canal, enabling location of the bleeding stump and application of two secure ligatures. If the skin incision is extended in this manner, scrotal ablation is necessary to excise the sac and associated dead space, which would otherwise predispose to scrotal haematoma.

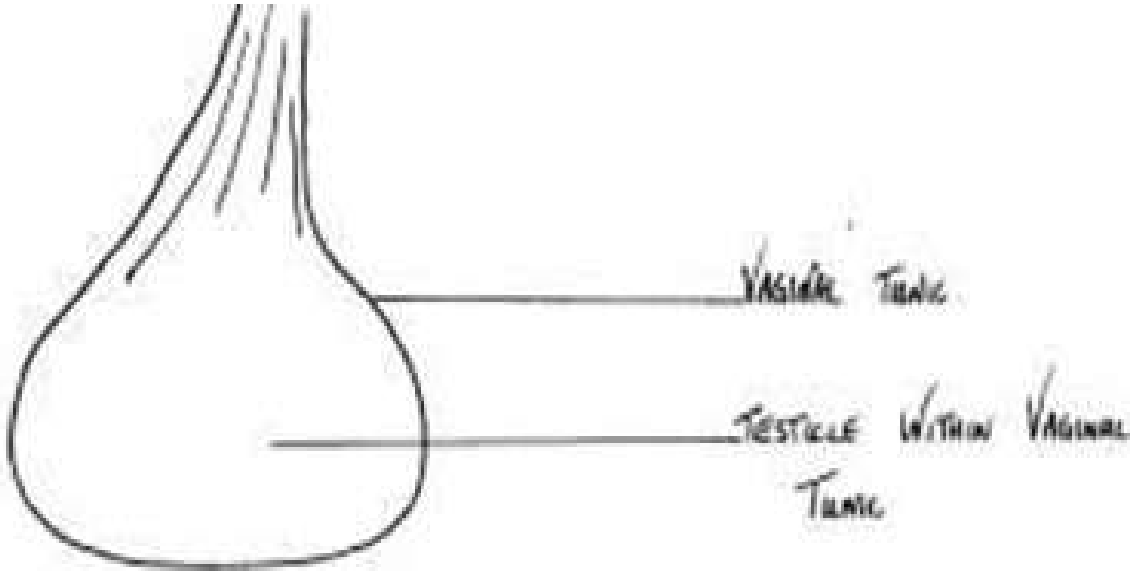


Illustration of testicular moved from scrotum within vaginal tunic

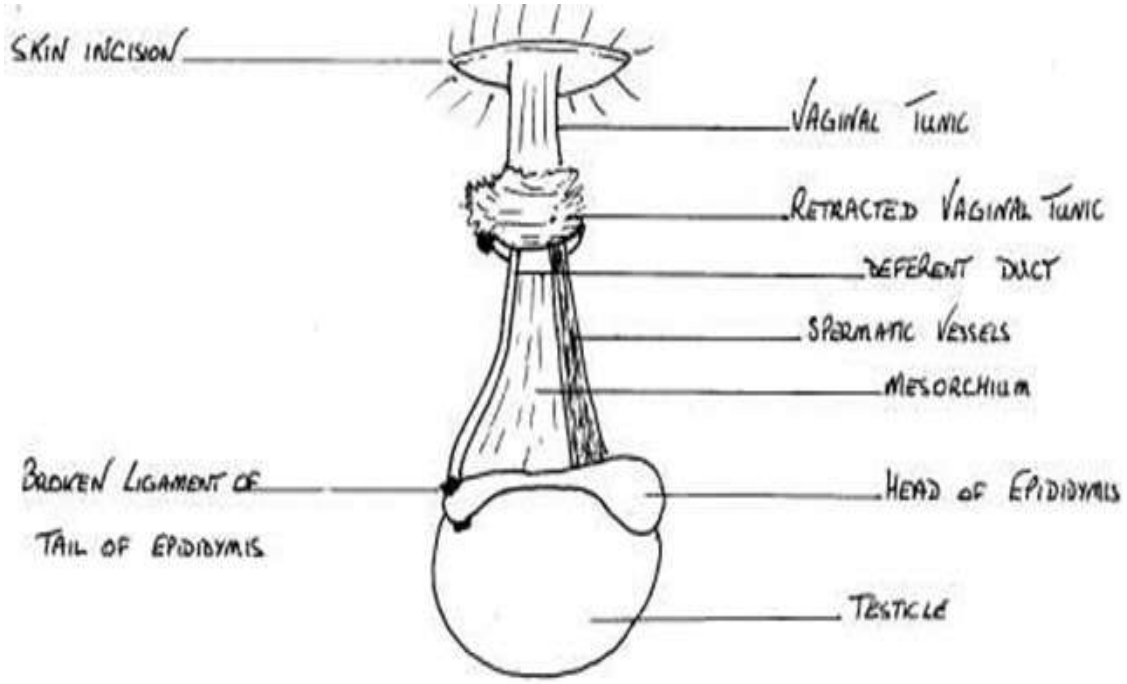


Illustration of testicle and associated structures after incision of vaginal tunic.

4.7.16 Cleaning of used kits and drapes

As soon as possible after the completion of a procedure, both the surgical instruments and drapes should be thoroughly washed and rinsed, ensuring removal of all blood and discharges. A toothbrush is useful to clean instruments thoroughly, with particular attention to the jaws, box joints and ratchets. Alternatively, an ultrasonic cleaner may be used to clean the instruments. After cleaning, the instruments should be rinsed in clean, hot water. This will help to flush away any organic matter still adhering to the instruments.

- Drapes should then be hung to dry. Once dry, the drapes should be checked for hair and any other debris present. If any hair is present on the drapes, the hair should be brushed out and the drape should be washed thoroughly once more and left to dry.
- Cleaned instruments should be placed on a towel to dry; instruments with ratchets should be left open.

Periodically, the instruments should be left to soak overnight in protective instrument milk (which would be available from the supplier). Hand lubrication of each joint of each instrument, with special oil, is also an acceptable option.

4.7.17 Safe disposal of surgical waste

After surgery, the gloves, empty vials, syringes and needles should be carefully disposed off, as per biomedical waste disposal protocol for hospital waste.

4.7.18 Post-Surgical Care : General considerations

- The choice of antibiotics and analgesics to be used after the surgery is a decision that is to be made on a case by case by the veterinary surgeon. The decision about the antibiotic / analgesic to be used would be influenced by the veterinary surgeon's clinical experience, conditions prevailing at the

kennel and the health of the dogs. Care should be taken to ensure that the antibiotics used are broad-spectrum.

- Dogs recovering from anaesthesia and surgery need to be kept warm and dry. Once the dogs have recovered sufficiently from anaesthesia and surgery, the dogs should be provided access to drinking water.
- Following surgery, the dogs should be under round the clock supervision by a veterinary surgeon, and based on the clinical condition of the dogs, a decision should be taken regarding additional medications to be given. Suitably sized 'buckets' or 'Elizabethan collars' can be used where dogs are irritated and causing self trauma to wound sites- in addition to the antiinflammatories and antibiotics needed.
- If the veterinary surgeon who is attending to the post-operative care is different from the veterinary surgeon undertaking the surgeries, a standard system of recording and reporting must be developed. This needs to be done to ensure that the veterinary surgeon who has done the surgery receives correct feedback about the progress of his / her patients so that improvements in technique can be identified and implemented if necessary.
- During check, the dogs which are ready to be released must be identified, and necessary steps should be taken to release the dogs.
- Surgeries must be done under stringent sterile conditions, and techniques which cause minimum tissue trauma must be adopted.Absorbable suture materials should be used and strict adherence to Halsted's Surgical Principles must be ensured., This will ensure complete healing in a lesser period of time, but an animal must be kept under veterinary supervision at the ABC facility / campus for at least 3 days and nights after successful surgery.

4.7.19 Use of analgesics and antibiotics:

The Standard Protocol to be followed is mentioned as below:

- Administration of analgesics — Analgesic agents are required for all patients undergoing neutering. Acceptable choices include opioids (e.g.

butorphanol, buprenorphine, morphine, hydromorphone, and pentazocine),alpha2- adrenoceptor agonists (e.g.medetomidine, dexmedetomidine, and xylazine), NSAIDs (eg, carprofen, meloxicam, tepoxalin, deracoxib, firocoxib, aspirin, flunixin, ketoprofen, and etodolac), and local anesthetics (eg, lidocaine and bupivacaine).

Note: All sterilization surgeries for street dogs must only be done only under General Anesthesia.

- Combining multiple analgesic agents in a single protocol is known as multimodal analgesia and greatly improves pain and stress control in animals undergoing neutering through a spayneuter program. Use of reversible agents and preemptive administration of analgesics prior to the initial surgical incision are common methods for providing safe and effective analgesia in highvolume settings.
- Surgical technique also influences the severity of postoperative pain. Anxiolytic agents for stress reduction include minor and major tranquilizers (eg, acepromazine, midazolam, and diazepam) and alph2-adrenoceptor agonists. These can be delivered in combination with other analgesics.
- Administering Intramuscular injection of meloxicam is recommended as an analgesic immediately after the surgery and also during the post-operative care.

4.7.20 Antibiotics

It is recommended that the following antibiotics be used :

- Amoxicillin-cloxicillin: 20 mg / kg body weight twice daily for 3-5 days Amoxicillin-sublactam: 10 mg / kg body weight
- Benzathine pencillin once in three days
- Ceftriaxone once a day @ 22mg / kg bw I/M for 3-5 days The surgical wound and ear notch wound must be cleaned and dressed regularly.

4.7.21 Anti-Rabies Vaccinations: General Considerations

- The anti-rabies vaccine should be administered on the day of release while deworming medications should be administered on the first day when dogs are caught.
- It is essential that all dogs passing through an ABC programme receive vaccination against rabies.
- It is essential that cold chain for the vaccines be maintained without fail, and power back-ups for refrigerators where these are stored must be installed.
- The cold chain of vaccine manufacturers and suppliers should be investigated prior to use of the vaccine.
- A log entry should be maintained while storing the vaccines. The refrigerator thermometer temperature should be checked and recorded in the log book every twelve hours.
- Some evidence exists to indicate that intramuscular injection of vaccine produces longer lasting protection. Therefore, it is recommended that the vaccine be given by the intra- muscular route.
- Concern has been expressed over the effects of stress on vaccine efficacy when vaccination is done at the time of surgery shortly after capture. It is thus advisable to administer the vaccine as long after surgery as possible, immediately before release of the animal.

4.7.22 Guidelines for release of the sterilized and vaccinated dogs

- Only dogs identified by a veterinary surgeon as fit for release should be released.
- It is imperative that dogs are released back to the exact location from where they were picked up. Care should be taken to ensure correct identification of dogs and addresses.
- Releasing dogs on main roads should be avoided if possible since the dogs may be temporarily disoriented at the time of release.

- Where possible, dogs should be released into the care of their caretakers if such persons are present.
- Although dogs should be released after ensuring that they have been fed, they should not be fed immediately prior to their transport to the release sites.
- A representative of the ABC Implementing Agency must always accompany the dog releasing team, and be present during the release.
- The release of dogs during the early morning hours is recommended.
- In the event of severely inclement weather, the release of the dogs should be postponed till more favourable weather prevails.

4.7.23 Educating the general public about the ABC program

- Members of the public that are present during the release of street dogs that have been sterilized and vaccinated under the ABC program, should be educated about the program. The onlookers must also be informed that the excess salivation seen in the released dogs is only due to the stress of transportation or possible motion sickness.
- Members of the public and care-givers should be encouraged to contact the ABC Implementing Agency if they see any released dog which appears sick or in need of further veteirnary care.

4.7.24 Euthanasia

Only street dogs that are diagnosed as incurably ill or mortally wounded shall be considered for euthanasia. This diagnosis must be made by a team appointed by the Local Animal Birth

Control Monitoring Committee.

As per Rule 15(1) of the Animal Birth Control (Dogs) Rules, 2023, the euthanasia team shall consist of:

1. The Jurisdictional Veterinary Officer,
2. The Project In-Charge,
3. A Representative of the Board or State Board.

Euthanasia shall be performed only during specified hours and must be carried out humanely by intravenous administration of sodium pentobarbital or any other approved humane method by a qualified veterinarian.

Rule 15(2) specifies that no dog shall be euthanized in the presence of another dog. Staff must carry out the procedure with professionalism and respect for the animal.

The dog to be euthanized should be restrained humanely and minimally, only as required for an intravenous (IV) catheter insertion. If the dog struggles against insertion, it must first be sedated using Xylazine or Ketamine given via intramuscular (IM) injection.

Confirmation of death:

Rule 15(2) mandates that the person responsible for euthanasia shall ensure that the animal is dead before disposal. Qualified veterinarians performing euthanasia should confirm death based on the following indicators:

- **No movement of the chest / No signs of respiration** – When the animal's chest has stopped moving up and down indicating that it has stopped breathing. However, this sign alone must not be relied upon as the animal's heart may continue to beat for some time after it has stopped breathing.
- **No heart beat** – Check for this with a stethoscope or by palpating the

animal's chest wall.

- **No pulse** – Check for this by palpation over the medial aspect of the animal's hind limb. This, however, is not always easy to locate in small animals.
- **Loss of colour from the mucous membranes in the animal's mouth** – Mucous membranes become pale and there is no capillary refill if pressure is applied. With time, the mucous membrane becomes dry and sticky.
- **Corneal reflex (blink reflex) is lost** – The corneal reflex is normally elicited when the eyeball is touched. After death, the animal's eyes remain open and the lids do not move when touched.
- **Glazing of the eyes** – This occurs rapidly after death. The cornea loses its clear, moist appearance and becomes opaque, dry and wrinkled.

4.7.25 Dealing with suspected rabid street dogs

Street dogs suspected to be rabid have to be dealt with strictly in the manner prescribed in Rule l6 of the Animal Birth Control Rules, 2023.

Capture and Observation: According to Rule 16(3) Dogs with suspected rabies shall be humanely captured and kept for observation at the Animal Birth Control Center. Upon the advice of the qualified veterinary practitioner, a dog showing symptoms of any communicable disease shall be housed in the Isolation Kennel, where food and water shall be provided to the dog twice every day.

Inspection by a Panel: As per Rule 16(4) any suspected rabid dog shall be subjected to inspection by a panel of two persons, including:
(i) A veterinary surgeon appointed by the local authority, and
(ii) A representative from an Animal Welfare Organisation.

Isolation and Natural Death: As per Rule 16(5) **i**f the dog is found to have a high probability of having rabies, it shall be isolated until it dies a natural death. Death normally occurs within ten days of contracting rabies.

To confirm rabies, the brain sample of every street dog suspected to have died of rabies must be sent to the closest accredited laboratory and a report must be obtained for every death under this category.

Disposal of rabies carcasses

Special precautions should be taken when handling the carcass of any animal suspected of carrying rabies, including the use of protective clothing: gloves, overalls, eye goggles and protective shoe covers.

The carcass should be sealed in a plastic bag, as the rabies virus can remain active for sometime after death.

The external surfaces of the carcass can remain infective for several hours after death and the internal organs can remain infective for several weeks depending upon the environmental temperature.

Rule 16(7) mandates that the carcasses of dogs suspected to have died of rabies shall be disposed of in an incinerator or by adopting any other method as provided by the Chief Veterinary Officer of the District.

4.7.26 Post-Mortem Examinations

Post-Mortem for All Deaths: All animals that die in the ABC facility/campus must be subjected to a post-mortem examination to ascertain the cause of death. The post-mortem must be carried out by a qualified veterinarian approved by the Local ABC Monitoring Committee.

Post-Operative Deaths: The local ABC Monitoring Committee should set up a panel of veterinarians to examine animals that die post-operatively. This panel **must not include** the veterinarian who performed the surgery on the said animal.

4.7.27 Verification of ABC Surgeries and Disposal of Organs

Verification of ABC Surguries and Disposal of Organs should strictly adhere to the mandates of Rule 17 of the Animal Birth Control Rules, 2023

1. **Record Keeping**: All records and registers pertaining to the catching, treatment (pre-surgical, surgical and post-surgical) and release should be maintained for each dog caught by the ABC Implementing Agency
2. **Storage of Organs:** Post-Surgery the removed reproductive organs removed from male and female dogs shall be stored in 10% formaldehyde at the Animal Birth Control Center.
3. **Counting of Organs:** The organs shall be counted fortnightly, monthly, or as often as decided by the Local Animal Birth Control Monitoring **Committee**, by a team comprising:
   (i) Chief Veterinary Officer or any Veterinary Officer authorised by him,
   (ii) Project In-Charge Veterinary Officer,
   (iii) Representative of the State Board or Society for Prevention of Cruelty to Animals, and
   (iv) Representative of any Animal Welfare Organisation:
   Provided that the Animal Welfare Organisation conducting the Animal Birth Control program shall not be part of the Organ Inspection Team.
4. **Preservation and Marking:** The organs shall be preserved in separate plastic boxes marked with the number of male and female genital organs and the date of surgery.
5. **Verification and Records:** The Organ Inspection Team shall count all the organs and verify the Progress Report of the Implementing Agency for the period in question. Records for anomalies, such as cryptorchid males, gravid uteri, and already operated females captured again for surgery, must be maintained to tally the recorded data with the physical count.
6. **Disposal of Organs:** After verification by the inspection team, the organs shall be immediately destroyed in the presence of the Organ Inspection Team by spraying of tattoo dye and deep burial or incineration. The process

of dyeing and burying the organs shall be video recorded and photographed with the date and time stamp.

7. **Surprise Inspections**: The State Animal Birth Control Monitoring Committee shall conduct surprise inspections at least once every year **in** each Animal Birth Control Center to ensure adherence to the rules and take necessary action in case of non-compliance.

4.8 Handling of street dogs with respect to which complaints of habitual biting or unprovoked aggression are received

Street dogs do not generally bite unless provoked. The reasons why dogs may attack humans have been dealt with in Chapter 3.3 of this module. An extended study on the behavioural ecology of free-ranging dogs in India reveals that dogs

are generally lazy and friendly animals, and their interactions with humans are typically submissive. Thus, dogs do not usually pose a threat to human well-being, and proper management of our refuse and a tolerant, if not friendly, attitude towards dogs can ensure their peaceful co-existence with us. (Sreejani Sen Majumder et al, 2014)

There is enough evidence to show that people who dislike street dogs often try to get dogs removed from their neighbourhoods. They are also capable of registering false complaints for the same. The main factors that lead to aggression in street dogs are migration and mating (sexual drive) and also protection of pups by the female dogs. When the street dogs are sterilised and put back in the same area where they were picked up from, the above-mentioned factors of migration, mating, and protection of pups cease to exist, and aggression is invariably eliminated, or at least considerably reduced.

Thus, taking into account both the human and dog points of view, in the case of street dogs with respect to which complaints of habitual biting or unprovoked aggression are received, the following procedure must be followed as per Rule 16 of the Animal Birth Control Rules, 2023

1.The local authority shall establish an Animal Helpline. Either the Project In-Charge or the Animal Welfare Organisation shall be responsible for recording and resolving conflict cases that may be reported.

2.Then the following protocol shall be adopted to deal with such cases:

- Physically verify the alleged bites
- Obtain the records of post-bite treatment, if any.
- Devise a mitigation strategy to prevent further conflict, which will include educating the community from where the complaint has been received regarding street dog behavior and dog bite prevention, and may also include counselling, designation of dog feeding spots, and prioritizing ABC and a vaccination drive in the area.
- The details of the complaint, such as the name of the complainant, complete address, date and time of complaint, and nature of the complaint, shall be recorded in a register to be maintained for permanent record.
- The information of any dog bite shall be promptly shared with the Government Medical Hospital to recommend post-bite treatment.

1. If complaints persist and the mitigation steps do not yield the desired result despite a reasonable period of time having elapsed, the street dog in question must be humanely captured and removed from the area and taken to the ABC facility/campus for observation, to ensure the safety of both the dog and humans in its territory. Such animals shall be kept for observation at the Animal Birth Control Center, and upon the advice of the Veterinary Practitioner, a dog showing symptoms of any communicable disease shall be housed in the Isolation Kennel where food and water shall be provided to the dog twice every day

2. The dog shall then be subjected to inspection by a two-member panel, comprising a veterinary surgeon appointed by the local authority and a representative from an Animal Welfare Organization. The panel will assess

the information available and observe the dog over a period of 10 days, and decide if the dog is indeed a habitual biter. If it comes to the conclusion that the dog is not a habitual biter, it will release the dog back into the area that it had been picked up from after sterilizing and immunizing the dog where required. If, however, the panel comes to the conclusion that the dog needs to remain under observation for a longer period of time, then, based on reasons recorded in writing, it will decide on the length of time varying from an additional week to three weeks, for which the dog may have to be detained for further observation and treatment where required. The intent of the detention in such a case also usually is to remove the dog from its pack, eliminate the alpha tendency if any, and calm the dog in cases in which anxiety was leading to aggression. During such detention, regular veterinary checkup of the dog is a must. If after continued observation and assessment, the panel comes to the conclusion that the dog is indeed a habitual biter without provocation, then the dog will not be released back. Provided, however, that the case of such a dog must be reviewed on a bi-monthly basis by the panel, and all records with respect to such an animal, including records of treatment, observation by the panel, and its recommendations, shall be retained. Such a dog shall then be released when it is deemed suitably altered in behavior and considered ready for release. Under no circumstances shall it be released into any territory other than the one from where it was picked up for observation.

- If the dog is found to have a high probability of having rabies, it shall be isolated till it dies a natural death. Death normally occurs within ten days of contracting rabies.
- If the dog is found not to have rabies but some other disease or is furious in nature, then it would be handed over to the Animal Welfare Organisation, which shall take the necessary action to cure and release the dog after ten days of observation.
- If the Animal Birth Control Program is being run by an animal welfare organisation, it shall be reimbursed by the local authority for keeping and treating such dogs under observation at a rate determined by the Local

Animal Birth Control Monitoring Committee.

3. The Local Authority shall display outreach material provided by the Board on prominent sites in the city, to sensitise people about street dogs .

4.9 Regulating Dog Breeding and Pet Shops

Unsterilised pet dogs may also contribute to the street dog population. Breeders / irresponsible owners are known to cruelly dump puppies or spent male and female dogs with little or no commercial value, thereby leading to an increase of the dogs on the street. Dog breeding has become an unregulated, lucrative industry, without any responsibility or onus cast upon the breeder to indulge in ethical breeding practices, and educate the buyer on the lifetime responsibility that keeping a pet entails. It is therefore very important to control and regulate dog breeding and pet shops, with a firm hand.

Regulating Dog Breeding

The Prevention of Cruelty to Animals (Dog Breeding and Marketing) Rules, 2017 establishes comprehensive regulations to ensure ethical dog breeding practices and animal welfare standards.

Mandatory Registration Requirements

Under Rule 3 and 13, no breeder can conduct breeding activities or house dogs for breeding and sale without obtaining registration from the SAWB. This is a fundamental requirement, and local authorities cannot grant any license to breeding establishments without this registration from the State Board. All breeding establishments must prominently display their registration certificate.

During the registration process, the SAWB will fix the maximum holding capacity for each dog breeding establishment based on available space, facilities, and manpower to avoid overcrowding.

The registration process includes:

- Submission of application as prescribed in the Rules with applicable non-refundable fee
- Inspection by a team comprising SAWB representative and veterinary practitioner
- Separate applications for each breeding establishment
- Registration validity of two years, with renewal application required thirty days before expiry
- Non-transferable registration certificates
- Assessment and fixing of maximum holding capacity by SAWB

For specific application formats and fee details, refer to the registration requirements outlined in Rule 4 of the Dog Breeding Rules 2017.

Breeders must maintain comprehensive records including:

- Complete documentation of all animals housed in the establishment
- Detailed records of individual breeding dogs including breed, microchip number, lineage, mating details
- Health and medical records with separate vaccination records for each dog and puppy
- Documentation of all sales and contracts
- Post-mortem reports for any animal deaths determined by a veterinary doctor
- Records must be maintained for at least eight years, or longer if directed by the State Board for investigation purposes
- Annual reports to the State Board detailing total animals sold, traded, bartered, brokered, given away, boarded or exhibited

For specific record-keeping formats and requirements, refer to Rule 9 of the Dog Breeding Rules 2017.

To regulate sale and protect buyers breeders must ensure:

- No sale of puppies younger than eight weeks

- Mandatory sterilization of dogs over six months before sale (except when sold to licensed breeders)
- All puppies must be microchipped before sale
- Only dogs in good health with proper medical inoculations can be sold
- Complete health records and vaccination details provided to buyers
- Proper screening of prospective buyers to ensure their capability for pet care
- No sale to unlicensed pet shops
- No display of puppies in public places for immediate sale
- Annual follow-up on all dogs sold
- Rehabilitation through Animal Welfare Organizations for unsold puppies after six months
- Dogs cannot be sold for experiments unless to facilities registered with the Committee for Control and Supervision of Experiments on Animals

For detailed sale conditions and requirements, consult Rule 8 of the Dog Breeding Rules 2017.

- SAWB shall conduct mandatory inspections at least once each year. Additional inspections should be conducted upon complaints or for other reasons. During inspections, inspectors can access all areas, animals, and records upon producing their authority and photographs and videos during inspection. Written inspection reports shall be submitted to SAWB.

For inspection procedures and compliance requirements, refer to Rule 7 of the Dog Breeding Rules 2017.

Regulating Pet Shops

The Prevention of Cruelty to Animals (Pet Shop) Rules 2018 establishes comprehensive regulations to address these concerns and ensure ethical pet trade practices.

Under Rule 3 and Rule 14 of the Pet Shop Rules 2018, it is mandatory for all pet shops to obtain registration from the SAWB before commencing operations. No local authority can grant a license to any pet shop without this registration from the SAWB. This dual registration requirement ensures proper oversight of pet shop operations. The registration remains valid for five years, after which renewal is required. The rules specify that pet shops must display this registration certificate prominently in their establishment.

Pet shops must operate according to strict guidelines regarding infrastructure and animal care as specified in the rules. They can only function from permanent structures, with temporary establishments like shanties or pavements being strictly prohibited. The rules mandate specific requirements for basic amenities such as water, electricity, and power backup. For detailed specifications about space requirements and infrastructure, Rule 6 of the Pet Shop Rules 2018 should be referred to.

Furthermore, all puppies must be microchipped by a veterinary practitioner before sale, and every pet shop must maintain a functional microchip reader on the premises. Monthly veterinary health checks are compulsory, and proper documentation must be maintained. Pet shops can only sell puppies obtained from registered breeders, and the sale of un-weaned, underage, or mutilated animals is prohibited. These requirements can be found in detail under Rule 7 of the rules.

The rules introduce comprehensive record-keeping requirements. Pet shops must maintain detailed records of animal sources, sales, deaths, and euthanasia cases in specific prescribed forms. For reference to these requirements and the format of necessary forms, consult Rule 8 of the rules. Additionally, pet shops must provide customers with detailed pet care information at the time of purchase and cannot sell animals to individuals below the legal age of majority.

SAWB can conduct mandatory annual inspections and surprise checks. Non-compliance can result in registration cancellation and animal confiscation, with

associated costs borne by the shop owner. For understanding the inspection process and compliance requirements, refer to Rules 9 and 10.

Pet shops must submit annual reports to the SAWB detailing all animal transactions, including sales, trades, deaths, and euthanasia cases. For specific reporting requirements and formats, pet shop owners should consult Rule 12 of the rules.

reinforces our constitutional duty under Article 51A(g) to show compassion for all living beings, fostering both responsible care and community harmony.

Importance of Responsible Feeding

Street animals rely on the compassion of caregivers and community members for food. Responsible feeding practices not only ensure the well-being of these animals but also help reduce conflicts with residents.

Feeding Spot Designation: As per Section 20(1)(i), ABC Rules, 2023 to ensure the safe and organized feeding, designated feeding spots must be identified through mutual agreement between RWAs, AOAs, or local body representatives and animal caregivers. These locations should be chosen based on the existing dog population, their territorial behavior, and overall community dynamics.

Location of Feeding Spots: Feeding spots should be situated away from children's play areas, entry and exit points, staircases, and areas frequented by senior citizens. This minimises the risk of conflicts and ensures safety for all residents.

Feeding Times: As per Section 20(1)(ii), of ABC Rules 2023 feeding times should be designated to avoid peak hours when children and senior citizens are most active. This helps in reducing the likelihood of accidental encounters and conflicts.

Litter Management: As per Section 20(1)(iii), of ABC Rules 2023 Feeders are responsible for ensuring that feeding locations remain clean and free from litter. They must adhere to guidelines framed by RWAs or AOAs to maintain hygiene and public health.

Volunteering for ABC Programs: As per Section 20(1)(iv), feeders are encouraged to volunteer for vaccination, capture, and release activities as part of the Animal Birth Control Programmes. This not only aids in population control but also ensures the health and well-being of the animals.

Taking care of street animals also means thinking about the weather. Very cold winters and hot summers can make life hard for these animals, so we need to adjust the care of animals based on the season.

Winter Care Considerations: During winter, especially in the northern parts of India, severe cold waves impact street animals, making it crucial to take extra

precautions. Compassionate citizens, Animal Welfare Organizations, RWAs, and local bodies are should prioritize the well-being of street animals during winter by providing sufficient bedding, including straw, blankets, and mattresses, helps maintain body heat and prevents cold stress. Elevated cots or dry areas should be made available to avoid direct contact with cold surfaces. This collective effort can significantly reduce the suffering of animals during harsh weather conditions.

Summer Care Consideration: Water is essential for all living creatures, especially during the sweltering summer months. Compassionate citizens, Animal Welfare Organizations, RWAs, and local bodies can place water bowls for birds and animals in clean, shaded areas. These bowls should be cleaned, and water should be changed daily to prevent contamination. Large earthen pots or containers that cannot be easily tipped over should be used.

Heat Stress Prevention: Animals are vulnerable to heat-related illnesses such as dehydration, heatstroke, and burns from hot surfaces. Keeping the same in mind, Compassionate citizens, Animal Welfare Organizations, RWAs, and local bodies can ensure that animals have access to shaded areas throughout the day. Environment-friendly materials should be used to construct makeshift shelters or provide natural shade from trees or structures.

Monitoring for Heat Stress: Be vigilant for symptoms of heat exhaustion, such as excessive panting, lethargy, drooling, rapid heartbeat, and collapse. Seek immediate veterinary attention if any signs of distress are observed.

4.11 Conflict Resolution for Feeding of Community Animals

Conflicts may arise between Resident Welfare Associations (RWAs), Apartment Owner Associations (AOAs), local body representatives, animal caregivers, and other residents regarding the feeding and care of community animals. To ensure harmony and address disputes effectively, the following structured approach for

conflict resolution has been established under **Rule 20(2) and (3)** of the ABC Rules 2023:

Formation of an Animal Welfare Committee

In the event of a conflict, an Animal Welfare Committee shall be formed to mediate and resolve the issue. The Committee will comprise the following members:

1. Chief Veterinary Officer or their representative.
2. Representative of the Jurisdictional Police.
3. Representative of the District Society for Prevention of Cruelty to Animals (SPCA) or State Board.
4. Representative of a Recognised Animal Welfare Organisation conducting Animal Birth Control (ABC) programs.
5. Veterinary Officer deputed by the local authority.
6. Complainant (the individual or group raising the concern).
7. Representative of the Resident Welfare Association (RWA), Apartment Owner Association (AOA), or Local Body of the area.

Role of the Committee

- The Committee shall review the concerns of all parties involved, including the designated feeders, residents, and local authorities.
- It shall ensure that the feeding points are designated in a manner that balances the welfare of community animals with the interests of residents, adhering to the guidelines under Rule 20(1).
- The Committee's decision regarding the fixing of feeding points and related matters shall be **final and binding**.

Appeals Process

- If any party (local authority, animal welfare organisation, feeder, RWA, AOA, or Local Body) is aggrieved by the Committee's decision, they may file an appeal with the SAWB.

- The State Board's decision on the matter shall be final and shall govern the feeding of animals in the concerned area.

Key Principles for Conflict Resolution

1. **Collaboration and Mutual Respect**: All parties are encouraged to approach conflicts with a spirit of collaboration, respecting the compassionate intent of feeders and the legitimate concerns of residents.
2. **Community Involvement**: Residents and caregivers are encouraged to participate actively in the resolution process, fostering a sense of shared responsibility for the well-being of community animals.

Preventing Conflicts

To minimise conflicts, RWAs, AOAs, and local bodies should:

- Clearly communicate the designated feeding spots and times to all residents.
- Educate the community about the importance of responsible feeding and the legal framework under the ABC Rules 2023.
- Encourage cooperation between feeders and residents to maintain cleanliness and hygiene at feeding locations.

Protection of Animal Caregivers

Law enforcement authorities must ensure that individuals showing compassion toward animals face no harassment. Police intervention becomes necessary when animal caregivers encounter opposition during feeding or rescue operations. The fundamental right to show compassion toward animals receives protection under both constitutional and statutory frameworks.

5 Results of Animal Birth Control

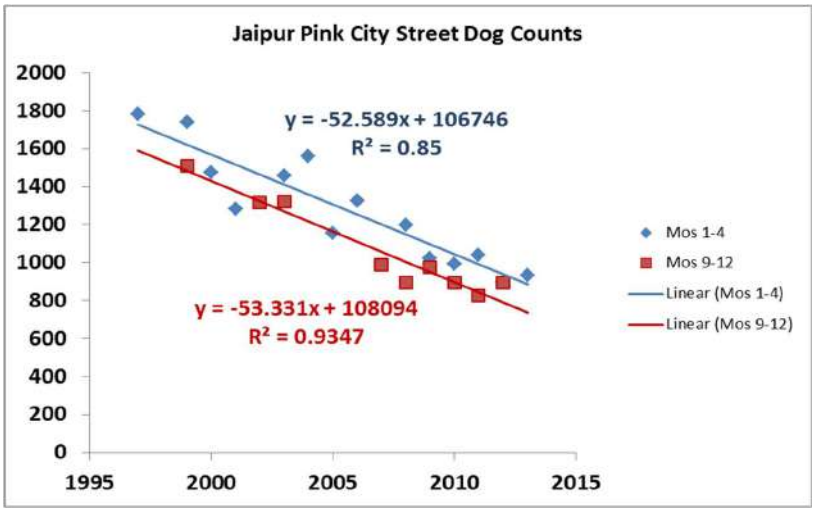
5.1 Reduction in Population

A recent paper by A. Rowan& T. Kartal, (2015), titled 'The impact of ABC and Sterilization on Dog Populations' has demonstrated the strong effect of animal

birth control on reducing street dog population. Research shows that the relative dog numbers are dependent on the density of the human population. In the cases where surveys/dog population indices have been undertaken following ABC programs, these programs have been shown to reduce street dog populations.

After an intensive ABC program in Jodhpur, the dog population fell around 40% from 5 dogs to 3 dogs per 100 humans (Totton, 2009) within the first 3 years and was projected to fall by 70% if the sterilization program was continued (Totton et al, 2010). In 2009, Hiby et al. (2011) estimated the Jodhpur street dog population at 24,853 (almost a 50% reduction since 2005). In Jaipur, where Help in Suffering has been conducting a low level ABC program since 1994 (sterilizing around 2,500 dogs a year with a focus on the Pink City district), the street dog population in the Pink City fell by around 50% from 1997 to 2014 (Figure 1). A study by Hiby (2014) of the dog population of greater Mumbai estimated the total street dog population of the core city (around 12 million people) to be around 95,000 (0.77 dogs per 100 people). More significantly, it was found that over 75% of the dogs were sterilized, reflecting successful ABC programs instituted by local NGOs over the last one or two decades.

Figure 1



Jaipur Pink City - Street Dog Population Trend: Street dogs were counted on the same index tracks at different times of the year. Because there will be more dogs on the street during and immediately after puppy season (January to April) than in the period (September to December) before the puppies appear, the dog counts were plotted as two separate trend lines. The slope of both trend lines is the same and the coefficient of variance (R2) is very high. (Data provided by J Reece and analysis conducted by AN Rowan.) See also Reece & Chawla, 2006.

A study comparing different approaches to controlling street dog population reported that sterilization (ABC) programs were the most effective means of reducing street dog populations (Yoak, 2015). According to Yoak (2015), culling had little impact on the total dog population but did increase the number of puppies produced annually.

Survey of the population of street dogs commissioned by the Municipal Corporation of Greater Mumbai, Preliminary Report of Roaming Dog Surveys of Greater Mumbai, conducted by Humane Society International Asia in January 2014, shows a drastic decrease in the street dog population and also a high percentage of sterilization. This amply demonstrates the success of the sterilization programme in Mumbai to reduce the street dog population

"The percentage of both females and males that have been sterilized was found to be high in almost all wards (average 78%, range 53-90% for females; average 77%, range 42-94% for males). Both percentage of lactating females and percentage of puppies were found to decrease with increasing rate of female sterilization across wards."

5.2 Reduction in Rabies

1. The vaccination of street dogs is an important part of the ABC programme. AR programmes being implemented across India are showing a big reduction in the

number of cases of human rabies, on account of the vaccination and sterilisation of street dogs.

2. No rabies death have occurred in Jaipur in areas where street dogs were vaccinated and sterilized. Reece and Chawla (2006)

3. The Sikkim Government has taken major initiative by being part of the state-wide rabies prevention programme. There have been no human deaths in Sikkim from rabies since 2008 and no known cases of rabies in animals since May 2010 (Report, Sikkim Anti Rabies and Animal Health Division: An Overview, Vets Beyond Borders).

4. A document obtained from the Public Health Department of the MCGM under the RTI Act, dated 02.03.2015, shows a drastic decrease in the number of human rabies deaths in Mumbai city to one per year for three years in 2011, 2012 and 2013 and nil in 2014. Rabies deaths were between 45 and 63 deaths per year when street dogs used to be killed by the MCGM before the start of the ABC programme in 1994. Thus, the drastic reduction in human rabies deaths demonstrates the success of the sterilisation and immunization programme in Mumbai.

In Chennai, the ABC programme commenced in September 1996. This brought down the reported human rabies cases from 120 in 1996 to 5 in 2004 and no human rabies death since 2007 (Dr Krishna S C, 2010).

5.3 Decrease in Dog Bites

1. Animal Birth Control programmes have shown to bring down the incidence of dog-bites.

2. It has been found that dogs that have been sterilised show less aggression (Yoak, A.J. et al 2013).

3. Recent data from the main government hospital in Jaipur shows a reduced bite incidence over the period of the ABC Programme, despite an increase in human population during that same time period, showing that the street dog sterilization programme had reduced human dog bite cases (Reece J F et.al, 2013).

5.5 Dog Bite Prevention Programs

The bite prevention strategies include educational programmes to educate children and their parents on how to avoid dog bites, orientation to pet owners on appropriate methods of pet rearing, training and socialization of pets, use of

physical restraints on pets, legislative, and behavioural methods (CALLISTO, 2013).

Research studies have shown that educational programmes have a positive impact on children's behaviour towards dogs but further research is needed to develop programmes that also have a lasting influence on the behaviour of children around dogs (CALLISTO, 2013). Consistent, positive, rewards-based behavioural training is likely to produce improved outcomes in reducing aggression and other behavioural problems. (CALLISTO, 2013).

In a study of the dog bite prevention and rabies awareness education programme, it was found that 86% of primary school children and 90% of secondary school children had gained the required knowledge and retention was good (WSPA, Dog Population Management in Colombo, Sri Lanka).

6.Oversight and Implementation of ABC Program: The Animal Birth Control Rules, 2023, mandate the formation of monitoring committees at three levels - Central, State, and Local Authority - for effective implementation of street dog population management, ensuring rabies eradication, and reduction in man-dog conflict. The implementation of the Rules in most states has been observed to be inadequate, haphazard, and poorly planned. The desired results have therefore not been achieved in such cases.

The reasons for poor implementation have been cited to be, lack of required coordination between the centre and the state governments, and between local authorities, implementation agencies, and other stakeholders within the states. Most states have not created any budget head for animal birth control of street dogs. The grant given by the central government has always been inadequate, and has reduced even further in the past few years, to become negligible. Successfully conducting a viable animal birth control programme throughout the country is not possible in these circumstances. The shortage of resources has also led to huge cruelties being inflicted on the animals, and in increased conflict.

To ensure the effective implementation of the Animal Birth Control (Dogs) Rules, 2023, in letter and spirit, it is imperative that each state and union territory establishes and operationalizes the Central Monitoring and Coordination Committee, State Implementation and Monitoring Committee, and Local Animal Birth Control Monitoring Committee as mandated under Rule 9 and Schedule-II of the Rules. These committees are now a statutory requirement, and their proper functioning is essential for the success of the ABC program.

1. Central Monitoring and Coordination Committee

As per Rule 9(1) and Schedule-II of the ABC Rules 2023, a Central Animal Birth Control Monitoring and Coordination Committee for Dog Population Management and Rabies Eradication shall be constituted to ensure coordination between different stakeholders at the Central Government and between the Central Government and the State Governments.

Structure of the Central Monitoring and Coordination Committee:

(a) Chairperson: The Secretary of the Administrative Ministry administering the Prevention of Cruelty to Animals Act, 1960, shall be the Chairperson of the Central Coordination Committee.

(b) Member Secretary: An officer at the level of Joint Secretary of the Administrative Ministry administering the Prevention of Cruelty to Animals Act, 1960, shall be the Member Secretary of the Central Monitoring and Coordination Committee.

(c) Members: The following officials shall be appointed as members of this committee:

- Animal Husbandry Commissioner, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying
- Joint Secretary or Equivalent Officer from Urban Development Ministry, Government of India
- Joint Secretary or Equivalent Officer from Ministry of Panchayati Raj Department, Government of India
- Chairperson, Animal Welfare Board of India

- Chairperson, Veterinary Council of India
- President, Indian Veterinary Association
- Joint Secretary, Ministry of Health and Family Welfare
- Two Representatives of prominent State Animal Welfare Boards actively engaged in animal birth control coordination in the State

Functions of the Central Monitoring and Coordination Committee :

(i) To monitor proper implementation of the Animal Birth Control Rules, 2023.

(ii) To promote the Animal Birth Control Program and arrange budgetary provision for the animal birth control in the states.

(iii) To facilitate inter-ministerial coordination and also resolve issues related to Animal Birth Control.

(iv) To address matters related to policy intervention required for the Animal Birth Control Program.

(v) To address any other matter related to the Animal Birth Control Program.

(vi) To hear complaints regarding the cancellation of recognition of Animal Welfare Organisations and pass necessary directions or orders to the Board.

(vii) To keep a watch on national and international developments in the field of research pertaining to street dogs' control and management, development of vaccines, and cost-effective methods of sterilization, vaccination, etc.

Meeting of the Committee:

The Central Monitoring and Coordination Committee shall meet once in six months or as and when necessary.

2. State Implementation and Monitoring Committees

As per Rule 9(3) and Schedule-II of the ABC Rules 2023, a State Animal Birth Control Implementation and Monitoring Committee shall be constituted at the State or Union Territory level in all States and Union Territories. This Committee shall coordinate the implementation of the Animal Birth Control Program across the State in a scientific and phase-wise manner.

Proposed Constitution of the State Monitoring and Implementation Committees:

(a) Chairperson: The Secretary in-charge of the Urban Development Department or equivalent in the State or Union Territory shall be the Chairperson of the State Monitoring and Implementation Committee.

(b) Member Secretary: The Officer In-Charge of the State Animal Welfare Board shall be the Member Secretary as well as the nodal officer for implementing the program in each state and union territory.

(c) Members: The following officials shall be appointed as members of this committee:

- Director, Health and Family Welfare Department
- Director, Department of Panchayati Raj
- Director, Urban Development Department (or equivalent)
- Two representatives of the Animal Welfare Board of India
- Two representatives of the State Animal Welfare Board
- Representative of the Indian Veterinary Association of the State Chapter
- President, State Veterinary Council of the Concerned State
- Administrative heads of at least two municipal corporations, and representatives of at least two panchayats, and at least two municipal councils in that state or union territory

Note: No representative of the Board or State Board should be directly involved in the Animal Birth Control Programme as an Implementing Agency.

Functions of the State Monitoring and Implementation Committee :

(i) To set up Animal Birth Control Monitoring Committees at the local authority levels as required by the Animal Birth Control Rules.

(ii) To develop a comprehensive district-wise plan (including but not limited to infrastructure, budget, etc.) for dog population management in urban and rural areas throughout the state.

(iii) To enlist Animal Birth Control Implementing Agencies possessing the requisite training and experience, recognised by the Animal Welfare Board of India, to carry out the Animal Birth Control Programme as per the District and State Plan.

(iv) To ensure that the requisite infrastructure is set up, and other capital costs (including but not limited to fully furnished Animal Birth Control facilities/campuses with ambulances and equipment), and all other expenses for successfully running an animal birth control program, including manpower costs, are made available to the Animal Birth Control Implementing Agencies from the local authorities, and reimbursed in a timely manner as required by Rule 6 of the Animal Birth Control Rules.

(v) To be responsible for overall monitoring of the Animal Birth Control Programme in the State by the Local Authorities.

(vi) To carry out inspections on receipt of any complaints regarding the Animal Birth Control and Cruelty to Animals during the Birth Control Program and violation of Animal Birth Control Rules and take appropriate action.

Meeting of the Committee:

The Committee shall meet once every three months or as and when necessary.

3. Local Animal Birth Control Monitoring Committees

As per Rule 9(4) and Schedule-II of the ABC Rules 2023, a Local Animal Birth Control Monitoring Committee shall be constituted at the Local Authority level in all States and Union Territories. The establishment of Animal Birth Control Monitoring Committees at the local level is indispensable for the success of the Animal Birth Control program.

Constitution of the Local Animal Birth Control Monitoring Committee:

(a) Chairperson: The Municipal Commissioner or Executive Officer of the local authority shall be the ex-officio Chairman of the Committee.

(b) Members:

- A representative of the Public Health Department of the District
- A representative of the Animal Husbandry Department of the nearby Block or District
- A jurisdictional veterinary doctor

- A representative of the district Society for Prevention of Cruelty to Animals

Functions of the Committee:

(i)To issue instructions for catching, transportation, sheltering, sterilisation, vaccination, treatment, and release of sterilized, vaccinated, or treated dogs.
(ii) To authorize a veterinary doctor to decide on a case-to-case basis the need to euthanize critically ill, fatally injured, or rabid dogs in a painless method using sodium pentathol. Any other method is strictly prohibited. This decision shall be made through a sub-committee comprising two veterinary officers and a representative of a recognised animal welfare organisation. The sub-committee shall specify reasons in writing for euthanasia of each animal.
(iii) To create public awareness and solicit cooperation and funding.
(iv) To provide guidelines to pet dog owners and commercial breeders from time to time.
(v) To take steps for monitoring dog bite cases and ascertain the reasons for dog bites, the area where it took place, and whether it was from a stray or a pet dog. For this purpose, details may be collected from human hospitals in a requisite format.
(vi) To arrive at an estimate of the number of dogs within its territorial limits by conducting a census in the manner advised by the AWBI.
(vii) To ensure the development of the infrastructure required to execute the Animal Birth Control program for the estimated number of dogs. Detailed project reports shall be prepared and submitted to the State Monitoring and Implementation Committee in coordination with the state government.
(viii) The infrastructure shall be designed to carry out area-wise animal birth control in a phased manner, ensuring that at least 70% of dogs in the targeted area are sterilized and vaccinated before a new area is taken up. The infrastructure shall include, but not be limited to, pre-operation preparation areas, Operation Theatres, post-op care, kennels, kitchen, store rooms for rations and medicines,

parking area, residential rooms for veterinarians and attendants, quarantine wards, ambulances, etc.

6. Guidelines for Birth Control and Immunisation of Stray Cats

1. ABC Agencies and its requirement: 1) Pursuant to Rule 3(1) of *Animal Birth Control Rules 2023(ABC Rules)*, local bodies shall implement Animal Birth Control(ABC) programmes through one of the following means to manage stray cat population:

a) Engagement of Animal Welfare Organisations (AWOs) recognised by the Animal Welfare Board of India (AWBI);

b) Utilisation of local body's own veterinary officers;

c) Establishment of a Special Purpose Vehicle (SPV) with hired staff.

2. The local bodies or AWOs involved in sterilisation and immunisation of stray cats must get their veterinarians trained in carrying out the birth control and immunisation, with respect to cats at AWBI recognised ABC Training Centres. They should have competent para veterinary manpower and appropriate infrastructure as specified below..

3. The local bodies or AWOs must prepare, document, and maintain detailed protocols for standardised surgical procedures, hygiene practices, pre- and post-operative care, and animal handling in alignment with these guidelines. All personnel must be trained on these protocols, which should be regularly reviewed and updated. These documents should be readily available at the ABC centre at all times.

4. The agencies eligible for sterilisation and immunisation should meet the following requirements:

(a) The organisation should have experience of conducting Animal Birth Control Programme for animals successfully, for at least one year.

(b) The AWO should be registered with AWBI and should have a valid Project Recognition Certificate for carrying out ABC programmes by the AWBI.

(c) Each veterinarian deployed for sterilisation of cats by the Local Body or AWO, as the case may be, should be registered with the Veterinary Council of India/State veterinary Council..

(d) Para Veterinary staff should be trained in humane cat handling, post-operative care, and recognising common feline health issues, maintaining sterile conditions, managing surgical equipment, and proper record-keeping as required.

(d) The AWO should have an appropriate administrative structure and a duly constituted managing/ executive committee.

(e) The AWO shall give an undertaking to submit Annual Reports including Audit of accounts and returns.

5. General Consideration:

1. Cat sterilisation programmes can be conducted at existing ABC Centres meant for dogs, provided that there shall be no direct interaction or inter-species co-housing. The cat housing area should be away from the noise and smell of dogs. However it is ***mandatory*** to strictly follow capacity limits and cats should be admitted ***only*** when mandatory and required care can be provided.
2. Before implementing a cat sterilisation programme, minimum standards of housing, feeding, hygiene, and veterinary care must be ensured.
3. The preparation room and operation theatre must be well-equipped with appropriate & necessary instruments, equipment, and medicines to undertake the volume of work and ensure complication-free surgeries.

4. Adequate personnel should be available to conduct the programme efficiently. Provisions shall include, but not be limited to, a doctor's room, preoperative preparation room, post-operative recovery room, kitchen, medicine stock room, attendants' quarters, suitable cages, and isolation and quarantine facilities with separate entrance and adequate and proper drainage.

6. Capture and Transportation:

1. Cats shall be captured by using humane methods available ***only***, including box traps, drop traps, and kitten traps. Personnel must be trained in low-stress handling techniques and proper trap usage.
2. All cats must be transported in sturdy, well-ventilated carriers or traps that are appropriate for their size and temperament. These carriers should be securely fastened within the transport vehicle to prevent shifting or tipping during transit. To minimise stress, the traps or carriers should be covered with breathable cloth during transport and cats should be transported separately from other species.
3. For journeys exceeding two hours, cats should be visually inspected at least every 2 hours to ensure their well-being. During these checks, staff should look for signs of distress, overheating, or other health concerns. If any issues are observed, immediate action should be taken to address them.
4. Water should be provided for any journey exceeding 4 hours.

7. Arrival, Quarantine, Isolation and Housing Area:

7.1 Arrival:

Upon arrival at the ABC Centre, every cat must be collared for identification, the collar should have an identification number and location from where the cat was caught. They must also be immediately examined within their carrier by a qualified veterinarian. Any cat showing signs of coughing, sneezing, vomiting,

diarrhoea, fever, ocular or nasal discharge or any other symptoms of contagious disease must be separated from the rest of the cats and transferred into the quarantine facility for observation and treatment. Sick or injured animals must be treated till complete recovery before sterilisation. Physically fit cats should be transferred from their carrier directly to the cat housing area to be kept under observation for 12 hours before sterilisation surgery. Cat housing area shall be under 24*7 CCTV surveillance.

7.2 Quarantine:

The quarantine area at the minimum should have separate drainage systems and entry, foot-dips, and hand-washing facilities available. No contact between cats in quarantine or between quarantined cats and other animals at the Centre should be allowed during the quarantine period. Separate staff for the quarantine area is preferable, however if separate staff are not available then healthy cats should be fed/cleaned/medicated first before moving to the quarantine area, to reduce the risk of disease transmission from sick to healthy animals. Staff must follow strict protocols including wearing dedicated PPE (gowns, gloves, shoe covers) when entering the quarantine area. The Quarantine Area should be under CCTV surveillance at all times.

7.3 Isolation:

If quarantined cats are found to have any contagious disease they must immediately be moved to an isolation unit in sealed carriers and designated transit routes to mitigate cross-contamination risks. Separate isolation areas must be provided for animals with different contagious diseases to prevent coinfections with multiple pathogens and the area should at the least have an independent ventilation system and separate drainage system. The isolation facility must have non-porous, seamless flooring with covered floor-wall junctions to enable thorough cleaning and prevent accumulation of pathogens. Walls and other surfaces should also be made of non-porous, easily cleanable materials. Foot dips containing approved disinfectant must be placed at the entrance and exit of the

isolation area and changed daily. Bedding, food, and medical waste should be disposed of in biohazard containers; autoclave or incinerate as required.

The area must be disinfected at least twice daily with pathogen-appropriate disinfectants (e.g., accelerated hydrogen peroxide for parvovirus, bleach solutions for calicivirus). Each disinfectant should be allowed 5-10 minutes of contact time, and thorough cleaning should be performed between patients. Immediate spot cleaning and disinfection is required for any contaminated areas.

Separate staff for the isolation area is *mandatory*. Staff must adhere to strict biosecurity protocols, including the use of disposable personal protective equipment (PPE)—gowns, gloves, masks, and shoe covers—and should not come in contact with non-isolated animals.

The Isolation Area should be under CCTV surveillance at all times.

7.4 Cat Housing Area:

The cat housing area should have adequate space to keep a well-spaced adequate number of cages for incoming patients. Individual cages should be at the minimum 2 feet wide, 3 feet deep and 2 feet high and should be made of sturdy material, have secure doors and should be spaced properly to ensure proper air circulation. Cages should not be stacked on top of one another, to avoid water, food, urine or faeces from falling on patients below. All cages should have solid, preferably angled, collection tray installed underneath. All patients should be housed in individual cages that allow for good visibility for proper monitoring.

Between patients, all housing units must be properly cleaned and disinfected using chemicals proven cat safe. This includes not only the cages and cat housing area but also any accessories such as food and water bowls, litter trays, and bedding.

8.Pre-Surgical Procedures for Cat Sterilisation

8.1 Initial Health Assessment

Prior to surgery, each cat must undergo a thorough physical examination by a qualified veterinary surgeon at least 12-14 hours before surgery and the findings must be recorded and documented. This examination should include verification of sex, reproductive status, temperature, respiration, pulse, mucous membrane colour, palpation of lymph nodes and abdomen, chest auscultation, and assessment of any external injuries or skin conditions. Cats with manageable conditions like mild skin conditions or injuries should be treated first, if necessary. For female cats, pregnancy status should be determined.

When possible, A CBC, creatinine, GGT value and a chest x-ray should be done for patients prior to anaesthesia to minimise risk and for determining drug type and flow rate.

If a cat's behaviour prevents a thorough examination prior to sedation, the veterinarian may perform the examination after premedication for anaesthesia induction. Body weight should be determined as close to the surgery time as possible.

Gabapentin at 25mg/kg body weight 12 hours and 2 hours can be used prior to examination for anxious cats to calm them down for examination

8.2 Pre-Surgical Checks

The veterinary surgeon must ensure that the cat's physical description matches its records, the operation theatre and preparation room are ready, the appropriate surgical instruments and equipment are sterile, required medications are available, and the recovery area is prepared to prevent hypothermia.

8.3 Pre-Operative Preparation

Food should be withheld for a minimum of 6-8 hours before surgery.

Premedication with a sedative agent should be administered to reduce the required anaesthetic and keep the patient calm. Pre-emptive analgesia should be provided for effective pain management.

The use of pre-operative antibiotics should be considered based on surgical conditions and used judiciously, decided on a case-by-case basis by the veterinary surgeon.

Adequate intravenous fluids should be provided during surgery to prevent dehydration and shock.

8.4 Perioperative Thermoregulation

Efforts to maintain normal body temperature should be made from admission until discharge. To prevent heat loss, patients should be kept on insulating materials and away from cold surfaces.

9: Surgical Procedure for Cat Sterilisation

9.1 General Consideration:

Each ABC Centre should have a Standard Operating Procedure for surgical technique prepared and should be followed, tailored to individual patients as needed. Efficiency is prioritised to improve recovery times.
Accepted principles of surgical asepsis and infection control should be adhered to. Surgical packs should be properly sterilised and wrapped, with identifiable sterilisation dates.

Patient positioning should avoid compromising respiration or causing postoperative discomfort. When using ties to secure limbs, care must be taken to prevent constriction.

All surgical procedures must be performed by a qualified veterinary surgeon under the supervision of jurisdictional veterinary officers. For female cats, various approaches are acceptable, including ventral midline, paramedian, flank, and laparoscopic. Male cats shall undergo scrotal approaches.

Gentle tissue handling, meticulous hemostasis, and aseptic technique should be followed. Incisions should be small and properly located to minimise trauma.

Suture materials must be biomedical grade, sterile, and dated for current use. They should not be shared between patients to avoid disease transmission.

For females complete removal of both ovaries and for males removal of both testes is mandatory.

9.2 Operation Theatre

The operating theatre should have dedicated space for anaesthesia, surgery, and recovery, with access limited to essential personnel and regular sanitation.

Sterile instruments and drapes shall be available for each patient

The patient should be positioned on the table in a manner that ensures proper respiratory function. Sterile draping is mandatory.

9.3 Anaesthesia for Cats

General anaesthesia should be administered and the patient must be monitored continuously to ensure an adequate depth of anaesthesia for safe surgery. Once anaesthetised, and throughout the procedure, the patient must be protected against hypothermia. The maintenance dose should be kept ready for long procedures or in case of complications.

9.4 Preparation for Surgery

A clinical record sheet must be maintained for each patient, containing physical information and drug administration details.

Anaesthetic induction, shaving, and prepping should be performed in the preparation room and not the operation theatre to minimise contamination. If using intravenous fluids, the catheter site must be shaved and prepared before insertion and the bladder should be palpated and expressed if necessary. The surgical site must be carefully shaved to avoid trauma to the area. The surgical site must be cleaned thoroughly with chlorhexidine solution, moving from centre to periphery. The site should be disinfected using three spray applications of surgical spirit, followed by a final spray of povidone iodine solution once dry.

9.5 Thermoregulation

During surgical preparation, excessive hair removal or moistening should be avoided, and warmed preparation solutions should be used. Active warming methods, such as heated surgical tables or warming blankets, can be employed during surgery.

9.6 Fluid Therapy Protocol: A catheter for intravenous access should be used. The cephalic vein of the forelimb and the saphenous vein of the hindlimb should be inspected for catheter placement. The cephalic vein should be the first choice for placement of catheter, if the vein on the forelimb is not available for IV catheter placement, then the catheter should be placed in the saphenous vein in a hind limb. The selected vein area should be cleaned thoroughly with surgical spirit or povidone iodine. Intravenous fluids should be administered during surgery to minimise the risk of surgical shock. The fluid of choice is Lactated Ringer's Solution, administered at a rate of 3 ml/kg/hour during routine procedures.

9.7 Anaesthetic & Surgical Protocols: The anaesthetic protocol should achieve loss of consciousness, sufficient sedation, analgesia, and muscle relaxation, while maintaining adequate cardiac function and providing ventilatory and respiratory support.

For airway management during surgery, endotracheal intubation with cuff inflation can be performed. A supraglottic airway device may also be used. Vital signs must be closely monitored throughout the procedure, with intravenous fluid

9.8 Anaesthesia Recommendation: The following is recommended for cat ABC:

A. Premedication:

1. Dexmedetomidine (7 mcg/kg) + Buprenorphine (0.03 mg/kg) + Ketamine (5 mg/kg), given IM in a single syringe.

2. Dexmedetomidine (7 mcg/kg) + Butorphanol (0.2-0.4 mg/kg) + Ketamine (5 mg/kg), given IM in a single syringe.

When preparing the injection, draw up Ketamine in the middle and mix well to minimise pain. The Dexmedetomidine dose can range from 2 to 10 mcg/kg IM, adjustable based on the cat's temperament and the dose of Butorphanol or Buprenorphine used. If Dexmedetomidine is unavailable, Xylazine can be substituted at 1 mg/kg IM, though it's not typically recommended for cats.

B. Induction:

1. Diazepam (0.25 mg/kg IV) + Propofol (1 mg/kg IV)
2. Propofol alone (1 mg/kg IV)
3. Ketamine (2-4 mg/kg) + Diazepam (0.1 - 0.4 mg/kg), mixed 1:1 by volume, given IV at 0.05 to 0.1 ml/kg
4. Ketamine (2-4 mg/kg) + Midazolam (0.1 to 0.4 mg/kg), mixed 1:1 by volume, given IV at 0.05 to 0.1 ml/kg

C. Pre-operative Analgesia:

For pre-operative pain management, administer Meloxicam (0.2 mg/kg SC). However, avoid this if the patient is in shock or dehydrated.

D. Maintenance:

1. Isoflurane to effect (only if an ET tube or Supraglottic device is being used)
2. Propofol (1 mg/kg IV or to effect)
3. Ketamine (2-4 mg/kg) + Diazepam (0.1 - 0.4 mg/kg), mixed 1:1 by volume, given IV at 0.05 to 0.1 ml/kg
4. Ketamine (2-4 mg/kg) + Midazolam (0.1 to 0.4 mg/kg), mixed 1:1 by volume, given IV at 0.05 to 0.1 ml/kg
5. Ketamine (2-4 mg/kg) + Propofol (2-4 mg/kg), combined in the same syringe and administered IV at 2-4 mg/kg of the combination

E. Postoperative Analgesia :

Buprenorphine/ fentanyl/ butorphanol/ nalbuphine can be used for post op analgesia or in abc units where opioids are not available then 0.1mg/kg meloxicam can be used for up to 3 days, SC/ PO.

9.9 Ear Notching

The tip of the right ear of all patients, irrespective of gender, must be notched in a V-shape during sterilisation surgery to indicate that the cat has been sterilised.

10. Post-Sterilisation Recovery and Release

Post surgery patients should be continuously monitored in a clean, dry, and warm environment, with attention to positioning to prevent airway restriction. Potential complications, including haemorrhage, cardiorespiratory issues, pain, and temperature abnormalities, should be closely monitored. Analgesia needs may vary, and multimodal approaches are recommended when possible.

Rabies vaccination shall be ***mandatorily*** administered to all patients entering the ABC programme. In addition to rabies vaccination, ABC centres should consider offering the FVRCP (feline viral rhinotracheitis, calicivirus, panleukopenia) vaccine.

Post recovery from anaesthesia, the patients should be taken back to their designated cages in the cat housing area and post operative care should be provided for at least four days. Adequate and healthy food twice a day and potable drinking water should be available to them at all times.

Before release, it is crucial to ensure that the sutures have completely healed and no signs of infection or complications are present. Cats should be released back to the exact location from which they were captured, with the date, time, and place of release duly recorded. Post Recovery from surgery patients should be released back at the same location from where they were captured and the date, time and place of their release shall be recorded.

11. Record Keeping

Individual medical records must be created and maintained for each cat that enters the programme.

These medical records should include, at minimum, the following information:

1. A detailed description of the cat, including colour, breed (if identifiable), and estimated age.
2. The location the cat was picked up from and where it was dropped back.
3. Complete findings from the physical examination.
4. Accurate body weight, temperature, pulse, and respiration (TPR) readings.
5. A comprehensive list of all drugs administered, including the name of the drug, the dose given, the route of administration, and the time of administration.
6. Detailed notes on the surgical procedure, including any variations from standard protocol or complications encountered.
7. Documentation of any abnormalities observed or complications that arose during the perioperative period.
8. Specific post-operative care instructions tailored to the individual cat.
9. Vaccination administered, including the type of vaccine, manufacturer, lot number, and site of administration.
10. Additionally mortality records, equipment inventory, cat van logbooks, staff attendance records, organ inspection records, CCTV footage for the previous 30 days and feeding records are to be mandatorily maintained.

All medical records should be completed using a standardised form (*annexed*) to ensure consistency.

All records, including but not limited to, medical records, capture and release records, monthly and annual reports must be stored securely by the local authority or the AWO. At a minimum, these records should be retained for a period of ten years, though longer retention periods are encouraged when feasible.

12. Monitoring:

Project-In-Chargeof the local body or the AWO, as the case may be, shall submit monthly and annual reports as per Rule 13 of *Animal Birth Control Rules 2023*.

1. Project In-charge to submit monthly progress reports to Local ABC Monitoring Committee with details on:

a. Number of cats sterilised and vaccinated
b. Details on cat capture and release
c. Veterinarian details (names, qualifications, surgeries performed)
d. Post-operative complications and mortality data (check AB Rules and update)

2. Annual reports are to be submitted to the Board through State Animal Birth Control Implementation and Monitoring Committee by May 31st of each year, including:

a. Total animals captured, sterilised, and immunised in the previous year (check ABC Rules and update). Additional information may be required by the AWBI or SAWB.

13. Cancellation, Blacklisting and Appropriate Action for Non-Compliance:

The cancellation and blacklisting of agencies and appropriate action against local authorities involved in ABC programmes shall be governed by Rule 8 of the *Animal Birth Control Rules, 2023*.

All AWOs and local bodies are advised to familiarise themselves with the full text of *ABC Rules 2023* to ensure compliance.

ANNEXURE

Cat Sterilisation: Medical Record Sheet

Cat Information

1. Cat ID: _____
2. Date: _____
3. Colony/Area: _____

Cat Description

1. Species: Cat
2. Sex: Male Female (Circle one)
3. Age (estimated): _____
4. Colour: _____

Physical Examination

1. General Appearance: _____
2. Body Condition Score (BCS):
3. Head: _____ (Eyes, ears, nose - any abnormalities)
4. Mouth: _____ (Teeth, gums - any abnormalities)
5. Neck: _____ (Lymph nodes - enlarged or normal)
6. Thorax: _____ (Heart rate, rhythm, lung sounds - any abnormalities)
7. Abdomen: _____ (Palpation for masses, pain)
8. Musculoskeletal System: _____ (Any lameness, gait abnormalities)
9. Neurological System: _____ (Mentally alert, any deficits)

10. Skin: _____ (Presence of parasites, fleas, etc.)

Vitals

1. Body Weight: _____ kg
2. Temperature: _____ °C
3. Pulse Rate: _____ beats per minute
4. Respiration Rate: _____ breaths per minute

Pre-operative Deworming (if performed)

1. Medication Name: _____
2. Dose: _____
3. Route: _____
4. Date: _____

Anesthesia

1. Pre-medication:

a. Drug Name: _____
b. Dose: _____
c. Route: _____ (e.g., IM, IV)
d. Time: _____

2. Induction Agent:

. Drug Name: _____
a. Dose: _____
b. Route: _____ (e.g., IM, IV)
c. Time: _____

3. Maintenance Agent:

. Drug Name: _____
a. Dose: _____
b. Route: _____ (e.g., IM, IV)

c. Time: _____

4. Anaesthetic Complications (if any): _____ (Describe)

Surgical Procedure

1. Surgical Approach: _____ (Spay/Neuter & details of incision)
2. Intraoperative Findings (if any): _____ (Describe)
3. Complications (if any): _____ (Describe in detail)
4. Sutures: _____ (Type of suture material used)

Post-operative Care (Minimum 4-day Hospital Stay)

1. **Release Criteria:** Cat will be released only after complete recovery, as determined by the veterinarian.
2. Date of Surgery: _____
3. Daily Monitoring:

a. Temperature: _____ °C

b. Pulse Rate: _____ bpm

c. Respiration Rate: _____ brpm

d. Pain Level (use standardised scale): _____ (

e. Appetite: ☐ Present ☐ Absent (Circle one)

f. Wound Condition: _____ (Describe healing progress - daily)

g. Activity Level: ☐ Normal ☐ Abnormal (Circle one) (Record daily)

h. Complications (if any): _____ (Describe and date)

4. Pain Management:

. Medication Name: _____

a. Dose: _____

b. Route: _____ (e.g., PO, SQ)

c. Frequency: _____ (as prescribed by veterinarian)

5. Fluids:

. Type: _____ (e.g., Lactated Ringers)

a. Volume Administered (record daily): _____ mL

b. Route: _____ (e.g., SC, IV)

6. Antibiotics:

. Medication Name: _____

a. Dose: _____

b. Route: _____ (e.g., PO, SQ)

c. Duration: _____ days

7. Diet:

. Post-surgery (minimum 4 days): _____ (Soft food recommended)

a. Release Instructions: _____

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