Canadian Veterinary
Medical Association

Association canadienne
des médecins veterinaires

CODE OF PRACTICE FOR THE CARE OF DOMESTIC CATS

Second Edition 2025

Canadian Veterinary Medical Association
Association canadienne des médecins vétérinaires

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One profession. Une profession
One strong voice. Une voix forte

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APPENDICES

INTRODUCTION

Purpose. The Canadian Veterinary Medical Association Code of Practice for the Care of Domestic Cats was originally published in 2009 to establish standards to promote the sound care, management, and humane treatment of populations of cats in various settings in Canada. Although attitudes towards cats and scientific information have evolved substantially since that time, this second edition shares the same fundamental goals.

The development process for CVMA Codes is collaborative, transparent, and consensus- based. It is designed to ensure that each Code is scientifically informed and reflects veterinary and societal expectations for responsible animal care. Codes are based on the best available knowledge sources, including peer-reviewed science, industry publications, experience, and expert opinion and can be updated as new information becomes available.

Cats serve us in many ways, and it is our duty to provide them with a high standard of care as best we can. This is at the heart of the Code.

Scope. It is estimated that Canada has more than nine million owned cats[1], and many of these are in or will be in some form of group housing, (whether home- or cattery- like facilities) at some point in their lifetime. This Code is designed to be used as an educational resource and to provide guidance to those who care for or manage populations of cats; it may be relied upon by enforcement agencies as a reference to required and recommended practices. This revision is substantially more comprehensive than the previous edition and incorporates updated evidence-based information. It remains, however, that this Code is not an operations manual, nor is it a substitute for veterinary care.

This Code is applicable to any situation in which cats are housed or managed, such as in breeding, boarding, shelter or rescue facilities, research institutions, veterinary hospitals, pet stores, and even home environments, with a focus on the care of groups of cats. Because of the wide variety of settings and situations in which populations of cats are kept, not all material will be pertinent to all situations. For this reason, the Code is intentionally not prescriptive, and readers are encouraged to consider their unique situation when consulting the Code.

[1] https://aka-humane-canada-prod.s3.ca-central-1.amazonaws.com/attachments/r9wlfhdlctvdxych93j1qdx1-cats-in-canada-2017.pdf

Key concepts. Throughout this Code, consideration is given to the Five Freedoms[2] and Five Domains[3]. Whereas the Five Freedoms describe primary welfare needs, the concepts in the Five Domains are especially valuable for assessing animals housed long-term, and whether they have the means for "a life worth living."

The World Organisation for Animal Health (WOAH) has developed Guiding Principles on Animal Welfare[4].

The following points are especially pertinent for this Code:

1. *That there is a critical relationship between animal health and animal welfare.*
2. *That the internationally recognised 'five freedoms' provide valuable guidance in animal welfare.*
3. *That the use of animals in agriculture, education and research, and for companionship recreation and entertainment, makes a major contribution to the wellbeing of people.*
4. *That the use of animals carries with it an ethical responsibility to ensure welfare of such animals to the greatest extent practicable.*

Organization and How to Use the Code. This document is organized into several sections and ordered such that related topics are grouped and follow a logical flow. This is intended to make information easier to find. It also separates animal care topics from facility-related ones. Each section is designed to be read on its own.

Cross- referencing is provided to related material in other sections.

Sections or subsections are followed by a list of requirements and recommendations. Throughout the document, the term '**must**' indicates a mandatory obligation whereas the term '**should**' indicates a discretionary measure that may be taken or provided. Requirements describe the minimum conditions that must be provided to ensure adequate cat care, aiming to be outcome-based rather than prescriptive. All persons caring for cats and/or managing facilities with group housed cats are expected to adhere to the requirements. These requirements may or may not be enforceable, depending on the applicable provincial law. In addition, other laws and regulations may supersede the requirements listed. It is the responsibility of managers and personnel to be aware of applicable laws and regulations in their jurisdiction. Recommended practices are those that are expected to enhance animal welfare outcomes. Implementation of recommendations is encouraged whenever possible, and as the unique nature of each facility allows.

The appendices summarize requirements and recommendations, provide a glossary of notable words and phrases, provide key resources and references, and provide further information for most of the sections.

[2] https://webarchive.nationalarchives.gov.uk/ukgwa/20121010012427/http:/www.fawc.org.uk/freedoms.htm
[3] https://pmc.ncbi.nlm.nih.gov/articles/PMC7602120/
[4] https://www.woah.org/fileadmin/Home/eng/Health_standards/tahc/current/chapitre_aw_introduction.pdf

1. MANAGEMENT AND RECORD-KEEPING

Good management practices are critical to an efficient and effective operation.

Record-keeping is an important management tool. Records contain information about a facility's legal, business, and financial operations as well as key operational practices, i.e., how a facility operates on a day-to-day basis. Information captured in records related to animal care, well-being, and health is at the heart of the management of every operation.

Information contained in records can be extracted and analyzed. Such analyses may support operational practices or suggest that operational refinements are required.

Documentation is important for operational and financial accountability particularly if public or private funding supports the operation. Documentation is equally important for purposes of compliance with regulatory and reporting obligations. Animal records are also a useful tool for monitoring health and behavioural trends, which are helpful indicators of animal welfare.

1.1 Roles and Responsibilities

The size of a facility will dictate staffing levels and associated operational roles and responsibilities. In small facilities, management and operational roles may be blended. Optimization of operations, compliance with standards of animal care, welfare, and health as well as the requirements for occupational health and safety and other regulatory compliance obligations are shared management and staff responsibilities. Success is the result of the responsible execution of duties, dedication, and competency. All these are rooted in subject matter and experiential knowledge and skill.

1.2 Policies and Protocols

The management of all operations requires the development of operational policies and associated protocols. A policy is a plan of action that defines operational goals. For example, the policies of a breeding cattery will be different from those of a shelter.

Protocols describe the rules that allow policies to be achieved. These are supplemented with standard operating procedures that capture details and expectations for specific aspects of a facility's operation such as feeding, cleaning, or waste management practices.

The mission statement is an important operational tool. It conveys to the public the facility's purpose and means of achieving its objectives. A mission statement also can be accompanied by a vision statement which describes a facility's mid-term and long-term goals. Both statements can assist with maintaining focus in day-to-day operations.

1.3 Documentation

The documentation necessary to support an operation will depend on its size. A two-cat breeding cattery will differ in scope, staffing, and operational needs from that of a shelter-type operation that houses many cats and requires the support of several staff. Documentation can be scaled up or down depending on a facility's focus, size, and operational context.

Documentation can be written, computerized, or a combination of both. However, whenever possible, a computerized system should be implemented for consistent management purposes and legibility. There should be a back-up system in place to protect document integrity and allow staff to access information if the primary system fails (e.g., cloud e-storage). Written documentation should also be available in multiple copies and secured in different zones on the premises to ensure its preservation. Some documentation must be preserved for a specified time in keeping with regulatory obligations.

Management of communications with staff in larger operations should be in writing to ensure accuracy of information transfer. Numerous tools are available to assist with communication including bulletin boards and operational white boards as well as email and other e-communication tools. Oral communications should be logged.

Some documents are focussed on over-arching management concerns. Other documents provide tools to support daily operations, for example, staff rotas, cleaning logs, animal health record-keeping, inventory logs, equipment service logs, and waste disposal schedules.

Critical documents include staff and emergency services contact information. All contact information must be kept up-to-date and emergency services information must always be readily accessible to all staff.

In sole owner facilities, documentation of operational practices must be available if the owner is unable to provide care for the animals. Emergency contact information should be accessible to ensure continuity of care.

Table 1.1 Facility Documentation, identifies some critical operational elements which should be supported by management documentation. This list is not exhaustive and can be varied in accordance with the nature, size, and regulatory accountability obligations of a facility.

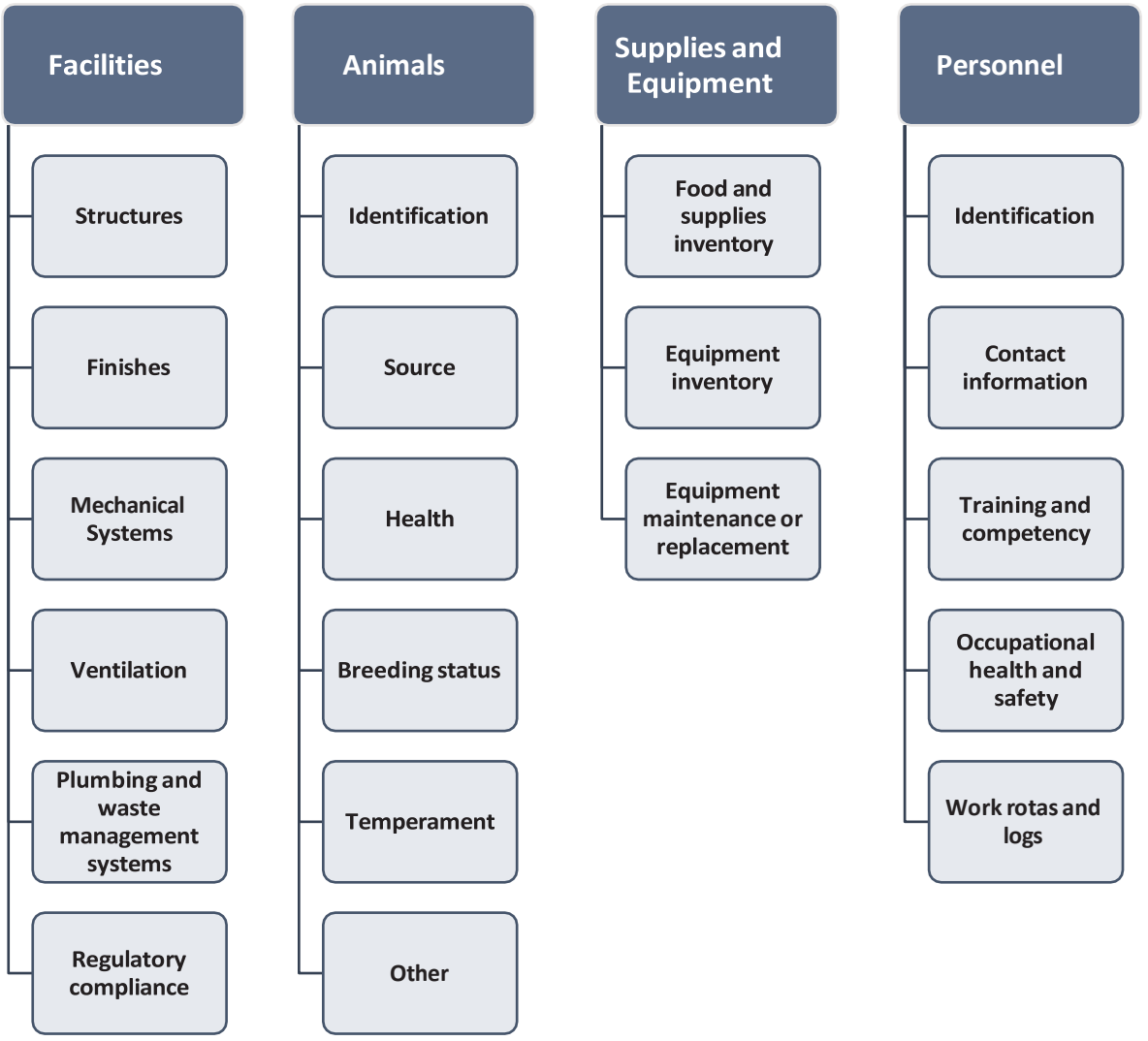


Table 1.1. Facility Documentation.

1.4 Training and Competence

It is the responsibility of management to ensure that staff are appropriately trained, suitably experienced, and knowledgeable in order to meet operational needs. This most importantly includes the health and welfare needs of cats. Additional training that specifically addresses methods to reduce animal fear and anxiety is recommended in support of appropriate cat care (several programs are available; see also Section 2.5 Care and Handling of Animals). The conduct of staff with cats, colleagues, and clients is integral to the reputation of the operation. Personnel are perceived by the public as representing the operation's mission and ideals.

Staffing levels must be sufficient to provide appropriate care and management of resident cats and meet operational support activities. Understaffing can compromise animal care and health and expose an operation to reputational compromise as well as regulatory non-compliance.

Staff and management benefit from regular meetings to review operational practices to ensure conformity with expectations and/or to consider revisions to refine operational efficiency and effectiveness. Staff also benefit from regular performance evaluations. Staff and management need to be open to frank discussion in order to develop effective remedies to address shortcomings and to contain operational risks.

1.5 Emergency Preparedness *(see also Sections 8 Health, Safety, and Working Conditions and 9 Emergency Management)*

Emergencies such as fire, flood, earthquake, other weather events, or power failure directly impact the health and welfare of animals and staff. A facility must have an emergency response plan that includes consideration of human, animal, physical installations and financial liability during the emergency as well as during the period of recovery from the emergency.

Emergency preparedness supports staff and animal safety and well-being. Construction and care of housing facilities in compliance with local building and maintenance regulations will decrease the risk of emergencies such as fire or power overloads related to defective design.

Emergency contact lists (staff lists and emergency response services) must be current and readily accessible. Every emergency response plan needs to be tested for operational feasibility, kept up-to-date and regularly rehearsed to ensure that all personnel are thoroughly familiar with the plan. An efficient emergency response plan considers not only evacuation of personnel and animals, preservation of material and physical resources, and financial operability but also recovery following the emergency.

REQUIREMENTS

1.1 A facility that group houses cats must maintain and preserve documentation that records management and operational practices. Documentation must be available and accessible.

1.2 A facility that group houses cats must develop policies, practices, and standard operational procedures.

1.3 Staffing levels must be sufficient to provide for the appropriate care and management of resident cats.

1.4 Staff must be trained and maintain competency to execute duties in keeping with their responsibilities.

RECOMMENDATIONS

- Develop mission and vision statements to support the operation.
- Communications between management and staff should be in writing and if oral, should be logged. This ensures effective transfer of information or instruction.
- Facility management and staff should hold regular meetings to review operations with a view to improving the quality of cat care and efficiency.
- Facility management should meet with individual staff members at least annually to review individual performance and develop remedies to optimize performance.
- Store copies of records off site (e.g., cloud-based electronic storage).

2. HEALTH AND WELFARE MANAGEMENT

2.1 Relationship between Animal Health and Animal Welfare

Animal health and animal welfare are closely linked and high standards for both are essential for optimizing overall animal well-being. The following practices are important in the daily care of cats, and in the planning for health and welfare challenges and preventive health care.

The internationally recognized Five Freedoms (freedom from hunger, thirst, and malnutrition; freedom from fear and distress; freedom from physical and thermal discomfort; freedom from pain, injury, and disease; and freedom to express normal patterns of behaviour) constitute a baseline for ensuring good animal welfare. In addition, good welfare is characterized by maximizing an animal's positive experiences and minimizing their negative ones. This is in alignment with the Five Domains model of animal welfare[5], and is at the core of many of the requirements and recommendations of this Code (see also Section 2.8 Welfare Assessment, and Appendix E).

2.2 Animal Procurement

This section applies primarily to breeding catteries, but shelter-type operations will also find some of the subject matter applicable. Before receiving new cats, managers should ensure that there is adequate physical and operational capacity to care for them. Both adequate housing and sufficient staffing need to be considered before acquiring additional cats. When facilities are overcrowded, adequate standards of care are much more difficult to maintain. Cats in confined locations with a high population density are more readily stressed and prone to disease. As much history as possible should be obtained about the new cats, particularly current diet, identification data (preferably microchips), prior breeding history and medical records including vaccination status (see also Section 3.2.1 Medical Records).

Transportation is a significant source of stress, so cats should be procured from nearby sources as much as possible. Cats should be in good physical and behavioural health prior to procurement unless it is an emergency removal. If cats are acquired from other countries, the shortest, most direct route and method of transport should be used. Managers should ensure that all import requirements are known in advance and that relevant documents are prepared (see also Section 7 Transportation).

Once acquired, identification should be verified, and the new cat should be placed in quarantine. It is particularly important for shelter-type operations to thoroughly check for identification so that an owner can be traced, if possible. The cat should be evaluated by a trained person on arrival and if there are any health concerns, seen immediately by a veterinarian.

[5] https://pmc.ncbi.nlm.nih.gov/articles/PMC7602120/

Even if the cat appears healthy, it should be examined by a veterinarian soon after arrival and before release into the general population. Any necessary vaccination boosters or parasite medication should be given at this time (see also Subsections 3.3.1 Isolation and Quarantine and 3.2.2 Vaccination).

RECOMMENDATIONS

- Avoid overcrowding by ensuring capacity for care before acquiring additional cats.
- When possible, acquire cats from a local source to minimize transportation stress.
- If circumstances allow, cats should be examined by a veterinarian before transport to ensure that there are no pre-existing health concerns that could compromise the cats during travel.
- Newly acquired cats should be examined by a veterinarian as soon as possible after arrival.

2.3 Animal Management

2.3.1 Record-keeping

Accurate record-keeping is an essential element of running a successful operation. Written records should be legible, kept current, be readily accessible by staff, and be available for veterinarians and officials as applicable. Paper and/or electronic formats are both acceptable. Copies and backups of records should be maintained, and these should be kept in moisture- and fireproof containers. Records for all cats must be kept at least two years after the cat leaves the premises or dies on-site (see also Section 1 Management and Record-keeping).

2.3.1.1 Animal History

All cats must have individual records from the age of weaning, and preferably from birth. New owners should be provided with copies of a cat's records. For cats that are in the temporary care of the feline establishment, such as lease or stud service, owner information with contact details must be included. Copies of contracts or agreements for transfer of ownership or temporary care must be maintained by the establishment.

Breeding records. All breeding animals should have records that include the date and source of their acquisition, prior breeding history, prior health records, and their pedigree. In addition, breeding records should include detailed reproductive data such as:

- Age at first estrus,
- Dates of previous estrus cycles,
- Details of behaviour during breeding,
- Dates and numbers of breedings and identification of the mating pairs,
- Outcomes of breedings (pregnancy or date of return to estrus),
- Pregnancy details (length of gestation, litter size and health, dystocias, and other complications).

Health records. Dated health records for all cats must be maintained. This allows for prompt access to information about preventive care, medical care, identification of changes in an individual's health status, and recognition of trends of emerging disease and potential genetic problems (see also Section 2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease). Health records should include:

- Date of birth, sex, colouration and markings, breed, permanent identification,
- Dates of administration and descriptions of vaccinations, parasite treatments, routine medications, and supplements,
- Health problems (illness, injury, behavioural issues), including evaluation, diagnosis, testing, treatments, and outcomes,
- Surgeries, including spay or neuter,
- Test results for blood type, hereditary disorders, and common infectious diseases [e.g., intestinal parasites, Feline Leukemia/Feline Immunodeficiency Virus (FeLV/FIV)],
- Body weight and body condition score,
- Litter records should include name and description of queen and tom, stillbirths and deaths, numbers and sexes, birth weights, desirable and undesirable traits, and a daily record of each kitten's progress (weight gain, supplemental feedings, vigor. etc.).

2.3.1.2 Animal Identification

Identification of individual cats is essential. Humanely applied permanent identification, such as a microchip, is preferred for all adult cats and weaned kittens. Nursing kittens that cannot be identified by sex or coat pattern may require a visual marking such as a soft expandable collar.

2.3.2 Lifecycle Planning

Operating a cattery is a significant undertaking that requires full lifecycle planning for every cat. Owning a cat is potentially a 20-year commitment and a cat's needs will change with age. The transition of queens and toms from active breeders through to retirement, and possible re-homing, requires thoughtful planning and resources. Before acquiring a cat, careful consideration needs to be made concerning the goals of the cattery and each cat's needs throughout its life, such as housing, nutrition, socialization, grooming, and health care. Planning for the financial and time commitments required is part of being a responsible cattery owner. Cattery owners should be knowledgeable about all aspects of caring for breeding cats, and for their breed in particular.

2.3.2.1 Spaying and Neutering

Adult cats who are not part of the breeding program, either because they are unsuitable or are retired, should be spayed or neutered. Intact animals are at higher risk of disease and accidental breeding. The decision when and whether to spay or neuter should be made in consultation with a veterinarian.

2.3.2.2 Responsible Breeding

This section applies to the breeding of domestic cats. The Canadian Veterinary Medical Association opposes the production of hybrids by breeding domestic cats with wild species such as African servals, Asian leopard cats, and jungle cats. For more information see the CVMA Position Statements Keeping Wild (Native or Exotic) Animals as Pets and Responsible Breeding of Companion Animals in the resources list (Appendix D).

The breeding of cats is a serious responsibility that requires a commitment of education, time, and financial resources. Persons breeding companion animals have a duty of care to the animals and to the prospective owners to breed and raise animals with the best potential for long-term physical and behavioural health.

Responsible breeders need to have an in-depth understanding of breed standards and be able to recognize excellent and healthy examples of a breed. The goal of all breeders should be to improve, over time, their cats' health and temperament, reproductive performance, and the breed itself. Breeding for extreme conformation, such as flat faces, shortened limbs, curled ears, and taillessness can have serious adverse health and welfare consequences for the queen and her offspring. When these features are part of the breed standard, breeders and judges are urged to reconsider these standards in light of welfare-associated problems and prioritize health over aesthetic values.

Before each breeding, breeders should ensure that there is adequate demand for their kittens. Indiscriminate breeding is strongly discouraged.

Queens and toms selected for breeding should be both physically and behaviourally healthy. Inbreeding may result in a higher incidence of inherited disorders; therefore, a close analysis of the pedigree is required. If available, relevant and validated tests for heritable diseases should be completed before breeding. For more information on inherited disorders in specific breeds, see Appendix E.

To ensure a successful breeding, a healthy pregnancy, and good postpartum care of kittens, queens need to be physically mature before they are first bred. Although this varies by breed, physical maturity is generally over one year of age. Queens older than 7 years of age experience more complications and adverse outcomes, so should not be bred. The number of litters a queen should be allowed to produce depends on her physical, psychological, and reproductive health. A veterinarian can help provide guidance for when a queen should be retired. Toms can be bred only if they are physically healthy, willing and able, and of a suitable temperament, i.e., calm and non-aggressive.

Unless there are health concerns, kittens should remain with the queen until fully weaned. This allows for the development of crucial socialization skills in the kittens (see also Subsection 2.4.4 Socialization).

Part of responsible breeding is ensuring that all cats and kittens receive preventive veterinary care, including regular examinations, vaccinations, parasite control, testing for Feline Leukemia and Feline Immunodeficiency Virus (FeLV/FIV) and blood typing as appropriate (see also Section 3 Veterinary Care).

Some cats are not suited for breeding and should be removed from the breeding program. Such cats include those with:

- unsuitable temperaments, e.g., unduly distressed, fearful or aggressive, poor mothering ability, lack of willingness to breed,
- inherited defects (including cryptorchidism, umbilical hernias, and dental abnormalities),
- incurable infectious disease,
- chronic injury, illness, or pain,
- repeated problems related to breeding such as pain while breeding, recurrent caesarian sections, or a high rate of stillborn kittens,
- physical features that affect their quality of life and those of their offspring.

2.3.2.3 Homing

Breeders have a responsibility to ensure that any kittens or cats they sell have a good prospect for an excellent life in their new home. This can be accomplished by:

- ensuring that the prospective owner is aware of the requirements needed to care for their cat and can provide them; taking care to match the person with a particular cat is key,
- providing information to prospective owners regarding routine health care, spaying/neutering, nutrition, grooming (including nail care and dental care), social and environmental needs,
- informing prospective owners of any health concerns, as well as any veterinary care or treatments that have been done and any which are due,
- informing prospective owners of breed related inherited diseases and disclosing all recommended and available test results for the cat and its tom and queen; terms such as “fully health tested” should be avoided, as they can be misleading,
- selling kittens who are healthy, fully weaned, well-socialized and at least 8 weeks old,
- adequately treating medical problems such as diarrhea, upper respiratory infections, and parasitic infestations before rehoming.

- providing a written guarantee of health indicating what compensation would be provided in the event of a genetic disorder or health concern,
- being prepared to accept the return of a kitten or cat; and,
- selling to local buyers when possible; lengthy travel is stressful for cats (see also Section 7 Transportation).

2.3.2.4 Retirement and Re-homing

Cats may be retired from the breeding program for various reasons such as old age, illness, injury, or poor performance. Retired cats may be kept as house pets for the remainder of their lives or rehomed. If the cattery owner is unable or unwilling to provide for the needs of the retired cat, a suitable new home should be found, as this is part of lifecycle planning. Simply relinquishing retired breeder cats to a shelter or rescue is not acceptable and should only be done as a last resort. Euthanasia must not be used as a means of population control for healthy, retired cats who could be re- homed.

2.3.2.5 End of Life Care

Injury, illness, and pain can threaten a cat's quality of life at any age. Regardless of the cause, veterinary assessment is needed to determine the best course of action. For example, a cat may be diagnosed with terminal cancer, yet continue to enjoy a good quality of life with appropriate pain management and some simple management changes. In all cases, the key is to maintain an acceptable quality of life, and when this is no longer possible then euthanasia is required.

2.3.2.6 Euthanasia

Owners and managers are responsible for euthanasia decisions, and these decisions should never be made without careful consideration. Cats serve their owners in many ways and deserve an end of life that is humane. Euthanasia can be performed on site or at a veterinary hospital.

A key component of euthanasia is timeliness. It is not acceptable to delay euthanasia for reasons of convenience or cost. When euthanasia is deemed necessary, it must be performed without delay, particularly in the case of a severe, traumatic injury, or significant deterioration of health due to illness. Leaving a suffering animal to die of natural causes (what is known as “letting nature take its course”) is not acceptable.

Decision-making criteria. When caring for a sick or injured cat or kitten, the facility operator must consult a veterinarian to determine when to stop treatment and instead euthanize, taking the following into account:

- What is the cat’s current quality of life? It is essential that nausea, pain, dehydration, and inappetence are addressed in every sick, injured, or elderly patient?
- What is the likelihood of recovery or return to an acceptable quality of life?
- How long should the cat be given to recover?
- Has the cat become depressed or lethargic?
- What kind of special care will the cat require and is the caregiver able to meet those needs in terms of skill level, time, and available facilities?
- Does the owner of the establishment have the financial resources to continue to provide for the cat?
- Have the chances of recovery improved or declined over the course of treatment?

Appropriate humane methods of euthanasia. The euthanasia method used must cause minimal pain and distress. The only acceptable method of euthanasia without general anesthesia is lethal injection administered by a veterinarian or a trained technician.

One Health. Euthanasia of any animal can take an emotional toll on all those involved. The psychological impact of the death of an animal that was nurtured and cared for should be acknowledged with sensitivity and compassion.

Remains management. In most instances, a veterinarian will handle the disposition of the remains. This is usually done through cremation carried out by a local animal disposal company. If the remains cannot be properly disposed of immediately, an appropriate storage facility such as a secured on-site freezer should be used.

If local and provincial laws permit, an owner may choose to bury a deceased cat. Disposal of remains which have received an intravenous injection of a barbiturate requires significant environmental consideration including the risk of wildlife exposure to barbiturate.

The following guidelines for burial method must be met:

1. The bottom of the burial site must be at least 1m above the seasonal high groundwater table.
2. At least 1 m of packed soil must cover the remains.
3. The burial site must be at least 30 m from domestic water sources.
4. A record must be kept of the date and location of the burial.

REQUIREMENTS

2.1 All cats and weaned kittens must have individual records.

2.2 Records for all cats must be kept at least two years after the cat leaves the premises or dies on-site.

2.3 Owner information with contact details must be included for cats who are in the temporary care of the cat facility.

2.4 Contracts or agreements for transfer of ownership or temporary care (such as lease or stud service) must be provided by the cat facility, and the facility must keep copies.

2.5 All adult cats and weaned kittens must have unique and permanent identification such as a tattoo or microchip.

2.6 Kittens must not be sold unless they are healthy, fully weaned, well-socialized, and at least 8 weeks old.

2.7 Euthanasia must not be used as a means of population control for healthy, re-homable cats.

2.8 The euthanasia method used must cause minimal pain and distress. The only acceptable method of euthanasia is lethal injection administered by a veterinarian or a trained technician.

2.9 Barbiturates used for euthanasia must be purchased, stored, recorded, and disposed of in accordance with provincial and federal regulations.

2.10 Disposal must be in accordance with provincial and municipal regulations.

RECOMMENDATIONS

- Keep copies of records, including electronic backups, in moisture and fireproof containers.
- Keep all records for 7 years.
- Store copies of records off site (e.g., cloud-based electronic storage).
- Develop a lifecycle plan for every cat.
- Select only queens and toms for breeding who are both physically and behaviourally healthy.
- Spay or neuter all adult cats who are not part of the breeding program.
- Ensure that there is a person always available at the facility who will be responsible for making euthanasia decisions, and that their contact information is known by all staff.
- Discuss euthanasia with a veterinarian when the cat or kitten:
  a) has a condition that requires surgery and has a grave prognosis without surgery, and surgery is unavailable or unaffordable;

b) possesses dangerous behavioural traits that renders it a hazard to itself, other cats or caregivers;
c) has a disease or condition for which the cost of treatment is prohibitive, or there is no available treatment;
d) has a transmittable disease, which is a serious health hazard to other cats or humans.

2.4 Behavioural Health and Mental Well-being

2.4.1 Enrichment

All cats must be provided some form of enrichment that allows them to engage in normal behaviours including exercise, play, and social interaction. Cats require a 3-dimensional living space. Structures should be available for jumping, climbing, and resting off the ground including corner shelf viewing points from which the cat cannot be approached from behind (see also Section 5 Care - Accommodation and Housing).

Many cats prefer to hide while resting. Structures should be available to provide the ability to rest hidden from view of other cats. In group housing, these structures should have an entry and an exit.

Cats are also highly motivated to scratch. Scratching primarily serves as communication through scent marking. It also allows for stretching and claw care. Scratching materials must be present in both single and multi-cat environments. The post should be high enough for the cat to fully extend its body when scratching. An example of suitable material is a solid post positioned securely and covered with sisal or rope. Some cats also like to scratch horizontal surfaces. Carpet, leather, or materials that can be shredded and ingested should be avoided as these may predispose the cat or kitten to scratch these surfaces in a home environment and can act as irritants or foreign bodies if ingested. All cats must be provided scratching material, such as a scratching post or pad.

Hunting and predatory behaviour are part of a cat's innate behaviour repertoire. Play and toys that help to stimulate predatory sequences are important forms of enrichment for cats and may help prevent inter-cat predatory aggression.

Social interaction with other cats will be enriching for many cats but not others; therefore, suitability for group housing should be assessed for each individual. Adult cats who have not lived with other cats are unlikely to be comfortable doing so. Any new adult cats or even cats that have left the premises for a short time should be introduced or re- introduced to a group slowly. For instance, these cats should initially be kept in a kennel or enclosure within sight, smell, and hearing of other cats until none of the cats are disturbed by the presence of the others. This can be followed by confinement of the new cat to an enclosure where each cat may see but not touch the unfamiliar cat; and finally, by supervised interaction between cats. If any cat is showing prolonged signs of stress, such as hiding, not eating, or aggression, they should be housed singly. Even among highly social cats, resources must be plentiful for group housing to be successful (see also Section 5 Care - Accommodation and Housing).

2.4.2 Play

Play is an important factor in feline well-being. It also facilitates exercise and prevents obesity. Group and individually housed cats should have opportunities for play. Play in cats and kittens mimics predatory behaviour. Cats and kittens should have the opportunity to engage in simulated hunting behaviour through play. They should also have opportunities for play with rolling and batting toys. Play may be facilitated through enrichment devices, friendly interaction between cats, and positive human-cat interaction. Cat-to-cat contact is not appropriate for all adult cats but is particularly important for kittens, especially those under the age of 7 weeks.

Toys may be hung or placed to encourage jumping, batting, pouncing, and running. It is also important that toys be safe, and not have swallowable parts. Climbing structures are excellent items for play. Cardboard boxes are also easily acquired enrichment items.

Toys should be removed and replaced every 3 days for sanitation and maintaining interest (see also Section 6 Sanitation).

Sufficient floor space should be provided to accommodate play while ensuring the play area does not intrude into hiding/sleeping areas, feeding, or toileting areas.

2.4.3 Supplementary Enrichment

Time outdoors may be very enriching for some cats. It may not be possible at all facilities, and it may not be appropriate for all cats but should be considered where possible in a safe manner (enclosed area or monitored harness). Examples of cats that may not do well with time outdoors are those with a territorial tendency or those who are fearful, anxious, or over-stimulated out of doors (see also Section 5 Care - Accommodation and Housing).

2.4.4 Socialization

The critical period for kitten socialization is 2 to 7 weeks of age. Therefore, breeding catteries and some shelters have a unique responsibility to provide kittens with positive experiences with respect to people and handling, other cats, and varied environments. Kittens that are socialized with other cats, human adults, children, and even dogs are more likely to be comfortable living with these species when they are rehomed. Socialization is more than simply exposing the kitten to multiple stimuli. It is an active process involving creating pleasant associations with novel situations and interactions through pairing them with food rewards or play. Socialization involves giving a kitten the opportunity to choose: to observe, interact, or leave. Ideally, socialization should include different environments, humans, cats, and other companion animals, household noises, smells, etc. It is also important to accustom the cat to touch and handling, by regularly looking in ears, mouth, under tail, paws, and claws in a gentle manner paired with reward.

Kittens must not be sold unless they are healthy, fully weaned, well-socialized, and at least 8 weeks old.

2.4.5 Exercise

Exercise is very important for cats as they are prone to obesity. Although some younger cats are naturally playful, adult cats may need encouragement to run and play. This may include interaction with humans, other cats, and/or time outdoors as appropriate (see also Subsection 2.4.3 Supplementary Enrichment).

REQUIREMENTS

2.11 All cats must be provided with some form of enrichment that allows them to engage in normal behaviours including exercise, play, and social interaction.

2.12 All cats must be provided with scratching material, such as a scratching post or pad.

2.13 All kittens must be socialized between 2 and 7 weeks of age and before being rehomed.

RECOMMENDATIONS

- Provide food through foraging and hunting simulation opportunities, when possible, rather than feeding from bowls.
- House cats in group housing when appropriate.
- Provide cats with choice and control over their environment as much as possible.

2.5 Caring and Handling of Animals

2.5.1 Handling and Restraint

Cats are very sensitive to touch and may demonstrate aggression in response to unwanted or prolonged petting. Caretakers should strive to interact with the cat and provide positive touch, but this should not be forced or overdone. All cats must be handled in a gentle manner that is not likely to cause distress.

Kittens should be handled gently beginning at 2 weeks of age. This should include becoming accustomed to touch over all parts of the body. Cat caregivers should be aware of common signs of stress in cats (see also Section 2.7 Pain, Discomfort, and Distress Assessment) and not force cats to submit to unwanted handling or restraint. When restraint is necessary the concept of “less is more” should be employed. Towels can be used to block vision or hold the cat gently. Soft food can be used as distraction and positive reinforcement. Pinning down and scruffing of cats is strongly discouraged as it has been shown to cause distress and may lead to fear and increased aggression.

Signs of pain, stress, or fear include:

- dilated pupils,
- ears down and/or back,
- head down,
- tense muzzle,
- back arched,
- erect hair on back and/or tail,
- tail tucked under body or held close to body,
- tail swishing back and forth,
- feigning sleep,
- body oriented away from front of enclosure or away from person/another cat,
- hiding,
- lack of appetite,
- urinating outside litter box (in absence of a physical health condition),
- growling,
- hissing,
- swatting, and
- biting.

2.5.2 Grooming and Care

Most cats keep themselves well-groomed. An unkempt haircoat can be an indication of poor health. Obese, overweight, or senior cats may have difficulty grooming. Long-haired cats are at risk of developing gastrointestinal obstruction resulting from ingestion of hair. Regular grooming may be necessary for these animals.

Claw care can often be accomplished by the cat with provision of appropriate scratching substrate; however, claws should be monitored regularly and trimmed as required. This is particularly important in senior cats, who may avoid regular use of scratching posts because of arthritic pain. Nail trimming should be introduced to young kittens using the gentle techniques previously described.

Oral health is often overlooked in cats. Tartar buildup often occurs on the premolar and molar teeth in the back of the mouth and therefore is not typically visualized in day-to-day interaction. All cats should have an annual examination by a veterinarian and a plan established to maintain oral health throughout the year (see also Section 2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease).

2.5.3 Special Care Considerations

Some animals need special care based on life stage, temperament, breed, sex, age, reproductive status, or medical conditions. Although kittens should meet older cats as part of their socialization, great care must be taken to ensure these cats are healthy and vaccinated for common communicable diseases. Introduction should be gradual and cause minimal stress to both parties (see also Section 3 Veterinary Care).

Arthritis is common in older cats. Pain and decreased mobility may require care in handling as well as provision of ramps to access elevated perch areas, easy entry and larger litter boxes, easily accessible food and water and the ability to remove themselves from playful younger cats. Poor grooming is common in senior cats, who may require more frequent nail and haircoat care than younger cats. Veterinary assessment and treatment of arthritic pain is necessary to assure good quality of life in senior cats with osteoarthritis.

Certain breeds of cats require additional care. For example, Sphinx cats have a greater risk of hypothermia, and Persians have greater grooming needs as well as an increased risk of toileting outside the litterbox.

Urine marking ("spraying") is considered normal behaviour for tom cats. Litter boxes with both vertical and horizontal components may provide the opportunity for this behaviour while preventing hygiene and odour issues.

Pregnant queens need to be closely monitored for stress during the gestation and peri-natal periods; any form of stress must be remediated promptly. This is important not only for the welfare of the queen but also because prolonged or excessive stress during gestation can lead to health and behavioural problems in the offspring. Queens require a solitary space for queening.

REQUIREMENTS

2.14 All cats must be handled in a gentle manner that is not likely to cause distress.

2.15 All cats must be groomed adequately, as appropriate for their age, breed, and health. Grooming must include coat, nail, and oral care.

RECOMMENDATIONS

- Cat caretakers should groom all cats regularly, with extra attention to long-haired, geriatric, or overweight cats.
- All cats should receive periodic nail trimming in a positive and gentle manner.
- Kittens should be acclimated to regular grooming procedures, including nail trimming, prior to rehoming.

2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease

Routine monitoring of cats by trained caretakers allows for prompt identification and treatment of illness and injury; this promotes good health and well-being of all animals. Frequency of monitoring depends on life stage and health status. For example, kittens should be kept under frequent supervision from birth until three weeks of age, whereas healthy adult cats should be monitored at least once daily. More frequent monitoring is required in situations such as when queens are about to give birth or when cats are ill or injured. In all cases, caretakers should be aware of the health status of each cat. Each cat must be assessed as often as required to maintain health and well-being, but at least once every 24 hours.

Cats should be assessed by observation, and by handling when necessary. Monitoring during feeding and before cleaning can be helpful. This allows the litter box contents to be observed, as well as providing clues about how a cat is spending time: Are the toys being played with? Does it look like they hid under their blankets all day? Did they spray the walls with urine? Combining hands-on assessments with playtime and grooming can be both enjoyable and efficient and is an excellent way to detect problems early. Becoming familiar with each cat's personality and normal habits and behaviour is essential to detect when adverse changes occur (see also Section 2.5 Care and Handling of Animals).

A simple template can be useful to record daily observations (see Table 2.6.1 Sample Template for Daily Health Checks). Health monitoring records must be kept for every cat. Any signs of pain, distress, or illness must be addressed without delay, and depending on facility size, reported to the manager. At times, consultation with a veterinarian is necessary. See Figure 3.4.1 Symptoms Requiring Urgent Veterinary Care. If a caregiver is unsure whether a cat requires veterinary care, it is always better to err on the side of caution and seek care, particularly as cats are adept at hiding their symptoms.

	[date]	[date]	[date]	[date]	[date]	[date]	[date]
Body condition							
Body weight							
Activity/attitude							
Pain score							
Appetite							
Drinking							
Urine							
BMs							
Treatments							
Other							

Table 2.6.1. Sample Template for Daily Health Checks.

Health monitoring should include:

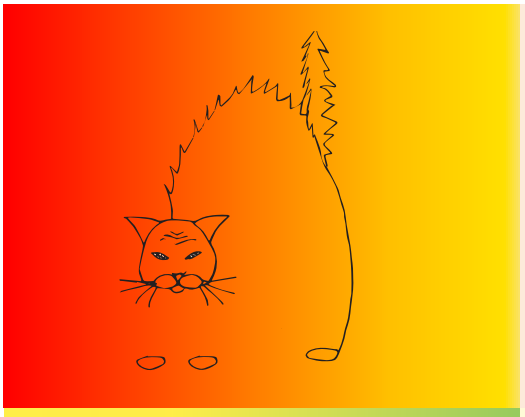
- *Body condition and weight* – Changes can be an early indicator of disease. Measure and record weight twice daily for kittens from birth to 2 weeks; weekly for kittens 2 to 8 weeks of age; monthly for cats 8 weeks to 1 year of age; every 6 to 12 months for adults, or more frequently as advised by a veterinarian. Cats who have significant weight changes (e.g., gain or loss of more than 10% body weight) must be examined by a veterinarian. Record the body condition score (BCS) for all adult cats at least monthly (see Figure 2.6.1 Feline Body Condition Score). For cats with a BCS of less than 4 or more than 7, corrective action must be taken. Overweight cats must not be starved in order to lose weight, as cats are prone to hepatic lipidosis if calorie restriction is too strict. Veterinary advice must be obtained if cats do not respond to the corrective action,
- *Behaviour* – Note activity and demeanour (see Table 2.8.1 Behavioural Indicators of Good and Poor Welfare of Cats). This should include interactions with other cats and humans. It is important to be familiar with an individual cat's normal behaviour so that any changes may be recognized (see also Figure 2.6.2 Feline Body Language for the differences in demeanour during fear, anxiety and stress and Section 2.4 Behavioural Health and Mental Well-being),
- *Pain score* – Actively look for signs of pain. For detailed assessment see Section 2.7 Pain, Discomfort, and Distress Assessment,
- *Appetite* – Record type and amount of food fed, and amount eaten,
- *Drinking* – Note water consumption. Watch for competition around food and water bowls,
- *Urine and bowel movements* – Note frequency, volume, colour, consistency, and any difficulty. Cats should urinate at least every 12 hours. Watch for competition around the litter box and look for urine or stool deposited outside the box, including on vertical surfaces ('spraying'),
- *Body systems* – Look for signs of illness or other problems. Record anything abnormal and address it promptly,
    - Respiration - Check frequency, effort, and noise if breathing abnormally; check frequency and severity if coughing or sneezing,
    - Eyes, ears, nose - Check severity, colour, and/or consistency if discharge is present; look for head shaking, squinting, or ear scratching,
    - Mouth - Note any tartar, drooling, bad breath, gum redness or swelling, loose or broken teeth, oral pain, coloured discharge, difficulty swallowing or opening or closing mouth, loss of normal grooming habits, and reluctance to pick up toys or food,
    - Bones, muscles, movement - Note changes in gait, limping, difficulty in getting up, lying down or sitting, reluctance to jump on or off furniture, difficulty with stairs; look for pain, and swelling, heat, or discharge at specific areas,
    - Skin and fur - Note bruising, redness, wounds, sores or scabs, discharge, lumps, and/or pain or itchiness; note fur loss, discolouration, odour, matting, and/or dander. Look under the cat's tail for the accumulation of fecal matter or presence of redness indicating urine burns,

- Paws - Note nail length and health and presence of swelling or redness in the footpads, especially where the footpad meets the haired skin,
- Reproductive organs - Note any abnormalities in the genital area or mammary glands including swelling, abnormal colour, discharge or pain; note heat cycles and whether they are abnormal or irregular,

- *Temperature* – This should be monitored in cats suspected of illness. Rectal thermometers should only be used by those trained to do so, otherwise aural thermometers are a safe and low stress option,
- *Treatments* – Record all treatments, supplements, and medications, including how and when they were given. Prescription medications should only be given under the advice of a veterinarian.

Figure 2.6.1. Feline Body Condition Score[6].

[6] World Small Animal Veterinary Association (WSAVA). Used with permission.https://wsava.org/wp-content/uploads/2020/08/Body-Condition-Score-cat-updated-August-2020.pdf

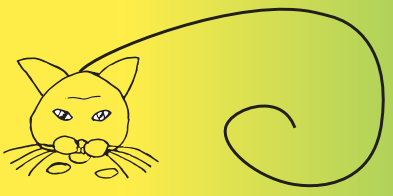


FLIGHT, FIGHT OR FREEZE – All are a distressed cat that should not be reached for or touched.

- **Ears may be back and down or fully forward**
- **Whisker position will follow the ears**
- **Pupils dilated or constricted**
- **Furrowed brow**

Body may be crouched with head down and tail under the body or cat may be standing with a hunched back, tail down or straight up.

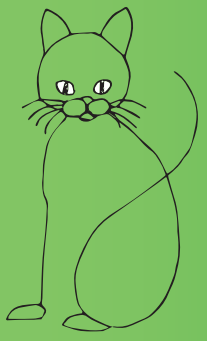
Tail may thrash back and forth – a 'wagging tail' is NOT a happy cat!



AROUSED CAT

- **Ears start to turn sideways**
- **Pupils start to dilate and cat appears to be staring at the person approaching**
- **Tail tucked very close to or under the body**
- **Cat may fidget – shift weight on paws while tucking the paws and tail under the body.**

Cats will pretend to sleep when they are stressed to avoid interaction. Usually they will lie on their chest (not their side), tail wrapped around their body, and their ears sideways or back.



RELAXED CAT

- **Ears forward or neutral**
- **Pupils neither dilated nor constricted**
- **Face and whiskers are relaxed**
- **Hair coat is flat to the body**
- **Tail up with the tip curled over the body in a 'question mark' shape or lying loosely beside the body.**

Offer the cat one finger before reaching in. A cat who is comfortable with contact will sniff the finger and then turn to the side or rub with its cheek.
A cat who is not comfortable will start to show some signs of arousal.

Figure 2.6.2. Feline Body Language.

2.6.1 Special Health Monitoring of Queens and Kittens

Vigilant monitoring is especially key for a successful breeding program. In addition to the regular health checks described, queens should be closely observed to determine their heat cycles and ensure optimal timing for breeding. Breeding needs to be supervised to make sure queens are not injured by overly aggressive toms. Pregnant queens should be moved into private queening areas where they can be closely watched to make certain that development (particularly appetite and weight gain) is normal. Ideally, constant supervision during and after birthing can quickly detect problems with either the queen or kittens.

Newborn kittens should be observed to ensure that they meet developmental milestones and are growing and gaining weight at an appropriate rate. Any kittens not developing appropriately should be examined by a veterinarian as soon as possible.

REQUIREMENTS

2.16 Each cat must be assessed as often as required to maintain health and well-being, but at least once every 24 hours.

2.17 Accurately dated health monitoring records must be kept for every cat.

2.18 Cats who have had significant weight changes (e.g., gain or loss of more than 10% body weight) must be examined by a veterinarian.

2.19 For cats with a body condition score of less than 4 or more than 7, corrective action must be taken, but overweight cats must not be starved to lose weight. Veterinary advice must be obtained if cats do not respond to the corrective action.

RECOMMENDATIONS

- Assess cats before cleaning and during feeding.
- Develop protocols for quick, consistent, and standardized health assessments.
- Become familiar with each cat's normal demeanour, patterns, and activity to quickly detect when a cat is not well.

2.7 Pain, Discomfort, and Distress Assessment

Pain, discomfort, and distress are animal welfare concerns in and of themselves but can also lead to profound physical and behavioural health problems. Cat caretakers have an obligation to endeavour to prevent and minimize pain and distress (see also Section 2.8 Welfare Assessment).

Group housed cats are susceptible to stress for multiple reasons, e.g., competition for food, changes in routine, rough handling, or excessive noise. Stress may also be associated with pain or as a response to fear. Both pain and distress cause changes in behaviour and when left untreated, can result in disease (e.g., Feline Interstitial Cystitis).

Pain and discomfort should be recognized and must be treated as soon as possible. Cats are typically very stoic animals and often do not display many overt signs of pain. It is therefore important to understand what constitutes normal behaviour for each cat and look for changes that may indicate pain:

- squinting or change in expression,
- reduced mobility – ease and quality of movement,
- changes in normal behaviours – play, jumping, scratching, using litter box,
- changes in eating and drinking,
- decreased grooming,
- restlessness,

- increased time lying down,
- reduced social behaviour with humans and other cats (this may include changes in sexual behaviour in breeding cats),
- sensitivity or avoiding touch, and,
- general temperament, e.g., aggression or hiding.

Assessing pain is an important part of health monitoring and welfare assessment. See Section 2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease and Section 2.8 Welfare Assessment. Several scoring algorithms have been developed for the assessment of pain in cats. It is important not to take the presence or absence of any one sign in isolation but to look at the whole cat when making an assessment. All staff members should use the same assessment scheme. Pain scores should form part of the health monitoring record.

The three validated algorithms are:

1. The Feline Grimace Scale (see Figure 2.7.1)
2. The Glasgow Composite Measure Pain Scale: CMPS – Feline.
3. UNESP-Botucatu Multidimensional Composite Pain Scale for assessing postoperative pain in cats.

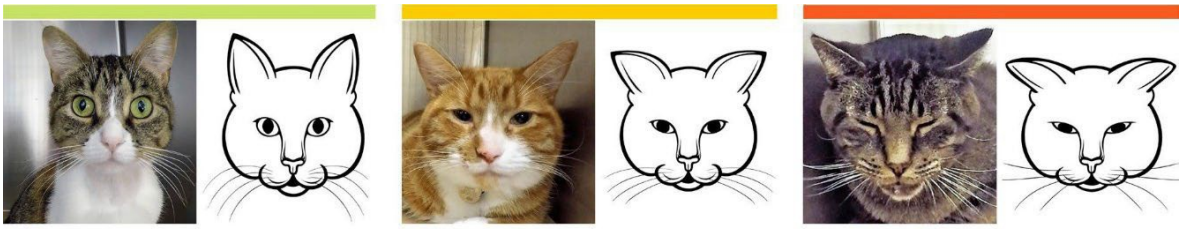
Other programs exist as well:

- Colorado State University Veterinary Medical Center Feline Acute Pain Scale.
    - This scale puts more focus on body posture than some of the others.
- Fear Free program.
    - This is geared to shelter facilities; however, it offers plenty of video and photo opportunities to practice reading body language.

When there is concern for pain or discomfort in any cat, veterinary attention must be sought. Depending on the cause, management may include changes in the environment (e.g., separating cats that do not get along, providing soft bedding for arthritic cats), changes in husbandry or analgesics.

Cats are extremely sensitive to non-steroidal anti-inflammatory medications and acetaminophen is fatally toxic to cats. Over the counter medication should not be administered unless on the advice of a veterinarian.

For more information on pain scales and programs, see Appendix D Resources and Appendix E Further Information: Section 2 Health and Welfare Management.



0 = AU is absent

- Ears facing forward
- Eyes opened
- Muzzle relaxed (round shape)
- Whiskers loose and curved
- Head above the shoulder line

1= AU is moderately present*

- Ears slightly pulled apart
- Eyes partially opened
- Muzzle mildly tense
- Whiskers slightly curved or straight
- Head aligned with the shoulder line

* The score of 1 can also be given when there is uncertainty over the presence or absence of the AU

2 = AU is markedly present

- Ears flattened and rotated outwards
- Squinted eyes
- Muzzle tense (elliptical shape)
- Whiskers straight and moving forward
- Head below the shoulder line or tilted down (chin towards the chest)

Figure 2.7.1. Feline Grimace Scale.[7]

*AU= Action Units i.e., ear position, orbital tightening, muzzle tension, whiskers position, head position.

REQUIREMENTS

2.20 Cats caretakers must be familiar with signs of pain and discomfort in cats.

2.21 Pain and distress assessments must be performed regularly for all cats.

2.22 Pain scores must be entered into the cat's record.

2.23 Pain medication must not be administered to cats without instructions from a veterinarian.

RECOMMENDATIONS

- A validated pain assessment scale should be used, and all staff should use the same one.
- Cat caregivers should anticipate and prevent pain, discomfort, and distress and seek to address and improve aspects of the operation that may contribute to these.

[7] Used with permission. https://www.felinegrimacescale.com/

2.8 Welfare Assessment

A cat's well-being can be determined by considering both their physical and psychological health. Psychological health is influenced by their environment (both physical and social) and their activity (for instance, whether they are a nursing queen or active show cat). Poor welfare can be reflected in poor physical health, illness, and disease, and/or behavioural problems such as fear, frustration, depression, aggression, or poor litter box habits. Welfare assessments are valuable tools for providing a snapshot of how a cat is experiencing their situation, as well as allowing an assessment of how a cat is doing over time. Assessments are particularly helpful when making breeding-related decisions, such as when to retire a queen from the cattery.

Good welfare is characterized by maximizing a cat's positive experiences and minimizing negative ones. All efforts should be made to ensure that cats experience excellent welfare. Excellent welfare results in an excellent quality of life. A welfare assessment can help determine causes of and remedies for poor welfare.

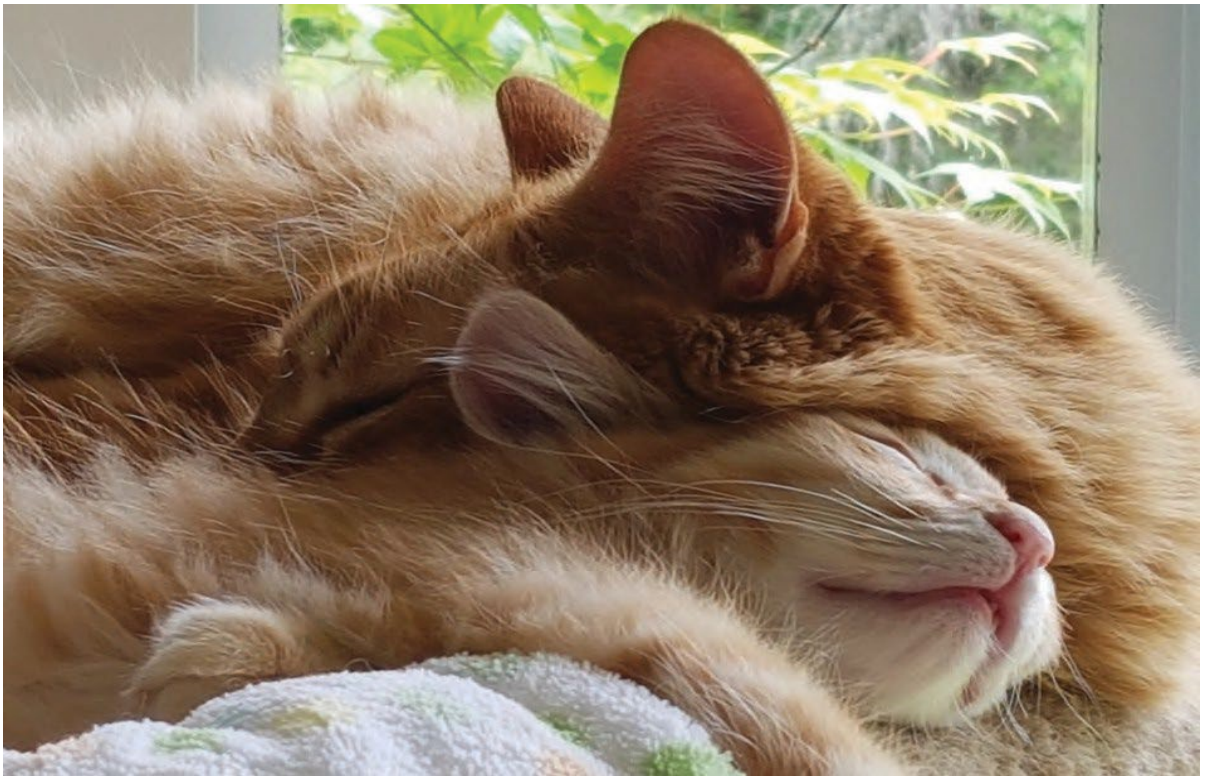
The method and level of detail of a welfare assessment depends on the size and nature of the operation, but in all cases, assessments need to be done with sufficient frequency to detect changes in welfare. Consideration of nutrition, health, housing, and husbandry are important aspects of assessing welfare; these are at the core of many of the requirements and recommendations throughout this Code. Emphasis should be placed on how a cat is experiencing their environment; Table 2.8.1 Behavioural Indicators of Good and Poor Welfare of Cats can be used as a guide when assessing behaviour. Any change in behaviour and habits may be an indication of a problem requiring investigation and alleviation. The elements of housing most relevant to welfare are summarized in Table 5.1 Welfare Elements of Housing: Housing Evaluation.

If any cat cannot be provided with the conditions for good welfare, and therefore a good quality of life, they must be removed from the cattery to avoid suffering. For example, a breeding queen may experience a range of problems from infertility to cannibalism of kittens resulting from excessive stress by living in close quarters with other cats. If the queen is spayed and placed in a household with no other cats, she may experience improved welfare.

Type of Activity	Behaviour	Signs of Good Welfare	Signs of Poor Welfare
General	exploration of surroundings?	yes	no/less
	mentation (attitude)?	bright, alert, responsive	dull, disengaged
Metabolic-related behaviour	eating & drinking normally?	yes	no: more/less/none
	urination & defecation normal?	yes (see note below re: spraying)	no: more/less; painful; abnormal appearance; out of litter box
Comfort behaviour	normal resting?	yes	excessive vigilance
	normal sleeping?	yes	reduced or none; feigned sleep; excessive sleep, lethargy, drowsiness
	grooming?	yes	over- or under-grooming; self-mutilation
	playing?	yes, with objects, other cats or people	less or none
Social interactions	interactions with people and other cats?	seeking presence of people & cats; staying near them; having positive interactions	none or negative reaction (e.g., avoiding contact, aggression, fear, hiding)
Communication	scratching, facial marking?	yes	no/infrequent
	urine spraying?	normal in some cats, particularly toms	increased
Other	compulsive behaviour? (e.g., pacing, circling)	no	yes
	hiding?	normal if during play or brief reaction to something fearful	prolonged
	vocalization/crying?	normal	excessive, quiet

Table 2.8.1. Behavioural Indicators of Good and Poor Welfare of Cats[8].

These are general guidelines. An individual cat's personality and normal habits must be considered when assessing behaviour. It can be helpful to look for a change from that cat's normal state.



[8] Modified from Methods of Assessment of the Welfare of Shelter Cats: A Review. Vojtkovská V, Voslářová E, Večerek V. See Appendix D.

REQUIREMENTS

2.24 Any welfare concerns must be addressed promptly.

2.25 Any cat for which good welfare cannot be provided and maintained must be removed from the cattery.

RECOMMENDATIONS

- Develop protocols for quick, consistent, and standardized welfare assessments.
- Assess welfare frequently to detect changes in welfare and allow rapid intervention.

3. VETERINARY CARE

All cats, including those in group housed facilities, should receive regular wellness examinations by a veterinarian throughout their lives. It is the facility operator's responsibility to have an active relationship with a veterinarian, preferably one familiar with feline group housing. Veterinary supervision is required for routine examination and diagnosis and treatment of disease. Health care protocols should be developed in consultation with a veterinarian. In addition to providing medical care, a veterinarian can help the operator by providing qualified guidance on reproduction, nutrition, environmental needs, behaviour, and a range of other health and welfare related topics, all based on the most current and evidence-based information.

A veterinarian should visit the premises at least annually to become familiar with general operations. Such house calls are a valuable opportunity to examine cats in their home setting; this is also less stressful for the patient than in-hospital examinations.

3.1 Veterinary-Client-Patient Relationship

Although the exact definition varies between provinces, a veterinarian-client-patient relationship (VCPR) is generally established when all of the following criteria are met:

1. The veterinarian gains a close knowledge of the health status and management of an individual animal.
2. The veterinarian assumes responsibility for making clinical judgements for the
3. The client indicates a willingness to follow the veterinarian's instructions health of that animal.

3.2 Preventive Medical Care

Health care protocols that prioritize disease prevention and promote a cat's health and well-being must be in place. The frequency of veterinary examinations depends on life stage and health condition. For instance, kittens will be examined several times in the course of receiving their series of vaccinations, whereas adult cats should have a wellness examination at least annually. Those with chronic health concerns may need to be seen more frequently. At any age, a change in health status may prompt an examination (see also life stage guideline in Appendix F, and Section 3.4 Interventional Medical Care).

The veterinarian can provide advice on disease prevention and prophylaxis, such as dental care, weight management, disease surveillance, and testing. The veterinarian can also advise on management of behavioural issues. Procedures such as dental prophylaxis (scaling and cleaning while under an anesthetic) can prevent more costly and painful conditions.

A relaxed cat has better immunity to disease and fewer behavioural problems, so all efforts should be made to reduce stress in all aspects of the facility. Some ways that stress reduction can be accomplished are through stable routines, avoiding overcrowding and providing cats with choice and control over their environment. The use of synthetic pheromone diffusers has been suggested to decrease stress in certain situations (see Appendix F for more information on environmental needs).

Chronic respiratory disease is common in cats which are group housed and can be caused by one or more of the viruses and bacteria listed in Section 3.5. Many cats can harbour these organisms, but only become ill when under stress. Although vaccination is an essential part of preventing disease outbreaks, environmental management as described is key.

3.2.1 Medical Records *(see also Sections 2.3 Animal Management and 2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease)*

Medical records must be kept for every cat in the facility. These should include vaccination and deworming information, test results (e.g., fecal testing for intestinal parasites, blood testing for Feline Leukemia/Feline Immunodeficiency Virus (FeLV/FIV), blood typing, genetic testing), weight, body and muscle condition scores, diets fed, findings of a wellness examination, diagnosis of illness or injury, diagnostic tests, and/or treatment(s) provided, any surgeries performed, reproductive status and special dietary needs.

Breeding records should include health-related information, such as heat cycle dates, breeding dates and results, queening dates and birthing complications (stillbirths, congenital defects) (see also Sections 1 Management and Record-keeping and 2.3 Animal Management for more information on breeding records).

3.2.2 Vaccination

Vaccinations protect cats from highly contagious and common viral diseases that can cause severe illness, death, or pose a zoonotic risk. Unless otherwise directed by a veterinarian, all cats should regularly receive core vaccines. Vaccinated queens have better immunity to infectious diseases and provide antibodies to their nursing kittens. Generally, kittens should receive vaccines every 3 to 4 weeks from at least 6 weeks of age until 16 to 18 weeks, with boosters thereafter.

Vaccine recommendations are based on risk factors such as the introduction of new cats, anticipated travel, local prevalence of a particular disease, population of cats, and the cat's immune status. For example, a breeding queen who is also a show cat will be at much higher risk for disease exposure than a single cat kept in a family home.

Some jurisdictions may require that cats be vaccinated against rabies: it is the facility owner's responsibility to ensure that they are compliant with local regulations. At the time of publication, Ontario is the only province that requires rabies vaccination.

Antibody titre testing can be a useful tool in some situations but is not a substitute for vaccination. Immunity for most viral illnesses does not depend solely on antibody levels, so high titres alone may not be fully protective. For more information on vaccination guidelines, titre testing, and specific vaccines, see 2020 AAFP vaccination guidelines in Appendix F.

3.2.3 Parasite Management

Parasites can compromise health and transmit disease to cats and other animals including humans. Cats can acquire parasites from other animals (e.g., their mother, and other cats and dogs that share the living space) and their environment. Newborn kittens often carry internal parasite burdens passed from the queen in utero.

Year-round parasite prevention and control is an essential part of an effective health care protocol. Unless directed otherwise by a veterinarian, kittens should be dewormed every 2 weeks beginning at 2 weeks of age until they are rehomed. Protozoal parasites such as coccidia, Giardia, and Tritrichomonas are not eliminated by routine deworming agents and require prescription medication from a veterinarian. In addition to medication, effective control programs include avoiding overcrowding and ingestion of raw meat or prey, immediate removal of feces, and excellent hygiene standards to prevent surface contamination. For more information, see Section 3.5 Common Parasites and Infectious Diseases.

3.2.4 Zoonoses *(see also Section 8.1 Zoonosis Management)*

A zoonotic disease is one which is transmitted between animals and people. Although many organisms can be acquired from cats, caregivers can protect themselves by thoroughly washing hands after changing litter boxes or handling cats with known or suspected disease, and before handling food. Training for personnel should include awareness of common zoonoses and prevention measures. For example, “cat scratch disease” is caused by Bartonella bacteria in flea feces and is prevented by regular flea control.

Caregivers should seek immediate counsel or care from a physician if bitten or scratched or when showing clinical signs indicative of a zoonotic infection. If a caregiver is diagnosed with a zoonotic disease, this should be reported immediately to the manager. Cats suspected of having a zoonotic disease should be assessed by a veterinarian who can confirm the diagnosis, establish a treatment plan, and recommend additional appropriate preventive measures. For more information, see Appendix F.

3.2.5 Disease Surveillance

All newly acquired cats should be quarantined to ensure they are healthy prior to exposing them to the general population (see Subsection 3.3.1 Isolation and Quarantine). All incoming cats and kittens should be tested for FeLV/FIV, although shelter-like operations may choose targeted testing for efficient use of resources. Other testing as required will be determined by the veterinarian.

Daily health checks are a vital part of disease surveillance, allowing early detection of disease. Some cats can carry diseases and parasites without appearing ill, so regular clinical testing is important. All operations should monitor for parasites through periodic fecal testing.

Environmental testing is sometimes necessary when outbreaks of certain diseases occur, e.g., ringworm.

3.3 Infection Control

Many cats housed together may lead to stress, which negatively affects the immune system and makes cats more vulnerable to infectious disease.

Good biosecurity programs can help prevent infectious organisms from entering the premises, e.g., establishing quarantine protocols and hygiene rules for visitors.

Infectious organisms can spread to other animals and humans either by direct contact with infected cats or their contaminated environment. Consistent hand hygiene, cleaning and disinfection protocols are essential for the protection of animal and human health (see also Section 6 Sanitation).

Husbandry practices are also very important. Some examples are:

- Rotation of cats within the facility should be limited to reduce stress, although this needs to be balanced with behavioural needs,
- Queens with kittens should be kept separate from other cats,
- Young kittens and queens should be handled first, less vulnerable adults next, and any known infectious cats or quarantined cats should be handled last,
- If administering oral medication to multiple cats, the dosing device (e.g., syringe) must be cleaned between cats.

3.3.1 Isolation and Quarantine

All premises must have a dedicated isolation area (preferably a separate room) in which cats can be kept apart from the rest of the population. The isolation area is used to protect the general population by helping reduce the risk of disease transmission and to care for new, ill, or injured cats.

The isolation room must meet the same standards for accommodation as the rest of the facility (see Section 5 Care – Accommodation and Housing). The room should house all equipment and supplies needed to care for the cats. Ideally, the isolation room should have washing facilities and separate ventilation from the rest of the facility. Appropriate cleaning, disinfection, and sanitation protocols should be in place, including entry and exit procedures.

To avoid transmission of disease, staff caring for cats in isolation should wear protective clothing and footwear, and these should be kept within the isolation area except when removed for cleaning and disinfection. Staff should care for cats in isolation after those in the general population. These cats should not be neglected and must receive the same level of care and attention as all other cats.

The decision to place an ill or injured cat in isolation needs to be carefully considered and should be made in consultation with a veterinarian (see Section 3.4 Interventional Medical Care). Recent studies show that most cats with mild to moderate signs of chronic respiratory illness do better if they remain in familiar surroundings with a stable routine. A cat may experience significant stress by being placed in isolation, which can be detrimental to their recovery. However, this needs to be balanced against the risk of spreading contagious disease to unaffected cats.

Quarantine. All newly acquired cats should be kept separate from the general population for a period deemed appropriate by a veterinarian. This protects the general population in case the newcomer is carrying disease but not yet showing signs, allows the cat to become acclimatized to the sounds and smells of the premises, and allows their caregivers to become familiar with them. During this time, newly acquired cats can be tested for FeLV/FIV, and vaccinated if necessary. The isolation area can be used for quarantine unless there are very ill cats being isolated at the time.

For more information on cleaning and disinfecting the isolation area, see Section 6 Sanitation.

3.4 Interventional Medical Care

Assessment of information gleaned through monitoring health (Section 2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease) helps to determine whether veterinary care is required. Cats who are sick, injured, or in pain must receive prompt, appropriate medical care.

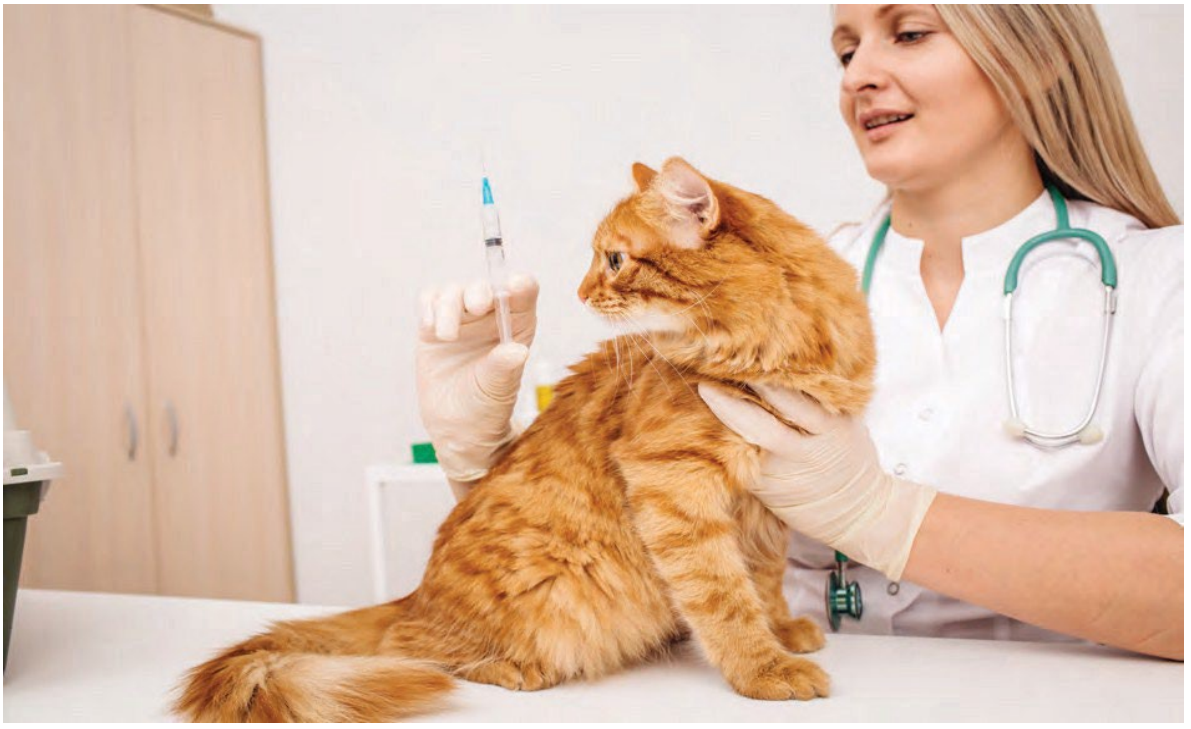
Knowledge of basic first aid is very helpful, but caregivers should avoid administering non- prescription medications without consulting a veterinarian, as some of these can be harmful to cats. All prescription medications should be obtained from a veterinarian and used as directed for the cat for whom they were prescribed. Records must be kept for all treatments and medications administered.

For sick, injured, or compromised cats who are not showing improvement, caregivers or managers must obtain veterinary advice on appropriate care and treatment or promptly arrange for euthanasia.

Figure 3.4.1 can be used as a guide when deciding whether a cat requires urgent veterinary care, but if there is any doubt, it is preferable to seek care.

Dental disease, regardless of severity, can be painful, and is more common in certain cat breeds. Cats showing signs of dental problems must be examined and treated by a veterinarian. Only veterinary professionals are qualified to perform dental procedures, including cleaning.

The owner or manager must ensure that emergency medical plans and contact information are part of the health care protocol, and that caregivers have access to this information.



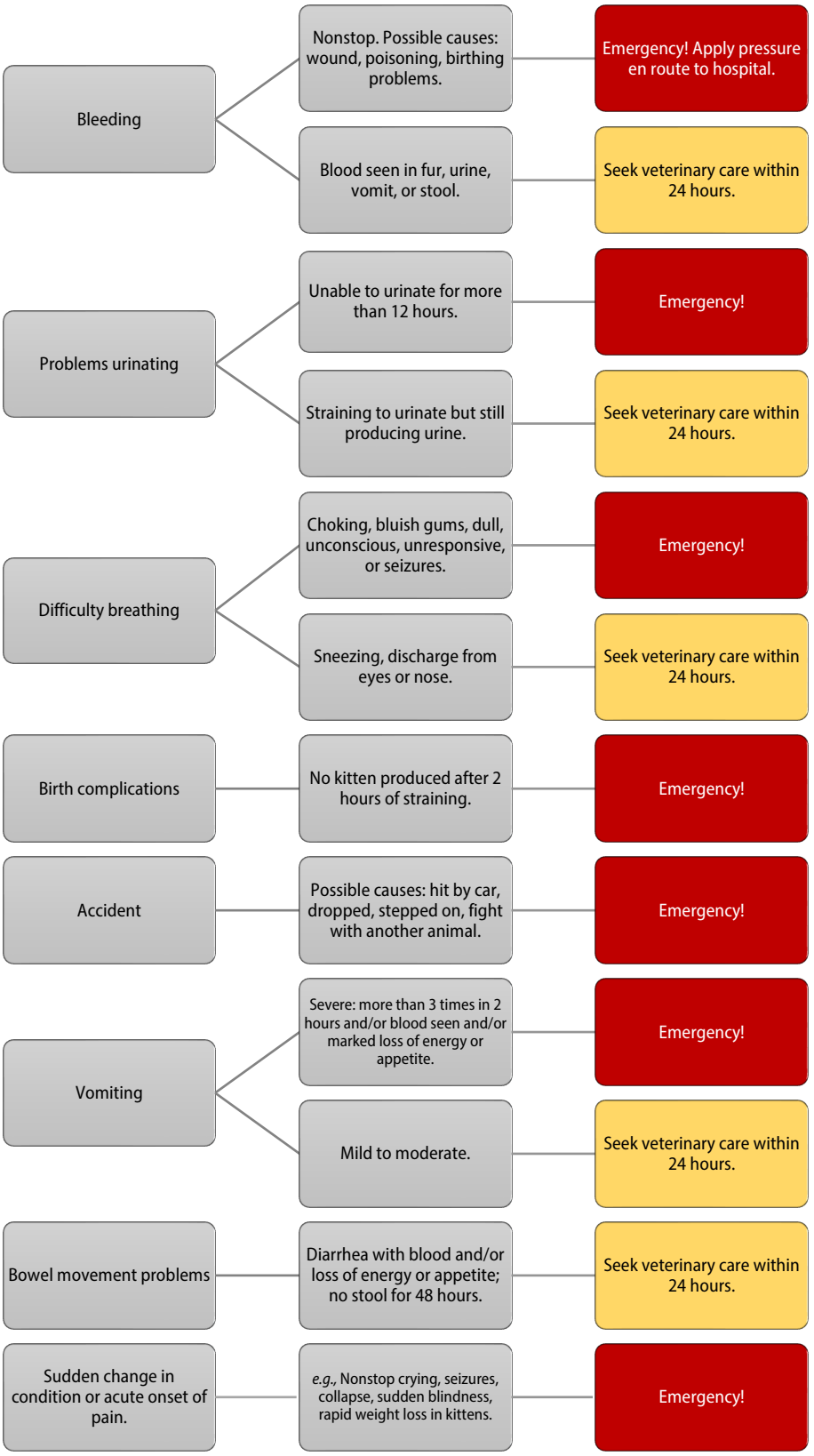


Figure 3.4.1. Symptoms Requiring Urgent Veterinary Care.

3.5 Common Parasites and Infectious Diseases

The following are relevant and common infectious diseases and parasites reported in Canadian cats who are group housed. An extensive list is not provided here. Consultation with a veterinarian is required before any diagnosis can be made.

Parasites

- External: fleas, ticks, ear mites, mange mites: Cheyletiella, Demodex.
    - Fleas can transmit other parasites such as tapeworms and Bartonella, and cause anemia in severe infestations. Flea bite allergy is a common cause of skin disease.
- Internal:
    - Worms: roundworms, hookworms, tapeworms, heartworm
        - Several broad spectrum antiparasitic medications are available and provide cross- protection. Some parasite eggs, e.g., *Toxocara* (roundworm) are resistant to common disinfectants, underscoring the need for regular deworming.
    - Protozoa: Toxoplasma, Giardia, Tritrichomonas, Coccidia, Cryptosporidium.
        - Toxoplasma, Giardia, and Cryptosporidium are potentially zoonotic. Cats may not show symptoms, illustrating the need for regular diagnostic testing and robust hygiene protocols.

See Appendix F for more information including control guidelines.

Viruses

- Feline Herpesvirus, Feline Calicivirus, Feline Panleukopenia, Rabies, Feline Leukemia, Feline Immunodeficiency Virus.
    - Vaccines that help prevent infection are available for many of these viruses.
    - Feline Herpesvirus and Feline Calicivirus are common causes of respiratory infections.

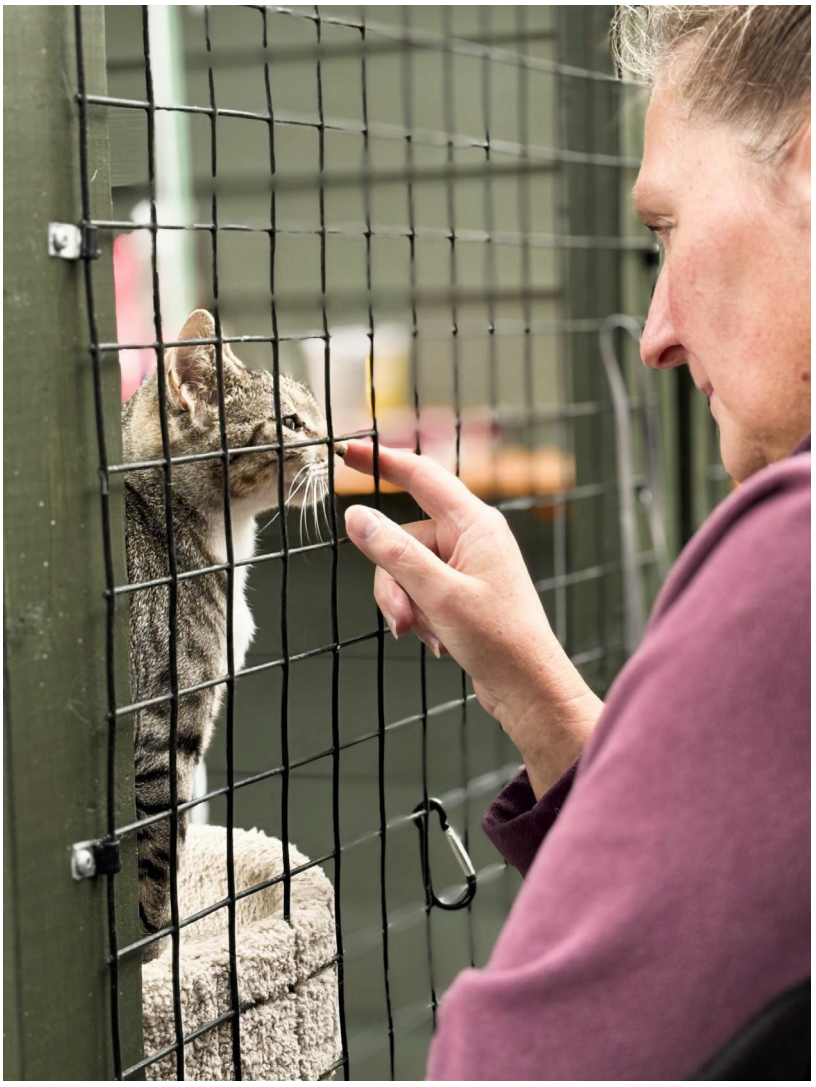
See Appendix F for disease fact sheets and reliable information on upper respiratory infections.

Bacteria

- *Chlamydophila felis, Bordetella bronchiseptica. Bartonella, Salmonella, Mycoplasma.*
    - Bordetella and Mycoplasma are common causes of, or contributors to, respiratory infections.

Fungi

- Ringworm species *(Microsporum sp., Trichophyton sp.)*
    - Very common cause of skin disease, easily transmitted by shared inanimate objects
    - Some species are zoonotic.



REQUIREMENTS

3.1 Cat caregivers must have a valid veterinarian-client-patient relationship (VCPR) with a licensed veterinarian.

3.2 A health care protocol for all cats must be in place.

3.3 The facility operator must ensure that emergency medical plans and contact information are part of the health care protocol, and that caregivers have access to this information.

3.4 Medical records must be kept for every cat.

3.5 Cats who are sick, injured, or in pain must receive appropriate treatment without delay or be euthanized without delay.

3.6 For sick, injured, or painful cats who are not responding to treatment or showing improvement, managers or caregivers must obtain veterinary advice on appropriate care and treatment or promptly arrange for euthanasia.

3.7 Cats showing signs of dental problems must be examined and treated according to a veterinarian's recommendations.

3.8 Catteries must have isolation facilities which meet the same standards according to a veterinarian's recommendations.

3.9 Cats in isolation must be provided the same level of care as those in the general population.

3.10 Cats with severe infectious disease must be separated from the general population.

RECOMMENDATIONS

- All cats should have their environmental needs met to reduce stress and promote health.
- A veterinarian should visit the cattery at least annually.
- All cats should receive wellness examinations and be vaccinated on a schedule determined by a veterinarian.
- Prophylactic parasite medication should be given to all cats, including kittens.
- All incoming cats should be tested for FeLV/FIV and be vaccinated before arrival.
- All newly acquired and significantly ill cats and kittens should be quarantined in an isolation facility.
- Queens and kittens should be segregated until kittens are vaccinated.
- Caregivers should receive training about zoonotic diseases and should notify managers if bitten, scratched, or diagnosed with a zoonotic infection.
- Caregivers should seek immediate counsel or care from a physician if bitten or scratched or when showing clinical signs indicative of a zoonotic infection.

4. CARE - NUTRITION AND FOOD MANAGEMENT

4.1 Food and Feeding

4.1.1 Food

Cats are obligate carnivores. Their nutrient requirements differ from omnivores such as dogs. Inadequate quantity or quality of food can result in malnutrition, reduced immune function, and disease. For example, the essential amino acid taurine comes only from meat products. Cats fed a diet deficient in taurine can develop heart problems, blindness, low fertility, stillbirths, malformations, and growth problems.

Nutrient requirements and quantities vary with life stage, activity level, environmental conditions, and state of health. Nutritional needs are best met by feeding a commercial balanced life-stage formulation, as canned (wet) or dry food, or both. Pet foods labelled for dogs or for both cats and dogs are not suitable and can be harmful.

It is very difficult to consistently meet the nutritional needs of cats with homemade diets and not possible with vegetarian diets, which are not recommended. Similarly, feeding raw food is strongly discouraged, both from a nutritional standpoint and for the risk of contamination, which can pose a health hazard to cats and to those who prepare the food. Unless directed by a veterinarian, dietary supplements or additions are not recommended, as they can unbalance the carefully formulated ration. For more information see Appendix G and Appendix E (life stage and environmental needs guidelines).

4.1.2 Storage and Handling

Food must be fresh to provide safe and optimal nutrition, so expired food must never be fed. If not stored in its original packaging, the storage container should be labelled with the type of food and expiry date. New food should not be added to the container without using up the entire contents, otherwise spoilage may occur at the bottom. In all situations, food must be stored in an enclosed clean, dry, leak- and pest-proof location to prevent spoilage and contamination.

Canned food is particularly prone to spoilage. It should always be refrigerated once opened and fed within 2 days. Once fed, if not consumed within 30 minutes, it should be discarded.

Feeding dishes must be in good condition and kept clean. Materials such as metal, ceramic, and glass are preferred over plastic, as plastic has been linked to acne and other skin conditions in some cats. Most cats prefer wide, shallow dishes to avoid their whiskers touching the sides. The use of a dishwasher is an effective way to clean and sanitize dishes (see also Section 6 Sanitation).

4.1.3 Feeding

The three main nutritional life stages of cats are kitten, adult, and senior. Breeding cats will have additional needs while pregnant or nursing. The goal of feeding cats is to maintain a lean body mass and to ensure a healthy growth rate for kittens. Using the WSAVA Body Condition and Muscle Condition Scores is helpful (see Appendix E).

When changing diets, the transition should be done gradually over 7 to 10 days to prevent gastrointestinal upset.

Treat intake should not exceed 10% of the cat's total daily energy requirements to prevent obesity and avoid unbalancing the overall diet.

For the first 3 to 5 weeks of their lives, kittens are entirely dependent on the queen for their nutritional needs. Kitten food can be introduced at 4 weeks by offering small amounts mixed with warm water to make a gruel. Kittens should be fully weaned (i.e., no longer nursing and acquiring all of their nutrition from kitten food) by 8 weeks of age and should be fed a kitten food until they are 1 year old. Offering weaned kittens both canned and dry food of different shapes and flavours encourages them to accept differing textures as adults.

Most adult cats should be fed "adult" cat food. Pregnant and nursing queens have much higher nutritional needs, which can be met by feeding a diet labeled for kittens or for "all life stages" throughout pregnancy until kittens are weaned.

Metabolic energy requirement (MER) of the cat starts decreasing at 11 years of age due to a decrease in muscle mass as well as possible reduction in activity levels; fewer calories are required at this time. Cat foods labeled "senior" or "mature" account for these changes and can also be chosen for overweight cats older than 7 years. Very old cats have an increased MER and a decreased ability to digest protein and fat. These cats, therefore, need more of these critical nutrients and a calorie dense diet. Cats with certain health conditions have nutritional requirements which are best met with a prescription diet, under the direction of a veterinarian.

4.1.4 Feeding Methods

For cats to thrive, it is not just what is fed, but how it is fed that is important. Recognizing the innate nature of these highly intelligent creatures can prevent many behavioural and medical problems. Cats should be closely observed to ensure they are eating and weighed regularly to help maintain good body condition (see also Section 2.6 Health Monitoring: Recognizing Ill Health, Injury, or Disease).

Cats have evolved as solitary hunters and are adapted to eat multiple small, frequent meals. Automatic feeders, which allow multiple small meals to be fed daily, while ensuring portion control, is one way to meet this need. However, cats also have the instinctual need to hunt; therefore, making them work for their food with indoor hunting devices and puzzles helps to alleviate boredom and stress (see also Section 2.4 Behavioural Health and Mental Well-being).

Overeating can lead to obesity, which can cause difficulty grooming, and lead to health problems such as diabetes, arthritis, and lower urinary tract disorders. Obesity needs to be very carefully managed, preferably under the guidance of a veterinary professional. Imposing overly aggressive weight loss programs in cats can cause hepatic lipidosis in cats, (fatty liver syndrome) which can be life threatening.

Although cats can be socially gregarious, most prefer to eat alone. Feeding cats in a group can cause stress and competition for food, which can result in problems ranging from aggression to cystitis. Caregivers should provide food in secluded spots; these may include elevated surfaces, such as shelves. Multiple bowls and food puzzles should be located in separate locations to accommodate the cats' preferences.

As most cats are fastidious, consideration should be given to the location of the litter box, with food and water dishes placed as far away as possible from it, and from each other.

4.2 Water

Cats originated from arid semi-deserts and have a poor thirst drive. Cats that do not drink enough are prone to many medical conditions such as urinary tract crystals, constipation, dehydration, and inappetence. Caregivers should observe cats at least once daily to ensure they are drinking enough. Caregivers need to know how to recognize signs of ill health. Feeding canned food can be a supplementary water source.

4.2.1 Water Quality

At all times cats must be provided with water which is clean, fresh, safe, and at an acceptable temperature. Unless water is known to be safe for human consumption, it should not be offered to cats.

4.2.2 Water Systems

Water bowls should be in good condition and kept clean. As with food bowls, metal, ceramic, or glass may be preferable to plastic, and should be wide and shallow. Many cats enjoy flowing water, such as from a water fountain.

4.2.3 Water Availability and Accessibility

Caregivers can encourage cats to drink by providing multiple types of water bowls in different locations to accommodate their preferences. Placement and number of water bowls should be adequate to avoid competition and be distant from litter boxes. Bowls must be easily accessible to cats that have limited mobility, such as heavily pregnant or geriatric cats, yet safe from access by very young kittens.

4.2.4 Water Bowl Cleaning (refer also to Section 6 – Sanitation)

Water bowls should be kept visibly clean and disinfected before use by different cats or groups of cats. Usually this requires cleaning and refilling daily. As with food dishes, use of a dishwasher is an effective way to clean and sanitize bowls.

REQUIREMENTS

4.1 Cats must have daily access to good quality, nutritionally balanced food in quantities that meet their physiologic needs.

4.2 Cats must have unrestricted access to safe, clean drinking water at an acceptable temperature.

4.3 Cats must be monitored daily to ensure they are eating and drinking adequately.

4.4 Cats must be offered food and water in a manner that minimizes competition with other animals.

4.5 Cats must never be fed expired, spoiled, or contaminated food.

4.6 Food containers must be covered, protected from pests and moisture, and properly labeled.

4.7 Food and water dishes must be in good condition, kept clean and easily accessible.

4.8 Canned cat food must be refrigerated once open to prevent spoilage and fed within 2 days.

RECOMMENDATIONS

- Use feeding toys and various feeding methods to encourage hunting and foraging behaviours.
- Maintain cats in an ideal body condition (see Appendix E).
- Make any changes in diet slowly.
- Offer two or more food and water bowls per cat in varying locations to provide choice.
- Offer weaned kittens both canned and dry food of different shapes and flavours to encourage them to accept differing textures as adults.
- Discard uneaten canned food 30 minutes after being offered for consumption.
- Replenish bowls with fresh water at least once a day.
- Clean food and water containers daily.
- Locate food dishes at least 2 feet (0.6 m) from litter boxes and resting areas.

5. CARE - ACCOMMODATION AND HOUSING

The facility's organizational purpose (i.e., shelter versus breeding catteries) will guide decisions regarding facility size, design, housing style, and capacity. All facilities must have adequate capacity to prevent overcrowding and allow for proper care. When the premises are overpopulated, alternative accommodation strategies need to be considered, such as fostering programs.

Optimal housing provides adequate space and shelter, with sufficient light, low noise levels, and an environment that is comfortable with no extremes in temperature and humidity.

The American Association of Feline Practitioners describes 5 pillars of a healthy feline environment (see Appendix HAAFP Environmental Needs Guidelines):

1. Provide a safe place.
2. Provide multiple and separated key environmental resources: food, water, toileting areas, scratching areas, play areas, and resting or sleeping areas.
3. Provide opportunity for play and predatory behavior.
4. Provide positive, consistent, and predictable human–cat social interaction.
5. Provide an environment that respects the importance of a cat's sense of smell.

Increased lengths of time spent in a group housing facility and smaller-sized cat enclosures may be associated with medical and behavioural problems. Reducing the risk of disease transmission, injury, and distress will have a positive impact on individual and overall cat health and welfare within the facility. In all facilities, the health and welfare of the cats should be central to housing design and management decisions.

5.1 Housing Environments

Facilities may consist of several housing environments, from cages to home-like environments. A primary enclosure is a cage or equivalent where the cat spends most of their time and a secondary enclosure is the room in which the cage is situated and/or an area where the cat spends a portion of their time (such as an outdoor enclosure or play area). Some important considerations for the design of all housing environments are safety, security, hygiene, provision of resources, and opportunities for enrichment (see also Subsection 2.4.1 Enrichment).

Safety, security and hygiene

- Primary enclosures should be escape-proof.
- Surfaces, including bedding, should be made of materials that can be cleaned and sanitized.
- Health monitoring and sanitization protocols should consider caretaker and cats safety and operational efficiency. Some considerations are:
  - Cages raised off the floor to avoid caretaker bending and to provide ease of viewing.
  - Use of walk-in enclosures and double compartment cages which are easily cleaned without the need to disturb cats.
  - Observation without entry into enclosures using windows, bars, or cameras.

Resources and enrichment

Housing should provide:

- An adequate number and proper distribution of resources (litter boxes, food, and water bowls, scratching posts, and enrichment items). Litter boxes must be placed as far as possible from food and water dishes and situated to allow for ease of access and proper posturing for elimination (see Appendix B Recommendations for more detail on litter boxes).
- A variety of appealing places to rest and hide.
- At least one area in which caretakers can observe the cats without disturbance and from which the cat can see outside their enclosure.
- Access to vertical space, e.g., provision of perches, shelves, climbing, and exercise apparatus. Providing vertical space is also important to optimize comfort, facilitate elimination behaviours and allow observation of areas outside the enclosure for mental stimulation. Preferably, cats should be able to stand on their hind legs and fully extend their front legs without touching the ceiling of a cage-type enclosure.
- Multiple opportunities for enrichment: supplying such things as toys, food puzzles, cat trees and catnip; provision of social time with other cats and humans (see also Subsection 2.4.1 Enrichment).

5.1.1 Welfare Elements of Housing

Some elements of housing can have a significant impact on a cat's welfare. Assessment of housing is an important part of an overall welfare assessment (see also Section 2.8 Welfare Assessment). Table 5.1 provides an objective way to conduct such an assessment by assigning scores to the elements of housing that most affect welfare. The scores are weighted according to the strength of that effect. For example, housing that provides group accommodation has a score of +5 which means it has a strong positive effect on welfare. An evaluation is done by observing the cats in their environment, noting the setup, what is provided, and how they use their space.

A score for each of the elements in the table is assigned, and the scores are added to determine the overall score. A score of 10 or more is sufficient, whereas a score of less than 10 requires that action be taken to address the deficiency.

Elements of Housing		Weighted score	Score
Provision of optimal floor space	Condo*	0	
	Cage	-1	
	Room	+1	
Provision of optimal vertical space	Condo, full height	0	
	Cage or ½ height condo	-1	
	Room, no climbing space	0	
	Room with wall shelves	+1	
Escape-proof	Yes	0	
	No	-2	
Group accommodation	Yes	+5	
	No	0	
Provision of food enrichments	Food dispenser toys	+1	
	Variety of food textures	+1	
	Interactive training	+1	
Presence of enrichment items	Toys, cat trees, scratching posts, hiding places, catnip	+1 each	
Ability to choose to be separate from other cats	Yes	0	
	No	-1	
Episodes of physical activity	Walking, running, jumping, climbing	+1 each	
Episodes of monopolizing resources and cornering	No	0	
	Yes	-5	
Sufficient = 10+ Insufficient<10		**TOTAL SCORE**	

Table 5.1. Welfare Elements of Housing: Housing Evaluation[9].

**Condo: multilevel or multi-compartment cage*.

5.2 Housing Systems

5.2.1 Housing Animals

Housing systems include indoor systems with or without outdoor access. Outdoor enclosures must not be used as the sole accommodation. Cats may be housed alone or with others, depending on their sociability and the situation.

5.2.2 Single versus Group Housing

Cats living freely together in one space and cats housed in separate cages within the same room are considered to be group housed. Disease control is more difficult when cats are group housed, so the risk of contagion needs to be weighed against the potential social benefits of this housing system.

When cats amicably co-exist, they may be housed together, recognizing that single housing may be preferred for some cats. Breeding catteries must provide specialized housing for toms and breeding queens with kittens. All establishments also must make provisions to isolate and quarantine cats (see Subsection 3.3.1 Isolation and Quarantine).

[9] Modified from Université de Montréal Grille d'évaluation de l'hébergement des chats. Used with permission.

5.2.3 Indoor Group Housing

Cats may benefit from being housed in groups to satisfy their social needs. In general, many cats tend to do best in small, stable groups. Close observation is required to ensure that cats are amicably co-existing and are not under a constant state of stress. Signs that cats are coping well include play, mutual grooming, and sharing beds (see also Section 2.8 Welfare Assessment).

5.2.3.1 Size of Enclosure

Group housing must provide a minimum of 1.7 m2 floor space per cat and be at least 76 cm high.

5.2.3.2 Multiple Resources

To prevent conflict, it is important to provide an adequate number of individual resources placed such that all cats who are sharing a space always have access to any resource. Cats may engage in a form of resource-sharing, in which resources are used at different times to avoid confrontation. However, in general, there should be as many litter boxes, hiding places, and elevated resting places as the number of cats, plus one.

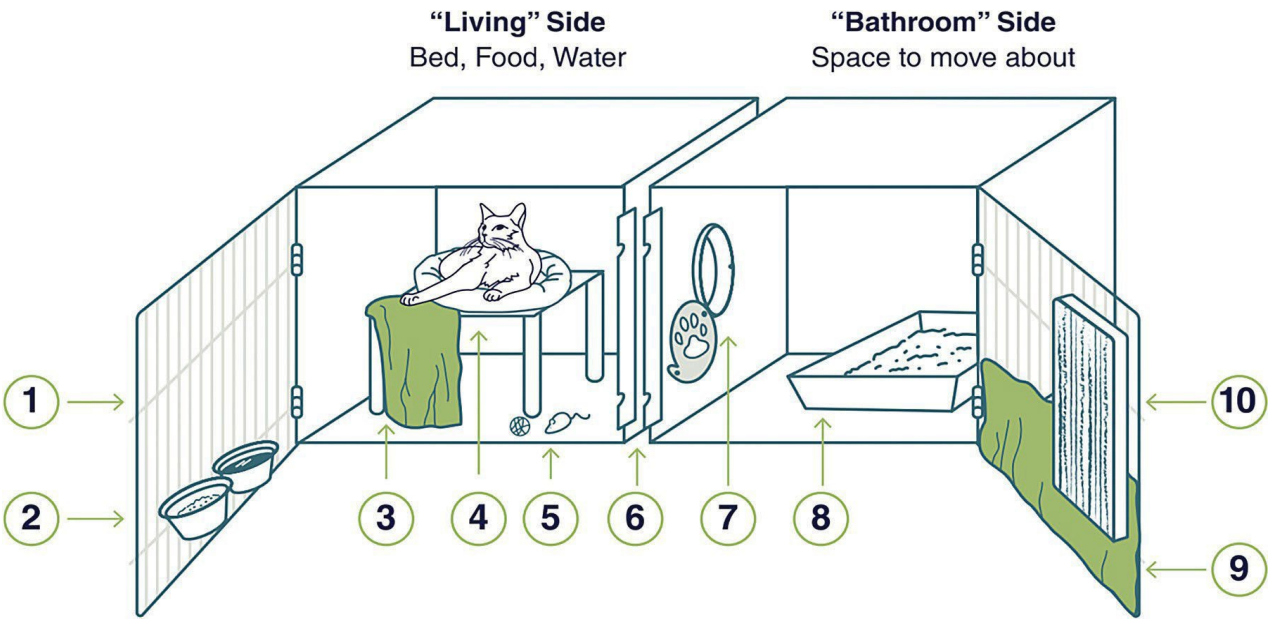
In breeding catteries, queening areas must be separate from the rest of the cattery. Queens require a tranquil, warm, and non-drafty place to birth and raise their kittens. Other aspects to consider:

- Newborn kittens are not able to regulate their body temperature for the first 3 weeks of life, so extra heat may be necessary. If supplementary heat is provided, care needs to be taken to ensure that kittens are protected against thermal burns, and that humidity remains within acceptable levels.
- Young kittens are highly susceptible to infectious disease, so particular attention to sanitization is extremely important.
- Cleaning supplies, waste receptacles, replacement bedding and other items necessary to care for the queen and kittens should be kept in or near the queening area but away from direct contact with the cats.
- The area should allow for close, frequent observation without disturbing the queen and kittens.
- The queen's food and water dishes and litter box should be located safely away from the kittens.

5.2.4 Indoor Single Housing

Single housing may be preferred for cats who are aggressive, fearful, or stressed when group housed. Cats that require close monitoring, are ill and/or require treatment may benefit from single housing. Single housing used for isolation and quarantine is discussed in Subsection 3.3.1 Isolation and Quarantine

Single housing must provide a minimum floor space of 1 m2 and be at least 76 cm high. Every unit must include food and water dishes, a litter box, a scratching post, a hiding place, bedding, and at least one enrichment item. Resources must be placed so that the cat can access them easily while retaining as healthy an environment as possible. For example, litter boxes should be placed as far away as possible from feeding and resting areas, and away from low, overhanging shelves. See Figure 5.2.1 Indoor Single Housing Setup.



1. **Open bars**
   - Interaction
   - Ventilation
2. **Food and water**
3. **Draped towel**
   - Hiding place
   - Interaction choice
4. **Raised bed**
   - Soft resting place
   - Retreat space
5. **Toys**
6. **Quiet latches and hinges**
7. **Portal**
   - Ease of daily care
   - Separation of spaces
   - Open except during cleaning
8. **Litter box**
   - Full size
   - No shelf above
9. **Partial cage cover**
   - Retreat space
   - Interaction choice
10. **Scratching material**

Figure 5.2.1. Indoor Single Housing Setup[10].

Other considerations for single housing:

- Double compartment housing with a pass through or portal has several benefits over single compartment housing. It allows cleaning of one side of the enclosure without disturbing the occupant. It also allows for wide separation of resources along with provision of a more stimulating environment with more opportunities for exercise (particularly if the orientation is vertical),
- Provision of a variety of places to inhabit such as hiding places, elevated perches, and free space, which gives cats choice and control over their environment,
- In breeding catteries, toms must be housed separately from intact queens to prevent unwanted pregnancies.

[10] Used with permission. https://jsmcah.org/index.php/jasv/article/view/42/19

Some considerations for tom housing are:

- Situating tom housing away from queens in heat and other toms to minimize frustration,
- When used as the breeding area, housing must be large enough not only to accommodate the tom but also the queen (minimum size 3.4 m^2) and include separate resources for each cat,
- Inclusion of at least one easily accessible elevated perch or shelf for retreating after mating,
- Recognition that toms frequently mark their territory. Some toms can be trained to use “spray stations,” i.e., a litter box placed vertically at 90º to a horizontal litter box. This can help manage odours by making cleanup easier. For more information, see Figure 5.2.2 Examples of Spray Stations for Tom Cats, and Appendix H.

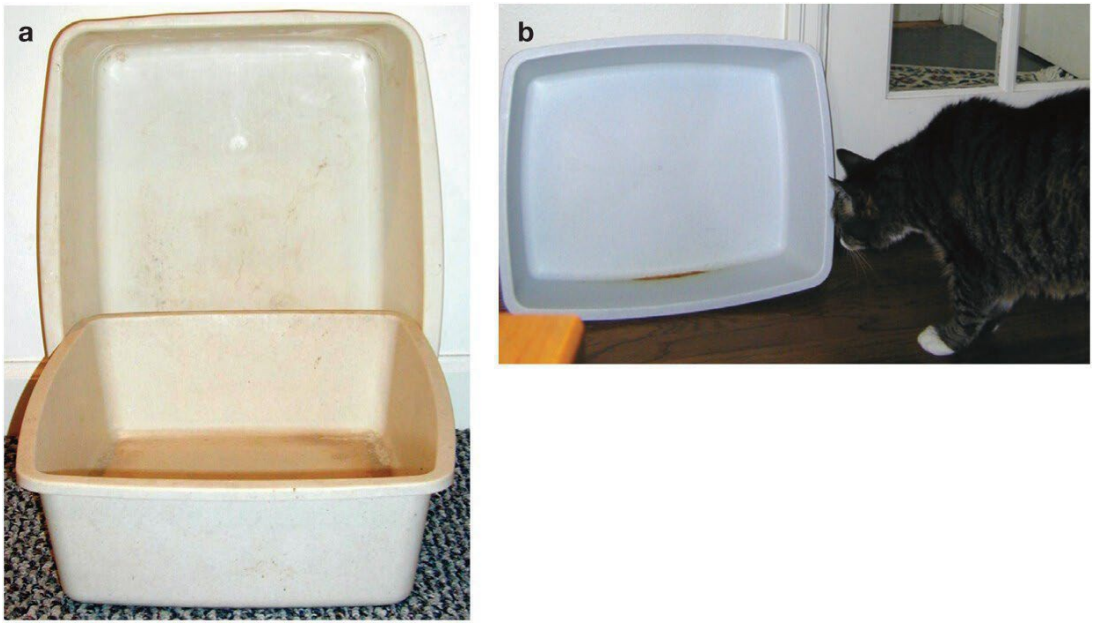


Figure 5.2.2 Examples of Spray Stations for Tom Cats.[11]

[11] Used with permission. https://journals.sagepub.com/doi/10.1177/1098612X19831203

5.2.5 Outdoor Housing

Enclosed outdoor access may allow a cat to express normal behaviours, provide natural light, extra living space, and a stimulating environment, but it also may increase the risks of escape, injury, parasitism, and infectious disease. Outdoor enclosures can provide an opportunity for social interaction and play and offer less social cats a quiet yet interesting place to spend time on their own.

In Canada, winter weather conditions are too harsh to allow for establishments to provide only outdoor housing. Design of any outdoor enclosure will be dependent on the primary design of the facility. A range of creative designs is possible for such housing, e.g., cat patios (catios') fitted to a window or door; runs connected to the primary enclosure and freely accessible with a cat flap; and even complex elevated tunnels. The enclosures may be furnished with various items, such as large tree branches, freely spinning exercise wheels, ramps, perches, and hiding places.

Safety and prevention of escape is vital. The enclosure must be designed and constructed well enough to prevent injury or escape (see also Section 5.3 Buildings). Cats must never be tethered as a means of confinement, or as a substitute for proper construction.

Outdoor enclosures must include shelter from the elements, which in many cases is a roof that covers the entire enclosure as well as an enclosed wind- and rain-proof space. Reasonable judgement should be used when allowing cats access to outdoor enclosures. Cats must not be left outdoors for long periods without periodic supervision. Consideration also must be given to the weather and access to resources, especially water bowls and litter boxes.

Outdoor access may not be suitable for all cats, such as those who are ill or injured, recovering from recent surgery, unable to cope with the weather, or who are very fearful. Although some cats may overcome their initial fear, they should not be forced outdoors if they clearly find the outdoors too stressful.

5.3 Buildings

5.3.1 Design, Materials, and Construction

The design, choice of materials, and quality of construction are core elements which have a direct impact on the health and well-being of resident cats. For rescue agencies and adoption centres, the design of the facility will contribute to the efficiency of operations and contribute to public awareness and confidence. This in turn may encourage cat fostering, adoption, or purchase.

Facilities must meet provincial and municipal construction requirements. In all areas where cats are housed, premises must be constructed of impervious, sanitizable, non-toxic material. Facilities must be designed to prevent escape or allow intrusion of vermin; they must be kept in good repair. A vermin control program must be in place.

Flooring in primary enclosures must be smooth and solid. Wire or slatted flooring is unacceptable. Cages, crates, or kennels designed for travel or short-term use must not be used as primary enclosures.

5.3.2 Heating, Ventilation, Cooling, Humidity

Air flow, temperature, and relative humidity are three very closely linked environmental factors that, if well managed, can positively contribute to cat health and welfare. Drafts, extremes in temperature, low and high humidity are detrimental to cats of all ages and promote respiratory disease. Heating, ventilation, and air conditioning (HVAC) are life-support system components, but even the most well- designed and operated systems are not substitutions for poor facility management, sanitation, and population management. It is essential that a facility's HVAC and air distribution systems be designed to meet the requirements for cat comfort and disease prevention. The indoor premises must be maintained at 18 to 26.6ºC and the relative humidity must range between 30 to 70%.

Air flow patterns (unobstructed supply and exhaust and avoidance of cross- circuiting) and room air pressures are critically important to effectively limit the spread of infectious disease, minimize airborne allergens, and manage odours and gases (ammonia and carbon dioxide). Recirculation systems may contribute to the spread of contaminants as well as bacteria, viruses, and moulds. The HVAC system must therefore provide a minimum of 10 to 20 fresh air changes per hour to ensure cat and caretaker comfort. In the absence of a centralized system, air exchanges can be accomplished by judicious use of exhaust fans, as well as open but screened windows and doors. The use of air purifiers can assist with maintenance of air quality but do not substitute for an effective HVAC system or other air exchange system.

The HVAC system must be monitored regularly to ensure optimal performance and be capable of being adjusted to respond to prevailing external and internal environmental conditions. An emergency power supply mitigates the risk of HVAC failure. On occasion, additional ventilation, heating, or cooling support may be required; a facility should have heaters, supplementary exhaust fans, and portable air conditioning units available for this purpose.

Although a cat's thermoneutral zone is 30 to 38ºC, many cats can tolerate a range of ambient temperatures if they are dry, protected from harmful drafts, have adequate bedding material, and are given time to adjust to the temperature (macro- and micro-environment). Consideration should be given to factors such as breed, conformation, age, and overall health. Strategies tailored to individual cat needs should be in place (blankets, ice treats, relocation).

Cats benefit from the opportunity of moving towards and away from warm spaces; this allows them to regulate their body temperature. Operator awareness that environmental temperature is influenced by sunlight, shade, insulation, ventilation, heating, and cooling will enable optimization of environmental management.

5.3.3 Plumbing

5.3.3.1 Safe Drinking Water

Fresh, potable water (i.e., safe drinking water) must always be available in sufficient quantity and locations to meet the needs of the number of cats housed in an enclosure. Drinking water should be periodically tested for potability unless it is provided from a municipal water supply.

5.3.3.2 Sewage - Septic or Municipal Systems

Sewage systems should have the capacity to handle the liquid waste associated with cat care, including all wastewater from cleaning and laundering. Solid biological waste (soiled litter) should not be composted, as it presents a risk of zoonotic disease. It should be collected in garbage bins and disposed of through a municipal waste collection system. If a municipality will not accept animal waste, an alternative waste disposal service provider must be identified (see also Section 6 Sanitation).

5.3.3.3 Drainage (Slope, Drain Size, and Servicing)

Effective drainage will allow removal of liquid wastes from housing rooms and facilitate sanitization. Key elements for effective drainage include slope to drain, drain size, in-drain waste collection baskets, clean-out ports for regular servicing, and drain covers designed and located to prevent cat toes and claws from being caught. In-drain waste collection baskets need to be regularly inspected and cleaned to remove solid waste to maintain flow.

Both indoor and outdoor housing systems should be designed and maintained to ensure there is no standing water.

5.3.4 Power and Lighting

The supply and distribution of power must be sufficient to support operations and be in accordance with provincial electrical building codes. Emergency power is required for all critical function systems. All outdoor outlets must be ground fault circuit interrupter (GFCI) outlets or equivalent, preferably with weatherproof covers. Interior power outlets near water sources also must be ground fault interrupter outlets to prevent electrocution. Outlet multipliers are not substitutes for a proper power distribution system. When an extension cord must be used, it must be sized in keeping with the power requirements of the device it is supplying and be hidden from the cats to ensure their safety.

5.3.4.1 Lighting - Spectrum, Photoperiod, and Intensity

Proper lighting is important for a comfortable, effective, and safe facility. Lighting should ensure that all areas of the premises can be clearly viewed and promote a safe working environment. Although natural lighting is preferred, this is not always possible. Sunlight can increase ambient temperature, and when cats cannot move away from a hot space, care needs to be taken to ensure that an appropriate temperature is maintained in the cat enclosure.

When artificial lighting is necessary, it should approximate the natural light spectrum, photoperiod (day length) and intensity for cats to experience a natural circadian rhythm. This is particularly important for breeding cats. The premises must provide a minimum dark period of 8 consecutive hours to allow cats to rest. When darkness cannot be provided in cat housing areas, cats should have access to a dark enclosure within the housing unit.

5.3.5 Alarm Systems

Alarm systems must be in place (e.g., fire, carbon monoxide, ventilation, and other critical function systems) and meet municipal, provincial, and federal requirements. Silent or strobe alarms address noise-related distress. An emergency response plan (including an evacuation plan) must also be developed to guide operators and their staff in how to respond to any alarm-triggering event (see also Section 9 Emergency Management).

5.4 Noise, Vibration, and Odours

5.4.1 Noise

Cats have very sensitive hearing compared to humans with a range of 48 to 85,000 Hz (humans: 20 to 20,000 Hz). The sound of animals perceived as predators or competition, including dogs and other cats, can cause stress. Many activities can be noisy, such as husbandry chores and use of equipment.

Lowering sound levels helps improve caretaker safety and comfort and particularly the welfare of the most vulnerable cats (breeding cats, queens with kittens, ill cats) so it is best to maintain an environment in which the average sound level is less than 60 dB. Sound can be measured through use of inexpensive validated sound-measuring devices and smartphone applications (see Appendix H NIOSH smartphone app).

5.4.2 Strategies to Reduce Noise

When building or renovating a facility, use materials that optimize sound- dampening. Slow-closing doors, as well as quiet ventilation and heating systems are helpful for this purpose.

Other measures to reduce noise levels include:

- the use of non-metal or rubber-coated dishes, and quiet toys,
- acoustic dampeners on enclosures, cupboard doors, room door silencers, and acoustic panels and baffles,
- keeping doors closed between rooms,
- keeping voices of personnel low,
- situating washing machines and dryers away from cat living quarters.

5.4.3 Odours

Cats possess more scent receptors in their noses than do humans and find some odours aversive. Exposure to aversive odours such as dogs (natural predator of cats), unfamiliar cats, alcohol, cleaning chemicals (e.g., laundry detergent), perfumes, and citrus scents can cause stress in cats. For this reason, unscented products should be used whenever possible. Some scents are pleasing to cats and can be safely used. These include catnip, honeysuckle wood, valerian, and silvervine.

Cats mark their territory and communicate with each other using urine and pheromones. Scent conveys important information to other cats regarding their emotional state, physiologic health, and reproductive status. Odours released by stressed cats or cats in heat may cause behavioural and hormonal responses in other cats.

Conversely, when scent is deposited by a cat, it provides a sense of familiarity and reassurance. For this reason, caretakers should avoid washing all bedding at once, and spot-clean living quarters (see also Section 6 Sanitation). Toms can be provided a “spray box” to contain urine deposited on vertical surfaces to aid in cleaning. Cleaning tom housing quarters to remove all odours and marking will interfere with breeding behaviour.

5.5 Fly, Tick, Vermin Control, and Nuisance Wildlife

Facilities should prevent entrance by insects, birds, and mammals that may pose a risk to the cats, caretakers, and building(s) (see also Subsection 6.1.4 Pest Control). A vermin control program must be in place.

REQUIREMENTS

5.1

Parameter			min/max
Temperature			18 to 26.6°C
Relative humidity			30 to 70%
Ventilation changes per hour			10 to 20
Maximum hours light per day			16
Minimum space per cat	Minimum height		76 cm
	Floor space	Single housing	1 m^2
		Group housing	1.7 m^2 per cat
		Tom housing	3.4 m^2

Table 5.2 Select Housing Requirements.

5.2 All facilities must have adequate capacity to house the resident cats to prevent overcrowding and allow for proper care.

5.3 Single housing must include food and water dishes, a litter box, a scratching post, bedding, a hiding place, and at least one enrichment item.

5.4 Resources must be placed so that the cat can use them properly.

5.5 Group housing must provide an adequate number of individual resources (e.g., litter boxes, food, and water bowls, hiding spaces, scratching posts, and enrichment items), located such that all cats who are sharing a space have access.

5.6 Group housing incompatible cats must not occur.

5.7 Toms must be housed separately from intact queens except during breeding. When tom housing is used as the breeding area, it must include separate resources for each cat.

5.8 In breeding catteries, queening areas must be separate from the rest of the cattery.

5.9 Outdoor enclosures must not be used as the sole accommodation, must include shelter from the elements, and must be escape proof.

5.10 Cats must never be tethered.

5.11 Cats must not be left outdoors for long periods without periodic supervision.

5.12 Facilities must meet provincial and municipal construction requirements including fire safety standards and alarms.

5.13 All areas in which cats are housed must be constructed of impervious, sanitizable, nontoxic material.

5.14 Facilities must be designed to prevent escape and be kept in good repair.

5.15 A vermin control program must be in place.

5.16 Flooring in primary enclosures must be smooth and solid. Wire or slatted flooring is unacceptable.

5.17 Cages, crates, or kennels designed for travel or short-term use must not be used as primary enclosures.

5.18 The HVAC system must be monitored regularly to ensure optimal performance and be capable of being adjusted to respond to prevailing external and internal environmental conditions.

5.19 The supply and distribution of power must be sufficient to support operations and be in accordance with provincial electrical building codes.

5.20 All outdoor outlets and interior power outlets near water sources must be ground fault circuit interrupter outlets.

RECOMMENDATIONS

- Provide a variety of enrichment items (minimum one but preferably several) for example toys, food puzzles, cat trees, cat kittens, and catnips. Access to a window to view the outdoors is enriching and should be provided.
- Provide a number of resources and a variety of places to inhabit including hiding places, elevated perches and open flooring, with the goal of optimizing use of three-dimensional space.
- Provide vertical space so that cats can stand on their hind legs and fully extend their front legs without touching the ceiling of their enclosure.
- Litter boxes should be at least 1.5 times the length of the cat, be kept clean, and should contain at least 3 cm of absorbent litter (preferably unscented). Litter boxes should be left uncovered and should be placed well away from food and water dishes and potential sources of loud noise. A general recommendation is to provide one litter box per cat, plus one. The best indication of a correct litter box condition is consistent use.
- Provide spray stations for toms.
- Provide various housing options and styles to serve the needs of a wide variety of cats, including out-of-cage areas, if possible.
- Provide soft, sanitizable bedding and slip-proof footing.
- Maintain noise levels below 60 dB in all areas that house cats by providing noise dampening materials and manage operations to minimize noise and associated cat stress.
- Provide natural light whenever possible.
- If emergency lighting interferes with darkness and regulatory codes permit, a red- orange light fixture will approximate darkness.
- Photoperiod controllers that permit a gradual decrease of light intensity from brightness to darkness (dusk) and darkness to brightness (dawn) are useful. Individual dimmable light fixtures also are useful to assist with lighting intensity control.
- Enclosures should be larger than the minimum requirements whenever possible, particularly for cats housed long term.

6. SANITATION

Sanitizing is defined as reducing or eliminating pathogens from surfaces by cleaning and disinfecting. A properly sanitized living environment is a necessary component of good animal husbandry. Cats housed in a clean environment with a clean litter box, fresh food, and clean drinking water are healthier and less exposed to infectious diseases. All staff, including volunteers, must be aware of the risks associated with unsanitary living conditions.

Clear and simple written sanitation protocols, ideally created with the help of a veterinarian, must be made available to staff.

Staff should be trained and assessed regularly for their competency and compliance. Protocols must be reviewed and updated regularly to reflect current scientific understanding and legislative requirements, when present.

Ideally, large establishments should have a dedicated staff member responsible for ensuring a sanitary living environment for their animals.

The UC Davis University Koret Shelter Medicine program and Wisconsin-Madison School of Veterinary Medicine provide additional and up-to-date information on population management and sanitation. See Appendix H and I for more information.

6.1 Cleaning and Disinfection

Sanitization of any surface or object has 2 steps: cleaning and disinfection. The Centers for Disease Control and Prevention (CDC) defines cleaning as “using warm water with soap or detergent to remove residual organic matter.” Soaps and detergents act as solvents, and clean by dissolving organic matter. Thorough rinsing is the last step in cleaning.

The CDC defines disinfection as a “process that eliminates many or all pathogenic microorganisms, except bacterial spores, on inanimate objects.” Disinfection may be chemical or thermal. Because organic material significantly reduces the efficacy of disinfectant products, proper cleaning is recommended before disinfection.

Wet surfaces, or those prone to water pooling, are susceptible to pathogen proliferation. For this reason, cleaned and disinfected surfaces must always be dried.

6.1.1 Cleaning Products, Disinfectants, and Safe Storage

Common disinfectants include sodium hypochlorite, accelerated hydrogen peroxide, potassium peroxymonosulfate (e.g., Virkon™) and quaternary ammonium compounds, among others.

Each compound has a recommended concentration, shelf life, stability, safety considerations, disinfectant properties, range of efficacy, suggested contact time, and cost. Even if certain compounds have both cleaning and disinfecting properties, cleaning should be regarded as an essential and separate step before disinfection. It is important to follow the manufacturer's recommendation when preparing a disinfectant and avoid mixing compounds unless specified by the manufacturer. Inappropriate mixing of compounds can lead to a loss of efficacy, or worse, can emit toxic fumes. All cleaners and disinfectants must be properly labeled and dated and stored out of the reach of children, cats, and other animals. Furthermore, spray bottles can create aerosols, which can irritate eyes, noses, and lungs. For this reason, squirt bottles are preferred if this approach is required.

Although the following are common disinfectants that are safe for use in cat facilities when prepared and used correctly, they must never come into direct contact with cats. When in doubt, verify product safety with the manufacturer before use.

1. Sodium hypochlorite (bleach) 5% diluted to 1:32 with water.
    a) No cleaning properties.
    b) Disinfectant properties.
    c) Appropriate against ringworm and viruses such as panleukopenia and calicivirus.
    d) Thirty (30)-day stability when diluted with water and stored in a lightproof bottle.
    e) Unstable when exposed to light or heat.
    f) Inactivated by organic material (hence the importance of pre-cleaning).
2. Accelerated hydrogen peroxide (e.g., Prevail™, Peroxigard™).
    a) Cleaning properties.
    b) Disinfectant properties.
    c) Appropriate against ringworm and viruses such as panleukopenia and calicivirus.
    d) Fast-acting.
    e) Ninety (90)-day stability once prepared.
    f) Active in the presence of organic material.
3. Potassium peroxymonosulfate (e.g., Virkon™).
    a) Cleaning properties.
    b) Appropriate against ringworm and viruses such as panleukopenia and calicivirus.
    c) Fast-acting.
    d) Seven (7)-day stability once reconstituted.
4. Quaternary ammonium compounds (e.g., Clinicide™, Germiphene™).
    a) Cleaning properties.
    b) Limited efficacy for viruses.
    c) Stable once prepared.
    d) Active despite the presence of organic material.

Note: Certain common pathogens such as feline panleukopenia, calicivirus, and ringworm spores are relatively resistant to destruction by contact disinfectants. Careful attention should be paid to the manufacturer's recommendations when selecting a disinfectant.

6.1.2 Sanitation Procedures

A facility must have an appropriate sanitization protocol. A protocol offers a systematic approach to sanitization and limits the likelihood of error or omission. It is a multi-step process that must be performed daily, and can be summarized as follows:

1. Properly identify what is potentially contaminated and needs to be sanitized (e.g., floors, bedding, litter boxes, food trays, water bowls, cages, toys, personal protective equipment, etc.).
2. Select appropriate detergents and disinfectants and dilute them according to manufacturers' recommendations.
3. Use these compounds safely (i.e., wear appropriate safety equipment such as gloves and eye protection if applicable). Use these compounds in a well-ventilated area and avoid creating aerosols as much as possible.
4. Properly remove all visible organic material (e.g., feces, urine, food, fur, vomit, litter, etc.) from surfaces. Use warm water and a detergent as needed. Allow for appropriate contact time.
5. Rinse with clean water.
6. Dry the area with a clean towel or let air dry.
7. Apply the appropriate disinfectant solution to the clean and dried surface as per the manufacturers' recommendations. Respect the appropriate contact time. If required by the manufacturer, rinse with water.
8. Make sure all surfaces are dry before reintroducing items or cats.
9. Cleaning logs and other records should be kept current and made readily available.

Sanitation protocols must list surfaces which are likely to become contaminated. Special care should be given to the order in which the premises are sanitized. Always begin with the cleanest living quarters and end with most contaminated ones. Those of vulnerable animals (e.g., neonatal kittens) should be sanitized first, followed by healthy weaned kittens, healthy adults, cats in quarantine, ending with sick cats in isolation wards.

If cage housing is used, the cages should be equipped with dividers. This permits staff to clean one side of the cage while the cat remains in the other, reducing stress. If compartmentalization is not possible, cats need to be provided with a temporary housing unit, such as a cage or a cage carrier (one carrier per cat), while cleaning products are applied. Carriers should be identified for each cat. The cages and carriers used to hold the cats during the cleaning process should also be cleaned and disinfected after each use.

Where cages are stacked vertically, they should be cleaned from top to bottom to avoid contaminating clean lower cages with debris or liquids from cages above.

Consider spot cleaning when possible. Spot cleaning is defined as cleaning only the soiled areas of a cage or room and is preferable especially if living quarters are clean. It is the most effective approach to cleaning areas where cats are housed together (e.g., a dedicated room). Spot cleaning preserves familiar scents and will reduce stress. It is not necessary to replace a cat's bedding daily so long as it is clean and free from soilage.

Regular and predictable cleaning schedules help cats acclimate to their housing environment. It is imperative to minimize stress during sanitization by avoiding loud noises such as banging dishes and talking loudly, spraying water near cats, and being especially quiet and considerate around queens with kittens. Cats should not be needlessly relocated for cleaning purposes.

When a more thorough deep cleaning is required, cats housed in groups can be temporarily housed in cages or carriers. Deep cleaning is typically required when a group leaves the room and a new group enters, or during a disease outbreak. Cleaning products maust not be sprayed into cages or living areas where animals are present.

When cleaning the facility, the manufacturers' recommended contact time for each compound must be followed. A general recommendation is to allow a disinfectant 10 minutes of contact. For this reason, protocols should budget for no less than 15 minutes daily per cat for proper sanitation. In larger establishments, each room should have its own cleaning supplies to avoid cross-contamination between rooms.

All visible organic material needs to be removed prior to laundering. Washing machines and dryers should be used for towels, animal bedding, and garments (scrubs, lab coats, etc.). Heavily soiled items, or those with unremovable organic material should be discarded. Adding bleach along with laundry detergent can increase the efficacy of sanitization. To avoid cross-contamination, clean laundry should be kept separate from dirty laundry and only handled with clean hands. Dryers are preferable to air drying because they further increase sanitization via heat and desiccation. For home-based catteries, regular household laundry should be handled separately from cattery items.

6.1.3 Fomite Control and Hand Washing

Fomites are objects that can serve as vectors for disease spread. Examples of fomites include water/food bowls, toys, blankets, brushes and combs, staff/visitors' clothing, shoes, hands, and medication delivery devices such as syringes.

Hands are a particularly important source of contamination and proper hand washing technique is essential for disease prevention. Cross-contamination readily occurs when staff members handle a contaminated object or animal, and then unintentionally transfer the contaminants to another object or animal. For this reason, proper hand sanitization should occur routinely (ideally after handling every cat), after handling possible contaminants, upon entry to living quarters, and before leaving any living quarters. Washing stations should be present in every animal housing unit.

Proper hand washing requires that hands be lathered in warm water and soap and scrubbed on every surface for a minimum of 20 seconds, then rinsed thoroughly and dried, using single use paper towels or a clean hand towel. In addition, hand sanitizers should be used following the hand wash if there is significant risk of disease transfer. Alternatively, single use disposable gloves may be worn if hand washing and/or sanitation are not possible or when handling objects that are grossly contaminated.

Hand sanitizers are most effective when hands are free of visible debris. Hand sanitizers should be appropriately labelled, and positioned strategically, preferably close to examination stations and exits. Hand sanitizers should contain 60 to 80% ethanol or isopropyl alcohol. Hand sanitizers are not effective against panleukopenia and ringworm. If these diseases are suspected, disposable gloves and strict isolation of affected animals are required.

Protective garments, such as single use gloves, protective gowns/scrubs/lab coats, and shoe coverings reduce fomite propagation and limit disease propagation. These should be used when hand washing measures are likely to be inadequate, for example during disease outbreaks or when handling sick or vulnerable animals. Protective garments and other objects such as toys that have been in contact with one cat should never be reused for another unless they can be disinfected. If this is not possible, they need to be discarded and replaced.

Special care should be taken before handling vulnerable patients, such as neonatal kittens, unvaccinated cats, immunocompromised patients (i.e., those with FIV/FELV/ Panleukopenia) and otherwise sick cats. Any protective garments should be changed after handling sick or contagious cats and cats with visible lesions, such as ringworm, infected wounds, nasal discharge, etc. (see also Section 2.5 Care and Handling of Animals and Section 2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease).

6.1.4 Pest Control

Pests such as rodents and insects are problematic because they can introduce disease and parasites. For these reasons, housing units should prevent the entry of pests and be kept in good repair. Windows should be equipped with screens, and doors need to be able to seal when closed (see also Section 5 Care - Accommodation and Housing). Stored food is particularly vulnerable to pest infestation. Food should be stored off the ground, in sealed, rodent- and insect-proof plastic or metal containers.

When pest control becomes necessary, products and methods must be used in a way that is safe for cats (e.g., do not allow cats to be exposed to toxic substances such as permethrins or have access to rodent or insect traps).

6.2 Equipment and Facilities

6.2.1 Wash Basins

Wash basins must be kept free of visible debris and carefully disinfected between uses. Each room should be equipped with at least one wash basin, running cold and hot water, and appropriate drainage. Ideally, equipment should be made of non-porous easy-to-disinfect material, such as stainless steel.

6.2.2 Dishwashers

Automatic dishwashers are an excellent part of any sanitation plan. They provide effective mechanical means for removing debris through water turbulence, and can achieve high temperatures, ridding and inactivating many pathogens. Unfortunately, some pathogens such as parvovirus and calicivirus can survive a dishwashing cycle. For this reason, items should be disinfected either before or after washing.

6.2.3 Household Equipment

Many household items can be used for sanitation. When possible, spray bottles should be replaced with squirt-top bottles to minimize aerosolization and thus avoid respiratory issues for both staff and cats. For larger cleaning areas, consider the use of a hose-end foamer adapted to the disinfectant.

Mops and rags should be avoided, if possible. These accumulate organic material which can inactivate disinfectants and cause the mops and rags to act as fomites. If used, mop heads should be washed and replaced frequently.

Pressure washers should be used with caution because they create aerosols and may facilitate the spread of infectious organisms.

Vacuuming is beneficial as it can remove particles from the environment and facilitate cleaning and disinfection. Fur and hair often accumulate in facilities; these can be vectors for the transmission of ringworm and calicivirus.

6.2.4 Caging and Habitats

Cats should be provided with clean and comfortable living quarters that are impervious to water and easy to clean. Cages with rusty or jagged edges are unacceptable as they can cause injury to its occupant (see also Section 5 Care – Accommodation and Housing).

6.3 Waste Management

Waste represents a biosecurity risk if left to accumulate or is inadequately disposed of. Waste containers should be impermeable, rodent- and insect-proof, covered, emptied regularly, and kept clean. Waste bags should be sealed before disposal. Waste disposal must follow municipal, provincial, and federal regulations.

6.3.1 Biological Waste

Cats must be provided with a litter box that is impermeable and easy to clean. Absorbent litter material is required. Sawdust and shredded or intact newspapers are unacceptable.

Litter boxes should have urine and feces removed at least once daily. When spot cleaning is not effective or appropriate (e.g., gross contamination with feces or urine, or before a box is used by another cat) litter boxes should be fully emptied, cleaned, and disinfected. Excrement and urine-contaminated litter should be placed in a properly sealed waste container. Litter boxes and food bowls should be cleaned in separate basins from each other. If this is not possible, then food bowls should be cleaned first. Stainless steel food bowls are the easiest to sanitize because they are non-porous.

6.3.2 Spoiled Food

Spoiled food should be disposed of in an appropriate waste bin to prevent odours.

6.3.3 Biomedical Waste

Biomedical waste such as used needles must be discarded in appropriate sharps containers in accordance with local and provincial regulations.

REQUIREMENTS

6.1 Every facility must have a sanitation protocol which is performed daily.

6.2 Sanitation protocols must be readily available, followed, and regularly reviewed and updated, and list surfaces which are likely to become contaminated.

6.3 All cleaners and disinfectants must be properly labeled and dated and stored out of the reach of children, cats, and other animals.

6.4 Product dilution and use must be in accordance with manufacturer recommendations.

6.5 Cleaning and pest control products and their use must be safe for cats.

6.6 Cats must not come into direct contact with cleaning products or disinfectants.

6.7 Surfaces must be cleaned before they are disinfected.

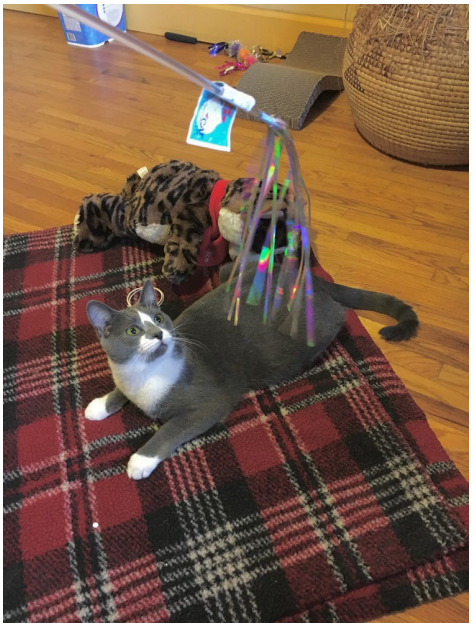
6.8 Disinfected surfaces must be dry before reintroducing animals.

6.9 Facilities must be equipped with appropriate cleaning equipment, such as hot and cold water, wash basin, washer, and dryer.

6.10 Waste (including biomedical waste) must be disposed of in accordance with municipal, provincial, and federal regulations.

RECOMMENDATIONS

- Sanitation protocols should be developed and updated with the help of a veterinarian; these need to be kept current by frequent review with staff.
- Each room should have its own cleaning and disinfectant products.
- Living quarters should be spot cleaned as needed.
- Facilities should be equipped with a dishwasher, washer, and dryer.
- Steam cleaners can also be used.



7. TRANSPORTATION

Whether moving cats over short or long distances, transportation can be stressful. The goal should always be that the cat arrives at their destination in perfect health. As with many aspects of management, personnel transporting cats must have adequate training and experience to recognize and mitigate the impacts of transport- related stressors on the health and welfare of the cats. Several factors need to be considered to safely move cats and avoid stress-related problems.

7.1 Moving Animals within a Facility

Cats should be relocated between housing areas within the premises only when necessary. Cats use scents to mark their environment, and if group housed, establish stable relationships with their familiar cohorts (see also Sections 5.2 Housing Systems and 5.4 Noise, Vibration, and Odours). Being moved to a novel area is often stressful and may lead to behavioral and/or physical problems such as increased aggression, poor appetite, and illness.

Cats should be housed according to health and breeding status (e.g., quarantine, known respiratory or viral infections, queens with kittens) and care should be taken to minimize the risk of disease transmission when moving cats. For example, one should avoid moving a healthy cat through an area that houses cats who are unwell, and cat carriers should be disinfected after use or assigned to individual cats. Caretakers should interact with healthy cats first, and clean and disinfect surfaces and hands between cats (see also Section 6 Sanitation).

If the cat is comfortable being handled, and there is no risk of escaping, it may be carried. If the cat is aggressive, fearful, or needs to be moved to another location within the facility (e.g., another room or building), moving the cat in a carrier is appropriate. Whenever possible, cats should be acclimated to their carrier before attempting to move them. For information on handling cats, see Section 2.5 Caring and Handling of Animals. For information on housing, see Section 5 Accommodation and Housing.

7.2 Moving Animals into or out of a Facility

Most cats will travel multiple times in their lives. It is important for cats to be transported in a manner that ensures their safety and welfare, as well as public safety.

There are federal, provincial, and municipal laws that apply to the transportation of cats, including the federal *Health of Animals Regulations: Part XII: Transport of Animals* (see Appendix J for a link to the document). Caretakers are advised to be fully aware of all applicable regulations in their jurisdictions.

7.2.1 Transport Planning

Planning is essential to prioritize the welfare of cats during transportation. Before the journey starts, it is important to determine that the cat is in good health and that any necessary travel documents are completed (see also Section 2.2 Animal Procurement). Owners must ensure that all relevant health certificates, proof of vaccination, and import/ export documents are complete and available for review by authorities (e.g., border agents, airline agents). For example, for cats leaving Canada, many countries require rabies vaccination and/or titer testing, microchipping, and a health certificate. Parasite control should also be considered before transport, as part of an ongoing preventative care regimen.

Prior to travel, ensure that the travel carrier is appropriate for the cat and is in good repair. It is important that the carrier is of adequate size to allow the cat to comfortably stand up, turn around, and lie down. Care needs to be taken to prevent kittens from being accidently injured by the queen during transportation, including ensuring adequate space is available, or transporting kittens separately from the queen, if appropriate. For air transport, requirements are outlined in the International Animal Transport Association's (IATA) Live Animals Regulations (see Appendix J). For vehicle travel, the safest location for the carrier is in the rear of the vehicle, either on the floor of the back seat or attached to an appropriate restraint device designed for this purpose.

If the cat will be exposed to the outdoors, assess weather conditions before transport. Adequate climate regulation and ventilation are required for the safe transportation of cats in all forms of conveyance. This includes regulation of temperature, humidity, circulating ventilation, and air pressure (specific to air transport). Cats must not be left unattended in enclosed conveyances, even for short periods, when there is a risk of hyperthermia or hypothermia. Determine the fastest and safest route before a journey and provide advanced notification to those accepting the cat at its destination.

For longer journeys, it is recommended that cats be provided with a litter box and water during transport. The litter box should be temporarily fixed in place and be of adequate size to permit the cat to eliminate comfortably. Consideration should be given to cleaning the carrier/litter box if possible. If it is not feasible to provide water during the journey, it should be offered during periodic rest stops and as soon as the journey ends. Routine feeding schedules should be maintained as much as possible.

Visual checks should be done at a frequency that is appropriate for the transport conditions. This ensures that the cat's welfare is maintained and takes into consideration both the cat's tolerance for transportation, as well as the mode of transportation.

7.2.2 Transport-related Stress

Transportation can cause significant stress in cats. It is, however, necessary in some instances, such as for access to veterinary care.

Transportation stressors include:

- handling,
- unfamiliar sights, noises, vibrations, and odours,
- inadequate or excessive ventilation,
- significant temperature changes or extremes,
- proximity to other animals,
- hunger and thirst,
- lack of ability to stretch/exercise, and,
- lack of access to a litter box.

Stressed cats may display physical abnormalities including rapid breathing or panting; an increased heart rate; and inappetence. Cats may become nauseated; this can appear as excessive drooling, lip-licking, or vomiting. Other stress-related behaviours include aggression, persistent vocalizations, clawing, hiding, chewing, excessive grooming, voiding urine or feces, and hyperactivity or shaking. Optimizing travel conditions and limiting the length of travel will reduce a cat's stress. If a cat has previously shown signs of stress when being transported, the use of visual barriers to reduce stressful stimuli may be beneficial (e.g., a blanket over the carrier if appropriate, giving consideration to the potential effect on temperature and ventilation within the carrier). In many cats, transportation stress can be significantly reduced with prior administration of appropriate medication, as prescribed by a veterinarian.

Stressed cats are more prone to illness, which may not present until after transportation is over. Given this, newly acquired cats should be kept separate initially (see Section 2.2 Animal Procurement and Subsection 3.3.1 Isolation and Quarantine).

Transporting bonded animals together may decrease stress during transport, but caretakers need to be mindful that normally compatible animals may become aggressive with each other as a result of the stress associated with transport. Females in estrus should not be transported with other cats and although some toms can co-exist with other toms, it is generally better to transport toms separately. Incompatible animals must be transported in separate carriers.

Conditioning cats to transportation will reduce the likelihood of stress during transport. It is important to ensure that cats have positive travel experiences starting at a young age. It is beneficial to condition cats to riding in both motor vehicles and in transport carriers, as this is the most common mode of transportation for cats. Cat caretakers can condition cats to transport by creating positive associations with their carrier (see Appendix D Resources for further information on this process).

If a cat has an adverse reaction to transport (e.g., vomiting, panting, howling) a veterinarian should be consulted to determine if medications should be considered for future travel.

7.2.3 Suitability and Fitness for Transport

A cat that exhibits any sign of illness, injury or a condition that indicates that it has a reduced capacity to cope with the planned transport should be considered compromised. Caretakers must assess the situation and risks before transporting a compromised animal and provide supportive measures as necessary to mitigate injury, pain and/or distress (e.g., increased monitoring, supportive medications, climate control).

REQUIREMENTS

7.1 A cat's capacity to withstand the planned journey must be assessed by considering any risk factors that could reasonably be viewed as having an impact on the cat's health or welfare during transport.

7.2 Compromised cats must be transported with the required provisions needed to mitigate injury, pain, and/or distress.

7.3 Personnel transporting cats must have adequate training and experience to recognize and mitigate the impacts of transport related stressors on the health and welfare of the cats during transport.

7.4 Transport carriers must allow cats to comfortably stand up, turn around and lie down. For air transport, carriers must meet the requirements of IATA's Live Animals Regulations.

7.5 Cats must not be left unattended in enclosed conveyances, even for short periods, when there is a risk of hyperthermia or hypothermia.

7.6 Incompatible animals must be transported in separate carriers.

7.7 Cats must be monitored at a frequency that is appropriate for their health, tolerance of transport, and the mode of transportation.

7.8 Prior to transport, owners must ensure all relevant health certificates, proof of vaccination, and import/export documents are complete and available for review by authorities (e.g., border agents, airline agents).

RECOMMENDATIONS

- Avoid transporting cats that are compromised, or at risk of becoming compromised during transport, unless absolutely necessary (such as transport to a veterinary hospital).
- Choose the shortest, safest route for transport. Acquire, sell, show, and breed cats locally whenever possible.
- Condition cats to riding in both motor vehicles and in transport carriers by creating a positive association.
- Provide cats with a litter box and water during extended transport.
- Facilitate proper communication among all personnel involved during transportation by listing on the carrier: the name of the animal; the final destination; emergency contact information; any relevant medical considerations; and caution if the animal is known to be aggressive. If cats are traveling by air, include the flight number and final airport code.
- Use visual barriers for cats that display signs of stress or aggression during transport (where appropriate, given the potential impact of barriers on temperature and ventilation within the carrier).

8. HEALTH, SAFETY, AND WORKING CONDITIONS

In all Canadian workplaces where employees are present, work conditions must meet the requirements outlined by provincial or territorial occupational health and safety statutes and regulations. In addition, "best practices" should follow the guidelines and recommendations of Health Canada. Contact information for these bodies is listed in Appendix K.

This section addresses personnel health and safety and the establishment of safe working conditions. Health of personnel and safe working conditions should be a priority in every operation. Preventative measures should be taken to reduce the risk of disease or injury to facility personnel or the public. In the event of injury or zoonotic disease, appropriate reporting and remedial action should be taken.

8.1 Zoonosis Management (see also Section 3.2 Preventative Medical Care and Subsection 6.1.4 Pest Control)

Zoonotic diseases are transmitted between humans and animals either directly or indirectly. Waste products, body fluids (e.g., respiratory secretions), bites, scratches, direct contact, and/or wounds are all potential sources. For example, personnel working with cats are at risk of contracting serious diseases including toxoplasmosis (*Toxoplasma gondii*) when handling cat waste, rabies or tetanus from bite wounds, cat scratch disease (*Bartonella henselae*) from scratch wounds, or ringworm (Dermatophilus sp.) through direct contact with ringworm lesions or spores on the animal's coat. Personnel should keep in mind that even apparently healthy cats can potentially transmit zoonotic disease.

Zoonotic exposure can be minimized by maintaining cat colonies free of infectious disease and by frequent and thorough hand washing, the use of personal protective equipment (PPE), routine environmental sanitation, and employment of sanitation stations (i.e., hand sanitizer, foot baths).

Risk may also be minimized by quarantine and/or testing of incoming cats for disease. Recommendations will vary among operations and consultation with a veterinarian is strongly recommended for guidance.

Wild animals and parasites (i.e., fleas) may transmit zoonotic disease to cats, such as tapeworm. Adherence to parasite and pest management protocols is strongly recommended.

Medical care should be sought immediately for any major injuries or cat bite wounds. If a zoonotic disease is suspected, the individual should seek medical advice as soon as possible and indicate potential zoonotic disease exposure. Personnel should never assume that their medical care provider is aware of all potential zoonotic pathogens.

Personnel should be aware of potential zoonotic risks and understand the most common zoonotic diseases when handling cats. Zoonotic risk training of new personnel and annual training of all personnel is strongly recommended. Depending on the geographic area and the source of cats coming into the facility, zoonotic agents of chief concern may include intestinal roundworms, arthropods *(Cheyletiella sp.)*, protozoa *(Toxoplasma gondii)*, fungi (dermatophytes), bacteria *(Bartonella henselae)*, or viruses (rabies virus).

Regardless of zoonotic risk, any injury that occurs onsite should be documented.

8.2 Allergen and Aerosol Exposure (see also Subsection 5.3.2 Heating, Ventilation, Cooling, Humidity)

Airborne particles may cause allergic reactions or respiratory infections. These particles may persist within the environment despite not being readily visible. A well-designed and maintained HVAC system is essential to prevent such respiratory problems. The work environment should be routinely cleaned to minimize dust and residues. Personnel with allergies should be aware of the risks and encouraged to follow advice from their medical provider. Properly fitted face masks and respirators can assist in minimizing aerosol exposure and should be available. Exposure to allergens may also occur by contact. Routine surface cleaning and wearing gloves can minimize exposure.

Emergency medical care should be sought immediately if a severe allergic reaction or anaphylaxis is suspected.

8.3 Animal Scratches and Bites

Minor bite or scratch injuries should be immediately washed with an approved disinfectant (e.g., diluted chlorhexidine) for a minimum of 5 minutes, then flushed with warm clean water, bandaged using aseptic technique, and documented. Immediate medical care should be sought for any bite wound due to the risk of infection with pathogenic bacteria, such as *Pasteurella multocida*, that are commonly found in cat saliva. Rabies may also be transmitted by cat bites. As infection may not be immediately apparent following the bite, emergency medical care should be sought as soon as possible after any severe injury. In some jurisdictions, rabies and potentially tetanus prophylaxis (vaccination) is advisable for all personnel at risk of being bitten by a cat.

8.4 Equipment and Contact Material-associated Injuries

Work conditions must meet the minimal requirements outlined by provincial occupational health and safety statutes and regulations (see Appendix K). Supervisors and operators are responsible for establishing a safe work environment, training employees, regularly inspecting the workplace, ensuring first aid availability, and reporting injuries to an appropriate governing body. Personnel must follow safe work procedures. Workers' rights include the right(s) to:

- know about workplace hazards,
- refuse unsafe work,
- receive medical attention if needed,
- be supplied with appropriate protective equipment.

When not in use, equipment and supplies should be appropriately stored to reduce the risk of injuries. All cleaning products and chemicals should be clearly labeled according to Workplace Hazardous Materials Information System regulations (WHMIS) and all material safety data sheets (MSDS) must be readily available and consulted following exposure.

Under the direction of a veterinarian, trained and competent personnel may give injections to cats (e.g., subcutaneous fluids, insulin administration). Needles have the potential to cause injuries (punctures) and expose personnel to hazardous substances. Adequate training in needle handling, use, and disposal is essential. Used needles must be disposed of according to municipal and provincial biomedical waste regulations. A puncture-proof sharps container is required to store used needles until disposal.

8.5 Noise, Odours, and Waste Exposure (see also Sections 5.3 Buildings, 5.4 Noise, Vibration, and Odours, and 6.3 Waste Management)

Noise and odours are disruptive to both personnel and cats. Well-designed facilities include ceiling and wall materials that optimize soundproofing and ventilation systems that help reduce odours and ammonia levels. Effective waste management practices prevent odours, keep areas free of contaminants, minimize disease transmission and injury, and prevent environmental fouling.

In people, permanent hearing damage may occur at sustained noise levels of 85 dB or greater and for this reason noise levels must be maintained below this threshold. If this is not possible, a noise control and hearing protection program should be implemented. Regardless, hearing protection should be available for personnel to use wherever applicable. Because cats have more acute hearing than humans, average noise levels in cat housing areas should be less than 60 db.

8.6 Hygiene

To reduce transmission of infectious and zoonotic disease, bodily fluids such as blood, urine, and liquid feces should be promptly cleaned using safe methods and appropriate protective personnel equipment (PPE). Employee health should be prioritized in all operations. To avoid risk of harming animals or other personnel, individuals who are sick or injured should not work. Should this be unavoidable, the individual should take appropriate precautions (frequent handwashing, keeping wounds covered) and wear appropriate PPE.

8.6.1 Protective Clothing and Footwear and Storage

Solid clothing, pants, and closed-toe footwear are recommended when working with any animal species. Depending on the size of the operation, a space may be provided for personnel to change into “work clothes.” Choice of PPE varies with different operations, tasks, and individual requirements. Personnel should seek veterinary guidance when determining appropriate PPE. This equipment may include hair coverings, safety glasses, face masks, respirators, gloves, sleeve protectors, coats or gowns, coveralls, and boot/shoe covers. As a minimum, gloves should be worn when cleaning or handling wastes and chemicals, or as required for other procedures.

Multiple forms of PPE should be worn when working with isolated animals or during a disease outbreak. Completely changing clothes, shoes, and/or showering may be advisable.

Persons at risk due to special circumstances (e.g., pregnant, ill, immuno-compromised, cat- or product-related hypersensitivities) are strongly encouraged to wear appropriate PPE. In particular, pregnant women should wear appropriate PPE or avoid handling litter boxes and cat waste due to the risk of contracting toxoplasmosis (see also Section 8.1).

8.6.2 Hand Washing

To limit transmission of disease, personnel should wash their hands frequently: when entering and exiting the facility, entering and exiting isolation units, between cleaning separate enclosures, before and after handling food or water, and after handling biomedical waste or other garbage.

Long sleeves should be rolled up and jewelry should be removed, if applicable. Proper hand washing requires that hands are lathered in warm water and soap and scrubbed on every surface for a minimum of 20 seconds, then rinsed thoroughly and dried, using single use paper towels or a clean hand towel.

Wash basins should be readily accessible throughout the facility. Ideally there should be separate sanitation stations for personnel, enclosure maintenance, and isolation units. Although hand sanitizer is useful in controlling some bacteria and viruses, it should never be a substitute for hand washing. Hand washing removes debris and microscopic films that protect bacteria against hand sanitizers.

If possible, feed bowls, water bowls, and enrichment items should be cleaned in a separate sink from litter boxes and soiled items. Having clearly labeled, separate designated sinks is recommended.

8.6.3 Personnel Facilities (see also Subsection 3.3.1 Isolation and Quarantine and Section 6.1 Cleaning and Disinfection)

Restrooms should be maintained and disinfected daily or weekly depending on frequency of use. Food and litter should not be disposed of in the toilet or sink as they can easily cause plumbing obstructions.

Break facilities should be separate from areas where cats are housed. These facilities should be cleaned following use and thoroughly cleaned weekly. Human food should always be inaccessible to cats and preferably stored away from cat holding areas, cat food storage, and waste areas.

REQUIREMENTS

8.1 Work conditions must meet the minimal requirements outlined by provincial occupational health and safety regulations and personnel need to follow safe work practices.

8.2 Sustained average sound levels must be maintained at less than 85 dB in areas of the facility.

8.3 Material Safety Data Sheets (MSDS) for all chemicals must be readily available.

8.4 Used needles must be disposed of according to municipal and provincial biomedical waste regulations.

RECOMMENDATIONS

- Frequent and thorough handwashing, routine environmental sanitation, protective- clothing, and use of personal protective equipment (PPE) should be employed to reduce risk of disease transmission.
- A veterinarian should be consulted regarding zoonotic disease prevention and control measures.
- Medical care should be sought immediately for any major injuries, cat bite wounds, suspected allergic reactions or zoonotic disease.
- Any injury that occurs within the premises should be documented.
- Sound levels should be periodically measured using validated sound-measuring devices such as the NIOSH smartphone app. (Appendix H).
- Individuals who are sick should not be permitted to work if there is a risk of harming animals or other personnel.
- Additional personal protective equipment (PPE) should be worn by immunocompromised
  workers and when working with quarantine/isolated cats.
- Waste products (i.e., vomit, urine, fecal material, soiled litter or bedding, and food waste) should be removed at least daily, and preferably at the beginning and end of the working period.
- When possible, there should be separate sanitation stations for personnel, enclosure maintenance, and isolation units.

9. EMERGENCY MANAGEMENT

Emergency management is critical: it reduces the impact of an unanticipated adverse event and ensures that the health and safety of both cats and people are protected as much as the circumstances allow. Emergencies may include natural disasters (e.g., extreme weather events, floods, earthquakes, wildfires), events beyond the control of the operation (e.g., power outages, bomb threats, pandemics), and incidents within the facility (e.g., HVAC or power system failure, fire, water line rupture, animal disease outbreak).

Although this section will focus on animal-related aspects of emergency preparedness, human safety must remain paramount. As with several other aspects of management, advanced planning and response depends on the size, purpose, and location of the establishment. Personnel will require personal emergency plans and kits (basic food, water, first aid, sanitary supplies), but this is beyond the scope of this document. Appendix L has links to more information, and local and provincial resources can be invaluable (see also Section 1.5 Emergency Preparedness).

Emergency preparedness includes development of plans to address the stages before, during, and after a crisis. Emergency management is organized into 4 categories: prevention/mitigation, preparedness, response (or action plan), and recovery. Figure 9.1 provides an overview and may be useful for developing a written emergency management plan, which is required by all facilities (see Subsection 9.2.1 Emergency Response Procedures for more details).

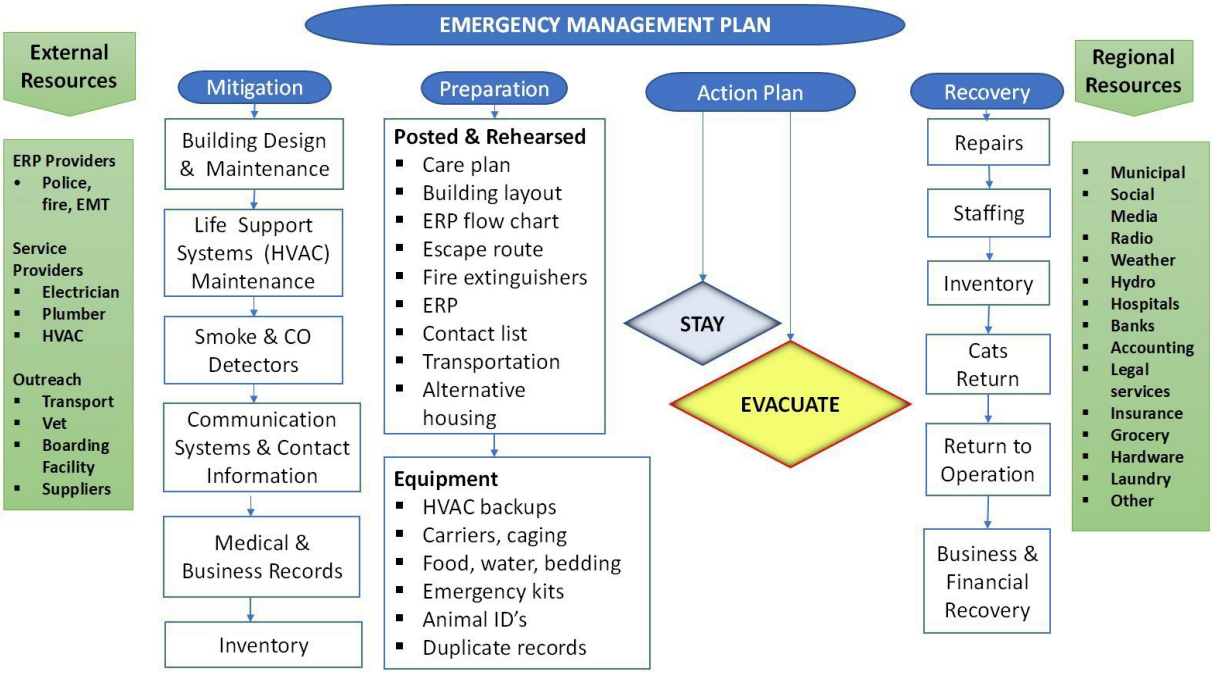


Figure 9.1 Sample Emergency Management Plan.
ERP=emergency response personnel; EMT= emergency medical team.

9.1 Prevention, Mitigation, and Preparedness

The first steps in emergency management are to identify potential risks and take steps to reduce or eliminate the risk as well as revisiting these as an ongoing activity. Always being aware of potential hazards that may compromise operations can be an important part of preparedness. Owners and managers can contact their municipality to learn about local hazards and the emergency plans in place, including the location of emergency shelters and evacuation routes. Local SPCAs are another good resource for learning about emergency plans for animals.

Within the facility, a risk assessment audit needs to be done by regularly (at least annually) inspecting the premises and identifying potential hazards, followed by remediation. Table 9.1 illustrates some key elements that need to be considered. Of particular importance is ensuring that the emergency power can support critical functions (e.g., well water-dependent supply and septic-based sewage systems, heating, ventilation and air conditioning (HVAC) life support systems).

Acclimating cats to carriers and car travel is important in the event of a medical emergency or when evacuation is required at short notice. This can greatly reduce fear and stress and allow for rapid response. For more information, see ‘Visiting your Veterinarian – Getting your Cat to the Veterinary Practice’ in Appendix D Resources and Section 7 Transportation.

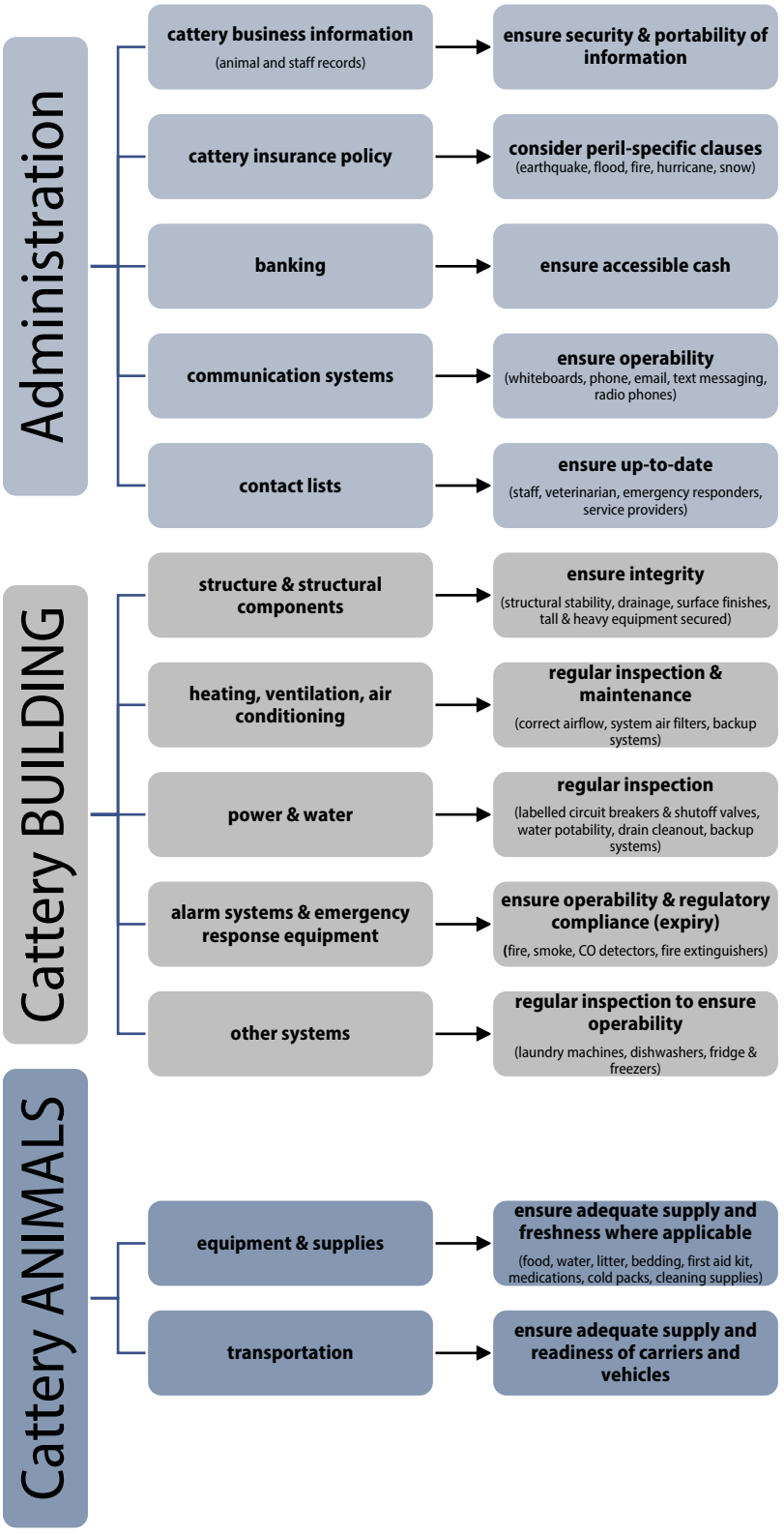


Table 9.1 Mitigation and Preparation: Key Elements.

9.1.1 Emergency Preparedness Equipment and Materials Kits

Supplies sufficient for a minimum of 72 hours and preferably 1 week or longer should be stored in labelled, waterproof, portable containers in an accessible location (such as near an exit). All staff need to know the location of the kit. Food should be rotated with regular stock to ensure freshness. Water containers should be emptied, thoroughly rinsed, and refilled at least every 6 months (or more frequently if well water). Water should be stored in sturdy plastic food grade containers and labelled and dated.

Important items to include are:

- A copy of the emergency response plan including contact lists,
- Portable carriers for all resident cats,
- Food, water, medications (with written instructions),
- Dishes, bedding, litter boxes (consider disposable litter boxes), litter, and scoops,
- Collars, harnesses, leashes,
- Cleaning supplies (paper towels, disinfectant, garbage bags, hand sanitizer, disposable gloves), utensils,
- Cat first aid kit - Many versions suitable for small catteries are available for purchase. General contents should include a first aid manual, disposable gloves, flashlight, scissors, tweezers, bandage material, antibiotic ointment, emergency thermal blanket, instant ice pack,
- Spare keys, flashlights, spare batteries.

9.2 Response

9.2.1 Emergency Response Procedures

All facilities must have written emergency response procedures, which are available and easily accessible to all relevant personnel. The procedures need to describe the actionable response in an emergency. A summary such as the example in Figure 9.1 can serve as a worksheet for developing detailed procedures. It can also be posted in strategic areas of the facility as a short-form guidance document. Emergency response procedures need to be designed to enable self-sufficiency for a minimum of 72 hours and preferably 1 week or longer. These procedures should be reviewed and rehearsed regularly to ensure relevancy, that information is current (e.g., contact lists), and that all involved staff know their roles and are proficient at using equipment (e.g., back-up generators; fire extinguishers). In some provinces, all workplaces are required to have emergency response procedures and provide instruction and training to employees (and volunteers). Managers must ensure that their procedures fulfill legislated requirements.

All emergency response procedures must include protocols for the following:

1. Response to utility failure to ensure adequate ventilation, heating, and cooling as well as water supply (well-based and septic system-based facilities).
2. Provision of cat care and necessary materials and equipment such as food, litter, litter boxes, bedding, medications, cleaning supplies, husbandry, and veterinary care.

The following questions may be helpful in developing an emergency response plan:

- How will litter boxes, food, and water dishes be cleaned if there is a power outage and water is unavailable?
- Where will cats be relocated if their regular accommodations are damaged, or if evacuation is necessary?
- How will supplies be obtained in the event of a supply chain disruption?
- Where will veterinary care be obtained if the attending veterinarian is unavailable?

3. Disease outbreak management and control measures to limit contagion- disease transmission.

   The following questions may be helpful in protocol development:

   - Has identification and management of zoonotic disease been addressed?
   - How will routine health monitoring, animal handling, and sanitation protocols be modified during a disease outbreak emergency?
   - Is a veterinarian involved in the development of the management protocol?

Emergency response procedures also need to include the following information (see also Table 9.1 Mitigation and Preparation: Key Elements):

- *Diagram of the facility* with key features highlighted, e.g., exit routes, location of utility shut off valves, electrical panels, housing areas, emergency kits.
- *Routes and destinations* - Include multiple routes from the premises to a predetermined destination (hotel, boarding facility, veterinary clinic, animal shelter, or home of a family member or friend).
- *Documentation* - Information protection protocols: Written documents should be kept in a waterproof container. Electronic documents should be backed up onto an external hard drive (or a cloud-based storage service). All information must be kept up-to-date. Important information includes:
  - Administrative documents: Operation insurance; banking information; security codes (see Table 9.1 Mitigation and Preparation: Key Elements).
  - Animal-related documentation: Copies of health records (including vaccination certificates, summary of health conditions, prescriptions, most recent FeLV/FIV test results); cat health insurance; proof of ownership (e.g., registration information) and identification information (microchip number, photograph, description).
  - Emergency contact lists:
    - Emergency resources - Local government services, fire department, police, ambulance, and other emergency response providers; mass communication sources (radio stations, websites, social media channels).
    - At least one emergency contact person from outside the community.
    - In the event of a community-wide disaster, this person can be a point of contact between key staff.
    - Staff including next-of-kin.

    - An alternate manager. Ensure that the alternate manager has toured the premises and has been familiarized with operations. Provide security codes and updates, access keys, and maintain regular communication.
    - The attending veterinarian, and an emergency veterinary hospital.
    - Evacuation destination.
    - Suppliers (e.g., for food, litter, cleaning supplies) and service providers (e.g., plumbers and electricians).
    - Utility providers (electricity, water, natural gas, propane).
- *Finances* – Emergencies can be costly. A good Emergency Management Plan includes consideration about how to manage finances in case there is a prolonged period before normal operations can resume, or in the event of costly damage to the facility (e.g., property insurance, feline health insurance, contingency savings/investments for bill payments, payroll, other financial obligations). Cash on hand can be useful in case banks are inaccessible during an emergency. In some situations, catteries may be eligible for provincial disaster financial assistance.

9.2.2 Action Plan

Emergency Response Procedures need to be adaptable to the emergency. For example, in the event of a fire or flood in the facility, a decision will need to be made whether it is preferable to shelter in place and manage the situation or evacuate. Depending on the situation, some of these decisions will be made by or in consultation with first responders. In all cases, caregivers must make every effort to continue to provide care for cats during an emergency but must not risk human safety in order to do so.

9.2.2.1 Shelter in place

The safest place within the facility should be chosen, ensuring all necessary supplies are nearby. For example, during a severe storm an interior room with no windows is the safest location. The use of outdoor enclosures during severe weather events should be avoided.

9.2.2.2 Evacuation

In Canada, emergency personnel may issue an evacuation ALERT, which is a warning that the premises may need to be evacuated on short notice. In the event of an evacuation ALERT, essential items should be packed and assembled and preparations to leave should be made. When an evacuation ORDER is issued, evacuation of the premises is mandatory. In the event of an evacuation ORDER, the cats, and all critical items (assembled materials and equipment kits) should be transferred to the evacuation vehicle(s) and the premises should be vacated immediately. Often emergency personnel will provide instructions.

All cats need to be individually identified, preferably with visible identification such as a collar with written contact information. Cats should be calmly placed in carriers that are then covered with a towel.

If it is necessary to evacuate without bringing all resident cats and it is possible to do so safely, a note should be posted for rescue workers in an outside window of the facility detailing the number and description of all remaining cats. To provide the remaining cats with the best chance of survival, plenty of water and food should be left for them. Cage doors should be left open if it is safe to do so. Abandoning cats is a last resort and should only be elected if there is a risk of human safety and life.

9.2.3 Disease Outbreak

Emergencies are stressful events for both cats and humans. Disrupted routines, increased noise, unfamiliar or strong odours, and changes in housing may cause stress, alter behaviour, and increase the likelihood of a transmissible disease outbreak. Cat caregivers are more likely to be scratched or bitten with the corollary of increased risk for zoonotic disease exposure.

A risk assessment needs to be done to determine which cats are exposed, at risk, sick or unexposed to the known or suspected infectious disease pathogen. Unless otherwise directed, cats should be separated by group and monitored at least daily. Cat caregivers must be aware of the clinical signs of the disease of concern, appropriate disease-specific sanitation procedures and optimal methods to continue to deliver care (see also Sections 2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease and 3.3 Infection Control).

9.3 Recovery after an Emergency

Managers need to ensure that the emergency ORDER is RESCINDED by checking with reliable information providers, such as the local Emergency Management Authority. If emergency-associated damage to the facility or local infrastructure presents a risk to staff or cats, a full safety assessment must be made before resuming occupancy and activities.

It should be recognized that cats (and their caregivers) may be distressed for some time after an emergency, and modifications to normal management procedures may be necessary (e.g., cats that normally get along may need to be temporarily separated if they show aggression). Cats that remain intensely fearful or anxious for an extended time should be examined by a veterinarian, who may prescribe anti-anxiety medications and offer management advice.

Following an emergency, the manager and staff should evaluate the effectiveness of their prevention, preparedness, and response procedures in order to improve the process for the future.

Business matters must also be addressed, not only to permit resumption of normal operations but also to deal with issues that arose during the emergency, for example: preparation and submission of insurance or disaster-relief fund claims; staff remuneration; emergency associated staff matters (injury claims, lawsuits) and infrastructure repair.

REQUIREMENTS

9.1 A facility must have an emergency management plan that includes the period during the emergency as well the period of recovery with consideration of human and animal needs, physical structures and finances.

9.2 Emergency plans must be tested for effectiveness, kept up-to-date and regularly rehearsed.

9.3 Staff and emergency services contact information must be kept up-to-date and be readily accessible to all staff.

9.4 All facilities must have emergency response procedures, which are available and easily accessible to all relevant personnel. Emergency response procedures must include:

a) An action plan in the event of a failure in utilities and life support systems. This includes details about how to ensure adequate ventilation, heating, and cooling.

b) A care plan for the provision of housing, food, water, litter boxes, and medical care for all residents.

c) A disease outbreak management plan.

9.5 Emergency power is required for all life support and critical function systems.

9.6 Alarm systems (e.g., fire, carbon monoxide, ventilation, and other life-support systems must be in place, regularly tested for operability, and meet municipal, provincial, and federal requirements.

9.7 The manager must make every effort to continue to provide care for cats during an emergency but must not risk human safety to do so. Abandoning cats is a last resort.

9.8 If damage to the facility or local infrastructure as a result of an emergency presents a risk to staff or cats, a full safety assessment must be made before resuming occupancy and operational activities.

RECOMMENDATIONS

- First aid and CPR training is recommended for all staff.
- Rehearse emergency drills at least annually.
- Map multiple routes to planned evacuation destinations.
- Travel evacuation routes and visit evacuation destinations on occasion to ensure that they remain viable and relevant.
- Verify that the local community shelter is pet-friendly.
- Include a digital copy of the emergency plan with other important documents.
- Managers should keep an electronic copy of the emergency management plan on their cell phone.
- A diagram of the floor plan should be posted in the facility, including exits, locations of electrical, water and gas shutoff, and locations of cat housing.
- Detail multiple reliable methods of communicating with staff (e.g.,emergency phone numbers, texting, social media, pagers, radios, websites).
- Emergency supplies should be sufficient to support operations for 1 week or longer.
- An animal as well as a staff first aid kit are components of the cattery emergency kit.
- Install emergency lighting that comes on automatically in the event of a power failure.
- Store emergency water in freezers so that it can be used as cooler packs in the event of a power failure.

APPENDIX A

SUMMARY OF REQUIREMENTS

1. MANAGEMENT AND RECORD-KEEPING

1.1 A facility that group houses cats must maintain and preserve documentation that records management and operational practices. Documentation must be available and accessible.

1.2 A facility that group houses cats must develop policies, practices, and standard operational procedures.

1.3 Staffing levels must be sufficient to provide for the appropriate care and management of resident cats.

1.4 Staff must be trained and maintain competency to execute duties in keeping with their responsibilities.

2. HEALTH AND WELFARE MANAGEMENT

2.3 Animal Management

2.1 All cats and weaned kittens must have individual records.

2.2 Records for all cats must be kept at least two years after the cat leaves the premises or dies on-site.

2.3 Owner information with contact details must be included for cats who are in temporary care of the cat facility.

2.4 Contracts or agreements for transfer of ownership or temporary care (such as lease or stud service) must be provided by the cat facility, and the facility must keep copies.

2.5 All adult cats and weaned kittens must have unique and permanent identification, such as a tattoo or microchip.

2.6 Kittens must not be sold unless they are healthy, fully weaned, well-socialized, and at least 8 weeks old.

2.7 Euthanasia must not be used as a means of population control for healthy, rehomable cats.

2.8 The euthanasia method used must cause minimal pain and distress. The only acceptable method of euthanasia is lethal injection administered by a veterinarian or a trained technician.

2.9 Barbiturates used for euthanasia must be purchased, stored, recorded, disposed of in accordance with provincial and federal regulations.

2.10 Disposal must be in accordance with provincial and municipal regulations.

2.4 Behavioural Health and Mental Well-being

2.11 All cats must be provided with some form of enrichment that allows them to engage in normal behaviours including exercise, play, and social interaction.

2.12 All cats must be provided with scratching material, such as a scratching post or pad.

2.13 All kittens must be socialized between 2 and 7 weeks of age and before being rehomed.

2.5 Caring and Handling of Animals

2.14 All cats must be handled in a gentle manner that is not likely to cause distress.

2.15 All cats must be groomed adequately, as appropriate for their age, breed, and health. Grooming must include coat, nail, and oral care.

2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease

2.16 Each cat must be assessed as often as required to maintain health and wellbeing, but at least once every 24 hours.

2.17 Accurately dated health monitoring records must be kept for every cat.

2.18 Cats who have had significant weight changes (e.g., gain or loss of more than 10% body weight) must be examined by a veterinarian.

2.19 For cats with a body condition score of less than 4 or more than 7, corrective action must be taken, but overweight cats must not be starved to lose weight. Veterinary advice must be obtained if cats do not respond the corrective action.

2.7 Pain, Discomfort, and Distress Assessment

2.20 Cats caretakers must be familiar with signs of pain and discomfort in cats.

2.21 Pain and distress assessments must be performed regularly for all cats.

2.22 Pain scores must be entered into the cat's record.

2.23 Pain medication must not be administered to cats without instructions from a veterinarian.

2.8 Welfare Assessment

2.24 Any welfare concerns must be addressed promptly.

2.25 Any cat for which good welfare cannot be provided and maintained must be removed from the cattery.

3. VETERINARY CARE

3.1 Cat caregivers must have a valid veterinarian-client-patient relationship (VCPR) with a licensed veterinarian.

3.2 A health care protocol for all cats must be in place.

3.3 The facility operator must ensure that emergency medical plans and contact information are part of the health care protocol, and that caregivers access to this information.

3.4 Medical records must be kept for every cat.

3.5 Cats who are sick, injured, or in pain must receive appropriate treatment without delay or be euthanized without delay.

3.6 For sick, injured, or painful cats who are not responding to treatment or showing improvement, managers or caregivers must obtain veterinary advice on appropriate care and treatment or promptly arrange for euthanasia.

3.7 Cats showing signs of dental problems must be examined and treated according to a veterinarian's recommendations.

3.8 Catteries must have isolation facilities which meet the same standards for accommodation as the rest of the cattery.

3.9 Cats in isolation must be provided the same level of care as those in the general population.

3.10 Cats with severe infectious disease must be separated from the general population.

4. CARE – NUTRITION AND FOOD MANAGEMENT

4.1 Cats must have daily access to good quality, nutritionally balanced food in quantities that meet their physiologic needs.

4.2 Cats must have unrestricted access to safe, clean drinking water at an acceptable temperature.

4.3 Cats must be monitored daily to ensure they are eating and drinking adequately.

4.4 Cats must be offered food and water in a manner that minimizes competition with other animals.

4.5 Cats must never be fed expired, spoiled, or contaminated food.

4.6 Food containers must be covered, protected from pests and moisture, and properly labeled.

4.7 Food and water dishes must be in good condition, kept clean and easily accessible.

4.8 Canned cat food must be refrigerated once open to prevent spoilage and fed within 2 days.

5. CARE – ACCOMMODATION AND HOUSING

5.1

Parameter			min/max
Temperature			18 to 26.6°C
Relative humidity			30 to 70%
Ventilation changes per hour			10 to 20
Maximum hours light per day			16
Minimum space per cat	Minimum height		76 cm
	Floor space	Single housing	1 m^2
		Group housing	1.7 m^2 per cat
		Tom housing	3.4 m^2

Table 5.2 Select Housing Requirements.

5.2 All facilities must have adequate capacity to house the resident cats to prevent overcrowding and allow for proper care.

5.3 Single housing must include food and water dishes, a litter box, a scratching post, bedding, a hiding place, and at least one enrichment item.

5.4 Resources must be placed so that the cat can use them properly.

5.5 Group housing must provide an adequate number of individual resources (e.g., litter boxes, food, and water bowls, hiding spaces, scratching posts, and enrichment items), located such that all cats who are sharing a space have access.

5.6 Group housing incompatible cats must not occur.

5.7 Toms must be housed separately from intact queens except during breeding. When tom housing is used as the breeding area, it must include separate resources for each cat.

5.8 In breeding catteries, queening areas must be separate from the rest of the cattery.

5.9 Outdoor enclosures must not be used as the sole accommodation, must include shelter from the elements, and must be escape proof.

5.10 Cats must never be tethered.

5.11 Cats must not be left outdoors for long periods without periodic supervision.

5.12 Facilities must meet provincial and municipal construction requirements including fire safety standards and alarms.

5.13 All areas in which cats are housed must be constructed of impervious, sanitizable, nontoxic material.

5.14 Facilities must be designed to prevent escape and be kept in good repair.

5.15 A vermin control program must be in place.

5.16 Flooring in primary enclosures must be smooth and solid. Wire or slatted flooring is unacceptable.

5.17 Cages, crates, or kennels designed for travel or short-term use must not be used as primary enclosures.

5.18 The HVAC system must be monitored regularly to ensure optimal performance and be capable of being adjusted to respond to prevailing external and internal environmental conditions.

5.19 The supply and distribution of power must be sufficient to support operations and be in accordance with provincial electrical building codes.

5.20 All outdoor outlets and interior power outlets near water sources must be ground fault circuit interrupter outlets.

6. SANITATION

6.1 Every facility must have a sanitation protocol which is performed daily.

6.2 Sanitation protocols must be readily available, followed, and regularly reviewed and updated, and list surfaces which are likely to become contaminated.

6.3 All cleaners and disinfectants must be properly labeled and dated and stored out of the reach of children, cats, and other animals.

6.4 Product dilution and use must be in accordance with manufacturer recommendations.

6.5 Cleaning and pest control products and their use must be safe for cats.

6.6 Cats must not come into direct contact with cleaning products or disinfectants.

6.7 Surfaces must be cleaned before they are disinfected.

6.8 Disinfected surfaces must be dry before reintroducing animals.

6.9 Facilities must be equipped with appropriate cleaning equipment, such as hot and cold water, wash basin, washer, and dryer.

6.10 Waste (including biomedical waste) must be disposed of in accordance with municipal, provincial, and federal regulations.

7. TRANSPORTATION

7.1 A cat's capacity to withstand the planned journey must be assessed by considering any risk factors that could reasonably be viewed as having an impact on the cat's health or welfare during transport.

7.2 Compromised cats must be transported with the required provisions needed to mitigate injury, pain, and/or distress.

7.3 Personnel transporting cats must have adequate training and experience to recognize and mitigate the impacts of transport related stressors on the health and welfare of the cats during transport.

7.4 Transport carriers must allow cats to comfortably stand up, turn around and lie down. For air transport, carriers must meet the requirements of IATA's Live Animals Regulations.

7.5 Cats must not be left unattended in enclosed conveyances, even for short periods, when there is a risk of hyperthermia or hypothermia.

7.6 Incompatible animals must be transported in separate carriers.

7.7 Cats must be monitored at a frequency that is appropriate for their health, tolerance of transport, and the mode of transportation.

7.8 Prior to transport, owners must ensure all relevant health certificates, proof of vaccination, and import/export documents are complete and available for review by authorities (e.g., border agents, airline agents).

8. HEALTH, SAFETY AND WORKING CONDITIONS

8.1 Work conditions must meet the minimal requirements outlined by provincial occupational health and safety regulations and personnel need to follow safe work practices.

8.2 Sustained average sound levels must be maintained at less than 85 dB in all areas of the facility.

8.3 Material Safety Data Sheets (MSDS) for all chemicals must be readily available.

8.4 Used needles must be disposed of according to municipal and provincial biomedical regulations.

9. EMERGENCY MANAGEMENT

9.1 A facility must have an emergency management plan that includes the period during the emergency as well the period of recovery with consideration of human and animal needs, physical structures and finances.

9.2 Emergency plans must be tested for effectiveness, kept up-to-date and regularly rehearsed.

9.3 Staff and emergency services contact information must be kept up-to-date and be readily accessible to all staff.

9.4 All facilities must have emergency response procedures, which are available and easily accessible to all relevant personnel. Emergency response procedures must include:

a) An action plan in the event of a failure in utilities and life support systems. This includes details about how to ensure adequate ventilation, heating, and cooling.

b) A care plan for the provision of housing, food, water, litter boxes, and medical care for all residents.

c) A disease outbreak management plan.

9.5 Emergency power is required for all life support and critical function systems.

9.6 Alarm systems (e.g., fire, carbon monoxide, ventilation, and other life-support systems must be in place, regularly tested for operability, and meet municipal, provincial, and federal requirements.

9.7 The manager must make every effort to continue to provide care for cats during an emergency but must not risk human safety to do so. Abandoning cats is a last resort.

9.8 If damage to the facility or local infrastructure as a result of an emergency presents a risk to staff or cats, a full safety assessment must be made before resuming occupancy and operational activities.

APPENDIX B
SUMMARY OF RECOMMENDATIONS

1. MANAGEMENT AND RECORD-KEEPING

- Develop mission and vision statements to support the operation.
- Communications between management and staff should be in writing and if oral, should be logged. This ensures effective transfer of information or instruction.
- Facility management and staff should hold regular meetings to review operations with a view to improving the quality of cat care and efficiency.
- Facility management should meet with individual staff members at least annually to review individual performance and develop remedies to optimize performance.
- Store copies of records off site (e.g., cloud-based electronic storage).

2. HEALTH AND WELFARE MANAGEMENT

2.3 Animal Procurement

- Avoid overcrowding by ensuring capacity for care before acquiring additional cats.
- When possible, acquire cats from a local source to minimize transportation stress.
- If circumstances allow, cats should be examined by a veterinarian before transport to ensure that there are no pre-existing health concerns that could compromise the cats during travel.
- Newly acquired cats should be examined by a veterinarian as soon as possible after arrival.

2.4 Animal Management

- Keep copies of records, including electronic backups, in moisture and fireproof containers.
- Keep all records for 7 years.
- Store copies of records off site (e.g., cloud-based electronic storage).
- Develop a lifecycle plan for every cat.
- Select only queens and toms for breeding who are both physically and behaviourally healthy.
- Spay or neuter all adult cats who are not part of the breeding program.

- Ensure that there is a person always available at the facility who will be responsible for making euthanasia decisions, and that their contact information is known by all staff.
- Discuss euthanasia with a veterinarian when the cat or kitten:
  a) has a condition that requires surgery and has a grave prognosis without surgery, and surgery is unavailable or unaffordable;
  b) possesses dangerous behavioural traits that renders it a hazard to itself, other cats or caregivers;
  c) has a disease or condition for which the cost of treatment is prohibitive, or there is no available treatment;
  d) has a transmittable disease, which is a serious health hazard to other cats or humans.

2.5 Behavioural Health and Mental Well-being

- Provide food through foraging and hunting simulation opportunities, when possible, rather than feeding from bowls.
- House cats in group housing when appropriate.
- Provide cats with choice and control over their environment as much as possible.

2.6 Caring and Handling of Animals

- Cat caretakers should groom all cats regularly, with extra attention to long- haired, geriatric, or overweight cats.
- All cats should receive periodic nail trimming in a positive and gentle manner.
- Kittens should be acclimated to regular grooming procedures, including nail trimming, prior to rehoming.

2.7 Health Monitoring: Recognizing Ill Health, Injury, and Disease

- Assess cats before cleaning and during feeding.
- Develop protocols for quick, consistent, and standardized health assessments.
- Become familiar with each cat's normal demeanour, patterns, and activity to quickly detect when a cat is not well.

2.8 Pain, Discomfort, and Distress Assessment

- A validated pain assessment scale should be used, and all staff should use the same one.
- Cat caregivers should anticipate and prevent pain, discomfort, and distress and seek to address and improve aspects of the operation that may contribute to these.

2.9 Welfare Assessment

- Develop protocols for quick, consistent, and standardized welfare assessments.
- Assess welfare frequently to detect changes in welfare and allow rapid intervention.

3. VETERINARY CARE

- All cats should have their environmental needs met to reduce stress and promote health.
- A veterinarian should visit the cattery at least annually.
- All cats should receive wellness examinations and be vaccinated on a schedule determined by a veterinarian.
- Prophylactic parasite medication should be given to all cats, including kittens.
- All incoming cats should be tested for FeLV/FIV and be vaccinated before arrival.
- All newly acquired and significantly ill cats and kittens should be quarantined in an isolation facility.
- Queens and kittens should be segregated until kittens are vaccinated.
- Caregivers should receive training about zoonotic diseases and should notify managers if bitten, scratched, or diagnosed with a zoonotic infection.
- Caregivers should seek immediate counsel or care from a physician if bitten or scratched or when showing clinical signs indicative of a zoonotic infection.

4. CARE – NUTRITION AND FOOD MANAGEMENT

- Use feeding toys and various feeding methods to encourage hunting and foraging behaviours.
- Maintain cats in an ideal body condition (see Appendix E).
- Make any changes in diet slowly.
- Offer two or more food and water bowls per cat in varying locations to provide choice.
- Offer weaned kittens both canned and dry food of different shapes and flavours to encourage them to accept differing textures as adults.
- Discard uneaten canned food 30 minutes after being offered for consumption.
- Replenish bowls with fresh water at least once a day.
- Clean food and water containers daily.
- Locate food dishes at least 2 feet (0.6 m) from litter boxes and resting areas.

5. CARE – ACCOMMODATION AND HOUSING

- Provide a variety of enrichment items (minimum one but preferably several) for example toys, food puzzles, cat trees, catnip. Access to a window to view the outdoors is enriching and should be provided.
- Provide a number of resources and a variety of places to inhabit including hiding places, elevated perches and open flooring, with the goal of optimizing use of the three-dimensional space.
- Provide vertical space so that cats can stand on their hind legs and fully extend their front legs without touching the ceiling of their enclosure.
- Litter boxes should be at least 1.5 times the length of the cat, be kept clean, and should contain at least 3 cm of absorbent litter (preferably unscented). Litter boxes should be left uncovered and should be placed well away from food and water dishes and potential sources of loud noise. A general recommendation is to provide one litter box per cat, plus one. The best indication of a correct litter box condition is consistent use.
- Provide spray stations for toms.
- Provide various housing options and styles to serve the needs of a wide variety of cats, including out-of-cage areas, if possible.
- Provide soft, sanitizable bedding and slip-proof footing.
- Maintain noise levels below 60 dB in all areas that house cats by providing noise dampening materials and manage operations to minimize noise and associated cat stress.
- Provide natural light whenever possible.
- If emergency lighting interferes with darkness and regulatory codes permit, a red-orange light fixture will approximate darkness.
- Photoperiod controllers that permit a gradual decrease of light intensity from brightness to darkness (dusk) and darkness to brightness (dawn) are useful. Individual dimmable light fixtures also are useful to assist with lighting intensity control.
- Enclosures should be larger than the minimum requirements whenever possible, particularly for cats housed long term.

6. SANITATION

- Sanitation protocols should be developed and updated with the help of a veterinarian; these need to be kept current by frequent review with staff.
- Each room should have its own cleaning and disinfectant products.
- Living quarters should be spot- cleaned as needed.
- Facilities should be equipped with a dishwasher, washer, and dryer.
- Steam cleaners can also be used.

7. TRANSPORTATION

- Avoid transporting cats that are compromised, or at risk of becoming compromised during transport, unless absolutely necessary (such as transport to a veterinary hospital).
- Choose the shortest, safest route for transport. Acquire, sell, show, and breed cats locally whenever possible.
- Condition cats to riding in both motor vehicles and in transport carriers by creating a positive association.
- Provide cats with a litter box and water during extended transport.
- Facilitate proper communication among all personnel involved during transportation by listing on the carrier: the name of the animal; the final destination; emergency contact information; any relevant medical considerations; and caution if the animal is known to be aggressive. If cats are traveling by air, include the flight number and final airport code.
- Use visual barriers for cats that display signs of stress or aggression during transport (where appropriate, given the potential impact of barriers on temperature and ventilation within the carrier).

8. HEALTH, SAFETY AND WORKING CONDITIONS

- Frequent and thorough handwashing, routine environmental sanitation, protective clothing, and use of personal protective equipment (PPE) should be employed to reduce risk of disease transmission.
- A veterinarian should be consulted regarding zoonotic disease prevention and control measures.
- Medical care should be sought immediately for any major injuries, cat bite wounds, suspected allergic reactions or zoonotic disease.
- Any injury that occurs within the premises should be documented.
- Sound levels should be periodically measured using validated sound-measuring devices such as the NIOSH smartphone app. (Appendix H)
- Individuals who are sick should not be permitted to work if there is a risk of harming animals or other personnel.
- Additional personal protective equipment (PPE) should be worn by immunocompromised workers and when working with quarantine/isolated cats.
- Waste products (i.e., vomit, urine, fecal material, soiled litter or bedding, and food waste) should be removed at least daily, and preferably at the beginning and end of the working period.
- When possible, there should be separate sanitation stations for personnel, enclosure maintenance, and isolation units.

9. EMERGENCY MANAGEMENT

- First aid and CPR training is recommended for all staff.
- Rehearse emergency drills at least annually.
- Map multiple routes to planned evacuation destinations.
- Travel evacuation routes and visit evacuation destinations on occasion to ensure that they remain viable and relevant.
- Verify that the local community shelter is pet-friendly.
- Include a digital copy of the emergency plan with other important documents.
- Managers should keep an electronic copy of the emergency management plan on their cell phone.
- A diagram of the floor plan should be posted in the facility, including exits, locations of electrical, water and gas shutoff, and locations of cat housing.
- Detail multiple reliable methods of communicating with staff (e.g., emergency phone numbers, texting, social media, pagers, radios, websites).
- Emergency supplies should be sufficient to support operations for 1 week or longer.
- An animal as well as a staff first aid kit are components of the cattery emergency kit.
- Install emergency lighting that comes on automatically in the event of a power failure.
- Store emergency water in freezers so that it can be used as cooler packs in the event of a power failure.

APPENDIX C
GLOSSARY

Acetaminophen	An over-the-counter medication commonly used for pain relief in people, but fatally toxic to cats.
Aerosol	A general term for any solid or liquid particle so tiny and lightweight that it can become suspended in air and float. Some viruses and allergens can become aerosols making airborne transmission possible, thereby promoting contagion. Also, aerosolization of some cleaning products can cause respiratory problems in some people and cats.
Animal welfare	The physical and mental state of an animal in relation to the conditions in which it lives and dies. https://www.woah.org/fileadmin/Home/eng/Health_standards/tahc/current/chapitre_aw_introduction.pdf Animals experience good welfare when they feel healthy, comfortable and well nourished; are able to express highly motivated behaviours; and are not subjected to prolonged negative states. Good animal welfare refers to an overall positive state.
Arthritis (or osteoarthritis)	A complex condition involving inflammation and degeneration of one or more joints. Cats with arthritis experience pain and inflammation in various joints that interfere with daily activities.
Biosecurity	Measures designed to prevent, reduce or eliminate the introduction and spread of disease.
Body condition score	A standardized tool for determining the amount of fat on an animal's body which is used to help determine ideal weight. It involves a visual assessment and touching specific anatomical sites that are most responsive to a change in body fat. A body condition score is the value assigned to individual animal from a specific body condition scoring scale.

Cattery	Any premise where one or more groups of cats are housed or managed, including breeding, boarding, shelter or rescue facilities, research institutions, veterinary hospitals and even home environments.
Cryptorchidism	A condition in which one or both of a male cat's testes fail to descend into the scrotum.
Cystitis	Inflammation of the urinary bladder. In cats, there may be multiple underlying causes or sources of inflammation, and treatment can be complex.
Disinfect	The process of using heat or chemicals to destroy many or all disease-carrying microorganisms on a surface. Disinfection is generally preceded by cleaning (contrast with 'Sanitize').
Domestic Cat	Member of the species *Felis catus*. Includes all cats regardless of ownership status or lifestyle.
Enrichment	Environmental enrichments are used to enhance a cat's social and physical environment and encourage expression of normal behaviours. Types of enrichments include social (e.g., housing cats in a compatible group), structural (e.g., devices that promote movements or exercise), and physical (e.g., addition of objects or substrates to play with or manipulate).
Estrus	A recurring period of sexual receptivity and fertility in female mammals. Cats in estrus are commonly referred to as being 'in heat'.
Euthanasia	The act of inducing the humane death of an animal in a way that minimizes or eliminates stress and suffering.
Five Domains	A model that describes the five factors (or domains) that most affect animal welfare (nutrition, physical environment, health, behavioural interactions, mental state). Considering both physical needs and mental states allows one to evaluate an animal's overall welfare (contrast with 'Five Freedoms').
Five Freedoms	A model of assessing animal welfare that includes five key aspects of animal welfare: freedom from hunger, thirst and malnutrition; freedom from fear and distress; freedom from physical and thermal discomfort; freedom from pain,

	injury and disease; and freedom to express normal patterns of behaviour. The limit of the Five Freedoms model is that it assumes that the absence of a negative state (e.g., hunger) infers there is good welfare, whereas the Five Domains model considers the subjective experience as well (e.g., the positive or negative experience an animal may have while eating) (contrast with 'Five Domains').
Hepatic lipidosis	A liver disease unique to cats in which large amounts of fat are stored in the liver, severely compromising its function. Also called 'fatty liver disease'.
Inappetence	Lack of appetite.
Inbreeding	Breeding two related cats. Inbreeding may result in a higher incidence of inherited disorders, so a close analysis of pedigree is required.
Neuter	The surgical removal of a male cat's testicles. An unneutered tom cat is referred to as intact.
Non-steroidal anti-inflammatory medication	A drug that provides analgesic (pain-killing), fever-reducing, and anti-inflammatory effects but that is not a steroid or a narcotic.
Parasite	An organism that lives on or in another organism (the host) and causes harm to the host.
Pathogen	A bacterium, virus, or other microorganism or agent that may cause disease.
Pedigree	A record of ancestry of a cat that can be traced back several generations and is recognized by a registration organization. A pedigree generally asserts that a cat is purebred of a specific breed.
Perinatal period	The last weeks before and the first weeks after birth. Generally, the queen and kittens are most vulnerable in the two to three days before and after birth.
Pheromone	A volatile chemical compound produced by cats and deposited in the environment (e.g., by facial rubbing, urine spraying and scratching objects). Cats use pheromones to signal a wide range of messages to other cats and themselves.

Prophylactic (or prophylaxis)	A medicine or course of action intended to prevent disease and preserve health.
Prescriptive	Imposition of a rigid rule or requirement that may have unintended adverse effects on a cattery e.g., all catteries must have one staff member per cat. Contrast with outcome-based rules e.g., Requirement 1.5 'staffing levels must be sufficient to provide for the appropriate care and management of resident cats.
Quarantine	Housing and managing cats in isolation with no direct or indirect contact with other cats or animals for a specified length of time to undergo health observation or prevent disease spread. Quarantined cats may also undergo testing and treatment. Also referred to as 'isolation'.
Queen	An unspayed female cat (contrast with 'Spay').
Recommendations	Discretionary measures that may be taken or provided and that are expected to enhance animal welfare outcomes (contrast with 'Requirements').
Requirements	Mandatory obligations that all catteries are expected to implement. Requirements describe the minimum conditions that must be provided to ensure adequate cat care (contrast with 'Recommendations').
Sanitize	A two-step process of cleaning and disinfecting that reduces or eliminates pathogens from surfaces (contrast with 'Disinfect').
Stillbirth	The death of a kitten before or during delivery.
Spay	The surgical removal of a female cat's sex organs (uterus and ovaries). An unspayed cat is referred to as intact.
Tom	An unneutered male cat (contrast with 'Neuter').

Umbilical hernia	A condition in which abdominal contents protrude past the spot where the umbilical cord was attached to the kitten (the umbilicus or belly button) due to incomplete closure of the umbilical ring. A hernia may appear as a bulge, soft swelling or protrusion under the skin. This condition can be inherited in cats.
Vermin (or pest)	Unwanted animals that may cause damage or spread disease within the cattery e.g., flies, cockroaches, mice, rats.
Zoonotic disease (or Zoonosis)	A disease that can be transmitted from animals to people.

APPENDIX D
RESOURCES

1. Association of Shelter Veterinarians' (ASV) Guidelines for Standards of Care in Animal Shelters. 2nd ed. Available from: https://www.jsmcah.org/index.php/ jasv/issue/view/2
2. CVMA Position Statement: Keeping Wild (Native or Exotic) Animals as Pets. Available from: https://www.canadianveterinarians.net/policy-and-outreach/position-statements/statements/keeping-wild-native-or-exotic-animals-as-pets/
3. CVMA Position Statement: Responsible Breeding of Companion Animals https://www.canadianveterinarians.net/policy-and-outreach/position-statements/statements/responsible-breeding-of-companion-animals/
4. CCAC guidelines, Animal Welfare Assessment. Available from: https://ccac.ca/Documents/Standards/Guidelines/CCAC_guidelines-Animal_welfare_assessment.pdf
5. Little S. Reproduction and breeding management in cats. Vet Med 2001;96:549-55.
6. Ohio State University College of Veterinary Medicine Indoor Pet Initiative. Available from: https://indoorpet.osu.edu/cats
7. Landsberg G, Hunthausen W, Ackerman L. Developmental, social, and communicative behavior. In: Behavior Problems of the Dog & Cat. 3rd ed. Elsevier, Great Britain, 2013:
8. O'Hanley KA, Pearl DL, Niel L. Risk factors for aggression in adult cats that were fostered through a shelter program as kittens. Appl Anim Behav Sci 2021;236:105251.
9. Turner DC, Bateson P, eds. The Domestic Cat. 3rd ed. Cambridge, UK: Cambridge University Press, 2014.
10. Slater M, Garrison L, Miller K, et al. Practical physical and behavioral measures to assess the socialization spectrum of cats in a shelter-like setting during a three day period. Animals 2013;3:1162-1193.
11. Slater M, Garrison L, Miller K, Weiss E, Drain N, Makolinski K. Physical and behavioral measures that predict cats' socialization in an animal shelter environment during a three day period. Animals 2013;3:1215-1228.

12. Wilson C, Bain M, DePorter T, Beck A, Grassi V, Landsberg G. Owner observations regarding cat scratching behaviour: An internet-based survey. J Feline Med Surg 2016;18:791-797.
13. Vojtkovská V, Voslářová E, Večerek V. Methods of assessment of the welfare of shelter cats: A review. Animals (Basel). 2020 Aug 28;10:1527. Available from: https://www.mdpi.com/2076-2615/10/9/1527
14. Small Animal Clinical Nutrition, 5th ed. Topeka, Kansas: Mark Morris Institute. Available from: www.markmorrisinstitute.org/sacn5_download.html.
15. CIEH Model Licence Conditions and Guidance for Cat Boarding Establishments 2013. Available from: https://www.dumgal.gov.uk/media/21228/Guidance-Cat-Boarding/pdf/Cat_Boarding_Guidance_2013.pdf?m=636899916006270000
16. AAFP Your Cat's Environmental Needs. Available from: https://catfriendly.com/wp- content/uploads/2016/08/Environmental-GuidelinesEViewFinal.pdf
17. Warwick C, Jessop M, Arena P, Pilny A, Steedman C. Guidelines for inspection of companion and commercial animal establishments. Front. Vet. Sci., 06 July 2018 Sec. Animal Behavior and Welfare Volume 5 - 2018 https://doi.org/10.3389/fvets.2018.00151
18. CVMA Position Statement: Transportation of Dogs and Cats. Available from: https:// www.canadianveterinarians.net/policy-and-outreach/position- statements/statements/ transport-of-dogs-and-cats/
19. American Association for Feline Practitioners. Visiting your Veterinarian –Getting your Cat to the Veterinary Practice. Available from: www.catfriendly.com/wp- content/ uploads/2022/10/AAFPGettingCatToVetWeb.pdf
20. Canine & Feline Sector Group's Setting Standards on Global Commercial Transport of Cats and Dogs. Available from: https://www.cfsg.org.uk/wp-content/uploads/2021/07/Setting-Standards-on-Commercial-Transport-of-Cats-and-Dogs-June-2021.pdf
21. Government of Canada Get Prepared: Hazards and Emergencies. Available from: www.getprepared.gc.ca/cnt/hzd/index-en.aspx

APPENDIX E
FURTHER INFORMATION:
2. HEALTH AND WELFARE MANAGEMENT

2.3 Animal Management

Genetic Welfare Problems of Companion Animals.
Available from: www.ufaw.org.uk/cats/cats

2.6 Health Monitoring: Recognizing Ill Health, Injury, and Disease

Body Condition Score. Available from:
https://wsava.org/wp-content/uploads/2020/08/Body-Condition-Score-cat-updated-August-2020.pdf

2.7 Pain, Discomfort, and Distress Assessment

1. Feline Grimace Scale. Available from: www.felinegrimacescale.com
2. How Do I Know if my Cat is in Pain? Feline Pain Management. Available from: https://wsava.org/wp-content/uploads/2020/01/AAFP-How-do-I-know-if-my-cat-is-in-pain.pdf
3. Glasgow Composite Measure Pain Scale: CMPS – Feline. Available from: www.aprvt.com/uploads/5/3/0/5/5305564/cmp_feline_eng.pdf
4. UNESP-Botucatu Multidimensional Composite Pain Scale for assessing postoperative pain in cats. Available from: www.animalpain.com.br/assets/upload/escala-en-us.pdf
5. Colorado State University Veterinary Medical Center Feline Acute Pain Scale. Available from: www.vasg.org/pdfs/CSU_Acute_Pain_Scale_Kitten.pdf
6. Fear Free Shelters. Available from: www.fearfreeshelters.com/
7. Spectrum of Fear, Anxiety & Stress. Available from: https://www.fearfreehappyhomes.com/the-spectrum-of-fear-anxiety-and- stress-cats/

APPENDIX F
FURTHER INFORMATION:
3. VETERINARY CARE

3.2 Preventive Medical Care

1. 2021 AAHA/AAFP Feline Life Stage Guidelines. Available from: www.aaha.org/aaha-guidelines/life-stage-feline-2021/feline-life-stage-home/
2. AAFP Your Cat's Life Stages. Available from: https://catfriendly.com/wp-content/uploads/2022/05/ AAFPLifeStageGuidelineBrochure.pdf
3. AAFP and ISFM Feline Environmental Needs Guidelines. Available from: www.journals.sagepub.com/doi/10.1177/1098612X13477537
4. Your Cat's Environmental Needs: Practical Tips for Pet Owners. Available from: https://catvets.com/wp-content/uploads/2024/01/Environmental GuidelinesEViewFinal.pdf

3.2.2 Vaccination

2020 AAHA/AAFP Feline Vaccination Guidelines. Available from: https://www.aaha.org/resources/2020-aahaaafp-feline-vaccination-guidelines/

3.2.4 Zoonoses

1. 2019 AAFP Feline Zoonoses Guidelines. Available from: https://journals.sagepub.com/doi/full/10.1177/1098612X19880436
2. What Can I Catch from my Cat? Feline Zoonoses. Available from: https://catfriendly.com/wp-content/uploads/2021/08/zoonoses.pdf

3.5 Common Diseases

1. AAFP Disease information fact sheets. Available from: www.catvets.com/guidelines/practice-guidelines/aafp-aaha-feline- vaccination
2. Upper respiratory infections (URIs, Cat flu) – information for breeders. Available from: https://icatcare.org/cat-advice
3. Companion Animal Parasite Council: parasite information, including prevalence maps and control guidelines Available from: www.capcvet.org/

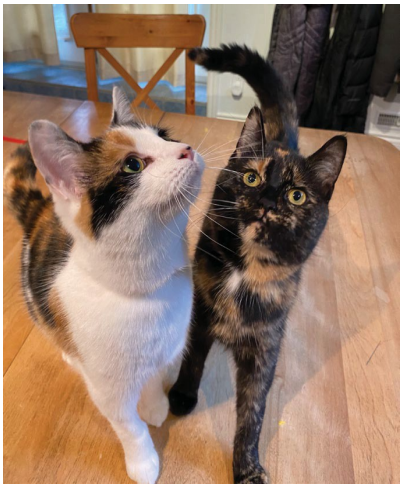
APPENDIX G
FURTHER INFORMATION:
4. CARE – NUTRITION AND FOOD MANAGEMENT

1. AAFP Consensus Statement: Addressing behavioral needs to improve feline health and wellbeing. Sadek T, Hamper B, Horwitz D, Rodan I, Rowe E, Sundahl E. J Feline Med Surg 2018;20:1049–1055.
2. How to feed a cat: Addressing behavioural needs. Available from: https://catfriendly.com/wp-content/uploads/2018/10/How-to-Feed-Client-Broch_Final.pdf
3. WSAVA Nutritional Toolkit. Available from: https://wsava.org/wp-content/uploads/2021/04/WSAVA-Global-Nutrition-Toolkit- English.pdf
4. Dr. Detective: How Do I Feed the Multicat Household with Different Nutritional Needs? Scherk M. Available from: https://www.canadianveterinarians.net/media/h43hpkwb/dr-detective-multicat- feeding- cvma-sbcv-nov-2021-1.pdf

APPENDIX H
FURTHER INFORMATION:
5. CARE – ACCOMMODATION AND HOUSING

1. Wagner D, Hurley K, Stavisky J. Shelter housing for cats: Practical aspects of design and construction, and adaptation of existing accommodation. J Feline Med Surg 2018;20:643-652. Available from: www.journals.sagepub.com/doi/full/10.1177/1098612X18781390
2. Wagner D, Hurley K, Stavisky J. Shelter housing for cats: Principles of design for health, welfare and rehoming. J Feline Med Surg 2018;20:635-642. Available from: www.journals.sagepub.com/doi/full/10.1177/1098612X18781388
3. National Centre for the Replacement Refinement and Reduction of Animals in Research. Housing and Husbandry: Cat. Available from: www.nc3rs.org.uk/3rs- resources/housing-and-husbandry-cat
4. Eagan BH, Gordon E, Fraser D. The effect of animal shelter sound on cat behaviour and welfare. Animal Welfare 2021, 30: 431-440. Available from: www.ufaw.org.uk/downloads/eagan-30-issue-4.pdf
5. Stella JL, Croney CC. Environmental Aspects of Domestic Cat Care and Management: Implications for Cat Welfare. The Scientific World Journal 2016: 1-7. Available from: www.hindawi.com/journals/tswj/2016/6296315/
6. Picture of spray stations Available from: www.journals.sagepub.com/doi/10.1177/1098612X19831203
7. NIOSH sound level meter app. Available from: https://www.cdc.gov/niosh/noise/about/app.html?CDC_AAref_Val=https://www.cdc.gov/niosh/topics/noise/app.html

8. Scherk, M. Optimizing an indoor lifestyle for cats. Veterinary Focus vol 26 no2. 2016. Available from: https://vetfocus.royalcanin.com/en/scientific/optimizing-an-indoor-lifestyle-for-cats
9. Herron ME, Buffington CA. Environmental enrichment for indoor cats. Compend Contin Educ Vet 2010;32:E4. PMID: 21882164; PMCID: PMC3922041
Available from: www.ncbi.nlm.nih.gov/pmc/articles/PMC3922041/
10. American Association of Feline Practitioners (AAFP) Environmental Needs Guidelines:https://journals.sagepub.com/doi/pdf/10.1177/1098612X13477537



APPENDIX I
FURTHER INFORMATION:
6. SANITATION

1. UC Davis Koret Shelter Medicine Program: Disinfectant product table. Available from: www.sheltermedicine.com/library/resources/?r=disinfectant-product-table
2. Madison Wisconsin School of Veterinary Medicine Shelter Medicine: in Shelter Medicine. Available from: www.uwsheltermedicine.com/library/resources/sanitation-in-animal-shelters
3. American Animal Hospital Association: Sample Environmental Cleaning and Disinfection Protocol. Available from: https://www.aaha.org/resources/2018-aaha-infection-control-prevention-and-biosecurity-guidelines/cleaning-and-disinfection2/
4. American Animal Hospital Association: Protocol for hand hygiene using soap and water, or alcohol-based hand sanitizer. Available from: www.aaha.org/aaha-guidelines/infection-control-configuration/protocols/hand-hygiene2/

APPENDIX J
FURTHER INFORMATION:
7. TRANSPORTATION

1. Health of Animals Regulations: Part XII: Transport of Animals. Available from: www.laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._296/page-10.html - h-548075
2. Health of Animals Regulations: Part XII: Transport of Animals: Interpretive Guidance. Available from: https://inspection.canada.ca/en/animal-health/terrestrial-animals/ humane-transport/health-animals-regulations-part-xii
3. International Air Transport Association: How to Prepare your Pet Prior to Booking Available from: www.iata.org/en/programs/cargo/live-animals/pets/
4. International Pet and Animal Transportation Association (IPATA) https://www.ipata.org/
5. Travelling with a Pet. Available from: https://inspection.canada.ca/travelling-with-pets-food-or-plants/travelling-with-a-pet/eng/1575745860029/1575746174301
6. Travel documents for your pets. Available from: https://travel.gc.ca/travelling/documents/travel-documents-for-your-pets

APPENDIX K
FURTHER INFORMATION:
8. HEALTH, SAFETYAND WORKING CONDITIONS

1. Hand hygiene practices in healthcare settings. Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, 2012. Ottawa, ON. Catalogue HP40-74/2012E-PDF. Available from: www.publications.gc.ca/site/eng/430135/publication.html
2. Designing an effective PPE Program. Canadian Centre for Occupational Health and Safety, 2022. Available from: www.ccohs.ca/oshanswers/prevention/ppe/designin.html
3. Animal and Human Bites. My Health Alberta. Available from: https://myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=anlbt
4. Workplace Safety, Workers Compensation Board of PEI. Available from: http://www.wcb.pe.ca/Workplace/OHSActAndRegulations
5. Health and Safety Nova Scotia. Available from: https://novascotia.ca/lae/healthandsafety/
6. Worksafe New Brunswick. Available from: https://www.worksafenb.ca/
7. Occupational Health and Safety Newfoundland & Labrador. Available from: https:// workplacenl.ca/workers/health-and-safety/ohs-program/
8. Quebec's Health and Safety Requirements. Available from: https://www.cfib- fcei.ca/en/tools-resources/occupational-health-and-safety-act-workplace-OHS-QC
9. Quebec Act Respecting Occupational Health and Safety. Available from: https://www.legisquebec.gouv.qc.ca/en/document/cs/s-2.1
10. Workplace health and safety: Government of Ontario. Available from: https://www.ontario.ca/page/workplace-health-and-safety
11. SAFE Work Manitoba. Available from: https://www.safemanitoba.com/
12. Worksafe Saskatchewan. Available from: https://www.worksafesask.ca/industries/occupational-health-safety/
13. Alberta Health and Safety Program. Available from: https://www.alberta.ca/health- safety-program

14. Work Safe BC. Available from: https://www.worksafebc.com/en/health-safety
15. Workers' Safety & Compensation Commission - Nunavut and Northwest Territories. Available from: https://wscc.nt.ca/
16. Workers' Safety and Compensation Board Yukon. Available from: https://www.wcb.yk.ca/web-0070

APPENDIX L
FURTHER INFORMATION:
9. EMERGENCY MANAGEMENT

1. Government of Canada Get Prepared: Hazards and Emergencies. Available from: www.getprepared.gc.ca/cnt/hzd/index-en.aspx
2. Red Cross source for local community programs and services. Available from: www.redcross.ca/in-your-community
3. Alertable Community Notifications. Available from: www.alertable.ca/signup
4. National Animal Rescue and Sheltering Coalition: Emergency Sheltering During Coronavirus Disease Pandemic. Available from: https://af343bb9-16a5-4f13-b57a-c0776a6dcaac.filesusr.com/ugd/8b3e05_9ad94d3be478412c997a02e45b5c30c9.pdf
5. ASPCA Animal Emergency Preparedness Self-Assessment Checklist. Available from: www.aspcapro.org/sites/default/files/aspca-emergencykit-checklist.pdf
6. Centre For Disease Control Pet Disaster Kit. Available from: https://www.cdc.gov/healthy-pets/media/pdfs/disaster-prep-pet-emergency-checklist-1.pdf?CDC_AAref_Val=https%3A//www.cdc.gov/healthypets/resources/disaster-prep-pet-emergency-checklist.pdf7.American
7. American Humane Pet Disaster Preparedness. Available from: www.americanhumane.org/fact-sheet/pet-disaster-preparedness/
8. CDART: During an Evacuation. Available from: https://www.cdart.org/during-an- evacuation