

# Sled Dog Code of Practice

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Ministry of  
Agriculture



## **ACKNOWLEDGEMENTS**

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This document benefitted greatly from the perspectives of many people from the academic community, government, veterinarians, animal welfare advocacy, and industry.

The Province of British Columbia recognizes the dedicated people who comprised the Sled Dog Standard of Care Working Group. These individuals gave freely of their time and expertise, and it is due to their passion and commitment to improving conditions for sled dogs that this document was made possible. Thank you.

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## BACKGROUND

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### Mandate

A Standard of Care Working Group (Working Group) comprising representatives from the Province of British Columbia, the British Columbia Society for the Prevention of Cruelty to Animals (BCSPCA), the College of Veterinarians of BC, Canadian Veterinary Medical Association, Industry Experts, Racers and Academics with expertise in the field of animal welfare was established by the Honourable Don McRae, Minister of Agriculture, in February 2011. The Working Group was given a mandate to develop recommendations for a Standard of Care for Sled Dogs, in the Province of British Columbia.

The Sled Dog Code of Practice is a reference document that provides guidance to sled dog owners and operators, veterinarians, and law enforcement officials. The Code of Practice contains recommended best practices. Mandatory requirements for Sled Dog operations are contained in the *Sled Dog Standard of Care Regulation*.

The Working Group observed consensus that the welfare of sled dogs include their physical and mental state of well-being and that they are entitled to the principles of the “five freedoms”<sup>1</sup>.

### Methodology

The Working Group was structured to represent a broad range of key stakeholders to the greatest extent possible. The Working Group met in person and by teleconference from May to October 2011. The approach included gathering information, surveying legislation, regulation, policy and practices, national and international codes of practice, and meetings and interviews with stakeholders.

The Working Group recognizes this document is intended to be a living document to be reviewed and revised as necessary to keep current.

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1 Freedom from hunger, thirst and malnutrition  
Freedom from fear and distress  
Freedom from thermal and physical discomfort  
Freedom from pain, injury and disease  
Freedom to express normal patterns of behaviour  
(Dr. John Webster: Researcher and Professor of Animal Husbandry, University of Bristol)

## INTRODUCTION

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Canadians have a special relationship with dogs, not only as companion animals, but also as active working animals. Dogs are living creatures capable of experiencing pain, and when an individual fails to adequately care for his or her animals, the poignant imagery delivered by the media can spark the public's sensitivity and feelings of outrage. The revelation of these deplorable acts of cruelty or neglect can incite human empathy, and the graphic accompanying imagery has been shown to enable the public's ability to recognize and empathize with the suffering of another living being. The empathetic public support and the recognition of animal welfare issues can help to ensure that standards are in place to protect animals. The challenge is how to best address those vital standards. Dogs are used for a variety of accepted purposes in society; and their care, housing and training can vary accordingly.

The bond mushers have with their dogs is consistent with how the majority in society view their own companion dogs. Many would argue that mushers have a particularly close bond with their dogs due to the mutual reliance and teamwork required on the trail. Sled dogs have been bred to run and they derive many benefits (both mental and physical) from engaging in sledding activities. A musher's duty is to care for their dogs' physical and mental well-being such that the benefits are fully realized. All physical activities incur some measure of risk; it is up to the musher to minimize those risks and make every effort to ensure their dogs' well-being. Sled dogs deserve regular veterinary care, adequate shelter, proper nutrition, exercise, and careful consideration about their care options after they are unable to work, which might include euthanasia when appropriate. The Working Group agrees that there is no acceptable reason to end the life of a healthy, socially amenable dog simply because it may no longer be suitable for use in the industry. The public expects a minimum standard for the treatment and living conditions of sled dogs that is appropriate and humane. The mushing community supports standards of care to protect sled dogs, and to demonstrate their commitment to sled dog welfare.

Although this Code of Practice is designed for sled dog owners, the working group feels strongly it can apply to all persons responsible for the welfare of dogs, including dog breeders, those who show dogs, keep dogs as companions [pets], and use dogs for sport, as working animals, or for any other reason. The way in which a minimum standard is achieved however, may depend on the context in which it is being considered.

# 1. HEALTH AND WELFARE MANAGEMENT

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## RELATIONSHIP OF ANIMAL HEALTH AND ANIMAL WELFARE

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### Introduction

The World Organisation for Animal Health (OIE) is an organization that leads internationally on animal health and welfare and develops recommendations and guidelines covering animal welfare practices.

The OIE's *Guiding Principles on Animal Welfare* pertinent to this Code of Practice for the Care of Sled Dogs are:

1. That there is a critical relationship between animal health and animal welfare.
2. That the internationally recognized “five freedoms<sup>2</sup>” provide valuable guidance in animal welfare.
3. That the scientific assessment of animal welfare involves diverse elements which need to be considered together, and that selecting and weighing these elements often involves value-based assumptions which should be made as explicit as possible.
4. That the use of animals carries with it an ethical responsibility to ensure the welfare of such animals to the greatest extent practicable.

## BODY CONDITION SCORE

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### Introduction

Body Condition Score (BCS) is an important tool in determining whether an animal is too thin, too fat, or of optimum weight. BCS can be variable and is dependent upon several factors including age, breed, gender, and activity level. Body weight itself cannot be used to determine whether an animal is over- or under-weight. Determination of optimum weight is best done by using BCS in combination with weighing of the dog.

Dogs that are too thin are less tolerant to cold and are often more susceptible to disease. Obese dogs face serious health risks, as obesity can increase the risk of and aggravate conditions such as diabetes and heart disease. Excessive weight can

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<sup>2</sup> Freedom from hunger, thirst and malnutrition  
Freedom from fear and distress  
Freedom from thermal and physical discomfort  
Freedom from pain, injury and disease  
Freedom to express normal patterns of behaviour  
(Dr. John Webster: Researcher and Professor of Animal Husbandry, University of Bristol)

also damage joints, reduce mobility and exacerbate arthritis. Keen observation of BCS allows an operator to regularly adjust the dog's health care plan and feeding regime to maintain optimal weight.

## REQUIREMENTS

Sled dogs at a Body Condition Score (BCS) below 3 must receive attention from a practicing veterinarian and/or corrective action as appropriate\*.

Sled dogs at a Body Condition Score (BCS) of 7 or above must receive attention from a practicing veterinarian and/or corrective action as appropriate\*.

\* BCS requirements based on the 9 point *Nestlé Purina Body Condition System* (see Appendix "A")

## RECOMMENDED BEST PRACTICES:

- Evaluate the body condition of sled dogs regularly and determine a BCS (see Appendix "A", *Nestlé Purina Body Condition System*).
- Identify sled dogs that are too thin or too fat and document corrective action.
- Aim to maintain a BCS of between 4 and 5 (see Appendix "A", *Nestlé Purina Body Condition System*).
- Monitor body condition by performing a hands-on examination every two to three days (*Determining a Working Dog's Dietary Needs* (p13), *Mush with P.R.I.D.E. Sled Dog Care Guidelines*, 3<sup>rd</sup> Edition, 2009).
- Monitor body weight using a reliable and consistent scale that is suitable for sled dogs.

## RECORD KEEPING

### Introduction

There are many benefits to maintaining health and welfare records. Well-organized and complete records provide for better management of a sled dog's health. They allow for on-going monitoring, demonstrate a commitment to and proof of animal care, ensure consistency, and in the event of a disease outbreak, provide a means of traceability.

## REQUIREMENTS

Records must be kept to maintain current, accurate, and detailed information on every sled dog that includes:

- acquisition
- disposition
- identification (e.g.: microchip, tattoo, photo)
- health
- re-homing
- euthanasia protocols that include how, when and why euthanasia was performed
- Life cycle plan, including activities undertaken for socialization

## RECOMMENDED BEST PRACTICES:

- Maintain current, accurate and detailed information on every sled dog that includes but is not limited to:
  - date of birth
  - date of death
  - disposal of remains
  - feeding and nutrition
  - incidental and behavioural concerns
  - injury, illness, parasite control and treatment
  - pedigree
  - sterilization and reproduction
  - vaccinations
  - work or training schedule.

## HEALTH CARE

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### Introduction

Animal health is an integral component of animal welfare (*Relationship of Animal Health to Animal Welfare, (p20) Code of Practice for the Care and Handling of Dairy Cattle, National Farm Animal Care Council*). Operators should maintain the health of their sled dogs through appropriate nutrition, suitable housing, disease prevention, detection and treatment. Veterinarians play a key role in helping operators meet these animal health needs. An effective health-management program (see [Health Care - Recommended Best Practices](#)) contributes to animal well-being by providing a strategy for disease prevention, rapid diagnosis and effective

treatment. A health-management program will also identify sick or injured animals early and enable the development of treatment protocols. The comfort and humane treatment of sick and injured sled dogs is a priority. As part of a sled dog's Health Management Plan, professional veterinary dental care promotes optimal health, enhancing a sled dog's quality of life, overall health, and longevity.

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**College of Veterinarians of British Columbia – Veterinary Client Patient Relationship:**

When a member agrees, expressly or by implication including by actions, to render care to an animal, a Veterinary Client Patient Relationship is thereby established<sup>3</sup>.

Every member must in every case make reasonable effort to be readily available, or make appropriate arrangements, for the provision of follow-up evaluation, treatment or any care appropriate in the case of an adverse reaction or ineffectiveness of the prescribed treatment regime<sup>4</sup>.

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**REQUIREMENTS**

Sled dogs must be provided with veterinary care to meet their health and welfare needs.

Sled dogs must receive prompt attention by a practicing veterinarian, either directly or by way of consultation, if they are experiencing severe pain, suffering, deteriorating health or serious injury.

Sled dogs known to be infected with an infectious disease must be carefully supervised and securely isolated to prevent infecting other sled dogs.

**RECOMMENDED BEST PRACTICES:**

- Establish a Veterinary-Client Patient Relationship with a practicing veterinarian.
- Work with the practicing veterinarian to develop a Health Management Program that includes but is not limited to the following components:
  - minimum annual veterinary check up
  - vaccination protocols for rabies and other diseases as recommended by a practicing veterinarian
  - protocols for the prevention, detection, and treatment of disease and injury
  - control protocols for infectious disease (*see Appendix "B", Control Protocols for Infectious Disease*)

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3 College of Veterinarians of British Columbia (BCVMA) ByLaws – Appendix A – BCVMA Code of Ethics, Duty to Patients and Clients (32), p5

4 College of Veterinarians of British Columbia (BCVMA) ByLaws – Appendix A – BCVMA Code of Ethics, Duty to Patients and Clients (34), p6

- zoonosis prevention and control ([see Appendix "C", Zoonotic Diseases](#))
- dental care
  - provide regular and routine examination of teeth and gums
  - seek professional guidance if inflammation, erosion of gums, and/or broken teeth is observed
- spaying and neutering protocols
- whelping considerations
- internal and external parasite management control ([see Appendix "D", Parasite Control](#))
- pest control
- end-of-life decisions including euthanasia plans
- recommendations for a canine first-aid kit and emergency supplies ([see Appendix "E", Trail First Aid Kit](#)).
- Provide a means of isolation should a sick or injured sled dog require individual care.

## EXERCISE

### Introduction

Exercise is extremely important for both physical and mental health, and is an essential component in meeting a sled dog's social needs. Insufficient exercise can contribute to the development of behaviour problems. Exercise is usually a matter of running in harness, but may also include walking and running on or off a leash, swimming, playing, or using exercise equipment such as treadmills.

### REQUIREMENTS

Sled dogs must receive sufficient exercise sufficient to maintain health and well being.

Sled dogs must be directly supervised at all times when exercising with exercise equipment such as treadmills or swimming pools to limit the risk of injury.

### RECOMMENDED BEST PRACTICES:

- Sled dogs should receive daily exercise outside their containment system at least once per 24-hour period.
- Ensure that sled dogs being exercised are under control at all times.
- Ensure that the level of exercise is appropriate for the age, level of fitness and physical condition of the sled dog.

## FULL LIFE CYCLE PLANNING FOR EVERY SLED DOG

### Introduction

Operating a kennel is a significant undertaking that requires full life cycle planning for every sled dog. Owning sled dogs is potentially a 15-year commitment to each dog. The transition of the sled dog from working life through to retirement, and possible re-homing, requires thoughtful planning and resources.

It is important to recognize that a dog's needs change and increase as they age. People thinking about acquiring a sled dog should choose a type that suits their situation and lifestyle, the work that the dog will perform, and the operator's mushing goals. Operators need to consider and plan for the provisions the dog will need, including housing and equipment, the cost of keeping the dog, its exercise, training, nutritional, socialization, grooming and health needs, inevitable retirement or potential re-homing needs, and the amount of time that the operator can devote to the dog during its lifetime.

Operators need to recognize and understand their legal responsibilities and should be knowledgeable about all aspects of caring for a dog. Additional care should be taken when choosing a puppy of unknown or mixed parentage in regard to its likely size as an adult, its temperament, its coat and any potential health problems (*Purchasing or Adopting a Dog* (p6, Introduction), *Animal Welfare (Dogs) Code of Welfare 2010*, National Animal Welfare Advisory Committee, New Zealand). It is unwise to breed a dog that has undesirable physical or behavioural defects as these are likely to be inherited by their offspring.

### REQUIREMENTS

Life cycle planning must be demonstrated before breeding or acquiring a sled dog. A Life cycle plan must be complete for each sled dog in accordance with Schedule C of the *Sled Dog Standard of Care Regulation*.

### RECOMMENDED BEST PRACTICES:

- Take the following steps when developing a life cycle plan before acquiring or breeding a sled dog:
  - Identify mushing goals (i.e. recreational, touring, seasonal, racing, skijoring, or hobby), choose a breed that matches those goals, and determine how many sled dogs will be required
  - Seek advice from experts such as reputable breeders, mushers, or practicing veterinarians on breed and lifestyle suitability, potential inheritable medical problems and behavioural tendencies

- Spend time with experienced mushers and sled dogs to obtain knowledge and gain a hands-on experience to better understand the requirements for proper care of sled dogs
- Ensure proper precautions are taken to avoid breeding a sled dog with physical, behavioural, or inheritable defects
- Determine specific costs, resource, and time requirements related to all life stages including housing, equipment, exercise, training, nutrition, socialization, grooming, health, geriatric care, and eventual retirement or re-homing
- Be realistic about your ability to provide for all of a sled dog's needs, throughout all of its life cycle phases, including its need for human and specie-specific interaction
- Ensure you are able to meet all of a sled dog's needs
- When acquiring a new sled dog, request information about:
  - Settling the sled dog into its new environment
  - Current feeding regime
  - Feeding requirements from puppy to adulthood
  - Behavioural training including house training
  - Vaccinations, parasite and de-worming treatments
  - Ongoing care
- Obtain a health examination within three days of acquiring a sled dog.

## BREEDING

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### Introduction

The breeding of dogs is a serious responsibility that requires a commitment of time and financial resources. Both male and female dogs become fertile at six to twelve months of age. The average interval between estrous cycles is about six months, but it can vary widely. Although a female may be bred in her first heat, the practice is not preferred because it can interrupt her growth and because young dogs can be poor mothers. It is advisable not to breed a young dog to allow time to rule out undesirable traits. Although older dogs can breed, fertility generally declines after about ten years of age. Caution should be used when breeding females over six years old that have not been bred as they more frequently experience problems whelping (*Acquiring a Dog* (p28), *Mush with P.R.I.D.E. Sled Dog Care Guidelines*, 3<sup>rd</sup> Edition, 2009).

Operators who are considering breeding a sled dog need to inform themselves about what is involved before they start. It is important to take the time to consider how to manage potential problems that can arise (*Breeding* (p17, *General*

Information), *Animal Welfare (Dogs) Code of Welfare 2010*, National Animal Welfare Advisory Committee, New Zealand), in addition to the extra costs, resource and time requirements associated with breeding.

Unplanned breeding can create a major welfare problem as the resulting puppies are often unwanted and can experience insufficient care, or inappropriate disposal, with detrimental effects (*Breeding (p17, Introduction)*, *Animal Welfare (Dogs) Code of Welfare 2010*, National Animal Welfare Advisory Committee, New Zealand). Finding new, appropriate homes for unwanted or unneeded dogs can sometimes be very difficult. The most effective method for preventing dogs from breeding is to spay or neuter all dogs that are not intended for breeding. Contrary to some beliefs, spaying and neutering will not reduce a dog's working abilities.

## REQUIREMENTS

Females in heat must be separated from intact males except in the case of planned breeding.

Females in heat must not have contact with more than one intact male at the same time.

## RECOMMENDED BEST PRACTICES:

- Avoid breeding a bitch before 18 months of age, or before the second estrous cycle.
- Receive clearances of all hereditary diseases that can be tested for in that breed before breeding a bitch or sire.
- Consider the BCS of the bitch and the presence of any chronic disease before breeding.
- Ensure the female is adequately vaccinated and de-wormed before breeding.
- Consult with a practicing veterinarian as soon as possible if an unwanted breeding is suspected.

## SPAYING AND NEUTERING

### Introduction

The most effective method of preventing dogs from breeding is to spay or neuter all dogs that are not intended for breeding. Spaying (ovariohysterectomy) and neutering (castration) are good options for dealing with heat cycles and for preventing unwanted litters. Spaying and neutering can make it easier to run females and males together, and can reduce dog fights, health problems, and food requirements (*Preventing Breeding (p26)*, *Mush with P.R.I.D.E. Sled Dog Care Guidelines*,

3<sup>rd</sup> Edition, 2009). There is no evidence to support the belief that spaying and neutering will reduce the drive of the racing sled dog (Zink, 2005). However, the only reason not to spay or neuter a dog is if there is the desire to breed the dog. Decisions regarding the ideal time and age for spaying or neutering working dogs should be discussed with a practicing veterinarian.

#### **RECOMMENDED BEST PRACTICES:**

- Spay and neuter all sled dogs that are not intended for breeding.
- Spay and neuter as early as practical all sled dogs that have or are likely to develop known inherited faults once the condition has been identified.
- Determine the ideal time for spaying and neutering through consultation with a practicing veterinarian.

### **RETIREMENT AND RE-HOMING**

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#### **Introduction**

It is important to recognize that, like humans, sled dogs are often forced to retire because of old age, illness, or injury. In other cases, a sled dog is no longer suitable to do the work intended by the musher. When this happens, an operator must decide whether to keep the sled dog for the remainder of the dog's life, or find an appropriate new home for the sled dog. Finding new homes for sled dogs can be challenging. Sled dogs that have been inappropriately socialized often have trouble acclimating to basic daily household occurrences such as television noises, climbing stairs, and the arrival of strangers at the door. Some sled dogs can be challenging pets if they have an instinct to roam, kill livestock, or if they are more independent than desired (*What to Do with Dogs You Don't Want to Keep* (p27), *Mush with P.R.I.D.E. Sled Dog Care Guidelines*, 3<sup>rd</sup> Edition, 2009).

Heart disease, metabolic disease, cancers and arthritis are common age-related disease of dogs. Difficulty standing up, weight change and excessive drinking and urination are common signs of disease related to age. Some disease may be interpreted by the operator as part of the natural aging process but in many cases the difficulties of advancing age can be managed by treatment and/or nutrition. As dogs age, there is an increased need for warmth, easily-accessible water, and both nutrient-rich and easily-digestible food.

There are mushers who maintain a lifelong commitment to the care of their animals with a preference for keeping their geriatric dogs until the end of their natural lives. Although older dogs may not be able to sustain the rigours of training, they may be helpful in training puppies and young dogs (*Geriatric Dogs and End of Life Issues* (p33), *Mush with P.R.I.D.E. Sled Dog Care Guidelines*, 3<sup>rd</sup> Edition, 2009).

If keeping retired sled dogs is not an option, operators must choose to explore options of re-homing. When trying to find an appropriate new home for the sled dog, it is important to consider a variety of options, including the re-homing with other mushers, junior mushers, or other interested and reliable people. If those options fail to provide a reasonable solution, it may be necessary to consider a rescue group as a last resort. If an operator needs to use rescue groups as a re-homing option they should reconsider their continued involvement with sled dogs.

Humans and dogs have developed a special relationship, a companionship, with one another that is different than that with livestock or other animals. There is a public expectation that all animals will be properly cared for, but there is an even greater expectation that a dog will be treated with dignity and respect during its entire life. For those reasons, it is not acceptable to euthanize healthy, re-homable sled dogs unless all options of re-homing have been exhausted.

## REQUIREMENTS

Euthanasia must not be used as a means of population control for healthy, re-homable sled dogs, unless it is demonstrable that all options of re-homing have been exhausted.

## RECOMMENDED BEST PRACTICES:

- Take responsibility for re-homing any unwanted sled dogs and puppies and avoid relying on humane societies or rescue organizations to re-home sled dogs.
- Establish a phased retirement plan for large numbers of sled dogs.
- Consider the following if planning to keep your older sled dog as a house pet (*Housing Considerations for Geriatric Sled Dogs* (p33), *Mush with P.R.I.D.E. Sled Dog Care Guidelines*, 3<sup>rd</sup> Edition, 2009):
  - Make the transition gradually
  - Provide additional bedding and an insulated doghouse
  - Adjust the feeding regime as the older sled dog's metabolic rate and general activity levels decrease
  - Provide easy access to shade and fresh, clean water during warm weather
  - Provide adequate space and mental stimulation.
- Consider the following when exploring re-homing options:
  - Re-homing a surplus sled dog with interested, reliable people
  - Exploring options of re-homing sled dogs with recreational or junior mushers, skijorers, mushers competing in a different mushing discipline or less demanding classes, or with pet owners looking for a companion

- Having the sled dog spayed or neutered before re-homing, or require that the person adopting the sled dog have the operation performed
- Fitting the sled dog to the right person, (e.g. compatibility and experience)
- Sled dogs that have been properly cared for and socialized have the best chance to be placed
- Relinquishing a surplus sled dog to a sled dog rescue organization only when the possibility of finding a new home has been exhausted.

## SANITATION

### Introduction

Good hygiene is important to maintain the health and welfare of dogs and to minimize disease and distress (*Sanitation (p16, Introduction), Animal Welfare (Dogs) Code of Welfare 2010*, National Animal Welfare Advisory Committee, New Zealand). Proper cleaning and disinfection practices help reduce the transmission of infectious diseases to both animals and people, and result in a cleaner and healthier environment. A clean containment area also increases the comfort level of the sled dog.

Most containment surfaces, as well as food and water containers, can be kept clean by scrubbing with hot soapy water, followed by rinsing and disinfection. The design of food and water containers affects the ease with which they can be kept clean. Plastic containers need to be sturdy as some can become brittle and pose a danger if a sled dog chews them. Cleanliness is improved by keeping areas around containers clean, by allowing containers to dry before re-use and by using drying methods that prevent cross-contamination (*Sanitation (p16, General Information), Animal Welfare (Dogs) Code of Welfare 2010*, National Animal Welfare Advisory Committee, New Zealand).

Fixed soft furnishings and carpets may harbour parasites and infectious agents. Regular renewal or cleaning and disinfection of bedding improve hygiene and comfort.

### REQUIREMENTS

Containment areas must be cleaned of fecal matter at least once each day.

### RECOMMENDED BEST PRACTICES:

- Follow a sanitation program that includes regular cleaning, rinsing, and disinfection of containment surfaces.
- Keep areas around food and water containers clean, allow containers to dry before re-use, and use drying methods of containers that prevent cross-contamination.

## **PREGNANCY, WHELPING, AND WEANING**

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### **Introduction**

The approximate length of gestation for a dog is 63 days, although this can vary by as much as five to seven days either way. Preparation and knowledge prior to whelping can reduce stress for the bitch and the likelihood of whelping complications or loss of puppies. Most dogs are more relaxed when separated from the general population during this period.

A bitch's caloric needs will increase during the last two weeks of gestation and will be increased during the weeks that she is nursing her puppies. Many operators begin feeding a more nutrient-dense puppy or growth formula at this time to provide for the increased requirements. Having an x-ray done about a week prior to whelping can be helpful in providing an accurate determination of how many puppies are expected. This may be helpful for operators to know when whelping is complete. At this stage of the pregnancy the procedure does not pose a risk to either the bitch or her puppies.

About 12 to 24 hours prior to whelping, the rectal temperature of the bitch will drop by several degrees. Monitoring rectal temperature for several days starting about day 56 to 57 will help alert the musher to determine when whelping is approaching.

Consulting with a practicing veterinarian or experienced breeders is a good idea to become familiar with the process of whelping prior to the event. Knowing the signs of impending and active labour allows the operator to recognize potential problems early and to provide or seek assistance if necessary. For most sled dogs, pregnancy and whelping proceed smoothly and without complications.

It is important to daily monitor the weight of each puppy to ensure progressive weight gain. A particularly large litter, or if the bitch cannot produce sufficient quantities of milk, may require supplementation with a milk substitute formula made for dogs. Cow or goat milk is not nutritionally appropriate for nursing puppies.

Puppies can be offered soft food beginning at about three weeks of age, though if the bitch is producing enough milk; it is preferable to allow her to wean her puppies naturally. When weaning, canned foods or soaked kibble are easier for young puppies to chew and digest. A high-quality puppy or growth formula should be fed in small quantities several times a day. Puppies will continue to nurse on the bitch as they gradually begin to shift to a solid diet. A large flat pan allows all the puppies to easily access the food. Puppies may be fully nutritionally weaned by about five to six weeks of age if necessary, though it is preferable to allow them to continue to nurse for another week or two if the bitch is healthy, willing and in good condition.

**RECOMMENDED BEST PRACTICES:**

- Consult with a practicing veterinarian or experienced breeder prior to the whelping event to become familiar with the process.
- Prepare a nesting area that includes a whelping box, for the bitch about a week prior to whelping.
- Ensure the whelping box is large enough to allow the bitch to stand up, turn in a circle and comfortably stretch out to full length to allow the puppies to nurse.
- Ensure the bitch can move without stepping on or crushing puppies.
- Ensure the nesting area allows for the bitch to rest comfortably away from her puppies if she desires.
- Ensure care is taken to protect puppies from excessive cold or heat if the nesting area is not in a temperature-controlled building.
- Take care to protect puppies from insects.
- Monitor the weight of each puppy daily.
- Maintain the bitch at a BCS of 4 to 5 during pregnancy.

**SOCIALIZATION**

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**Introduction**

Socialization is an on-going, life-long process of familiarizing dogs with a variety of stimuli, including direct contact with other animals and humans, and is most critical during the period of early development between the ages of three and 12 weeks. During this critical period it is important that dogs be exposed to a wide range of stimuli including gentle, but not excessive, handling by people, exposure to novel experiences, vaccinated dogs, cats and other animals, vehicles and household appliances. This process is essential for normal behavioural development, will assist the dog in learning how to communicate and interact with humans and other dogs, help the dog adjust to novel situations and environments, and increase the chances of re-homing later in life.

Proper socialization is consistent with producing good sled dogs. Dogs that are at ease with most other dogs are easy to place in teams and are comfortable with other dogs. They are also more at ease with a variety of people they will encounter and a variety of circumstances they would experience. Research has demonstrated that even gentle handling for a short period daily in puppies less than three weeks accelerated maturation of the nervous system and enhanced development of motor and problem solving skills.

Without appropriate socialization during the critical period of development, dogs may develop chronic fear and anxiety or suffer from the inability to normally adjust

to their environments. Predatory behaviour may also relate to a lack of appropriate socialization during the critical period of early development.

If appropriate socialization is not provided within the first 12 weeks of a dog's life, it cannot be successfully substituted at a later date. Performance of daily husbandry practices is not a means of providing for the socialization needs of dogs.

In addition to adequate socialization, providing the right physical environment for puppies from three to nine weeks may significantly aid in a dog's future ability to be housetrained if required. When puppies start to eliminate on their own, from three weeks on, they should have access to another area beside the nest, and preferably that area should include a different type of surface.

While exposing dogs to the sound and presence of babies (and cats) will reduce the predatory behaviour towards them, dogs should never be left alone with babies without direct supervision. Dogs and children should never be left together unsupervised.

## REQUIREMENTS

Sled dogs must be appropriately socialized in all life stages to ensure an adequate quality of life, to minimize the development of behavioural problems and to provide a reasonable expectation they can be successfully re-homed; and

A socialization plan must be in place for all sled dogs (see [Record Keeping - Requirements](#)).

## RECOMMENDED BEST PRACTICES:

Ensure that socialization is appropriate to the circumstances in which the individual sled dog may be kept as an adult (i.e. sled dogs who will come into contact with children, livestock, and other pets or be expected to live in a home should be socialized accordingly).

- Include the following in the socialization plan:
  - Transition Period (up to three weeks of age)
    - puppies should be provided with another area of the nest to eliminate
    - puppies should have access to at least two footing surfaces or locations
  - Socialization Period (three to 12 weeks of age with five to eight weeks being the most important)
    - puppies should be exposed to a variety of animate stimuli including other sled dogs, cats, and people (adults and children)

- puppies should be exposed to a variety of inanimate stimuli including different locations, sounds (household, vehicle, children crying, etc.), overhead environments, stairs and slippery surfaces
- duration of stimuli exposure should be a minimum of 20 minutes two times per week
- the exposure should be gentle and the intensity controlled to be below the threshold where the puppy shows a fearful reaction
- Juvenile period (14 weeks to eight months)
  - juveniles should continue to be exposed to stimuli including people.

## EMERGENCY MANAGEMENT

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### Introduction

Emergency planning and evacuation protocols provide for the welfare of sled dogs in the event of an emergency (e.g., fire, flood, loss of power, snow storm, or other natural disasters).

### RECOMMENDED BEST PRACTICES:

- Develop emergency plans and evacuation protocols that cover food, water and shelter options.
- Ensure operators are familiar with emergency procedures.
- Prepare and make available a list of emergency contacts in the event of an operator's inability to care for sled dogs.
- Have an alternative watering system in the event of an interruption in water supply.

## 2. NUTRITION AND FEED MANAGEMENT

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### FEEDING

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### Introduction

No single diet will meet the requirements of every sled dog under every condition. Diets can vary widely in quality. The ideal diet for a sled dog depends on the dog's genetic makeup, age, physical state, training regime, environment and the food sources that are available. Operators should be aware of the disease risks associated with the feeding of raw food diets and the steps that should be taken to mitigate these risks. The Canadian Veterinary Medical Association (CVMA) and the Public Health Agency of Canada (PHAC) believe that potential risks exist for both dogs fed a raw food diet and for humans in contact with dogs fed a raw food diet.

Conventional science has documented evidence of potential animal and public health risks in feeding raw foods and believes the risks outweigh any perceived benefits of this feeding practice. Studies have demonstrated that dogs fed raw food diets can shed potential bacterial pathogens in their stool thereby potentially acting as a source of significant zoonotic infections to in-contact humans. The public health risks of feeding raw food may be increased given that bacterial pathogens in raw foods, and in the stool of pets fed raw foods, may have higher levels of antimicrobial resistance.

The traditional knowledge of mushers has established over thousands of years that sled dogs not only survive, but thrive on a diet that contains raw food. For generations mushers have used raw food diets to feed their sled dogs with no evidence of detrimental effects to dogs or humans.

### REQUIREMENTS

Sled dogs must be fed a minimum of once every 24 hours unless a practicing veterinarian or expert in canine nutrition gives direction to do otherwise.

Sled dogs must be provided with a balanced diet that meets the individual dog's caloric and nutritional requirements.

Sled dogs must be provided with food containers that are kept clean of contamination to decrease the health or welfare threat to the dog.

### RECOMMENDED BEST PRACTICES:

- Feed sled dogs more than one time per day.
- Feed non-nursing puppies a minimum of three times per day until the age of six months.
- Ensure necessary steps are taken to mitigate the risk of pathogen exposure when handling raw food and when managing sled dogs consuming raw food.
- Manage feeding so all sled dogs have adequate opportunity to consume their own food without competition from other sled dogs.
- Choose a product that is formulated for working dogs, is fresh, and is of the highest quality.
- Ensure diets are nutritionally complete and balanced.
- Ensure that foods are properly stored in a cool, dry place to avoid food spoiling and contamination by rodents and insects.
- Design and construct all surfaces in the feeding area of a material that allows for regular cleaning and disinfection.

- Follow good hygiene practices during feeding to prevent exposure to parasites and bacteria.
- Ensure adequate supplies of feed are carried on board when traveling.

## WATER

### Introduction

Water availability and quality are extremely important for animal health and welfare. Water is the most essential part of a feeding regime. While deficiencies in protein, fat, vitamins, or minerals will affect a dog's health, it may take days or months before such problems are noticeable. In contrast, dehydration affects an animal's health immediately and in extreme cases can lead to death if left untreated (*Water (p15), Mush with P.R.I.D.E. Sled Dog Care Guidelines, 3<sup>rd</sup> Edition, 2009*).

Palatability of water affects water consumption. A dog gains water by drinking and eating. Anything that increases a dog's daily water loss, e.g., panting, exercise, racing, diarrhea and vomiting, will increase its daily water requirement. As a general rule, dogs require 50 to 70mls of good-quality water per kg body weight daily (*Hand, M. S., Thatcher, C. D., Rimillard, R. L., & Roudebush, P. (Eds.). (2000) Small Animal Clinical Nutrition. (4th ed.). Marceline, MO: Walsworth*) for general functioning with additional requirements during hot weather, when performing high levels of work, or when lactating.

The best indication of hydration comes from physically monitoring your dogs. In a well-hydrated dog the tent made by lifting up the skin on the shoulder blades should disappear within one to two seconds and the dog's gums should be moist and slippery. A well-hydrated dog should produce light yellow urine at least three or four times per day. Warm, baited water can increase a dog's water consumption when temperatures fall below freezing. This can be prepared by mixing a fresh bait source (i.e. dry food, meat or cooked fish) into the water.

### REQUIREMENTS

Sled dogs must have access to palatable and clean water in adequate quantities to meet their needs and prevent dehydration.

Sled dogs must be provided with water containers that are kept clean of contamination to decrease the health or welfare threat to the sled dog.

### RECOMMENDED BEST PRACTICES:

- Encourage water consumption when temperatures drop below freezing by offering warm baited water.
- Monitor your sled dogs' hydration status by observing their hunger for snow and by examining their skin and gums and the colour of their urine.

- Ensure adequate supplies of water are carried on board when traveling.
- Test non-municipal water quality annually to ensure water is not compromised.

### 3. ACCOMMODATION AND HOUSING

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#### CONTAINMENT SYSTEM

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##### Introduction

A containment system is a secure area such as a pen, run or kennel; or the area within which a tethered sled dog may roam. The length of time that sled dogs are contained and the way that it is done can have a significant impact on their welfare.

Sled dogs are very social creatures and they thrive in an environment in which they can interact with their teammates. Isolating sled dogs from the company of their teammates has been associated with an increased incidence of behavioural abnormalities. Research has shown that dogs housed in a way that allows them to interact with at least one companion, spend a similar amount of time interacting with each other as dogs kept in groups of five to 11 animals (*Hubrecht, 1993*).

Both social and psychological stimulation in the containment area is extremely important for maintaining physical and mental health in sled dogs. Toys, chew bones and other safe objects with unique smells and placement can provide psychological stimulation, particularly when a variety of objects are offered in rotation. Providing a “play area” in which compatible dogs can interact under supervision can be beneficial.

Working with other team members, physical exercise and the unique sights and scents of the trail are some of the best possible forms of stimulation for sled dogs. A sled dog’s quality of life is influenced not only by its environment and containment method, but also by what the sled dog does outside of the containment area. Regardless of the type of containment system used, keen observation and good management of the sled dog is crucial.

##### REQUIREMENTS

###### **Construction and Maintenance:**

Containment systems must provide sled dogs with a reliable and safe means of preventing escape.

Containment systems must be made of durable and reliable materials and hardware, be regularly inspected for signs of deterioration, and be maintained in good condition.

Containment systems must allow for adequate shelter, shade, sanitation, ventilation, and exercise.

Containment system must include a dog house (see *Housing Systems*).

Containment surfaces must be well drained to prevent the accumulation of standing water and kept clean from feces and urine.

Sled dogs must be contained in such a way that they are not caused injury or distress.

#### **Release from Containment Area:**

A sled dog must be released from its containment system at least once every 24 hour period, for the purposes of socialization and exercise.

The above condition does not apply in any of the following circumstances:

- a. if the sled dog should not be moved or released due to illness or injury;
- b. if the sled dog is a female that is:
  - (i) within one week of her anticipated whelping date, or
  - (ii) has whelped within 2 weeks previously;
- c. if the sled dog is younger than 6 weeks old;
- d. if extreme weather conditions would make it unsafe for the sled dog to be released;
- e. if the sled dog:
  - (i) has within the previous 24 hour period participated in a racing activity or other activity involving significant physical exertion, and
  - (ii) requires rest as a result of participating in the activity;
- f. if a practicing veterinarian has given direction that the sled dog not be released.

#### **Space Requirements:**

Sled dogs must be contained in such a way that they have enough room to move around freely and engage in species typical behaviours such as running or jumping and safe physical contact with other sled dogs.

Sled dogs must be able to urinate and defecate away from the sleeping and eating area.

**RECOMMENDED BEST PRACTICES:**

- Allow sled dogs to see, smell and safely play with each other whenever feasible.
- Provide sled dogs with a stimulating, non-barren environment.
- Keep isolation duration to a minimum when sled dogs are isolated from teammates because of health issues, aggression or when isolating a bitch in season.
- Provide isolated sled dogs with extra human interaction and house them within sight of other dogs.
- Ensure all interactions are as positive and rewarding for sled dogs as possible.
- Spend time in playful interaction with each sled dog during the daily routine, in training, and when working.
- Take sled dogs on frequent training and conditioning runs.

**PENNING**

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**Introduction**

Penning is a form of containment that typically includes group (known as group housing) or individual penning of dogs. Pens may also be referred to as runs, cages or kennels. There are both benefits and risks to either method of penning. Group housing can be used as a tool to provide a more enriched and varied environment, and benefits include opportunities for positive interactions with other dogs including play, companionship, physical connection, and socialization. However, if not managed properly, group housing can create fear, stress, and anxiety in some members of the group. Group housing can also create physical risks of infectious disease exposure and injury or death from fighting. Group housing makes monitoring of individual sled dogs more difficult, and also requires careful selection and monitoring of dogs by knowledgeable caretakers. Selection considerations should include separation by age, behaviour, and prevention of infectious disease (*Group Housing, Selection (p37), Guidelines for Standards of Care in Animal Shelters, The Association of Shelter Veterinarians, 2010*).

Individual penning can be useful for those sled dogs that do not group well with other dogs, including those that fight with one another, are intact and of breeding age, require individual monitoring, are ill and require treatment, or those that are unfamiliar with one another. For individual penning of sled dogs, care must be taken to ensure that social contact and companionship with other animals\* and humans is provided (*Group Housing, Risks and Benefits of Group Housing (p37), Guidelines for Standards of Care in Animal Shelters, The Association of Shelter Veterinarians, 2010*).

## REQUIREMENTS

A pen for a sled dog must provide a minimum space of 100 sq. ft. (9.3 m<sup>2</sup>).

If 2 sled dogs are to be kept in the pen, 13.02 m<sup>2</sup> must be provided, with additional space provided for each subsequent dog to ensure dogs are able to engage in species typical behaviours and maintain adequate social distances, and to have adequate space for feeding, resting, urination and defecation.

## RECOMMENDED BEST PRACTICES:

- Use group penning for compatible sled dogs.
- House sled dogs communally only if they are known to interact well together, or if they are kept under observation to ensure that they are compatible.
- Combine sled dogs in groups no larger than six dogs.
- Provide a sturdy barrier to discourage digging by using chain link or heavy gage wire fencing.
- Construct fences to discourage climbing.
- Place doghouses so the roof cannot be used as a platform from which a sled dog can climb or jump over a fence.
- Equip pens with gates that are wide enough to permit easy entry and exit, but which can be closed quickly if necessary to prevent a sled dog from “rushing” the gate and escaping.
- Install gates with thresholds that allow for snow to accumulate without interfering with the gate opening and closing (the thresholds should be removable to allow for access with equipment like wheelbarrows and carts).
- Equip gates with latching devices that are easy for the musher to manipulate while wearing gloves, but difficult for sled dogs to manipulate.
- Shovel any accumulated snow away from gates during winter in order for them to swing fully open when necessary, especially if thresholds are not incorporated in the design (source: MWP, p. 9).
- Avoid the use of electric fencing.

## TETHERING

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### Introduction

Tethering is a common and traditional means of containing sled dogs. As with other means of containment, care must be taken to ensure that social contact and companionship with other animals and humans is provided.

### REQUIREMENTS

Sled dogs must not be tethered using a choke collar.

Tethering systems must allow for safe physical contact between sled dogs while limiting the risk of tangling and preventing overlap of adjacent chains.

Tethering system must substantially conform to one of the methods illustrated in ([Appendix "F", \*Tethering Methods\*](#)).

#### Tethering systems must:

- be comfortable and fitted so that they do not damage the skin or restrict breathing;
- be regularly inspected for wear and tear and be maintained;
- be of a size and weight that will not cause discomfort to tethered sled dogs;
- be at least 1.83 m long; and
- contain at least one swivel at the collar end that can turn 360 degrees to prevent tangles that can potentially choke a sled dog.

#### RECOMMENDED BEST PRACTICES:

- Ensure that the tether is made of chain rather than rope or cable to avoid cutting into the skin, tangling around the legs and to prevent the sled dog from chewing through the tether.
- Ensure that the attachment of the tether to the post rotates freely through 360 degrees at the post end ([see \*Appendix "F", Tethering Methods\*](#)).

## HOUSING SYSTEM

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### Introduction

Sled dogs need access to shelter from the elements that provides warmth, comfort, and is free from draughts and excessive heat or cold, to meet their physical needs. A sled dog may share a human dwelling, or be provided with shelter by a dog house. The dog house needs to provide a dry bed and enough space to lie down, stand, and turn around.

## REQUIREMENTS

Dog houses must be maintained in good condition, be large enough to allow the sled dog to comfortably stand up, turn around and lie down.

Sled dogs must be provided with sheltered and dry dog houses.

Sled dogs must be able to keep warm in cold weather and measures must be taken to:

- (a) provide shelter from rain, wind, snow sun, and other elements;
- (b) provide protection from excessive heat and cold.

## RECOMMENDED BEST PRACTICES:

- Provide sled dogs with a sleeping surface that is raised off the ground.
- Construct dog houses of solid, non-toxic, non-permeable materials and make sure they are free from hazards such as nails, screw heads, etc.
- Ensure floors are solid with no gaps capable of injuring the feet.
- Provide bedding that is clean and dry, and sufficient for comfort and insulation.
- Monitor bedding for mould, excessive dust, feces, and urine, insect infestation, parasites, and seed heads that could become embedded in the sled dogs' coat.
- Include a sturdy fence around the kennel perimeter to contain any sled dogs that may get loose from their primary containment and to keep unwanted people, wildlife and stray domestic animals away from the sled dogs.

## 4. HUSBANDRY PRACTICES

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### GROOMING AND NAIL CARE

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#### Introduction

Neglected coat and nails can cause distress and suffering. Hygiene around the perineum, anus and tail is particularly important in dogs with long coats to reduce soiling and the risk of flystrike. Mats can harbour external parasites and dermatitis is likely to develop in the underlying skin. Mats should be brushed out or clipped off.

Nails that are too long can put unnecessary stress on a dog's paw. When left for too long this can lead to degenerative changes in alignment of the joints of the foot and lower leg leading to chronic lameness. Nails grow continuously and

if left untrimmed and not worn down, can become cracked and broken, and can eventually lead to a very painful condition where the nails curl and embed themselves into the pad of the foot.

## REQUIREMENTS

Coats of sled dogs must be groomed at a frequency that will prevent suffering and distress including but not limited to excessive heat, matting or infestation by parasites.

Nails must be maintained so as to prevent penetration of the skin and/or foot pads and to prevent digital displacement.

## WORKING CONDITIONS

### Introduction

Selective breeding and training allows sled dogs to run and pull with joy and enthusiasm. An individual dog's athletic abilities vary as widely as those of individual human athletes. The equipment used and environmental conditions during the work are beyond the dog's control. Certain aspects of their work must be controlled to allow the dog to participate in a safe, enjoyable and humane manner to the best of their abilities.

The operator's leadership role should be enforced calmly and patiently, using recognized techniques that provide positive enforcement for acceptable behaviour as part of the training process. The operator's role as a leader should not be established by physical punishment or processes that are psychologically harmful to the sled dog (*Behaviour* (p33, *Recommended Best Practice (h)*), *Animal Welfare (Dogs) Code of Welfare 2010*, National Animal Welfare Advisory Committee, New Zealand).

## REQUIREMENTS

Sled dogs must not be worked beyond their willingness, capability or conditioning.

Sled dogs must not be dragged or physically coerced.

Sled dogs must not be pushed beyond their natural abilities by administering drugs or medications to enhance performance.

Analgesics and anti-inflammatories must only be used under the direction of a practicing veterinarian.

Training methods must not cause fear, distress, or pain.

**RECOMMENDED BEST PRACTICES:**

- Assess weight loss, hydration, condition of the feet, behaviour, attitude, and willingness to work.
- Use the following criteria to assess weight loss and hydration:
  - weight loss - sled dogs at a BCS below 3 are too thin and must receive attention from a practicing veterinarian and/or corrective action as appropriate (see [Appendix "A"](#), *Nestlé Purina Body Condition System*)
  - dehydration - indicators include a skin tent that takes two or more seconds to relax; sticky mucous membranes; depression of the eyes into the sockets; dark urine or no urine produced.
- Use the following indicators to assess and determine that a sled dog is willing to work:
  - has a normal appetite on the day of work
  - stands up to be harnessed with a wagging tail
  - barks, jumps, and paws at the air
  - leans into harness when hooked up to the gangline
  - should stand up from a resting spot and be willing to go forward subsequent to any rest break
  - once in harness should not allow itself to be dragged when the team starts running
  - when running should not have a loose or slack tugline, though dogs will "coast" for short periods
  - should not require any physical coercion to run in the team.
- Work bitches only after their puppies are weaned.
- Avoid opportunities that result in economic considerations taking precedence over the health and welfare of the sled dog.
- Humanely and appropriately train sled dogs to minimize the risk of inappropriate behaviour, improve the quality of their working life, and so that they are under control at all times.
- Sled dogs should be trained as puppies to learn basic commands.
- Advice (e.g. from a practicing veterinarian, dog trainer or dog behaviourist) should be sought at the early stages of a behavioural problem.
- Training sessions should be interesting, motivating and determined by the sled dog's reactions and condition, without over-working the sled dog.
- Use of over-the-counter medications should only be used in consultation with a practicing veterinarian.

## EQUIPMENT

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### Introduction

Safe, well-made, and well-fitted harnesses and equipment is critical for preventing injury, optimizing performance, and ensuring that sled dogs are comfortable while working. Just as a poorly designed or poorly fitted backpack can irritate a hiker, so too can poorly fitted gear irritate a working dog.

A sled dog may spend its entire life wearing a collar so it is important that the collar be comfortable and non-chaffing. The most important consideration for sled dog harnesses should be the fit. Three areas of the harness should be checked to ensure proper fit: the neck, girth, and length. Padding that is sewn into the harness will protect against chaffing, help spread the load, and provide some shock absorption. While dog jackets typically protect the dog's chest, back, and sides, they don't provide protection for the belly, teats, or penis - all areas particularly prone to frostbite in cold, windy conditions for dogs with less coat (*Winter Training* (p18), *Mush with P.R.I.D.E. Sled Dog Care Guidelines*, 3<sup>rd</sup> Edition, 2009). To address that issue, belly covers, and penis and scrotum protectors should be used for susceptible dogs. As with any gear, proper fit and overall comfort is extremely important.

The care of a dog's feet is a vital part of overall health maintenance. Most foot disorders can be prevented by the recognition of potential problems and with the proper use of booties under certain conditions and with some individual dogs. Booties must be intact (no holes) and applied so that they fit snugly to stay on, but not so tightly that they cut off the circulation. Tight booties won't let the dog's feet expand naturally and will compromise natural circulation. Overly large booties will hamper the dog's movement.

Whatever gear is chosen, it should be suitable for the intended job, maintained and in good repair, and it should be tested before heading down the trail. For those who are newcomers to dog sledding, it is a good idea to obtain knowledge by talking with and observing others who are experienced in the field.

### REQUIREMENTS

Harnesses and equipment must be properly fitted and constructed to ensure comfort and prevent injury.

Harnesses and equipment must be clean and in good repair.

An appropriate tool must be carried to quickly remove ganglines and/or tuglines in the event of an emergency.

Sled dog collars must be comfortable and fitted so that they do not damage the skin or restrict breathing.

### RECOMMENDED BEST PRACTICES:

- Carry a first aid kit appropriate for sled dogs at all times ([see Appendix “E”, Trail First Aid Kit](#)).
- Use ganglines that are reinforced with cable core and have a means of cutting the ganglines and/or tuglines readily available.
- Use belly protectors to prevent injury to mammary glands on post-weaning dams.
- Use penis and scrotum protectors for male sled dogs susceptible to frost bite.
- Use booties that have an elasticized Velcro closure and that are made from breathable, durable fabric that is not abrasive to the sled dogs’ feet.
- Use a loose-fitting wind proof jacket for sled dogs susceptible to hypothermia, particularly when resting and not sheltered.

## ENVIRONMENTAL CONDITIONS

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### Introduction

A sled dog uses a tremendous amount of energy in the fall and winter to develop a thick and protective coat. Unfortunately, the sled dog is not able to shed its coat the way humans would remove a jacket. Exercise uses energy and produces heat. If the sled dog is not able to dissipate the heat produced heat stress occurs. Heat stress can occur at temperatures well below freezing. Conditions predisposing to heat stress are warm temperatures, bright sunlight, and increased humidity. The sled dogs likely to be susceptible have dark coats, are hard workers, are not conditioned for the task, or have thick undercoats. Overweight sled dogs are more likely to be affected than lean dogs, and underlying illness such as an infection may predispose a sled dog to heat stress.

Any sled dog that is worked too hard in warm temperatures can be affected by heat stress. Given the growing trend to work sled dogs year round, whether for training, racing or recreation using both sleds, and wheeled rigs when there is no snow, operators should be aware of potential heat stress in their sled dogs.

Cold temperatures and wind can predispose some sled dogs to frostbite of extremities or of exposed, non-haired areas. It is important that protective equipment (e.g. belly protectors, wind-proof jackets) be used during cold temperatures and wind to avoid injury, hypothermia, and frostbite ([see Equipment - Recommended Best Practices](#)).

It is extremely important to monitor environmental conditions closely and use good judgment when making decisions about working sled dogs in marginal conditions.

## REQUIREMENTS

Sled dogs must not be worked in conditions that result in them suffering from hypothermia, frostbite, hyperthermia, or dehydration.

## RECOMMENDED BEST PRACTICES:

- Use protective equipment on susceptible dogs (e.g. belly protectors, wind-proof jackets) during cold temperatures and wind to avoid injury, hypothermia, and frostbite.
- Carry a thermometer when working sled dogs, and monitor and assess rectal temperatures using the following as a guide:
  - normal rectal temperature is between 38 and 39 degrees Celsius (100.4 and 102.2 degrees Fahrenheit)
  - body temperature can rise as high as 41 degrees Celsius (105.8 degrees Fahrenheit) with exercise but should return to normal within 30 minutes after exercise.
- Use extreme caution and take corrective action immediately if a sled dog is exhibiting the following signs of heat stress:
  - unsteady or wobbly on its feet
  - the sled dog lays on its side at rest
  - desperate panting with its mouth wide open and the tongue fully extended and swollen
  - frantic biting of snow
  - a rectal temperature greater than 41 degrees Celsius (105.8 degrees Fahrenheit) after ten minutes at rest.
- Use extreme caution and take corrective action immediately if a sled dog is exhibiting the following sign of hypothermia:
  - the sled dog has a rectal temperature below 36.7 degrees Celsius (98 degrees Fahrenheit).

## 5. TRANSPORTATION

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### Introduction

Each person responsible for transporting animals in Canada, or arranging for their transport, must ensure that the entire transportation process does not cause injury or undue suffering to the animals (*Transportation, (p37) Code of Practice for the Care and Handling of Dairy Cattle*, National Farm Animal Care Council).

The federal requirements for animal transport are covered under the [Health of Animals Regulations, Part XII](#). They are enforced by the Canadian Food Inspection Agency (CFIA) with the assistance of other federal, provincial and territorial authorities (*Transportation, (p37) Code of Practice for the Care and Handling of Dairy Cattle*, National Farm Animal Care Council). British Columbia has additional regulations related to animal transport covered under the [Prevention of Cruelty to Animals Act](#) and the [Motor Vehicle Act](#).

If you are responsible for transporting animals, you must be familiar with, and follow, Canada's animal transport requirements. If you do not comply with the regulations, you could be fined or prosecuted. If your actions or neglect are considered animal abuse, you could also be charged and convicted under the [Criminal Code of Canada](#) and/or provincial regulations (*Transportation, (p 37) Code of Practice for the Care and Handling of Dairy Cattle*, National Farm Animal Care Council).

Dogs are sometimes transported unsecured in the box of a pick-up truck or on the bed of a flatbed truck, placing them at increased risk of injury. This form of transportation is illegal in British Columbia. Most sled dogs enjoy travelling. Individually, dogs may vary considerably in how they respond to transport. Genetics, socialization, and rearing practices all influence how a dog responds to transportation. Adequate space, comfortable environmental conditions, and good air quality are all important welfare considerations. Additionally, drivers should take care to avoid sudden acceleration and deceleration, or excessive cornering, noise or vibration. Use extra care when transporting puppies to prevent exposure to temperature extremes and infectious disease, dehydration, and inadequate nutrition. Veterinary guidance should be taken if using sedation because this can make dogs susceptible to hypothermia, dehydration, and injury (*Animal Transport, Responsibilities During Transport, Primary Enclosure and Occupancy, (p46) Guidelines for Standards of Care in Animal Shelters*, The Association of Shelter Veterinarians, 2010).

## REQUIREMENTS

Dog boxes or crates must be large enough for the sled dog to stand, turn around and lie down comfortably.

If sled dogs are transported in containers such as dog boxes or crates, the container must:

- be well-constructed and maintained in good repair
- be constructed of durable materials;
- have secure latches and locking devices so the sled dog cannot escape; be securely attached to the transport vehicle.

Sled dogs must have adequate ventilation when being transported.

## RECOMMENDED BEST PRACTICES:

- Clean up straw and other wastes from drop locations.
- Match compatible companions when transporting sled dogs in groups.
- Design ventilation systems so they draw clean air from the front of the box and exhaust air towards the back to prevent back-drafting of vehicle exhaust.
- Modify vehicle exhaust systems if necessary so they discharge above the dog box.
- Ensure bedding provides comfort and prevents chaffing.
- Avoid using dusty or mouldy bedding.
- Avoid sedating sled dogs for travel unless recommended by a practicing veterinarian.
- Avoid separating nursing puppies from their mother for more than a couple of hours.
- Avoid transporting nursing puppies if the mother senses danger and there is a risk that she may cause harm to her young.
- When transporting weaned puppies together, ensure that the number of puppies is related to the size and strength of the individual animals.
- Avoid transporting a weakling puppy that may be harmed by its companions.

## PREPARING FOR TRANSPORT

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### Introduction

It is the responsibility of the party transporting dogs to ensure that all dogs are fit for the intended journey. For that reason, those responsible for transportation need to consider how long the dogs will be expected to be in transit, including the potential for mechanical or weather related delays.

### REQUIREMENTS

Sled dogs must be fit\* for transport unless being transported for veterinary care.

- \* Fit for transport means that a sled dog is not displaying signs of shock, exhaustion, severe injury (fracture, neurological, significant or infected wound) or illness (contagious or otherwise, including conditions that are not specifically identified, e.g. fever and dehydration). Bitches are not fit for transport if they are within one week of their anticipated whelping date or within the first two weeks of whelping.

### RECOMMENDED BEST PRACTICES:

- Undertake early socialization of puppies by providing transportation experiences to help prevent future problems, including motion sickness and transport anxiety.
- Take steps to reduce the incidence of motion sickness.
- Take into account weather conditions prior to transport and adjust plans accordingly.
- Ensure sled dogs are transported under clean conditions.

## ON-THE-ROAD HOUSING

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### RECOMMENDED BEST PRACTICES:

- Provide ventilation systems for cooling during extremely hot or humid conditions.
- Consider space, temperature, and ventilation when transporting more than one sled dog in a box or crate.
- Securely place a recording thermometer in the vehicle housing at the level of the sled dogs and frequently monitor temperatures.
- Keep drop chains short to avoid dog entanglement.
- Use a swivel attached to neck line for drop use.
- Take necessary precautions to avoid having snow entering transport boxes.

- Use carbon monoxide sensors in dog boxes and crates and change periodically to ensure monitoring accuracy.
- Match compatible companions when transporting sled dogs in groups.
- When groups of sled dogs are transported together, protect submissive sled dogs from those that are more dominant by physical separation or restraint that prevents aggressive interaction.
- Change bedding as often as necessary to prevent wet bedding and the soiling of sled dogs (e.g. urine, feces, or vomit).

## **FEEDING AND WATERING ON THE ROAD**

### **REQUIREMENTS**

Sled dogs must have access to palatable and clean water in adequate quantities to meet their needs and prevent dehydration.

Sled dogs must be fed a minimum of once every 24 hours unless medically necessary to do otherwise.

### **RECOMMENDED BEST PRACTICES:**

- Feed non-nursing puppies a minimum of three times per day until the age of six months.
- Check sled dogs for hydration and offer water a minimum of every six hours or more often depending on conditions.
- Offer sled dogs food more than once per day.

## **TRAVEL TIMES**

### **REQUIREMENTS**

Sled dogs must be removed from the box or crate and provided with feed, water and elimination breaks to ensure they arrive un-soiled, in comfort, and in good condition.

### **RECOMMENDED BEST PRACTICES:**

- Ensure sled dogs are not transported longer than six hours without a break for sufficient for stretching, feeding, watering and for elimination.
- Ensure that sled dogs are taken out of the box or crate and “dropped” several times per day.
- Ensure sled dogs are left no longer than eight hours overnight.

- “Drop” sled dogs every four hours, except after they are fed or watered (drop every two to two and a half hours after feeding or watering). A sample drop schedule might be:
  - 7 or 8 a.m.
  - 12 noon
  - 5 p.m. with food and water
  - 7:30 p.m.
  - 11 p.m.

## PROVISIONS FOR OVERNIGHT STAYS

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### RECOMMENDED BEST PRACTICES:

- Adopt a good neighbour policy:
  - respect the rights of other people
  - train dogs to be quiet
  - clean up after the sled dogs.
- Bring adequate and sufficient supplies when traveling.
- Avoid parking where other sled dogs have been in order to avoid exposure to parasites and disease.

## 6. EUTHANASIA

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### Introduction

Euthanasia is the act of inducing humane death in an animal. There are certain situations when euthanasia may be the most humane option for relieving pain, suffering and distress (e.g. a dog that is severely injured and unable to receive prompt veterinary treatment). In these situations, it is important that euthanasia be carried out in such a way that the death is as painless and free from distress as possible. Important considerations include appropriate handling and restraint of the animal to be euthanized, sufficient knowledge and experience of the person performing euthanasia, and the safety of other animals and persons involved in euthanasia.

### REQUIREMENTS

Kennel decisions concerning euthanasia must be done according to a euthanasia plan which has been developed in consultation with a practicing veterinarian (see *Record Keeping*).

Euthanasia must not be used as a means of population control for healthy, re-homable sled dogs, unless it is demonstrable that all options of re-homing have been exhausted.

Euthanasia must be carried out by a competent person in such a way to ensure death occurs quickly and without unnecessary pain, suffering or distress.

Euthanasia by firearm must be performed according to *Guidelines for euthanasia of domestic animals by firearms*, Longair et al unless an alternative method can successfully be used to ensure death occurs quickly and without unnecessary pain, suffering or distress.

Secondary action must be applied if evidence of death is not immediately apparent following first attempt.

Safety of persons and other animals must be ensured when euthanasia is performed.

#### RECOMMENDED BEST PRACTICES:

- Work with a practicing veterinarian to develop a euthanasia plan.
- Ensure sled dogs are euthanized by a practicing veterinarian using a barbiturate overdose with prior sedation.
- In an emergency situation (i.e. critical distress) AND when a practicing veterinarian is not available, euthanasia should be performed by a competent person (see glossary), and undertaken by a single bullet of an appropriate calibre to the brain (see [Appendix "G", \*Guidelines for euthanasia of domestic animals by firearms\*, Longair et al](#)).
- Use appropriate restraint if required.
- Do not use euthanasia for population control.
- Undertake euthanasia out of the sight of other sled dogs to minimize distress.

### EVIDENCE OF DEATH

#### Introduction

Death has been defined as the irreversible loss of brain activity demonstrable by the loss of brain stem reflexes.

#### REQUIREMENTS

Death must be confirmed immediately before disposing of or leaving the sled dog.

**RECOMMENDED BEST PRACTICES:**

- Confirm death by observing the following:
  - lack of respiration and heart beat (for a duration of five minutes)
  - lack of corneal reflex-touch the surface of the eye and note if the sled dog blinks. There should be no eye movement or blinking when touched. If the sled dog is dead, the eye will remain open and the lid does not move
  - lack of active body movement
  - observable lowering of body temperature
  - mucous membrane (gums) changes colour
  - pupil dilation
  - the surface of the eye should be dry.

**DISPOSAL OF REMAINS****Introduction**

If disposing of remains which have received intravenous injection of a barbiturate, there are significant environmental considerations to take into account including the risk of wildlife exposure to barbiturate. Incineration is usually the safest means to dispose of remains.

**REQUIREMENTS**

Sled dogs euthanized by injection of a barbiturate must be disposed of in accordance with provincial and local government requirements (applicable provincial regulations are the *Environmental Management Act*, the *Public Health Act* and the *Wildlife Act*).

**RECOMMENDED BEST PRACTICES:**

- Consider using a service that collects remains in areas serviced by animal disposal companies.
- Work with a practicing veterinarian to coordinate incineration of the remains at an existing animal disposal facility.
- Meet the following guidelines if burial is to be considered a viable disposal method:
  - Bottom of the grave must be at least one m above the seasonal high ground water table<sup>5</sup>
  - No less than 1.0 m of packed soil covering the remains, with 0.3 m of soil crowned above ground level

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5 Soil texture, soil depth and depth to ground water can be determined by digging a test hole

- Bury in clay soils and line grave with approximately 15 cm of high carbon material
- Apply a layer (up to 10 cm) of agricultural or hydrated lime<sup>6</sup> over remains to help reduce odours and potential scavenging
- Locate grave at least 30 m from domestic water sources
- Keep records of the date and location of burial.

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A Comparison of Social and Environmental Enrichment Methods for Laboratory Housed Dogs.

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<sup>6</sup> Hydrated lime [Ca(OH)<sub>2</sub>] or Quick Lime [CaO] can be very caustic to skin and eyes

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## APPENDIX "A": NESTLÉ PURINA BODY CONDITION SYSTEM

# Nestlé PURINA BODY CONDITION SYSTEM

|           |   |   |   |   |
|-----------|---|---|---|---|
| TOO THIN  | 1 | Ribs, lumbar vertebrae, pelvic bones and all bony prominences evident from a distance. No discernible body fat. Obvious loss of muscle mass.  |    | 1 |
|           | 2 | Ribs, lumbar vertebrae and pelvic bones easily visible. No palpable fat. Some evidence of other bony prominence. Minimal loss of muscle mass.   |    | 2 |
|           | 3 | Ribs easily palpated and may be visible with no palpable fat. Tops of lumbar vertebrae visible. Pelvic bones becoming prominent. Obvious waist and abdominal tuck.  |    | 3 |
| IDEAL     | 4 | <b>Ribs easily palpable, with minimal fat covering. Waist easily noted, viewed from above. Abdominal tuck evident.</b>  |    | 4 |
|           | 5 | <b>Ribs palpable without excess fat covering. Waist observed behind ribs when viewed from above. Abdomen tucked up when viewed from side.</b>   |    | 5 |
| TOO HEAVY | 6 | Ribs palpable with slight excess fat covering. Waist is discernible viewed from above but is not prominent. Abdominal tuck apparent.  |    | 6 |
|           | 7 | Ribs palpable with difficulty; heavy fat cover. Noticeable fat deposits over lumbar area and base of tail. Waist absent or barely visible. Abdominal tuck may be present.   |    | 7 |
|           | 8 | Ribs not palpable under very heavy fat cover, or palpable only with significant pressure. Heavy fat deposits over lumbar area and base of tail. Waist absent. No abdominal tuck. Obvious abdominal distention may be present. |    | 8 |
|           | 9 | Massive fat deposits over thorax, spine and base of tail. Waist and abdominal tuck absent. Fat deposits on neck and limbs. Obvious abdominal distention.  |   | 9 |
|           |   |   |  |   |

The BODY CONDITION SYSTEM was developed at the Nestlé Purina Pet Care Center and has been validated as documented in the following publications:

Mowbray D, Bortges JW, Moyers T, et. al. Comparison of body fat estimates by dual-energy x-ray absorptiometry and deuterium oxide dilution in client owned dogs. *Compendium* 2001; 23 (9A): 70

Laflamme DP. Development and Validation of a Body Condition Score System for Dogs. *Canine Practice* July/August 1997; 22:10-15

Kaaly, et. al. Effects of Diet Restriction on Life Span and Age-Related Changes in Dogs. *JAVMA* 2002; 220:1315-1320

Call 1-800-222-VETS (8387), weekdays, 8:00 a.m. to 4:30 p.m. CT

 Nestlé PURINA

## **APPENDIX “B”: CONTROL PROTOCOLS FOR INFECTIOUS DISEASE**

Vaccinations protect the animal from disease by stimulating the immune system to produce antibodies. In order to achieve immunity, dogs need a properly spaced series of vaccinations. An effective vaccination program will start when puppies are six to eight weeks of age and will continue on a regular schedule throughout the dog's life.

If the mother has been properly vaccinated, puppies receive immunity through colostrum, which is the milk produced by the mother for the first 24 to 48 hours after whelping. This is the main reason that the mother's milk is so important for newborn puppies. After this period, they are no longer able to absorb these antibodies from the mother and they are vulnerable to nearly any disease to which they might be exposed.

Depending on the mother's antibody levels, maternal antibodies protect neonates anywhere from two to eight weeks, with six to seven weeks being most common. After this time, the level of maternal antibodies drops off, and the young are no longer protected from disease. At this time, puppies will be able to respond properly to a series of vaccines that will protect them against disease.

Vaccinations do not cure disease that is already present in the dog. The effectiveness of a vaccine depends on the dog's ability to respond to it. This is why it takes a certain amount of time (often two weeks) after a vaccine is administered for a dog to actually be protected from the disease.

Selection of vaccination is determined by identifying risk factors such as geographic location, travel, exposure to other dogs, breeding program, etc. “Core” vaccinations are those recommended for all dogs and usually include rabies, distemper, canine infectious hepatitis, parainfluenza and parvovirus. Some dogs may be at risk for other diseases, such as leptospirosis, kennel cough or Lyme disease and vaccination may also be recommended for those diseases.

### **RECOMMENDED BEST PRACTICES:**

- Consult with a practicing veterinarian to develop a proper vaccination program in accordance with risk factors for your area and your type of operation.
- Permit unvaccinated dogs and puppies to socialize only with dogs that are fully vaccinated and avoid exposing them to areas that pose a risk of disease (public parks, roadside rest areas, etc.).
- Fully immunize breeding females so puppies receive maternal antibody protection through colostrum.

## APPENDIX “C”: ZOONOTIC DISEASES

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### Introduction

Zoonotic diseases are diseases that can be transmitted between humans and animals. Zoonotic infections of humans are most often the result of poor hygiene or exposure to infected animals. Spread of disease may occur directly, or may require an insect or parasite to transmit the disease. One concern with zoonotic diseases is that dogs that are infected may appear to be perfectly healthy. People who have compromised immune systems (infants, children, elderly, chronically ill or HIV positive status) are especially susceptible to zoonotic infections.

### Common Zoonotic Diseases

The diseases listed below are the more common zoonotic diseases, grouped by their most common of transmission:

*Fecal-Oral Transmission:* **infection occurs when fecal material is accidentally ingested.**

**Campylobacteriosis:** most commonly occurs in puppies under the age of six months. Dogs housed in non-hygienic, crowded conditions most likely to be infected. Causes diarrhea, vomiting, abdominal cramps and fever. Bacteria are spread by feces.

**Cryptosporidiosis:** causes mild to severe signs such as vomiting and diarrhoea. Many infections are subclinical; that is, the infected animal does not show any signs of disease. Organism that causes the disease can be shed in feces of apparently healthy animals. Young, ill or stressed dogs and immunocompromised people are especially susceptible to infection.

**Echinococcus tapeworm:** is the human tapeworm that comes from dogs, as well as, other members of the canidae family (foxes, coyotes, wolves, etc.) and cats. The dog is the definitive host and passes the eggs of the adult Echinococcus granulosus tapeworm through its stool. Sheep, cattle, goats, and humans act as the intermediate host. Once the intermediate host ingests the eggs, the eggs release the oncosphere (first-stage larvae); the oncosphere then separates and invades the intestinal wall entering the circulatory system. The oncosphere can travel throughout the body and form parasitic tumours. The most common site of tumours from the Echinococcus granulosus tapeworm is the liver (60%). These tumours, formally called Hydatid disease, are also found in the lungs (25%), brain, and other organs.

**Giardia (“beaver fever”):** transmitted through fecal-contaminated soil, water, food or surfaces. Causes severe abdominal cramping and profuse diarrhea. Infected dogs and humans become dehydrated and lose weight very quickly.

**Salmonella:** most commonly affects animals that are debilitated for other reasons (illness or stress). Healthy animals also known to shed Salmonella in their feces. Salmonella has been known to occur in dry pet foods, but the most common source is by ingestion of raw or undercooked eggs and poultry. Children and immunocompromised individuals most susceptible to infection. Common cause of “food poisoning” in humans.

**Toxicariasis:** disease caused a roundworm that is very common in dogs, particularly puppies. Eggs of the parasite are shed in large numbers in the stool and become infective in two to three weeks. If ingested by a human, which is not the parasite’s natural host, the larvae hatch but then cannot complete their natural life cycle. Larvae migrate through tissues in a haphazard fashion causing significant tissue damage. Larval migration through liver and lungs is most common in children under the age of four years. Larval migration into the eyes is more common in older children and adults and can cause permanent blindness.

#### ***Insect Vector-Borne Disease***

**Lyme Disease:** transmitted through tick bites. Infection in humans causes fever, headaches, joint pain, chronic arthritis and sometimes skin rashes and can be difficult to diagnose. Humans are typically exposed when outdoors or when removing ticks from infected dogs.

#### ***Direct Parasitic Infection***

**Ancylostomiasis:** disease caused by exposure of bare skin to soil contaminated with hookworm larvae. Larvae hatch into worms that cause severe itching and rashes as they travel through the skin.

#### ***Urine-Oral Transmission***

**Leptospirosis:** bacterial disease that affects many mammals, including dogs, livestock, wildlife and rodents. Transmission is through ingestion of infected urine through contaminated water or food, or through skin abrasions. Dogs may be infected with no clinical signs. Human infection may be mild with no apparent symptoms or severe, with resulting kidney damage, liver failure, respiratory issues and meningitis (inflammation of the membranes surrounding the brain and spinal cord). Dogs are typically infected due to poor sanitation of kennels, crowded conditions and drinking from contaminated puddles or other water sources.

#### ***Direct or Indirect contact***

**Ringworm (dermatophytosis):** organism is a fungus, not a worm. Easily spread through direct contact or by grooming tools, clippers and bedding. Causes patchy loss of hair with or without itching. Animals can be contagious without showing clinical signs. Infection in humans usually

shows as a reddened, crusty skin lesion and may or may not be typical ring-shaped (that is how the disease got its common name).

### ***Bites and Scratches***

**Rabies:** viral disease of wild animals (especially bats), pets and occasionally livestock. *Human infection with rabies is 100 % fatal without immediate medical intervention.* Rabies vaccination is highly effective in preventing disease. Humans become infected through saliva or contact with infected tissues.

### **Prevention of Zoonotic Diseases**

- Proper hygiene practices, including frequent thorough washing of hands, dishes, tools, and maintaining clean facilities is one of the most effective means of preventing zoonotic disease transmission.
- Regular vaccination and de-worming of dog.
- Prevention of tick exposure by use of topical products.
- Be aware of risks if feeding raw food.
- Prevent contact of dogs with carcasses of deceased animals, both domestic livestock and wild animal.
- Avoid rough play with animals that may lead to bites or scratches.
- Recognize at-risk individuals: people who work with animals, very young or old individuals, pregnant women, immunocompromised individuals (chronic illness, recent hospitalization or surgery, immunosuppressive medications, positive HIV status, etc.).

## **APPENDIX “D”: PARASITE CONTROL**

Sled dogs can become infected with both internal and external parasites. Geographic location, sanitation practices, travel and numbers of dogs all affect the level of exposure that a dog may have to parasites. Parasitic infection can have detrimental effects on the sled dog's health by causing decreased performance, weight loss, poor haircoat, diarrhea, anemia (loss of red blood cells), lowered resistance to disease and skin irritation or infection. Many parasites also pose a human health risk.

Parasitic infection may not be readily visible, as many parasites live inside the dog and shed microscopic eggs in the feces. Fleas spend about 95 percent of their life cycle in the environment, not on the dog. Ticks can be very difficult to see on a dark coloured dog or one with a long coat. Mites that cause mange cannot be seen without a microscope. Working with a practicing veterinarian is an important component in determining the ideal protocol for controlling parasites.

**RECOMMENDED BEST PRACTICES:**

- Consult with a practicing veterinarian to develop an appropriate and effective parasite control program.
- De-worm breeding animals and puppies according to a practicing veterinarian's recommendation.
- Maintain confinement areas in a manner that discourages accumulation of fecal material and the subsequent development of a heavy parasitic load.
- Familiarize yourself with symptoms that indicate a possible parasitic infection so appropriate diagnosis and treatment can be sought in a timely manner.

**APPENDIX "E": TRAIL FIRST AID KIT**

(Karin E. Schmidt, DVM, ©1997 – *The Musher & Veterinary Handbook*, page 117)

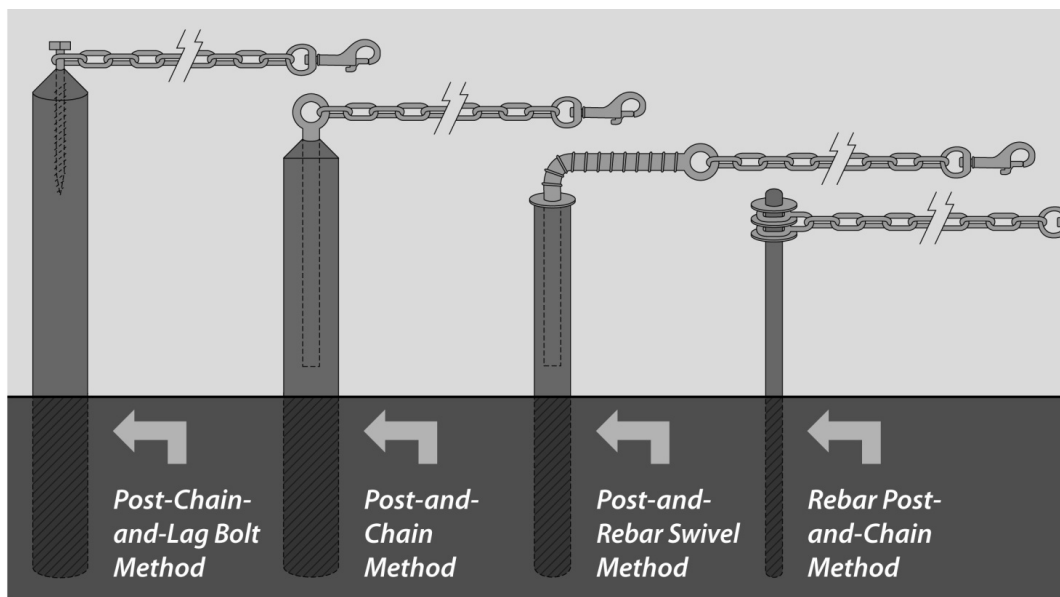
- **Scissors:** numerous uses including trimming hair along wound edges
- **Nail clippers:** use the heavy duty type (it's also great for cutting lines)
- **Hemostats:** useful in removing small foreign bodies and may be helpful in suturing wounds
- **Bandage Materials:** gauze and gauze pads, cotton balls (absorbent padding between toes and pads when bandaging), Telfa pads, 2" white medical tape, vet wrap 2" and 4" +/- 1", sticky, elastic bandage. The secret to bandaging is to make the bandage comfortable, and tight enough to stay on, but not tight enough to cut off the circulation
- **Ophthalmic Ointment:** without cortisone
- **First Aid Ointment:** bacitracin works well
- **Betadine Scrub:** for cleaning wounds – do not use around eyes
- **Betadine Solutions:** A 1% solution is safe for flushing deep wounds and the eye
- **Panalog Ointment:** (Optional) for ears and other areas a cortisone cream is useful
- **Thermometer in Case:** normal rectal temperature in dogs is 100.8° F (38.2° C) to 102.8° F (39.3° C)
- **Super Glue:** for pad patches – be sure never to make the patch larger than the wound
- **Suture Material:** (With swaged on needle) 2-0 PDS is good – used for tacking tissue flaps until you can reach a veterinarian
- **Skin Stapler:** ideal for skin tears and barbed wire cuts. Consult a practicing veterinarian for proper use

- **Antibiotics (Clindamycin):** once started, used for a minimum of three days, and
- **Antidiarrheals:** Loperamide (Immodium AD), Amforol, and Blue Heron.

It is suggested that you include basic first aid items for yourself. They are day-time cold medication, cough drops, antibiotics, Carmex, Traumeel, ibuprofen, and baby powder.

## APPENDIX “F”: TETHERING METHODS

(Diagram courtesy of MUSH with P.R.I.D.E.)



## APPENDIX “G”: GUIDELINES FOR EUTHANASIA OF DOMESTIC ANIMALS BY FIREARMS

“the following is an excerpt from Guidelines for euthanasia of domestic animals by firearms

(J. (Al) Longair, Gordon G. Finley, Marie-Andree Laniel, Clayton MacKay, Ken Mould, Ernest D. Olfert, Harry Rowsell, Allan Preston

Animal Welfare Committee, Canadian Veterinary Medical Association, *Can Vet J* Volume 32, December 1991)

Full text of the is available at the Canadian Veterinary Journal

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1481111/>

### General considerations:

For an animal to receive a humane death, it should be rendered unconscious as rapidly as possible. Therefore most recommended methods of euthanasia involve agents that affect the brain very rapidly. *Can Vet J* Volume 32, December 1991 Shooting, although esthetically unpleasant, is a humane method of killing

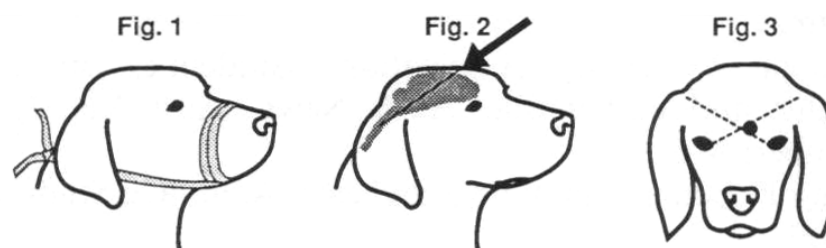
provided that the shot penetrates the brain. To ensure that this occurs, the weapon used must be fired with the muzzle placed close to the animal's head, pointing in the required direction. The animal should be adequately restrained to ensure proper placement of the shot. Each animal species has a slightly different brain positioning within the skull, therefore knowledge of these differences is essential.

Shooting an animal should only be done by persons well versed in handling firearms and licensed to use firearms, and only in jurisdictions that allow for firearm use. Ideally, local policing agencies should be involved. Safety to personnel and the general public must be considered. The procedure should be performed outdoors in a location away from public access. If police officers using their firearms are not available, the firearms that can be used for humanely shooting an animal from close range would be either a .22 caliber rifle with long-rifle mushroom shells or a .410 gauge shotgun with slugs or pellets. In most cases, the barrel of the firearm should be 3-5 cm from the head if using a rifle, pistol or .410 gauge shotgun, or 1-2 m if using a larger gauge shotgun or rifle (e.g. a .308 rifle).

To facilitate the humane shooting of an animal, familiarity with handling animals is necessary. The animal should be treated with a calm and reassuring manner to reduce any anxiety that the animal may have. An animal that becomes tense or excited will be more difficult to restrain and to kill humanely. In some cases it may be advisable to sedate the animal before killing it. In some cases the shot may pass right through the animal's head, thus direction of shooting must be considered. It must be noted that although an animal shot correctly is instantly unconscious, there may be convulsive thrashing and muscle spasms for some seconds after the shot.

### Guidelines for shooting domestic animal species

#### Dogs



Dogs should always be handled and spoken to in a kind and calm manner. It may be necessary in some cases to muzzle unpredictable, nervous or injured animals. Muzzling is easily done by taking a long piece of soft cord (or gauze, soft fabric or panty hose) and making a loop in the middle. The loop is slipped over the dog's muzzle and gently but firmly tightened with a single half-hitch knot on top. The ends of the cord are then passed around under the chin, crossed over and tied behind the ears (Figure 1).

Once the dog has relaxed, it can be taken outside, the leash secured to a solid object, and the dog offered some food. It may be convenient to place the food on a small stool or chair. The firearm is then aimed at a point midway between the level of the eyes and the base of the ears, but slightly off to one side so as to miss the bony ridge that runs down the middle of the skull (Figures 2 and 3). The aim should be slightly across the dog and towards the spine. In some cases the shot may pass right through the animal's head, thus direction of shooting must be considered.

## GLOSSARY OF TERMS

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**Animal Husbandry** - the science of breeding, feeding and care of domestic animals; includes housing and nutrition.

**Animal Welfare** - how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear and distress. Good animal welfare requires disease prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane slaughter/killing. Animal welfare refers to the state of the animal; the treatment that an animal receives is covered by other terms such as animal care, animal husbandry, and humane treatment.

**Baited Water** - warm water combined with dry food, cooked fish, meat or other flavouring to encourage drinking.

**Barbiturate** - any of a class of sedative and sleep-inducing drugs derived from barbituric acid.

**Barrier** - a fence or other obstacle that prevents movement or access.

**Body Condition Score** - an assessment of the sled dog's weight for age and weight for height ratios, and its relative proportions of muscle and fat. The assessment is made by eye, on the basis of amount of tissue cover between the points of the hip, over the transverse processes of the lumbar vertebrae, the cover over the ribs and the pin bones below the tail. Each sled dog is graded by comparison with animals pictured on the chart.

**Choke (or slip) collar** - a restraint device that tightens around the neck without limitation.

**Competent Person** - someone who has the necessary technical expertise, training and experience to carry out the task. A combination of knowledge, skills and practical experience to be able to do a particular task properly. This includes not only the routine task, but also covers unexpected situations and changes.

**Compromised Animal** - an animal with reduced capacity to withstand the stress of transportation, due to injury, fatigue, infirmity, poor health, distress, very young or old age, impending birth, or any other cause.

**Containment System** - A sled dog's pen, run or kennel; or the area within which a tethered sled dog may roam.

**Corneal Reflex** - closure of the eyelids on irritation of the cornea.

**Dehydration** - excessive loss of water and salts that are essential for normal body function.

**Digital Displacement** - is a condition that exists when the nails are too long such that they contact the bearing surface most or all of the time causing the toes (digits) to be displaced from their normal alignment. A dog should be able to stand relaxed on a hard flat surface with the toe nails not quite touching the surface.

**Disease** - a pathological condition of a body part, an organ, or a system resulting from various causes, such as infection, genetic defect, or environmental stress, and characterized by an identifiable group of signs or symptoms.

**Disinfection** - is the process that will kill most of the contamination in a given area.

**Distress** - for the purposes of this document, an animal is in distress if it is

- a. deprived of adequate food, water, shelter, ventilation, light, space, exercise, care or veterinary treatment
- b. kept in conditions that are unsanitary
- c. not protected from excessive heat or cold
- d. injured, sick, in pain or suffering, or
- e. abused or neglected.

[British Columbia Prevention of Cruelty to Animals Act]

**Dog Box** - large box tailored to the size of a truck bed or trailer and divided into sections. Installs on the truck or trailer for traveling and transporting the dogs.

**Dog House** - an individual shelter, providing protection from the elements, with or without a raised floor.

**Dog Lot** - home base where the sled dogs are housed in pens, runs or on tethers.

**Drop** - when travelling, lifting sled dogs from dog boxes for feeding to the ground for exercise and to relieve themselves.

**Drop Chain** - cable or chain that can be fastened between trees, trucks, posts, etc. with short leads attached to hold individual sled dogs while awaiting transport.

**Euthanasia** - is the act of inducing humane death in an animal.

**Exercise** - bodily exertion for the sake of developing and maintaining physical fitness and mental stimulation.

**Fit for Transport** - means that a sled dog is not displaying signs of shock, exhaustion, severe injury (fracture, neurological, significant or infected wound) or illness (contagious or otherwise, including conditions that are not specifically identified, e.g. fever and dehydration). Bitches are not fit for transport if they are within one week of their anticipated whelping date or within the first two weeks of whelping.

**Gangline** - central line leading from the bridle at the front of the sled. Attaches the sled to all the sled dogs. The sled dogs are attached to the gangline via a tugline secured to the very back of each harness.

**Harness** - a piece of equipment worn by the sled dog which attaches to the gangline and allows the sled dog to pull the sled.

**Housing Systems** - the organization of shelter within a dog lot.

**Hydrated Lime** - a dry white powder consisting essentially of calcium hydroxide obtained by treating lime with water.

**Hyperthermia** - the condition of having a rectal temperature above normal 41 degrees Celsius (105.8 degrees Fahrenheit) after ten minutes of rest.

**Hypothermia** - the condition of having a sustained rectal temperature below 37.5 degrees Celsius (99.5 degrees Fahrenheit).

**Innate Behaviour** - behaviour inherited by genes which occurs in all members of a species. An animal in a sense is born with this type of behaviour.

**Intact** - a male that is used for breeding purposes. Intact indicates an animal has not been desexed, i.e. spayed (female) or neutered (male).

**Life Cycle** - the progression of the sled dog through a series of differing stages of growth and development.

**Kennel** - see **Containment System**.

**Pedigree** - record of the dog's ancestry.

**Mucous Membrane** - lining of the mouth.

**Operator** - means a person who engages in a regulated activity, and includes any person who assists, directs, supervises or employs that person for the purpose of doing the regulated activity [British Columbia *Prevention of Cruelty to Animals Act*].

**Palatable** - agreeable to the palate or taste.

**Pathogen** - a biological agent that may cause disease or illness in an animal.

**Penning** - is a form of containment that typically includes group (known as group housing) or individual penning of sled dogs. Pens may also be referred to as runs, cages, and kennels.

**Physical Cleaning** - the removal of urine, fecal matter, and other organic material from the environment. Cleaning should result in a visibly clean surface but may not remove all harmful pathogens.

**Physical Fitness** - the ability to function efficiently and effectively without injury, to enjoy leisure, to be healthy, to resist disease, and to cope with emergency situations.

**Practicing Veterinarian** - a person licensed to practice veterinary medicine.

**Quarantine Area** - a separate area used to house and observe animals to prevent the spread of disease for a specified period of time, and to observe for signs of illness.

**Raw Food Diet** - any groups of food that is fed uncooked.

**Re-Homing** - the process of finding a new home for animals.

**Remains** - in this document means carcass or dead body of an animal.

**Retirement** - withdrawal from active working life.

**Sanitation** - is the combination of cleaning and disinfection.

**Skijoring** - the sport of skijoring is one in which a person on skis is pulled by dogs, horses, or a form of mechanized transportation such as a snowmobile.

**Sled Dog** - dogs used or bred for dog-powered or load-bearing activities including pulling a vehicle mounted on runners or a person on skis over snow or a wheeled vehicle or weight on dry land.

**Stool** - fecal matter from a single bowel movement.

**Socialization** - a process of familiarizing animals with a variety of stimuli, including direct contact between animals and humans during their critical period of early development; may also refer to animals of any age spending time with one another.

**Tethering** - a containment method attaching a chain which can rotate around a fixed object.

**Thresholds** -

1. a strip of wood, metal, or stone forming the bottom of an entrance, or
2. the point that must be exceeded to begin producing a given effect or result or to elicit a response.

**Traceability** - means the ability to follow an animal or group of animals during all stages of its life.

**Veterinary Attention** - a sick or injured dog being presented to a veterinarian for assistance.

**Veterinary Care** - a sick or injured dog receiving treatment from a practicing veterinarian.

**Whelping** - the act of birthing puppies.

**Tugline** - line of about 3' which fastens the back loop of the harness to the gangline.

**Zoonosis** - a disease that can be transmitted between humans and animals.



## Sled Dog Code of Practice

March 2011

