

# Introductory Course for Commercial Dog Breeders

## Part 8: Housing (Part 2)



# Introduction

## Housing Part 1

- Define types of facilities
- General requirements for all facilities including:
  - Maintenance
  - Cleaning and Sanitization
  - Storage
  - Space

## Housing Part 2

- Specific requirements for each type of facility:
  - Primary Enclosures
  - Indoor Housing
  - Outdoor Housing
  - Sheltered Housing

# Learning Objectives

By the end of this session you should be able to:

1. Describe maintenance, climate and other requirements for primary enclosures.
2. Describe the maintenance, climate and other requirements for indoor, outdoor and sheltered housing facilities.



# Primary Enclosures

# Definition

## **Primary Enclosure:**

Any structure or device used to restrict an animal to a limited amount of space. For example: room, pen, run or cage.



# Primary Enclosure: Example





# Minimum Requirements: Primary Enclosures

# General Requirements

- Designed and constructed of suitable materials
- Structurally sound
- Kept in good repair
- Must:
  - Protect animal from injury
  - Securely contain animals
  - Keep animals dry and clean

# Protect from Injury

- No sharp points or edges
- Floors keep feet and legs from injury (falling through spaces in slats or mesh)
- No openings large enough to allow dog's head or body to pass through

# Securely Contain

- Keep dog in enclosure
- Keep other animals out
- Enough space so dog can:
  - Turn around freely
  - Stand, sit and lie in a normal comfortable position and walk in a normal manner
- Suspended floors must not sag or bend

# Keep Clean and Dry

- Shelter from extreme temperatures or weather
- Shade and shelter for all dogs at the same time
- Easy, convenient access to clean food and water
- Able to clean and sanitize surfaces
- Able to repair or replace worn surfaces



# Compatible Grouping

# Compatible Grouping

Regularly observe dogs for signs of incompatible grouping:

- Overly aggressive/vicious
- Wounds: head, neck, face and legs
- Ruffled or thin hair coat, scratches or bites
- Restricted access: food or water
- Sick, thin or weak dog in same unit as healthy dogs



# Compatible Grouping

Regulations require that these dogs NOT be housed together:

1. Females in heat with male dogs, except for breeding
2. Vicious or overly aggressive dogs must be housed separately
3. Puppies less than 4 months old and adults, except dam or foster dam

# Compatible Grouping

4. Dogs with other animal species unless compatible
5. Isolate dogs with or suspected of having contagious disease from healthy dogs
6. No more than 12 adult nonconditioned dogs in same primary enclosure

# Space and Exercise Requirements

# Minimum Space Requirement

- Minimum amount of space dogs must have.
- Formula for calculating minimum space requirements
- Handout shows how to calculate space

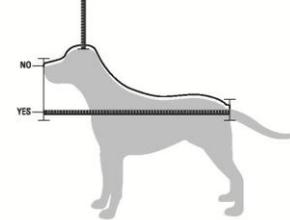
## Minimum Space Requirements for Dogs

The Animal Welfare Act Regulations require that primary enclosures for adult dogs without nursing puppies or weaned puppies must have adequate space to allow the dogs to turn about freely, to stand, sit and lie in a comfortable, normal position and to walk in a normal manner. 9 CFR 3.6(a)(2)(xi) Additionally, the interior height of the primary enclosure must be at least 6 inches higher than the head of the tallest dog in the enclosure, measured when the dog is standing in a normal comfortable standing position. 9 CFR 3.6(c)(1)(iii)

### Measuring the Length of a Dog

With the dog in a normal standing position, or with the dog held lying flat on its side, measure the dog along a straight line from the tip of the nose to the base of the tail. Do not follow the contours of the dog's body when measuring the length of the dog.

There must be a minimum space of 6 inches from the top of dog's head to the top of cage



This table below provides a guide to the minimum space needed for dogs based on body length

Dog Length (in)	Sq Ft Needed	Dog Length (in)	Sq Ft Needed	Dog Length (in)	Sq Ft Needed
7	1.17	19	4.34	31	8.81
8	1.38	20	4.88	32	10.53
9	1.58	21	5.45	33	10.58
10	1.78	22	6.04	34	11.11
11	2.01	23	6.64	35	12.25
12	2.25	24	7.25	36	13.44
13	2.51	25	7.87	40	14.88
14	2.78	26	8.51	42	16.53
15	3.08	27	9.18	44	17.36
16	3.38	28	9.88	46	18.76
17	3.67	29	10.61	48	20.25
18	4.00	30	11.36		

### Calculating Minimum Space Requirements 9 CFR 3.6(c)(1)(i)

The following is an example of how to calculate minimum space requirements. Scout is a female Dalmatian. She is 31 inches long from the tip of her nose to the base of the tail.

**Step 1: Measure the length of the dog from tip of nose to base of tail (inches). Add 6 inches to this number.**

$$31 \text{ inches} + 6 \text{ inches} = 37 \text{ inches}$$

**Step 2: Calculate minimum floor space in square inches.**

$$37 \text{ inches} \times 37 \text{ inches} = 1369 \text{ square inches} \quad \text{minimum required amount of floor space in square inches}$$

**Step 3: Calculate minimum floor space in square feet.**

$$\frac{1369 \text{ square inches}}{144} = 9.51 \text{ square feet} \quad \text{minimum floor space in square feet}$$

\*\* The total floor space for animals in group housing must meet or exceed each dog's individual minimum space requirement.

# Measure Dog's Length

Measure the dog from the tip of the nose to the base of the tail

- Standing or lying flat
- Measure in a straight line. Do not follow the contours of the dog's body
- Add 6 to the dog's length in inches

$$\text{Dog's length (in)} + 6 =$$
$$37 \text{ in} + 6 = 43 \text{ in}$$



# Measure Dog's Length



# Calculate Minimum Floor Space

Multiply sum from step 1 by itself

(Dog's length (in) + 6) x (Dog's length (in) + 6) = \_\_\_\_\_

$$(37 + 6) \times (37 + 6) = 1849 \text{ sq. in.}$$

1849 sq. in. is minimum amount of floor space in square inches.

Convert to sq. ft. by dividing by 144

$$\frac{1849}{144} = 12.84 \text{ sq. ft. floor space}$$

144

# Dogs in Group Housing

The total amount of floor space must meet or exceed each dog's minimum requirement.



# Height Requirement

- Measure dog in normal standing position
- Minimum of 6 inches from top of dog's head to top of cage.

# Dams with Puppies

- Separate calculation for dams with nursing puppies.
- Dog's breed and behavioral characteristics
- Guidance from attending veterinarian

# Dam's Space Requirement

1. Measure dam

Tip of nose to base of tail = 37"

2. Add 6 inches to length

Dog's length (in) + 6 = \_\_\_

37 in. + 6 = 43 in.

3. Multiply sum by itself

$(37 + 6) \times (37 + 6) = 1849$  sq in

4. Convert to sq. ft.

$\frac{1849}{144} = 12.84$  sq. ft.

144



# Minimum Space Per Puppy

- Each puppy needs 5% of dam's minimum space.
- Dam's min. space x 0.05 = space per puppy  
 $12.84 \text{ sq ft} \times 0.05 = .642 \text{ sq ft space/puppy}$
- Space per puppy x # of pups = space for litter  
 $.642 \times 5 \text{ pups} = 3.21 \text{ sq ft for all pups}$

# Total Floor Space

Add space for dam to total space for litter.

$$12.84 \text{ sq ft} + 3.21 \text{ sq ft} = 16.05 \text{ sq ft}$$

# Written Exercise Plan

Required by regulations

- Applies to all dogs except dams with nursing puppies and dogs under 12 weeks of age.
- Exercise requirement may be met by providing sufficient space in the primary enclosure.
- Written plan, available for review

# Exercise Plan and Space Requirement

- Related to minimum space requirement
- Singly housed dogs
  - If minimum space requirement met, must have other opportunities to exercise
  - If provided 2 times minimum space, no exercise plan needed
- Group housed dogs that meet minimum space requirements also meet exercise requirement
- Written plan documents how requirement is met.



# Other Requirements for Primary Enclosures



# Cleaning and Sanitizing Primary Enclosures

# General Cleaning Guidelines

Daily removal of feces, urine and food waste from primary enclosures.

# Animal Contact Areas

Daily spot cleaning of hard surfaces that dogs contact daily

- Sanitize at least every two weeks, or more often if necessary

Daily spot clean/rake non-hard/porous surfaces

- Often enough so animals avoid contact with excreta
- Replace when raking/spot cleaning not sufficient to prevent or eliminate:
  - Odors, insect, pest or vermin infestations

# Other Surfaces

- Clean and sanitize when necessary to meet generally accepted husbandry standards and practices.
- Remove feces, urine and food waste in pans or on the ground under primary enclosures as often as necessary to prevent excessive accumulation, keep dogs clean and reduce insects, pests, odors and disease risk

# Steam and Water Cleaning

1. Remove dogs from enclosure
  - unless enclosure is large enough to avoid harm, wetting or distress to dogs
2. Protect dogs in other enclosures from contamination by water or waste
3. Clean pans under primary enclosures to prevent waste accumulation and reduce disease risk
4. Remove standing water after cleaning

# Sanitization: Enclosures and Receptacles

- Clean and sanitize as often as needed
- Before used for another dog
  - Primary enclosures
  - Food and water bowls
- Must clean and sanitize at least once every 2 weeks or more often as needed



# Sanitizing Hard Surfaces

Use one of these methods:

- A. Steam Cleaning OR
- B. Washing in hot (180° F water) and soap/detergent OR
- C. Remove all organic material and mineral buildup; wash with detergent and disinfectant solutions or combination detergent/disinfectant product; followed with clean water rinse



# Pens, Runs, Outdoor Housing

Materials that cannot be sanitized by previous methods:

(porous/non-hard surfaces)

Remove contaminated materials to prevent

- Odors
- Diseases
- Pests
- insects and vermin

Direct sunlight aids in disinfection



# Indoor Facilities: Special Requirements

# Indoor Facility

Building intended to house animals which has :

- Environmental controls to regulate
  - Temperature
  - Humidity
  - Odors
- Is an enclosed space with continuously connected roof, walls and floor
- Has at least one door for entry and exit that can be opened and shut
- Windows covered by transparent glass or hard plastic

# General Requirements: Temperature and Humidity

Indoor facilities must have sufficient heating and cooling systems to:

- protect dogs from extreme temperatures and humidity
- provide for health and well-being

# Indoor Housing: Temperature

- Not colder than 50° F
  - Unacclimated dogs,
  - Breeds that are not cold tolerant
  - Sick, aged, infirm or young dogs
- If below 50°F provide
  - Dry bedding, resting boards, etc.

# Minimum and Maximum Temperatures

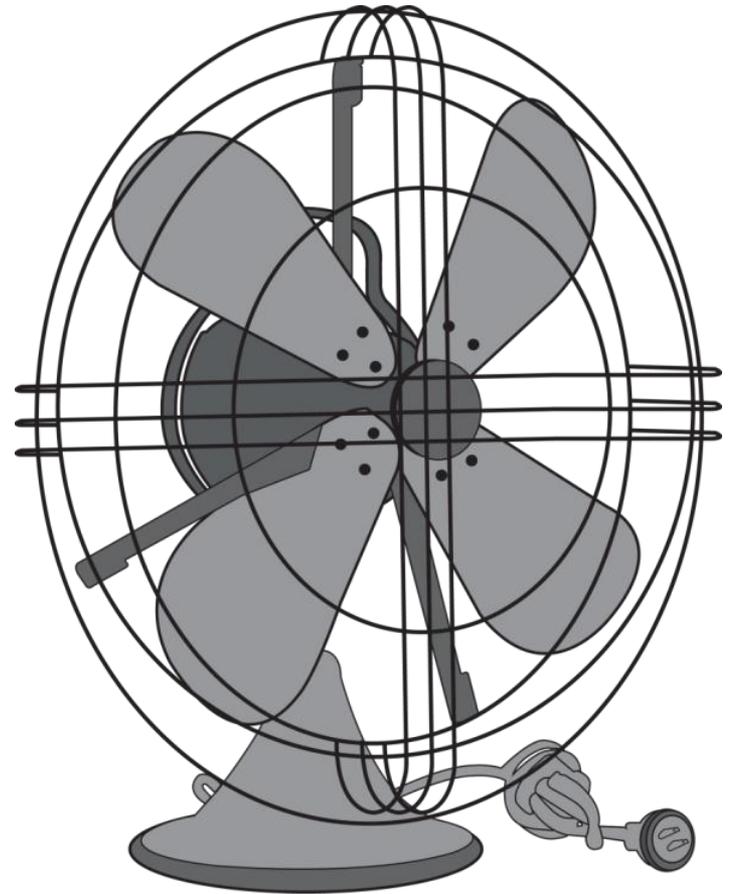
**Minimum:** not below 45°F for more than 4 consecutive hours

**Maximum:** not above 85°F for more than 4 consecutive hours



# Ventilation

- Sufficient ventilation at all times
  - Minimize odors, drafts, ammonia, condensation
  - Windows, vents, fans, air conditioning
- Above 85° F
  - Auxiliary ventilation: Fans, blowers, air conditioning



# Humidity

- At a level to ensure health and well-being of dogs
- Follow directions of attending veterinarian and generally accepted professional and husbandry practices



# Lighting

- Sufficient light for inspection, cleaning and observation of dogs
- Natural or artificial
- Diurnal cycle
- Uniform lighting
- Protect dogs from excessive light



# Impervious Surfaces

The following surfaces must be impervious to moisture:

- Floors
- Walls
- Surfaces in contact with animals
- Ceilings if not replaceable

# Impervious Surface

## Surface

- does not permit the absorption of fluids.
- can be thoroughly and repeatedly cleaned and disinfected,
- will not retain odors,
- from which fluids bead up and run off or can be removed without being absorbed into the surface material

# Example: Impervious Surface





# Sheltered Facilities: Special Requirements

# Sheltered Housing Facility: Definition

Facility that at all times provides:

- Shelter
- Protection from the elements
- Protection from temperature extremes

May consist of:

- Runs or pens totally enclosed within a building
- Runs or pens which have connected indoor-outdoor areas, where the inside portions are inside of a totally enclosed building

# Temperatures: Sheltered Portion

- Not colder than 50° F
  - Unacclimated dogs,
  - Breeds that are not cold tolerant
  - Sick, aged, infirm or young dogs
- If below 50°F provide
  - Dry bedding, resting boards, etc.

# Minimum and Maximum Temperatures

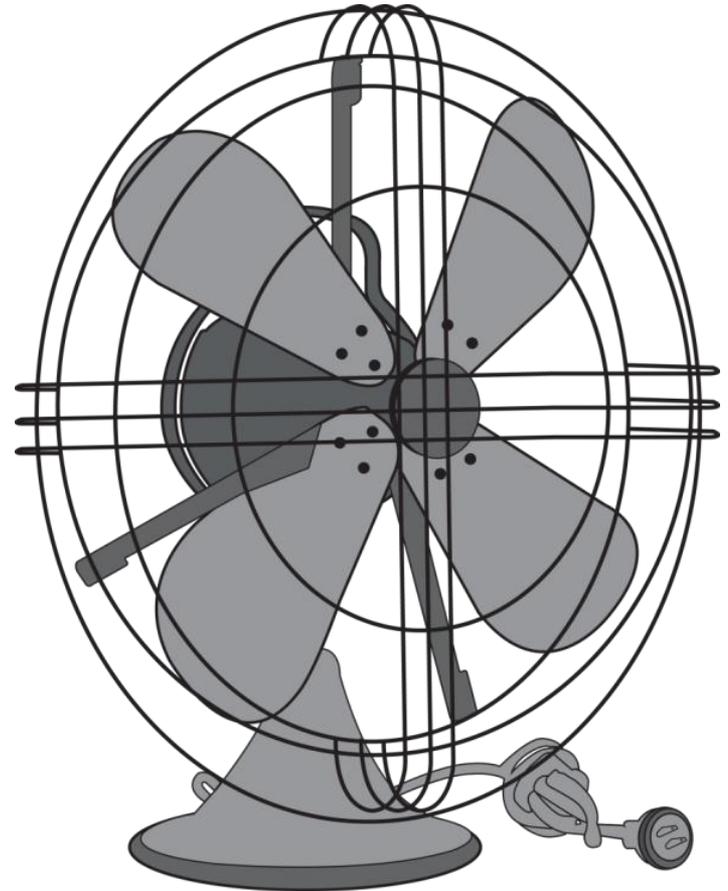
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# Ventilation: Sheltered Portion

- Sufficient ventilation at all times
  - Minimize odors, drafts, ammonia, condensation
  - Windows, vents, fans, air conditioning
- Above 85° F
  - Auxiliary ventilation: Fans, blowers, air conditioning
- Humidity level to ensure health and well-being



# Lighting

- Sufficient to permit routine inspection, cleaning and observation
- Natural or artificial light
- Diurnal schedule
- Uniform throughout facility
- Protection for dogs from excessive light

# Shelter from the Elements

- Dogs must have shelter from elements at all times
- All dogs must be able to sit, stand, turn about freely and lie in a normal manner

# Impervious Surfaces

- These must be impervious to moisture:
  - Indoor floor areas in contact with dogs
  - Outdoor floors in contact with dogs, when not exposed to direct sunlight, or made of hard material such as wire, wood, metal or concrete;
  - All walls, boxes, houses, dens and other surfaces with dog contact
- Outside non-hard surfaces with dog contact and exposed to direct sunlight and replaceable:
  - Compacted earth,
  - Absorbent bedding,
  - Sand,
  - Gravel
  - Grass

# Replaceable Surfaces

Outside non-hard surfaces with dog contact and exposed to direct sunlight and replaceable:

- Compacted earth
- Absorbent bedding
- Sand
- Gravel
- Grass

# Outdoor surfaces: Examples





# Outdoor Facilities: Special Requirements

# Outdoor Housing Facility

Any structure, building, land or premises which houses animals or is intended to house animals which:

- Does not meet the definition of any other type of housing as provided in the regulations

AND

- In which the temperature cannot be controlled within set limits

# Restrictions

These dogs may not be kept in an outdoor facility\*

- Dogs not acclimated to the prevalent temperature in the area
- Breeds that cannot tolerate the prevalent temperature
- Sick, infirm, aged or young dogs

If acclimation status unknown, may not be in outdoor facility when temperature is below 50° F

\* Unless approved by attending veterinarian

# Shelter Requirements

- Roof, 4 sides and floor
- Adequate protection from heat and cold
- All dogs have access
  - All must be able to sit, stand, lie normally and turn around freely
- Protect from sun's direct rays and direct effect of wind and rain
- Provide wind and rain breaks at entrance
- Clean, dry bedding when temperature below 50° F: more when 35° F or colder

# Prohibited Structures

These items may not be used as shelter:

- Metal barrels
- Cars
- Refrigerators/freezers

# Surfaces

These surfaces must be impervious to moisture;

- Building surfaces in contact with dogs
- Hard surfaces in contact with dogs

Replace when worn or soiled:

- Can't be readily cleaned/sanitized
- Floors of compacted earth, dirt, sand, gravel, absorbent bedding or grass

# Shade

Must provide separate outdoor area(s) of shade for all dogs.

- Large enough for all dogs to use at same time
- Provide protection from sun's direct rays

# Conclusion

You should now be able to:

1. List the general requirements for primary enclosures.
2. Briefly describe cleaning requirements for primary enclosures.
3. Define and describe indoor housing, outdoor housing and sheltered housing facilities and the specific requirements for each type of facility.



Questions?

# Acknowledgments

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