

1 **D. Species-specific provisions for dogs**

2

3 **1. Introduction**

4

5 The domestic dog (*Canis familiaris*) is an inquisitive and highly social animal  
6 which actively seeks information about its surroundings, reflecting the  
7 behaviour of its ancestors in the wolf family. Although much of the day is  
8 spent resting, the dog requires a complex physical and social environment  
9 during the active phase.

10

11 Bitches seek solitude in a quiet area for parturition and rearing of young.

12

13 As aggression is a significant risk, care is needed to maintain dogs in socially  
14 harmonious groups. The recommendations provided are for the beagle, the  
15 most commonly used breed. Account should be taken of individual breed  
16 characteristics if other breeds are used.

17

18 **2. The environment and its control**

19

20 2.1. Ventilation

21 (See paragraph 2.1 of the General section)

22

23 2.2. Temperature

24 Dogs may be maintained within a wide room temperature range provided that  
25 their welfare is not compromised. Abrupt temperature changes and wide  
26 variations should be avoided where these could affect the physiology. A  
27 temperature range of 15°C to 21°C should be maintained when precise  
28 control is required for dogs under procedure (see paragraph 2.2.3 of the  
29 General Section).

30

31 As puppies have limited thermoregulatory control in the first ten days or so of  
32 life, additional local heating should be provided within the whelping enclosure.

33

34

35 2.3. Humidity

36 It is considered unnecessary to control relative humidity, as dogs can be  
37 exposed to wide fluctuations of ambient relative humidity without adverse  
38 effects.

39

40 2.4. Lighting

41 The holding of dogs under the natural twenty-four-hour light-dark cycle is  
42 acceptable. Where the light part of the photoperiod is provided by artificial  
43 lighting, this should be within a range of ten to twelve hours daily.

44

45 If natural light is totally excluded, low-level night lighting (5 to 10 lux) should  
46 be provided to allow dogs to retain some vision and to take account of their  
47 startle reflex.

48

49 2.5. Noise

50 Noise in dog kennels can reach high levels which are known to cause damage  
51 to humans, and which could affect dogs' health or physiology. For these  
52 reasons it is important to consider methods of reducing noise in dog facilities.  
53 By addressing the dogs' behavioural needs in the facility design, the level of  
54 vocalisation may be decreased e.g. socialisation and habituation of dogs to  
55 the presence of humans will reduce barking behaviour. Much of the noise is  
56 generated by the dogs' own vocalisations, but may also be generated by  
57 husbandry operations within the facility and ingress from outside sources. Any  
58 source of noise that may stimulate further dog barking should therefore be  
59 limited as far as possible. Penetration of external noise can be reduced by  
60 appropriate siting of the facility and by appropriate architectural design. Noise  
61 generated within the facility can be reduced by noise absorbent materials or  
62 structures. Expert advice on noise reduction should be taken when designing  
63 or modifying dog accommodation.

64

65 2.6. Alarm systems

66 (See paragraph 2.6. of the General section)

67

68

69 **3. Health**

70

71 (See paragraphs 4.1. and 4.4. of the General section).

72 Two weeks is suggested as a minimum quarantine period and is also  
73 considered reasonable.

74

75 **4. Housing, enrichment and care**

76

77 4.1. Housing

78 Dogs should be housed in socially harmonious groups within the animal  
79 enclosure, unless the scientific procedures or welfare requirements make this  
80 impossible. Special care is needed when regrouping dogs or introducing an  
81 unfamiliar dog to a group. In all cases, groups should be monitored for social  
82 compatibility on an ongoing basis.

83

84 Outside runs provide an environmental enrichment opportunity for dogs in  
85 both breeding and user establishments and should be provided where  
86 possible.

87

88 Single-housing of dogs for even short periods can be a significant stress  
89 factor. Therefore, dogs should not be single-housed for more than four hours  
90 without justification on welfare or veterinary grounds. For single-housing for  
91 more than four hours on experimental grounds, see paragraph 4.5.2 of the  
92 General section.

93

94 In such circumstances, additional resources should be targeted to the welfare  
95 and care of these dogs. Additional human socialisation time, and visual,  
96 auditory and, where possible, tactile contact with other dogs should be  
97 provided for all single-housed animals on a daily basis.

98

99 Unless contra-indicated on scientific grounds, single-housed dogs should be  
100 allowed to exercise in a separate area with, if possible, other dogs, and with  
101 staff supervision and interaction, on a daily basis.

102

103 Stud dogs should, wherever possible, be housed in socially harmonious pairs  
104 or groups or with bitches.

105

106 Peri-parturient bitches should only be moved to the whelping enclosure  
107 between one and two weeks of expected parturition. While in the whelping  
108 enclosure they should have additional daily human contact.

109

110 Social behaviour in dogs develops between four and twenty weeks of age.  
111 During this period it is particularly important that the dog has social contacts  
112 with littermates, adult dogs (e.g. the bitch) and with humans, and is  
113 familiarised with conditions likely to be encountered during subsequent use.  
114 Daily handling during this sensitive stage of development is a prerequisite for  
115 the social behaviour of the adult dog and it has been shown that a short  
116 period of handling, even from the first day after birth onwards, is of importance  
117 as the young animals are already able to respond to scent and tactile  
118 stimulation.

119

120 Veterinary hospitalisation and isolation facilities must be provided. Where  
121 such facilities are below the space requirements outlined in this Code of  
122 Practice or limit social contact with other dogs, the amount of time spent in  
123 them by dogs needing treatment should be restricted to the minimum  
124 necessary and used only as directed by a veterinary surgeon.

125

#### 126 4.2. Enrichment

127 The design of indoor and outdoor enclosures should allow some privacy for  
128 the dogs and enable them to exercise some control over their social  
129 interactions.

130

131 Separate areas for different activities should be provided. This can be  
132 achieved by, for example, inclusion of raised platforms and pen sub-divisions.  
133 Dog pens should be subdivided into separate sleeping and exercise area.  
134 This provides some environmental complexity and allows the animal to  
135 defecate/urinate away from its sleeping area.

136

137 The pen design should not overly restrict the dog's ability to obtain information  
138 about its surroundings. Reducing solid partition height and use of horizontal  
139 rather than vertical bars will help with this. Provision of platforms within pens  
140 offers several benefits, provided that they have sufficient height so as not to  
141 limit the floor area below, including increasing the complexity of pens,  
142 providing a viewpoint for dogs and providing a retreat or sleeping area under  
143 the platform.

144

145 Dog treats and toys afford welfare benefits to the animals, providing these are  
146 used sensibly and their use is adequately monitored. As chewing is an  
147 important behaviour, items should be provided which meet this need.

148

149 The primary advantages of exercise are to allow additional opportunities for  
150 dogs to experience a complex and varied environment and to increase  
151 interaction with other dogs and humans. These will be particularly important  
152 where these needs cannot be fully met within the space provided by the  
153 animal enclosure. Therefore, unless contra-indicated on scientific or veterinary  
154 grounds, dogs should be removed to a separate area and allowed to exercise,  
155 with other dogs where possible, and with staff supervision and interaction,  
156 ideally on a daily basis.

157

#### 158 4. 3. Enclosures – dimensions and flooring

159 Animal enclosures, including the divisions between enclosures, should  
160 provide a robust and easy to clean environment for the dogs. In their design  
161 and construction they should seek to provide an open and light facility, giving  
162 the dogs comprehensive sight of other dogs and staff outside of their  
163 immediate animal enclosure.

164

##### 165 4.3.1. Dimensions

166 These guidelines are intended to encourage the social housing of dogs and to  
167 permit adequate environment enrichment. It should be noted that within this  
168 concept and strategy every encouragement is given to holding dogs in large  
169 and socially harmonious groups both to increase the available floor space and  
170 to enhance socialisation opportunities.

171

172 Pens should have sufficient depth to allow nervous dogs to retreat from the  
173 front of the pen.

174

175 Dogs should never be forced to spend their entire lives outside and should at  
176 all times have access to an internal enclosure that meets the standards for  
177 construction and environmental control detailed in these guidelines. The  
178 internal enclosure should represent not less than 50% of the minimum space  
179 to be made available to the dogs, as detailed in **Table D.1** below.

180

181 The space allowances detailed below are based on the requirements of  
182 beagles, but it should be noted that allowances significantly in excess may be  
183 required for giant breeds such as St Bernards or Irish wolfhounds. For breeds  
184 other than the beagle, space allowances should be decided in consultation  
185 with veterinary staff and the responsible authority.

186

187 **Table D.1. Dogs: Minimum enclosure dimensions and space allowances**

188

Weight (kg)	Minimum enclosure size (m <sup>2</sup> )	Minimum floor area for one or two animals (m <sup>2</sup> )	For each additional animal add a minimum of (m <sup>2</sup> )	Minimum height (m)
up to 20				2
over 20				2

189

190 Dogs that are pair or group housed may each be constrained to half the total  
191 space provided (*text to be provided*) while they are undergoing procedures as  
192 defined in [UK legislation], if this separation is essential for scientific purposes.  
193 The period for which a dog should be so constrained should be minimised and  
194 should not in any event exceed four hours. This provision is made to  
195 encourage pair housing (particularly in toxicology studies) while at the same  
196 time allowing for the need to monitor feed intake and perform post-dosing  
197 observations.

198

199 Any further social or physical constraint, such as in a metabolism cage or  
200 physical restraint in a sling, may severely compromise the welfare of the

201 animals. Constraint in a metabolism cage or any similar type of housing for  
 202 scientific purposes should be within a space that is as close as possible to  
 203 that defined above and no less than that required for the animal to stretch  
 204 fully, lie down and turn around.

205

#### 206 4.3.2. Nursing bitches and litters, and puppies up to 7.5 kg

207 A nursing bitch and litter should have the same space allowance as a single  
 208 bitch of equivalent weight. The whelping pen should be designed so that the  
 209 bitch can move to an additional compartment or raised area away from the  
 210 puppies.

211

212 The normal weaning age for puppies is six to nine weeks.

213

214 **Table D.2. Dogs: Minimum enclosure dimensions and space allowances**  
 215 **for post-weaned stock**

Weight of dog (kg)	Minimum enclosure size (m <sup>2</sup> )	Minimum floor area/animal (m <sup>2</sup> )	Minimum height (m)
up to 5			2
over 5 to 10			2
over 10 to 15			2
over 15 to 20			2
over 20			2

216

#### 217 4.3.3. Flooring

218 The preferred flooring for dog accommodation is a solid continuous floor with  
 219 a smooth non-slip finish. All dogs should be provided with a comfortable, solid  
 220 resting area, for example, by the use of enclosure furniture such as raised  
 221 beds or platforms.

222

223 Open flooring systems such as grids or mesh should not be used for dogs.  
 224 Where there is a justification for open flooring, great care should be taken in  
 225 their design and construction in order to avoid pain, injury or disease and to  
 226 allow the animals to manifest normal behaviours. If any welfare problems do  
 227 arise which are related to the flooring, veterinary advice should be sought and,  
 228 if necessary, the dogs relocated onto solid flooring.

229

230 Pre-weaned puppies and peri-parturient and suckling bitches should not be  
231 kept in an open floor system.

232

233 The quality and finish of the floor of an outside run need not be to the  
234 standard of the inside enclosure, providing it is easily cleanable and not  
235 injurious to the dogs.

236

237 4.4. Feeding

238 (See paragraph 4.6. of the General section)

239

240 4.5. Watering

241 (See paragraph 4.7. of the General section)

242

243 4.6. Substrate, litter, bedding and nesting material

244 When dogs are held on solid floors, some litter or substrate material facilitates  
245 cleaning and minimises the necessity for regular washing or hosing down.

246

247 Provision of a warm, dry place to sleep is paramount. Peri-parturient and  
248 suckling bitches should be provided with a bed and bedding material to  
249 support whelping and the nursing of puppies. Puppies also benefit from the  
250 provision of bedding materials, as do the majority adult dogs.

251

252 4.7. Cleaning

253 Each occupied enclosure should be cleaned at least daily. All excreta and  
254 soiled materials should be removed from all areas used by dogs at least daily,  
255 and more frequently if necessary.

256

257 Wet cleaning by hosing down of enclosures should be carried out as  
258 necessary but should not result in the dogs becoming wet. When enclosures  
259 are hosed down, the dogs should be removed from the enclosure to a dry  
260 place and returned only when it is reasonably dry.

261

262

263 4.8. Handling

264 (See paragraph 4.1. above and paragraph 4.10. of the General section)

265

266 4.9. Humane killing

267 (See paragraph 4.11. of the General section)

268

269 4.10. Records

270 (See paragraph 4.12. of the General section)

271

272 4.11. Identification

273 (See paragraph 4.13. of the General section)

274

275 **5. Staffing**

276

277 The number of staff must be adequate to maintain the size of breeding  
278 colonies and good standards of husbandry and care. In setting staff levels it is  
279 most important to take into account the additional time for the essential human  
280 interactions required, especially with pups and single-housed animals.

281