

TABLE 1.1

AGE, SEX AND BREED DISTRIBUTION OF 4,831 DOGS SCREENED  
FOR HEART DISEASE

| Breed or group*                     | AGE IN YEARS |     |     |     |     |     |      |     |     |    | Total |
|-------------------------------------|--------------|-----|-----|-----|-----|-----|------|-----|-----|----|-------|
|                                     | 0-1          |     | 1-4 |     | 5-8 |     | 9-12 |     | 13+ |    |       |
|                                     | M            | F   | M   | F   | M   | F   | M    | F   | M   | F  |       |
| Mongrel                             | 354          | 208 | 250 | 162 | 154 | 139 | 121  | 107 | 44  | 51 | 1590  |
| Cocker Spaniel                      | 39           | 52  | 62  | 81  | 69  | 81  | 49   | 43  | 9   | 11 | 496   |
| Boxer                               | 45           | 31  | 82  | 53  | 67  | 53  | 27   | 25  | 4   | 4  | 391   |
| Fox & Irish Terrier                 | 43           | 34  | 50  | 42  | 32  | 43  | 17   | 31  | 9   | 8  | 309   |
| German Shepherd                     | 57           | 45  | 48  | 39  | 16  | 19  | 14   | 14  | 2   | 2  | 256   |
| Collie                              | 34           | 36  | 41  | 38  | 25  | 18  | 14   | 6   | 4   | 4  | 220   |
| Poodle                              | 33           | 27  | 38  | 51  | 17  | 12  | 6    | 9   | 4   | 0  | 197   |
| Dachshund                           | 15           | 15  | 42  | 33  | 12  | 20  | 7    | 12  | 5   | 2  | 163   |
| Beagle                              | 31           | 28  | 24  | 19  | 11  | 11  | 5    | 4   | 2   | 3  | 138   |
| (Groups below exclude above breeds) |              |     |     |     |     |     |      |     |     |    |       |
| Hounds                              | 12           | 6   | 15  | 11  | 6   | 8   | 2    | 5   | 0   | 0  | 65    |
| Terriers                            | 6            | 11  | 14  | 26  | 16  | 20  | 10   | 11  | 0   | 0  | 114   |
| Sporting Dogs                       | 32           | 25  | 52  | 36  | 50  | 28  | 26   | 18  | 5   | 4  | 276   |
| Working Dogs                        | 23           | 29  | 44  | 31  | 27  | 21  | 12   | 12  | 6   | 5  | 210   |
| Nonsporting Dogs                    | 24           | 15  | 25  | 21  | 33  | 23  | 24   | 21  | 9   | 3  | 198   |
| Toys                                | 39           | 32  | 43  | 37  | 16  | 25  | 6    | 9   | 0   | 1  | 208   |
| Totals                              | 787          | 594 | 830 | 680 | 551 | 521 | 340  | 327 | 103 | 98 | 4831  |

Mean age: 4.42 years; total males: 2611; females: 2220.

\*American Kennel Club: 1956, The Complete Dog Book. Garden City Books. New York, N.Y.: VIII-XI.

TABLE 1.2  
AGE, BREED AND SEX PREVALENCE RATIOS  
OF CHRONIC VALVE DISEASE IN 4,831 DOGS

| Breed                               | No. Dogs Examined |      | Average Age (Yrs.) |      | No. Dogs With CVD |     | Prevalence CVD/1000 |     | Breed |
|-------------------------------------|-------------------|------|--------------------|------|-------------------|-----|---------------------|-----|-------|
|                                     | M                 | F    | M                  | F    | M                 | F   | M                   | F   |       |
| Mongrel                             | 923               | 667  | 4.02               | 4.84 | 57                | 46  | 62                  | 69  | 65    |
| Cocker Spaniel                      | 228               | 268  | 5.56               | 5.10 | 46                | 27  | 202                 | 101 | 147   |
| Boxer                               | 225               | 166  | 4.46               | 4.90 | 22                | 19  | 98                  | 114 | 105   |
| Fox & Irish Terrier                 | 151               | 158  | 4.39               | 5.34 | 10                | 10  | 66                  | 63  | 65    |
| German Shepherd                     | 137               | 119  | 3.13               | 3.53 | 3                 | 2   | 22                  | 17  | 20    |
| Collie                              | 118               | 102  | 4.13               | 3.44 | 6                 | 5   | 51                  | 50  | 50    |
| Poodle                              | 98                | 99   | 3.50               | 3.17 | 8                 | 4   | 80                  | 40  | 61    |
| Dachshund                           | 81                | 82   | 4.15               | 4.57 | 8                 | 9   | 99                  | 110 | 104   |
| Beagle                              | 73                | 65   | 3.13               | 3.36 | 9                 | 2   | 123                 | 31  | 80    |
| (Groups below exclude above breeds) |                   |      |                    |      |                   |     |                     |     |       |
| Hounds                              | 35                | 30   | 2.96               | 4.50 | 2                 | 1   | 57                  | 33  | 46    |
| Terriers                            | 46                | 68   | 5.37               | 4.65 | 7                 | 4   | 152                 | 59  | 96    |
| Sporting Dogs                       | 165               | 111  | 4.95               | 4.79 | 21                | 7   | 127                 | 63  | 101   |
| Working Dogs                        | 112               | 98   | 4.55               | 4.36 | 10                | 11  | 89                  | 112 | 100   |
| Non Sporting Dogs                   | 115               | 83   | 5.84               | 5.70 | 13                | 5   | 113                 | 60  | 91    |
| Toys                                | 104               | 104  | 2.83               | 3.65 | 10                | 8   | 96                  | 77  | 87    |
| Sex Totals                          | 2611              | 2220 | 4.26               | 4.61 | 232               | 160 | 89                  | 72  | 81    |
| All Dogs                            | 4831              |      | 4.42               |      | 392               |     | 89                  | 72  | 81    |

TABLE 1.3

AGE AND SEX ADJUSTED PREVALENCE RATIOS  
OF CHRONIC VALVE DISEASE IN DOGS (PER 1000)

| Sex    | No. of dogs | No. of cases | Crude rate | Av. age in years | Age Adj. rate |
|--------|-------------|--------------|------------|------------------|---------------|
| Male   | 2611        | 232          | 88.8       | 4.26             | 92.9*         |
| Female | 2220        | 160          | 72.1       | 4.61             | 67.7*         |
| Total  | 4831        | 392          | 81.1       | 4.42             | 80.3          |

\* .001 < P < .01

$$t = \frac{P_1 - P_2}{\sqrt{\frac{P_1 Q_1}{N_1} + \frac{P_2 Q_2}{N_2}}}$$

TABLE 1.4

AGE AND SEX SPECIFIC PREVALENCE RATIOS  
OF CHRONIC VALVE DISEASE IN DOGS (PER 1000)

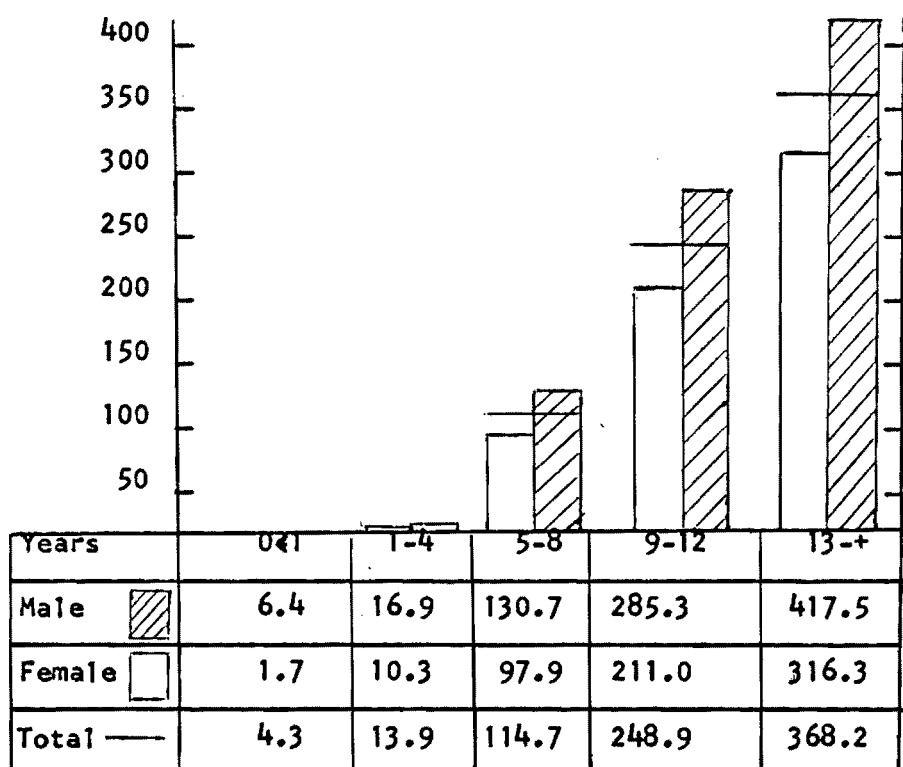
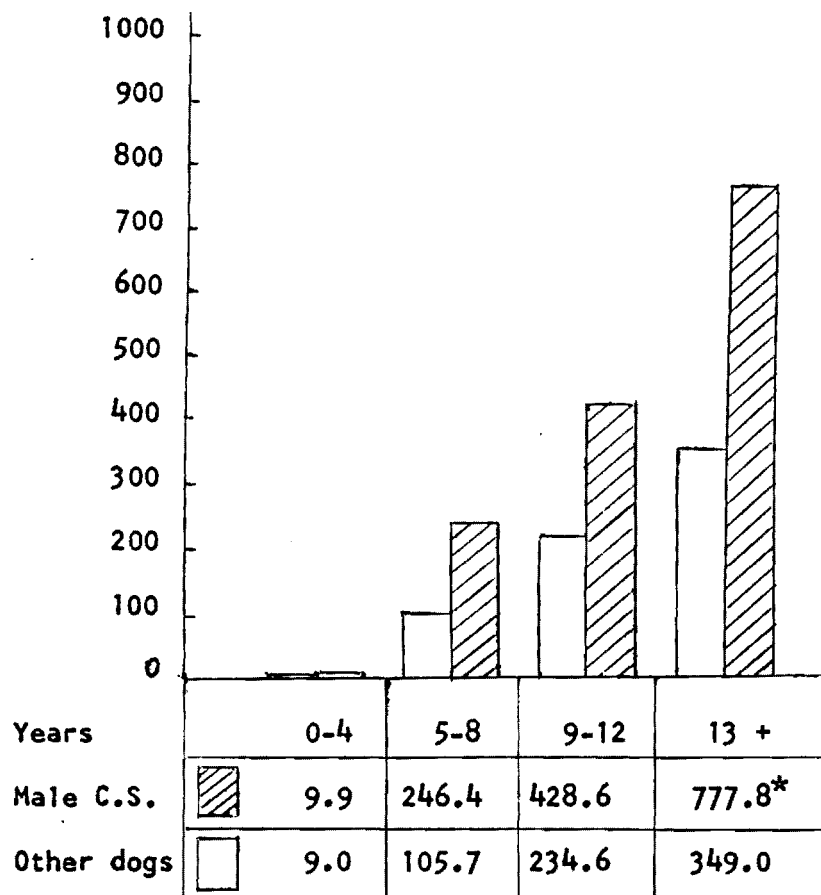


TABLE 1.5

AGE SPECIFIC PREVALENCE RATIOS OF CVD  
IN MALE COCKER SPANIELS AND OTHER DOGS (PER 1000)



\* 7 out of 9 dogs.

(Other denominators consist of  
49 dogs or more - see Table 1.1)

TABLE 1.6

PREVALENCE OF CHRONIC VALVE DISEASE  
IN PUREBRED -VS.- MONGREL DOGS

|          | With CVD |      | Without CVD |      |      |
|----------|----------|------|-------------|------|------|
|          | Obs.     | Exp. | Obs.        | Exp. |      |
| Purebred | 289      | 263  | 2952        | 2978 | 3241 |
| Mongrel  | 103      | 129  | 1487        | 1461 | 1590 |
|          | 392      | 392  | 4439        | 4439 | 4831 |

$\chi^2 = 8.50 (P < .01)$

TABLE 1.7

PREVALENCE OF CVD IN MALE PUREBREDS  
(EXCEPT COCKER SPANIELS) -VS.- MALE MONGREL DOGS

|                            | With CVD |      | Without CVD |      |      |
|----------------------------|----------|------|-------------|------|------|
|                            | Obs.     | Exp. | Obs.        | Exp. |      |
| Male Purebreds Except C.S. | 129      | 114  | 1331        | 1346 | 1460 |
| Male Mongrel               | 57       | 72   | 866         | 851  | 923  |
|                            | 186      | 186  | 2197        | 2197 | 2383 |

$\chi^2 = 5.53 (P < .02)$

Table 1.8

Chronic Valve Disease In 4,831 Dogs;  
Prevalence Ratios By Breed And Sex

| Groups          | Number |        | Age Adjusted ratio/1,000 |        | $t = \frac{P_1 - P_2}{\sqrt{\frac{P_1 Q_1}{N_1} + \frac{P_2 Q_2}{N_2}}}$ |
|-----------------|--------|--------|--------------------------|--------|--------------------------------------------------------------------------|
|                 | Male   | Female | Male                     | Female |                                                                          |
| All dogs        | 2,611  | 2,220  | 93                       | 68     | .001 < P < .01                                                           |
| Cocker Spaniels | 228    | 268    | 190                      | 108    | .01 < P < .02                                                            |
| Other than C.S. | 2,383  | 1,952  | 82                       | 63     | .01 < P < .02                                                            |

Table 1.9

Congestive Heart Failure In 4,831 Dogs;  
Prevalence Ratios By Breed and Sex

| Groups          | Number |        | Age Adjusted ratio/1,000 |        | P                       |
|-----------------|--------|--------|--------------------------|--------|-------------------------|
|                 | Male   | Female | Male                     | Female |                         |
| All dogs        | 2,611  | 2,220  | 23.8                     | 13.0   | .001 < P < .01          |
| Cocker Spaniels | 228    | 268    | 86.7                     | 19.7   | .001 < P < .01          |
| Other than C.S. | 2,383  | 1,952  | 16.7                     | 12.1   | Not Significant P > .20 |

TABLE 1.10

INCIDENCE OF VALVE INVOLVEMENT IN DOGS  
WITH CHRONIC VALVE DISEASE AT NECROPSY

|                              |       |
|------------------------------|-------|
| Mitral alone                 | 143   |
| Mitral and tricuspid         | 75    |
| Mitral and aortic            | 6     |
| Mitral, tricuspid and aortic | 3     |
| Tricuspid alone              | 3     |
|                              | <hr/> |
|                              | 230   |