

1. INTRODUCTION

Bloat is a condition in which a dog's stomach distends. If this condition involves a twisted stomach, it is called gastric dilatation and volvulus (GDV). This survey is interested in the surgical condition of GDV. In a large three year study of 927 military working dogs (MWD), GDV was found to be the fifth most common reason for death and the major preventable cause of death (Moore, 2001).

The literature on GDV points in many directions which has not brought breeders any closer to a solution. This survey focuses only on some of the environmental factors that might be related to factors that trigger or contribute to the occurrence of GDV. We hope that the data collected will be of use to those who study the entire puzzle of this disease. The aim of this survey is to look at conditions that are relevant to the further study of this disease. Your contribution is very much appreciated. A summary of the results and findings will be posted on the website www.breedingbetterdogs.com in November 2010.

This survey is the joint effort of Dr. Carmen Battaglia PhD of the AKC and Dr. Cindy Otto DVM, University of Pennsylvania, School of Veterinary Medicine.

For this survey we are interested in dogs that bloated. We are able to collect information on up to 3 of your dogs that have bloated. If you had other dogs at the time your dog bloated, we would like information on one of those dogs that is most like the dog that bloated.

We are also interested in your dog that might have been at risk of bloat and did not bloat. If you have multiple dogs that did not bloat please only provide information for one of them.

2. GENERAL QUESTIONS

1. Please enter the following data for your dog.

Country in which the dog

lives:

Zipcode/postal code:

2. If this dog was born before 1993, what year was it born?

3. Year of birth

- | | | |
|-----------------------------|----------------------------|----------------------------|
| <input type="radio"/> other | <input type="radio"/> 1999 | <input type="radio"/> 2006 |
| <input type="radio"/> 1993 | <input type="radio"/> 2000 | <input type="radio"/> 2007 |
| <input type="radio"/> 1994 | <input type="radio"/> 2001 | <input type="radio"/> 2008 |
| <input type="radio"/> 1995 | <input type="radio"/> 2002 | <input type="radio"/> 2009 |
| <input type="radio"/> 1996 | <input type="radio"/> 2003 | <input type="radio"/> 2010 |
| <input type="radio"/> 1997 | <input type="radio"/> 2004 | |
| <input type="radio"/> 1998 | <input type="radio"/> 2005 | |

4. Breed of your dog (if mixed breed please write "MIXED")

5. Gender

- Female
- Male

6. Neutered?

- Yes
- No

7. What is the main purpose of your dog (check all that apply)?

- Family pet
- Show dog
- Performance dog
- Competitive sports
- Working dog
- Hunting dog

Other (please specify)

8. Has this dog ever had an episode of bloat (not requiring surgery)?

- Yes
- No

9. Has this dog ever had a GDV requiring surgery?

- Yes
- No

3. General Questions for second dog

1. If this dog was born before 1993, what year was it born?

2. Year of birth

- | | | |
|----------------------------|----------------------------|----------------------------|
| <input type="radio"/> 1993 | <input type="radio"/> 1999 | <input type="radio"/> 2005 |
| <input type="radio"/> 1994 | <input type="radio"/> 2000 | <input type="radio"/> 2006 |
| <input type="radio"/> 1995 | <input type="radio"/> 2001 | <input type="radio"/> 2007 |
| <input type="radio"/> 1996 | <input type="radio"/> 2002 | <input type="radio"/> 2008 |
| <input type="radio"/> 1997 | <input type="radio"/> 2003 | <input type="radio"/> 2009 |
| <input type="radio"/> 1998 | <input type="radio"/> 2004 | <input type="radio"/> 2010 |

3. Breed of your dog (if mixed breed please write "MIXED")

4. Gender

- Female
- Male

5. Neutered?

- Yes
- No

6. What is the main purpose of your dog (check all that apply)?

- Family pet
- Show dog
- Performance dog
- Competitive sports
- Working dog
- Hunting dog

Other (please specify)

7. Has this dog ever had an episode of bloat (not requiring surgery)?

Yes

No

8. Has this dog ever had a GDV requiring surgery?

Yes

No

4. General Questions for third dog

1. If this dog was born before 1993, what year was it born?

2. Year of birth

- | | | |
|----------------------------|----------------------------|----------------------------|
| <input type="radio"/> 1993 | <input type="radio"/> 1999 | <input type="radio"/> 2005 |
| <input type="radio"/> 1994 | <input type="radio"/> 2000 | <input type="radio"/> 2006 |
| <input type="radio"/> 1995 | <input type="radio"/> 2001 | <input type="radio"/> 2007 |
| <input type="radio"/> 1996 | <input type="radio"/> 2002 | <input type="radio"/> 2008 |
| <input type="radio"/> 1997 | <input type="radio"/> 2003 | <input type="radio"/> 2009 |
| <input type="radio"/> 1998 | <input type="radio"/> 2004 | <input type="radio"/> 2010 |

3. Breed of your dog (if mixed breed please write "MIXED")

4. Gender

- Female
- Male

5. Neutered?

- Yes
- No

6. What is the main purpose of your dog (check all that apply)?

- Family pet
- Show dog
- Performance dog
- Competitive sports
- Working dog
- Hunting dog

Other (please specify)

7. Has this dog ever had an episode of bloat (not requiring surgery)?

Yes

No

8. Has this dog ever had a GDV requiring surgery?

Yes

No

5. General Questions for fourth dog

1. If this dog was born before 1993, what year was it born?

2. Year of birth

1993

1999

2005

1994

2000

2006

1995

2001

2007

1996

2002

2008

1997

2003

2009

1998

2004

2010

3. Breed of your dog (if mixed breed please write "MIXED")

4. Gender

Female

Male

5. Neutered?

Yes

No

6. What is the main purpose of your dog (check all that apply)?

Family pet

Show dog

Performance dog

Competitive sports

Working dog

Hunting dog

Other (please specify)

7. Has this dog ever had an episode of bloat (not requiring surgery)?

Yes

No

8. Has this dog ever had a GDV requiring surgery?

Yes

No

6. QUESTIONS FOR DOGS WITH GDV

1. What was the age of your dog at the time of the GDV?

- | | | |
|-------------------------|--------------------------|----------------------------|
| <input type="radio"/> 1 | <input type="radio"/> 6 | <input type="radio"/> 11 |
| <input type="radio"/> 2 | <input type="radio"/> 7 | <input type="radio"/> 12 |
| <input type="radio"/> 3 | <input type="radio"/> 8 | <input type="radio"/> 13 |
| <input type="radio"/> 4 | <input type="radio"/> 9 | <input type="radio"/> 14 |
| <input type="radio"/> 5 | <input type="radio"/> 10 | <input type="radio"/> > 14 |

2. Is your dog currently still alive?

- Yes
- No

3. If your dog is not alive any more, was the death related to the GDV (i.e. did your dog died in 14 days after the surgery for GDV)?

- Yes
- No
- Do not remember
- Not applicable

4. If your dog is not alive any more, what was his/her age in years at the time of death?

- | | | |
|--------------------------------------|--------------------------|---------------------------|
| <input type="radio"/> not applicable | <input type="radio"/> 6 | <input type="radio"/> 12 |
| <input type="radio"/> 1 | <input type="radio"/> 7 | <input type="radio"/> 13 |
| <input type="radio"/> 2 | <input type="radio"/> 8 | <input type="radio"/> 14 |
| <input type="radio"/> 3 | <input type="radio"/> 9 | <input type="radio"/> >14 |
| <input type="radio"/> 4 | <input type="radio"/> 10 | |
| <input type="radio"/> 5 | <input type="radio"/> 11 | |

5. Did the sire of this dog have a GDV?

- Yes
- No
- Unknown

6. Did the dam of this dog have a GDV?

- Yes
 No
 Unknown

7. Did any littermates of this dog have a GDV?

- Yes
 No
 Unknown

If "YES" please specify how many (if you know)

8. During the week prior to the GDV - for male intact dogs, was there a nearby bitch in season? For female intact dogs, was she in season? Check all that apply.

- Yes
 No
 My dog is neutered/spayed
 Do not remember

9. During the six months prior to the GDV did your dog participate in any of the following activities? Check all that apply.

- Dog show training or shows
 Field training or trials
 Schutzhund or working dog activities or trials
 Obedience training or trials
 Agility training or trials

Other activities that involve physical "work outs"

10. How many times per week (on average) did your dog participate at the above mentioned activities?

- 1 per week
- 2-4 times per week
- more than 4 times per week

11. During the six months prior to the GDV were there any new additions to the household? Check all that apply.

- A new person
- A new dog
- Other new animal

12. At the time of the GDV how many other dogs were in the household?

- 0
- 1
- 2
- 3
- 4
- 5
- more than 5

13. At the time of the GDV did this dog live with cats?

- Yes
- No
- Unknown

14. At the time of the GDV how would you rate your dog's body condition (on a scale of 1-9 with 1 being severely emaciated, 5 being ideal for the breed, and 9 being severely obese).

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

15. If a commercial diet has been fed, was it (check all that apply):

- Dry kibble
- Canned food
- Raw food
- Unknown
- Not applicable

16. If a homemade diet has been fed, was it (check all that apply):

 Cooked Unknown Raw Not applicable

17. Was your dog fed table scraps?

 Yes No

18. Supplements you were adding to the regular diet at the time of GDV (check all that apply):

 None Vitamins Cheese Eggs Cooked chicken Yogurt Cod liver oil Raw chicken Coat enhancer Fish Cottage

Other products (please specify)

19. At the time of the GDV rate how fast your dog would eat its meal (scale of 1-5 with 1 being a slow eater and 5 meaning gulping food).

 1 2 3 4 5

20. What was the feeding frequency at the time of GDV?

 Once per day Twice per day Free choice

Other (please specify)

21. At the time of GDV, you were feeding your dog from a bowl:

 On the floor. Raised from the floor. My dog was not fed from a bowl.

22. What time after feeding was your dog typically allowed outdoors or to engage in activity?

- | | |
|-----------------------------------|---|
| <input type="radio"/> Immediately | <input type="radio"/> 1-3 hours |
| <input type="radio"/> 30 minutes | <input type="radio"/> 3-6 hours |
| <input type="radio"/> 1 hour | <input type="radio"/> more than 6 hours |

23. In the time prior to being allowed to engage in activity after feeding, your dog was:

- Kenneled.
- Kept loose indoors.
- Kept loose in a yard.

24. What activity was your dog typically allowed to engage in after meals at the time marked above (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> Run free outside. | <input type="checkbox"/> Play with other dogs. |
| <input type="checkbox"/> Kennel run | <input type="checkbox"/> Run the fence. |
| <input type="checkbox"/> Run free inside. | <input type="checkbox"/> Jog/run with you. |

Other (please specify)

25. In the six months prior to the GDV, did your dog have a history of illness?

- Do not remember
- No
- Yes

If YES please specify

26. In the six months prior to the GDV, did your dog have surgery?

- Do not remember
- No
- Yes

If YES please specify

27. In the month prior to the GDV, did your dog have diarrhea?

- Do not remember
- No
- Yes

28. Anesthesia was given to your dog for any reason within 72 hours of GDV.

- Yes
- No

29. On the day of GDV your dog was in the care of (check all that apply):

- Its owner/handler
- A familiar person (but not owner/handler)
- An unfamiliar person
- Was alone
- Do not remember

30. On the day of the GDV your dog was (check all that apply):

- In its home environment
- At a boarding facility
- At a training facility
- In a familiar environment (but not home)
- In an unfamiliar environment
- Traveling
- Do not remember

31. What was the season of the year when the GDV occurred?

- Spring
- Summer
- Fall
- Winter

32. On a scale of 1-5, where 1 is sub freezing and 5 is extremely hot, rate the outside temperature on the day of the GDV.

- 1 2 3 4 5

33. At the time of GDV your dog lived in:

- Urban environment
 Suburban environment
 Rural environment

34. Rate your dog's energy level (on a scale of 1-9, where 1 is calm and 9 is hyperactive):

- 1 2 3 4 5 6 7 8 9

35. Rate your dog's anxiety level (on a scale of 1-9 where 1 is no anxiety and 9 is extremely anxious):

- 1 2 3 4 5 6 7 8 9

36. When describing your dog's behavior, check all the answers that apply to him/her:

- | | |
|---|--|
| <input type="checkbox"/> Not excitable at all. | <input type="checkbox"/> Chases tail. |
| <input type="checkbox"/> Barks when knock at door. | <input type="checkbox"/> Spins out of control. |
| <input type="checkbox"/> Barks at strangers. | <input type="checkbox"/> Acts oblivious to efforts to intercede. |
| <input type="checkbox"/> Barks at other dogs. | <input type="checkbox"/> Likes to fence run. |
| <input type="checkbox"/> Hard to control when exited. | <input type="checkbox"/> Plays with other dogs. |

37. During a typical day around the time of the GDV your dog was:

- Primarily indoors.
 Primarily outdoors.
 Indoor/outdoor.

38. During a typical day around the time of the GDV your dog spent most of its time:

- Alone.
 With other dogs.
 With family members.
 With nonfamily members.

39. Does this dog typically sleeps on its back?

Yes

No

40. During a typical day around the time of the GDV your dog spend most of its time:

In a crate.

In a pen.

Loose.

Other (please specify)

41. In a typical week around the time of GDV, how many days were you or your family members in the company of your dog?

0

1

2

3

4

5

6

7

42. On average how many hours a day were you awake in the company of your dog?

None.

Less than 1 hr

1-2 hrs

3-4 hr

5-6 hrs

More than 6 hrs

43. During a typical night your dog was (check all that apply):

Kept indoors.

Able to freely go in and out during the night.

Kept outdoors.

44. If you owned another dog at the time of GDV in this dog, would you like to give us the information about the other dog too?

Yes

No

7. QUESTIONS FOR SECOND DOG WITH GDV

1. What was the age of your dog at the time of the GDV?

- | | | |
|-------------------------|--------------------------|----------------------------|
| <input type="radio"/> 1 | <input type="radio"/> 6 | <input type="radio"/> 11 |
| <input type="radio"/> 2 | <input type="radio"/> 7 | <input type="radio"/> 12 |
| <input type="radio"/> 3 | <input type="radio"/> 8 | <input type="radio"/> 13 |
| <input type="radio"/> 4 | <input type="radio"/> 9 | <input type="radio"/> 14 |
| <input type="radio"/> 5 | <input type="radio"/> 10 | <input type="radio"/> > 14 |

2. Is your dog currently still alive?

- Yes
 No

3. If your dog is not alive any more, was the death related to the GDV (i.e. did your dog died in 14 days after the surgery for GDV)?

- Yes
 No
 Do not remember
 Not applicable

4. If your dog is not alive any more, what was his/her age in years at the time of death?

- | | | |
|--------------------------------------|--------------------------|---------------------------|
| <input type="radio"/> not applicable | <input type="radio"/> 6 | <input type="radio"/> 12 |
| <input type="radio"/> 1 | <input type="radio"/> 7 | <input type="radio"/> 13 |
| <input type="radio"/> 2 | <input type="radio"/> 8 | <input type="radio"/> 14 |
| <input type="radio"/> 3 | <input type="radio"/> 9 | <input type="radio"/> >14 |
| <input type="radio"/> 4 | <input type="radio"/> 10 | |
| <input type="radio"/> 5 | <input type="radio"/> 11 | |

5. Did the sire of this dog have a GDV?

- Yes
 No
 Unknown

6. Did the dam of this dog have a GDV?

- Yes
 No
 Unknown

7. Did any littermates of this dog have a GDV?

- Yes
 No
 Unknown

If "YES" please specify how many (if you know)

8. During the week prior to the GDV - for male intact dogs, was there a nearby bitch in season? For female intact dogs, was she in season? Check all that apply.

- Yes
 No
 My dog is neutered/spayed
 Do not remember

9. During the six months prior to the GDV did your dog participate in any of the following activities? Check all that apply.

- Dog show training or shows
 Field training or trials
 Schutzhund or working dog activities or trials
 Obedience training or trials
 Agility training or trials

Other activities that involve physical "work outs"

10. How many times per week (on average) did your dog participate at the above mentioned activities?

- 1 per week
 2-4 times per week
 more than 4 times per week

11. During the six months prior to the GDV were there any new additions to the household? check all that apply.

- A new person
 A new dog
 Other new animal

12. At the time of the GDV how many other dogs were in the household?

- 0
 1
 2
 3
 4
 5
 more than 5

13. At the time of the GDV did this dog live with cats?

- Yes
 No
 Unknown

14. At the time of the GDV how would you rate your dog's body condition (on a scale of 1-9 with 1 being severely emaciated, 5 being ideal for the breed, and 9 being severely obese).

- 1 2 3 4 5 6 7 8 9

15. If a commercial diet has been fed, was it (check all that apply):

- Dry kibble
 Canned food
 Raw food
 Unknown
 Not applicable

16. If a homemade diet has been fed, was it (check all that apply):

Cooked

Unknown

Raw

Not applicable

17. Was your dog fed table scraps?

Yes

No

18. Supplements you were adding to the regular diet at the time of GDV (check all that apply):

None

Vitamins

Cheese

Eggs

Cooked chicken

Yogurt

Cod liver oil

Raw chicken

Coat enhancer

Fish

Cottage

Other products (please specify)

19. At the time of the GDV rate how fast your dog would eat its meal (scale of 1-5 with 1 being a slow eater and 5 meaning gulping food).

1

2

3

4

5

20. What was the feeding frequency at the time of GDV?

Once per day

Twice per day

Free choice

Other (please specify)

21. At the time of GDV, you were feeding your dog from a bowl:

On the floor.

Raised from the floor.

My dog was not fed from a bowl.

22. What time after feeding was your dog typically allowed outdoors or to engage in activity?

- | | |
|-----------------------------------|---|
| <input type="radio"/> Immediately | <input type="radio"/> 1-3 hours |
| <input type="radio"/> 30 minutes | <input type="radio"/> 3-6 hours |
| <input type="radio"/> 1 hour | <input type="radio"/> more than 6 hours |

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- Kenneled.
- Kept loose indoors.
- Kept loose in a yard.

24. What activity was your dog typically allowed to engage in after meals at the time marked above (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> Run free outside. | <input type="checkbox"/> Play with other dogs. |
| <input type="checkbox"/> Kennel run | <input type="checkbox"/> Run the fence. |
| <input type="checkbox"/> Run free inside. | <input type="checkbox"/> Jog/run with you. |

Other (please specify)

25. In the six months prior to the GDV, did your dog have a history of illness?

- Do not remember
- No
- Yes

If YES please specify

26. In the six months prior to the GDV, did your dog have surgery?

- Do not remember
- No
- Yes

If YES please specify

27. In the month prior to the GDV, did your dog have diarrhea?

- Do not remember
- No
- Yes

28. Anesthesia was given to your dog for any reason within 72 hours of GDV.

- Yes
- No

29. On the day of GDV your dog was in the care of (check all that apply):

- Its owner/handler
- A familiar person (but not owner/handler)
- An unfamiliar person
- Was alone
- Do not remember

30. On the day of the GDV your dog was (check all that apply):

- In its home environment
- At a boarding facility
- At a training facility
- In a familiar environment (but not home)
- In an unfamiliar environment
- Traveling
- Do not remember

31. What was the season of the year when the GDV occurred?

- Spring
- Summer
- Fall
- Winter

32. On a scale of 1-5, where 1 is sub freezing and 5 is extremely hot, rate the outside temperature on the day of the GDV.

- 1 2 3 4 5

33. At the time of GDV your dog lived in:

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34. Rate your dog's energy level (on a scale of 1-9, where 1 is calm and 9 is hyperactive):

- 1 2 3 4 5 6 7 8 9

35. Rate your dog's anxiety level (on a scale of 1-9 where 1 is no anxiety and 9 is extremely anxious):

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36. When describing your dog's behavior, check all the answers that apply to him/her:

- | | |
|---|--|
| <input type="checkbox"/> Not excitable at all. | <input type="checkbox"/> Chases tail. |
| <input type="checkbox"/> Barks when knock at door. | <input type="checkbox"/> Spins out of control. |
| <input type="checkbox"/> Barks at strangers. | <input type="checkbox"/> Acts oblivious to efforts to intercede. |
| <input type="checkbox"/> Barks at other dogs. | <input type="checkbox"/> Likes to fence run. |
| <input type="checkbox"/> Hard to control when exited. | <input type="checkbox"/> Plays with other dogs. |

37. During a typical day around the time of the GDV your dog was:

- Primarily indoors.
 Primarily outdoors.
 Indoor/outdoor.

38. During a typical day around the time of the GDV your dog spent most of its time:

- Alone.
 With other dogs.
 With family members.
 With nonfamily members.

39. During a typical day around the time of the GDV your dog spend most of its time:

In a crate.

In a pen.

Loose.

Other (please specify)

40. In a typical week around the time of GDV, how many days were you or your family members in the company of your dog?

0

1

2

3

4

5

6

7

41. On average how many hours a day were you awake in the company of your dog?

None.

Less than 1 hr

1-2 hrs

3-4 hr

5-6 hrs

More than 6 hrs

42. During a typical night your dog was (check all that apply):

Kept indoors.

Able to freely go in and out during the night.

Kept outdoors.

43. Does this dog typically sleeps on its back?

Yes

No

44. If you owned another dog at the time of GDV in this dog, would you like to give us the information about the other dog too?

Yes

No

8. QUESTIONS FOR THIRD DOG WITH GDV

1. What was the age of your dog at the time of the GDV?

- | | | |
|-------------------------|--------------------------|----------------------------|
| <input type="radio"/> 1 | <input type="radio"/> 6 | <input type="radio"/> 11 |
| <input type="radio"/> 2 | <input type="radio"/> 7 | <input type="radio"/> 12 |
| <input type="radio"/> 3 | <input type="radio"/> 8 | <input type="radio"/> 13 |
| <input type="radio"/> 4 | <input type="radio"/> 9 | <input type="radio"/> 14 |
| <input type="radio"/> 5 | <input type="radio"/> 10 | <input type="radio"/> > 14 |

2. Is your dog currently still alive?

- Yes
- No

3. If your dog is not alive any more, was the death related to the GDV (i.e. did your dog died in 14 days after the surgery for GDV)?

- Yes
- No
- Do not remember
- Not applicable

4. If your dog is not alive any more, what was his/her age in years at the time of death?

- | | | |
|--------------------------------------|--------------------------|---------------------------|
| <input type="radio"/> not applicable | <input type="radio"/> 6 | <input type="radio"/> 12 |
| <input type="radio"/> 1 | <input type="radio"/> 7 | <input type="radio"/> 13 |
| <input type="radio"/> 2 | <input type="radio"/> 8 | <input type="radio"/> 14 |
| <input type="radio"/> 3 | <input type="radio"/> 9 | <input type="radio"/> >14 |
| <input type="radio"/> 4 | <input type="radio"/> 10 | |
| <input type="radio"/> 5 | <input type="radio"/> 11 | |

5. Did the sire of this dog have a GDV?

- Yes
- No
- Unknown

6. Did the dam of this dog have a GDV?

- Yes
 No
 Unknown

7. Did any littermates of this dog have a GDV?

- Yes
 No
 Unknown

If "YES" please specify how many (if you know)

8. During the week prior to the GDV - for male intact dogs, was there a nearby bitch in season? For female intact dogs, was she in season? Check all that apply.

- Yes
 No
 My dog is neutered/spayed
 Do not remember

9. During the six months prior to the GDV did your dog participate in any of the following activities? Check all that apply.

- Dog show training or shows
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 Schutzhund or working dog activities or trials
 Obedience training or trials
 Agility training or trials

Other activities that involve physical "work outs"

10. How many times per week (on average) did your dog participate at the above mentioned activities?

- 1 per week
- 2-4 times per week
- more than 4 times per week

11. During the six months prior to the GDV were there any new additions to the household? check all that apply.

- A new person
- A new dog
- Other new animal

12. At the time of the GDV how many other dogs were in the household?

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- 1
- 2
- 3
- 4
- 5
- more than 5

13. At the time of the GDV did this dog live with cats?

- Yes
- No
- Unknown

14. At the time of the GDV how would you rate your dog's body condition (on a scale of 1-9 with 1 being severely emaciated, 5 being ideal for the breed, and 9 being severely obese).

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

15. If a commercial diet has been fed, was it (check all that apply):

- Dry kibble
- Canned food
- Raw food
- Unknown
- Not applicable

16. If a homemade diet has been fed, was it (check all that apply):

- | | |
|---------------------------------|---|
| <input type="checkbox"/> Cooked | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Raw | <input type="checkbox"/> Not applicable |

17. Was your dog fed table scraps?

- Yes
 No

18. Supplements you were adding to the regular diet at the time of GDV (check all that apply):

- | | | |
|--|---|--|
| <input type="checkbox"/> None | <input type="checkbox"/> Vitamins | <input type="checkbox"/> Cheese |
| <input type="checkbox"/> Eggs | <input type="checkbox"/> Cooked chicken | <input type="checkbox"/> Yogurt |
| <input type="checkbox"/> Cod liver oil | <input type="checkbox"/> Raw chicken | <input type="checkbox"/> Coat enhancer |
| <input type="checkbox"/> Fish | <input type="checkbox"/> Cottage | |

Other products (please specify)

19. At the time of the GDV rate how fast your dog would eat its meal (scale of 1-5 with 1 being a slow eater and 5 meaning gulping food).

- 1 2 3 4 5

20. What was the feeding frequency at the time of GDV?

- Once per day
 Twice per day
 Free choice

Other (please specify)

21. At the time of GDV, you were feeding your dog from a bowl:

- On the floor.
 Raised from the floor.
 My dog was not fed from a bowl.

22. What time after feeding was your dog typically allowed outdoors or to engage in activity?

- | | |
|-----------------------------------|---|
| <input type="radio"/> Immediately | <input type="radio"/> 1-3 hours |
| <input type="radio"/> 30 minutes | <input type="radio"/> 3-6 hours |
| <input type="radio"/> 1 hour | <input type="radio"/> more than 6 hours |

23. In the time prior to being allowed to engage in activity after feeding, your dog was:

- Kenneled.
- Kept loose indoors.
- Kept loose in a yard.

24. What activity was your dog typically allowed to engage in after meals at the time marked above (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> Run free outside. | <input type="checkbox"/> Play with other dogs. |
| <input type="checkbox"/> Kennel run | <input type="checkbox"/> Run the fence. |
| <input type="checkbox"/> Run free inside. | <input type="checkbox"/> Jog/run with you. |

Other (please specify)

25. In the six months prior to the GDV, did your dog have a history of illness?

- Do not remember
- No
- Yes

If YES please specify

26. In the six months prior to the GDV, did your dog have surgery?

- Do not remember
- No
- Yes

If YES please specify

27. In the month prior to the GDV, did your dog have diarrhea?

- Do not remember
- No
- Yes

28. Anesthesia was given to your dog for any reason within 72 hours of GDV.

- Yes
- No

29. On the day of GDV your dog was in the care of (check all that apply):

- Its owner/handler
- A familiar person (but not owner/handler)
- An unfamiliar person
- Was alone
- Do not remember

30. On the day of the GDV your dog was (check all that apply):

- In its home environment
- At a boarding facility
- At a training facility
- In a familiar environment (but not home)
- In an unfamiliar environment
- Traveling
- Do not remember

31. What was the season of the year when the GDV occurred?

- Spring
- Summer
- Fall
- Winter

32. On a scale of 1-5, where 1 is sub freezing and 5 is extremely hot, rate the outside temperature on the day of the GDV.

- 1 2 3 4 5

33. At the time of GDV your dog lived in:

- Urban environment
 Suburban environment
 Rural environment

34. Rate your dog's energy level (on a scale of 1-9, where 1 is calm and 9 is hyperactive):

- 1 2 3 4 5 6 7 8 9

35. Rate your dog's anxiety level (on a scale of 1-9 where 1 is no anxiety and 9 is extremely anxious):

- 1 2 3 4 5 6 7 8 9

36. When describing your dog's behavior, check all the answers that apply to him/her:

- | | |
|---|--|
| <input type="checkbox"/> Not excitable at all. | <input type="checkbox"/> Chases tail. |
| <input type="checkbox"/> Barks when knock at door. | <input type="checkbox"/> Spins out of control. |
| <input type="checkbox"/> Barks at strangers. | <input type="checkbox"/> Acts oblivious to efforts to intercede. |
| <input type="checkbox"/> Barks at other dogs. | <input type="checkbox"/> Likes to fence run. |
| <input type="checkbox"/> Hard to control when exited. | <input type="checkbox"/> Plays with other dogs. |

37. During a typical day around the time of the GDV your dog was:

- Primarily indoors.
 Primarily outdoors.
 Indoor/outdoor.

38. During a typical day around the time of the GDV your dog spent most of its time:

- Alone.
 With other dogs.
 With family members.
 With nonfamily members.

39. During a typical day around the time of the GDV your dog spend most of its time:

In a crate.

In a pen.

Loose.

Other (please specify)

40. In a typical week around the time of GDV, how many days were you or your family members in the company of your dog?

0

1

2

3

4

5

6

7

41. On average how many hours a day were you awake in the company of your dog?

None.

Less than 1 hr

1-2 hrs

3-4 hr

5-6 hrs

More than 6 hrs

42. During a typical night your dog was (check all that apply):

Kept indoors.

Able to freely go in and out during the night.

Kept outdoors.

43. Does this dog typically sleeps on its back?

Yes

No

44. If you owned another dog at the time of GDV in this dog, would you like to give us the information about the other dog too?

Yes

No

9. QUESTIONS FOR DOGS WITHOUT GDV

1. Is there any history of illness in your dog?

No

Yes

If Yes, list illnesses

2. Is there any history of diarrhea in your dog?

No.

Yes, few times per year.

Yes, few times per month.

Yes, few times per week.

Yes, constantly every day.

3. Did your dog have surgery for any reason (includes spaying and neutering)? Please check all that apply.

No.

Yes, spay/neuter.

Yes, other surgery.

If "YES, OTHER SURGERY" please specify:

4. Did your dog have a preventative gastropexy done (i.e. surgical attachment of the stomach to the abdominal wall to prevent GDV)?

Yes

No

5. Does your dog participate in any of the following activities (please check all that apply)?

- Dog show training or shows.
- Field training or trials.
- Schutzhund or working dog activities or trials.
- Obedience training or trials.
- Agility training or trials.

Other activities that involve physical "work outs" (please specify):

6. Did the sire of this dog have a GDV?

- Yes
- No
- Unknown

7. Did the dam of this dog have a GDV?

- Yes
- No
- Unknown

8. Did any littermates of this dog have a GDV?

- Yes
- No
- Unknown

If "YES" please specify how many (if you know)

9. This dog lives in:

- Urban environment
- Suburban environment
- Rural environment

10. How many other dogs live with this dog?

- 0
- 1
- 2
- 3
- 4
- 5
- >5

11. Does this dog live with cats?

Yes

No

12. How would you rate your dog's body condition (on a scale of 1-9 with 1 being severely emaciated, 5 being ideal for this breed, and 9 being severely obese).

1

2

3

4

5

6

7

8

9

13. If you are feeding a commercial diet to your dog, is it (check all that apply):

Dry kibble

Raw food

Canned food

Not feeding a commercial diet

14. If you are feeding a homemade diet to your dog, is it (check all that apply):

Cooked

Not feeding a homemade diet

Raw

15. Do you feed your dog table scraps?

Yes

No

16. Supplements you are adding to the regular diet of your dog (check all that apply):

None

Vitamins

Cheese

Eggs

Cooked chicken

Yogurt

Cod liver oil

Raw chicken

Coat enhancer

Fish

Cottage

Other products (please specify)

17. How frequently is your dog fed?

Once per day

Twice per day

Free choice

Other (please specify)

18. Rate how fast your dog eats its meal (scale of 1-5 with 1 being a slow eater and 5 meaning gulping food).

- 1 2 3 4 5

19. You are feeding your dog from a bowl:

- On the floor
 Raised from the floor
 Is not fed from a bowl

20. What time after feeding is your dog typically allowed outdoors or to engage in activity?

- Immediately 1-3 hours
 30 minutes 3-6 hours
 1 hour more than 6 hours

21. In the time prior to being allowed to engage in activity after feeding, your dog is:

- Kenneled.
 Kept loose indoors.
 Kept loose in a yard.

22. What activity is your dog typically allowed to engage in after meals at the time marked above (check all that apply):

- Run free outside. Play with other dogs.
 Kennel run. Run the fence.
 Run free inside. Jog/run with you.

Other (please specify)

23. Rate your dog's energy level (on a scale of 1-9, where 1 is calm and 9 is hyperactive):

- 1 2 3 4 5 6 7 8 9

24. Rate your dog's anxiety level (on a scale of 1-9 where 1 is no anxiety and 9 is extremely anxious):

- 1 2 3 4 5 6 7 8 9

25. When describing your dog's behavior, check all the answers that apply to him/her:

- | | |
|---|--|
| <input type="checkbox"/> Not excitable at all. | <input type="checkbox"/> Chases tail. |
| <input type="checkbox"/> Barks when knock at door. | <input type="checkbox"/> Spins out of control. |
| <input type="checkbox"/> Barks at strangers. | <input type="checkbox"/> Acts oblivious to efforts to intercede. |
| <input type="checkbox"/> Barks at other dogs. | <input type="checkbox"/> Likes to fence run. |
| <input type="checkbox"/> Hard to control when exited. | <input type="checkbox"/> Plays with other dogs. |

26. During a typical day your dog is:

- Primarily indoors.
- Primarily outdoors.
- Indoor/outdoor.

27. During a typical day your dog spends most of its time:

- Alone.
- With other dogs.
- With family members.
- With nonfamily members.

28. During a typical day your dog spends most of its time:

- In a crate.
- In a pen.
- Loose.

Other (please specify)

29. In a typical week, how many days are you or your family members in the company of your dog?

- 0 1 2 3 4 5 6 7

30. On average, how many hours a day are you awake in the company of your dog?

- None
- Less than 1 hour
- 1-2 hours
- 3-4 hours
- 5-6 hours
- More than 6 hrs

31. During a typical night your dog is (check all that apply):

- Kept indoors.
- Able to freely go in and out during the night.
- Kept outdoors.

32. Does this dog typically sleeps on its back?

- Yes
- No

10. THANK YOU

Our maximum number of dogs with GDV is 3 per family and the information on companion dogs is 1 per family. Thank you for your participation, your information will be extremely helpful in understanding this disease.

11. THANK YOU NOTE

1. Any comments that you would like to add

Thank you for your participation, your information will be extremely helpful in understanding this disease. Look for the first short report of this survey in November 2010 at www.breedingbetterdogs.com.