

November 2008

Dear Reader,

In the spring of 2008, in collaboration with the Association of Shelter Veterinarians, ACC&D contracted with BN Research to conduct a survey of 241 shelter veterinarians about pet sterilization, including attitudes toward non-surgical sterilization. This study followed a 2007 study of 200 private practice veterinarians.

ACC&D is concerned, if not too surprised, about the results of this study. While shelter veterinarians were far more likely to see a need for these new products than private practitioners surveyed previously, still 40% cited little or no need. The timing is right for the veterinary field to become more supportive of developing useful tools to extend our reach for humane, safe and effective population control.

The levels of sterilization needed to dramatically reduce euthanasia rates in the U.S. cannot feasibly be provided in our current paradigm. Most pet owners who value and can afford veterinary care have their pets spayed or neutered by their veterinarians. Special spay/neuter programs (high volume clinics, voucher programs, etc.) strive to reach those pets without owners or whose owners cannot afford traditional veterinary care. Unfortunately, these programs are not reaching far enough. The situation in the United States is critical. Around the world, delivery of broad-scale veterinary services is even more difficult, and in some cases nearly impossible. Non-surgical sterilants offer new hope for addressing these dilemmas.

The entire veterinary community's support plays a pivotal role in the decisions of pharmaceutical companies to advance research and products to the marketplace and in the perceptions of the general public. As animal welfare advocates, including veterinarians, work to advance this technology, we hope all veterinarians will support these efforts for the impact they can have on animal welfare.

We know it is normal for veterinarians to be uncertain about new medical options until all their questions are answered. This study helped us clarify key questions and concerns from veterinarians currently working in or with animal shelters and nonprofit sterilization clinics. This input will help to both to guide the product research to meet these needs and inform the dialogue we would like to continue on this topic.

We have included a brief summary of research findings below, followed by a full report. A report of the 2007 private practice veterinary study is available at <a href="https://www.acc-d.org">www.acc-d.org</a> under "Resources".

Sincerely,

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# ACC&D Overview of Independent Study of Veterinarians regarding Non-Surgical Pet Sterilants (Contraceptives)

In late 2007 and in 2008, the **Alliance for Contraception in Cats and Dogs (ACC&D)** commissioned two independent spay-neuter studies on the perception and use of nonsurgical sterilants (contraceptives) as a viable alternative (or supplement) to the use of surgical spaying and neutering in controlling dog and cat populations. The studies were fielded by BN Research, a leader in animal health marketing research. BN has over twenty years of experience interviewing veterinarians and pet owners.

In 2007, ACC&D conducted a survey among 200 general practice, small animal veterinarians, and in 2008, 240 veterinarians who are current members of the Association of Shelter Veterinarians (ASV).

Here are highlights of those survey results:

- Nearly all veterinarians surveyed (96% shelter vets; 94% general practice vets) agreed that "unplanned litters contribute significantly to the number of unwanted pets in our community."
- While 6 in 10 veterinarians working in animal shelters agreed there was a need for non-surgical sterilization alternatives to control the pet population, 6 in 10 private practice veterinarians felt just the opposite: they said there was little or no need for non-surgical alternatives because surgical sterilizations were adequate and provided additional behavior and health benefits to pets.
- Of vets surveyed, 61% of general practice vets reported they participate regularly in community programs to control pet population.

Summary: While veterinarians in both surveys agree that unplanned litters are the major cause of unwanted pets, there was a significant discrepancy in how shelter vets versus general practice vets felt about the potential for non-surgical sterilants as a solution.

In a side-by-side comparison of shelter veterinarians and general practice veterinarians, respectively, shelter veterinarians were more likely to find the following possible benefits of non-surgical sterilizations highly valuable (a 6 or 7 on a 7 point scale):

- Could increase the number of sterilizations performed in the community (68% vs. 50%)
- Could increase the number of sterilizations performed in the shelter/clinic (64% vs. 34%)
- Reduces the time and resources required by the vet and shelter (62% vs. 32%)
- Provides a lower cost alternative to offer clients (53% vs. 30%)
- Is a safer alternative for the animal having less risks and side effects than surgical spay/neuters (45% vs. 35%)

Summary: Shelter veterinarians were almost twice as likely as general practice veterinarians to recognize many possible benefits of non-surgical sterilizations.

In a side-by-side comparison of shelter veterinarians and general practice veterinarians, respectively, shelter veterinarians were more likely to recognize the following attributes as very important

components of a non-surgical sterilant or contraceptive product:

- Requires only one treatment (86% vs. 70%)
- Provide permanent sterilization (93% vs. 78%)
- Reduces unwanted behaviors of sexually intact pets (83% vs. 72%)
- Protect against some reproductive traits and hormone-related diseases (78% vs. 65%)

SUMMARY: Even more shelter veterinarians than general practice veterinarians indicated that it was very important that a non-surgical product require only one treatment, provide permanent sterilization, reduce unwanted behaviors of a sexually intact pet, and protect against hormone-related diseases.

In both surveys, respondents were asked how likely they would be to recommend a new contraceptive implant for a female cat that would render her infertile with a single injection, with no heat behaviors, but that would only last three years and then need to be repeated..

• Less than a third (30%) of shelter veterinarians surveyed compared to just over half (52%) of general practice

veterinarians said they would recommend this product to their clients.

- More than 7 in 10 veterinarians combined said they were concerned that pet owners would forget to have their cats treated again in three years. (82% versus 72%)
- All veterinarians saw the greatest need for sterilants to be female cats (compared to male cats, or female and male dogs) However, <u>shelter veterinarians rated the need much greater with 62% ranking it a 6 or 7 on a 7 point scale compared to general practice vets where only 22% gave it those ratings.</u>

Summary: While shelter veterinarians more than general practice veterinarians recognized a greater need for non-surgical sterilants to control the (especially) feral cat population, they were much less likely to recommend a temporary contraceptive (three-year) out of concern that the cats would not receive a repeat treatment. More than 7 in 10 shelter vets were concerned that their clients would forget to repeat the treatment as well.

#### **Final Points**

In order for any pet sterilant or contraceptive product to be broadly considered by veterinarians as a viable alternative to surgical sterilization (in more than just special circumstances), they believe it will need to deliver many of the same benefits attributed to surgical procedures; preventing both health and behavior problems, providing permanent sterilization and requiring only one treatment.

In order for non-surgical sterilants to be researched, developed, and introduced into the marketplace, veterinarians overall will need to become more educated in the potential use of these products as a means of reducing the pet population and as an alternative or supplement to surgical sterilization, which some pet owners won't do because of cost, inconvenience, and fear of injury during surgery.

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Note: ACC&D veterinary surveys were made possible by funding from the Animal Assistance Foundation and Maddies' Fund, and through collaboration with the Association of Shelter Veterinarians. For more information on ACC&D's studies, see Veterinary Study Survey Summary below or for a complete look at both surveys, visit <a href="www.acc-d.org">www.acc-d.org</a>



### ONLINE SURVEY with SHELTER VETERINARIANS:

Non-Surgical Alternatives to Spaying and Neutering and

Commissioned by the Alliance for Contraception in Cats and Dogs, in partnership with the Association of Shelter Veterinarians

This study was made possible by funding from the Animal Assistance Foundation and Maddies' Fund

July 2008

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## **Background**

Non-surgical sterilants may be a viable alternative to the use of surgical spay and neutering in controlling dog and cat populations, offering an additional service option for veterinarians to provide their clients, where appropriate. The successful introduction and adoption of non-surgical sterilants, however, will hinge on the attitudes of key audiences, including pet owners and persons/groups that feed feral cats, veterinarians and shelters. In 2007 the Alliance for Contraception in Cats and Dogs (ACCD) conducted a survey among general practice, small animal veterinarians to gain better understanding in that channel. In 2008, the ACCD wished to expand the scope of the initial study to gather information from veterinarians who are current members of the Association of Shelter Veterinarians (ASV). Results of both surveys will also help shape communications about non-surgical sterilants to these audiences and pharmaceutical manufacturers regarding market potential.

# Study Objectives and Methodology

Similar to the 2007 study, the primary objective of the study was to assess ASV veterinarians' attitudes regarding the potential acceptance of, and potential barriers to, a non-surgical, chemical sterilant as an alternative to surgical spay and neuter in cats and dogs. In addition, the study gauged this audience's perceptions of a specific female contraceptive product concept.

The survey measured opinions of veterinarians regarding product features and attributes associated with a chemical sterilant in both dogs and cats. It also assessed attitudes veterinarians have toward surgical spay and neuter procedures in terms of impact on their practice (for those in private practice) and perceived benefits of these procedures to both the practice and the animal. Results of this survey will be compared to the 2007 survey to identify differences in attitudes and perceptions between the two audiences.

The survey also gathered additional demographic and behavioral information about the respondents, specifically desired by ASV, to provide a clearer understanding of those veterinarians who volunteer, teach or work full-time as shelter staff.

The survey consisted of a series of topics to assess:

- Attitudes related to pet over-population and level of involvement in pet population control programs
- Importance of spay/neuter surgeries in terms of gross annual revenue and ability to attract new customers/perceived profitability of spay/neuter surgeries (for those in private practice)
- Perceived benefits of spay/neuter surgeries
- Awareness of non-surgical sterilants and contraceptives
- Perceived need for a non-surgical alternative to spay/neuter procedures
- Perceived value of possible benefits associated with non-surgical sterilants
- Perceived importance of non-surgical sterilant product attributes
- Likelihood of recommending cat contraceptive product concept

Other information gathered about respondents includes employment status and income plus benefits, time spent with the shelter, size and make up of shelter staff, required duties at the shelter as well as other practice work, supervisory responsibilities at the shelter, information about shelter facilities and equipment and respondent's veterinary school and other educational experiences. Not all of this information is included in the Executive Summary report and can be found in the data sets provided to the client

#### **Methodology**

In order to meet the objectives of this study, BNResearch conducted online surveys of 240\* ASV member veterinarians across the United States, with the sample database provided by ASV.

Description of Sample: Email invitations to participate in the online survey were sent to 908 recipients in several prioritized waves; first to active ASV members followed by inactive members. Reminder emails, again prioritized to active first and then inactive, were sent on a regular basis. After some invitations were returned, due primarily to invalid email addresses and a small group of members who refused to participate, the remaining sample pool was 773

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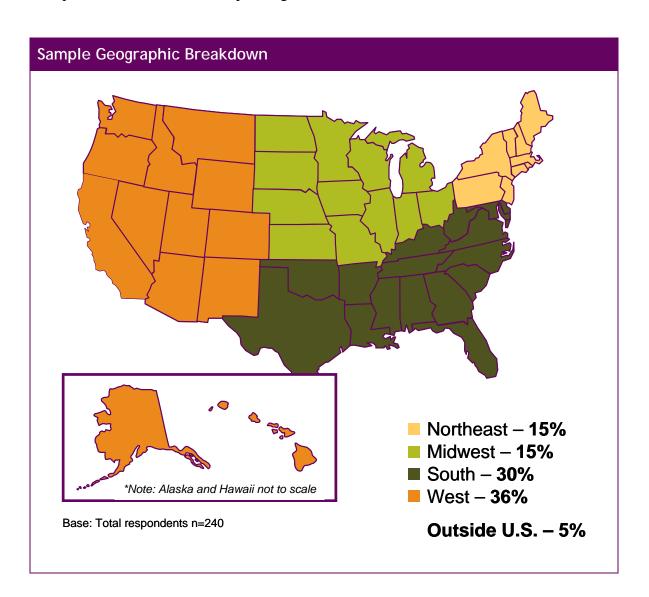
<sup>\*</sup> The maximum standard error for a sample of 240 is 6.3% at the 95% level of confidence.

members total. The data is not weighted against any national statistics of geographic or demographic distributions.

# **Summary of Findings**

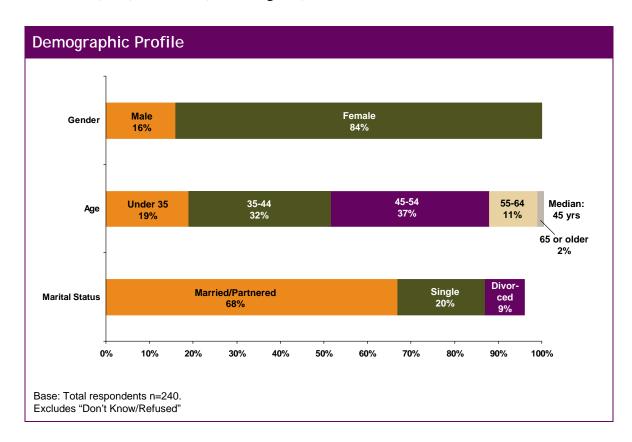
#### **Sample Characteristics**

The sample was comprised of veterinarians from all four census regions of the United States. Five percent of veterinarians responding were located outside of the US.



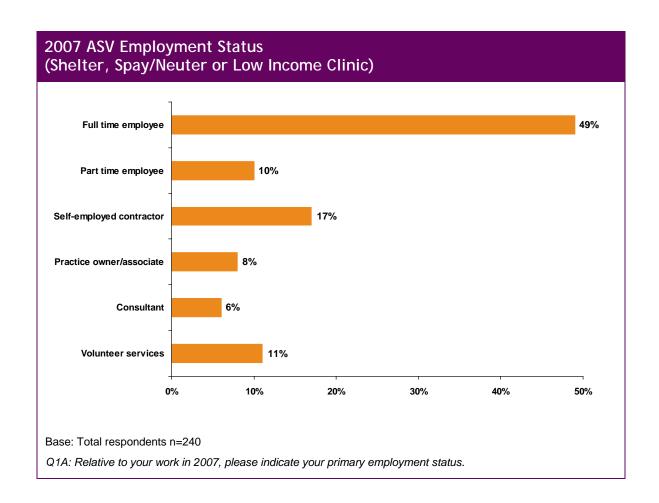
As shown below, more than 8 in 10 of the veterinarians responding are female. The median age is 45 and two-thirds are married or partnered.

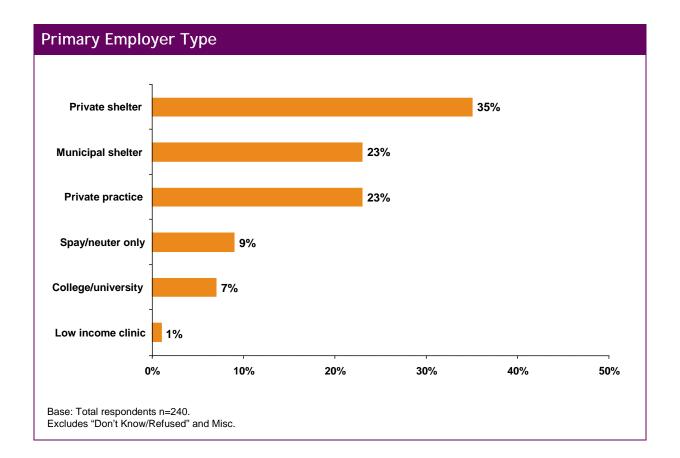
The sample differs significantly from the 2007 survey as the majority of respondents in 2007 were male (62%) and older (median age 51).



Just under half of the ASV veterinarians responding reported that in 2007 they were full time employees of a shelter, spay/neuter or low income clinic. Ten percent were part-time employees. Nearly a third of the sample are made up by self-employed contractors, private practice owners or associates and consultants, all of whom have shelters/clinics as clients. And, 11% report that they volunteer their services to a shelter/clinic.

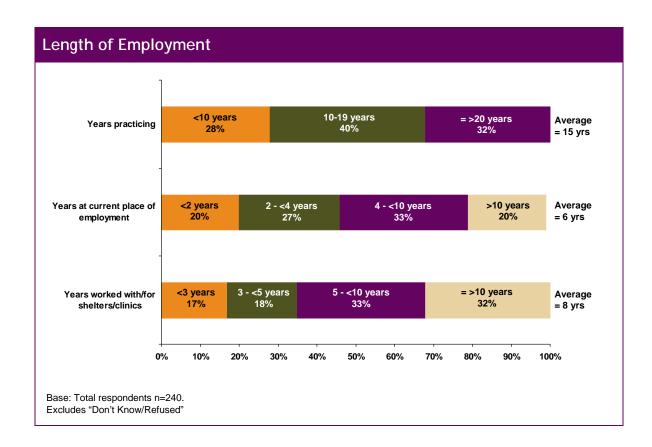
In this report, the term "shelter veterinarians" is used for those who are employed directly by a shelter. "Private practice veterinarians" are those who have a private practice and *volunteer* their services to a shelter. "Non-shelter/clinic veterinarians" are used to describe all of those who are not employed directly by a shelter or clinic (private practice veterinarians, contractors, consultants, etc).





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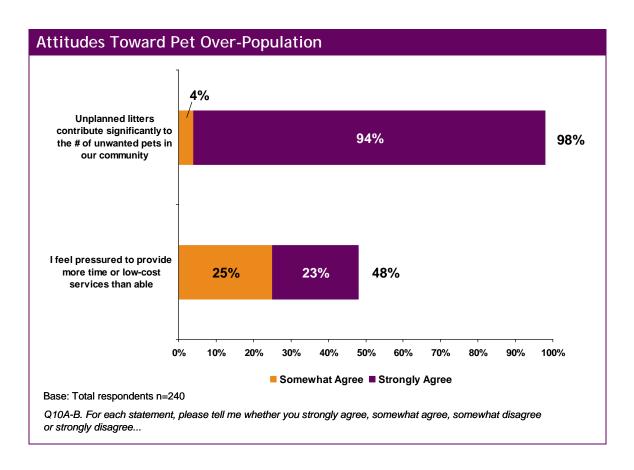
As shown below, the majority have been in practice for ten or more years and have been at their current place of employment for an average of 6 years. Most have been involved with shelter or clinics, on either a volunteer or paid status, for five or more years – 8 years on average.



#### **Participation in Pet-Population Control**

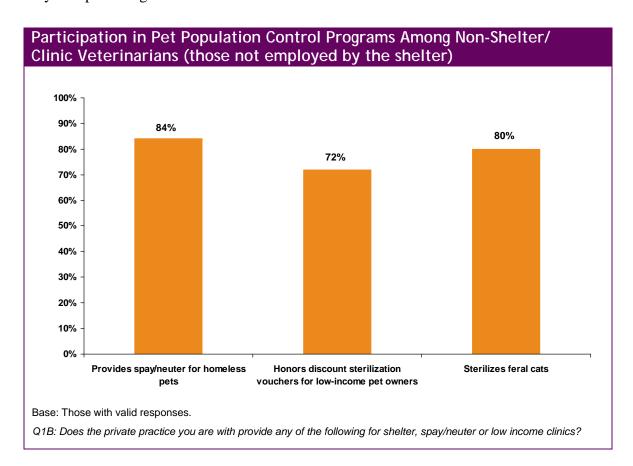
Almost all veterinarians surveyed acknowledge the significant impact the number of unplanned litters have on the problem of pet over-population. Interesting that ASV veterinarians from this study were significantly more likely to strongly agree with the statement below, regarding unplanned litters, compared to general practice veterinarians from the 2007 study (94% to 84%).

About half of the respondents from this ASV study and the general practice study of 2007 indicate that they feel pressured to support efforts to reduce the number of unwanted pets in their community – either through volunteer time or providing low-cost services to other groups.



The vast majority of ASV non-shelter veterinarians, [those who are not directly employed by the shelter, such as those in private practice, contractors, consultants and others], participated in population control services including: providing spay/neuter to homeless pets (84%), honoring discount vouchers (72%) and sterilizing feral cats (80%). *See graph below*.

This group provides significantly more services to the community compared to the 2007 study of general practitioners, where only 6 in 10 participated in any pet population control programs, only half providing each of the above listed services.



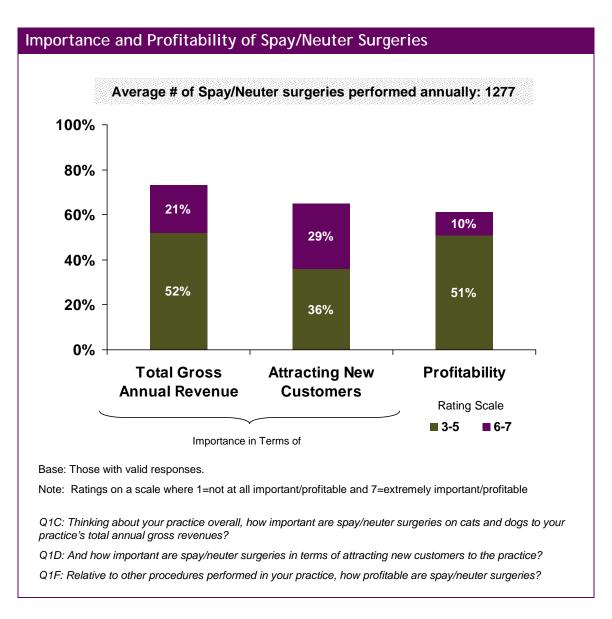
Shelter veterinarians, employees of a shelter/clinic, by nature of the work they are in, participate regularly in duties relating to population control activities. In fact, 97% of this group said they were expected or required to perform one or more of the following duties in their "shelter work".

- Spay/Neuter and/or Pediatric Neutering
- Population Management
- Euthanasia and the Decision Making Process Involved in Euthanasia

On an interesting note regarding the topic of population management among ASV members, and considering the high amount of population control work done by this sample, not all veterinarians in this study received education on related topics. Only half say euthanasia was covered in school, 20% were exposed to population management programs and only 6% were trained in issues specific to feral cats.

#### Importance and Benefits of Spay/Neuter Surgeries

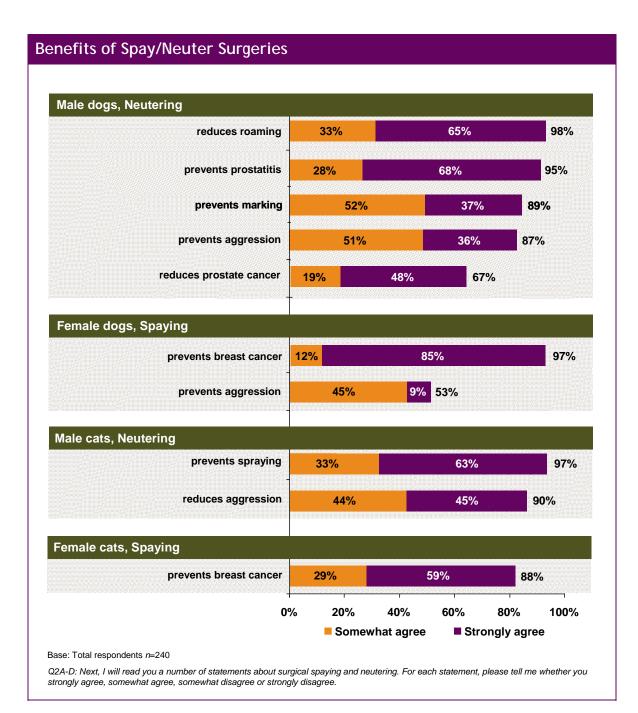
Among private practice veterinarians [79 of 240 surveyed], spay/neuter surgeries are viewed by the majority as at least somewhat important in terms of their impact on the practice's gross annual revenues and their role in attracting new customers to the practice. Just under a quarter (21%) indicate that these procedures are very important (a 6 or 7 on a 7-point rating scale) to their annual revenues and 29% indicate that they are very important in terms of attracting new clientele. Only 10% of respondents indicated that spay/neuter procedures are very profitable relative to other procedures, while 51% indicate they are moderately profitable (a 3-5 rating). Overall, the reported average number of spay/neuter surgeries performed in a year is 1277, with a median of 600.



There is a sharp different in the average number of spay/neuter surgeries performed by ASV veterinarians versus the 2007 study (1277 to 446). However, similar to the 2007 ACCD study findings, this survey revealed a strong belief among the ASV veterinarians in the benefits associated with spay/neuter surgeries – with a few exceptions.

As the following figure shows, the vast majority of respondents agree that surgical spay/neuter provides benefits beyond sterilization – helping to prevent both health problems and behavior problems in cats and dogs of both sexes. However, these veterinarians are significantly less likely than the vets surveyed in 2007 to agree (*somewhat* or *strongly*) that spaying and neutering reduces aggression in male or female dogs and in male cats. In addition, for several of these statements, the degree to which the ASV veterinarians agree differs significantly from the 2007 study. ASV veterinarians are significantly less likely than the general practice veterinarians surveyed in 2007 to *strongly* agree with the following statements:

- For male dogs, neutering, in the majority of cases, will help to:
  - ✓ reduce the incidence of prostate cancer (48% ASV vs. 63% GP, respectively)
  - ✓ prevent prostasis (68% vs. 77%)
  - ✓ prevent marking (37% vs. 53%)
- For male cats, neutering, in the majority of cases, will help to prevent spraying (63% ASV vs. 81% GP)

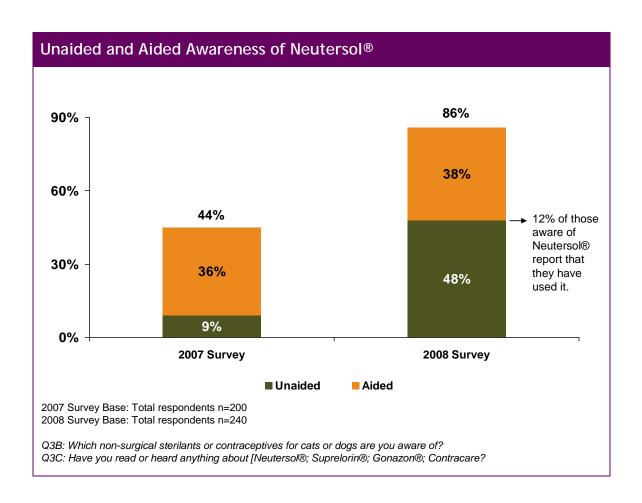




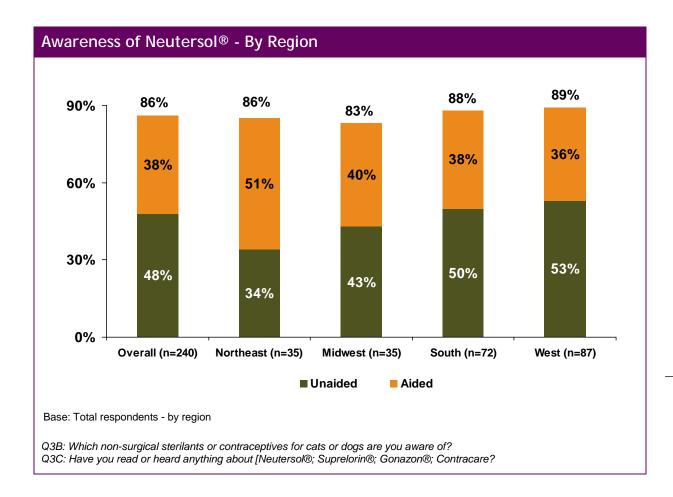
#### Awareness and Usage of Neutersol®

Respondents were asked, on both unaided and aided basis, if they were aware of non-surgical sterilants or contraceptives for cats or dogs that are currently under development or that have been on the market in the US or in other countries. As shown in the figure below, ASV veterinarians are significantly more likely to be aware of Neutersol® than those veterinarians surveyed in 2007. Nearly 9 in 10 respondents in this survey reported that they were aware of Neutersol® compared to 44% of those surveyed in 2007. Also important to note is the significantly higher level of unaided awareness of Neutersol® among ASV veterinarians than among veterinarians surveyed in the 2007 study.

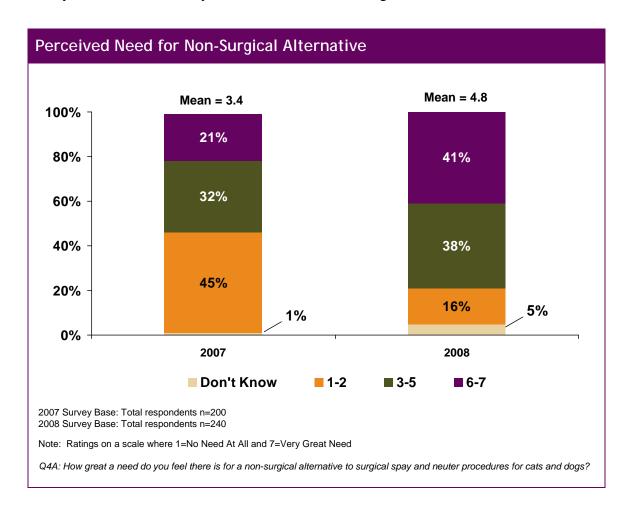
Among those veterinarians who are aware of Neutersol® (n=206), only 12% report that they have used the product.



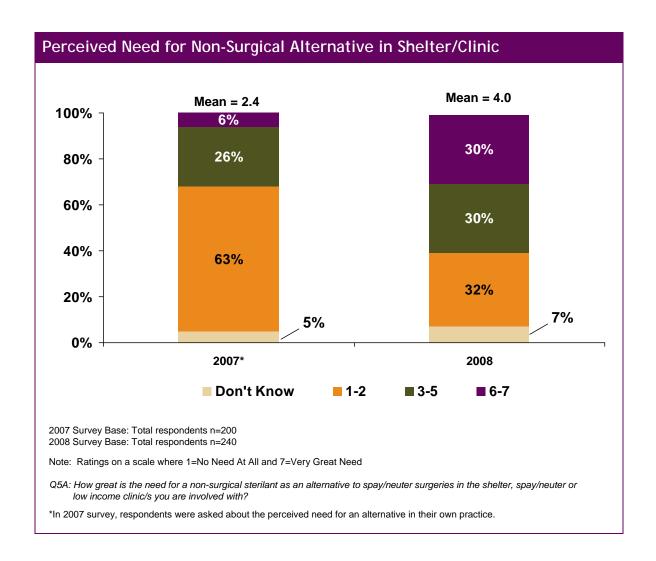
Total awareness of Neutersol® does not differ significantly by region. Unaided awareness was highest in the Western region (53%) and lowest in the Northeast (34%).



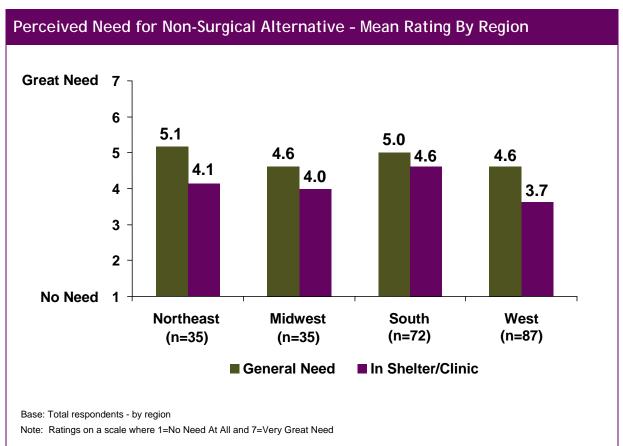
Respondents were asked about the need for a non-surgical alternative to spay/neuter procedures – both in general and in the shelter or clinic with which they are involved. As shown in the following figure, four in ten ASV veterinarians indicate that there is a great need (a rating of 6 or 7 on a seven point scale), in general, for a non-surgical alternative, while 38% indicate there is some need (a rating of 3-5). Perceived need is significantly greater among ASV veterinarians than among veterinarians surveyed in the 2007 study, as only 21% of veterinarians surveyed in the earlier study indicated that there was a great need for an alternative.



Overall, six in ten ASV veterinarians perceive a need for a non-surgical alternative in the shelter or clinic with which they are involved (30% a great need and 30% some need). This contrasts sharply with the 2007 findings where over six in ten respondents indicated that they perceived little or no need for a non-surgical alternative in their own practice.



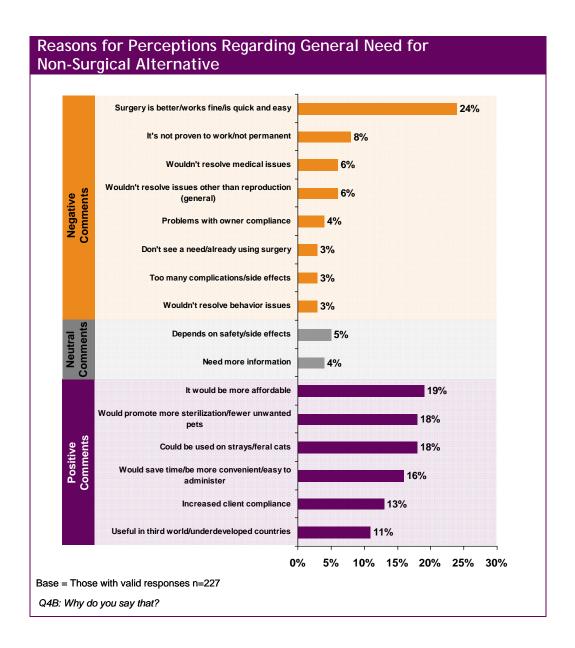
The level of perceived need for an alternative does not differ significantly by region.



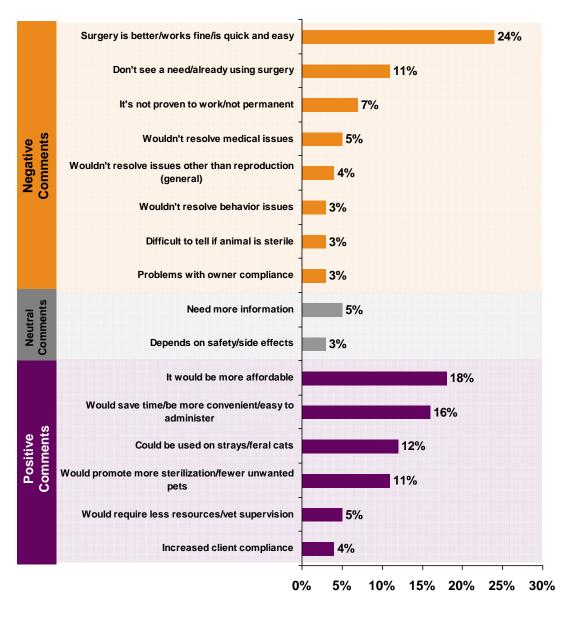
Q4A: How great a need do you feel there is for a non-surgical alternative to surgical spay and neuter procedures for cats and dogs?

Q5A: How great is the need for a non-surgical sterilant as an alternative to spay/neuter surgeries in the shelter, spay/neuter or low income clinic/s you are involved with?

Respondents were asked to explain their perceptions about the need for an alternative to surgical sterilization. (Responses are summarized in the following two figures.) The most commonly cited reasons for *seeing a need* for an alternative to surgical spay/neuter were related to affordability, increasing the number of sterilizations performed overall and its possible use for feral cats. The most commonly cited reasons for *not seeing a need* for an alternative (both in general and in the shelter/clinic) are related to the ease and effectiveness of spay/neuter in general, doubts about the effectiveness of a non-surgical method in terms of resolving medical and behavioral problems and complaints that non-surgical alternatives would not provide permanent sterilization.



# Reasons for Perceptions Regarding Need for Non-Surgical Alternative in Shelter/Clinic

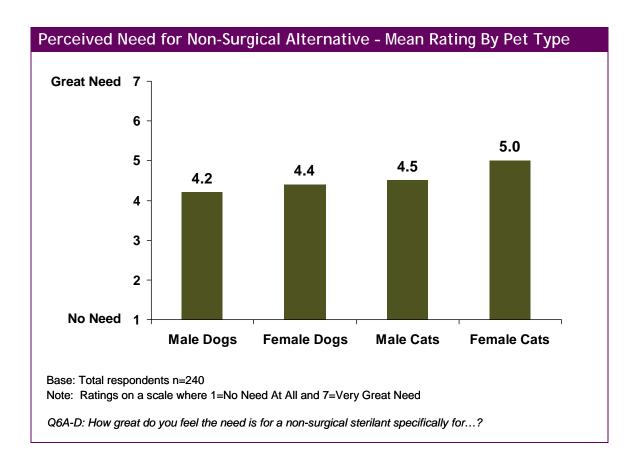


Base = Those with valid responses n=223

Q5B: Why do you say that?

As shown below, there is a higher level of perceived need for a non-surgical alternative to spay/neuter procedures for female cats (5.0) than for male cats or dogs of either sex.

Compared to the 2007 study, these results show a similar trend toward a higher need for a surgical alternative for female cats. However, the 2007 study produced significantly lower ratings across all pet types, with dogs having the lowest rating (at 3.1) and female cats with the highest rating (at 3.5).



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#### Perceived Value of Possible Benefits Associated with Non-Surgical Sterilants

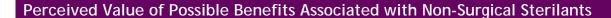
ASV veterinarians indicate that they clearly value some of the benefits that a non-surgical sterilant may be able to provide. The most valued benefits are related to the possible increase in the number of sterilizations performed both in the community and in the shelter or clinic where they work or volunteer. Reducing the time and resources required for surgical spay/neuters and the fact that a non-surgical method would reduce recuperation time are also viewed as relatively valuable benefits by at least three quarters of the veterinarians surveyed. The least valued benefit, relative to others, is having a safer alternative with less risks and side effects than surgical sterilization.

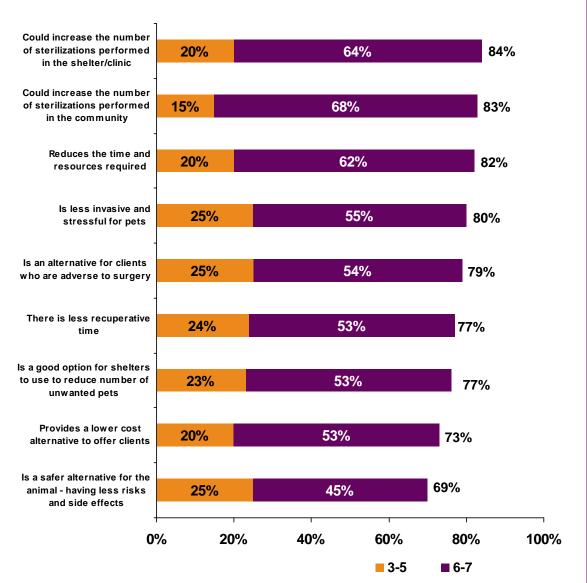
Compared to 2007 findings, ASV veterinarians are significantly more likely to indicate that the following benefits would be very valuable (a 6 or 7 on a 7-point scale):

- Could increase the number of sterilizations performed in the community (68% vs. 50%)
- Could increase the number of sterilizations performed in the shelter/clinic\* (64% vs. 34%)
- Reduces the time and resources required by the vet and shelter\* (62% vs. 32%)
- Provides a lower cost alternative to offer clients (53% vs. 30%)
- Is a safer alternative for the animal having less risks and side effects than surgical spay/neuters (45% vs. 35%)

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<sup>\*</sup> In 2007, survey referred to the vet's practice.



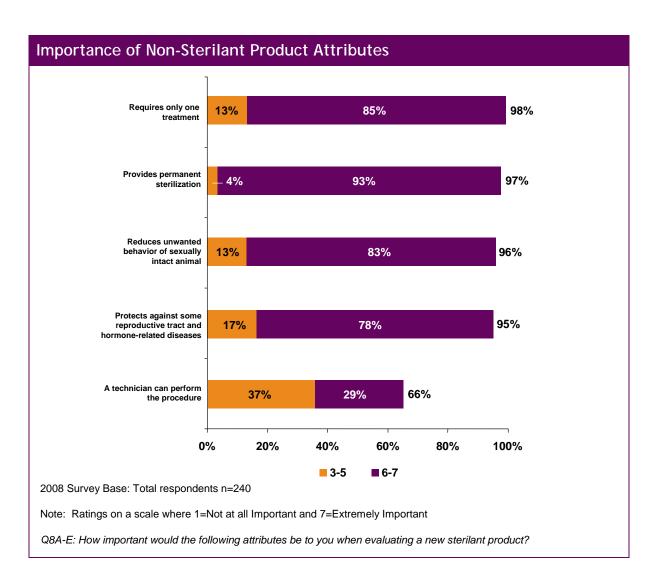


2008 Survey Base: Total respondents n=240

Note: Ratings on a scale where 1=Not at all Valuable and 7=Extremely Valuable

Q7A-J: I'm going to read a list of possible benefits associated with some non-surgical sterilants. Please tell me how valuable you feel each benefit is.

Similar to the 2007 study findings, these findings suggest that in order for a non-surgical sterilant to be accepted by ASV veterinarians, it must provide the same benefits in terms of permanent sterilization and reducing unwanted behavior and health problems in animals that surgical sterilization is believed to provide. As shown in the figure below, 93% of those surveyed indicate that providing permanent sterilization is a very important (a rating of 6 or 7) attribute of any non-surgical sterilant product. More than 8 in 10 indicate it is very important that the product only requires one treatment and that it reduces unwanted behavior of a sexually intact animal. Less important is the ability of a technician to perform the procedure (only 29% rated this as very important). ASV veterinarians are significantly more likely than the veterinarians surveyed in the 2007 study to indicate that permanent sterilization, requiring only one treatment and reducing behavior problems, are very important attributes.

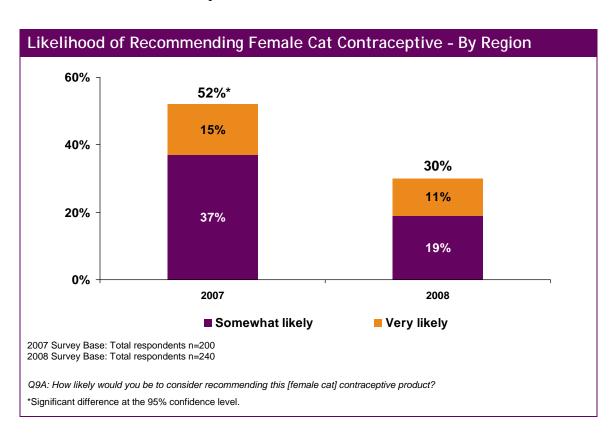


#### **Reactions to Female Cat Contraceptive Product Concept**

As in the 2007 survey, respondents were read the following description of a new product for female cats and were asked how likely they would be to recommend the new product for use in the shelter or clinic where they work.

This product will provide contraception for a female cat with a single injection. It blocks the hormones producing heat behavior and renders female cats infertile for three years at which point cats can be retreated. The product is approved as safe and effective by the FDA. Pricing is estimated to be \$15-\$20 to the veterinarian.

In 2007, just over half (52%) of the veterinarians surveyed indicated that they would be likely to recommend this product to their clients. In contrast, less than a third (30%) of the ASV veterinarians surveyed indicate that they would be likely to recommend the female cat contraceptive product concept for use in the shelter/clinic where they work (19% somewhat likely and 11% very likely). There were no significant differences between regions in terms of likelihood to recommend the product.



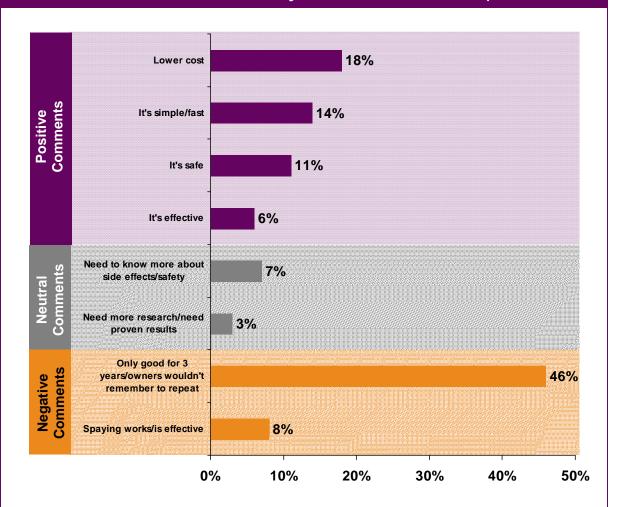
Those most closely involved with shelters and clinics – the full-time shelter/clinic veterinarians (n=117), are significantly less likely than part-time employees, consultants or volunteers (as a group) to indicate that they would recommend the product (26% vs. 43%, respectively).

Not surprisingly, those veterinarians who indicated that there was a great need for a non-surgical alternative to spay/neuters in the shelter or clinic with which they work (n=73) are significantly more likely than those who indicated the need was moderate, or that there was no need, to say that they would recommend the product for use in the shelter (53% vs. 31% and 15%, respectively).

The main benefits of the contraceptive product concept appear to be the possible cost savings associated with this product when compared to the cost of spay surgeries, the simplicity of application and its perceived safety relative to spay surgeries. However, even among those veterinarians who are open to the idea of recommending this product, there is a sizeable group who express concern that it is only effective for three years and that owners would not remember to repeat the treatment.

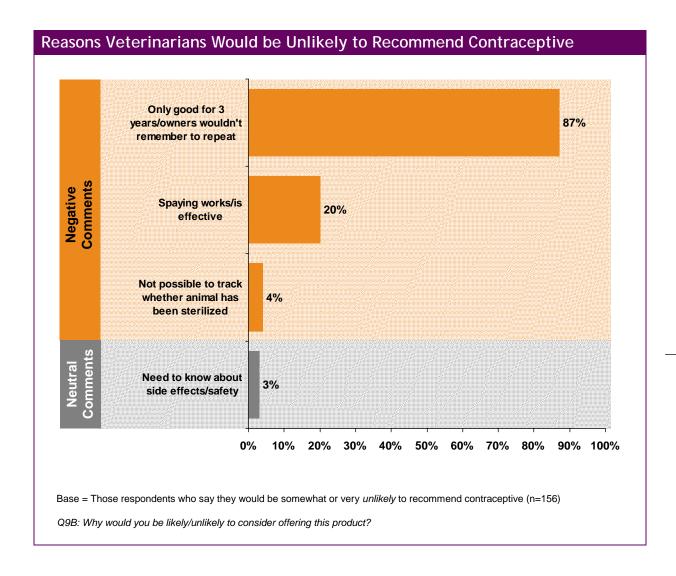
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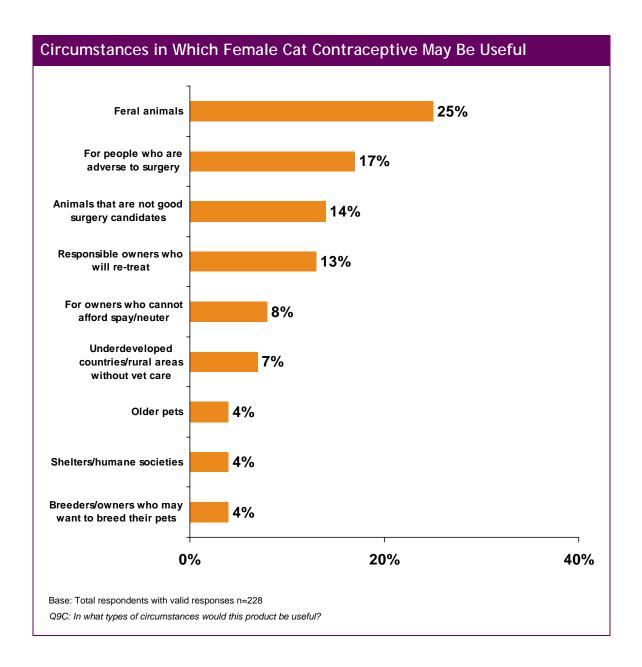


Base = Those respondents who say they would be somewhat or very *likely* to recommend contraceptive (n=72) Q9B: Why would you be likely/unlikely to consider offering this product?

As with those likely to consider this product, those unlikely see the main drawback of the contraceptive product concept for ASV veterinarians is clearly the fact that it is only effective for three years and the concern that owners would forget to repeat the treatment.



Respondents were asked in what types of circumstances the product may be useful. As shown below, over a quarter of those asked indicate that it may be appropriate for feral cat populations. Clients who are adverse to surgery or who have pets that are not good surgical candidates are also possible applications for this product.



## **Conclusions and Key Findings**

Findings of this study demonstrate that there is a fairly high level of perceived need among ASV veterinarians for an alternative to surgical spay and neutering for use in both the larger community and in their shelter or clinic [mean = 4.8 on a scale of 1-7].

ASV veterinarians are much more likely to see the need for an alternative solution than were the private practice veterinarians surveyed in 2007 [mean = 3.4].

Like their 2007 counterparts, the vast majority of ASV veterinarians included in this study believe that surgical spay/neuter provides clear benefits beyond sterilization – helping to prevent both health problems and behavior problems in cats and dogs of both sexes. However, these results indicate that the ASV veterinarians do not have the same degree of confidence in the associated benefits. For example, they are significantly less confident than the vets surveyed in 2007 that neutering male cats prevents spraying.

Due to the higher level of perceived need among this audience for an alternative and the lower degree of value placed on the benefits associated with spay/neuter surgeries, it could be easier to convince ASV veterinarians to consider an alternative to surgical sterilization than their counterparts in private practice. In addition, these data suggest there is value in some of the benefits that a non-surgical sterilant may be able to provide. For instance, the majority do feel the availability of a non-surgical sterilant may increase the number of sterilizations performed in shelters and in the community overall. The fact that it may reduce the time and resources required for the veterinarian and/or shelter is also appealing. Important to note, however, is the fact that only a little over half of the veterinarians surveyed firmly believe that a non-surgical alternative would be a better option for shelters to use to reduce the number of unwanted pets.

Interest in a female cat contraceptive is quite low among this audience. The major drawback of this product is the fact that it does not provide permanent sterilization. There is a moderate amount of support for use on feral cat populations.

It is fairly clear that, in order for any sterilant or contraceptive product to be broadly considered as a viable alternative to surgical sterilization (in more than just special circumstances), it will need to deliver some of the same benefits attributed to surgical procedures: preventing both

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health and behavior problems, requiring only one treatment and, more important, providing

permanent sterilization.

# **Appendix**

#### **Questionnaire**

#### ASV Veterinarian Spay and Neuter Survey (ONLINE) BN08-038

#### **INTRODUCTION**

INTRO1. Thank you for helping us with this research. This survey takes about 20-30 minutes to complete. To ensure that our study is of the highest quality, it is very important that you answer each question thoughtfully and honestly. Please do not rush through this survey.

All of your answers are kept confidential.

If at any time you need to exit the survey, no problem—your answers will be saved for when you return to finish the survey. To return to this survey, click on the link in your email invitation.

#### **SCREENER**

QS1. First, are you currently a practicing veterinarian? [ALLOW DON'T KNOW] [SINGLE RESPONSE ONLY]

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1	Yes	
2	No	[TERMINATE]
88	Don't know	[TERMINATE]

QS2. And do you currently, or have you in the past year, worked or volunteered for/in an animal shelter, spay/neuter or low income clinic? [ALLOW DON'T KNOW] [SINGLE RESPONSE ONLY]

		Notes
1	Yes	
2	No	[TERMINATE]
88	Don't know	[TERMINATE]



Notes

QS3A. Do you practice within the United States? [SINGLE RESPONSE ONLY]

		Notes
1	Yes	SKIP TO QS3B
2	No	SKIP TO QS3C

QS3B. What is the zip code of the location in which you primarily practice? [NUMERIC RESPONSE ONLY]

	Notes
Zip Code:	SKIP TO Q1A

QS3C. In what country do you primarily practice?

	Notes
Country:	

#### **QUESTIONNAIRE**

Q1A. Relative to your work in 2007, please indicate your primary employment status: [SINGLE RESPONSE ONLY]

1 Full time employee of shelter, spay/neuter or low income clinic **SKIP TO Q1G** 2 Part time employee of shelter, spay/neuter or low income clinic **SKIP TO Q1G** Self-employed contractor – shelter, spay/neuter or low income 3 SKIP TO Q1B clinic is client 4 Practice owner/associate – shelter, spay/neuter or low income SKIP TO Q1B clinic is client 5 Consultant – shelter, spay/neuter or low income clinic is client SKIP TO Q1B Volunteer services for shelter, spay/neuter or low income clinic SKIP TO Q1B

Q1B. Does the private practice you are with provide any of the following for shelter, spay/neuter or low income clinics? Do you: [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/REFUSED]

	Yes	No	Don't Know	Prefer Not To Answer
A. Provide spay neuter for homeless pets for a shelter or rescue group?	1	2	8	9
B. Honor Discount sterilization vouchers for pet adopters or low income pet owners?	1	2	8	9
C. Sterilize feral cats?	1	2	8	9

Q1C. Thinking about your practice overall, how important are spay/neuter surgeries on cats and dogs to your <u>practice's</u> total annual gross revenues? Please use a 7-point scale where 1 = not at all important and 7 = extremely important. [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/NOT APPLICABLE]

Not At All Important						Extremely Important	Don't Know	Not Applicable	
1	2	3	4	5	6	7	8	9	

Q1D. And how important are spay/neuter surgeries in terms of attracting new customers to the <u>practice</u>? Would you say 1, not at all important, 7, extremely important or some number in between? [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/NOT APPLICABLE]

Not At All Important						Extremely Important	Don't Know	Not Applicable
1	2	3	4	5	6	7	8	9

Q1E. About how many spay and neuter surgeries on cats and dogs are performed in your <u>practice</u> in an average year? [ALLOW DON'T KNOW/REFUSED]

	RECORD NUMBER (entered as text to allow don't know/refuse)
8	Don't know
9	Prefer not to answer

Q1F. Relative to other procedures performed in your <u>practice</u>, would you say spay/neuter surgeries are 1 not at all profitable, 7 very profitable or some number in between? [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/NOT APPLICABLE]

Not At All Profitable						Very Profitable	Don't Know	Not Applicable
1	2	3	4	5	6	7	8	9

	RESPONSE ONLY][ALLOW DON'T KNOW/REFUSED]
	involved with, approximately how many animals are handled per year? [NUMERIC
Q1G.	Thinking about the primary animal shelter, spay/neuter or low income clinic you are

RECORD NUMBER (entered as text to allow don't know/refuse)						
8	Don't know					
9	Prefer not to answer					

Q1H. Thinking about the primary animal shelter, spay/neuter or low income clinic you are involved with, about how many spay and neuter surgeries on cats and dogs are performed by that organization in an average year? [NUMERIC RESPONSE ONLY][ALLOW DON'T KNOW/REFUSED]

RECORD NUMBER (entered as text to allow don't know/refuse)							
	8	Don't know					
	9	Prefer not to answer					

Q1I-J. About how many hours on average do you...

I	work (compensated) per week <u>ON SITE</u> at the shelter, spay/neuter or low income clinic?	Hours
J	donate/volunteer to a shelter, spay/neuter or low income clinic per week?	Hours

#### **HOURS** limited to 168 maximum per week

Q1K. Please rank the following areas in order of your focus on them in your "shelter" work in 2007. In other words, which areas demanded the most of your time? For your primary area, rank as 1, secondary as 2 and so on. [PROGRAMMER ROTATE 1-4][RANKING]

		110100
1	Shelter medicine	
2	Spay/neuter	
3	Low cost veterinary services for the public	
4	Management	

The next section of this survey will explore animal shelter, spay/neuter and/or low income clinic operations.

For each statement, please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree.

#### NOTE: This introduction text will appear before Q2A

### Q2A. For male dogs, neutering, in the majority of cases, will help to: [PROGRAMMER ROTATE A-E][ALLOW DON'T KNOW/NOT APPLICABLE]

		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Don't Know	N/A
A	reduce the incidence of prostate cancer	1	2	3	4	8	9
В	prevent prostatitis	1	2	3	4	8	9
C	reduce roaming	1	2	3	4	8	9
D	prevent marking	1	2	3	4	8	9
E	prevent aggression	1	2	3	4	8	9

### Q2B. For female dogs, spaying, in the majority of cases, will help to: [PROGRAMMER ROTATE F-G][ALLOW DON'T KNOW/NOT APPLICABLE]

		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Don't Know		_
F	prevent breast cancer	1	2	3	4	8	9	
G	prevent aggression	1	2	3	4	8	9	

### Q2C. For male cats, neutering, in the majority of cases, will help to: [PROGRAMMER ROTATE H-I][ALLOW DON'T KNOW/NOT APPLICABLE]

		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Don't Know	N/A	
Н	prevent spraying	1	2	3	4	8	9	
I	reduce aggression	1	2	3	4	8	9	



### Q2D. For female cats, spaying in the majority of cases, will help to: [ALLOW DON'T KNOW/NOT APPLICABLE]

		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Don't Know	N/A
J	prevent breast cancer	1	2	3	4	8	9

#### PROGRAMMER: ROTATE Q2 QUESTION BLOCKS

Q3A. Are you aware of any non-surgical sterilants or contraceptives for cats or dogs that are currently in development or that have been on the market in the US or in other countries? [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/REFUSED]

		Notes
1	Yes	ASK Q3B
2	No	SKIP TO Q3C
8	Don't know	SKIP TO Q3C
9	Prefer not to answer	SKIP TO Q3C

Q3B. Which non-surgical sterilants or contraceptives for cats or dogs are you aware of?

<oe response=""></oe>	38

Q3C. Have you read or heard anything about: [PROGRAMMER ROTATE A-D]

		i es	NO	
A	Neutersol®	1	2	
В	Suprelorin®	1	2	SKIP TO Q4A
C	Gonazon®	1	2	SKIP TO Q4A
D	Contracare®	1	2	SKIP TO Q4A

Q3D. Have you used Neutersol®? [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW]

		Notes
1	Yes	
2	No	
8	Don't know	

Q4A. In general, how great a need do you think there is for a non-surgical sterilant as an alternative to surgical spay and neuter procedures for cats and dogs? Please use a 7-point scale where 1 means there is no need at all and 7 means there is a very great need.

[SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/NOT APPLICABLE]

No Need At All						Very Great Need	Don't Know	Not Applicable	
1	2	3	4	5	6	7	8	9	

#### PROGRAMMER: IF 8 or 9, SKIP TO Q5A, ELSE CONTINUE TO Q4B

Q4B. Why do you say that?

<OE Response>

Q5A. How great is the need for a non-surgical sterilant as an alternative to spay/neuter surgeries in the shelter, spay/neuter or low income clinic/s you are involved with? Use the same 7-point scale where 1 means there is no need and 7 means there is a very great need. [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/NOT APPLICABLE]

_	No Need At All						Very Great Need	Don't Know	Not Applicable
	1	2	3	4	5	6	7	8	9

PROGRAMMER: IF 8 or 9, SKIP TO Q6, ELSE CONTINUE TO Q5B

Q5B. Why do you say that?

<oe response=""></oe>
-----------------------

Q6. How great do you feel the need is for a non-surgical sterilant specifically for:

[PROGRAMMER ROTATE A-D][SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/NOT APPLICABLE]

		No Need						Very Great Need	Don't Know	N/A
A	Male dogs	1	2	3	4	5	6	7	8	9
В	Female dogs	1	2	3	4	5	6	7	8	9
С	Male cats	1	2	3	4	5	6	7	8	9
D	Female cats	1	2	3	4	5	6	7	8	9

Q7. Please read the following list of possible benefits associated with some non-surgical sterilants. From the perspective of your work with animal shelter, spay/neuter or low income clinics please tell me how valuable you feel each benefit is. Please use a 7-point scale where 1 = not at all valuable and 7 = extremely valuable. [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/NOT APPLICABLE]

PROGRAMMER: ROTATE A-I

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		Not at All Valuable						Extremely Valuable	Don't Know	N/A
A.	Provides a lower cost alternative to offer clients	1	2	3	4	5	6	7	8	9
В.	Reduces the time and financial resources required for the vet and the shelter	1	2	3	4	5	6	7	8	9
C.	Is an alternative for clients who are averse to surgery	1	2	3	4	5	6	7	8	9
D.	Could increase the number of sterilizations performed in the shelter, spay/neuter or low income clinic	1	2	3	4	5	6	7	8	9
E.	Could increase the number of sterilizations performed in the community	1	2	3	4	5	6	7	8	9
F.	Is a safer alternative for the animal – having less risks and side effects than surgical spay/neuters.	1	2	3	4	5	6	7	8	9

G. There is less recuperative time	1	2	3	4	5	6	7	8	9
H. Is less invasive and stressful for pets	1	2	3	4	5	6	7	8	9
I. Is a good option for shelters to use to reduce number of unwanted pets	1	2	3	4	5	6	7	8	9

Q8. How important would the following attributes be to you when evaluating a new sterilant product? [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/NOT APPLICABLE]

PROGRAMMER: ROTATE A-E

		Not At All Important						Extremely Important	Don't Know	N/A
A	A technician can perform the procedure	1	2	3	4	5	6	7	8	9
В	Requires only one treatment	1	2	3	4	5	6	7	8	9
С	Provides permanent sterilization	1	2	3	4	5	6	7	8	9
D	Reduces unwanted behavior of a sexually intact animal	1	2	3	4	5	6	7	8	9
Е	Protects against some reproductive tract and hormone-related diseases	1	2	3	4	5	6	7	8	9

Q9A. Please read the following description of a product specifically for female cats:

This product will provide contraception for a female cat with a single injection. It blocks the hormones producing heat behavior and renders female cats infertile for three years at which point cats can be retreated. The product is approved as safe and effective by the FDA. Pricing is estimated to be \$15-\$20 to the veterinarian.

Based on this description, how likely would you be to consider recommending this product for use by the shelter, spay/neuter or low income clinic in which you work? Would you be: [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/REFUSED]

Notes

4	Very Likely					
3	Somewhat Likely		-			
2	Somewhat Unlikely		1			
1	Not at all Likely		-			
8	Don't know	SKIP TO Q10	1			
9	Prefer not to answer	SKIP TO Q10	=			
			42			
Q9C.	In what types of circumstances would this product be useful?					

# Q10. Please review the following statements about pet overpopulation. For each statement, please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree. [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/NOT APPLICABLE]

		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Don't Know	N/A
A.	Unplanned litters contribute significantly to the number of unwanted pets in our community.	1	2	3	4	8	9
В.	I feel pressured to provide more volunteer time or low cost services to community animal welfare groups than I am able.	1	2	3	4	8	9

Q11. How long have you been practicing veterinary medicine?

	years (0 = Less than a year) (entered as text to allow don't know/refuse)
88	Don't know
99	Prefer not to answer

Q12. How many years have you worked at your current place of employment?

43

	years (0 = Less than a year) (entered as text to allow don't know/refuse)
88	Don't know
99	Prefer not to answer

Q13. What is the zip code for your current place of employment?

	RECORD ZIP CODE (entered as text to allow don't know/refuse)
88	Don't know
99	Prefer not to answer

Q14A. How many years have you worked with or for shelters, low income clinics and/or spay/neuter clinics as a veterinarian?

	years (0 = Less than a year) (entered as text to allow don't know/refuse)
88	Don't know
99	Prefer not to answer

Q14B. Please answer the following question for the animal shelter, spay/neuter or low income clinic you commit the most time to.

Including yourself, how many veterinarians were employed by this shelter, spay/neuter or low income clinic on a full or part-time basis in 2007? If you work for more than one, please answer for the one you commit the most time to. [SINGLE RESPONSE]

#### ONLY][ALLOW DON'T KNOW/REFUSED]

		Notes
1	1	
2	2	
3	3	
4	4	
5	5	
6	6-10	
7	11-15	
8	More than 15	
88	Don't know	
99	Prefer not to answer	

# Q14C. How many worked full time?[SINGLE RESPONSE ONLY][ALLOW DON'T KNOW/REFUSED]

		Notes
1	1	
2	2	
3	3	
4	4	
5	5	
6	6-10	
7	11-15	
8	More than 15	
88	Don't know	
99	Prefer not to answer	

### Q15A. How many **certified** veterinary technicians does your shelter, spay/neuter or low income clinic employ? [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW]

		Notes
1	1	
2	2	
3	3	
4	4	
5	5	
6	6-10	
7	11-15	
8	More than 15	
88	Don't know	
99	Prefer not to answer	

Q15B. How many **non-certified** veterinary technicians does your shelter, spay/neuter or low income clinic employ? [SINGLE RESPONSE ONLY][ALLOW DON'T KNOW] Notes 1 1 2 2 3 3 4 4 5 5 6-10 6 7 11-15 8 More than 15 88 Don't know 99 Prefer not to answer What is your current position title? Q16. <OE Response> Q17. And how many years have you held this position? **RECORD NUMBER** Q18. Please indicate your primary employer type in 2007. [SINGLE RESPONSE ONLY] Notes Private shelter 1 2 Municipal shelter 3 Private practice 4 Spay/neuter only 5 Low income clinic Industry or commercial firm 6

7

8

College/university
Other (SPECIFY)

# Q19. And what was your primary position <u>description</u> in 2007? [SINGLE RESPONSE ONLY]

		Notes
1	Shelter veterinarian	
2	Executive director	
3	Medical director	
4	Consultant/contract veterinarian	
5	Professor/assistant professor	
6	Sales or marketing executive	
7	Board of directors	
8	Program leader/coordinator/section head	
9	Clinician providing services to shelter	
10	Researcher	
11	Other (SPECIFY)	

Q20A. Please select all the duties you are required or expected to perform in your 'shelter' work in 2007? [MULTIPLE RESPONSE]

		Notes
1	Spay/neuter	
2	Pediatric neutering	
3	Physical exams	
4	Treatment decisions	
5	Adoptability decisions	
6	Behavior evaluation	
7	Population management	
8	Set health care policies and/or standard operating procedures	
9	On call/emergencies	
10	Weekend hours	
11	Forensics/cruelty investigation	
12	Testify in court	
13	Euthanasia	
14	Euthanasia decision making process	
15	Laboratory (fecals, blood smears, UA, etc.) in house	

Other surgery		
Supervision of lay staff	SKIP TO Q20B	
Supervision of veterinary staff	SKIP TO Q20C	
Administrative responsibilities		
Development/fund raising		
You said that you supervised lay staff as some of your pervise in 2007?	duties. How many lay staff	did
# of Staff		
You said that you supervised veterinary staff as some ary staff did you supervise in 2007?	of your duties. How many	
# of Staff		
Q21. What was your <b>TOTAL PROFESSIONAL INCOME</b> , before personal taxes, from <u>all</u> shelter, spay/neuter or low income clinic veterinary medical related activities during 2007? Please include income from salary only. Please remember that your answers for this survey are kept strictly confidential. Income levels will be summarized and not linked to individual responses. [NUMERIC RESPONSE ONLY]		
	Notes	
Total Professional Income:	(entered as text to allow don't know/refuse)	
Don't know		
Prefer not to answer		
Please indicate your gender.[SINGLE RESPONSE C	ONLY]	
	Notes	
Male		
Female		
	Supervision of lay staff  Supervision of veterinary staff  Administrative responsibilities  Development/fund raising  You said that you supervised lay staff as some of your pervise in 2007?  # of Staff  You said that you supervised veterinary staff as some ary staff did you supervise in 2007?  # of Staff  What was your TOTAL PROFESSIONAL INCOM shelter, spay/neuter or low income clinic veterinary m 2007? Please include income from salary only. Please this survey are kept strictly confidential. Income level linked to individual responses. [NUMERIC RESPONT Total Professional Income:  Don't know  Prefer not to answer  Please indicate your gender. [SINGLE RESPONSE Communication of the professional staff and the professional staff as some of your pervise in 2007?	Supervision of lay staff  Supervision of veterinary staff  Supervision of veterinary staff  Skip TO Q20C  Administrative responsibilities  Development/fund raising  You said that you supervised lay staff as some of your duties. How many lay staff pervise in 2007?  # of Staff  You said that you supervised veterinary staff as some of your duties. How many ary staff did you supervise in 2007?  # of Staff  What was your TOTAL PROFESSIONAL INCOME, before personal taxes, from shelter, spay/neuter or low income clinic veterinary medical related activities during 2007? Please include income from salary only. Please remember that your answers this survey are kept strictly confidential. Income levels will be summarized and no linked to individual responses. [NUMERIC RESPONSE ONLY]  Notes  Total Professional Income: (entered as text to allow don't know/refuse)  Don't know  Prefer not to answer  Please indicate your gender. [SINGLE RESPONSE ONLY]

## Q27. During your veterinary school education, were you introduced to shelter medicine topics? [SINGLE RESPONSE ONLY] [ALLOW DON'T KNOW/REFUSED]

		Notes
1	Yes	
2	No	SKIP TO Q29
8	Don't know	SKIP TO Q29
9	Prefer not to answer	SKIP TO Q29

#### Q28. Was this part of...? [MULTIPLE RESPONSE]

		Notes
1	Mandatory credits	
2	Elective credits	

### Q29. Which of the following topics were covered in your veterinary school education? **[MULTIPLE RESPONSE]**

		Notes
1	Pediatric S/N	
2	Small animal infectious disease management/population management	
3	High volume S/N	
4	Feral cat TNR	
5	Euthanasia	
6	Ethics/animal welfare	
7	Animal cruelty/forensics	
8	Pet overpopulation	
9	Statistics	
10	Epidemiology	
11	Interpretation of studies	
12	Behavior	
13	Staff management/business management skills	

### Q30. What degree(s) have you earned in addition to your DVM/VMD? [MULTIPLE RESPONSE]

1	Doctorate (PhD.) degree or equivalent	Specify
2	Masters degree (MS, MBA, MPH) or equivalent	Specify
3	Other professional degree	Specify
4	I have earned no additional degrees	

### Q31. Were you a diplomate of an AVMA-recognized specialty board or college in 2007? [SINGLE RESPONSE ONLY] [REFUSED]

		Notes
1	Yes	
2	No	SKIP TO Q33
9	Prefer not to answer	SKIP TO Q33

#### Q32. In what specialty?

### Q33. Have you completed a residency program and/or internship? [SINGLE RESPONSE ONLY][ALLOW REFUSED]

		Notes
1	Residency	SKIP TO Q34A
2	Internship	SKIP TO Q34A
3	Neither	SKIP TO Q35A
4	Both a residency and internship	SKIP TO Q34B
9	Prefer not to answer	SKIP TO Q35A

Q34A. You said that you have completed a/an<INSERT Q33 RESPONSE>. Please explain what this <INSERT Q33 RESPONSE> was and where it was located?

<oe response=""></oe>			

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Notes

Q34B. You said that you have completed <INSERT Q33 RESPONSE>. Please explain what these were and where they were located? <OE response> Q35A. In 2007, for the animal shelter, spay/neuter or low income clinic you committed the most time to: How many weeks did you work? Weeks Α How many hours did you work in a typical week? Hours  $\mathbf{C}$ How many weeks paid vacation did you receive? Weeks D How many weeks of paid vacation (not including legal Weeks holidays) did you take? [Hours limited to 168, weeks limited to 52] Q35B. In 2007, for your practice: 52 How many weeks did you work? Weeks Α How many hours did you work in a typical week? В **Hours** C How many weeks paid vacation did you receive? Weeks D How many weeks of paid vacation (not including legal Weeks holidays) did you take? [Hours limited to 168, weeks limited to 52] Q36A. From the list below, please select all benefits there were provided to you by your employer during 2007. If you were self-employed in 2007, select the benefits you personally purchased for yourself and/or your family from your income. [MULTIPLE **RESPONSE**] Notes 1 State association dues Association of Shelter Veterinarian dues 3 **AVMA** dues

4

Other association dues

5	Continuing education expenses	SKIP TO Q36B		
6	Paid continuing education leave	SKIP TO Q36C		
7	Dental plan			
8	Vision plan			
9	Disability insurance			
10	Internet access			
11	Cellular phone			
12	Computer/laptop			
13	VIN membership			
14	Liability insurance			
15	Life insurance		]	
16	Health insurance full coverage		]	
17	Health insurance with co-pay		]	
18	Paid vacation leave	SKIP TO Q36D	]	
19	Paid legal holidays		]	
20	Paid sick leave		]	
21	Personal use of vehicle			
22	403B or other employer sponsored retirement plan		]	53
23	Employer contribution to retirement plan			
24	Pension plan			
25	Other (SPECIFY)			
26	Other (SPECIFY)			
	You said that you or your employer provided continuuch was this for 2007?	ing education expenses.	About	
	\$ for 2007			
	You said that you or your employer provided paid conhow many days were provided in 2007?	ntinuing education leave. Ab	out	
	Days provided in 2007			

Q36D. You said that you or your employer provided paid vacation leave. About how many days were provided in 2007?

	Days provided in 2007		
	In 2007, where did you obtain the majority of your	CE credits?	
		Notes	
	North American Veterinary Conference (NAVC)		
	Midwest Veterinary Conference (MVC)		
	Western Veterinary Conference (WVC)		
	Humane Society of the United States Expo (HSUS)		
	American Humane Association Conference (AHA)		
	Other national/regional conventions		
	State VMA		
	Local meetings		
	University		
	Online/Veterinary Information Network (VIN)		
	Journals		
	Other (Specify)		
	About how many hours of CE credits per year do ye	ou earn?	
Ε 1	response>		

Q39. What equipment and/or facilities are available to you in the shelter, low income or spay/neuter clinic where you work or volunteer? [MULTIPLE RESPONSE]

		Notes
1	Surgical suite and equipment	
2	Isolation/quarantine area	
3	Microscope	
4	Centrifuge	
5	Blood chemistry analyzer	
6	Refractometer	

ı	Ξ	1	Ξ
٠	J	١,	

7	Otoscope	
8	Opthalmoscope	
9	Tonopen	
10	Blood pressure	
11	Pulse oximeter	
12	Esophageal stethoscope	
13	X-ray	
14	Ultrasound	
15	Other (Specify)	

#### **CLOSING**

Thank you for your participation in this study. This study is sponsored by the Association of Shelter Veterinarians (ASV) and the Alliance for Contraception in Cats and Dogs (ACC&D).

In appreciation for your participation in this study, ASV and ACC&D have offered the choice of a charitable donation made in your name or a selection of professional texts. A total of fourteen gifts will be made to individual participants selected at random from those who complete the survey.

Four (4) \$50 donations, (5) copies of <u>Shelter Medicine for Veterinarians</u> and (5) copies of <u>Veterinary Forensics</u>: <u>Animal Cruelty Investigations</u> are available.

Q40. From the list below, please rank what incentive you would like to receive, where 1 is your primary choice, 2 your secondary, and so on. [RANKING]

		Notes
1	\$50 charitable donation	
2	<b>Shelter Medicine for Veterinarians and Staff</b> by Lila Miller and Stephen Zawistowski - Suggested Retail Price \$79.99	
3	Veterinary Forensics: Animal Cruelty Investigations by Melinda D. Merck \$99.99 Suggested Retail Price	

Thank you to the ASPCA for donating the gift books!



Motor

Q41A. As an additional incentive, all respondents are offered a summary report of this study. Would you like to receive a summary report of this study?

		Notes
1	Yes	
2	No	SKIP TO CLOSE

Q41B. Would you prefer an electronic or hard copy version of the summary?

		110103
1	Hard copy	
2	Electronic	SKIP TO CLOSE

Q41C. Please enter your mailing address so that we may send you a hard copy results summary of this study.

	Notes
<address data="" here=""> (multiple fields in survey to allow full address data)</address>	

CLOSE1: The ASV and ACC&D, with support from the Animal Assistance Foundation, Maddies Fund and the ASPCA, would like to thank you for your participation in this study. Results from this study will be used by the ASV and ACC&D to assist each group with their efforts to better serve the veterinary industry.