

Roundtable Discussion on the Risks and Benefits of Early Socialization for Puppies

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The American Veterinary Society of Animal Behavior (AVSAB) has recently released a position paper on Puppy Socialization (AVSABonline.org). The central theme of this paper is the importance of providing puppies with adequate socialization opportunities during their sensitive period of socialization, which ends between 12 and 16 weeks of age. Because puppies need to be around other puppies during this period, AVSAB recommends that owners be encouraged to take their puppies to puppy classes as early as safely possible, even though these puppies will not have completed their full sequence of vaccination boosters. Some veterinarians remain concerned about the relative risk of allowing puppies to co-mingle prior the completion of all vaccinations. To provide interested veterinarians with additional information, both theoretical and practical, AVSAB has interviewed four veterinarians who have had extensive experience with early puppy socialization. Although our participants were not physically together for these interviews, we will present their observations and opinions in a “round table” style so the reader may benefit from the various, expert points of view. Lets meet our experts.

Brenda Griffin, DVM, MS, is an ACVIM diplomate (Small Animal Internal Medicine) and is currently an Assistant Professor and Director of Clinical Programs in the Maddie’s Shelter Medicine Program at Cornell Veterinary School.

Ian Dunbar, PhD, BSc, BVetMed, MRCVS is currently Director of the Center for Applied Animal Behavior in Berkeley, California and Scientific Director for www.dogstardaily.com; and is a noted author and speaker.

Kersti Seksel BVSc (Hons) MRCVS MA (Hons) FACVSc DACVB DECVBMC is a registered veterinary specialist in behavioral medicine and is a diplomate of the American, European, and Australian specialty colleges in behavioral medicine. She runs a referral practice in Sydney and Melbourne in Australia and is an associate of the University of Sydney.

Jennifer Messer, BA (Hons) Psych, DVM, is the director of the City of Ottawa Spay and Neuter Clinic in Ottawa, Ontario.

Dr. E. Kathryn Meyer (AVSAB president, moderator): Welcome everyone. We appreciate your participation in this virtual roundtable discussing the relative risks of early puppy socialization. Drs. Griffin, Dunbar, and Messer, please give us a little background on your experience with puppy socialization, especially with regard to puppy classes.

Dr. Griffin: I joined my first dog-training club in 1979 and instructed my first obedience class for the public 27 years ago when I was 16 years old! Over the years, I have been a member of numerous dog training clubs and have assisted with classes off and on

during this time. Over the past 30 years, I have been associated with clubs that have taught puppy classes to hundreds and hundreds of puppies.

In addition, I taught a course (offered once or twice a year) to both pre-veterinary and veterinary students at Auburn University from 2002-2006. Students participated in lectures and mentored dog-training labs and service-learning activities at the county shelter. I was also a clinician in the community practice service at AU, where I developed wellness protocols for dogs and cats not only for physical health, but also for behavioral health. In particular, students learned about puppy training; clients and puppies were trained in the exam room, covering basic manners, house-training, and other problem-prevention strategies. Clients were instructed on the awesome importance of socialization during the critical period—before 16 weeks of age, and puppy classes were “prescribed.” At Cornell, I also work with the Community Practice service and have implemented behavioral wellness into the teaching rounds and preventive medicine protocols for our patients here as well. In addition, I have lectured to the students and residents about training and socialization for both puppies and kittens.

Dr. Seksel: I started teaching Puppy Preschool® classes in Australia almost 20 years ago when, as a practitioner in general practice, I wanted to do something to make puppy veterinary visits

more enjoyable for all. This included puppies, owners, the veterinary staff, and especially—me! I believed veterinary visits could and should be more enjoyable, or at least less traumatic. I was then asked by veterinary organizations to speak about the concept of training puppies in veterinary hospitals and promote the benefits for the puppies, the staff, and the community. It struck me that, although anecdotally everyone seemed to think they were beneficial, I had seen no published research, certainly in the Australian context. So, I went back to University and my thesis looked at the short- and long-term benefits of puppy socialization and training classes. Since that time, as our knowledge of canine behavior has increased, I have changed the way that I originally recommended the classes be run. The long-term future of keeping dogs and owners happily together depends on having the best start for the puppies that we as veterinarians can provide, both physically and psychologically.

Dr. Messer: I started teaching puppy classes in 1995, during my first year of veterinary school. There were no puppy schools in town at the time, so with the benefit of having observed Jean Donaldson and Ian Dunbar's exemplary classes, and then the luxury of their mentorship, I set about starting a school of my own. As my final year in school approached, I needed teachers to replace me so I transformed experience and a pile of notes into a detailed training manual for my new instructors. Out of that eventually was born a published, comprehensive curriculum manual, which became available to trainers outside of our school.

The availability of this manual naturally brought me into closer contact with the dog training community, and shortly after graduation, I began to receive invitations to speak at dog training conferences on the topic of puppy training and early socialization. An area of great interest was the relative risks of early socialization classes. Trainers

were frustrated with the veterinary community's apprehension to send puppies to class before the completion of their vaccination series. They recognized that veterinarians were looking out for the puppies' physical wellness, but also knew that holding them back from class carried great behavioral risks. The training community wanted advice on minimum age and vaccine requirements based on a thorough understanding of both the medical and behavioral issues at hand, including the far-reaching quality of life and societal safety implications of early training and socialization. The combination of a veterinary degree and years of experience in running a puppy school put me in a good position to try to help resolve this conundrum, and promoting the longstanding recommendations of Dr. R.K Anderson within the dog training community has certainly helped in this regard.

The other application of early socialization that I have experience with is as a clinician. Repeating the same behavior information to each client over their series of vaccination appointments seemed inefficient, so I implemented a puppy parenting program, which is a stand-alone group training and socialization session held right in clinic one evening every couple of weeks. The clientele and pups love the group session, and the program helps lure clients towards puppy class.

Dr. Dunbar: I started teaching off-leash puppy socialization and training classes over 27 years ago. I taught nine classes a week for 15 years. My company (SIRIUS® Puppy Training) continues to train 5000+ puppies annually. Also, I have given over a hundred one-day Puppy Training seminars/workshops for veterinarians and dog trainers.

Dr. Meyer (moderator): [Some people worry about the risks of allowing puppies to interact with other puppies before they have completed their full vaccination series. Would you please discuss your](#)

[views concerning the risks compared to the benefits of puppy classes?](#)

Dr. Griffin: There is no question that the benefits far outweigh any associated risks. In terms of wellness, prevention IS everything! For puppies, the single most important part of a behavioral wellness program is proper socialization during their critical period of development. Owners must begin this the day they bring their new puppy home and timing is everything since the clock is ticking with the period ending by 16 weeks of age. When proper socialization is combined with positive reinforcement-based training for manners in the context of a group puppy class, these practices help puppies grow into well-adjusted pets that are far more likely to remain with their families. Scientific studies have clearly demonstrated that when owners take their dogs through a training class, they are much more likely to keep their pets. The experience helps them to develop a strong bond and develop realistic expectations of their pet's behavior while interacting with others in a group class setting. Puppy classes provide critical socialization for puppies with a variety of people and other dogs, and hands-on training for owners as they learn proper techniques to shape their pet's behavior. Not to mention, it is fun-fun-fun for puppies and owners alike!

Dr. Seksel: There is no doubt in my mind that properly run puppy classes provide the basis for happy and healthy dogs and happy owners. The risks always need to be considered but the risk of being euthanized or surrendered is much greater in unsocialized, badly mannered dogs than the risk of dying from infectious diseases; one just has to look at the numbers involved. Additionally, these days with the newer vaccines available the vaccination program can be completed as early as 10 weeks of age (note, this is for vaccines available in Australia).

Dr. Dunbar: The risks are minimal to non-existent and the benefits are positively HUGE, namely, learning bite inhibition (via dog-dog play-fighting), socialization with people (during off-leash play), handling by strangers, and owners learning to train their pups in a controlled yet extremely distracting setting (integrating training interludes into play, so that rather than being a distraction to training, play with other dogs becomes a reward for training). Plus, it is a fun night out for dogs and their human families.

Dr. Messer: There are enormous benefits and relatively few risks in allowing puppies to interact in a well-run puppy class before the completion of their vaccination series. The main risk to take into consideration is the possibility of transmission of Parvo virus, as the other agents for which we vaccinate pups are either comparatively rare in prevalence and the vaccine highly effective, or cause relatively minor illness if contracted by an otherwise healthy puppy.

Despite tremendous improvements in efficacy that came with the advent of high-titer, low passage vaccines in the mid 1990's, there is still a small population of puppies (2-8% according to Dr. Ron Schultz) who will not be adequately protected from Parvo virus until vaccinated at 14-16 weeks old. This percentage is small, but cannot be ignored. However, it must be taken into account along with the equally serious behavioral risks of holding puppies back from class until they are fully vaccinated.

Nothing we do as veterinarians is risk free. In considering the question of risks versus benefits of puppy classes, it is worth reflecting on the fact that in other areas of medicine we routinely make recommendations to clients that carry associated risks of astronomically higher incidence than that of infectious disease transmission in puppy class. For example, the approximately 25% chance of hormone-responsive urinary incontinence as a result of ovariohysterectomy is a good case-in-point. And,

we often do so without even discussing associated risks because we judge the benefits to so grossly outweigh them. Administration of vaccines themselves is a good example of this. We ought to consider this specific question of relative risk – physical versus behavioral disease associated with opting in/out of early socialization – within the greater context of how we manage relative risk and related recommendations in general. Are we being consistent in our approach to risk management?

Given the fact that behavior problems are the number one cause of relinquishment to shelters, and of euthanasia of young dogs, and that puppy classes help prevent behavior problems and increase retention in the home, there needs to be evidence of phenomenal risk associated with early socialization classes to warrant recommending holding puppies back until they are fully vaccinated. There is no such evidence to date. In fact, Dr. R.K. Anderson's longstanding recommendation that puppies begin class well before the completion of their vaccination series is based on over a decade of experience and data supporting the relative safety and lack of transmission of disease in puppy socialization classes in many parts of the United States.

While it is unfortunate that the behavioral gains of puppy class are under such tight age constraints, and that the most critical learning just cannot reliably take place once the puppy is old enough to have completed his vaccination series, the most sound advice we can give clients seems obvious: the small risk of infectious disease transmission in puppy class should be acknowledged, and well-run puppy socialization classes should be recommended in spite of this fact, on the grounds that the relative risk is so low. In doing so, the puppy, owners, and society at large stand to benefit enormously at the cost of a relatively small risk of exposure to a treatable infection.

Dr. Meyer (moderator): [Would you please comment on the requirements for](#)

[puppy participation in your classes?](#)

Dr. Seksel: As the period of socialization in dogs occurs between 3 and 12 weeks of age, I recommend that puppies should be 8 weeks of age when they start, but preferably no older than 13 weeks of age. This is because the classes run over a 4 to 5 week period. For example, an 8-week-old puppy is still a puppy when it completes the class at 12-13 weeks of age. However, a puppy that is 16 weeks of age when it starts will be 20 to 21 weeks of age when it finishes—no longer a puppy but a juvenile. Juvenile puppies have very different motor and mental skills than younger puppies so these older puppies should attend juvenile classes with dogs their own age. This is very much like children of similar age attending to the same class and playing with children their own age.

All puppies need to have started their vaccination program at least one week prior to attending class.

Dr. Griffin: We recommend that puppies start class as soon as possible, ideally between 8 and 12 weeks of age. The puppies should be receiving their standard distemper-Parvo virus combination vaccinations and Bordetella is also recommended. Deworming should be done according to the Companion Animal Parasite Council guidelines. The first class meeting is just for the owners—they are given basic information on housetraining, collars, leashes, positive reinforcement, socialization and how to start training at home. In addition, vaccine records are verified and class rules are discussed. Owners are not allowed to bring their puppies to class if the puppies have any signs of illness. Depending on the origin of the puppy, an increase in biosecurity might be considered in some cases. For instance, if the pup originated from a high-risk shelter environment where cases of Parvo virus were known to be common, it may be best to keep the pup away from other young pups for two

weeks, since virus may be shed before clinical signs of illness are apparent. Even so, these pups can be exposed to older dogs that are vaccinated and to a variety of people to ensure proper socialization. Owners can attend classes without their puppy until their puppy is ready to join them.

Dr. Dunbar: At SIRIUS®, we require puppies to be a minimum of 10 weeks old. As for vaccination, we require at least one distemper combination vaccine after 8 weeks of age and at least one week prior to class. Deworming is encouraged but not required. Having said that, simply having a puppy attend one session of puppy class will not ensure that the puppy will grow up to be a properly socialized dog. Breeders must never forget that by eight weeks of age, the sensitive period of socialization is nearly two thirds over and they must make sure they expose the puppies to a variety of people prior to adoption. Likewise, owners need to introduce their young puppy to people in their homes. In addition, after completing a puppy class series, we encourage owners to continue on with another class to continue socialization opportunities. To remain socialized, we recommend that adolescent dogs continue to meet and interact with at least three unfamiliar people and three unfamiliar dogs a day until they are three years old.

Dr. Messer: All puppies must be at least 8 weeks of age. They must have had at least one distemper combination vaccination administered by a veterinarian at 6 weeks of age or older, and at least 10 days before attending the first class. Proof of vaccination is verified by the instructor at the start of the session and all owners are required to commit to completing their puppies' vaccination series as recommended by their veterinarians. Deworming and vaccination against kennel cough are recommended but are not required. Owners are clearly instructed to not bring their puppy to class if the puppy

seems in any way ill, and especially if there is any vomiting or diarrhea, unless the puppy is cleared for infectious disease by their veterinarian.

Dr. Meyer (moderator): So, it appears that you do have certain requirements designed to protect puppy health. Are there any other precautions that you take?

Dr. Griffin: If an animal shelter is known to have frequent cases of Parvo virus, which is the case in some facilities especially in the southeastern US, then holding puppy classes on the shelter grounds is not advisable. Parvo virus can survive in soil for months to years.

I prefer puppy classes that are held in indoor locations. If an animal eliminates, the area should be thoroughly cleaned and disinfected. Just use common sense, wash your hands, don't bring sick puppies to class, and report any problems immediately. Disinfection is best accomplished by mopping a clean surface with 1:30 bleach solution.

When pups appear healthy, are vaccinated, and dewormed, and when classes are conducted in a clean environment, the risk of infectious disease is extremely low. I have personally never seen a puppy develop a life threatening infection that was associated with attending puppy class.

Dr. Messer: Yes, we do take many precautions. Puppy classes are held indoors, and conducted before adult classes each evening, and the floor is sanitized with a 1:30 bleach solution at the end of the night. We make sure that classes are only taught on surfaces that are non-porous and able to be sanitized. Owners may help clean up urine during class, but only instructors are permitted to clean up feces. Any fecal matter deposited in class is cleaned in two stages: first a paper towel is used to remove all visible fecal matter and then the area is thoroughly disinfected with bleach solution. Instructors must either glove up or wash their hands thoroughly afterwards.

Our facility is located in a university city that includes the presence of a veterinary college. As such, the level of care of pet dogs is quite good, and Parvo virus is very rare. Were we located in a higher-risk area where Parvo virus is prevalent, we might consider having street shoes removed at the entrance to class, having puppies carried from the car to the classroom, and ask that puppies not be walked on public property the day of class in order to further reduce risk.

Dr. Seksel: Puppy Preschool classes are ideally run in a veterinary hospital so that the disease status is known and can be effectively managed. Puppies are ideally health-checked by the veterinarian or veterinary nurse before attending each class. Hygiene is important so floors should always be appropriately cleaned, hands washed before handing puppies and so on.

Dr. Dunbar: Our classes are held in facilities with impermeable and easy-to-clean floors. Any urine or fecal deposits are cleaned up immediately and the area heavily bleached. We ask owners to remove their puppies if they have bloody diarrhea or cough.

Dr. Meyer (moderator): Clearly, much effort is placed on keeping the environment clean for these puppies so that the potential for infectious disease spread is minimized. Would you comment on any recommendations you make to puppy owners to safeguard their puppies outside of the puppy class?

Dr. Griffin: There may be regional differences. I don't like dog parks for young puppies, but it is not just about infectious disease. It depends on the dog park and the other dog owners there. I think there are behavioral risks associated with dog parks as much if not more than other risks for young pups. I prefer puppy class for the little pups to interact with conspecifics, as well as known dogs of friends and neighbors.

Depending on the dog's temperament and size, the dog park could be for dogs over 4 months of age when appropriate (with supervision of course!).

Dr. Messer: Owners are advised to avoid areas heavily trafficked by dogs of unknown health and vaccination status until their puppy has had at least two vaccinations over the age of 8 weeks of age. If we were located in a less affluent, higher risk area we might advise waiting until the puppy is at least 14-16 weeks old before venturing on heavily trafficked public grounds. Other means of socialization during this period are encouraged, including: socialization with adult dogs of known health and vaccination status on areas not heavily trafficked by unknown dogs, car rides that take in a wide range of sights and sounds, and exposure to lots of different people in safe settings.

Dr. Dunbar: Very young puppy owners are advised to continue socializing their puppy to people in the safety of their own home, with of course the precaution that outdoor shoes remain outdoors to prevent fomite infection. Very young puppy owners are advised to avoid high-risk areas, especially including the sidewalk and parking lot outside veterinary clinics and veterinary clinic waiting room floors. Owners are advised to keep their puppy in the car until time for examination and to carry the puppy to the examination table and not to put it on the floor anywhere outside or inside the veterinary clinic. Owners are also advised to avoid dog parks and sidewalks until the puppy is four-months-old.

Dr. Seksel: This really depends on the specific area that the puppies came from and the areas in which they now live, as disease risk is regional. The usual precautions include keeping puppies away from areas that stray dogs frequent and avoiding dog parks until the full vaccination is complete. However, it is not only the physical

health that is important but also the emotional health.

Behaviorally, the puppy owner should be encouraged to socialize and habituate the puppy to the sights, sounds, and smells of the environment in which the dog lives in a non-threatening manner. Puppies should not be overexposed to stimuli in their environment; just because a "little" is good does not make "a lot" better. Also, the puppy's interactions with other dogs are important. Badly behaved puppies and adult dogs can affect the puppy's later behavioral responses to other dogs. This needs to be managed in puppy classes as well as out in the wide world.

Dr. Meyer (moderator): We all know that even with precautions, there are no 100% guarantees. Would the four of you comment on your experiences with the health of the puppies taking your class? Have any of the puppies become ill or have you had reason to believe infectious diseases may have been spread as a consequence of the class?

Dr. Messer: In the 13 years that I have been involved in running puppy classes for thousands of dogs, and the 4 years of clinical practice running puppy parenting sessions for hundreds of dogs, I have not known of any incidents of disease spread between puppies that could have been associated with their attendance. North American puppy class instructors are very concerned about the risk (albeit small) of disease transmission in class, both for the sake of the health of the puppies and out of fear of losing the trust of the veterinary community if ever there were a Parvo virus outbreak in class. However, I have not heard of actual cases of exposure/transmission of disease in puppy classes, despite the steady trend towards decreasing the minimum age and vaccination requirements over the past 15 years.

Puppy class in itself is a very progressive arm of the dog-training field, and most genuine puppy classes—classes that

emphasize socialization with off-leash play and are restricted to puppies under 18 weeks of age—tend to be run by quite conscientious and well-informed members of the dog training community. Given this, I suspect that screening for the main criteria of a genuine puppy class (as opposed to regular obedience classes that also accept puppies) helps to screen for implementation of the basic preventive measures against disease transmission.

Dr. Dunbar: We have had occasional puppies become sick with Parvo virus while enrolled in our classes, but we have never had a Parvo virus "outbreak," where the infections has spread among puppies in the same class. This is over 27 years of classes, despite there being occasional Parvo virus outbreaks in the community. We have had kennel cough outbreaks in class, but always at a time when there has been a kennel cough outbreak in the community.

Dr. Seksel: I have never seen any physical disease spread due to attendance at Puppy Preschool®. That does not mean that the occasional puppy may not have a bout of diarrhea or fleas, but these are unrelated to attendance at any of the classes I have conducted.

Dr. Griffin: As I have mentioned, I have never seen a puppy develop illness related to spread of disease in puppy class.

Dr. Meyer, moderator: Thank you participants. Your experience and insight is of great benefit to veterinarians and puppy owners who wish to more thoroughly investigate this topic. Clearly, the preponderance of evidence and practical experience support the early socialization of puppies through properly run puppy classes. As with every choice we make, the risks and the benefits must be considered. The benefits of early puppy socialization far outweigh the risks of infectious disease spread as long as basic precautionary techniques are used. •