

Puppy Pack

- *a supplement, concise, and summarized version* -

We welcome your new puppy to Mill Brook Animal Clinic! Thank you for allowing us to care for your pet in the best way possible. We are a full-service clinic committed to providing excellent medical care for our patients.

Please contact our office any time during the hours listed below to set up an appointment with the doctor or to ask our staff any questions you may have. At other times when you call with emergencies, you will be referred to other facilities that are open 24 hours a day. For your convenience, we have enclosed directions to four such emergency facilities.

We believe that great veterinary care begins with attention to preventative care and great nutrition. This handout includes important and relevant information to help you keep your pup lead a long, healthy life.

Remember, as always, our staff welcomes any questions you may have!

Sincerely,

Everyone at Mill Brook Animal Clinic

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All The Visits Of The First Year And A Half

Depending on the age of your pup at the time they first present to the clinic, your puppy will need a health check with some core vaccines. This is known as “the first visit” and typically follows the plan listed below. The visit is followed by a series of visits for the next months until around a year and a half. The boxes below list every aspect we touch on throughout the first 18 months of your puppy’s life!

Visit 1, typically age 7-8-9 weeks, but may vary	
Procedure items: <ul style="list-style-type: none"> ● Comprehensive Wellness Exam ● Intestinal Parasite Screening ● Routine Deworming ● Necessary vaccinations* 	We recommend reviewing the following around the time of this visit: <ul style="list-style-type: none"> ● Pet Insurance ● Behavior training ● Flea prevention ● Tick prevention ● Intestinal parasite prevention
Visit 2, typically age 11-12-13 weeks, but may vary	
Procedure items: <ul style="list-style-type: none"> ● Comprehensive Wellness Exam ● Intestinal Parasite Screening ● Routine Deworming if needed ● Necessary vaccinations* ● Rabies vaccination if 12 weeks or older 	We recommend reviewing the following around the time of this visit: <ul style="list-style-type: none"> ● Nutrition ● Internal parasite prevention refresher ● Flea prevention refresher ● Tick prevention refresher ● Behavior training follow-up ● Review pet insurance status
Visit 3, typically age 15-16-17 weeks, but may vary	
Procedure items: <ul style="list-style-type: none"> ● Comprehensive Wellness Exam ● Intestinal Parasite Screening and Deworming if previously positive ● Necessary vaccinations* 	We recommend reviewing the following around the time of this visit: <ul style="list-style-type: none"> ● Nutrition follow-up ● Parasite prevention refresher ● Behavior training follow-up
Visit 4, typically age 19-20-21 weeks, but may vary	
Procedure items: <ul style="list-style-type: none"> ● Comprehensive Wellness Exam ● Critical Dental Evaluation ● Potential preoperative lab work ● Booster any necessary vaccinations* 	We recommend reviewing the following around the time of this visit: <ul style="list-style-type: none"> ● Dental Homecare ● Health and behavioral benefits ● Spay/neuter discussion and details surrounding this ● Pet Microchip Identification ● Nutrition and behavior refresher

Visit 5 = Spay/Neuter visit, age varies: 6-12 months, large breed male dog: 12-18 months**	
<p>Procedure items:</p> <ul style="list-style-type: none"> ● Presurgical examination ● Spay / Neuter procedure ● Microchip if elected ● Booster any delayed vaccinations 	<p>We recommend reviewing the following around the time of this visit:</p> <ul style="list-style-type: none"> ● Post-operative care including discharge handout
Visit 6 = Juvenile Wellness Visit, typically age 9 months	
<p>Procedure items:</p> <ul style="list-style-type: none"> ● Comprehensive wellness exam ● Orthopedic exam ● 4DX test, includes: <ul style="list-style-type: none"> ○ Heartworm test ○ Lyme test ○ Anaplasma and Ehrlichia test 	<p>We recommend reviewing the following around the time of this visit:</p> <ul style="list-style-type: none"> ● Review nutrition ● Discuss behavior training status: <ul style="list-style-type: none"> ○ Housebreaking ○ obedience ○ socialization
Visit 7 = First Adult Wellness Exam (a.k.a. "First Annual", typically age 15 months	
<p>Procedure items:</p> <ul style="list-style-type: none"> ● Comprehensive wellness exam ● Vaccines as necessary ● Intestinal parasite screening 	<p>Discussion topics:</p> <ul style="list-style-type: none"> ● Future care of your (now adult) dog!

*see vaccination section for details

Spaying/Neutering

**Most dogs are recommended spaying/neutering is recommended at 6-12 months except for large breed male dogs, which are advised to hold off until older due to the prolonged period of bone maturation they undergo. Each patient will be evaluated on an individual basis, and the veterinarian will give you recommendations based on your pet's needs, lifestyle, and family history. The American Animal Hospital Association recommendations can be found here: <https://www.aaha.org/aaha-guidelines/life-stage-canine-2019/spay-and-neuter-timing/>

Vaccinations

There are many vaccinations available to dogs, and it can be daunting navigating through all the different recommendations. This section aims to explain the different canine vaccines, what they protect against, when to give them and who should have them. The main vaccinations recommended at Mill Brook Animal Clinic have in the table below been listed with a concise version of the information.

Vaccine	Diseases covered	When is it given
<u>DAPP (Distemper, Adenovirus, Parvovirus, and Parainfluenza)</u>	<p>Distemper - a highly contagious and potentially deadly viral disease seen worldwide.</p> <p>Adenovirus (type 2) - Also known as Canine Infectious Hepatitis. Causes mild disease, including fever to more serious morbidity including death. The disease can be found worldwide.</p> <p>Parvovirus - a highly contagious and deadly disease found in the environment, spread by infected individuals. The virus can survive on the ground for over 12 months and be picked up by any unvaccinated puppy.</p> <p>Parainfluenza - A virus causing viral tracheobronchitis (windpipe infection or kennel cough) in dogs. The disease is rarely deadly, but the clinical signs can be persistent for long periods.</p>	DAPP is given every 3-4 weeks from 7 or 8 weeks of age until we are 16 weeks or older. After this, it is given once more 12 months later and then every three years for life.
<u>Bordetella bronchiseptica (Kennel Cough)</u>	A bacteria causing bacterial tracheobronchitis (windpipe infection or kennel cough) in dogs. The disease is rarely deadly, but the clinical signs can be persistent for long periods. In puppies, bordetella can cause pneumonia.	A single initial dose is required beginning as early as 8 wk of age. Then given annually or every 6 months, depending on the requirements of boarding facilities.
<u>Rabies</u>	Rabies disease is caused by the rabies virus. A 100% lethal disease that can affect any mammal, including humans.	Rabies vaccination is a legal requirement in the entire United States. The vaccine is given once between 12 and 26 weeks of age and is repeated once after 12 months and then every three years for life.
<u>Borrelia burgdorferi (Lyme)</u>	A tick-borne disease resulting in neurologic, renal, cardiac, and joint disease. The injuries from infection with Lyme are almost always irreversible.	Two initial doses, 2 to 4 wk apart, may be administered as early as 8 or 9 wk of age. Then given annually after that.
<u>Leptospirosis (Lepto)</u>	A potentially deadly multisystemic disease resulting in liver and kidney failure and bleeding disorders. This disease can spread to humans.	Two initial doses, 2 to 4 weeks apart, are required; the initial dose may be administered as early as 8 to 9 weeks. Then given annually after that.
<u>Canine Influenza Vaccine (CIV)</u>	The canine version of the "flu." Typically covering the H3N2 and H3N8 strains.	Two initial doses, 2 to 4 wk apart, are required. The first dose may be administered to dogs 6 to 8 wk of age or older. Then annually after that.

An example of when a puppy receives their first year of vaccines is displayed here:							
Age in weeks --->	8	10	12	14	16	18	20
DAPP	✓		✓		✓		
Bordetella (Kennel Cough)	✓						
Rabies			✓				
Borrelia (Lyme)			✓		✓		
Leptospirosis					✓		✓
CIV (Canine Influenza)		✓		✓			

Your pet's vaccination regimen may differ slightly. Puppies may present later than eight weeks of age for their first visit, and for them, we amend the plan to ensure the pup is covered adequately against the appropriate diseases. Most vaccines are repeated one year later.

Which vaccines do I choose?

This can be a difficult question, but the recommendations are based on the risk of exposure, so when in doubt, get protected! Our technicians will, in liaison with the doctors, advocate for the vaccines necessary based on the exposure your puppy will have.

As a rule:

- Every dog is at risk for Distemper and Parvovirus, so every dog should receive the DAPP vaccine
- Rabies vaccination is legally required, and all dogs must receive this vaccine
- Bordetella (Kennel Cough) is present worldwide, and all dogs who are in areas or in buildings in proximity of other dogs are at risk and should have this vaccine.
- Borrelia (Lyme) is endemically present in the entire of New England, and all dogs should be protected
- Leptospirosis is on the rise, and all dogs walking outdoors, even on private and fenced-off lands, are at risk
- CIV (Canine Influenza) is recommended for dogs who attend boarding, daycare, and other situations where socialization with other dogs can happen.

To conclude:

- You *must* vaccinate against Distemper/Parvo and Rabies.
- You *should* vaccinate against Bordetella, Lepto, and Lyme
- You *can* vaccinate against Canine Influenza Virus, and this is recommended if your dog socializes a lot or stays in boarding facilities.

We are more than happy to discuss any questions you may have!

Internal Parasites

Puppies should be dewormed routinely, as well as have their stools tested regularly, even as adults. Worms, or helminths as they are scientifically called, exist everywhere and a puppy living on a fenced property is still at risk of being exposed. There are also other parasites that are not worms, such as Giardia. The main worms seen in puppies are roundworms and whipworms. Roundworms can be transmitted through the milk when nursing, and the life cycle of the worm is anywhere from 4-8 weeks, so regular deworming is highly recommended.

External Parasites

The ectoparasites consist of fleas, mites, ticks, and lice. Of these, the flea and the tick is most commonly seen. Puppies are often challenged by fleas, but some may not be affected. Fleas and ticks can have deadly consequences, so protection is important.



Monthly preventatives

We will also introduce two monthly preventatives for your puppy:

- **Heartworm preventative**
 - Reduces the risk of heartworm infection significantly
 - Protects against other intestinal worms too
 - At Mill Brook Animal Clinic we recommend using Heartgard or Simparica Trio Tablets since this product also covers roundworms, whipworms, and hookworms in addition to protecting against heartworm.
- **Tick and Flea prevention**
 - The ideal preventative should be easy to administer (like a flavored chew)
 - Some of the products aid in reducing the risk of Lyme infection
 - At Mill Brook Animal Clinic, we recommend using Nexgard for tick and flea prevention.

Monthly Flea and Tick Preventatives

Our selection of recommended external and internal parasite control products are based on clinical evidence, safety, and ease of use. Other acceptable options exist for your dog and we will be happy to discuss these with you.

Options at Mill Brook Animal Clinic:

Heartgard: protects against heartworm and most intestinal worms. Given monthly.

+

Nexgard: protects against fleas and ticks. Given monthly.

Simparica Trio: protects against fleas, ticks, heartworms, most intestinal worms. Given monthly.

4DX test for vector-borne diseases

The 4DX test is a test against four common vector-borne diseases:

- Heartworm infection
- Lyme disease
- Ehrlichiosis
- Anaplasma



All diseases can be deadly and every dog should be screened at least annually. The test is done in our in-house laboratory and requires three drops of blood which are analyzed in a well (picture).

The diseases above are all vector-borne, meaning they are carried by either a tick or a mosquito. 4DX testing is a standard component of the annual check-up of a patient.

Heartworm



[Heartworms](#) are filarial worms that are transmitted by mosquitoes. The infection causes disease to the heart, lungs, and blood vessels. The disease can be fatal, and the treatment of infection takes several months. The best treatment is prevention with monthly heartworm prevention. All dogs should be tested for heartworm at least once a year.

Lyme



[Lyme infection](#), medically known as borreliosis, can affect both humans and dogs. The disease is spread by ticks and New England is a hotbed for this infection. Every dog should be tested for this infection once a year. The best prevention is proper tick control and Lyme vaccination.

Ehrlichiosis



[Ehrlichiosis](#), also known as canine rickettsiosis, canine hemorrhagic fever, canine typhus, tracker dog disease, and tropical canine pancytopenia is another tick-borne disease. The infection causes fever, bleeding diathesis, skin edema, nose, and eye discharge. The disease can be subclinical, meaning there are no clinical signs. It is important to screen for this disease at least once a year.

Anaplasmosis



[Anaplasmosis](#) is a tick-borne disease responsible for anemia, white blood cell destruction, lameness, fever, and bleeding abnormalities. The disease is very often co-transmitted with Lyme disease. Once-a-year screening is necessary to treat subclinical cases.

Dental Health

All dogs get plaque build-up on their teeth - there is no exception. Plaque on its own is not very dangerous to the otherwise healthy dog, provided is a low-grade amount. Along with plaque comes gingivitis, which is the inflammatory response to the bacteria and organic materials the plaque is composed of. Gingivitis leads to periodontitis, tooth loss, and possible bone infection. Dental disease is arguably the most commonly diagnosed illness in dogs and cats.



Why worry about dental disease - isn't it "normal"?

Oral and dental diseases such as heavy plaque, gingivitis, periodontitis, and stomatitis put your dog at increased risk of heart infection (endocarditis), bone infection, kidney problems, liver problems, anorexia, and other conditions. Some cases develop oronasal fistulas and tooth root abscesses which can lead to blindness and sepsis. Dental disease is extremely painful and dogs are very good at hiding this pain from their owners.

What dental products are safe?

Brushing your dog's teeth at home can make a significant difference to your dog's health and well-being. There are several home care options to choose from, and picking one may seem like a daunting task given the options found in pet stores and online. We recommend products approved by the [Veterinary Oral Health Council](#). Their list is complete and suggests the best products to help maintain good oral health in your dog.

The take-home message is that maintaining oral health is a long-term job of prevention by teeth brushing and oral rinses. Chews may play a helping role but are inferior in comparison to brushing your dog's teeth.

How to brush my dog's teeth?

The earlier you start, the easier it is. Puppies will learn that brushing is a short affair and can often be a nice socialization moment. Our technicians are happy to demonstrate tooth brushing as well as introduce the products we have available.

These videos demonstrate brushing techniques:

- [How to Brush Your Dog's Teeth \(Canine Dental\) - VetVid](#)
- [How to brush your dog's teeth by White Cross Vets](#)
- [Instructional video by Virbac on brushing canine teeth](#)

At Mill Brook Animal Clinic, we have the recommended toothbrushes and dog safe toothpaste seen in these clips as well as healthy dental chews which may also be used.

Feeding Guide

This is intended as a general guide. Always refer to your veterinary care professional for advice as needed.

What to feed

With hundreds of diets available on the market, it has become increasingly difficult to recommend a specific diet for our patients. As a general rule, feed a diet that is AAFCO-approved and right for your pet's life stage. [Visit their website for more information.](#)

How often and how much to feed

The younger the pup, the more frequent it should be fed. Puppies up to 12 months should be fed at least 3 times a day. After this, most dogs are fed twice daily.

The standard formula used to calculate food requirements is based on body weight, life stage, and lifestyle. Calculating food needs is a little complicated and not linear, i.e. a 40lb dog doesn't just eat twice as much as a 20lb dog. The formula yields the caloric need (daily kcal) and should be divided over two or more meals. Using the table below, you can see that a 3-month-old puppy weighing 10lbs should be getting 654 kcal per day.

Puppy <4 months		Puppy 4-12mo		Intact adult		Fixed adult		Inactive / obese prone	
weight in lbs	kcal need	weight in lbs	kcal need	weight in lbs	kcal need	weight in lbs	kcal need	weight in lbs	kcal need
5	389	5	259	5	233	5	207	5	168
7.5	527	7.5	351	7.5	316	7.5	273	7.5	221
10	654	10	436	10	392	10	349	10	283
12.5	773	12.5	515	15	532	12.5	412	12.5	335
15	886	15	591	20	660	15	473	15	384
20	1099	20	733	25	780	20	586	20	476
25	1300	25	866	30	894	25	693	25	563
30	1490	30	993	40	1109	30	795	30	646
35	1673	35	1115	50	1312	35	892	35	725
40	1849	40	1233	60	1504	40	986	40	801
50	2186	50	1457	70	1688	70	1500	70	1219
		60	1671	80	1866	80	1659	80	1348
		70	1876	90	2038	90	1812	90	1472
		80	2073	100	2206	100	1961	100	1593
		90	2265	120	2529	120	2248	120	1826
		100	2451	150	2990	150	2657	150	2159
				175	3356	175	2983	175	2424
				200	3710	200	3297	200	2679

Your bag of food may tell you an amount based on weight. However, that is not always accurate. Instead, you can calculate daily requirements by kcal/cup. This gives you the number of cups to feed per 24hrs.

E.g.: If your pet's daily kcal need is 1,100 and the label says 465 kcal/cup, then $1,100/465 = 2.3$ cups. Split this over two or three meals, depending on the life stage.

Financial Aid Initiatives

It is advisable to consider the following options:

Pet Insurance (IS IT WORTH IT?)

Pet insurance is a policy purchased by the owner of a pet that will lessen the overall costs if expensive medical bills are incurred by that pet. The key to pet insurance is to enroll early in life to limit the likelihood of any pre-existing exclusions on the policy. There is a variety of pet insurance options out there and it is worthwhile looking at the options carefully before selecting. Feel free to ask our support staff any questions you may have about pet insurance.

Care Credit (Helps spread the cost)

[Care Credit](#) is a program designed to help you spread the cost of unexpected veterinary bills. You can apply for care credit pre-approval online already now and have it should you need it in the future. Speak to us about this if you are interested!

Clinical signs warranting your pet be seen by a veterinarian

Should your pup/dog experience any of the following signs, please contact a veterinarian:

<ul style="list-style-type: none">• Vomiting• Diarrhea• Unintended weight loss• Appetite change• Lethargy, hyperactivity or restlessness• Limping• Sudden inability to move back legs• Showing any sign of pain when touched• Appearing disoriented• Seizures/fits• Any loss of consciousness• Coughing• Hair loss	<ul style="list-style-type: none">• Labored or difficult breathing• Any blue, purple or pale hue to tongue or gums• Sudden collapse• Excessive drooling• Straining to urinate• Crying or discomfort when urinating• Change in urination (smell, frequency, location, color, amount)• Bloated abdomen• Excessive sneezing• Nose bleeds or other bleeds• Any bruising• Unusual odor including bad breath• Runny eyes or nose• Squinting
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Emergency and Urgent Care for Pets in Our Area

If you have any questions after hours the night of the surgery, please contact one of the following 24-hour Emergency Services:

- Massachusetts Veterinary Referral Hospital (MVRH) on (781) 932-5802.
- Blue Pearl Waltham on (781) 684-8387
- Blue Pearl Charlestown on (617) 284-9777

Dog Training

Correct training of your dog is of paramount importance. There is a lot of literature available, but nothing compares to instructed sessions by a certified dog trainer. Since the pandemic, a lot of training facilities have closed and reopened. Please inquire with our front desk or your [local dog owner group](#) for up-to-date information.

Another good resource is the Humane Society's [article on Dog Training](#)

Useful Handouts - we provide handouts on the following topics:

- [Top 5 tips for a better behaved and healthier dog](#)
- [Puppy mouthing, nipping, and biting - bite inhibition and teaching off](#)
- [Socialization tips for puppy owners](#)
- [Leadership and control](#)
- [Canine housetraining](#)
- [Guide to crate/confinement training](#)
- [Dealing with problem behaviors](#)
- [Destructive chewing and digging](#)
- [Barking - training quiet](#)
- [Puppy socialization checklist - 100 new experiences in 100 days](#)
- [Train your dog to walk on a lead](#)
- [How to brush your dog's teeth](#)
- [The Puppy's Rule of 12 - a useful guide on puppy husbandry and training](#)
- [Poison proof your pet - a guide to poison-proofing your home](#)

My Dog's Checklist

Vaccines

Illness	At risk?		Covered?		Comment/next due?
	Y	N	Y	N	
DAPP (Distemper-Parvo)					
Bordetella (Kennel Cough)					
Rabies					
Leptospirosis					
Borreliosis (Lyme)					
CIV (Influenza)					

Internal Parasites

Parasite	At risk?		Covered?		Comment/next due?
	Y	N	Y	N	
Round-, Hook-, Whip- and Heartworm					
Tapeworm					

External Parasites

Parasite	At risk?		Covered?		Comment/next due?
	Y	N	Y	N	
Ticks					
Fleas					

Vaccine checker - technician can help you fill this in when we plan the vaccination course

Age in weeks --->	8	10	12	14	16	18	20
DAPP							
Bordetella (Kennel Cough)							
Rabies							
Borrelia (Lyme)							
Leptospirosis							
CIV (Canine Influenza)							