

INTRODUCTION

This manual has been developed as a study guide for the Florida State Fair Skilathon, which is part of the Champion Youth Program. The topic for this year's Skilathon is **Health Care Management**.

The Florida State Fair recognizes that agricultural education instructors, 4H agents, parents, and leaders provide the traditional and logical instructional link between youth, their livestock projects, and current trends in the animal agriculture industry. **PLEASE NOTE:** This manual is provided as a **study guide** for the Skilathon competition and should be used as an additional aid to ongoing educational programs.

Sections are labeled **Junior, Intermediate & Senior, Intermediate & Senior, or Senior** to help exhibitors and educators identify which materials are required for their age level.

Juniors

(age 8-10 as of September 1, 2021)

Internal & external body parts
Nails & nail trimming
Ear Cleaning (including labeling diagram)
Dehydration and Heat Exhaustion

Intermediates

(age 11-13 as of September 1, 2021)

all of the above plus...
Health Instruments & medications
How to give an Injection & injection sites
Common Internal Worms and Symptoms
Gum disease
How to Administer Common Medications

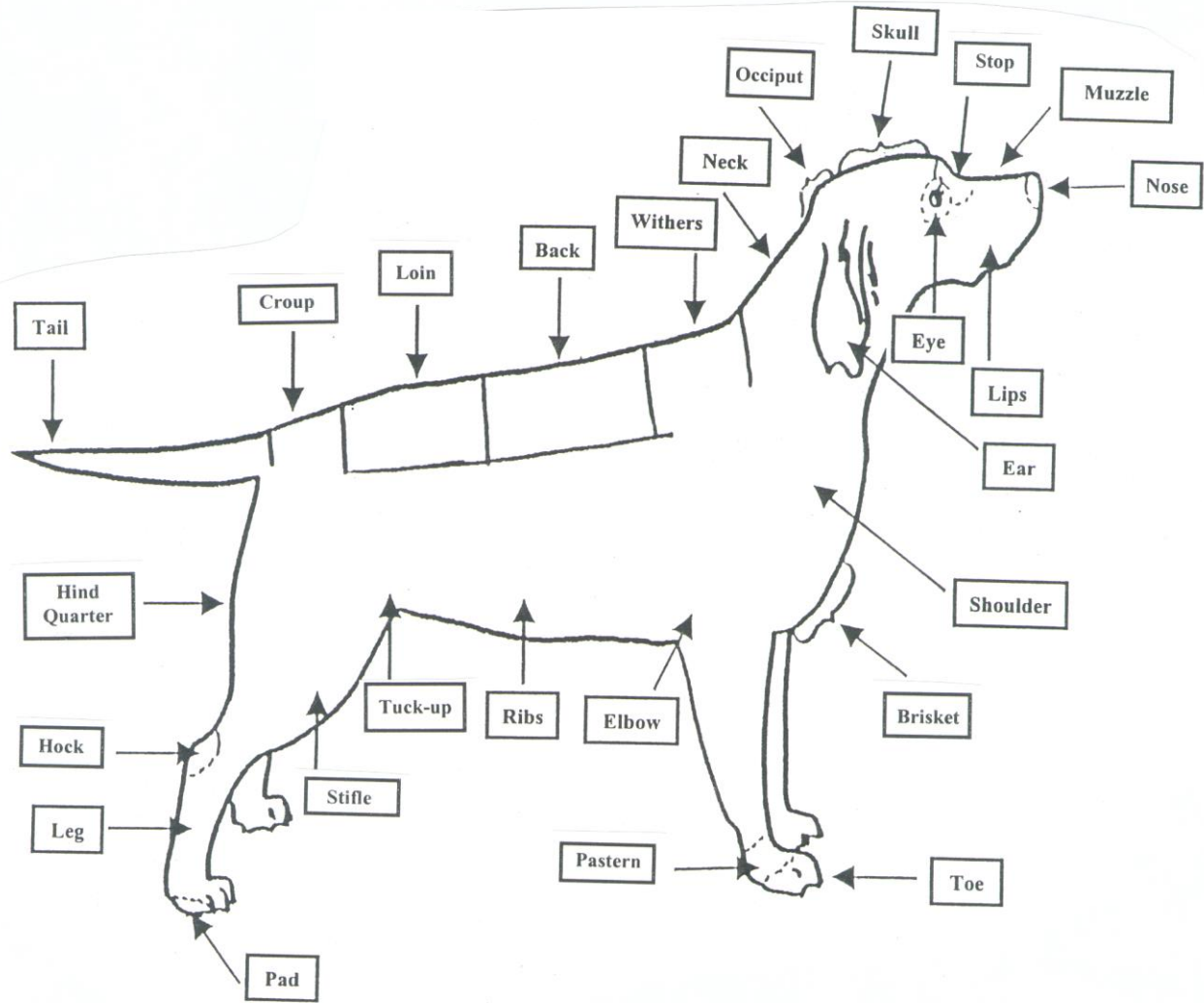
Seniors

(age 14 and over as of September 1, 2021)

all of the above plus....
Proper Vaccinations for dogs
Common Canine Diseases and Vaccines
Medication label identification
Medical Calculations
Hip dysplasia

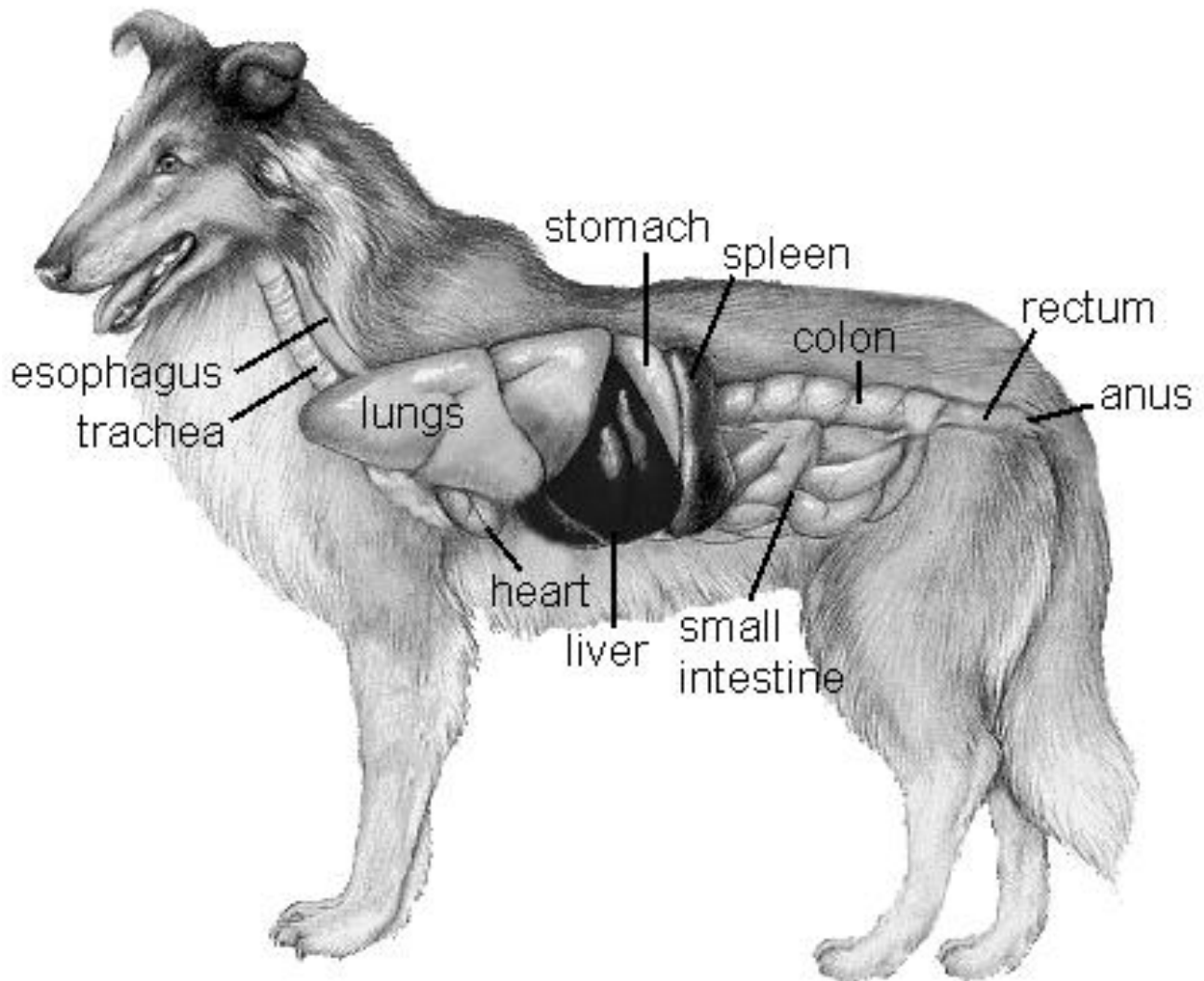
Study well and GOOD LUCK

Dog External Body Parts



<https://www.chegg.com/flashcards/external-dog-anatomy-ohio-4h-65a729bc-d7b5-4aa3-8193-8d1f4e14193f/deck>

Dog Internal Body Parts

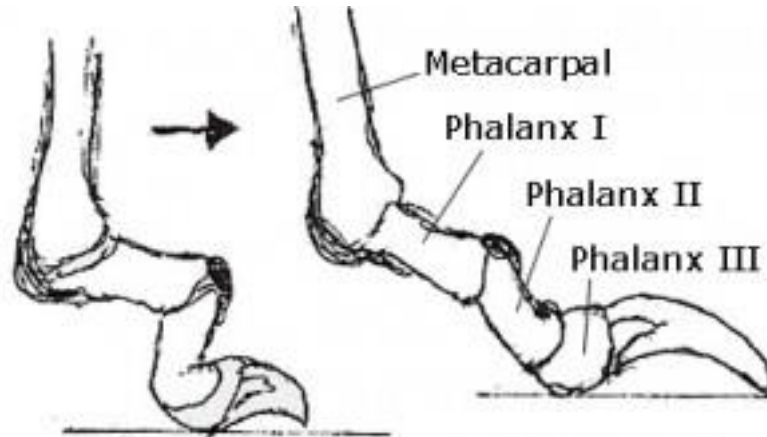


* Notice that the kidneys are not labeled on this picture. The kidneys are tucked up close to the liver toward the spine. Image modified from Hill's Pet Nutrition, Atlas of Veterinary Clinical Anatomy.

https://dogs.lovetoknow.com/wiki/Canine_Anatomy_Illustrations

Nail Trimming

The nails of a dog should be trimmed regularly to prevent ingrown nails, traumatic nail fractures, impaired walking from overgrown nails, broken toes, or nails growing into the pad of the foot. Most dogs need their toenails trimmed every two to three weeks depending on the speed of their growth and the level of activity of the dog. Toenails that are left long can cause the bones in the dog's foot to change position and placement. The picture below shows how the angles of the bones change due to a long toenail.



Various types of nail trimmers are available. The owner should choose the type they are most comfortable with. The nail contains a blood vessel called the "quick" (also spelled kwik) that will bleed if a nail is cut too short. The quick appears as a pink line running through the nail and ends at the edge of the nail. It usually does not go all the way to the tip, unless the nail has just been cut. Cutting the quick can be painful for the pet and may make them refuse or struggle with future nail trims. In the event of cutting the "quick," a cauterizing agent should be applied such as Quick Stop Powder. The nail should be cut cleanly and any frayed edges should be filed with a nail file or dremel. The nail trimmer should be placed within a few millimeters of the end of the quick and cut with a swift, smooth motion. In the case of a pet with a black nail, when the quick is not visible, a small amount of nail should be gradually trimmed until a clearer or lighter color appears in the cross-section. This lighter colored area in the cross-section indicates the end of the quick. The remaining nails can be trimmed by using the first nail as a reference as to how much to trim. An alternative to cutting the nail is to "dremel" or file the nail until the quick is several millimeters from the end of the nail.

There are many websites that have pictures demonstrating nail trimming for your dog. Here is one that is recommended: https://dogs.lovetoknow.com/wiki/Trimming_Dog_Nails

Types of nail trimmers



Scissor nail trimmer

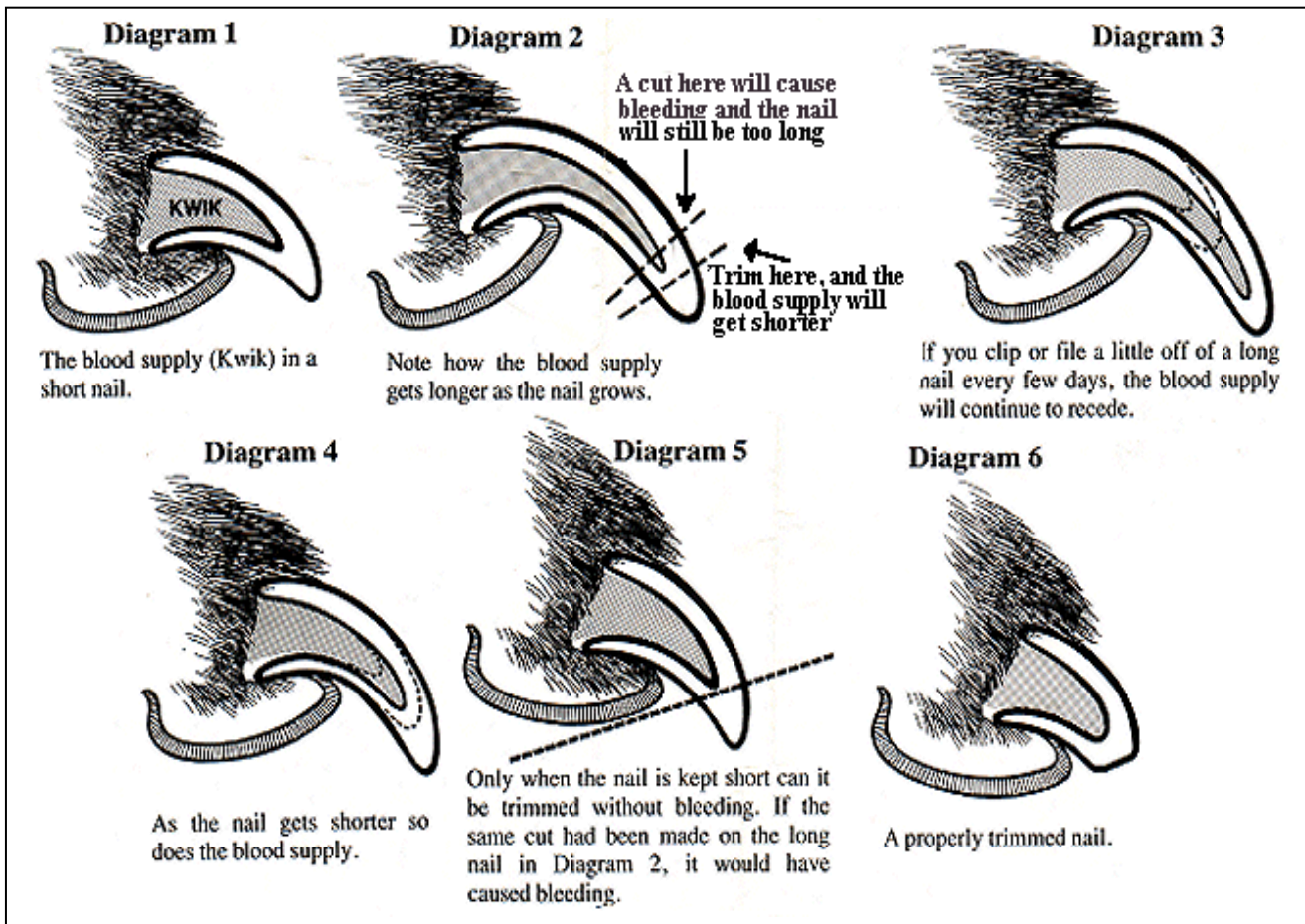


Guillotine nail-trimmer



dremel

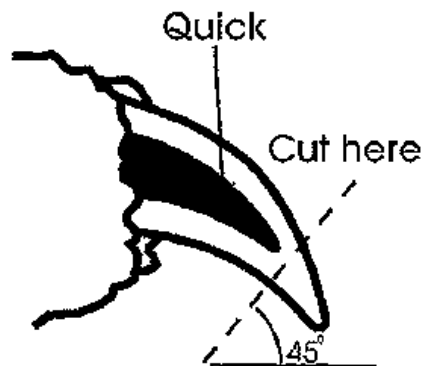
Diagram of dog's toenail and how to trim the toenail



Please note: alternate spelling for "quick" can be "kwik."

The above picture found at: <https://www.vetbabble.com/dogs/grooming-dogs/trimming-dogs-nails/>

Nail cross section



The above picture found at: http://www.bamboopet.com/media/pdf/nc_english_1203.pdf

Dehydration and Heat Exhaustion

Owning dogs and living in Florida means, for more than six months of the year, we must be careful with our dogs and the outside temperature. Dogs, like people, are vulnerable to dehydration and heat stroke. Dehydration is caused by a loss of water in the body. This happens when dogs lose water from their body faster than they are able to take it into their body.

Dogs depend on panting to help keep them cool. When it is very hot and humid, panting may not be enough to cool them off. Pets.webmd.com lists several common situations that can trigger dehydration and or heat exhaustion:

- being left in a car in hot weather
- exercising strenuously in hot, humid weather
- being a brachycephalic breed, especially a bulldog, pug, or pekingese
- suffering from a heart or lung disease that interferes with efficient breathing
- being muzzled while put under a hair dryer
- suffering from a high fever or seizures
- being confined on concrete or asphalt surfaces
- being confined without shade and fresh water in hot weather
- having a history of heat stroke

Severe or excessive vomiting can cause dehydration. This does not just mean vomiting once or twice, but vomiting many times and in large amounts. When a dog vomits, it is not just losing fluids, but also valuable electrolytes. Symptoms of mild dehydration include dry, sticky gums, and thicker saliva. More severe dehydration symptoms include “tenting,” severe panting, eyes sunken, the dog collapsing or signs of shock. Tenting is when the skin on the neck is pulled up, but does not fall back into place quickly. Symptoms of shock include heavy panting, rapid heart rate, and bright red gums and tongue.

Treatment for mild dehydration can be as simple as giving the dog water a little at a time and keeping the dog in a cool place. In cases of mild dehydration, dogs can be given electrolytes in their water. If the dog is not vomiting, an electrolyte solution such as Ringer’s lactate, Pedialyte, or Gatorade can be given to the dog. If the dog is vomiting or skin is “tenting,” a veterinarian needs to be consulted immediately.

Strenuous exercising in hot, humid weather, especially in the sun and not the shade, can bring on heat exhaustion. Some breeds are more susceptible to heat stroke because the nose is short and “pushed in.” This is known as “brachycephalic.” Heat stroke or exhaustion is more severe and should be treated immediately by a veterinarian. If possible, it is best to start bringing down the dog’s body temperature by running cool water over the dog or placing cool packs in the groin region of the dog. If the dog starts having seizures, take it immediately to a veterinarian for treatment.

Ear Cleaning Procedure

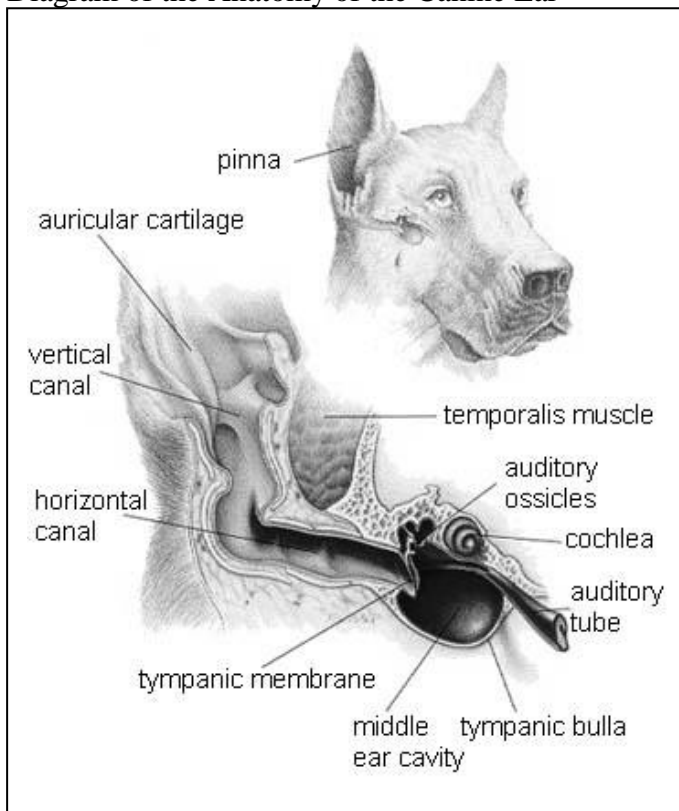
Ear cleaning is an important part of maintaining a dog's health and should be done regularly. The ear cleaning solution should include a drying solution so that the ear does not develop an infection from excess moisture remaining in the canal.

The proper procedure for cleaning should be used to prevent injury or infection and maintain proper health.

1. Put on a pair of latex or rubber exam gloves.
2. Gently tip the head so the ear is angled slightly up (toward the ceiling), grasp the pinna, and place the solution into the ear canal.
3. Massage the base of the ear to distribute the cleaning solution and loosen any debris.
4. Use gauze pads to remove excess cleaning solution and debris.
5. Allow pet to shake its head to loosen more debris.
6. Use gauze pads to remove excess cleaning solution and debris.
7. Administer more solution into the ear canal.
8. Massage the base of the ear to distribute the cleaning solution and loosen any debris.
9. Use gauze to remove excess cleaning solution and debris.
10. Allow pet to shake its head to loosen more debris.
11. Use gauze for the external ear canal and interior of the pinna only.
12. Dry the ear canal with gauze pad to wipe out one last time.
13. Apply any necessary medication; message the ear canal to distribute the medication.

*Cotton swabs are not recommended because if the dog moves suddenly the tip may damage the inner ear.

Diagram of the Anatomy of the Canine Ear



Juniors must be able to recognize and label:

- 1) pinna (outer ear also called the ear leather or flap)
- 2) vertical canal
- 3) horizontal canal
- 4) middle ear cavity

Intermediate and Seniors must be able to recognize and label any of the diagram.

https://www.hillsvet.com/content/dam/cp-sites/hills/hills-vet/en_us/atlas/HillsAtlasOfClinicalAnatomy-secured.pdf

The pictures in this section are reprinted with permission by the copyright owner, Hill's Pet Nutrition, from the Atlas of Veterinary Clinical Anatomy.

Health Instruments

Instruments may be needed in order to maintain a pet's health and monitor them if they are ill. Being familiar with these instruments and knowing how to use them correctly can be beneficial to a pet owner and help prevent potential problems.

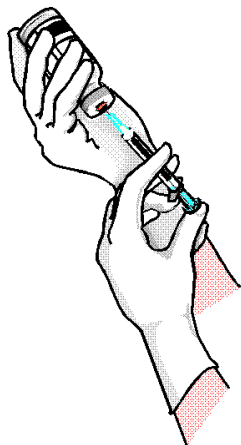
Instrument	Description of Use
Muzzle	Restraint device to prevent a pet from biting.
Nail Trimmers	Instrument to cut excess length from the nail.
Rectal Thermometer	Instrument to determine the core body temperature.
Stethoscope	Instrument to monitor the chest, specifically the heart and lungs.
Toothbrush	Instrument to remove plaque and disinfect teeth and gums.

Medications

Description of Use

Ear Cleaner	Solution to loosen and remove debris from the ear canal. (medication to be dispensed by veterinarian).
Silver Nitrate	Powder to stop a nail from bleeding if the "quick" is cut.

How to Give an Injection



Vaccines and many medications must be given by injection. When learning to give an injection, some owners may find it easier to practice on an orange or banana because fruit cannot feel pain. The discomfort that an animal getting a shot feels is similar to the discomfort that you feel when you get shots from your doctor. When giving an injection to an orange or banana, we must remember that it is somewhat different than giving an injection to a live animal. The live animal may move around and the skin may be harder to get the needle through.

There are two main types of injections - *subcutaneous* (Sub-Q) or *intramuscular* (I.M.). The subcutaneous injection is given just under the skin and the intramuscular injection is given within the muscle tissue. On your orange, the peel is comparable to the skin on an animal, the orange sections are comparable to the muscles, and the area in between these two is comparable to the subcutaneous space.

To draw up an injection, wipe the vial top (rubber stopper) with an alcohol moistened cotton ball to disinfect it. Make certain the needle is securely attached to the syringe by inserting the plunger portion of the syringe into the open end of the syringe and twisting the needle onto the syringe tip. Remove the cap, but do not touch the needle. Draw the plunger back to fill the syringe with an amount of air equal to the amount of vaccine you want to inject. Push the needle (with syringe) through the rubber stopper of vaccine and inject air - this prevents a vacuum from forming as you draw the vaccine out. Turn the vaccine vial (with needle/syringe still inserted) upside down, and draw out the desired amount of vaccine. Turn vial right-side up, remove needle/syringe, and cap needle until ready to use.

To give a subcutaneous injection:

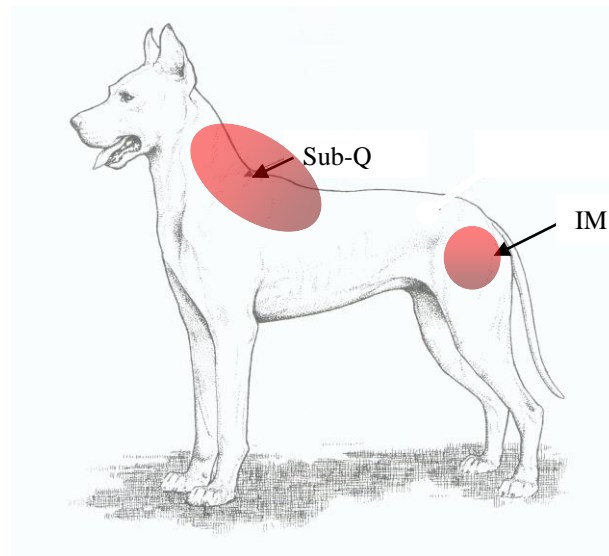
Place the needle just under the skin by picking up a fold of skin behind the dog's head, halfway between its shoulder blades. Gently lift the skin until it is raised in an inverted "v" (also described as a "tent" of skin). Insert the needle ½ way and push the plunger to expel the injection into the animal.

To give an intramuscular injection:

The needle must penetrate the muscle. Draw up the material as described above. Injections are given in the lateral region of the thigh. Gently insert the needle into the muscle, pull back slightly to make sure you are not in a vein, and then slowly push on the plunger of the syringe. When the syringe is empty, remove the needle and syringe from the animal, making sure that the needle is still attached and replace the cap to prevent injury. You may gently rub the area to comfort the dog.

Always use sterile equipment as dirty equipment could cause infections at the injection site. Remember to dispose of all needles and biological wastes properly. It is important that you consult your veterinarian before giving any shots and always READ THE LABEL and FOLLOW INSTRUCTIONS. Proper animal identification and record keeping are vital components of your project. Remember to always WRITE IT DOWN.

Dog Injection Sites



Common Internal Parasites and Symptoms

Dogs, especially puppies, are susceptible to internal parasites. Parasites are small organisms that live within an animal's body and feed off of the host. The most common parasites are heartworms (which live in the heart and bloodstream) and intestinal parasites (which live within the digestive tract). Medications are available to treat a pet if they become infected. There are monthly preventatives that can be given to ensure a dog does not become infected. The way an animal becomes infested is different from each type of parasite and is called the route of infection. In order to check for these parasites a veterinarian must take a blood or stool sample and examine it in a laboratory. A fecal sample will contain the eggs of the intestinal parasites and a blood sample would have baby heartworms. If not treated, a dog can become very ill and possibly die. The time from which an animal becomes infected to the time that the parasites start reproducing is called the pre-patent period. The laboratory results will only be positive after the pre-patent period. Therefore, it is possible for a dog to be showing symptoms of a parasite without testing positive. Common symptoms related to these parasites are coughing, vomiting, diarrhea, and anemia.

Canine Internal Parasites

Internal Parasite	Route of Infection	Pre-patent Period
Heartworms	Mosquito bite	6 – 8 months
Tapeworms	Ingestion of an infected flea	3 weeks
Threadworms	ingestion of egg	8 – 14 days
Roundworms	Ingestion of egg (in puppies passed from mother in the milk)	3 – 5 weeks
Hookworms	Skin Penetration or ingestion of of larvae	2 – 3 weeks
Whipworms	Ingestion of egg	3 months
Coccidia	Ingestion of immature egg or eating infected rodents such as mice or squirrels	4 – 12 days
Giardia	Ingestion of infectious cysts	6 – 10 days

Gum Disease

Gum disease, also known as periodontal disease, is an inflammation of the tissue surrounding the teeth in a dog. It can be just on top or between the teeth or can extend deep into the tissue that supports the teeth. It is caused by food and bacteria building up between the teeth. When food and bacteria are left on the tissue, it can cause a build up of calculus along the gumline. The calculus mixes with minerals from food and saliva in the mouth to form plaque. The plaque irritates the tissue, causing sores at the base of the teeth. If left untreated, reddening of the gums surrounding the teeth appears. This is an early warning sign of a periodontal disease called gingivitis. Periodontal disease is one of the most common diseases in dogs.

If gingivitis is not treated, the redness in the gums of the dog will continue to grow in size. As it progresses, the tissue surrounding the teeth pull away, leaving the tooth and gum separated. Periodontal disease is categorized by the amount of tissue that is pulling away from the teeth. Stage 1 is reddening of the gums without any tissue pulling away from the teeth, stage 2 has redness and about 25 percent of the teeth has lost some of the attachment to the surrounding tissue, stage 3 includes around 30 to 45% of the teeth separated from the gum line, and stage 4 (otherwise known as advanced periodontal disease) is over 50% of the teeth separated from the gums.

You may notice one or all of the symptoms of gum disease in your dog. One of the first symptoms is discoloration of the teeth along the gum line. Bad breath is another common symptom that can be seen in many dogs. Gums become red and swollen and may even bleed. As the disease gets worse, dogs may start drooling extra saliva, or have trouble eating as the teeth become loose. They may lose their appetite. Teeth may loosen and dogs may begin shaking their head due to sores in the mouth. Some dogs may whimper while eating or paw at their mouth; again, this is due to the sores in the gum and even in the bones of the jaw.

During stages 1 and 2, the bone supporting the teeth begins to get thinner and may start to change the shape of the tooth socket. X-rays show that during stage 3 or 4, the bone of the jaw starts to become lost. Teeth may need to be pulled and treatment for bone loss may become necessary.

Treatment

In the early stages, treatment is daily brushing. Once the disease has progressed to stages 2 or 3, professional cleaning is recommended, as well as using an antibiotic to help decrease the bacteria. The antibiotic will also help rejuvenate the affected tissue. Advanced periodontal disease may require bone replacement and other more advanced treatments.

Prevention

Prevention is the best option. Regularly brush your dog's teeth, starting when it is a puppy. There are many good videos on the Internet demonstrating different methods for brushing your dog's teeth. There are many different products that can be used for toothpaste, including homemade toothpaste using baking soda.



How to Administer Common Medicines

Oral Medications

Pills – Open your dog’s mouth and drop the pill down as far back as you can, on top of and in the center of the tongue. Close the dog’s mouth and hold it to shut while stroking the throat until your dog swallows. If licks its nose, chances are that it swallowed the pill. Giving it a treat afterwards helps ensure that the pill is swallowed. You can try hiding the pills in a treat like cheese or peanut butter. Pill plungers work well also.

Liquids – Tilt the chin up at 45 degrees and place the neck of the bottle into the cheek pouch between the molar teeth and the cheek. Seal the lips around it with your fingers and pour in the liquid. Large amounts can be given this way. Hold the muzzle firmly while the dog swallows. Bottles, syringes, and eyedroppers can be used. Your vet can help you out here.

Eye Medications – Eye medications are either in a liquid or ointment form. Cradle the dog’s head in one hand and gently use your thumb to hold down the lower eyelid. Hold the medication in the other hand and squeeze or drop the medicine in the pouch created by moving the lower lid. If you must administer eye drops to your dog and it resists, try the following trick: stand behind your dog and hold the eye open to administer the drops. This may help your dog feel more at ease and less anxious. Gently message the eye after closing it.



Ear Medications – Ear medications are either liquid or ointment form. Ear should be cleaned first (see previous section for method to clean). Be careful to not put tube too far into the ear as this could hurt the eardrum (tympanic membrane). Either ear drops or ointment should be placed a few millimeters into the ear canal and then gently message the base of the ear to distribute the medicine.

Proper Vaccinations for Dogs

<i>Puppy's Age</i>	<i>Recommended Vaccinations</i>	<i>Optional Vaccinations</i>
6 - 8 weeks	Distemper Parvovirus	Bordetella
10 - 12 weeks	DHPP (Distemper, adenovirus(Hepatitis), Parainfluenza, & Parvovirus	Influenza, Leptospirosis, Bordetella, Lyme disease (per lifestyle as recommended by veterinarian)
16 - 18 weeks	DHPP, rabies	Influenza, Leptospirosis, Bordetella, Lyme disease (per lifestyle as recommended by veterinarian)
12 - 16 months	DHPP, rabies	Coronavirus, Leptospirosis, Bordetella, Lyme Disease (per lifestyle)
Every 1 - 2 years	DHPP	Influenza, Coronavirus, Leptospirosis, Bordetella, Lyme disease (per lifestyle as recommended by veterinarian)
Every 1 - 3 years	Rabies (as required by law)	

Common Canine Diseases and Vaccines

Against which diseases should puppies be vaccinated? As with every health and wellness question for your dog, you should rely most heavily on your trusted veterinarian. There are a lot of opinions that can be found on the internet. Make sure when you do web based research to find valid websites from recognized groups, such as veterinary schools and journals, the American Kennel Club, etc. Ultimately, you and your veterinarian will find the best health regimen for your dog by considering your lifestyle and environmental exposures.

In most areas of the country, the core vaccines for dogs include rabies (required by law) and DHPP. DHPP is a combination vaccine that includes Distemper, Hepatitis (canine adenovirus), Parainfluenza, and Parvovirus. Other vaccinations that are called non-core and need to be considered depending upon lifestyle are Bordetella Bronchiseptica, Coronavirus, Leptospirosis, Lyme Disease, Kennel cough, and Heartworm. (See the following descriptions.)

Bordetella Bronchiseptica

This highly infectious bacterium causes severe fits of coughing, whooping, vomiting, and, in rare cases, seizures and death. It is the primary cause of [kennel cough](#). There are injectable and nasal spray vaccines available. If you plan on boarding your puppy in the future, attending group training classes, or using dog daycare services, often proof of this vaccination will be a requirement.

Canine Distemper

A severe and contagious disease caused by a virus that attacks the respiratory, gastrointestinal (GI), and nervous systems of dogs, raccoons, skunks, and other animals, [distemper](#) spreads through airborne exposure (through sneezing or coughing) from an infected animal. The virus can also be transmitted by shared [food and water bowls](#) and equipment. It causes discharges from the eyes and nose, fever, coughing, vomiting, diarrhea, seizures, twitching, paralysis, and, often, death. This disease used to be

known as “hard pad” because it causes the footpad to thicken and harden. There is no cure for distemper. Treatment consists of supportive care and efforts to prevent secondary infections, control symptoms of vomiting, seizures and more. If the animal survives the symptoms, it is hoped that the dog’s immune system will have a chance to fight it off. Infected dogs can shed the virus for months.

Canine Hepatitis

Infectious canine hepatitis is a highly contagious viral infection that affects the liver, kidneys, spleen, lungs, and the eyes of the affected dog. This disease of the liver is caused by a virus that is unrelated to the human form of hepatitis. Symptoms range from a slight fever and congestion of the mucous membranes to vomiting, jaundice, stomach enlargement, and pain around the liver. Many dogs can overcome the mild form of the disease, but the severe form can kill. There is no cure, but doctors can treat the symptoms.

Canine Parainfluenza

One of several viruses that can contribute to kennel cough.

Coronavirus

The canine coronavirus is **not** the same [virus that causes COVID-19](#) in people. COVID-19 is not thought to be a health threat to dogs, and there is no evidence it makes dogs sick. Canine coronavirus usually affects dogs’ gastrointestinal systems, though it can also cause respiratory infections. Signs include most GI symptoms, including loss of appetite, vomiting, and diarrhea. Doctors can keep a dog hydrated, warm, and comfortable, and help alleviate nausea, but no drug kills coronaviruses.

Heartworm

When your puppy is around 12-to-16 weeks, talk to your vet about starting a [heartworm](#) preventive. Though there is no vaccine for this condition, it is preventable with regularly administered [heartworm medication](#) that your veterinarian will prescribe. The name is descriptive — these worms lodge in the right side of the heart and the pulmonary arteries (that send blood to the lungs), though they can travel through the rest of the body and sometimes invade the liver and kidneys. The worms can grow to 14 inches long and, if clumped together, block and injure organs.

A new heartworm infection often causes no symptoms, though dogs in later stages of the disease may cough, become lethargic, lose their appetite or have difficulty breathing. Infected dogs may tire after mild exercise. Unlike most of the conditions listed here, which are passed by urine, feces, and other body fluids, heartworms are transmitted by mosquitoes. Therefore, diagnosis is made via a blood test and not a fecal exam.

Kennel Cough

Also known as infectious tracheobronchitis, kennel cough results from inflammation of the upper airways. It can be caused by bacterial, viral, or other infections, such as Bordetella and canine parainfluenza, and often involves multiple infections simultaneously. Usually, the disease is mild, causing bouts of harsh, dry coughing; sometimes it’s severe enough to spur retching and gagging, along with a loss of appetite. In rare cases, it can be deadly. It is easily spread between dogs kept close together, which is why it passes quickly through kennels. Antibiotics are usually not necessary, except in severe, chronic cases. Cough suppressants can make a dog more comfortable.

Leptospirosis

Unlike most diseases on this list, [Leptospirosis](#) is caused by bacteria, and some dogs may show no symptoms at all. Leptospirosis can be found worldwide in soil and water. It is a zoonotic disease, meaning that it can be spread from animals to people. When symptoms do appear, they can include fever, vomiting, abdominal pain, diarrhea, loss of appetite, severe weakness and lethargy, stiffness, jaundice, muscle pain, infertility, kidney failure (with or without liver failure). Antibiotics are effective, and the sooner they are given, the better.

Lyme Disease

Unlike the famous “bull’s-eye” rash that people exposed to [Lyme disease](#) often spot, no such telltale symptom occurs in dogs. Lyme disease (or borreliosis) is an infectious, tick-borne disease caused by a type of bacteria called a spirochete. Transmitted via ticks, an infected dog often starts limping, his lymph nodes swell, his temperature rises, and he stops eating. The disease can affect his heart, kidney, and joints, among other things, or lead to neurological disorders if left untreated. If diagnosed quickly, a course of antibiotics is extremely helpful, though relapses can occur months or even years later.

Parvovirus

[Parvo](#) is a highly contagious virus that affects all dogs, but unvaccinated dogs and puppies less than four months of age are at the most risk to contract it. The virus attacks the gastrointestinal system and creates a loss of appetite, vomiting, fever, and often severe, bloody diarrhea. Extreme dehydration can come on rapidly and kill a dog within 48-to-72 hours, so prompt veterinary attention is crucial. There is no cure, so keeping the dog hydrated and controlling the secondary symptoms can keep him going until his immune system beats the illness.

Rabies

Rabies is a viral disease of mammals that invades the central nervous system, causing headache, anxiety, hallucinations, excessive drooling, fear of water, paralysis, and death. It is most often transmitted through the bite of a rabid animal. Treatment within hours of infection is essential, otherwise, death is highly likely. Most states require regular rabies vaccinations. Check with your vet about rabies vaccination laws and requirements in your area.

Vaccinations for Adult Dogs: Boosters and Titters

There is a difference of opinion about having your adult dog vaccinated every year. Some vets believe too many vaccinations in adult dogs pose health risks. But others disagree, saying that yearly vaccinations will prevent dangerous diseases such as distemper. Talk with your vet to determine what kind of vaccination protocol works for you and your dog.

Many dog owners opt for titer tests before they administer annual vaccinations. Titer tests measure a dog’s immunity levels, and this can determine which, if any, vaccinations are necessary. One key exception to this is rabies: a titer test is not an option when it comes to the rabies vaccine. This vaccination is required by law across the United States. Your vet can tell you the schedule for your particular state. Your veterinarian should weigh in and can always provide the most up to date information and guidance if needed on necessary and optional vaccinations.

The above vaccination recommendations are from the 2021 AKC website <https://www.akc.org/expert-advice/health/puppy-shots-complete-guide/>

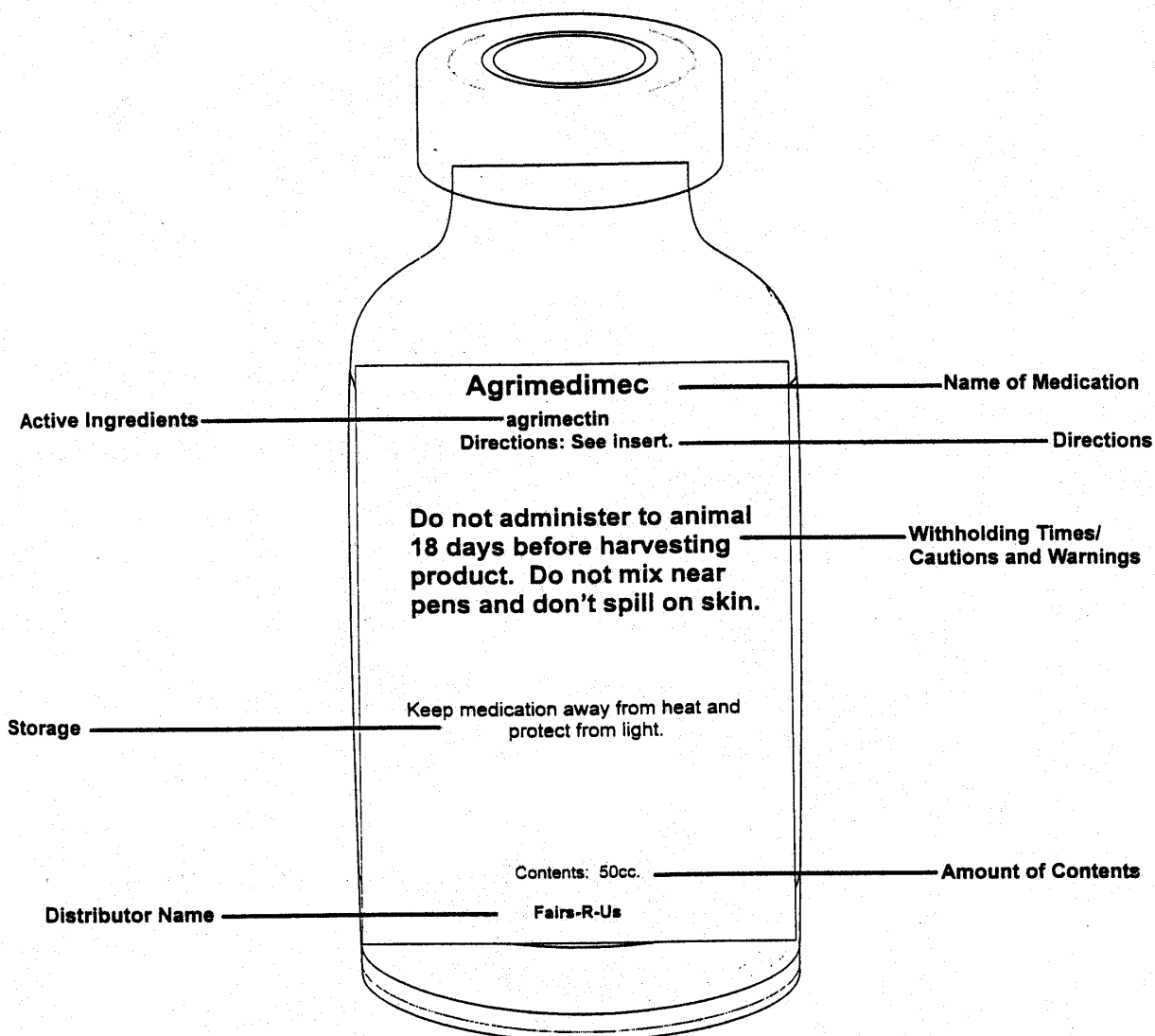
(Seniors need to be able to fill out a vaccination record for a puppy into adulthood.)

Medication Labels

Manufacturers of pharmaceutical products follow strict guidelines in labeling their products. Understanding what is on the label and how to use the information is a critical skill for livestock health care management. Using the picture shown here, study the labels on the products you routinely use on your project animals.

*A good resource for the medicine is the package insert. It has indications and contraindications for the uses of the drug.

The use of trade names in this publication is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the products named and does not signify that they are approved to the exclusion of others.



Medication Calculations

Be prepared to read a medication label and calculate when to administer vaccines, booster shots, worm medicines, etc.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

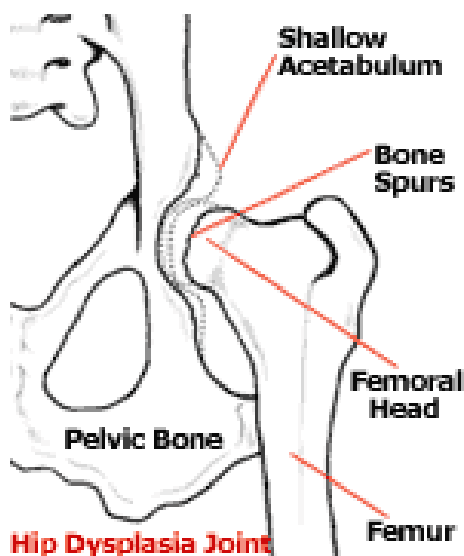
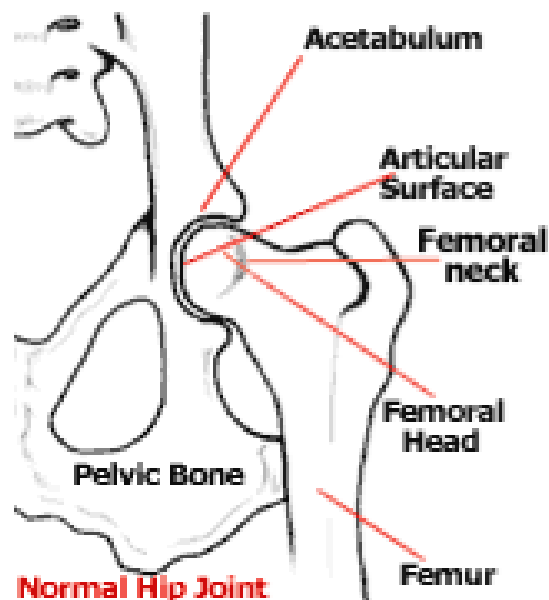
The abbreviation needed to interpret a medication label includes the following:

sid – 1 time daily
 b.i.d. – 2 times daily
 tid – 3 times daily
 qid – 4 times daily
 EOD – every other day
 PO – medicine is given orally
 cap – capsule
 tab – tablet
 d – day

- Most wormers will require a repeat dose in three weeks (ex. Virbantal, drontal plus, panacur). Whip worm medication is repeated in 3 weeks and 3 months.
- Some drugs, such as steroids, may be given with a “tapering dosage.” For example, 1 tablet two times daily for 5 days, then 1 tablet one time daily for 5 days, then 1 tablet every other day until gone. This would be written as: 1T BID x 5d, then 1T SID x 5d, then 1T EOD until gone.

Hip Dysplasia

In order for the hips of a dog to work correctly, the structure must be aligned properly. For the dog, that means that the head of the femur bone must fit and sit correctly in the socket (acetabulum) of the hipbone. Strong ligaments and connective tissue help hold the bones together; this gives the joint stability. The joint area, where the bones move against each other, has protective cartilage that helps the bones slide. When the two bones do not glide smoothly, the bones can start to rub against each other. When the bones rub each other they start to wear away the outer layer of protective cartilage and then wear away the bone.



Hip dysplasia is caused by an abnormal joint structure and by loose joints. Muscles, connective tissue, and ligaments are not supporting the joint properly. This improper support causes the bones to move incorrectly and changes the joint itself. The separation of the head of the femur and the socket of the hip is called subluxations. Dogs can have hip dysplasia in one or both hips.

Risk Factors

Hip dysplasia is a genetic disease; it is more likely that offspring will develop hip dysplasia if both of the parents carry or have hip dysplasia. If there is no hip dysplasia in the lineage of either parent, there is less risk of hip dysplasia. Because this is a genetically inherited syndrome, there is no prevention except for careful breeding. There are several risk factors for those dogs that are prone to hip dysplasia due to their genetics. One such factor is growing too quickly during three to ten months of age. Another factor is feeding either too much or too little of the required minerals (including calcium), which contributes to the dysplasia. Obesity in young and old dogs can cause the hip dysplasia and the osteoarthritis associated with dysplasia. Over exercising a dog with a pre-disposition for hip dysplasia at a young age, in those with a pre-disposition for hip dysplasia, may also be a risk factor for developing the syndrome.

Diagnosis

Dogs with hip dysplasia may appear to be perfectly normal, but will develop arthritis on the hips. Others may show an altered gait; a "bunny hop" type of running movement often characterizes this. In severe cases, puppies may show signs of discomfort at an early age. A veterinarian, using clinical symptoms and x-rays, makes the diagnosis. Many dogs are x-rayed after the age of two, and then the x-rays are sent to Orthopedic Foundation for Animals (OFA). The OFA radiologist evaluates the hip joints for proper structure between the hip joint and head of the femur, subluxation, the condition of the socket

(acetabulum), and the shape and size of the femoral head and neck (thigh bone).

Treatment

Once it is determined that a dog has hip dysplasia, proper management of the dog should include: good nutrition, appropriate exercise, and weight management. Keep the sleep areas warm to help those with arthritis. Change the home to help those with arthritis; stairs and jumping into cars, for example, can be difficult for some. Oral supplements and some drugs have been proven to help manage osteoarthritis. There are also several types of surgeries that can be performed to help dogs depending on the need of the individual dog.

**This information is provided to help you with Junior Showmanship;
it is not part of the Skilathon.**

SHOWMANSHIP

Participation in Junior Showmanship is intended to encourage Juniors to learn how to care for and present different dog breeds. Junior showmanship classes are judged on the ability of the Junior to handle his or her dog. The quality of the dog is not judged. Juniors are will be asked to demonstrate:

1. moving the dog with the rest of the class
2. presenting the dog in the standing position proper to its breed (including the use of the examining table for those breeds normally judged on a table).
3. moving the dog individually in a regular pattern

Juniors are expected to know basic ring routines. They should be able to follow directions, use space wisely, and be familiar with gaiting patterns. Juniors should appear "ring wise", alert to what is going on in the ring, and should be prepared for changes in the routine of judging. Juniors must be able to control their dogs at all times.

Juniors should be clean, neat, and well groomed. They should wear clothing that is comfortable to handle in and appropriate for dog shows. Clothing should not distract, limit or hinder the judge's view of the dog.

Dogs should be groomed and trimmed, as they would be for the breed ring. Judges will not evaluate the quality of the grooming and trimming, but Juniors should make an effort to prepare their dogs properly.

Juniors should appear confident, prepared, business-like and attentive. They should be courteous to both the judge and other handlers. Juniors are expected to handle their dogs without disturbing the dogs of the other juniors. Handlers should not crowd and they should not distract others by continued use of toys and bait. Handlers should be alert to the needs of their dogs. They should use firm but thoughtful hands in controlling and handling of their dogs. Juniors should not be impatient or heavy-handed.

Juniors will be judged on their ability to make their individual dog look its best in both pose and motion.

Junior handlers should:

1. keep their dog's attention without using dramatic or unnecessary movements.
2. gait their dogs in a controlled trot without distracting or interfering with the judge's view of the dog.
3. be aware of what is going on in the ring.
4. concentrate on their dog and not the judge, but be aware of where the judge is at all times.
5. Junior Handlers who use exaggerated posture, motions or gestures in any part of the competition will be faulted