CAT VACCINES 101

What follows is a brief outline of each disease you can vaccinate against, why you would, the pros and cons of doing so, and details that will help you make the best decision about your pet’s vaccination program. The vaccines we administered today are divided into two categories: core and non-core.

CORE

The core vaccines protect against diseases that are serious and common. It is strongly recommended to provide the core vaccinations in order to control these diseases across the pet population. Your individual dog or cat may not be at significant risk of exposure to one of these viruses, but preventing them from recurring within a population means controlling them on an individual level. As you think about whether to vaccinate your pet, it’s important to consider the societal responsibility of controlling these diseases on a wider scale. Protecting your pet can also mean protecting the dog or cat next door, down the street, and elsewhere in your city, state, province, or country.

NON-CORE

The non-core vaccines are optional and should be considered based on your pet’s individual risk of exposure to the disease.

These guidelines are put forth by the American Animal Hospital Association (AAHA), the Canadian Veterinary Medical Association (CVMA), and the American Association of Feline Practitioners (AAFP). They are adopted by most veterinarians. You’ll want to discuss these recommendations with your veterinarian and take into consideration your pet’s individual risk of exposure to these diseases in the area where you live and your pet’s lifestyle, travel agenda, and regular exposure to other animals. It’s important to think of these as recommended guidelines. All vaccine programs should be tailored to each pet, with a commitment to controlling the serious core diseases in all pets.

Disclaimer: healthcareforpets.com and its team of veterinarians does not endorse any products or services mentioned in any responses and answers. All advice presented by our veterinarians is not meant to replace a regular physical exam and consultation with your primary veterinarian. We always encourage you to seek medical advice from your regular veterinarian.
A BRIEF NOTE...

This is a brief note on vaccines that may guide your selection of individual products. You can speak to your veterinarian about the types of vaccines he or she has to offer.

There are two general types of vaccines: **non-infectious** and **infectious**.

The noninfectious vaccines are made up of inactivated or “killed” parts of the virus that the vaccine is protecting against. Since the virus is killed, these vaccines are considered safer because they can’t inadvertently cause the disease; however, they may not stimulate an appropriate reaction from the immune system. In some cases, these vaccines are fortified or adjuvanted with chemicals to stimulate a more robust response, but this comes at a price since some of these chemicals can increase the chance of irritation or allergic reactions when given. They are still considered safe, and in general, these reactions are extremely rare.

The infectious vaccines must infect the patient’s cells to create immunity. The virus in these vaccines has been attenuated or modified so that it will not cause the disease, but it has the benefit of creating a more effective and longer-lasting immunity than noninfectious vaccines.
<table>
<thead>
<tr>
<th>DISEASE</th>
<th>INFORMATION</th>
<th>RECOMMENDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabies</td>
<td>Rabies is a virus within saliva that is transmitted through bites, wounds, inhalation, and ingestion of tissue. It enters the muscle and can be deactivated by vaccine-induced immunity, but once it enters the nervous system, it becomes protected. From there, it travels to the spinal cord and brain before spreading out once again through exiting nerves. In cats it causes irritability, aggression, reduced fear of people, difficulty swallowing, excessive salivation, disorientation, weakness, seizures, and paralysis. Death typically occurs within 10 days of symptoms developing. For this reason, cats without proof of vaccination that are reported to have bitten someone are often quarantined for a few weeks and monitored for these symptoms to determine if they could have potentially transmitted rabies during that bite. This is a horrible disease for pets and humans, but it has been kept under control due to great efforts by government vaccination programs. Rabies is less common in cats than dogs, but it is still a major problem in underdeveloped countries and we still see outbreaks in pockets of North America. No doubt a resurgence of rabies would be seen if vaccination were not continued. For this reason, you most likely live in an area where your local authorities REQUIRE by law that you have your pet vaccinated against this disease, even if your pet’s risk of exposure to it may be unlikely. This holds true even for indoor cats despite the fact that their risk of exposure to rabies may be extremely small.</td>
<td>The most important thing to be aware of with rabies vaccination in cats is which product your veterinarian may be offering. Adjuvanted rabies vaccine: - There is a three-year rabies vaccine that is adjuvanted and may still be in use by some veterinarians. - This vaccine has been known to cause severe injection site reactions, including vaccine-induced sarcoma, a cancerous lesion. The risk is low – on the order of one to two cases per 10,000 cats vaccinated. Non-adjuvanted rabies vaccine: - We recommend that you request a non-adjuvanted rabies vaccine for your cat, as this is believed to reduce the risk. - There is a widely available one-year feline rabies vaccine, but just recently, a three-year non-adjuvanted feline rabies vaccine was released. - We recommend that you inquire about which product your veterinarian currently offers and consider requesting the three-year vaccine if you wish to reduce the frequency of vaccination but still retain the protective effect in accordance with local rabies control laws in your area. Vaccination schedule: - A rabies vaccine is recommended at 16 weeks of age, a booster given one year later, and then boosters provided every three years in accordance with legal requirements. - Your veterinarian may recommend a more frequent booster plan if he or she deems your pet has a higher risk of contracting rabies than the legally required program may protect against.</td>
</tr>
</tbody>
</table>
### Rhinotracheitis

Rhinotracheitis is caused by the feline herpesvirus and spreads by entering the nose, eyes, mouth, and airways. Symptoms include nasal congestion, sneezing, nasal discharge, respiratory tract infections, and eye infections that in some cases can progress to severe damage of the eye, necessitating that it be removed. Feline herpesvirus is very common in the environment and frequently present in shelters, and it causes latent infections that repeatedly recur throughout a cat’s life. It is highly contagious.

**Vaccination schedule:**

- Our recommendation is to vaccinate at 8, 12 and 16 weeks of age, boostered 1 year later, and then boostered every 3 years.
- To reduce repeated, potentially unnecessary vaccinations, we recommend titer testing at the time of the 3 year booster, and then annually, until ‘protective immunity’ is lost and revaccination is required.
- Please see our video and information on titer testing for more information.

### Calicivirus

Calicivirus is a common virus that causes upper respiratory tract infections, oral ulcers, and on occasion, arthritic conditions. It commonly affects kittens but can also create serious disease in adults. Symptoms include weakness, lack of appetite, fever, eye infections, sneezing, nasal discharge, drooling, joint swelling, and lameness. It’s commonly encountered in shelters and other areas where multiple cats are housed. It can be found in combination with other viruses, causing much worse symptoms than each individual virus alone. It is highly contagious and has worldwide distribution.

**Vaccination schedule:**

- Our recommendation is to vaccinate at 8, 12 and 16 weeks of age, boostered 1 year later, and then boostered every 3 years.
- To reduce repeated, potentially unnecessary vaccinations, we recommend titer testing at the time of the 3 year booster, and then annually, until ‘protective immunity’ is lost and revaccination is required.
- Please see our video and information on titer testing for more information.
<table>
<thead>
<tr>
<th>DISEASE</th>
<th>INFORMATION</th>
<th>RECOMMENDATION</th>
</tr>
</thead>
</table>
| PANLEUKOPENIA     | Panleukopenia is induced by a feline parvovirus and causes severe, sometimes fatal, acute inflammation in the digestive system. This virus can enter the body, travel to the bone marrow, and destroy the cells that fight simple and complex infections in the body. Symptoms include sudden death, vomiting, diarrhea, fever, dehydration, behaviour abnormalities, extreme weakness, tremors, and seizures. Pregnant cats can pass the infection to their unborn kittens, and therefore, certain forms of the vaccine must be avoided during pregnancy. It is less common because of the widespread use of vaccines but would rapidly return if these programs were not followed. It can persist for long periods in most environments, has a worldwide distribution, and is highly contagious. | Vaccination schedule:  
- Our recommendation is to vaccinate at 8, 12 and 16 weeks of age, boostered 1 year later, and then boostered every 3 years.  
- To reduce repeated, potentially unnecessary vaccinations, we recommend titer testing at the time of the 3 year booster, and then annually, until ‘protective immunity’ is lost and revaccination is required.  
- Please see our video and information on titer testing for more information. |
| FELINE LEUKEMIA   | Feline leukemia is a devastating virus that is frequently encountered and is totally preventable. This virus is found worldwide and infects as many as 3% of the total cat population in North America. It is easily transmitted through saliva, so it can be contracted by cat bites, sharing water bowls, grooming, and simply playing. Although it doesn’t survive long in the environment, it is found in abundance in the outdoor cat population and in shelters. It’s our opinion that this is one of the most important diseases a small animal veterinarian needs to protect against. It is so frequently encountered and easily contracted outside that cats need to be protected from this either through vaccination or, better yet, by keeping them inside so they can’t be exposed to it at all. | All cats that are adopted from shelters, rescued from an outdoor life, or taken in with an unknown history should be tested for FeLV to determine their status.  
If found to be positive:  
- All reasonable efforts should be made to restrict the cat’s exposure to other cats by avoiding social situations and boarding facilities and confining the pet to the indoors.  
Risk of contraction:  
- Any cat allowed to room freely outdoors is at great risk of contracting this virus and the serious health complications it causes. |
<table>
<thead>
<tr>
<th>DISEASE</th>
<th>INFORMATION</th>
<th>RECOMMENDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FELINE LEUKEMIA VIRUS</td>
<td>When initially infected, some cats may fight off the virus while others become ill immediately. Still others can have a latent infection that can be reactivated at a later time. The feline leukemia virus (FeLV) rapidly replicates in the lymph tissues and moves to the bone marrow where bodies create the cells that fight infection. It reduces the immune system’s ability to fight off even simple infections and can also cause cancers to develop. The symptoms displayed are highly variable and dependent on the activity of the virus in the body. Cats can show weakness, enlarged lymph nodes, pale gums, anemia, bleeding disorders, trouble breathing, fluid accumulation in the chest, diarrhea, vomiting, and jaundice, and the virus can produce cancers of the intestines, kidneys, bones, and nervous system. Cats that contract this virus can succumb to it immediately or live with it for years while experiencing associated illnesses throughout their lives.</td>
<td>Considerations before vaccinating:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Discuss your cat’s lifestyle with your veterinarian and the pet’s potential exposure to other cats with an unknown FeLV status.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Be aware that the FeLV vaccine has been associated with the development of cancer (called a sarcoma) at the site of vaccination. The risk is low—on the order of one to two cases per 10,000 cats vaccinated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- It is recommended to use a non-adjuvanted product, as this is believed to reduce the risk of a sarcoma.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Being a non-core vaccine, avoiding its use is best if your cat is not at risk of contracting this virus.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Speak to your veterinarian about the product he or she uses and the necessity of it for your pet.</td>
</tr>
<tr>
<td></td>
<td>Feline immunodeficiency virus (FIV) is well ingrained in cat populations all over the world. Approximately 5% of client-owned cats are infected, and up to 20% of stray outdoor cats may be affected in North America. FIV is not as easily spread as FeLV, but it is just as deadly. The virus is present in saliva and blood and needs more intimate contact to spread, such as bite wounds and mating. Once in the body, it replicates in salivary glands and lymphoid tissue, then infects the cells of the body that fight infections.</td>
<td>If vaccination is needed:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- We recommend that an initial dose be given as early as 8 to 12 weeks, with a second dose being given three to four weeks later.</td>
</tr>
<tr>
<td>FELINE IMMUNODEFICIENCY VIRUS</td>
<td></td>
<td>All cats that are adopted from shelters, rescued from an outdoor life, or taken in with an unknown history should be tested for FIV to determine their status.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If found to be positive:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If a cat tests positive for it, all reasonable effort should be made to restrict its exposure to other cats by avoiding social situations and boarding facilities and confining the pet to the indoors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Risk of contraction:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Any cat allowed to room freely outdoors is at risk of contracting this virus and the serious health complications it causes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Male cats, especially non-neutered males, have a greater risk due to the tendency for fighting and mating.</td>
</tr>
</tbody>
</table>

FIV: Feline Immunodeficiency Virus
FeLV: Feline Leukemia Virus
(cont’d)
FELINE IMMUNE-DEFICIENCY VIRUS (cont’d)

The virus can remain silent until it transitions to a terminal stage, wherein simple infections can become overwhelming, tumors can develop, and infection of the nervous system can occur. Symptoms include fever, weakness, enlarged lymph nodes, vomiting, diarrhea, sneezing, difficulty breathing, stumbling, behavioural changes, seizures, and paralysis. FIV infection is not a reason for euthanasia, as many cats will live for years symptom-free until the infection enters a terminal phase.

FIV vaccination is controversial:
- Any cat that is vaccinated with the FIV vaccine produces antibodies that react with the test we have for detecting FIV. This means that once you vaccinate, the cat will test positive for the disease even if it doesn’t have it, making it impossible to know if a positive FIV cat truly has the infection.
- It also makes it difficult to determine whether the vaccine worked to prevent the disease.

Considerations before vaccination:
- Vaccination against this virus is not currently recommended.
- Instead, efforts are made to identify cats with FIV and limit their exposure to other cats.
- More importantly, the owner of a cat should understand that protection against this disease is based on lifestyle choices that prevent possible interaction with cats that may have the virus, such as confining cats inside, keeping them away from shelters, and avoiding mute-cat social settings where the other cat’s viral status is unknown.
- The virus can only survive for minutes outside of the body, so simple cleaning procedures will keep it under control in multi-cat situations.

If a vaccination is needed:
- A vaccine should only be considered if it is determined that a cat is at extreme risk of contracting the virus.
- Speak to your veterinarian about your cat’s lifestyle, travel, and exposure to other cats to determine if this is a vaccine you should be using.
- If so, we recommend that three doses are administered, with the first being given as early as 8 weeks of age, then two more doses should be given two to three weeks apart.
- A booster is given annually if the risk of infection is still present. It would take very unique circumstances to warrant the use of this vaccine.