

## Canine Spay

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Surgical sterilization of the female dog, commonly referred to as spaying, is one of the most significant aspects of female dog care an owner can provide. The benefits to the dog FAR outweigh simply not having puppies, though as pet over-populations looms as a societal problem it is important to be part of the solution rather than part of the problem.

Spaying involves removal of the uterus and ovaries. It is a major surgery but a commonly performed one, ideally performed while a female dog is still in puppy-hood, prior to her first heat cycle.

Why Female Dogs should be Spayed

### Mammary Cancer Prevention

A female dog spayed before her first heat will have a near zero chance of developing mammary cancer. After the first heat, this incidence climbs to 7% and after the second heat the risk is 25% (one in four!). It is easy to see that an early spay can completely prevent what is frequently a very difficult and potentially fatal form of cancer.

But is it too late if a dog is already past her second heat? No, in fact spaying is important even in female dogs who already have obvious tumors. This is because many mammary tumors are stimulated by estrogens; removing the ovaries, the source of estrogens, will help retard tumor spread.

Spaying removes both the uterus and both ovaries and is crucial in the prevention as well as the treatment of mammary cancer.

### Pyometra Prevention

Pyometra is the life-threatening infection of the uterus that generally occurs in middle-aged to older female dogs in the six weeks following heat. The uterus with pyometra swells dramatically and is filled with pus, bacteria, dying tissue, and toxins. Without treatment, the dog is expected to die. Despite her serious medical state, she must be spayed quickly if her life is to be saved.

- This is an extremely common disease of un-spayed female dogs.
- Without treatment the dog will die.
- Treatment is expensive.
- Treatment involves surgery in a potentially unstable patient.
- Spaying prevents the whole thing.

The older unspayed female dog has an irregular heat cycle. There is no end of cycling comparable to human menopause. If you still decide against spaying, be familiar with the signs of pyometra, which include loss of appetite, lethargy, vomiting, excessive thirst, marked vaginal discharge.

### Simple Convenience

The female dog comes into heat every 8 months or so. There is a bloody vaginal discharge and local male dogs are attracted. Often there is an offensive odor.

What is done surgically?

A pre-operative evaluation is performed and baseline bloodwork is run to make sure we can safely anesthetise your pet. An incision is made on the midline of the abdomen, and the three points where the ovaries and uterus attaches are tied off and cut. The abdomen is checked for bleeding and two or three layers of stitches are placed to close the incision. It is helpful to know that should the skin stitches come out, there are two layers below holding everything closed. Skin stitches are placed intradermally so there is no need for removal.

### **What about Behavioral Changes?**

The female dog's reproductive tract is dormant for most of the year. It only activates for the three-week period of heat. This means that from a behavioral stand point, the female dog acts spayed most of the time. This said, there

has been a documented slowing of metabolism after spays and it may be necessary to use a reduced calorie food in an adult dog. Check with your veterinarian about nutritional recommendations.