THE BIRDS AND THE BEES OF CATS AND DOGS:

What All Pet Parents Should Know About Pets' Reproductive Health

By Andrea Vardaro Tucker, ELS



here's a whole hidden world to pets you may know little about. Fortunately, with some help from Dr. Bruce W. Christensen, a board-certified theriogenologist (or pet reproduction specialist) who founded Kokopelli Assisted Reproductive Services in California, we've got answers to common questions about pets' reproductive health.

Spaying and Neutering Myths

Does spaying or neutering pets really calm them down? Spaying and neutering aren't cure-alls for aggression, but they can cut back on undesirable behaviors like mounting, territory defending, fighting, and irritability caused by hormones.

Does it make them fat? Spayed and

neutered pets *can* more easily gain weight than their *intact* counterparts, but a healthy diet and abundant exercise can make up for it. Plus, there are other health benefits. "Reproductive health problems are uncommon in spayed or neutered animals," Dr. Christensen says. These include diseases like uterine and prostate infection and breast, uterine, ovarian, prostate, and testicular cancers.



Spayed females also avoid the discomfort (and inconvenience for you) of going into heat as well as the health risks and expenses of pregnancy and giving birth.

Does being altered make pets more likely to wander? They're probably less likely to wander because they're not off searching for, or fighting over, potential mates. Neutered males are also less likely to spray urine around your home or on walks to mark their territory.

Fertility Facts

At what age can pets reproduce? Just like with humans, age at sexual maturity varies for pets. Male puppies can produce sperm when they're about 5 months old, and females' fertility begins around 6 months of age. Technically, female pets don't actually menstruate, or have periods, but they do have estrus cycles, when they are considered "in heat" and can possibly get pregnant. Smaller dog breeds often have their first cycle earlier than larger breeds, and cats can start reproducing between ages 4 and 6 months depending on breed and other factors.

How frequently do females cycle?

Smaller dogs have the most estrus cycles—up to 4—in a year, and giant breeds might only cycle every year-and-a-half or so. Each cycle lasts 2 or 3 weeks

and brings light discharge resembling menstruation. Cats can have numerous estrus cycles, which repeat until pregnancy, in a year—typically every few weeks during spring and summer. These cycles are linked to *diurnal rhythms*, or daylight exposure, but indoor-only cats can cycle year-round thanks to artificial light exposure. Cats only ovulate, though, after mating, and their bleeding generally isn't noticeable. Pets are most likely to get pregnant in the first couple of weeks after their bleeding stops.

Can pets be infertile? Short answer: yes. Genetics, illness, infection, environment, and certain behaviors can all cause infertility. Some pets have both male and female sex characteristics (these might be internal so pet parents wouldn't even notice!) and can't reproduce.

Do pets go through menopause, and why do ovariohysterectomies in humans exacerbate health problems like osteoporosis and heart disease, but spaying a pet makes her healthier? Female dogs and cats don't go through menopause—in fact, although they don't usually keep up the same level of fertility as they age, older unspayed female pets can still become pregnant. If they aren't spayed, female pets are exposed to fluctuating levels of

reproductive hormones related to their heat cycles, regardless of whether they become pregnant. This cycling of hormones can lead to *pyometra*, a potentially deadly uterine infection. In addition, healthy pregnancies are less likely as pets get older. When women go through menopause, the low levels of reproductive hormones can cause unpleasant symptoms and leave them at higher risk for certain health issues, but when pets are spayed, they're actually at lower risk of mammary (breast) cancer.

Birth Basics

Where is a pet's umbilicus? Dogs and cats get a flat scar under the fur on their bellies (not as pronounced as ours) where their moms chewed off their umbilical cords after birth. If you can see your pet's belly button, call your vet—you might be seeing an umbilical hernia.

How many litters can a dog or cat have in a year, and what determines litter size? A pet's estrus cycle, breed, health, size, and age—plus nursing in cats—all influence these numbers. Cats can have up to an average of 3 litters a year, and dogs about 2. Smaller dog breeds, feral cats, and certain cat breeds can have litters as small as 1 to 4, but dogs and cats can have up to a dozen or so babies at a time. This is why spaying is so important!

How long does gestation last in dogs and cats? Roughly 60 days.

Can a litter have multiple dads? If a dog or cat mates with multiple partners during a heat cycle, the babies in her litter can indeed be parented by different dads—and thus be different breeds.

Board-certified editor in the life sciences and HealthyPet copy editor Andrea Vardaro Tucker lives near Pittsburgh with her husband; 11-year-old Westie, Cole; and 2 human kids, who piqued Andrea's curiosity about pet reproduction with their search for Cole's belly button.