

CANIDS - CARNIVORES

Recommendations

- (1) **GnRH Agonists** - Gonadotropin Releasing Hormone Agonists are considered the safest reversible contraceptives, but dosages and duration of efficacy are not well established for all species; side effects are generally similar to those associated with gonadectomy, especially the potential for weight gain unless diet is controlled.
 - [Suprelorin® \(deslorelin\) Implants \(F or M\)](#)
 - [Lupron® Depot Injection \(F or M\)](#)
- (2) **Ovariohysterectomy or Ovariectomy** are safe methods and effective methods for preventing pregnancy if permanent sterilization is an option (but see Caution 1 for males).

Cautions

- (1) **Vasectomy or castration of males will not prevent potential adverse effects to females** from prolonged, cyclic exposure to endogenous steroids associated with the obligate hormonal pseudo-pregnancy that follows ovulation in canids. Endogenous steroids and steroid contraceptives cause similar side effects.
- (2) **Progestin contraceptives** are associated in canids with progressive uterine growth that can result in infertility, infections, and sometimes uterine cancer; mammary tissue stimulation also can result in cancer. Signs of diabetes mellitus have also been reported.
 - a) If a progestin is used, treatment should only be short term, because of the increased likelihood of side effects with prolonged exposure.
 - b) If a progestin is used, treatment should start well **BEFORE** any signs of proestrus, since the elevated endogenous estrogen can exacerbate side effects of the progestin. Proestrus can begin 2 or more months before estrus in some canid species.
 - c) Progestins should not be used in pregnant animals, since they may suppress uterine contractions necessary for normal parturition. Thus, progestins should only be administered to females **CONFIRMED** non-pregnant.

d) Progestins

- [MGA Implant for 2 years](#), then remove for 1 pregnancy if possible; non-fertile ovulatory cycles do not substitute for pregnancy in reversing deleterious effects on the uterus; not recommended for more than a total of 4 years **(F)**.
 - [Depo-Provera®](#) injection (5 mg/kg body wt. every 2 months) **(F)**.
 - [Megestrol acetate](#) orally for seasonal breeders, but for no more than 2 consecutive seasons **(F)**.
- (3) [PZP vaccine](#) efficacy and safety have only been demonstrated in pinnipeds and bears among the carnivores. In other carnivores, there is mounting evidence that anti-PZP antibodies do not cross-react with the sperm receptor on the ovum, or may cause depletion of ovarian oocytes. PZP is contraindicated in species in which pseudopregnancy is common.
- (4) **Mibolerone**, a synthetic androgen, is sometimes used in female domestic dogs; however, because it can also increase aggression, it is not recommended for exotic canids.

Research and Monitoring

- (1) Surveillance
- [Surveillance for deleterious effects](#)
 - [Contraception Survey](#)
 - [Tissue Submission Form](#) – Pathology
 - [Adverse Reactions Report](#)

THE USE OF ANY CONTRACEPTIVE IN NON-DOMESTIC ANIMALS IS CONSIDERED EXPERIMENTAL
(M=MALE-DIRECTED, F=FEMALE-DIRECTED METHOD)