



AZA Wildlife Contraception Center

## DEPO-PROVERA® (medroxyprogesterone acetate) INJECTIONS

**Manufacturer** – Pfizer

**Product information** - With the second most numerous records in the Wildlife Contraception Center database, Depo-Provera® has been used most often in reproductively seasonal species (e.g., prosimians, bears, pinnipeds), species in which anesthesia for implant insertion is problematic (e.g., giraffes, hippos), and as an immediately available interim contraceptive (e.g., if an implant is found missing or has not been ordered). Medroxyprogesterone acetate is a synthetic derivative of progesterone administered as an acetate salt with anti-estrogenic activity.

**Dose** - Dosage studies have not been conducted for most species. Recommended doses and injection intervals vary according to species and experience. Current reports have indicated that 2-5 mg/kg body weight every 2-3 months has been effective (the higher dose for smaller species and the lower dose for larger ones). However, [New World monkeys](#) require as much as 20mg/kg monthly. For especially large species for which body weights may not be available, such as hippos, see [Taxon-Specific Recommendations](#).

**Latency to effectiveness** - IM injection is roughly equivalent to implant insertion, i.e., separation or alternative contraception should be used, conservatively, for 2 weeks, but at least for 1 week.

**Estrous cycles during contraceptive treatment** - Synthetic progestins may effect contraception by blocking ovulation, causing thickening of cervical mucus, slowing ovum transport, and/or interfering with fertilization or implantation. However, follicle growth may continue and sometimes be accompanied by estrogen production sufficient to cause estrous behavior. Ovulation may occur even though pregnancy does not ensue. Higher progestin doses may be preferred, so that estrous behavior is prevented, but may not be effective in completely suppressing follicle growth and all estradiol production.

**Duration of efficacy and reversibility** - Duration of efficacy, and thus latency to conception following last injection, can be extremely variable and has been seen to vary from 4 weeks to 2 years in some individuals. In general, the recommended dose (2.5-5 mg/kg BW) is effective for at least 2 months in most species. Hippos and giraffe have been treated at lower doses and appear to need re-treatment every 6 weeks. New World primates require higher doses at more frequent intervals.

**Use during pregnancy** - Progestins are not recommended in pregnant animals

because of the possibility of prolonged gestation, stillbirth, abortion, etc. in some species, although the effect may depend on dose. Progestins in late pregnancy seem not to interfere with parturition in primates, but this is a taxon-specific phenomenon. Because of the variability in duration of efficacy for Depo-Provera, special caution should be used when treating females that might be pregnant.

**Use during lactation** - Progestins are sometimes prescribed for lactating women and are considered generally safe for nursing infants.

**Use in pre-pubertals or juveniles** - Future reproduction was not affected in calves of domestic cows on MGA-treated feed, but no studies of pre-pubertal treatment with MGA or other progestins have been conducted with other species, so possible long-term effects on fertility are not known.

**Consideration for seasonal breeders** - Treatment should begin at least one month before the anticipated onset of the breeding season. This does not include however canids or other carnivores due to the potential for progestin side effects addressed in the corresponding taxonomic sections below.

**Precautions** – Progestins likely cause weight gain in all species. Possible deleterious effects on uterine and mammary tissues vary greatly by species; see cautions for each taxon. In the human literature, Depo-Provera® has been linked to mood changes. Because it binds readily to androgen receptors and is anti-estrogenic, females may experience male-like qualities (increased aggression, development of male secondary sex characteristics, etc.)

**Reporting requirements** - All institutions using Depo-Provera® are asked to submit a complete [Contraception Center Survey](#) to the AZA Wildlife Contraception Center. It is essential that accurate records of doses and intervals be maintained and results reported to the Wildlife Contraception Center Database to contribute to dosage development.

Please submit surveys to:

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