

Updated April 6, 2020 (Original statement released March 31, 2020)

Situation: In light of the need to provide healthcare workers with protective gear, conserve resources, and to maintain social distancing, the U.S. Surgeon General issued an order to limit both human and veterinary “non-essential” or “elective” surgeries during the Covid-19 pandemic. Surgical sterilizations are being defined by some organizations/local or state governments as non-essential. Animal welfare organizations and veterinarians are concerned about how this policy will impact their work. Several influential entities in veterinary medicine^{1,2,3} have advised animal shelters, spay/neuter clinics, and veterinarians to comply with this order by deferring sterilization surgeries for dogs and cats, and continuing to manage adoptions. Organizations and professionals are understandably worried that pregnancies will result in unwanted litters that will further stress shelter intake and the community when shelter resources will be low and community need high, especially during high seasonal reproduction for cats.

Alternatives to surgery: Any non-surgical contraceptive will need to be administered in accordance with human social distancing requirements to reduce the spread of Covid-19 and without the use of personal protective equipment (PPE) to conserve those resources for human health. There are no drugs/vaccines approved in the U.S. for the suppression of fertility in either male or female cats. However, the progestin, megestrol acetate (MA) can be obtained and may be used as an oral contraceptive when administered for short durations to prevent estrus in queens while surgeries are delayed.

Target animals: This recommendation is for cats that can be individually treated at prescribed times with an accurate dose and whose health can be monitored over time. Unaltered queens \geq approximately 4 lbs. body weight can be treated to prevent estrus. Administration of MA to pregnant dogs causes masculinization of female fetuses. There is no equivalent data for pregnant cats. MA has been used in feral cat colonies, administered by mixing it into food, at a much lower dose per cat. This type of dosing comes with less ability to control how much each cat eats. Because of this, **ACC&D has historically advised against the use of MA in cat colonies and has not yet re-evaluated this position.**

Description of the pharmaceutical: MA is a synthetic progestin that can be used to prevent pregnancy and estrus (heat) cycles in dogs and cats, as well as other mammalian species. It has also been prescribed to treat certain skin and behavior problems in dogs and cats of both sexes. MA has been studied and used for dogs and cats over several decades in numerous countries under different brand names and at varying recommended doses. The product was approved by the FDA in 1975 for use in female dogs (Ovaban™). It was not developed for use in cats. It is not commonly used in the U.S. where both high rates of surgical neutering and concerns about MA’s side effects are high. Research to date strongly suggests that when considering use of MA to prevent or suppress estrus, the dosage and treatment duration is important in order to minimize the likelihood of adverse side effects.

Availability of megestrol acetate: Currently, MA can be prescribed under extra-label use guidelines from the FDA which include a veterinarian-client-patient relationship as well as other criteria some of which have been amended for COVID-19⁴. MA is available via veterinary compounding pharmacies. It is advisable for each veterinarian to check their state law on compounding. In some states, veterinarians are permitted to order a supply of “office stock” of non-controlled prescription compounded medications from select compounding pharmacies, which can greatly reduce its cost, and then use that supply for individual cats. An oral liquid suspension of MA can be flavored (chicken, fish, etc.) and provided in a variety of container volumes. Individual doses can be drawn into oral syringes. Although MA is available in other forms, practical considerations suggest MA compounded as a liquid suspension will be easier and more cost-effective to administer.

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503B compounder Stokes Healthcare (800-754-5222) serving the U.S. nationwide can ship “office stock” directly to veterinarians if permitted by their state. This product is quite inexpensive. For example, a 30 mL vial of MA (10 mg/mL) contains 120 doses. The price quoted on April 2nd was \$42 or 35 cents per dose (not including oral syringes or a \$9.50 shipping fee for 2-day delivery). Popular compounding pharmacies Wedgewood and Roadrunner quoted similar prices.

Stokes quoted a 6-month shelf life on the product. Veterinarians should check with their preferred compounding pharmacies for details pertaining to their situation and location.

Dosage suggestions: In a 2015 review of decades of research⁵, the recommended oral dosage for cats not showing estrus (“heat”) signs is 2.5 mg/cat weekly (approximately 0.625 mg/kg/week) for up to 30 weeks. The oral dosage for cats showing signs of heat is higher at 5 mg/cat daily for three days followed by the 2.5 mg/cat dose weekly after that.

Efficacy: The literature suggests that in cats, the contraceptive effect takes place quickly but there is no available data to support this. It must be assumed that once a queen is off the medication, she will come into heat.

Safety: Potential adverse side effects in cats are more likely to occur at higher doses (>2.5 mg/cat). These side effects include diabetes mellitus, pyometra, adrenal gland suppression (Addison’s disease), mammary hyperplasia, and mammary cancer. Cats treated with MA sometimes develop diabetes mellitus, with or without related complications, that may or may not resolve after halting MA treatment. Diabetes mellitus has occurred at rates as high as 5-10% when cats are treated at higher doses (>2.5 mg/cat). Some side effects may resolve once the cat is taken off the medication.

Making this recommendation: The Alliance for Contraception in Cats and Dogs (www.acc-d.org) is a non-profit organization formed in 2000. Our mission is to advance non-surgical sterilants and contraceptives for cats and dogs and to promote their global accessibility. We envision a world in which dog and cat populations are effectively and humanely managed, improving the lives of dogs and cats and the people who care about them. It is up to each veterinarian to weigh the benefit of the need to prevent pregnancy and the health risks to the individual cat.

Advising this announcement: The decision to advise the field on the applicability of this interim contraceptive, not well-known in the U.S., was made in consultation with key ACC&D Board members and Scientific Advisors whose bios are on our website, specifically Cheri Asa, PhD; Julie Levy, DVM, PhD, DACVIM; Linda Rhodes, VMD, PhD, and Michelle Kutzler, MBA, DVM, PhD, DACT. The American College of Theriogenologists is in agreement that there may be viable non-surgical short-term options to prevent pregnancy in certain cats during this current Covid-19 pandemic, and encourages owners to consult with their primary care veterinarian or a theriogenologist to discuss potential treatment.

Important references for practitioners: Practitioners should consult the peer reviewed papers below for additional info:

Romagnoli, S. “Progestins to control feline reproduction: Historical abuse of high doses and potentially safe use of low doses” *Journal of Feline Medicine and Surgery* (2015) 17:743–751. <https://doi.org/10.1177/1098612X15594987>. *Thank you to Sage Publishing for granting open access.*

Greenberg, M., D. Lawler, S. Zawistowski, and W. Jochle. “Low-dose megestrol acetate revisited: A viable adjunct to surgical sterilization in free roaming cats?” *Veterinary Journal* (2013) 196:304–308. *Open access has been requested.*

More information is available on ACC&D’s website at: <https://bit.ly/progestins>.

Citations

- 1) National Animal Care & Control Association statement encouraging the release of unaltered pets from animal shelters. <https://bit.ly/2Jpz9un>
- 2) Shelter Medicine programs' statement and recommendations for transport and animal movement during COVID-19 pandemic- updated 3/28/20. <https://bit.ly/33XW5KN>
- 3) Open Letter from Dr. Julie Levy, “Why we must suspend S/N surgeries NOW”: <http://blog.theaawa.org/open-letter-from-dr-julie-levy-why-we-must-suspend-s-n-now/>
- 4) U.S. Food and Drug Administration, <https://www.fda.gov/animal-veterinary/resources-you/ins-and-outs-extra-label-drug-use-animals-resource-veterinarians>. Note, on 3/24/20, the FDA issued a press release stating,

“In order to help veterinarians utilize telemedicine to address animal health needs during the COVID-19 pandemic, the FDA generally does not intend to enforce the animal examination and premises visit portion of the VCPR requirements relevant to the FDA regulations governing Extralabel Drug Use in Animals... This will allow veterinarians to prescribe drugs in an extralabel manner or authorize the use of VFD drugs without direct examination of or making visits to their patients, which will limit human-to-human interaction and potential spread of COVID-19 in the community.” <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-helps-facilitate-veterinary-telemedicine-during-pandemic>

The full policy document (CVM GFI #269) can be found at <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/cvm-gfi-269-enforcement-policy-regarding-federal-vcpr-requirements-facilitate-veterinary>

- 5) Romagnoli, S. “Progestins to control feline reproduction: Historical abuse of high doses and potentially safe use of low doses” *Journal of Feline Medicine and Surgery* (2015) 17:743–751. <https://doi.org/10.1177/1098612X15594987>