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Cannabis as Drug, Food, or Supplement in Veterinary Medicine

Among many other issues, the Agriculture Improvement Act of 2018 (2018 Farm Bill)[1] addresses the production and marketing of "hemp." We've been receiving many questions from individual veterinarians and state veterinary medical associations related to the Act's cannabis provisions, so are providing the following summary as information. Please note that this is a rapidly evolving issue, with respect to both available science and law, so the information provided below is correct to the best of our ability to determine same as of the date of this notice.

Within the 2018 Farm Bill, "hemp" is defined as *Cannabis sativa L.* and derivatives of cannabis with less than 0.3 percent delta-9-tetrahydrocannabinol (THC) on a dry weight basis. The new law removes "hemp" from the Controlled Substances Act (CSA)[2], so it is no longer a controlled substance under federal law. This means that access to the product for biomedical research will likely be simplified, which is excellent and something the AVMA has wanted to achieve.

Non-hemp cannabis and its derivatives remain in Schedule I under the CSA, with the exception of three products approved for human use. One of these, Epidiolex, is derived from marijuana and is used for the treatment of seizures associated with two rare, but severe, forms of epilepsy. The FDA has also approved the synthetic cannabinoids dronabinol and nabilone to treat nausea and vomiting associated with cancer chemotherapy, with dronabinol also approved for the treatment of loss of appetite and weight loss in people with Acquired Immune Deficiency Syndrome (AIDS).

While the 2018 Farm Bill removed "hemp" from the CSA, it did not remove authorities under the Food, Drug, and Cosmetic Act (FDCA)[3] to regulate cannabis and cannabis products as drug or food.

According to a statement[4] issued on December 20, 2018 by FDA Commissioner Scott Gottlieb, "…we treat products containing cannabis or cannabis-derived compounds as we do any other FDA-regulated products — meaning they're subject to the same authorities and requirements as FDA-regulated products containing any other substance. This is true regardless of the source of the substance, including whether the substance is derived from a plant that is classified as "hemp" under the Agriculture Improvement Act."

Gottlieb went on to say that FDA "…continue[s] to be concerned at the number of drug claims being made about products not approved by the FDA that claim to contain CBD or other cannabis-derived compounds. Among other things, the FDA requires a cannabis product (hemp-derived or otherwise) that is marketed with a claim of therapeutic benefit, or with any other disease claim, to be approved by the FDA for its intended use before it may be introduced into interstate commerce. This is the same standard to which we hold any product marketed as a drug for human or animal use. Cannabis and cannabis-derived products claiming in their marketing and promotional materials that they're intended for use in the diagnosis, cure, mitigation, treatment, or prevention of diseases (such as cancer, Alzheimer's disease, psychiatric disorders and diabetes) are considered new drugs or new animal drugs and must go through the FDA drug approval process for human or animal use before they are marketed in the U.S. Selling unapproved products with unsubstantiated therapeutic claims is not only a violation of the law, but also can put patients at risk, as these products have not been proven to be safe or effective."

FDA also indicated that it will be considering whether there are circumstances in which certain cannabis-derived compounds might be permitted in a food or dietary supplement. Thus far, products containing CBD or THC have not been permitted to be used as a feed or dietary ingredient because both substances have been investigated for use as a drug and therefore would not be classified as a food substance or a dietary supplement.

With respect to dietary supplements, the law that regulates those, the Dietary Supplement Health and Education Act of 1994 (DSHEA),[5] does not apply to veterinary medicine (i.e., FDA regulates veterinary products as either "food" or "drug"; there is [legally] no such thing as a "veterinary supplement").

In a separate statement,[6] FDA announced that it had completed its evaluation of three Generally Recognized as Safe (GRAS) notices related to hulled hemp seeds, hemp seed protein, and hemp seed oil. These products can now be legally marketed in human foods without food additive approval, provided all other requirements are met and there are no associated disease treatment claims. FDA indicates the reason they have drawn their conclusion about these parts of hemp in human food is because they are derived from parts of the plant that may not contain CBD or THC, meaning that their addition to foods should not raise the same issues as the addition of drug ingredients like CBD and THC. The review doesn't address the use of these portions of the plant in animal feed.

Among law firms working on behalf of the hemp industry is the Hoban Law Group, which released comments[7] on December 14, 2018. In their comments, they acknowledge that, "…The Farm Bill does not affect the Federal Food, Drug and Cosmetic Act, which provides the U.S. Food and Drug Administration ("FDA") authority to regulate permissible ingredients in ingestible products…", and go on to indicate that, "…Attention now turns to FDA with respect to ensuring that hemp-derived cannabinoids – including extracts containing cannabidiol – are to be treated as permissible ingredients…" It is not clear from their comments whether their reference to "permissible ingredients" refers to use in food, drugs, or both. A flow chart[8] that assists in determining the regulatory status of a food ingredient is available from FDA.

It doesn't look like discussion around CBD will be ending anytime soon. For right now, however, the federal environment surrounding the use of CBD (or other cannabis derivatives) in veterinary medicine for therapeutic purposes has not appreciably changed. While no longer controlled under the CSA if derived from "hemp", at this time there are no CBD products approved for use in animals—as drug or as food. The previously mentioned approved human product, Epidiolex, is Schedule V and is available to veterinarians for extralabel use in animals under the Animal Medicinal Drug Use Clarification Act (AMDUCA).[9]

As federal law continues to evolve, so do statutes and regulations at the state level pertaining to cannabis. To date, medical marijuana laws only apply to the use of these products in human patients as recommended by a human healthcare provider and do not authorize veterinarians to administer, dispense, prescribe, or recommend such products for use in animal patients. However, on September 27, 2018, California lawmakers passed legislation (AB 2215)[10] that amended the Business and Professions Code to allow veterinarians to discuss cannabis products with their clients, and require the Veterinary Medical Board to develop related guidance for such discussions within the veterinarian-client-patient relationship before January 1, 2020. The amended Code also prohibits a licensed veterinarian from dispensing or administering cannabis or cannabis products to an animal patient.

While research into their potential therapeutic application in the treatment of osteoarthritis, epilepsy, and pain is active, ongoing, and shows promise, limited peer-reviewed and published information is currently available to guide the safe and efficacious therapeutic use of cannabinoids in veterinary patients. In addition to lack of FDA-approval for therapeutic use, the quality, purity, and strength of cannabinoid products matter and can be difficult to determine. Currently many of these products include insufficient labeling, and analyses by ConsumerLab[11] and a report[12] published in the *Journal of the American Medical Association (JAMA)* indicate that many of these products contained greater or lesser amounts of cannabinoids than indicated on their label. There may also be large variations in potency between human and animal products (human products typically are more concentrated than those manufactured for pets) and, because of how some products are manufactured, they may pose a risk of contamination with mycotoxins, metals, metalloids, and pesticides. All of this presents additional challenges to safe and effective use, as well as an increased risk of toxicosis.

FDA notes[4] that, "We'll take enforcement action needed to protect public health against companies illegally selling cannabis and cannabis-derived products that can put consumers at risk and are being marketed in violation of the FDA's authorities. The FDA has sent warning letters[13] in the past to companies illegally selling CBD products that claimed to prevent, diagnose, treat, or cure serious diseases, such as cancer. Some of these products were in further violation of the FD&C Act because they were marketed as dietary supplements or because they involved the addition of cannabis to food."

FDA has indicated that it is investigating how these products may best be regulated in the future, and that it plans to hold a public meeting to gather stakeholder opinion with regard to the regulatory landscape of cannabis-derived products. The agency has also stated its commitment to pursuing a more efficient regulatory framework that supports legal pathways to product development.

So, while we continue our conversations with researchers, regulatory authorities, and the hemp industry, what is the current bottom line for veterinarians? Under existing federal and state law, veterinarians who administer, dispense, prescribe, or recommend 'hemp' or other cannabis-derived products that are not approved for use in animals, or approved for animals or people in accord with FDA extralabel drug use regulations, face increased potential legal risk if there is an adverse event. Adverse events can include unintended effects (side effects) of a drug or it could be that the drug doesn't deliver the intended therapeutic effect. Legal risk can be heightened if there are approved drugs available to treat the condition and those are not selected as part of a treatment plan or in the absence of a related standard of care.

We'll keep you updated as more information becomes available.

References:

1. Agriculture Improvement Act of 2018, HR 2, 115th Congress. (2018) Retrieved from: https://www.agriculture.senate.gov/imo/media/doc/CRPT-115hrpt1072.pdf
2. Title 21 United States Code Controlled Substances Act; Drug Enforcement Agency. Retrieved from: https://www.dea.gov/controlled-substances-act
3. Title 21 United States Code Federal Food Drug and Cosmetic Act; Food and Drug Administration. Retrieved from: https://www.fda.gov/RegulatoryInformation/LawsEnforcedbyFDA/FederalFoodDrugandCosmeticActFDCAct/default.htm

4. United States Food and Drug Association (2018) Statement from FDA Commissioner Scott Gottlieb, M.D., on signing of the Agriculture Improvement Act and the agency's regulation of products containing cannabis and cannabis-derived compounds. Retrieved from: https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm628988.htm?utm_campaign=122018_Statement_FDA%20statement%20on%20regulation%20of%20cannabis-containing%20products&utm_medium=email&utm_source=Eloqua>
5. Dietary Supplements Health and Education Act, 103rd Congress. (1994) Retrieved from: https://ods.od.nih.gov/About/DSHEA_Wording.aspx
6. United States Food and Drug Association (2018) FDA Responds to Three GRAS Notices for Hemp Seed-Derived Ingredients for Use in Human Food. Retrieved from: https://www.fda.gov/Food/NewsEvents/ConstituentUpdates/ucm628910.htm
7. Hoban Law Group (2018) Hoban Law Group Statement on the Farm Bill. Retrieved from: https://hoban.law/blog/2018/2018-12/hoban-law-group-statement-farm-bill
8. United States Food and Drug Association (2018) Determining the Regulatory Status of a Food Ingredient. Retrieved from: https://www.fda.gov/food/ingredientspackaginglabeling/foodadditivesingredients/ucm228269.htm>.
9. Animal Medicinal Drug Use Clarification Act., 103rd Congress. (1994) Retrieved from: https://www.congress.gov/bill/103rd-congress/senate-bill/340
10. Assembly Bill 2215, Chapter 815 (2018). Retrieved from: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB2215
11. Consumer lab (2019) CBD and Hemp Extracts Supplements Review: Retrieved from: https://www.consumerlab.com/reviews/cbd-oil-hemp-review/cbd-oil/
12. Vandrey R, Raber JC, Raber ME, *et al*. Cannabinoid dose and label accuracy in edible medical *Cannabis* products. *JAMA*. 2015;313(24):2491–2493.
13. United States Food and Drug Association (2017) Warning Letters and Test Results for Cannabidiol Related Products. Retrieved from: https://www.fda.gov/newsevents/publichealthfocus/ucm484109.htm