

## Another Piece of the Puzzle? Understanding South Dakota Veterinarians' Response to the Opioid Epidemic

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While some headway has been made in addressing supply-side causes of the opioid epidemic, including with the pharmaceutical industry, providers of human healthcare, and human pharmacies, there is evidence that more scrutiny is needed with regards to misuse and abuse of opioid prescriptions obtained from veterinary clinics<sup>1</sup>. Researchers at South Dakota State University (SDSU) wanted to understand the extent of this problem in South Dakota in order to better prepare veterinary clinics to deal with this epidemic. Using data from a survey of licensed veterinarians in the state who prescribe opioids in late 2018 and early 2019, we found that veterinarians are largely aware of the increasing opioid problem, have modified their practices because of it, and are dedicated to finding a balance between treating their animal patients in the most effective way while also avoiding contributing to the opioid problem. Many veterinarians are also interested in receiving additional training on opioid use and abuse signifying the opportunity for educators and policymakers to provide additional resources to further address another piece of this epidemic facing U.S. communities.

### **The opioid epidemic in the United States**

As opioid use, abuse, overdoses, and deaths increased through the 1990s and 2000s, federal and state governments took action to reduce the opioid supply. For instance, states can now place caps on the number of days an opioid can be prescribed for acute pain. In 2016, the Centers for Disease Control and Prevention (CDC) released guidelines to physicians instructing them to prescribe the lowest possible dosage that would be effective in the patient. These policies have

led to a reduction in the overall number of opioid prescriptions. However, the demand for opioids has remained steady. This has resulted in users and addicts turning to alternative sources to obtain opioids. Opioid users now obtain opioids through legitimate prescriptions as well as online, family and friends, and private dealers.<sup>2,3,4</sup>

Veterinarians are seeing an alarming new trend of pet owners taking opioids intended for their pets to support their own addiction.<sup>5</sup> Opioid medications are prescribed for animals, much as they are for humans, to provide short-term relief from pain following injuries or surgical procedures. They are available in injectable forms for use in the veterinary hospital, or in pill forms that can be dispensed to clients to administer to their animals at home.

In a study of 189 Colorado veterinarians, 13% reported that they were aware of a person intentionally harming their pet, or making their pet seem harmed, to receive opioids for their own use.<sup>1</sup> Further, 44% of veterinarians were aware of a veterinary staff member or client who abused or misused opioids. As with prescribing rates in humans, an examination of opioid prescriptions in a veterinary teaching hospital in Philadelphia from 2017-2018 found an increase in the prescribing of some opioids to animals, specifically Codeine and Hydrocodone.<sup>6</sup> Break-ins of veterinary clinics for the purpose of obtaining opioids are also increasing. The FDA encourages secure storage of opioids within each practice to deter theft.<sup>7</sup> With an increase in pharmacy break-ins and clients abusing

medications intended for pets, increasing opioid prescribing rates by veterinarians is potentially problematic.

## Methods

From November 2018 to February 2019 we conducted a mixed-mode survey of veterinarians licensed by the South Dakota Veterinary Medical Association (SDVMA). Questions focused on how they prescribe and utilize opioid prescription drugs for their patients, how they secure their opioid prescription drugs, whether they perceive there to be indicators of misuse or abuse of these drugs among clients (e.g., pet owners), views on oversight and training regarding opioid prescriptions, and practice and individual characteristics.

In our five-wave research design, we began by contacting those in the licensee list provided by the SDVMA (N=893) via email to request their participation in an online version of the survey. After a follow-up email reminder to those who had not yet responded, we mailed a paper copy of the survey with a stamped return envelope. This contact was followed by two more email reminders to non-respondents.

Our response rate to the survey was 52.3%, with 153 currently practicing veterinarians who prescribe opioids completing the full survey. Veterinarians who indicated

they were not currently practicing in South Dakota or who had not practiced in the past five years (N=218) and those who are currently practicing but have not prescribed or administered opioids (N=79) to patients within the past five years were not asked to complete the full survey. We provided a definition of opioids so that respondents were clear on the focus of the survey: "Opioids are a class of drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and pain relievers available legally by prescription, such as oxycodone (OxyContin®), hydrocodone (Vicodin®), codeine, morphine, and many others."<sup>8</sup>

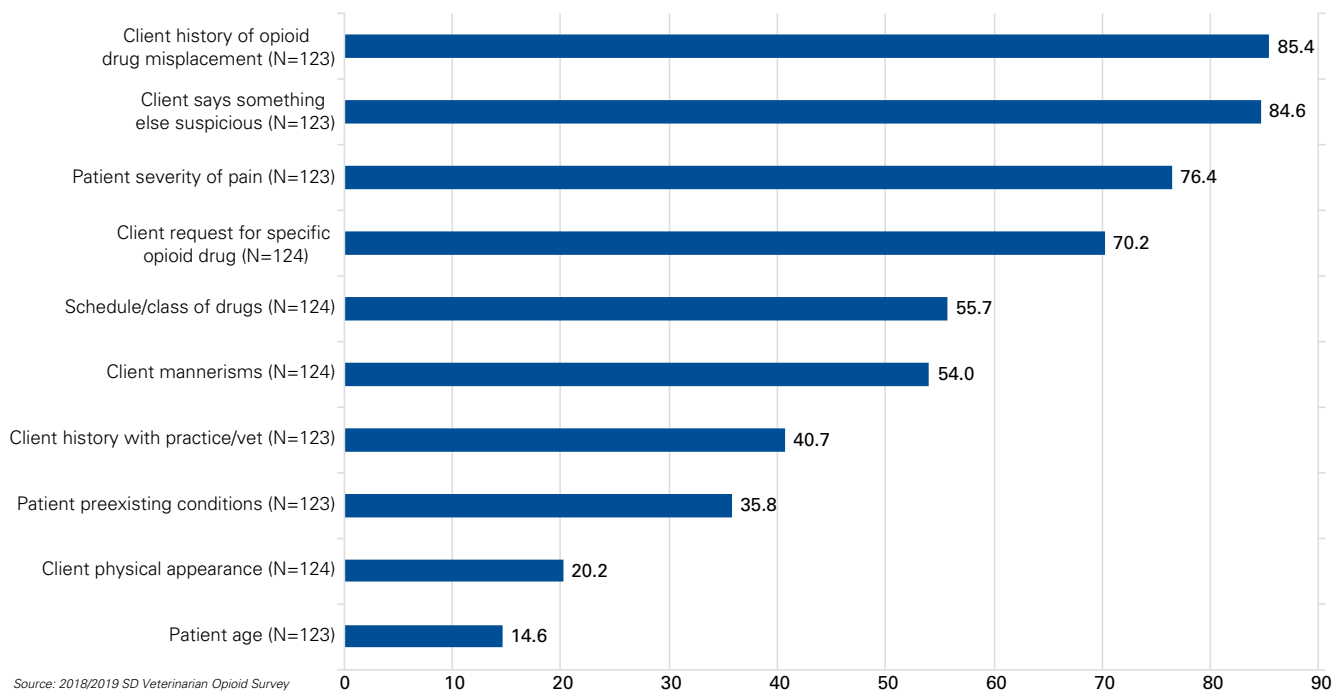
## Findings

Below we highlight the key findings related to how South Dakota veterinarians are currently prescribing and storing their opioids, their perceptions of opioid related problems, and their attitudes towards oversight and training that may be informative in steering financial and educational resources towards addressing another piece of the opioid supply puzzle.

### Prescribing and storing opioids

- Sixty-six percent of currently practicing respondents currently prescribe opioids. The most commonly prescribed drugs (sometimes or often) are Butorphanol (95%), Tramadol (90%), and Buprenorphine (70%).

**Figure 1.** Percent of Respondents Who Consider the Following Factors Very Important When Making Decisions About Giving Take-Home Opioids



Source: 2018/2019 SD Veterinarian Opioid Survey

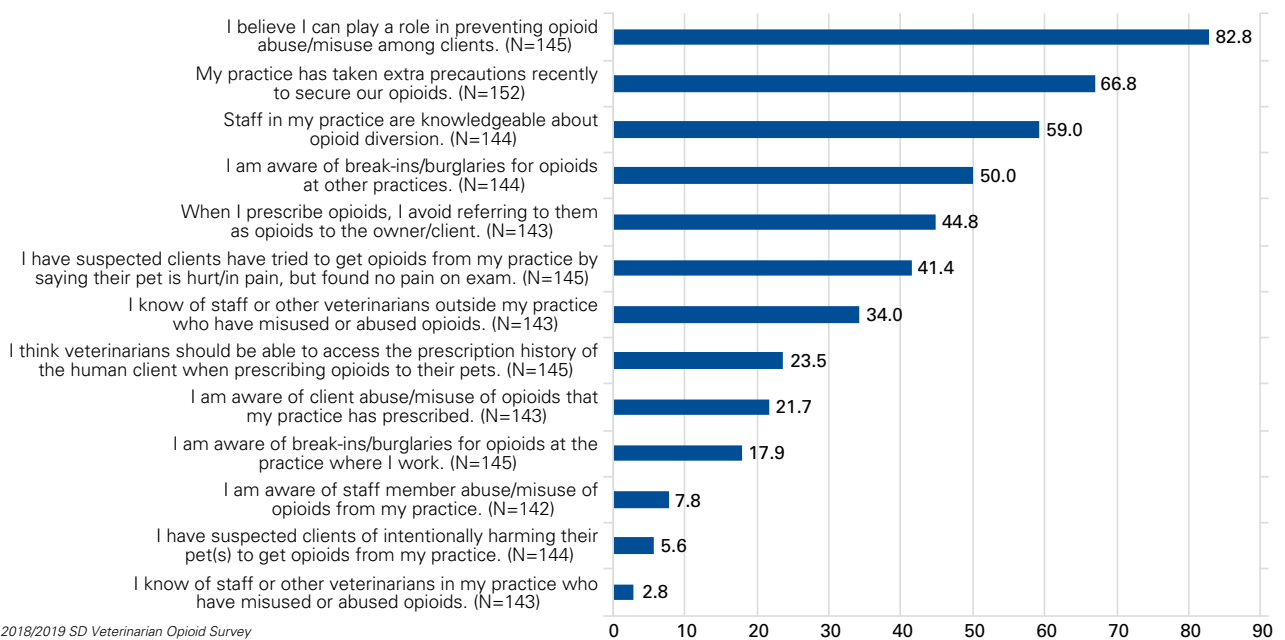
- Most (83%) veterinarians prescribing opioids prescribe the medication for a client to take home and administer to a patient themselves. About three-fourths of those who give clients take home drugs have a maximum number of days for which they will prescribe them. The number of days ranged from 2 to 60 and the average was 16 days.
- When considering whether to provide pet owners with take home opioid prescriptions, factors such as client history of drug misplacement (85%), client saying something suspicious (85%), patient/pet severity of pain (76%), and client requests for specific drugs (70%) were factors deemed very important by the highest percentage of prescribing veterinarians (see Figure 1).
- Nearly all opioids are stored within some form of locked cabinet, safe, or drawer, but about one in three veterinarians work within practices where multiple people have access to the drugs do not account for who is accessing drugs within their practice.

### Veterinarian perceptions of opioid-related problems

- On par with a study of rural Americans<sup>9</sup>, most (54%) veterinarians think the opioid problem in their community has remained about the same over the past five years, and nearly none think it has improved.

- Eight percent were aware of a staff member who abused/misused opioids from their practice. Veterinarians were much more likely to know staff or other veterinarians outside of their practice (34%) than within it (3%) who have abused or misused opioids (see Figure 2).
- Forty-one percent have had a client request drugs for their pet, but were unable to detect pain in an exam, and 6% have suspected clients of intentionally harming their pets to get opioids (see Figure 2).
- Nearly one in five have experienced a break-in or burglary at their South Dakota practice (see Figure 2).
- Most (67%) say they have taken extra precautions to secure their drugs and many (45%) are also shifting how they communicate with clients as a result (e.g., not referring to opioids as opioids) (see Figure 2).
- Nearly 70% said they have modified the amount, duration, or dose of a prescribed opioid due to owner/client characteristics. This tells us that veterinarians are closely watching pet owners and are in tune with suspicious behavior.
- Many (37%) have also changed how they prescribe based upon recent publicity regarding opioid misuse.

**Figure 2.** Percent of Respondents Who Agree with the Following Statements Regarding Opioid Misuse or Abuse



Source: 2018/2019 SD Veterinarian Opioid Survey

## Oversight and training

- Only 24% of prescribing veterinarians were aware of the Food and Drug Administration (FDA) resource guide<sup>10</sup> to support responsible opioid prescribing for pain management in animals that was released in August 2018. Of those aware of the report, 81% found it somewhat helpful and 11% found it very helpful in understanding other options for pain management in animals. Nearly half would like to see more guidance from the FDA on this topic.
- Respondents were generally uninterested in receiving state pharmacy board, law enforcement, or general oversight regarding prescribing opioids. At most, one-third of respondents agreed they were interested in such oversight.
- Many did not receive training on opioid abuse/misuse in veterinary school (59%) and 30% did not feel training in veterinary school on opioid abuse/misuse was sufficient (see Figure 3).
- Even fewer have received training on opioid abuse/misuse through continuing education (34%) and many did not feel they received sufficient training on opioid abuse/misuse (75%) (see Figure 3).
- Nearly one-half reported that they would like to see additional training on opioid use/abuse and nearly all think this topic should be addressed in veterinary school (92%) (see Figure 3).

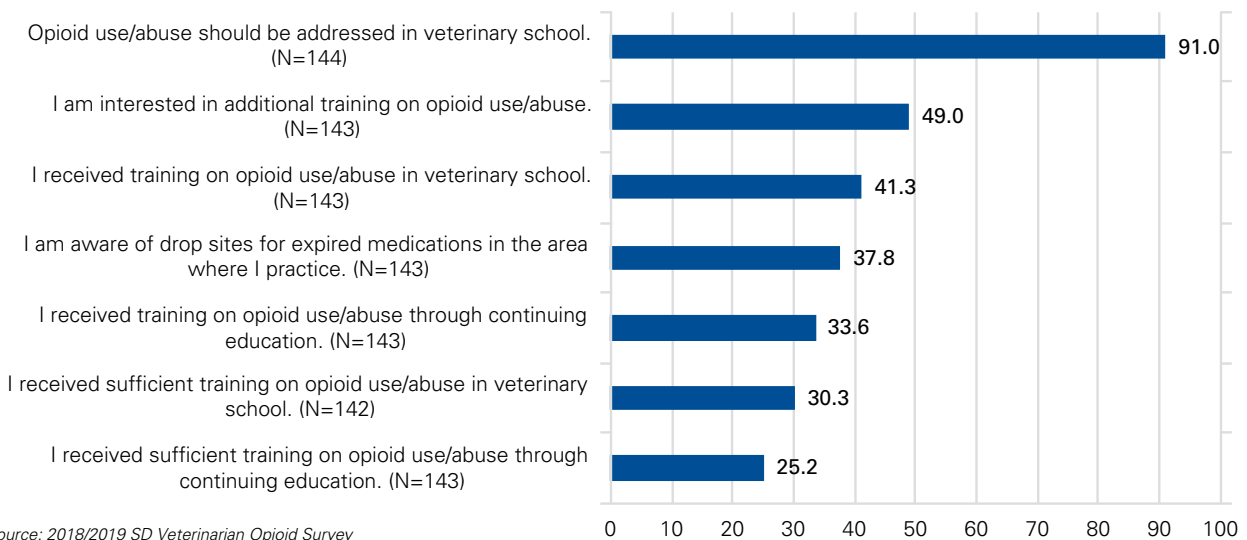
## Discussion

Veterinary practices that prescribe controlled substances must have at least one veterinarian on staff with a Drug Enforcement Agency (DEA) license. This ensures some DEA oversight into what, how much, and when drugs are prescribed. This survey revealed that many veterinarians are already taking precautions but are also interested in learning more about this issue to better handle opioid prescriptions.

## Take-home points for veterinarians

- Very few veterinarians think the opioid problem has gotten better in their community in the past five years. They perceive this problem as staying the same or getting worse across South Dakota.
- Most veterinarians think they can play a role in preventing opioid abuse/misuse in clients.
- Most veterinarians are unaware of the 2018 Food and Drug Administration resource guide to support responsible opioid prescribing for pain management in animals.
- Most veterinarians have not received training on opioid use/abuse, either through veterinary school or continuing education.
- Nearly all veterinarians think that opioid use/abuse should be addressed in veterinary school.

**Figure 3.** Percent of Respondents Who Agree with the Following Statements Regarding Opioid Related Training



Source: 2018/2019 SD Veterinarian Opioid Survey

## References

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- <sup>7</sup> FDA. (2018). The opioid epidemic: What veterinarians need to know. <https://www.fda.gov/animalveterinary/resourcesforyou/ucm616944.htm>.
- <sup>8</sup> <https://www.drugabuse.gov/drugs-abuse/opioids>
- <sup>9</sup> RWJ report 2018. <https://www.rwjf.org/en/library/research/2018/10/life-in-rural-america.html>
- <sup>10</sup> <https://www.fda.gov/AnimalVeterinary/ResourcesforYou/ucm616944.htm>