

The Drug Crisis and the Potential Impact on Animals

Everyone has seen media stories about the opioid drug crisis in the United States. These drugs have claimed the lives of so many people. This epidemic has sparked action at the local, state, and national level to deal with prescription drug overdoses and illegally-laced compounds from overseas. Physicians, veterinarians and other medical professionals have all been affected by this situation. Animals caught in drug dealing situations and law enforcement animals on the front lines have been exposed to these substances and experienced signs of ingestion/overdose. Identifying signs of exposure and proper treatment options will help veterinarians deal with illegal drug related problems.

For the purposes of this article, we will be discussing methamphetamine, opioid and cocaine exposure in primarily dogs and cats. Law enforcement officers and their animals that are deployed to drug/crime scene activity need to be aware of the potential for exposure at these venues. Dogs maintained by drug users may accidentally inhale, ingest or come in contact with meth, cocaine or opioids. Animals may be exposed by inhalation, ingestion, direct contact, or through the eyes, nose or mouth (mucous membranes).

In the case of methamphetamine, cocaine and opioids, animals who have ingested the drug will present with neurological signs including agitation, hyperactivity, irritability, aggression and apprehension. Large doses may present as severe respiratory depression. Since exposure information may be lacking, most of these cases will be treated symptomatically. Working with the owner to get the correct information can certainly help with proper treatment.

Some animals will have respiratory distress from inhaling harmful fumes or chemical burns from fires or explosions, along with dermatologic contact with the drug on feet or hair. The respiratory cases may be treated with removal from the environment and oxygen. Antibiotics and other drugs may be used as needed. Animal contamination on the skin and hair coat may need 2-step decontamination with appropriate disinfectant on the first step by people in appropriate PPE and the second step would involve cleaning with regular shampoo.

Law enforcement may want samples to prove presence of the drug on the animal. Chemical burns to the skin may vary in severity depending on amount of exposure, type of chemical(s), and length of exposure time. Testing of the affected area may or may not provide information on the type of chemical(s) the animal was exposed to. Visually, chemical burns may have a similar appearance, irrespective of the type of chemical causing the burn. Urine and blood testing can be submitted from an animal but may be negative. Urine test kits sold in pharmacies may produce results on animals with large doses of drug exposure.

Chemical burns do not occur with exposure to methamphetamine but by exposure to products used to create or by-products of producing methamphetamine. These include lithium metal, hydriodic acid, and iodine crystals. With lithium metals, it is important NOT to use water to flush the skin or wound because lithium reacts violently when it contacts water. If you suspect lithium metal on the skin or wound, cover the area with mineral oil, extract the metal shavings, and place into mineral oil.

For non-metal chemicals, the best treatment is flushing the wound with copious amounts of tap water. Flush the wounds for at least 15 minutes or longer, and test with litmus paper until the pH is neutral. Make sure that the runoff irrigation solution does not come into contact with unaffected skin of the animal or people. Irrigation (or removal of metal) should begin immediately after exposure, preferably in the field. Gentle, low pressure irrigation is best.

In the case of opioids, Narcan or naloxone carried by law enforcement to treat human drug overdoses can be used in canines through the IV or IM route. There is an intranasal Narcan but its use has not been validated in dogs.

It is critical that these exposed dogs or cats are transported to veterinary facilities for ongoing monitoring and care. Any animal exposed to illegal substances needs veterinary attention as soon as possible with any information about drug exposure. Large enough doses of all these drugs can be fatal in dogs and cats, as well as people. Heroin laced with fentanyl can produce deadly results in many animals.

It should be noted that when veterinarians are presented with animals potentially exposed to illegal substances or drugs, it may be difficult to get information from the owner/presenter as to what the animals ate, smelled, rolled in, or inhaled. They will present the animal with little history and the veterinarian will need to probe about possible drug exposure. It may be more evident when law enforcement animals are presented for drug exposure as the reason for presentation.

There is very little information on drug exposure in animals. Overdoses of drugs in people will continue to dominate headlines across the state and country. As long as people own pets and law enforcement animals are used in these situations, veterinarians will continue to see pets with illegal drug exposure. We need to be aware of the signs and how to work with clients and law enforcement to treat these animals.