

## **Companion animal population health in the face of a pandemic: what we're talking about in shelter medicine practice 2020.**

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### **Learning objectives**

Participants will

- Be exposed to the current principles of population and infectious disease management in shelters and how they have been impacted by COVID-19
- Review current knowledge regarding coronaviruses in animals, with a particular focus on concerns around SARS-COV2 and companion animal species, to better understand current guidelines
- Understand how some common veterinary practice recommendations in shelter-owned animals may differ from those in private homes
- Be given an opportunity to submit their questions about shelter medicine practice and shelter COVID-19 responses, to be answered both during the presentation and after with follow-up materials.

### **Introduction**

Outcomes for animals entering shelters in the US have changed dramatically in the last two decades. Increased veterinary care for shelter and community animals, decreased euthanasia of homeless pets, and evolving roles of the shelter in the community have all contributed to improved companion animal welfare. Euthanasia has dropped from an estimated 12-20million animals in the US in 1999, to less than 2 million today. This presentation will review and build on shelter medicine principles to explore current practices being employed by shelter veterinarians, particularly in light of the COVID-19 pandemic.

### **Key Concepts in Shelter Medicine Practice**

#### *Capacity for Care Management*

Overcrowding is the single most important cause of compromised health and welfare in shelters. Controlling overcrowding involves instituting a comprehensive approach to managing intake into the shelter, handling of animals within the shelter to minimize their length of stay, and decreasing time to humane outcomes.

While capacity for care management is really a cultural and deep operational shift for shelters, small practical changes in protocols, communication strategies, and daily activities can go a long way in decreasing the length of stay of each animal, and the overall level of health in the shelter population (Karsten 2017). Creating programs that provide alternatives to relinquishment, minimize in shelter time, and maximize humane outcomes in a timely fashion are the key institutional practices in this approach (Newbury 2010).

### *Length of stay (LOS)*

Length of stay (LOS) equals the time from intake to time of outcome for each animal. Minimizing length of stay of individual animals in shelters impacts not only the welfare of that individual animal, but the overall health and welfare of the population. This is a key central tenet in shelter practice.

### *Practicing alternatives to relinquishment*

Keeping animals out of shelters whenever possible has been a practice that continues to grow over time. Interventions such as offering spay/neuter for community cats and returning them to the field has become commonplace in most communities. Other examples include offering public assistance short-term boarding, foster care support, short-term medical interventions, or direct re-homing assistance are all programs practiced prior to COVID-19, but with substantial increase in the face of the pandemic.

### *Humane housing within the shelter*

The most important element in housing is to minimize the proportion of time animals spend in inappropriately sized and unenriched enclosures and environments (Wagner 2018). Shelter renovation, especially for shelter cats, does not need to be extensive or expensive; examples of relatively easy alterations to standard cages as well as recommendations for communal room design are readily available. <https://www.uwsheltermedicine.com/library/resources/cat-cage-modifications-making-double-compartment-cat-cages-using-a-pvc-portal>

Shelter renovations for dogs should always involve double-sided enclosures, which allow dogs to eliminate separate from sleeping areas, facilitate safer handling for animals and staff, and reduce overall stress on people and animals (Wagner 2014). Wards housing 6-8 dogs, rather than large rooms with long runs of kennels, are much better for controlling noise, stress, and disease transmission (Coppola 2010).

### *Preventive Medicine*

Shelters across the US have different intake protocols based on disease risks and resources. However, many practices are standard, including the use of modified live vaccines at intake. Often these practices are performed by trained medical staff under the general supervision of a veterinarian who is regularly in the facility and has documented the practices in the standard written protocol (SOP). Population health in shelters requires a broader use of vaccination and a standardization of the treatment of common diseases. Additionally, shelter health programs rely on high quality high volume spay neuter (HQHVSN) programs utilizing efficient clinic protocols and surgical techniques to safely reduce populations of unwanted companion animals and increase the health and welfare of individual animals (Looney 2016).

## **Companion Animals and COVID-19**

Early in the pandemic, veterinary and shelter professionals were very concerned with the potential for companion animals to act in the transmission of SARS-COV2 to people. Over time,

science has demonstrated that while cats and dogs may become infected with the virus through close contact with infected people or from high doses in an experimental setting, and cats may pass the virus to other cats, they do NOT appear to be a substantial risk in the transmission of the virus to people. Reviewing case examples and laboratory studies over time paired with the steadily increasing knowledge of the biology of this virus illustrates that the primary impact of the virus on companion animal populations is likely the social and economic impact on families and communities.

### **Animal Sheltering in the time of COVID-19**

From the beginning of the pandemic, shelters have been very concerned with how COVID-19 may impact the welfare of our companion animals. While the virus itself has proven to be less of a direct threat to animals, the health and financial impact on pet owners and communities is poised to be of great threat to the welfare of companion animals. Very quickly, shelter and shelter medicine leadership from private, non-profit, and academic sectors organized and responded. Multiple remote meetings occur weekly to continue the efforts and the conversations. Several sheltering initiatives have remained constant throughout this pandemic:

- Sheltering of pets of sick and hospitalized owners. Protocols have followed the abundance of caution CDC protocol for housing and handling of cats and dogs with known exposures which includes a 14day holding period from the last point of exposure. Link to CDC/AVMA information and protocol: <https://www.avma.org/resources-tools/animal-health-and-welfare/covid-19/interim-recommendations-intake-companion-animals-households-humans-COVID-19-are-present>
- Remote management of programs essential to life-saving: foster care, emergency medical interventions, adoptions. Shelters early on shifted to move animals out of the shelter and into the community, doubling the number of animals in foster care at the start of shelter in place orders. This remote management also enabled staff to minimize their time in close contact with one another caring for animals in the shelters. Maintaining more animals in foster care is likely to continue for the duration of the pandemic, and beyond. A more case management approach to interventions in sheltering is also likely a long-term change, with more interest in fields such as veterinary social work and other social support services. <https://vetsocialwork.utk.edu/>
- Appointment-based and curbside services in shelters: intake, adoptions, foster placements, food pantries, vaccine clinics, others. Many shelters are using waitwhile and applications from human healthcare and restaurant management to provide for appointment management, provide better customer service, and manage the traffic of humans in their facilities and their programs. <https://waitwhile.com/doctor-waitlist/>

- Adaptations to shelter HQHVSN surgical programs in order to continue to provide spay/neuter for previous clientele and patients. Many spay neuter clinics shuttered or greatly reduced operations early in the pandemic until more was understood about how to protect their staff and community. Following practices similar to those in veterinary clinics, spay neuter clinics are now rebounding in their operations. Link to COVID-19 Spay Neuter Clinic Preparedness Guide: <https://network.bestfriends.org/covid-19/lifesaving-programs/covid-19-sn-clinic-guide>
  - Incidentally, the PAUSE on spay neuter, while upsetting to many, is unlikely to have any lasting impact on animal populations over time, as demonstrated in this excellent video from the Alliance for Contraception in Cats and Dogs. It also cleverly illustrates that spay neuter programs are more effective when they target high numbers in a population at risk, rather than simply addressing low numbers of animals easily trapped or brought in for services. <https://www.youtube.com/watch?v=bAac78YBk68>
- Increased demand for wellness and other medical services from pet owners, due to financial lack of access and/or the increased challenges for owned animals to receive care from other agencies. Incremental care and veterinary billing are getting closer examination as methods to meet this demand and support pet ownership. <https://pphe.utk.edu/aligncare/>  
<https://vetbilling.com/>
- Housing insecurity and concerns about a pending eviction crisis and its impact on companion animals. It is estimated that 60% of US households own pets. 12.6 million households are at risk of eviction. Animal numbers at risk range from 6-10 million beyond current shelter intake. Shelters are tracking this closely and preparing, while also trying to prevent relinquishment by providing support for pet-owners. Link to HSUS Eviction Response Toolkit <https://www.animalsheltering.org/eviction-toolkit> and a link to the Eviction Lab COVID-19 Database <https://evictionlab.org/eviction-tracking/>

Veterinarians have played an active role in the healthcare of communities during this pandemic. Shelter veterinarians, in particular, work at the interface of companion animal population health/welfare and the health/welfare of communities during more “normal times,” and have seen directly the impacts of COVID-19 on companion animals and pet owners. Many of the interventions and services of shelters require veterinary input and oversight going forward. Shelters today face both the challenge and the privilege of re-visiting their roles in the community.

## References

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