



COVID-19 Spay/Neuter and Wellness Clinic Preparedness Guide

This COVID-19 Spay/Neuter and Wellness Clinic Preparedness Guide is a collaborative effort led by shelter and spay/neuter professionals representing different aspects of veterinary clinic operations. The intention is advisory in nature, based on current knowledge. This guidance is not a standard or regulation and creates no legal obligation. It is intended to help clinic leadership formulate the safest and most reasonable approaches to operating spay/neuter and wellness clinics and maintain lifesaving functions. Communities vary greatly and what may be safe and feasible for one community may not be for another. Organizations should adhere to state and local laws and regulations at all times.

This is a living document that will be updated regularly.

We welcome sample protocols and documents for for consideration in the library or other feedback [here](#).

COMMUNITY PREPAREDNESS

There are many challenges to consider in redesigning plans and protocols to operate a spay/neuter clinic in the time of COVID-19. Ongoing issues may include varying levels of disease in the local community, supply interruptions and shortages, financial instability for clients and alterations in executive orders. Spay/neuter and clinic operations will likely be impacted long-term. Similar to other businesses, clinics are responding with exciting innovations in order to meet their mission and serve their communities.

State officials and local health departments are good sources to access how changing restrictions, stay-at-home orders and phased opening procedures may affect spay/neuter operations. State veterinary medical associations can give additional guidance. There is also a directory of local health departments [here](#).

If programs are traveling to other communities to provide services, consulting local authorities on the COVID-19 status of the host community is essential to planning.

DECISION-MAKING TO CONTROL DISEASE TRANSMISSION

Every clinic will have the task of interpreting these recommendations according to their own circumstances and plans. [This hierarchy](#)* may be helpful in decision-making.

The CDC advises workplaces to use multiple methods from the “hierarchy of controls” to provide the greatest degree of protection. Clinic protocol and scheduling decisions should engineer methods to protect people from SARS-CoV2 exposure while also putting in administrative protections and using PPE.

Staff safety and support

- Clinics should follow state and local guidelines for testing and/or self-quarantine of employees exposed to someone with COVID-19.
- Ask employees to voluntarily take their temperature in the morning and not report to work if they are febrile. (Note: only 50% of infected people are febrile.)
- Provide team check-ins at the start of the day covering roles, worries, strategies, challenges. See the [sample checklist](#) provided.
- Have a back-up staff on call for sick employees so that clinics can continue to operate. Alternately, have an action and communication plan if there is a need to close the clinic abruptly.
- Provide training and updates to staff as well as general workplace support. Maintain honest but positive communication.

Creating a clinic protocol for when a staff member tests positive for SARS-CoV2

- Develop a protocol for the clinic before it becomes reality and share with staff up front. Staff should know whether they will be paid or need to use PTO, when they can return to work and what is required for them to return.
- This [guidance summary](#) has been developed from CDC recommendations to help in protocol writing. For more complete information, see the [AVMA website](#) for clinics.
- Respect patient privacy and always follow applicable laws.
- Identify and inform staff (and clients if applicable) of potential exposure.
- Reassess available team and individual risks.
- Determine new capacity and staff roles and adjust the workload.
- Under the CARES Act passed by Congress, many employers are required to provide sick time for staff who test positive for SARS-CoV2 or are caring for someone who tests positive for SARS-CoV2. Staff members with children who do not have child care due to pandemic-related school or day care closures may be eligible for paid family/medical leave. The employer is eligible for a payroll tax credit to offset these costs. A human resources professional, CPA, or payroll service may be able to provide guidance. Employers with fewer than 50 employees can ask for an exemption.

Training staff and volunteers in adapted clinic operations without compromising social distancing

- Video meetings by Zoom, Microsoft Teams or GoToMeetings can be helpful.
- Challenges for MASH clinics can include rotating staff and volunteers, particularly if scheduling, check-in and discharge is done by different teams in every location. Video meetings provide for consistent training and messaging.
- Give your staff and volunteers a virtual tour of the clinic and new operations items through a Zoom call.

PRIORITIZING PATIENTS

It is up to each clinic to decide how many surgeries they are comfortable performing when opening again. Because many clinics are operating at reduced capacity, they are phasing in services with a focus on minimizing the numbers of human contacts. For example, they may be prioritizing rescue/shelter partners and community cats and adding on limited public appointments at a later time.

The safest and most efficient plan may also mean reducing some services and prioritizing others. It is expected that with social distancing procedures, it will take more time to provide services safely. Additionally, the stress of mitigating one's actions in daily life takes a toll on staff and clients. Production levels need to be balanced with safety and financial sustainability and that balance will be different for every clinic.

Priority patients for spay/neuter services

- Pregnant
- High risk of pregnancy (mixed-sex households, outdoor cats)
- Intact animals causing behavior/housing issues (cats in heat, marking)
- Emergency procedures

Priority clients

- Housing insecurity with intact animals
- Managing community cats
- Recently adopted intact animals

Considerations for vaccine and wellness clinics

- Puppies and kittens
- Overdue rabies vaccines
- Conditions affecting welfare if delayed
- Routine procedures done safely with fewer people
- Consider extending heartworm prevention for six months for overdue heartworm tests rather than testing

CAPACITY FOR CARE

Physical capacity

- The physical capacity of the space can help determine a staffing plan and number of surgical patients you can serve safely per day.
- A ballpark estimate for safely staffing the physical space takes the clinic areas used for patient preparation, surgery and recovery and allows for a minimum of 60 square feet per staff member. (This area is equivalent to a half-circle in front of an individual with a six-foot radius. To provide a full circle around an individual with a six-foot radius would require 113 square feet.) Not all clinics will be able to achieve this, which is why other safety precautions are in place to mitigate risks.
- Workstations ideally would have one primary staff member assigned to each function (intubation, surgery table and recovery); staff should be six feet apart and not facing one another. Some activities

require close proximity between staff members and so additional protections will be needed (see section on PPE).

- Some clinics are putting up plexiglass between prep table stations or washable shower curtains to make barriers between staff.
- Staff should avoid sharing equipment like stethoscopes. Consider purchasing additional supplies for staff to avoid shared equipment, e.g. hair clippers, scrub solution bottles and positioning trays.
- Mark out one-way traffic patterns wherever possible to discourage staff from crossing paths in close proximity. Again, in some spaces this may not be possible.
- Mark out six-foot distances on the floor in key areas to act as visual reminders.
- Consider whether there are ways to relocate or open new intake and recovery areas or add workstations to use space outside of the usual clinic if spaces are tight.
- Rather than staffing one large recovery area with multiple people, and depending on caseload, consider creating multiple recovery areas that are individually staffed.
 1. If you create intake and recovery areas outside of the usual clinic because spaces are tight, animals must be monitored in these places by a staff member.
- MASH set-ups may have an advantage in their physical capacity to provide for safer workspaces and traffic flow for staff by reconfiguring some of their spaces or resetting workstations. Many shelters have fewer animals currently, so a MASH program may be able to use empty rooms previously reserved for housing shelter animals. There may be different demands or solutions at each site but given the team's familiarity with the location this can likely be tackled remotely with planning prior to returning to the site.
- Some clinics are locking their lobby doors during the day and scheduling trap rentals, donation drop offs and rechecks by appointment only to avoid high traffic during the day.
- If the facility will be open to the public, make sure to have trash cans, tissues, hand sanitizer and signage about washing hands and social distancing.

Staff capacity

- Calculate staff needs and roles and create surgical teams.
- For programs with more than one veterinarian and LVT, consider scheduling two or more split teams (Team A/Team B) that do not overlap with each other to minimize risk to all staff. This has been done in shelters with great success at isolating exposures and preserving functions of the organization. See sample protocol [Creating Staff Teams for Spay/Neuter Clinics](#).
- Many clinics may need to reduce the numbers of volunteers they are using if it overcrowds clinic spaces. Their participation should be assessed and managed just like staff.
- Consider how many days the team can do surgery safely and still allow for cleaning of spaces and equipment and recovery of teams. Some clinics are doing fewer surgeries per day with fewer staff and extending the number of surgery days to meet demand and surgical goals.
 1. Schedule time for [deep cleaning](#) or potentially half a day at the end of one surgical team's stretch (e.g. Team A with three days of surgery, one-half day of surgery, then one-half day of deep cleaning followed by Team B with three days of surgery, one-half day of surgery, one-half day of deep clean).
- Ensure there is full team commitment and a level of comfort with surgical goals. Provide opportunities for discussion of this process.
 1. Have the staff do a confidential self-assessment and self-reporting to help develop the schedule. This [survey](#) can help identify how many hours staff can work and what risks they have. Examples of higher risk

team members include older volunteers (95 percent of deaths from COVID have been people over 50), those with medical conditions, those with daily exposure to other family members working in high-risk professions or those with family members who are immunocompromised.

2. Re-allocate remote jobs when possible to employees for whom working in the clinic is particularly risky. Some clinics are having administrative staff answer phones remotely or in separate offices and encouraging them to not share phones and to clean the receiver between calls.
- Break room: schedule breaks at different times and limit the number of staff in one room at the same time.

SURGICAL SUPPLIES AND PPE

Surgical supplies

- Inventory surgical supplies and calculate how many patients the clinic can serve with what is currently on hand.
- Expected ongoing shortages include surgical masks, surgical gloves, disposable drape material, disposable gowns and anesthetic drugs.
- Consider opening accounts with multiple suppliers such as MWI, Patterson, and Midwest to increase access to supplies.
- Order additional supplies, but do not schedule appointments until the clinic has the supplies to serve those animals.

PPE

- Expectations for PPE and hand hygiene in clinics:
 1. Sinks are easily accessible for hand-washing and stocked with soap and single-use paper towels at all times.
 2. Hand sanitizers should be available at stations when sinks are not easily accessible, though hand-washing is preferred.
 3. Staff should be trained to avoid touching their face or each other, to consistently disinfect any shared equipment (or avoid sharing it) and to be attuned to interactions that increase risk.
 4. Ensure all staff have PPE and that masks are always worn in the clinic around others. **Cloth masks** should always be worn in the clinic. Staff members should have one mask per four hours of clinic time. They should be washed daily and dried completely.
 5. At this time, the **CDC advises** veterinary clinic staff to wear goggles or a face shield in addition to a mask, gown and gloves when handling any animals with respiratory disease.
 6. Provide face shields for staff to wear while transporting large dogs within the clinic, drawing blood, trimming nails, giving vaccines or handling emergencies, as these require multiple staff members working together at close range.
- If you are having difficulty finding supplies through regular vendors, consider **innovative solutions** to these shortages using products that are readily available without compromising the health of humans or animals.

ANESTHETIC CONSIDERATIONS

Capacity of pharmaceuticals, including anesthetics and analgesics

- Inventory in-stock pharmaceuticals, including controlled drugs.

- Shortages are anticipated in drugs shared with human medicine. **These include:**
 1. Propofol, ketamine, fentanyl and midazolam.
 2. Other drugs affected are hydromorphone, morphine and diazepam.
 3. Local anesthetics such as lidocaine and bupivacaine may also be impacted at times
 4. Dexmedetomidine may be in high demand, but is anticipated to be available in restricted quantities
- Veterinary-specific drugs are good options.
 1. Drugs that are manufactured particularly for the veterinary market include butorphanol, alfaxalone, tiletamine-zolazepam and buprenorphine (Simbadol).
 2. Drugs that can be compounded for use in spay/neuter clinics include buprenorphine and medetomidine, which can be substituted for dexmedetomidine.
- Link to the most [up-to-date information](#) on drug shortages as reported to FDA.

Alternative anesthetic protocols for spay/neuter

- Alternative protocols providing multi-modal analgesia for spay/neuter are summarized [here](#).
- TTD protocol (butorphanol, tiletamine-zolazepam, and dexmedetomidine) is commonly already used, but dexmedetomidine may be difficult to get at times. [Dosing charts](#) are widely available.
 1. Medetomidine can be substituted for dexmedetomidine, however be careful in mixing cocktails as concentrations of products may vary.
- Tiletamine-zolazepam IV induction for dogs is an alternative to ketamine/midazolam; this can be used in cats as well but the TTD combination is preferred in cats (IM induction, less handling better recoveries).
- Other alternatives: buprenorphine with acepromazine followed by induction with alfaxalone IV could be a reasonable alternative, particularly for higher-risk patients. This is more costly than standard protocols.
- Use of [local blocks](#) (testicular, pedicle, incisional) with lidocaine or bupivacaine can provide additional pain control.
- Different agents can result in a variety of monitoring parameters (e.g. bradycardia in patients with dexmedetomidine), so staff should be trained in monitoring and safety parameters prior to employing new protocols.
- Anti-anxiety medications can be given in the morning to enable easier restraint and reduce stress. **Options include:**
 1. Oral trazodone and/or gabapentin to dogs
 2. Gabapentin for cats

Client communications

- Provide clear instructions on your website and social media as well as on the phone for scheduling, payment and what to expect on the day of the clinic in terms of check-in procedures and social distancing. Signage on the clinic doors can be helpful: [sample 1](#), [sample 2](#), [sample 3](#).
- Provide FAQs for how the clinic works now. [Here is an example](#).
- The clinic website can have clear methods for payment, and it will be a time saver if payment collection is built into the appointment process.

- If your clinic is prioritizing which patients will be rescheduled first (e.g. shelter pets, community cats first) or any types of pets you will not be doing during this time unless an emergency, clearly communicate this with clients who had their appointments cancelled and let them know your plan for rescheduling.
- Clinics may also want to **ask clients questions** when scheduling to ascertain if the client is sick and to not schedule pets from COVID-positive households until those in the household are not contagious.

Scheduling and social distancing

Some clinics, particularly mobile, MASH, TNR and vaccine clinics, do not make appointments prior to the day of service. Instead, clients form a line in the morning and are handled on a first-come, first-served basis. This type of “walk-in” scheduling makes it difficult to maintain social distancing guidelines. To minimize contact, consider taking appointments by phone or online ahead of time.

- With pre-scheduled appointments, a clinic can determine what services the client would like to arrange for their pet. Pre-entering services before the client arrives will reduce the amount of time your staff interacts with a client. This is also a good time to collect relevant medical history, if known, to ensure it is captured. These items can then be verified at check-in the morning of surgery.
- To reduce handling of paper between clients and clinic personnel, consider emailing or digitizing your surgical consent/admin/intake form to the client to fill out ahead of time using a software like **Clinic HQ**, which is currently offering three months free, or companies like DocuSign or HelloSign.
- To reduce the number of people and pets in your parking lot at one time, consider staggering check-in times by species. For example, if your check-in is normally from 8–9 a.m., have dogs check in at 8 a.m. and cats check in at 8:30 a.m.
- The **CDC** recommends utilizing “touchless payment” wherever possible. Consider collecting payment ahead of time either online or by calling clients for payment details. Not all clients will be able or willing to pay ahead of time, but by decreasing the physical exchange of paper money or credit cards we improve staff and client safety. Discussing payment options ahead of time allows staff to pre-enter any grant programs or discounts clients qualify for (income verification can even be done ahead of time), thereby limiting physical contact at check-in and reducing contact and the potential spread of the virus. Options include systems like PayPal and Venmo.

INTAKE PROTOCOLS AND SOCIAL DISTANCING

Staff will need to direct clients on what to do when they arrive. Some clinics are doing curbside intake, and some are doing contactless or limited numbers in the clinic.

Curbside intake

- Clients stay in their vehicles and your staff or volunteer comes to them to complete intake. This can be communicated ahead of time via email, your website and social media, as well as signage posted at parking lot entrances.
- Staff can wear colored safety vest for identification. Staff can also wear a sticker that says “I am social distancing. Please stay six feet back.” These can be made using labels and a printer.
- Each car can be assigned a number on a piece of paper (such as a Post-It Note or index card to be used once) and place the number under the vehicle’s windshield wiper. You can also use a restaurant wait system like WaitlistMe.com or TablesTeady.com.

- Tents can be provided for shade or protection from rain for staff.
- A table can be set up outside to hold leashes, pens, muzzles and sanitizing wipes for carriers. Consider not using clipboards, but if they are used, sanitize between uses.
- Pets in open-bed pickup trucks or cats not contained inside a car should be moved to the head of the line as they are at risk of jumping out and getting loose. Note: This is particularly important if it is hot outside and/or for any pet that is muzzled as heatstroke is a concern. Make sure your staff is comfortable with how to explain this to other clients who may be upset with someone going ahead of them.
- Wipe the handle of the carrier or trap handle before and after transporting.
- When staff are done with check-in, they should wash their hands and arms, even if they have been wearing gloves, and remove overgarments or change clothes prior to working in the clinic.
- These options also apply to vaccine and wellness clinics. For a curbside approach, the only change is that the owner can wait in the car until services are completed and the pet is brought back out to the car. Alternately, owners can drop off their pet and return later to pick them up. Staff can discuss any treatment options with clients over the phone. Some organizations have been successful with drive-through or outdoor vaccine clinics. Other [ideas](#) about vaccine clinics can be found [here](#).

Contact-less or limited client check-in

- Consider contactless drop off for partners (shelters or rescues) and TNR partners. Some clinics are using a visual doorbell system like Ring to announce when partners arrive. Empty carriers are placed for shelter or rescue clients to drop off patients in the front [vestibule](#) or lobby. Staff pick up the carriers or traps after clients leave.
- For public appointments, clinics can limit one person per pet and limit the overall number of clients allowed in the clinic.
- Consider marking lines six feet apart on the floor.
- Consider installing plexiglass between your intake station and clients.
- Some MASH clinics have clients wait with their pet until the vet can examine the pet. Clinics may want to consider having clients hand their pet to clinic staff or volunteers and get back in their vehicle or do limited or contact-less intake in the clinic. Veterinarians will still proceed with the exam and the normal intake process.
- Provide signage as a reminder of social distancing and other messaging.
- Cash payments are discouraged. If cash must be accepted, employees should wash their hands or use hand sanitizer immediately after handling.

PAPERWORK AND RECORD-KEEPING

Here are approaches for check-in which seek to minimize contact with the public, yet balance very real practical, technological and financial constraints of many clinics.

Option 1: Minimal Paper

- This option assumes the clinic was able to send consent forms ahead of time for clients to sign (see scheduling). It also assumes your software can auto-populate your admission document. Using a system like Clinic HQ or Microsoft Word's mail merge fields will allow for the pre-population of forms. This automation removes the need for clients to physically fill out your clinic's forms and can drastically reduce check-in time and limit contact.

- In order to follow a pre-printed consent form for TNR clinics, the form will need to be intentionally vague, since it will be unknown ahead of time which cats a caretaker is able to catch. When making the appointments, cats can be labeled simply as cat one, cat two, cat three, etc. Once it's known which cats are being admitted to the clinic, the color of the cat or a trap ID number can be written on the document.
- To minimize paper within the clinic, a one-page surgical record (often called a "treatment sheet") primarily written on by one staff member would suffice to track drugs, surgery reports and additional findings. Minimize who handles it. [Here is an example.](#)

Option 2: Paperless

- The paperless option uses a tablet in the parking lot instead of printed documents. Check the Wi-Fi strength in the parking lot ahead of time. The owner can be approached in the same manner as described above. Staff can confirm services, ask the screening questions and make sure the consent form is signed. If it is not signed, a sanitized stylus can be provided for the patient to sign on the tablet. It can then be sanitized after use. Ask the owner to reach out and take the tablet to reduce bite risks to staff.
- If you have a cloud-based software, staff can adjust services and enter notes in real time on the tablet.
- Staff should be prepared to print the patient's packet of information on the spot (this could just be the treatment sheet for the pet or a full admin packet) once the animal is inside the clinic in order to make sure the correct paperwork stays with the animal.
- An entirely paperless system is possible if a scribe is assigned with a laptop to record all aspects of record-keeping.

Option 3: Paper with additional biosecurity

- If it is not possible to go with minimal or no paper, clinics can still use their regular paper and utilize the curbside check-in or limited or contact-less clinic check-in process.
- Paper should be considered a potential fomite for SARS-CoV2; research suggests the virus can live up to three to five hours on paper.
- Paperwork handled by clients should not circulate widely through the clinic. Have a single staff member wearing a face mask and gloves handle and process paperwork from client forms. Likewise, paperwork to go home with clients should also have minimal handling, preferably by one designated staff member wearing PPE. Some clients may prefer not to receive paper.
- Pens, clipboards and other items being handled by the public should be sanitized between use.

Discharge protocols and social distancing

- Email discharge sheets or take a photo and text it to the client prior to pick-up. Make sure clients have enough data usage to ensure they do not incur a charge. Clients whose pets had anything unusual during surgery should be called to discuss before pick-up.
- For clients who do not have email or texting capability, call them to quickly go over post-operative instructions. Vaccination certificates and other paperwork can be mailed or distributed with the precautions listed above.
- Some clinics are providing a link on their website to a post-surgery video as well as online post-op instructions. Here is a [sample video](#) you may use.
- Parking lot management during pick-up can be like intake with clients staying in their vehicles and simply giving their name or coming into the clinic one person at a time.

POST-OPERATIVE CARE

Telemedicine

- Sign up for a telemedicine platform to offer rechecks virtually. Check out the Veterinary Telemedicine Platform Facebook page or suggestions on platforms or consider other video conferencing platforms. [Pet Connect](#) is offering five percent transaction fees, so for free rechecks there will be no cost to use the platform.
- Restrictions around telemedicine vary on a state-by-state basis. The American Association of Veterinary State Boards is [maintaining a site](#) with updated changes for individual states regarding telemedicine.
- If rechecks are not done virtually, follow your guidelines for intake.

Pharmacy

- Take-home medications can be put in a labelled bottle, sanitized and placed in a clean bin to be distributed at check-out.
- Use an online pharmacy service such as Covetrus or Vetsource to bill and send medications directly to clients.
- Fill prescriptions at the clinic and send via mail or provide contact-less pick up by placing medications in labelled bottles and leaving them in a pre-determined place for the client to pick up.

Financial considerations and mitigating risk

- Many clinics are experiencing financial difficulties in the wake of closures and might need to revise budgetary plans. If you are unsure where to start, an [excel template](#) has been provided to help consider business models, the financial runway and possibilities for phasing in or ramping up services.
- Consider opportunities to reduce supply costs yet still maintain high-quality care.

Examples include:

1. Oral vs injectable pre-operative NSAID administration for a 10-pound dog: Meloxicam 0.2mg/kg oral dosing costs about 70 cents while the injectable is \$3 to \$4 per patient. Carprofen 4.4mg/kg oral dosing costs about 20 to 40 cents, while the injectable is \$3 to \$6 per patient.
2. Compounded products, where legal, may be more cost-effective for clinics.
3. Transitioning from individual suture packs to cassette suture with threading a reusable needle can reduce suture costs by 25 to 60% (approximately \$1 to \$3 per procedure)
4. Best Friends Network Partners and ASPCA Spay/Neuter Alliance-mentored clinics may be eligible for medical supply discounts, so check with these organizations if you are partners.

FOR THE LATEST INFORMATION ON COVID-19 RELATED TO WORKPLACE SAFETY AND VETERINARY PRACTICE, ORGANIZATIONS ARE DIRECTED TO THE FOLLOWING SITES:

[OSHA Guidelines on Preparing Workplaces for COVID-19](#)

[CDC Guidance for Veterinarians During the COVID-19 Response](#)

[AVMA COVID-19 Practice Resources](#)

[Veterinary State Boards Are Taking Special Actions During COVID-19 Pandemic](#)

Core Committee

Elizabeth Berliner DVM, DABVP, Cornell University, College of Veterinary Medicine

Jennifer Bolser DVM, Association of Shelter Veterinarians

Gina Clemmer, Clinic HQ

Natalie Corwin, Pet Community Center, TN

Cynthia Karsten DVM, DABVP, UC Davis Koret Shelter Medicine Program

Aimee St.Arnaud, Best Friends Animal Society

Review Committee

Jennifer Scarlett DVM, San Francisco SPCA

Stan Hill DVM, Jacksonville Humane Society

Denise Deisler, Jacksonville Humane Society

Brian DiGangi DVM, ASPCA and Association of Shelter Veterinarians

Lena DeTar DVM, DABVP, DACVPM Cornell University, College of Veterinary Medicine

Karen Little, Alley Cat Advocates, KY

Erin Katribe DVM, Best Friends Animal Society

Leslie Appel DVM, SOS NY

Emily McCobb DVM, DACVAA, Cummings School of Veterinary Medicine at Tufts University