



Triaging care during a COVID-19 pandemic: A Guide for Equine Veterinarians

(OAEP Peer advice)

Use your best judgement and be prepared to state your position if questioned by enforcement officers.

On April 3, 2020 Premier Ford ordered the closing of more non-essential workplaces and designated veterinary services as urgent care only for 14 days with the potential for extension.

As veterinarians we need to remember that these actions were taken to:

- **reduce exposure and stop the spread of COVID-19 from person-to-person**
- **protect workers who maintain essential goods and services**
- **minimize impacts to people's livelihood and businesses' bottom lines**
- **maintain a strong supply chain for the goods and services they need**

The government also advised that essential workplaces put the necessary measures in place to protect the health and safety of their employees and the public, including safe physical distancing and hand-washing.

The term "urgent" with respect to veterinary services has not been defined by the government of Ontario. The College of Veterinarians of Ontario released a description of urgent care as follows:

The College continues to expect veterinarians to follow the government directive and to use their judgement in delivering urgent care only, at this time of public health emergency. Urgent care includes providing veterinary medical care for illnesses or injuries which require prompt or emergency attention. This does not include elective procedures that will not impact the animal's immediate health. Preventative medicine may be necessary in specific cases that may have long term animal and public health impacts, such as rabies and canine parvovirus. Ancillary services such as grooming are not essential services and, as previously, should be discontinued.

The Canadian Triage and Acuity Scale (CTAS), used by human emergency room hospital staff and paramedics define emergency and urgency as:

Emergency: a condition that is threat to life or imminent risk of deterioration requiring immediate aggressive interventions (e.g. Unrelenting/severe abdominal pain, major trauma with significant blood loss)

Urgent: Conditions with the potential for deterioration that would benefit from intervention (less urgent) to conditions that could progress to a serious problem requiring emergency treatment.

In determining whether a situation is urgent, other factors need to be considered;

1. Issues of human health and safety; Is there a potential for zoonotic transmission of an infectious disease? Is there a behavioural issue that puts the owner at risk (e.g. stallion behaviour)?

2. Your relationship with the owner/agent custodian. Do you feel comfortable with the person's description of the issue? Is the owner able to treat the animal? Should the horse be referred elsewhere (e.g. referral clinic) for management?
3. Urgency changes with time. This may be due to an increase in risk (e.g. approaching mosquito season for WNV/EEE) or to a gradual or sudden deterioration in disease state. Open communication and flexibility to adapt to changes in risk are needed.

The following advice is based on the results of a survey completed by members of the Ontario Association of Equine Practitioners and reflects their unique situation. It is advice only. You should use your own professional judgement.

Preventative Health Procedures

Wellness exams	Postpone visits for now – remind owner/agent to call if there are any concerns or change in condition
Fecal testing	<p>Adult horses – Consider postponing if you do high numbers of fecals as this creates extra work for laboratory/clinic staff and brings more clients to your office to drop off samples</p> <p>Foals – If managing an ongoing farm issue (e.g. roundworm resistance), use your judgment to advise on how many samples the owner/agent should collect and how to safely drop off samples at your clinic.</p>
Dentistry	<p>Postpone visits for now – remind owner/agents what to watch for to call with concern</p> <p>Routine corrective dentistry (e.g. managing a wave mouth in a geriatric horse). Based on when the last dental procedure was done, determine how long you can safely wait to not adversely affect the progress of the treatment and ultimately health of the horse.</p>
EIA testing for transport/racing	<p>Racing – Postpone for now. Testing can resume once the return to racing is announced.</p> <p>Transportation – Livestock transport (horses) is still permitted across the border. Proceed using public health precautions.</p> <p>New stable entry – Horses should not be changing barns when possible during this pandemic as “new” horses bring “new” people to the facility.</p>
Vaccinations	<p>Routine vaccinations are generally not considered urgent, however, there are some specific considerations based on risk:</p> <p><u>Core Vaccinations:</u></p> <p>Rabies – According to one paper¹ horses that have received their primary vaccine followed by subsequent vaccines develop neutralizing antibody that lasts for 2-3 years. Horses that are unvaccinated or have only received their primary dose have much shorter-lived neutralizing antibodies. There is no research evaluating the level of neutralizing</p>

antibody and protection from rabies. Having said that, in certain situations, some veterinarians do rely on rabies titres to determine if a vaccination is required. To consider a horse “properly vaccinated for rabies” the vaccine manufacturer’s guidelines must be adhered to. Horses that have been exposed to a potentially rabid animal should be vaccinated as soon as possible (within 7 days) to boost immunity if the offending animal cannot be tested. Decisions involving whether a horse should need a rabies vaccination will depend on the risk assessment including previous vaccination status and geographical risk to rabies exposure. For assistance with doing a risk assessment for a potential domestic animal rabies exposure, call OMAFRA AICC at 1-877-424-1300.

West Nile Virus and Equine Encephalitis Vaccine – Risk of exposure to infected mosquitoes capable of transmitting WNV and EEE increases as we near June. For the last few years, the first cases of EEE are generally reported to OMAFRA at the end of July/beginning of August and the first WNV cases later in August/early September. However, this can change based on the weather. Over the last few years, Public Health Ontario has reported peak numbers of mosquito pools infected with WNV in the second week of August. Current equine vaccination recommendations for protection against WNV state that horses should be vaccinated 1-2 months before peak mosquito season therefore it is recommended that horses are fully vaccinated by the end of May beginning of June. Unvaccinated horses should have their series completed by this time as well.

Tetanus toxoid – According to one paper², horses that were vaccinated with 3 doses of tetanus vaccine after 5 months of age mounted an antibody response that lasted longer than one year. Manufacturer recommendations should be followed. Horses should be boosted when there is a risk of exposure to *C. tetani* (e.g. certain wounds).

Risk based vaccinations:

Influenza, EHV-1/4, botulism, Strangles (*S. equi*), Potomac Horse Fever

The risk for influenza, EHV-1/4 and Strangles are influenced by horse movement and comingling. Since very little horse movement is occurring and there are no competitions/racing etc. they could be postponed until an announcement is made for their return.

EHV-1/4 vaccination to prevent abortion should be a farm decision based on risk.

Botulism vaccine should be administered based on management risk.

	<p>PHF vaccination is based on risk of exposure to <i>N. risticii</i>. The first PHF cases in Ontario occur usually towards the end of June. Vaccination should occur at least one month prior to peak season.</p> <p>Broodmare vaccinations to support foal immunity should proceed based on risk of exposure to disease agent.</p> <p>Foal vaccination series generally begin between 3 and 6 months of age and should proceed based on risk of exposure to disease agent.</p>
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Reproductive Services Including Foal Health

<p>Breeding (AI, ET, Semen evaluation, u/s and twin reduction)</p>	<p>This is a challenging area to provide recommendations. Under the current <u>medical</u> definition of “urgent”, breeding does not quite fit. There may be risks to welfare if laypeople are doing the breeding if no veterinarian is available. Breeding is also time sensitive as we have a managed breeding season in the racing industry.</p> <p>If breedings can be postponed for the next 14 days they should be. However, if the order is extended beyond this, this creates some critical issues to the sustainability of the industry.</p> <p>Semen, embryos and ova are considered “animal products” and foals/horses are considered agricultural/farm products. This was confirmed recently by a conversation an OAEP member had with the “Stop the Spread Business Information Line”. Breeding/horses are therefore considered part of the agricultural products (equine) supply chain.</p> <p>Therefore, breeding services MAY fall under:</p> <p>26. Businesses that support the food or agricultural products supply chains and the health and safety of food, animals and plants.</p>
<p>Obstetrics</p>	<p>Foaling is a critical time for the health of the mare and foal. Abnormalities related to foaling (e.g. dystocia, C-section, retained placenta) are emergencies/require urgent care. Perineal injuries that could worsen over time could also be considered urgent.</p>
<p>Neonatal Foal Health</p>	<p>Examining neonates for health and IgG status could be considered urgent since the condition of a foal can change quickly and a failure of passive of transfer puts a foal at risk for potentially life-threatening illnesses.</p>

	Sick foals can deteriorate quickly so any changes to their health can be considered urgent (including sepsis, inguinal, scrotal, umbilical hernias, umbilical infections, ruptured bladder).
Foal Health	<p>Sick foals can deteriorate quickly so any changes to their health can be considered urgent.</p> <p>Contracted tendons and angular limb deformities should be addressed promptly but depending on severity and owner/agent knowledge and competence, some may be managed through telemedicine and farrier referral.</p> <p><i>Rhodococcus equi</i> screening: recent research had shown that monitoring the size of lesions and only treating those foals with a higher abscess score has a positive outcome and reduces the use of antimicrobials. Screening of clinically normal foals could be postponed in the interim but monitoring for change in abscess size (along with other health indicators) is a best practice on breeding farms with R. equi issues.</p>

Medical conditions

Continue to see those conditions that you would presently see on an emergency/urgent care basis (e.g. colic, choke, respiratory distress, colitis with dehydration etc.).

Acute medical conditions	<p>Medical conditions can be triaged via client communication and telemedicine. If deterioration in condition is likely then consider providing “urgent care”.</p> <p>Conditions that present a human safety concern and/or spread of a significant infectious disease (e.g. horses with neurologic signs) are considered urgent.</p>
Chronic medical conditions	<p>Many chronic conditions can be managed through telemedicine. Owners should be aware of what changes in their horse’s condition would warrant a call to you.</p> <p>Chronic conditions can change acutely and may become urgent.</p>
Ophthalmologic conditions	<p>Eye conditions can deteriorate very quickly to become an emergency. Although some situations may be able to be monitored through telemedicine, most horses with eye disorders could be considered to need urgent care.</p>

Lameness and Performance

Lameness	<p>Acute lameness - horses with acute lameness can demonstrate clinical signs indicating a wide range of severity. Some of these situations may be able to be handled with telemedicine and dispensing of medication while other cases require in-person evaluation.</p> <p>Chronic lameness – horses with chronic lameness should be handled similarly.</p>
Joint injections	<p>In some situations, joint injections are performed to “maintain” joint health during competition/racing. During this time when there are no organized events consider postponing for now. There may be individual cases whereby there is a risk of joint health deterioration if treatment is not provided in which case consider providing treatment while respecting public health provisions.</p>
Poor performance evaluations (including hematological work-up, endoscopy, cardiac workup)	<p>During this time, competitions/racing have been cancelled so there is no immediate need to examine a horse with idiopathic performance-related issues. Consider postponing at this time.</p> <p>If a cause of poor performance is or becomes obvious and the horse’s condition starts to deteriorate the consider urgent care.</p>

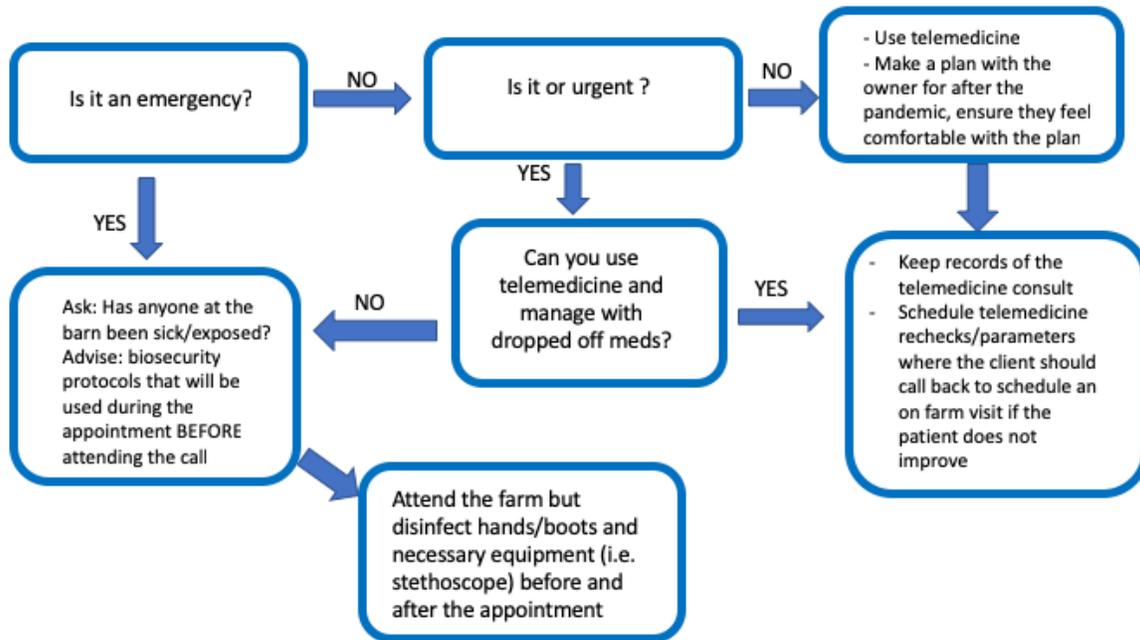
Surgical conditions

Surgeries which are presently performed as emergency/urgent procedures (e.g. colic surgery, fracture repair, C-section, arthroscopies for septic tendon sheaths/joints etc.) should proceed as normal.

Elective surgeries (OCD fragment/chip removal, upper airway surgeries (DDSP, RLN)	<p>Consider postponing all elective surgeries that will not cause a deterioration in the horse’s condition in the near future.</p> <p>If a horses’ condition is expected to deteriorate based on clinical history, examination and imaging results then urgent care may be required.</p>
Castrations	<p>Consider postponing castrations for the next few weeks and reassess.</p> <p>If the colt/stallion is or becomes a human safety concern then consider proceeding with surgery</p>

Use your best judgement and be prepared to state your position if questioned by enforcement officers.

Triage Flow Chart



Results of the OAEP survey on “equine urgent care procedures”:

Examples of conditions considered non-urgent and urgent/urgent on a case-by-case basis are presented below. This list contains examples only and is not considered to be exhaustive or all-inclusive.

Non-urgent	Wellness exams Routine dentistry Joint injections Poor performance exam EIA testing Fecal testing
Non-urgent or urgent on a case-by-case basis	Chronic lameness Chronic muscle disease Dermatologic case Surgery – stem cell/PRP treatment of tendons/ligaments/joints Surgery –tendinopathy/desmopathy

	<p>Surgery -upper airway surgery Surgery – OCD fragment/chip removal Surgery – mass removal Arthroscopic surgery EIA testing for racing or movement Hematologic monitoring of chronic conditions</p>
Urgent / urgent on a case-by-case basis	<p>Colic Choke Diarrhea/colitis Neurologic – acute Neurologic - chronic Acute respiratory disease Chronic respiratory disease Acute lameness Acute muscle disease Post foaling exam Periparturient exam Dystocia Neonatal foal exam Angular limb disorder Sick foal exam Contracted tendons Lacerations Weight loss ADR (ain't doing right) Ophthalmologic disease Surgery – enucleation Surgery – angular limb disorder</p>

¹ Harvey et al. Duration of serum antibody response to rabies vaccination in horses. JAVMA 2016, 249(4)

² Kendall et al. Duration of tetanus immunoglobulin G titres following basic immunization of horses. EVJ. 2016 48:710-713