This is designed for voice-over for the PowerPoint.

[1] This training module covers COVID-19 UPDATES TO THE INFECTION CONTROL PROTOCOL.

[2] As part of the shelter’s plan to gradually reopen shelter services, we have added a section to the infection control protocol called “additional measures during COVID-19”.

[3] Before I get into the detail of that, I want to talk about the importance of following the strategies that are outlined. The changes we are making will be annoying. They will slow you down and get in your way, and sometimes you may find yourself wondering why you are going through all this inconvenience. The answer is very simple. Not to over dramatize, but by following these strategies, you will be protecting yourself, the rest of the staff, and our community.

[4] I’m going to start by explaining the assumptions behind our reopening strategy. It’s spring now, the birds are singing, everything is beautiful, and the weather has improved finally. Province is allowing organizations to reopen at a pretty rapid rate. People can be forgiven for thinking that we have conquered the coronavirus and we are moving back normal life.

[5] That’s really not the case. Dr Scott Weese from the Ontario Veterinary College put it pretty bluntly a few days ago when he said “opening up does not mean the outbreak is winding down … it means there is space for you in the ICU”.

[6] Remember how all the talk a few weeks ago was about flattening the curve? The reason for that was precisely to make sure that there will be space for people in the ICU, in other words to keep the outbreak within the capacity of healthcare systems. Thankfully, we’ve reached a point where we have indeed flattened the curve. So we are able to start tentatively moving forward. We are also faced with the reality that we are unable to keep the economy closed forever, because that could ultimately cause damage that is as bad in its own way as the suffering caused by the coronavirus. This is a very fine balance that the politicians and economists have to find, and we are very fortunate to be in such good hands in Canada. The response here has been science-based, thoughtful, appropriate and generally effective.

[7] That said, this is virus is nowhere near defeated. We are playing a waiting game, and we will be vulnerable until we have a treatment, or a vaccine, or enough of us have been infected that this virus becomes something like seasonal influenza and is no longer rampaging through a completely vulnerable population.

[8] While we are all hoping that virus might just fade away like SARS did, experts are not predicting this at all. Doctor Anthony Fauci from the CDC said just a few days ago, "It is so transmissible, and it is so widespread throughout the world, that even if our infections get well controlled and go down dramatically during the summer, there is virtually no chance it will be eradicated.”

[9] These graphs show some coronavirus scenarios that have been modelled by epidemiologists at the Unversity of Minnesota. These take us from now to 2022. The arrows show the outbreak we are experiencing now, which is on its way down. Scenario 1 is that we will have repeated spikes liks this one. Scenario 2 is that there will be a huge spike in the Fall, which is what happened in the 1918/1919 influenza pandemic. That would be followed by irregular smaller spikes. Scenario 3 is that this spike has been the worst one and will be followed by smaller, more manageable, spikes in infection. That’s the one we are hoping for. I’ve drawn this orange line to show where governments might start reinstituting lockdowns or other containment measures as time goes by. It’s very hard to predict when those might happen and what the extent of them will be, but we are certainly planning for a future where we will be opening and closing services as restrictions loosen and tighten again.

I’ve gone through all of this in quite a lot of detail, to properly set the background for the changes to our infection control protocol. We are not asking you to make a major effort for a few days or weeks, then go back to normal. We are asking you to insitute behaviour changes that will last months or years. We are asking you to do this to protect yourselves, your loved ones, our community and our medical profession and first responders.

[10] The last piece of background before getting into the prevention strategies in the protocol is how the disease spreads. As you know, it’s mostly spread by aerosol droplet transmission, meaning that virus is sprayed out in large drops of mucous or saliva during speaking, coughing or, worst, sneezing. That virus gets into another person’s eyes, nose or mouth and infects them that way. This is considered to be by far the most important method of transmission. But since the virus survives on surfaces and can float in the air in smaller particles, it’s also possible to get infected by touching contaminated surfaces or being in the general vicinity of an infected person for a reasonably long time, probably 15 minutes or more. People who are infected but aren’t sick yet, and people who are clinically ill, can both spread the virus.

[11] You may think that you are just one person and what you do won’t make much difference. You may think this is up to the politicians and public health. That could not be further from the truth. Controlling this pandemic is all about changes in individual behaviour and in the culture of our society.

This virus has an R number of about 2.5 and the incubation period is about 5 days. That means that every person who is infected can infect another 2.5 people, on average, every 5 days. If each of those people goes on to infect another 2.5 people, after one month that first person will be responsible for infecting 406 people.

If reasonable distancing is carried out, the first person will infect only 15 people in 30 days, and if distancing is done well, they will only infect 2.5 people. That makes an enormous difference at every level of society.

[12] So how do we get to that 75% less contact? Is that possible in a large, complex organization or is it just not realistic?

[13] Dr. Atul Gawande [photo], who is a surgeon, public health researcher and general genius, wrote a very influential article recently in the New Yorker. He works at a hospital network called the Mass (for Massachussetts) General Brigham network. Dr. Gawande wrote the Checklist Manifesto and his work has had a tremendous influence on how THS functions and the levels of excellence we aspire to. His hospital group has seventy-five thousand employees—more people than in seventy-five per cent of U.S. counties. In April, two thirds of them were working on-site. Yet, they have had very few infections. They’ve done it using the strategies that we will be using. And we are using them because they so clearly work and every public health agency in the world is advocating them.

[14] So keep this in mind when you are overhwelmed, as I sometimes am, by the complexity and scope of all the services we provide at THS. To me, we are a big and complex environment with many moving parts. But if a human hospital with 75,000 people, dealing with critically ill COVID-19-infected patients all the time, can control their staff infection rates, it’s most definitely something that THS can do. We are actually very lucky because wse are very familiar with infection control and PPE, way more than the average veterinary clinic and certainly a whole lot more than retail stores, so we are already way ahead of the game.

Another real advantage of bringing about this culture shift is that it will protect the animals. When you think about it, a shelter it not unlike an orphanage or longterm care facility or prison. Animals are kept more closely confined than is normal, have no agency about where they go, suffer from stress and are inevitably exposed to infection. We’ve taken it almost for granted over the years that things like kitten diarrhea are just inevitable because it’s a shelter. By decreasing numbers of animals in the shelter during the pandemic, and upping our infection control game, we should see a dramatic decrease in infecious diseases among the animals we serve.

[15] There are five strategies that together are very effective at preventing COVID-19 infection. They need to be used not just when you are at work but when you are home and out in your community as well. It won’t help if you comply perfectly with all the protocols at THS but then stop taking precautions when you leave work and bring the infection back to the shelter. They also all need to be used. Just using one or two won’t have the desired result.

[16] Strategy one is screening.

This is to identify the highest risk people, who are the ones who are sick or are likely to be incubating infection. Screening questions help keep us safe by identifying people who may be infected with COVID-19. To be effective, the screening questions have to be asked every day when you walk into the building. Your answer today may be dfferent from your answer yesterday. Any member of the public who is bringing an animal to the shelter or who is entering the sheter for some reason will also be asked these questions.

Self screening means that you need to take personal responsibility for identifying that you might have COVID infection. If in doubt, don’t come to work. We don’t expectyou to be able to know if you have COVID or an allergy or the ‘flu. Only a test can tell you that. But if you do feel sick, you should use the Ontario Public Health self-assessment tool to help decide what to do. If you might have COVID-19, we expect you to stay home, call in sick and let your supervisor know your symptoms. Public health can then be informed and plans can be made for other staff members you have been in contact with.

[17] The second strategy is wearing face masks. As you recall, the World Health Organization and Health Canada initially said masks would not help prevent disease transmission, and some people seem to have stuck with that idea. However, public health agencies have now fallen in line with Asian countries where sick people have been wearing masks for a long time. Canadian recommendations are now to wear masks in any situation where physical distancing cannot be assured.

[18] Cloth masks are not as effective as surgical masks but there are not enough surgical masks for everyone so cloth masks are being widely used now. Masks help keep others safe by **preventing aerosols from getting from the wearer to the other person.**

They also help keep the wearer safe, but are less effective for this.

Masks need to be worn correctly, covering the nose and mouth, and fitting as snugly to the face as possible. Wearing a mask under your nose is completely pointless.

Masks **must be worn by all people in the building** - staff or the public

Each staff member will be given two cloth masks initially and can wear one mask for the day. It is up to staff to ensure the masks are laundered each night. Normal washing is fine, no special detergent or wash cycle is needed.

[19] Strategy 3 is physical distancing. Physical distancing keeps us safe by **preventing virus-containing aerosols from reaching** our mouth, nose and eyes. As you know, this is an absolutely key strategy and is supported by many of the other measures we have in place, such as working from home, telemedicine consults, visits by appointment only, limiting the number of people in the shelter, dividing staff into teams and unidirectional flow in certain parts of the shelter.

There is less risk of infection outdoors. Work outdoors or in a large space if you can

Keep doors open if you can

The risk of infection is a product of amount of virus and exposure time. Just walking past an infected person is unlikely to infect you. The closer you are to an infected person, the more confined the space and the longer you are in that space, the more likely you are to get infected.

If you have to perform a task with another person (e.g. lifting an animal, or performing a blood draw), remember that **the shorter the contact time, the lower the risk of infection**. Plan and prepare beforehand to limit the amount of time spent in close contact with another person.

[20] This image shows how far aerosols travel. The distances are in feet and the arrow shows approximately where 2 metres is. Look how most of the large aerosol droplets travel about one and a half feet feet, with some getting close to the 2m mark and some droplets, mainly smaller ones, travelling close to 10 feet or 3 metres. This is where the 6 feet minimum comes form – it will protect most people most of the time from an infected person, but it’s not a magical distance. It is a minimum distance. So if you can be further away from people, that is even better.

[21] Fourth on the list is hygiene measures, and this in particular refers to hand hygiene.

Hygiene measures keep us safe by **removing virus from contaminated hands or surfaces. Once you get infectious virus on your hands it’s only a mattrer of time before you touch your face and the virus can then your nose, mouth or eyes.**

Hand hygiene has been a critical pillar of infection control ever since early scientists discovered micro-organisms and how they spread. But it has historically been difficult to get people to remember to be consistent about washing and sanitixing hands. It’s a drag. We all know that. We have much more interesting things to do. We’re in a hurry. We don’t want our skin to dry out and crack. We don’t want to sing happy birthday a hundred times a day.

[22] This chart shows how long the coronavirus survives on different surfaces. It can survive on plastic and stainless steel for up to 3 days, but it’s important to be aware that the virus starts to die off pretty quickly so while there may be a lot of virus on the surface just after someone sneezed on it, after even a few hours the numbers will be greatly decreased. It’s a fairly fragile virus so it doesn’t build up in the environment like parvovirus does but if you touch a surface that was recently contaminated it seems very likely that you could become infected that way. Of course, there are certain surfaces we all touch many, many times a day, like our phones, computers and so on. It’s not practical to clean these all the time and it’s not recommended that every surface needs to be cleaned every time it is touched. The key remains hand hygiene. If you wash or sanitize your hands often, you are protected even if you have touched a contaminated surface.

[23] So this is an excellent time for us all to get into the **permanent** habit of washing or sanitizing hands every time we enter or leave a group environment, and before and after handling each animal. Future animals in the shleter will truly thank you for this, covid or no covid. Remember, handwashing is just as good as sanitizing so wash your hands with soap when you can, to reduce the use of sanitizer. To protect your hands, moisturizer will be made available. You could also wear a single pair of gloves for a few hours or as long as is comfortable and wash or sanitize these between environments or patients.

Management and supervisors will set up schedules for regular cleaning of frequently touched objects and surfaces but it is also up to each staff member to wipe down surfaces and objects regularly.

[24] Last on the list is the strategy that is really critical to everything else. It’s culture. We can’t ensure that all the strategies are consistently followed without buy-in and a culture shift. We can’t watch everyone all the time, and we know we don’t need to. We have to be able to trust you, and you have to be able to trust your colleagues, to do the right thing and protect yourselves and others. Everyone knows about fearless feedback now, and this will be a amazing opportunity to practice those techniques. If you see someone not following the recommendations, it doesn’t matter how senior they are, you have the right to speak up. Politely and compassionately remind them of what they need to be doing. If that’s really not working out, speak to a supervisor or manager. Be specific about the who, what and when, so that the issue can be properly and specifically dealt with. And don’t delay. Mention the problem as soon as you can. We are not asking staff members to spy on each other. We are reminding you of your right to be safe and your moral obligation to ensure the safety of others.

[25] There are a couple of other COVID additions to the infection control protocol, and then there will be an opporunity to ask equesiont.

First, it’s really important to conserve PPE and other vital supplies. The main immediate reason is that further shortages are very possible and actually quite likely, now that business are reopening and everyone will need the same PPE. But it’s also important for the environment and fits in with our shelter’s sustainability initiatives, both environmental and financial. Use what you need to, don’t use what you don’t need to and reuse whatever you can. For example, don’t use gloves if you don’t have to. Surgeons could use exam gloves instead of surgical gloves for cat neuters. In a crunch, surgical masks could be reserved for higher risk surgeries where surgial site infections are more likely, and more likely to be serious, such as orthopedic procedures.

We've had many discussions over the years about the order to put on and take off PPE. We decided to move to a common sense approach rather than being prescriptive. The goal is not to contaminate PPE when putting it on and not to contaminate skin and clothes when removing the PPE. If you are mindful of these goals, it's quite easy to decide what order to do things and there isn't only one right way. You need to assume your hands will be contaminated after you have removed all the PPE, so always wash or sanitize hands before moving on to the next task.

This protocol does not deal with COVID-exposed animals but I wanted to mention that there is a now a protocol for that in patient care protocols in the SOP drive.

[26] Thank you for your attention. If this is a live presentation, please feel free to ask questions now. If you are watching in the prerecorded format, please direct questions to your manager or supervisor and we will do our best to ensure they are answered.