

Understanding Zoonotic Disease: An Overview For Animal Sanctuaries

From [The Open Sanctuary Project](#)
August 2023

The importance of having a basic understanding of the topic of zoonoses and how zoonotic diseases spread so as to protect the human and non-human animals who come into contact with each other in sanctuary spaces or during sanctuary operations.



Hand washing can play an important role in preventing transmission. Photo by Dan Dennis, Unsplash.



Veterinary Review Initiative

This resource has been reviewed for accuracy and clarity by Dr. Wendi Rankin, [DVM, MS, DACVIM](#) as of August 2023.

[Check out more information on our Veterinary Review Initiative here](#)

Additional Resource Acknowledgments

We are also very grateful to Dr. Leila Dehghan-Zaklaki, MD, MSc (Nutr), ANutr, of [Plant-based Health Justice](#) for her thoughtful review of this resource.

We talk a lot about resident health and the things caregivers can do to keep sanctuary residents happy and healthy. However, it's not just about preventing disease introduction and spread between residents – sanctuaries also have a responsibility to think about the potential for disease transmission between humans and non-human animals. As such, it's important that animal caregivers and animal sanctuary leadership have at least a basic understanding of the topic of zoonoses and how zoonotic diseases spread so as to protect the human and non-human animals who come into contact with each other in sanctuary spaces or during sanctuary operations. In addition to ensuring the well-being of all, for animal organizations, prevention of zoonotic disease transmission is also important from a liability standpoint.

The topic of zoonotic disease (or [zoonosis](#), plural zoonoses) is a complicated one – in this resource, we'll provide a simplified overview of this important topic so that sanctuaries are better situated to mitigate the risk of zoonotic disease spread at their sanctuary and while participating in activities such as [animal rescue](#), animal adoption, community, [outreach](#) etc.

What Is Zoonotic Disease?

If you were to look up the definition of zoonotic disease in ten different sources, you'd likely notice that there is at least some variation in how different sources define it. In fact, the authors of the article *Zoonosis—Why We Should Reconsider “What’s In A Name?”* point out that the World Health Organization uses at least three different definitions of zoonosis. While epidemiologists and other professionals may need a more specific definition (or may need to use different terms to identify different categories of zoonoses), we're going to use the following definition: **zoonotic diseases are infectious diseases that can be naturally transmitted between humans and other animals**. As with infectious diseases more generally, zoonotic diseases can be caused by different types of infectious agents, such as bacteria, viruses, fungi, parasites, or prions (a type of protein). If you have not yet read our resource [Understanding Infectious Disease](#), we encourage you to do so. That resource provides an overview of how infectious diseases spread, which will be helpful when considering ways in which to reduce the risk of zoonotic disease exposure in sanctuary spaces or during sanctuary activities.

It Goes Both Ways

While information pertaining to zoonotic disease is often focused on transmission from a non-human animal to a human, it's important to recognize that humans can also transmit certain diseases to non-humans. Some sources use different terminology when referring to diseases that

have been transmitted from a human to a non-human than they do to refer to those that have been transmitted from non-human animals to humans. This includes terms such as ‘reverse zoonosis’ and ‘zooanthroponosis.’ We do not want to ignore or minimize the potential risk of human to non-human animal disease transmission, and we recommend taking this risk into account when considering resident health and disease prevention, but given the potentially serious implications and liability associated with zoonotic disease spread from a sanctuary resident to a human volunteer, staff person, or guest (especially a child), transmission from non-humans to humans will be the primary focus of this resource. If you haven’t already checked out our [Biosecurity series](#), be sure to do so! The second part of the series focuses on specific measures sanctuaries can take to protect residents from infectious disease, generally, and includes measures that will help prevent disease spread from humans to residents.

Just because a certain infectious agent (pathogen) can be found in both humans and non-human animals does not automatically mean it is zoonotic. Some diseases that affect both humans and other animals may be picked up by each species in the environment rather than as a result of zoonotic transmission. While these may be infectious diseases that humans have in common with other species, if they are not transmitted between humans and non-humans under natural conditions, they are not truly zoonotic. To further complicate things, in some cases, our understanding of whether or not a certain pathogen is zoonotic has changed over time. It’s also important to recognize that certain conditions that can affect humans and other species go by the same common name, but are caused by different pathogens. For example, while many species, including humans can get pediculosis (lice infestation), most species of lice are host-specific, primarily affecting one specific species (and maybe a close relative). So while humans can get head lice (caused by *Pediculus humanus capitis*), you don’t have to be worried about staff getting pediculosis as a result of coming into contact with a chicken or goat resident who has lice, as they are affected by different species of lice that cannot complete their life cycle on humans.

Some Human-Specific Diseases Have Zoonotic Origins

While zoonotic diseases can be spread from non-humans to humans and/or from humans to non-humans, there are also human-specific diseases that have or are strongly believed to have a zoonotic origin. These diseases start out as zoonoses, originating in non-human animals, but after infecting humans, mutate into human-specific strains that are transmitted between humans. While these diseases are not the focus of this resource, it’s important to keep this in mind when considering the wide-reaching impact zoonoses have.

How Are Zoonotic Diseases Spread?

One can be exposed to zoonotic diseases via the same routes as described in *Understanding Infectious Disease*.

Direct contact – This type of exposure occurs when a pathogen makes direct contact with open wounds, mucous membranes, or the skin. This might occur while petting a resident who has a certain type of infection (such as a skin infection), when treating a resident’s infected wound, when collecting diagnostic samples (if not wearing protective gear), or when coming into direct contact with an infected resident’s urine, feces, saliva, tissues, afterbirth, etc. (though different pathogens will be transmitted by specific secretions, excretions, etc. – i.e. pathogen X might be shed in feces, but not in urine or saliva).

Aerosol – This type of exposure occurs when a human breathes in pathogens suspended in the air. A sick resident could release pathogens into the air while breathing, sneezing, or coughing. Pathogens may also become aerosolized during parturition or if contaminated soil or dust gets stirred up.

Oral – This type of exposure occurs when pathogens are ingested. While this can happen when contaminated food or water is consumed, it can also happen if someone gets pathogens on their hands and then eats without properly washing their hands first. Similarly, putting unwashed fingers in or near your mouth or using them to touch something that you then put in your mouth/on your lips can also result in oral exposure, as can putting a contaminated fomite in your mouth.

Fomite – This type of exposure occurs when a human comes into contact with a pathogen via a contaminated inanimate object (called a fomite). Things like cleaning tools, feeding supplies, brushes, coats, bedding, and equipment can act as **fomites**.

Vector-borne – Whereas fomite exposure occurs when a pathogen is introduced via an inanimate object, vector-borne exposure occurs when the pathogen is introduced by a living organism, such as ticks, mosquitoes, flies, or rodents.

As with any other pathogen, each zoonotic pathogen will have a particular transmission route (or routes) – not all of the above routes will apply.

How Common Are Zoonotic Diseases?

While some zoonotic diseases are far more common than others (and some are exceptionally rare in certain parts of the world), as a group, zoonotic diseases are quite common. In fact, according to the [Centers For Disease Control And Prevention \(CDC\)](#), more than 6 out of every 10 known infectious diseases in humans can be transmitted from non-human animals, and 3 out of every 4 new or emerging infectious diseases in humans come from non-human animals.

While zoonotic diseases are common in a broad sense, this does not mean zoonotic disease transmission is inevitable in a sanctuary setting. There are a number of common sense practices that can greatly reduce the chances of zoonotic disease transmission, which we'll talk about more later on in this resource.

How Serious Are Zoonotic Diseases?

As with infectious diseases more generally, zoonotic diseases that **farmed animal sanctuary** residents could potentially transmit to humans range from those that typically cause minor disease in most individuals (for example, ringworm) to those that can cause severe (and potentially fatal) disease. That said, it's important to recognize that some folks may be at an increased risk of developing serious and potentially life-threatening disease, as described next. Which Groups Are Most At Risk Of Serious Disease From Zoonoses?

In *Understanding Infectious Disease*, we discussed host determinants and how they can make a resident more or less susceptible to infectious disease. Similarly, certain factors can make a

human more vulnerable to infectious disease, including those that are zoonotic. This does not at all mean that folks who do not fit into these categories are immune to zoonoses. Measures should be taken to prevent zoonotic disease from spreading to all humans, but it's important to recognize that some groups are more at risk than others. This includes:

- Young children, particularly children under 5 years old;
- Older adults, particularly those over 65 years old;
- Pregnant people;
- And folks with a weakened immune system (such as from illness or treatment)

While all of the above groups are at an increased risk of illness, young children deserve additional consideration. Young children are at an increased risk due to their still developing immune system. In addition to this, they also are more likely to engage in behaviors that increase the likelihood of disease exposure and are less likely to practice frequent and proper hand washing. Behaviors such as putting their hands in/near their mouth, nose, or eyes, putting their mouth on a resident or object they've come into contact with, dropping a toy, pacifier, or food item on the ground and then putting it in their mouth, etc. could expose them to harmful pathogens. If they were to be exposed to pathogens such as salmonella, E. coli, cryptosporidium, campylobacter, or giardia, they could become **very** sick. In fact, these are some of the same pathogens that typically make the news when a child becomes seriously ill, or even dies, following exposure at a petting [zoo](#). While [animal sanctuaries are very different from petting zoos](#), it's important to recognize the potential risks of children being exposed to zoonoses at your sanctuary.

What Can Sanctuaries Do To Prevent Zoonotic Disease Spread?

Thankfully, there are a number of things sanctuaries can do to help reduce the risk of zoonotic disease exposure. This includes focusing on resident health and enacting protocols that reduce the chances of disease exposure. We'll take a look at both of these topics below.

Think Beyond Sanctuary Spaces

Below, we'll discuss various ways in which sanctuaries can mitigate the risk of zoonotic disease transmission to humans with a focus on activities that take place at the sanctuary. However, depending on the operations your sanctuary is involved in, you may have to think beyond sanctuary spaces. For example, if residents are taken off site for things other than veterinary care, in addition to careful considerations regarding the resident's comfort and safety, you'll also want to think about the potential for zoonotic disease spread. Similarly, if residents are to be adopted out, they should always be vetted first to ensure they are healthy enough for adoption. Also be sure to consider the potential for zoonotic disease exposure during [animal rescues](#) and transports and take steps to reduce these risks.

Focus On Resident Health

While it's important to implement measures that reduce the risk of zoonotic disease spread, it's equally important to prevent disease in the first place by promoting resident health. This includes providing a nutritionally complete diet, keeping resident living spaces clean and properly ventilated, and keeping resident stress to a minimum, among other things. You should also closely monitor your residents' health through [daily observation](#), [routine health checks](#), [veterinarian examinations](#), and diagnostic testing as recommended by your veterinarian.

To further help prevent disease introduction to your residents, be sure to work closely with your veterinarian to enact an [appropriate biosecurity plan](#) and, if appropriate, a [vaccination program](#) for your residents.

Keep Resident Spaces And Sanctuary Grounds Clean

Many zoonotic diseases can be spread in a resident's feces, so finding ways to limit exposure to feces can help prevent zoonotic disease. Keeping resident spaces clean can go a long way in keeping both your residents and the humans who interact with them healthy. While poop is an inevitable part of an animal sanctuary experience, there is a big difference between a resident [living space](#) that is regularly cleaned and one that is not. Humans will be exposed to less feces in a well-cleaned space, and residents will also be less likely to lie in or otherwise become covered in feces if they live in a space that is regularly cleaned, in turn exposing the humans who touch them to less feces as well. Keeping sanctuary grounds clean can also make the sanctuary less appealing to certain vector species, which can help prevent vector-borne transmission.

While your relationship with your veterinarian should encompass more than just reaching out to them when someone is sick, their role in diagnosing illness and developing an appropriate response plan cannot be overstated. Whenever a resident is showing signs of concern, it's important to get your veterinarian involved. Not only can they help with diagnosis and recommend [treatments](#), but if there is a zoonotic concern, they can give you specific guidance regarding how to proceed. Below, we'll talk about general measures to help reduce the risk of zoonotic disease spread, but when dealing with a suspected or confirmed zoonotic disease, your veterinarian will be able to make more specific recommendations to prevent spread to humans and other residents based on the ways in which the disease is transmitted, while also taking into consideration the seriousness of the disease.

When a zoonotic disease is suspected or confirmed, even if it is a disease that is typically mild (such as ringworm), we recommend preventing guests from coming into contact with the affected individual, their living space, and any residents who are likely to have been exposed. We also recommend implementing measures to protect sanctuary personnel who work with the individual or who work in their living space and making sure to clearly communicate the specifics of the situation (what is the disease, how is it spread, what type of illness can it cause in humans, etc.).

The Absence Of Clinical Signs Does Not Mean There Is No Risk Of Zoonotic Spread!

In some cases, a resident may be capable of transmitting a zoonotic disease despite appearing healthy. Therefore, it is imperative that sanctuaries take reasonable steps to prevent zoonotic disease transmission, even if there are no specific zoonoses of concern. This does not mean every resident should be treated as a biohazard, but there are many commonsense measures that can be easily put in place that will help reduce the risk of zoonotic disease spread (we'll touch on these below).

Measures That Can Protect Humans From Zoonoses

Even with the best care practices, it's impossible to completely rule out the possibility that a resident may at some point have the potential to spread zoonotic disease. Therefore, it's important

to enact measures that help reduce the chances of zoonotic disease transmission to the humans who enter sanctuary spaces or otherwise might come into contact with residents.

Encourage Folks To Consult With Their Primary Physician

If a volunteer, visitor, or employee of the sanctuary has a concern about their existing medical condition and how that affects their risk, or if they have concerns about performing any sanctuary tasks, please encourage them to consult with their doctor. Their doctor can take into account any pre-existing conditions and their risk of contracting zoonotic disease. When running a sanctuary, it's best practice to provide opportunities to keep people safe, but leave medical recommendations to the person's own physician.

Measures To Protect Guests

First, let's consider ways sanctuaries can protect guests from zoonoses. We'll define 'guests' as folks who do not work or volunteer for the sanctuary. This includes folks who come for a tour or event or who come to visit with sanctuary personnel. While it's also important to protect sanctuary personnel, there are some key differences between guests and personnel that either require or allow for different protective measures.

A Note About Service Providers

While professionals who work closely with animals, for example veterinarians, [farriers](#), and shearers, should be familiar with the risk of zoonoses and should take appropriate measures to protect themselves, other service providers such as electricians or contractors might not be well versed in this subject. Many of the measures listed below that can help protect guests can also help protect service providers. It's a very good idea to have folks check in and to have sanctuary personnel accompany them on sanctuary grounds, particularly when they are in resident spaces. This is not only beneficial in terms of zoonotic disease prevention but also from a general safety perspective. While animal care service providers may be more likely to take their own preventative measures to protect against zoonotic disease exposure, it's important to clearly communicate any specific zoonotic disease concerns with them so they can make informed decisions about how to proceed.

The following measures can help protect guests from exposure to zoonoses:

Require That Guests Check-In Upon Arrival

By requiring that guests check-in, you have an opportunity to relay important information regarding where they can go, what they can or cannot do, and how they can interact with residents safely. While there is other important information to share with folks besides just the risk of zoonotic disease exposure, this topic should certainly be mentioned as well as reminders of the various ways in which folks can keep themselves safe. This is a great time to let folks know where hand washing or hand sanitizing stations are located and to remind them to thoroughly clean/sanitize their hands regularly. It's also a great time to remind caregivers of small children to watch them closely to ensure (among other things) that they don't put their fingers in their mouth.

Careful Communication Is Key

When talking about zoonotic disease, it's important to steer clear of villainizing non-human animals. This is particularly important when talking about zoonotic disease in the context of **farmed animal** species. When communicating with members of the public who may not have the same understanding of who **farmed animals** are, it's important to think carefully about how to inform them of the potential risks of zoonotic disease without inadvertently reinforcing negative stereotypes about these species or making folks scared to be around them.

In order to be effective, you must make sure check-in procedures are clear. If guests don't know that they must check in or aren't sure where they need to go to do so, you will miss out on an important opportunity to pass along necessary information.

Provide Guided Tours

Consider only allowing guests to walk sanctuary grounds when accompanied by trained sanctuary personnel, with exceptions made on a case-by-case basis. With proper training, tour guides can act as another line of defense between guests and safety risks, including zoonotic disease exposure. In addition to offering instructions regarding what they should or should not do during various parts of the tour, tour guides can also offer frequent reminders about hand washing and other safety measures. Providing guided versus self-guided tours offers many benefits beyond just those pertaining to zoonoses. You can read more about creating an effective tour program [here](#).

We strongly recommend that you only allow guests to enter resident spaces when accompanied by trained sanctuary personnel, with very few exceptions only made with careful consideration (for example, while you may have a firm policy in place that guests can only visit residents when accompanied by staff, you might feel comfortable making an exception for a former **caregiver** who has returned for a visit). If guests are allowed to walk sanctuary grounds unaccompanied, either in the form of a self-guided tour or following the conclusion of a guided tour, be sure to give clear instructions regarding where they can go and what they can do. It's also important to have clear **signage** posted that reiterates important information, particularly regarding restricted areas or reminders not to touch residents through the fence.

Provide Hand Washing Stations And/Or Hand Sanitizer

Make sure there are numerous areas in which folks can wash/sanitize their hands. Ideally, these should be spread throughout the sanctuary and should be easy to access to increase the chances they will be utilized. Consider installing a wall-mounted hand sanitizer dispenser outside of each resident area with prominent signage reminding folks to sanitize their hands after entering resident living spaces.

In order to be effective, hand washing/sanitizing supplies must remain clean and well-stocked. Be sure to incorporate checking and restocking of hand washing/hand sanitizing stations into your team's daily tasks.

Do Not Allow Food Or Drink In Resident Living Spaces

Eating and drinking in resident living space, or even just bringing in a water bottle, could result in oral disease transmission. Do not allow folks to bring food or drink into resident living spaces, and instead provide a safe, clean spot for folks to leave such items before entering resident areas. Not only is this an important protocol from a disease transmission perspective, but also food brought into resident living spaces can result in other issues such as a resident ingesting something they shouldn't or residents interacting with guests in a potentially unsafe way in an attempt to get to a tasty treat they smell hidden away in someone's pocket or bag.

Be Especially Careful When Providing Food Or Drink To Guests

If part of your operations involves providing food or drink to guests, or if you host an event that includes food or drink, be sure to think carefully about how to mitigate the risk of zoonotic disease exposure. Food and drink should be kept away from residents, their living areas, and things they have come in contact with both during storage, preparation, serving, and consumption. Just as you will want to check your [zoning restrictions](#) with regards to holding events, you will also want to check all applicable local regulations to make sure that you are legally permitted to sell or serve food at your sanctuary. You must also carefully observe all health code requirements.

Keep Rodents Away From Human Food And Human Dining Spaces

As with your residents' food, you must take steps to keep rodents out of human food that is stored on site (including food brought in by sanctuary personnel). Additionally, you also must make sure that areas where humans eat are designed to keep rodents out. To learn more about compassionate practices to prevent issues with rodents, check out our resource [here](#).

Encourage Guests To Leave Bags And Other Items Outside

It's also a good idea to encourage guests to enter resident living spaces without any extra baggage, when possible. The more items that come into a resident's living space, the more opportunity for spread via fomites. While some devices or items may be necessary, those that can easily be left behind should be. As with food, there may be other safety concerns associated with bringing certain items into resident spaces.

Prevent Contact With Sick Or Quarantined Residents

As mentioned above, guests should not be allowed to interact with or enter the living spaces of individuals with confirmed or suspected zoonotic disease. With very few exceptions, we encourage you to restrict access to all [isolation areas](#). Even if an isolated resident does not have a zoonotic disease, it still may not be wise to have non-essential personnel enter these spaces. Not only might guests contribute to disease spread to other residents (such as by carrying pathogens to other residents on their shoes or hands), but also, a sick resident may be more susceptible to other illnesses, including zoonoses they could transmit to or contract from guests. In addition to individuals/areas that are under [isolation](#), you may also need to prevent contact with other individuals who are showing signs of illness. While your veterinarian will be your best resource in this area, it's generally a good idea to keep guests away from individuals who have

diarrhea or skin issues unless your veterinarian has identified the cause and deemed it safe for guests to be around them. Quarantine areas should also be off limits since those residents could be harboring zoonotic diseases.

In addition to preventing contact with quarantined and sick residents and their living spaces, you should also prevent guests from coming into contact with equipment, tools, or other objects that have entered the living space or come into contact with a sick or quarantined individual.

Think About Your Sanctuary's Physical Infrastructure

Depending on where you are in your sanctuary's development, you may be able to create physical infrastructure that can help mitigate the risk of zoonotic disease transmission. For example, if you are planning to add new fencing or replace existing fencing, consider constructing fences so as to allow guests to see but not touch residents. This can help prevent a host of issues including a guest touching a resident they shouldn't. If it's not possible to construct all fencing in this way, consider if you can at least do this in quarantine and isolation areas.

Measures To Protect Sanctuary Personnel

When it comes to protecting guests from zoonoses, a big part of the strategy is eliminating risk as much as possible by preventing guests from coming into contact with certain residents or areas. However, when it comes to sanctuary personnel, this will not be possible for everyone. After all, sick and quarantined residents need care too. Therefore, protecting sanctuary personnel often needs to focus on ways to mitigate risk while recognizing that folks who work closely with animals are at an increased risk of zoonotic disease exposure. Some of the measures listed above that help protect guests should also be applied to sanctuary personnel, but because they face a different degree of risk, for the most part, you'll need a different set of measures to keep personnel safe. This includes the following:

Robust Training

It's important to provide training to your staff about zoonotic disease so that they understand the ways in which they may be exposed to zoonoses and how they can mitigate this risk. In addition to making sure folks know where personal protective gear can be found, it's also important to make sure they know how to properly use said gear. For example, encouraging folks to wear gloves during a certain activity can help prevent disease exposure if used correctly, but if folks keep the gloves on while eating or while rubbing their eye, they could still be exposed to pathogens. Training should also include information about the groups that are more vulnerable to zoonotic disease (as described above) and what folks can do if they fall into one of those categories and require modifications to their responsibilities or additional personal protective gear in order to better protect themselves. We recommend incorporating this training into your onboarding materials and to also consider implementing an annual refresher training. Depending on their availability and your relationship with them, you might even talk to your veterinarian about the possibility of them leading annual re-training sessions.

Zoonotic disease is not something you talk about only during scheduled zoonotic disease training sessions, so be sure to include discussion of zoonotic disease prevention in your daily activities and other training opportunities. Of particular note, if personnel are to be trained in wound

management, diagnostic sample collection (i.e. fecal, blood, or pus samples), or in tasks that require the use of a needle, be sure to carefully train them both in proper technique and in the preventative measures they should take to protect themselves and others from disease. For example, when training folks to safely use needles, it's important to stress that they should not cap, uncap, or otherwise hold the needle cap in their mouth, which could result in oral exposure to pathogens. Similarly, you should teach the proper technique so as to avoid needle stick injuries.

Clear Communication

Clear communication is important for a myriad of reasons, one of which involves zoonotic disease prevention. Make sure you have a system in place for sanctuary personnel to stay informed about the happenings on the sanctuary and health of the residents. If zoonotic disease is suspected or confirmed, this information must be relayed to sanctuary personnel. Be sure to also include specific information about how the disease spreads, the severity of the disease, and possibly a reminder that folks in high risk groups may need to take precautions or have their duties modified.

If folks don't realize that a particular individual is sick or that certain precautions are in place, they may inadvertently put themselves at risk. For example, if you start seeing signs of [sore mouth](#) in a group of sheep residents, in addition to implementing isolation procedures to help prevent disease spread to other susceptible groups at the sanctuary, it's also important to implement measures to protect staff. However, in order for these measures to be effective, personnel need to know about them. Do not assume folks will notice a new sign (though signage is important!) or a tote full of personal protective gear, or that "word will travel" and everyone will get the information they need. Instead, be sure to implement a communication system that is used for all important communications to ensure folks have access to all the information they need in a timely manner.

Also Be Clear When Zoonotic Disease Is NOT A Concern

As we mentioned above, there is sometimes confusion about which conditions are zoonotic and which are not. If a resident has a condition that is not zoonotic but is likely to be misunderstood as being zoonotic, it's a good idea to remind folks that it's not. This is not because they can throw caution to the wind so long as a condition is not zoonotic. Instead, being clear about what is and is not zoonotic can help folks trust that when there is a specific zoonotic disease concern or a heightened risk, you'll let them know.

Foster A Culture Where Folks Feel Empowered And Supported To Ask For What They Need

As with clear communication, there are many reasons that sanctuaries should strive to foster a workplace culture that makes folks feel empowered and supported and one in which they can ask for what they need. When it comes to zoonotic disease prevention, fostering such a culture can go a long way. While folks should **never** be asked to provide personal details they are not comfortable sharing, make sure you create and nurture a workplace culture that empowers folks to ask for what they need and one in which they know they will be supported. If someone says they cannot perform a certain task or work with a certain resident, or if they ask for additional personal protective gear, you should **always** do what you can to get them what they need. Keep in

mind that a person's situation can change – just because someone was not in a high risk group previously does not mean this will always be the case. A new diagnosis, a change in medication, a recent medical procedure, or a pregnancy could result in an individual's risk of serious disease from zoonoses increasing. Make sure all personnel have a trusted channel they can go through to raise such concerns or to ask for modifications.

Encourage Frequent Hand Washing

As with guests, be sure to encourage all sanctuary personnel to wash or sanitize their hands frequently. While personnel may be able to use some of the same facilities as sanctuary guests, because sanctuary personnel likely access areas of the sanctuary guests do not, be sure to have supplies set up with this in mind. To encourage use, you want to make it as easy as possible for personnel. Sanctuary work can be very busy and folks may not be inclined to walk out of their way to hit up a hand sanitizer station if they're in a rush.

Have Strict Policies About Food And Drinks

Do not allow sanctuary personnel to eat or bring food into resident living spaces or other areas of high risk. Instead of eating while they work, personnel should be given adequate break time (which may vary depending on the length of time they are working), and should also be given access to a designated space (or spaces) to eat that is kept clean and separate from residents. They should also have access to a refrigerator that is for human food only. Storage of human food in refrigerators that also store resident medications or diagnostic samples is in violation of [Occupational Safety and Health Administration \(OSHA\) regulations](#).

When thinking about the length of breaks, in addition to considering legal requirements, also consider the time it takes for them to get to and from break areas. As with hand washing, if it is cumbersome for folks to adhere to your organization's policy, they will be less likely to do so. To encourage hand washing before eating, be sure to provide hand washing supplies in break areas (and to keep supplies well stocked). Even with ample break time, some sanctuary personnel may need to eat more often or at times that do not line up with scheduled breaks. Be sure to remind folks about the areas in which food is not allowed and that washing or sanitizing their hands first is a must.

To avoid contamination, we recommend **not** allowing water bottles or other drinks in resident spaces, but at the same time, folks should have easy access to drinking water, especially when performing strenuous tasks or when working in the heat. Therefore, we recommend instructing folks to keep water bottles out of resident spaces and to instead keep them in a designated spot nearby that residents do not have access to. Remind folks that hand washing/sanitizing before drinking is important if they have been working with residents or in resident living areas or if they've been in contact with objects residents have come into contact with. Make sure the necessary supplies are located accordingly (ideally in or very near to every area in which folks spend time working).

Restrict Access To High Risk Areas If Possible

While you can't restrict all personnel's access to high risk areas as you can with guests, you might be able to restrict certain areas to essential personnel only. Keeping less experienced staff,

as well as interns and volunteers out of areas where zoonotic disease has been suspected or confirmed, particularly if said disease has the potential to cause serious illness is wise. Less experienced personnel may be more likely to engage in unsafe behavior or forget to take certain precautions, so striving to only have your most experienced folks work in these spaces can be helpful, so long as they are not in a high risk group. In addition to protecting the humans at your sanctuary, limiting the number of personnel who work with sick and quarantined residents can also help prevent disease spread to other residents.

Provide Necessary Personal Protective Gear

We talked a bit about personal protective gear above, but it deserves further mention. Protective gear such as shoe covers, gloves, facemasks, and coveralls should be provided by the sanctuary. In addition to making sure that these supplies are kept in stock and are freely accessible, also make sure that you stock a variety of sizes to ensure everyone has what they need. Gloves, shoe covers, and coveralls that are too small could tear, reducing or eliminating any protection they provide, and those that are too big may fall off or provide inadequate protection due to their loose fit. Folks may also be less inclined to use PPE if they know it won't fit them. Therefore, it's imperative that you ensure everyone has gear that fits.

Have A System In Place For Sharps And Hazardous Waste Disposal

Be sure to follow federal, state, and local regulations pertaining to sharps disposal (i.e. needles, scalpel blades, etc.) as well as hazardous waste and that personnel are trained in proper procedures.

Be Sure To Have Well-Stocked First Aid Kits

Breaks in the skin can act as an entry point for pathogens, so it's a good idea for folks to keep open wounds covered when coming into contact with residents or things they've come into contact with. We aren't going to get into the specifics of how to handle an injury sustained by a guest or personnel while on sanctuary grounds (though this is an important topic, and one you may want to talk to your insurance company and legal counsel about BEFORE it happens), but we do want to stress the importance of having well-stocked first aid kits available in the event someone needs to address a wound they have sustained or to replace a bandage that has become soiled or fallen off. If your sanctuary is large, you'll want to have multiple kits located throughout the property for easy access.

Be Sure To Consider Other Zoonotic Disease Risks

Farmed animal species are not the only species capable of spreading zoonotic diseases. Other domesticated animals who reside or spend time at your sanctuary, as well as wild animals, could be sources of zoonotic disease spread as well. Depending on where you are located, there may be specific zoonotic disease risks that have nothing to do with your residents, but that folks should be aware of nonetheless. For example, in many areas, tick-borne diseases such as Lyme are prevalent. If ticks are abundant at your sanctuary, it's a good idea to let folks know so they can take certain precautions to help keep ticks off them and know to check themselves for ticks after their visit.

Because [farmed animal sanctuaries](#) often act as a safe haven for wildlife, it's not uncommon for folks to be in close proximity to free-living wild animals at sanctuaries. You may even have certain wild individuals who feel particularly comfortable around humans. For many reasons, it's important to remind folks (guests and personnel) not to touch wild animals. In the event that an orphaned, injured, or sick wild animal is found, be sure to contact a licensed wildlife rehabber. For general guidance regarding how to respond to certain wild species in need, check out [Managing Requests To Take In And Help An Animal Outside The Scope Of Your Sanctuary's Mission](#).

This resource includes links to directories that can help you find a licensed wildlife rehabilitator as well as general guidance regarding initial steps to take when encountering sick or injured wildlife. Of particular note, it's important to consider the risk of rabies exposure when handling mammals, especially rabies-vector species such as raccoons, groundhogs, skunks, foxes, coyotes, and bats. These species should **never** be handled with bare hands. If someone is bitten by a wild animal or you have other reason to suspect someone could have been exposed to rabies, always urge them to seek immediate medical advice. Rabies is almost always fatal, but postexposure prophylaxis (PEP) following exposure will help prevent rabies from developing.

Speaking of rabies, if dogs or cats live at or otherwise spend time at your sanctuary, keep in mind that they too have the potential to spread certain zoonotic diseases, including rabies. All sanctuary cats and dogs should receive regular veterinary care and vaccinations as recommended by your veterinarian. If personnel are permitted to bring [companion animals](#) with them to the sanctuary, it's a good idea to ask for proof of vaccination and to request they stay current on their vaccinations. Make sure waste is cleaned up regularly and disposed of properly. If scooping litter boxes is part of the daily responsibilities, it's best to avoid having pregnant people or folks who have a weakened immune system perform this task.

Just as sanctuaries have a responsibility to the animals in their care, so too do they have a responsibility to the humans who enter sanctuary spaces. While the topic of zoonoses can be scary, by understanding the ways in which folks might be exposed to zoonoses, you'll be better able to enact practices that mitigate this risk, such as those described above. As an added bonus, many practices that help mitigate the risk of zoonotic disease exposure will also help protect your residents from infectious disease and can help prevent other safety issues at your sanctuary, which makes implementing these measures a win-win-win!

Sources

[Zoonosis-Why We Should Reconsider "What's In A Name?" | Singh BB, Ward MP, Kostoulas P, Dhand NK.](#)

[Pathogens And Host Species In Zoonoses | Merck Veterinary Manual](#)

[Transmission Routes Of Zoonotic Diseases | The Center For Food Security And Public Health](#)

[Common OSHA Violations In Vet Practices | Gamma Compliance Solutions](#)

[Pediculosis | Centers For Disease Control And Prevention](#)

[Lice | Purdue University](#)

[Rabies Postexposure Prophylaxis \(PEP\) | Centers For Disease Control And Prevention](#)

[Zoonotic Diseases | Centers For Disease Control And Prevention](#) (*Non-Compassionate Source*)

[Zoonoses | BB Chomel](#) (*Non-Compassionate Source*)

Non-Compassionate Source?

If a source includes the (*Non-Compassionate Source*) tag, it means that we do not endorse that particular source's views about animals, even if some of their insights are valuable from a care perspective. [See a more detailed explanation here.](#)