



Wildlife and SARS-CoV-2: Handling Guidelines

RECOMMENDATIONS FOR WILDLIFE PROFESSIONALS AND ORGANIZATIONS

Version 2, Date: March 7th, 2022

Purpose of the Handling Guidelines

The goal of this document is to provide general recommendations to federal, provincial, and territorial governments, as well as wildlife agencies and organizations to reduce the risk of transmission of SARS-CoV-2 while working with wildlife. Specific guidance is provided for select occupations working with wildlife, including wildlife researchers conducting fieldwork (Annex I), for animal care facilities (Annex II), and for nuisance wildlife control officers (Annex III), on how to minimize the risks of transmission of SARS-CoV-2. To supplement these guidelines, we also provide recommendations specific to wildlife professionals working directly with deer (Annex IV and Annex V). This document represents the current state of knowledge on SARS-CoV-2 and will be updated as more information becomes available.

Introduction

COVID-19 is an infectious disease caused by the novel coronavirus SARS-CoV-2. There is currently limited information on the virus in animals, especially on whether animals can transmit the virus back to people. In most cases, people are infecting animals, though there have been reports from the World Organization for Animal Health that suggest some susceptible species may transmit the virus back to humans. Risk of transmission from animals to humans remains very low, but caution is still encouraged when handling animals, particularly known susceptible species. Natural and experimental infections have confirmed susceptibility for several animal species. More information on SARS-CoV-2 and animals is available through the Government of Canada.

Plan your strategy to reduce the risk from COVID-19

- 1. Review: Stay informed on the developments on COVID-19 and personal safety and related to SARS-CoV-2 and wildlife. Information on these topics should inform the risk vs. benefit of handling wildlife.
- **2. Minimize:** Minimize and delay activities until more is known about exposure, transmissibility, and sensitivity to SARS-CoV-2.





- **3. Assess:** Identify the risks and perform regularly self-assessment for signs of COVID-19 in those working directly with wildlife.
- **4. Reduce exposure:** Minimize contact and prioritize non-invasive approaches to replace animal capture and avoid close proximity to wildlife.
- **5. Protect:** Protect yourself and wildlife. Use appropriate personal protective equipment (PPE), ensure disinfection protocols are in place, reduce the number of workers, minimize close contact, and limit handling and the number of locations visited.

Personal Protective Equipment (PPE) for COVID-19

PPE should be used during operations/activities and when physical distancing between people and/or animal is not possible.

- Nitrile or latex gloves
- Non-medical masks, medical masks, or a respirator can all be used when working with wildlife. The Government of Canada website has information on non-medical masks. However, respirators provide an added level of protection when working with highly susceptible species, known infected animals, or in situations where aerosols may be produced. Be advised that the use of certain respirators can require fit-testing and training for proper usage. Face shields and goggles offer an added level of protection and are recommended in situations where there is risk of splashing or spraying.
- Use hand and surface disinfectants effective against SARS-CoV-2. The Government of Canada provides recommendations for approved <u>hard-surface disinfectants and hand</u> <u>sanitizers</u>.

Worker safety

COVID-19 transmission is primarily from person-to-person. Information on <u>prevention and risk</u> is available through the Government of Canada.

- Up-to-date vaccination is one of the most effective ways to help protect ourselves, our families, and our communities against COVID-19, and may also help prevent the spread of COVID-19 from people to animals. More information on COVID-19 vaccines available in Canada can be found at Vaccines for COVID-19: How to Get Vaccinated. In addition to information provided by the Public Health Agency of Canada, please consult with your provincial or territorial public health authority as you reopen or operate during the COVID-19 pandemic, particularly when working with known susceptible species.
- Rapid antigen testing, within 24 hours prior to working with animals, is another tool that
 can be used to strengthen preventative measures and limit the risk of transmission of SARSCoV-2 to animals.





- Frequent handwashing: Wash and then disinfect your hands prior to working with wildlife and before touching equipment. Details on the best handwashing practices are available in the Government of Canada Wash Your Hands infographic.
- Do not touch your face: Avoid touching your face during work.
- **Increase distance:** Accommodations should be made for social distancing and avoiding groups. Maintain a distance of 2 metres between all individuals and limit contact whenever possible.
- Carpooling: Avoid carpooling. If sharing a vehicle is unavoidable, open windows, maximize ventilation with outside air, wear masks and maintain as much distance as possible within the vehicle when travelling to field sites.
- Dedicated work clothes: Have dedicated work clothes that are cleaned after each work shift.
- Wear gloves: Wear nitrile or latex gloves while working and change gloves as needed if they become soiled/contaminated. Even when wearing gloves, hand hygiene must be prioritized. Wash and then disinfect hands regularly.
- **Find equipment alternatives:** Do not blow on fur to examine for parasites. Use an instrument or small air blower/puffer to part the fur or feathers.

Cleaning and disinfecting

- **Isolate** used work clothes and equipment (i.e., bag them) until decontaminated and waste until disposed.
- Disposal of waste: Do not discard waste into the environment. Waste must be disposed of safely and properly. Dispose of any biohazardous waste according to local government guidelines.

When to avoid working with wildlife

- You should not handle wildlife if you have been diagnosed with COVID-19 or have had contact with someone who has tested positive for COVID-19 in the last 10 days prior to handling wildlife.
- Symptom screening of personnel should take place prior to every work shift. Avoid contact with wildlife if you show any symptoms of COVID-19 including, but not limited to, fever, dry cough, fatigue, and/or loss of taste or smell. More information on symptoms and treatment is available on the Government of Canada website.
- Keep records of activities and who is in contact with wildlife. This information can be used to track potential exposures in the event of a positive test for COVID-19.





Annex I. Wildlife and SARS-CoV-2: Handling Guidelines for Wildlife Researchers

The following guidelines present recommendations for wildlife researchers. For specific guidance when working with deer, please consult **Annex IV**.

Prior to beginning fieldwork

- **Check with your institution** regarding animal care and use protocols, permits, and field safety and hygiene protocols. For more advice, follow your local public health guidelines.
- Up-to-date vaccination is one of the most effective ways to help protect ourselves, our families, and our communities against COVID-19, and may also help prevent the spread of COVID-19 from people to animals. More information on COVID-19 vaccines available in Canada can be found at Vaccines for COVID-19: How to Get Vaccinated. In addition to information provided by the Public Health Agency of Canada, please consult with your provincial or territorial public health authority as you reopen or operate during the COVID-19 pandemic, particularly when working with known susceptible species.
- Rapid antigen testing, within 24 hours prior to working with wildlife, is another tool that can be used to strengthen preventative measures and limit the risk of transmission of SARS-CoV-2 to wildlife.
- Personal Protective Equipment (PPE) for capture and animal handling: a non-medical mask, medical mask, or respirator, as well as gloves, should be used for the safety of the workers and wildlife. The Government of Canada website has information on non-medical masks. However, respirators provide an added level of protection when working with highly susceptible species, known infected animals, or in situations where aerosols may be produced. Be advised that the use of certain respirators can require fit-testing and training for proper usage. Face shields and goggles offer an added level of protection and are recommended in situations where there is risk of splashing or spraying.
- Learn how to wear PPE: Become familiar with the <u>Sequence for Putting on Personal Protective Equipment</u>* for masks and gloves.
- **Dedicated field clothes**: Bring clothes to use only during fieldwork, such as coveralls, longsleeve shirts, and pants/trousers, shoes. If a change of clothes is not available, be sure to wash clothes frequently during fieldwork.
- **Frequent handwashing:** Wash and then disinfect your hands prior to working with wildlife and before touching equipment. Details on the best handwashing practices are available in the <u>Government of Canada Wash Your Hands infographic</u>.
- **Equipment and disinfectant:** Keep a spray bottle with disinfectant on hand for cleaning gear and surfaces. The Government of Canada provides recommendations for approved <u>hard-surface disinfectants</u>. Bring containers for disposal of gloves, sharps, or other contaminated materials.





During fieldwork

- Reduce the size of field research teams and the number of sites each team visits. Individuals should limit the duration of contact to the minimum required for study purposes and reduce the duration of close contact with wild animals.
- Wash your hands as frequently as possible, including before and after using gloves, before and after using the washroom, and during breaks. Details on the best handwashing practices are available in the Government of Canada Wash Your Hands infographic. Use water and soap, but, if not available, an approved hand sanitizer can be used.
- **Avoid touching your face:** Avoid touching your face or masks, and, if contact occurs, change your gloves, wash and then disinfect your hands.
- **Separate your spaces:** Do not eat, drink or smoke in the proximity of the animals or on the same surfaces where you are handling them.
- **Disinfect surfaces and equipment frequently:** Wash and then disinfect surfaces, workstations, and equipment frequently with a surface disinfectant effective against SARS-CoV-2 as per the <u>Government of Canada website</u>.

Handling of animals

This applies to live mammals, including those handled for sampling, animals found dead, and those that will be euthanized.

- **Minimize contact:** Whenever handling is not required, personnel should maximize distancing from animals.
- Use of masks should be mandatory when handling animals, in proximity (< 2-meters) to susceptible species, or in restricted close environments.
- **Do not touch your face:** Avoid touching the face or mask/face covering during work. If this does happen, change gloves and carefully wash and then disinfect hands afterwards to prevent contamination of hands, gloves, or equipment.
- **Practice hand hygiene:** Washing and disinfecting hands before starting work, including before touching equipment that will come into contact with the animal, and at the end of work.
- Gloves: Use nitrile or latex gloves when handling animals or equipment that will be used on animals. Change and disinfect gloves regularly and between each animal for known susceptible species.
- Find equipment alternatives for some techniques: For example, do not blow on animals (i.e., to examine them). Evaluate other techniques such as small air blowers, puffers, blunt-ended dissecting scissors, or empty wash bottle with a fine nozzle.
- **Animal holding:** Keep animals originating from different capture locations separate from each other to the greatest extent possible when holding animals.





Specimen collection

This applies to animals that may be found dead or where there is concern about submitting a dead animal for sampling.

- **Record** location and any relevant information
- Specimen collection: Avoid contact with blood or bodily fluids and avoid punctures or cuts from bills, claws, teeth, or instruments during handling. Carcasses should be handled using a small shovel or large tongs or can be handled by hand if disposable gloves are worn. Carcasses of trapped/euthanized animals in the field must be placed individually in sealed plastic bags labeled with their unique identification number, kept cold (in fridge or, alternatively, frozen if no fridge is available). Carcasses should be brought directly to participating lab as soon as possible, ideally within 24 hours. For more information on specimen collection refer to the Wildlife Surveillance Guidelines in Response to the Detection of SARS-CoV-2 in Farmed Mink in Canada.
- **Disposal of specimens:** Carcasses should be disposed of following institutional, provincial or territorial regulations for biohazardous waste.
- Contact the CWHC regional center in your area for more guidance on how to <u>safely collect</u> and <u>submit dead</u> or sick animals. Use the <u>online reporting tool</u> available through the CWHC.

Cleaning sites

- **Isolate** used work clothes and equipment (i.e., bag them) until decontaminated and waste until disposed.
- Clean and Disinfect equipment: Clean and then disinfect your field and personal equipment between sites or at the end of each day. All reusable equipment that has been in direct contact with animals should be cleaned and then disinfected between uses. The Government of Canada provides recommendations for approved hard-surface disinfectants.
- **Disposable of waste:** Properly dispose of biohazard waste (materials contaminated with blood, urine, and/or feces, used gloves, and sharps) according to local guidelines.

Other resources related to COVID-19 and wildlife

- <u>Bats Health and SARS-CoV-2</u> Canadian Wildlife Health Cooperative
- Bird handling during the COVID-19 pandemic Government of Canada
- Guidance to Reduce the Risk of SARS-CoV-2 Spreading between People and Wildlife US Centers for Disease Control and Prevention
- Guidelines for Working with Free-Ranging Wild Mammals in the Era of the COVID-19
 Pandemic World Organisation for Animal Health





Annex II. Wildlife and SARS-CoV-2: Handling Guidelines for Animal Care and Rehabilitation Facilities

The following guidelines present recommendations for animal care and rehabilitation facilities working with wildlife. For specific guidance when working with deer or housing deer at care facilities, please consult **Annex IV** and **Annex V**.

Personal Protective Equipment (PPE)

- **Confirm required personal protective equipment** (PPE): Make sure the required PPE is accessible and supplies are adequate each day.
- **Dedicated clothing**: Clean clothing and footwear should be worn and cleaned between each use. Clothing should be kept on premises of the workplace and bagged until clothing can be decontaminated. When possible, it is suggested that the facility provide scrubs and launder them on-site.
- **Dedicated footwear**: Footwear should be kept on premises of the workplace and bagged until clothing can be decontaminated. Shoes and boots should be kept clean of fecal matter, dirt, and cage litter.
- Non-medical masks, medical masks, or a respirator can all be used when working with wildlife. The Government of Canada website has information on non-medical masks. However, respirators provide an added level of protection when working with highly susceptible species, known infected animals, or in situations where aerosols may be produced. Face shields and goggles offer an added level of protection and are recommended in situations where there is risk of splashing or spraying.
- Learn how to wear PPE: Become familiar with the <u>Sequence for Putting on Personal Protective Equipment</u>* for masks, face shields, and gloves.
- Use hand and surface disinfectants effective against SARS-CoV-2. The Government of Canada provides recommendations for approved <u>hard-surface disinfectants and hand</u> sanitizers.

Record keeping

- **Records:** Maintain a log of contact with animals for workers and visitors to the facility (e.g., who was in contact with the animals, date of admission, location animal is found, feed suppliers, etc.). Consider ways to ensure consistency in the people who handle specific animals, particularly for susceptible or highly susceptible species.
- **Suspect death records:** keep track of suspect deaths in the facility and contact your provincial/territorial Wildlife Ministry or CWHC for further testing, if necessary.





Personal safety when handling animals

- Up-to-date vaccination is one of the most effective ways to help protect ourselves, our families, and our communities against COVID-19, and may also help prevent the spread of COVID-19 from people to animals. More information on COVID-19 vaccines available in Canada can be found at Vaccines for COVID-19: How to Get Vaccinated. In addition to information provided by the Public Health Agency of Canada, please consult with your provincial or territorial public health authority as you reopen or operate during the COVID-19 pandemic, particularly when working with known susceptible species.
- Rapid antigen testing, within 24 hours prior to working with animals, is another tool that can be used to strengthen preventative measures and limit the risk of transmission of SARS-CoV-2 to animals.
- Frequent handwashing: Wash hands frequently with soap and water/or apply hand sanitizer. See the Government of Canada website for approved hand sanitizers. Be sure to clean hands between glove changes, after washroom breaks, etc. Details on the best handwashing practices are available in the Government of Canada Wash Your Hands infographic.
- Wear a mask: Masks should be worn at all time and must be worn correctly, covering both nose and mouth.
- **Do not touch your face:** Avoid touching your face or masks, and, if contact occurs, change your gloves, wash and then disinfect your hands.
- Gloves: Wear disposable or clean reusable gloves, and change gloves when handling animals that are housed individually or when handling any items (e.g., food) in different enclosures.
- Do not eat, drink, smoke or remove PPE while working.
- **Disinfect surfaces and equipment frequently:** Wash and then disinfect surfaces, workstations, and equipment frequently with an <u>approved disinfectant effective against SARS-CoV-2</u>. All reusable equipment that has been in direct contact with animals should be cleaned and then disinfected between uses.

Limit contact with animals

- Limit contact: Avoid any close contact like air kissing or petting (especially without gloves). Maintain a 2-meter distance from animals whenever possible. If this is not possible then they wear a face shield in addition to their mask. If feasible, limit contact and maintain physical barrier between susceptible species.
- Limit access: Access of the animals should be limited to essential personnel and minimize the number of people interacting with the animals, particularly for susceptible or highly susceptible species. Consider ways to limit access for non-essential personnel.
- **Find equipment alternatives for some techniques**: For example, do not blow on animals (i.e., to examine them). Evaluate other techniques such as small air blowers, puffers, blunt-ended dissecting scissors, or empty wash bottle with a fine nozzle.





Specimen collection

This applies to animals that may be found dead or where there is concern about submitting a dead animal for sampling.

- **Record** location and any relevant information
- Specimen collection: Avoid contact with blood or body fluids and avoid punctures or cuts from bills, claws, teeth, or instruments during handling. Carcasses should be handled using a small shovel or large tongs or can be handled by hand if disposable gloves are worn. Carcasses of trapped/euthanized animals in the field must be placed individually in sealed plastic bags labeled with their unique identification number, kept cold (in fridge or, alternatively, frozen if no fridge is available). Carcasses should be brought directly to participating lab as soon as possible, ideally within 24 hours. For more information on specimen collection refer to the *Wildlife Surveillance Guidelines in Response to the Detection of SARS-CoV-2 in Farmed Mink in Canada*.
- **Disposal of specimens:** Carcasses should be disposed of following institutional, provincial or territorial regulations for biohazardous waste.
- Contact the CWHC regional center in your area for more guidance on how to <u>safely collect</u> and <u>submit dead</u> or sick animals. Contacts and information are available through the <u>CWHC online reporting tool</u>.

Cleaning workstations

- Isolate used work clothes and equipment (i.e., bag them) until decontaminated and waste until disposed.
- Clean and disinfect surfaces: Items available to animals, such as food and water dishes, enrichment items, cages, and workspaces should be cleaned frequently. Pay special attention to frequently touched surfaces like handles, knobs, and switches. Use an approved disinfectant effective against SARS-CoV-2.
- **Disposable of waste:** Properly dispose of biohazard waste (materials contaminated with blood, urine, and/or feces, used gloves, and sharps) according to local guidelines.





Annex III. Wildlife and SARS-CoV-2: Handling Guidelines for Nuisance Wildlife Control Officers

The following guidelines present recommendations for nuisance wildlife control officers working with wildlife. For specific guidance when working with deer, please consult **Annex IV**.

Personal Protective Equipment (PPE)

- **Confirm required personal protective equipment** (PPE): Make sure the required PPE is accessible and supplies are adequate each day.
- **Dedicated clothing**: Clean clothing and footwear should be worn and cleaned between each use. Clothing should be kept on premises of the workplace and bagged until clothing can be decontaminated.
- Non-medical masks, medical masks, or a respirator can all be used when working with wildlife. The Government of Canada website has <u>information on non-medical masks</u>. However, <u>respirators</u> provide an added level of protection when working with highly susceptible species, known infected animals, or in situations where aerosols may be produced. Be advised that the use of certain respirators can require fit-testing and training for proper usage. Face shields and goggles offer an added level of protection and are recommended in situations where there is risk of splashing or spraying.
- Learn how to wear PPE: Become familiar with the <u>Sequence for Putting on Personal Protective Equipment</u>* for masks, face shields, and gloves.
- Use hand and surface disinfectants effective against SARS-CoV-2. The Government of Canada provides recommendations for approved <u>hard-surface disinfectants and hand</u> <u>sanitizers</u>.

Record keeping

- Records: Maintain a log of contact with animals for workers and visitors to the facility (e.g., who was in contact with the animals, date of admission, location animal is found, feed suppliers, etc.). Consider ways to ensure consistency in the people who handle specific animals, particularly for susceptible or highly susceptible species.
- **Suspect death records:** keep track of suspect deaths in the facility and contact your provincial/territorial Wildlife Ministry or CWHC for further testing, if necessary.





Personal safety when handling animals

- Up-to-date vaccination is one of the most effective ways to help protect ourselves, our families, and our communities against COVID-19, and may also help prevent the spread of COVID-19 from people to animals. More information on COVID-19 vaccines available in Canada can be found at Vaccines for COVID-19: How to Get Vaccinated. In addition to information provided by the Public Health Agency of Canada, please consult with your provincial or territorial public health authority as you reopen or operate during the COVID-19 pandemic, particularly when working with known susceptible species.
- Rapid antigen testing, within 24 hours prior to working with animals, is another tool that can be used to strengthen preventative measures and limit the risk of transmission of SARS-CoV-2 to animals.
- Frequent handwashing: Wash hands frequently with soap and water/or apply hand sanitizer. See the Government of Canada website for approved hand sanitizers. Be sure to clean hands between glove changes, after washroom breaks, etc. Details on the best handwashing practices are available in the Government of Canada Wash Your Hands infographic.
- Wear a mask: Masks should be worn at all time and must be worn correctly, covering both nose and mouth.
- **Do not touch your face:** Avoid touching your face or masks, and, if contact occurs, change your gloves, wash and then disinfect your hands.
- Gloves: Wear disposable or clean reusable gloves, and change gloves when handling animals that are housed individually or when handling any items (e.g., food) in different enclosures.
- Do not eat, drink, smoke or remove PPE while working.
- **Disinfect surfaces and equipment frequently:** Wash and then disinfect surfaces, workstations, and equipment frequently with an <u>approved disinfectant effective against SARS-CoV-2</u>. All reusable equipment that has been in direct contact with animals should be cleaned and then disinfected between uses.

Limit contact with animals

- Limit contact: Avoid any close contact like air kissing or petting (especially without gloves). Maintain a 2-meter distance from animals whenever possible. If this is not possible then they wear a face shield in addition to their mask. If feasible, limit contact and maintain physical barrier between susceptible species.
- Limit access: Access of the animals should be limited to essential personnel and minimize the number of people interacting with the animals, particularly for susceptible or highly susceptible species. Consider ways to limit access for non-essential personnel.
- **Housing:** Maintain space (2-meters), when possible, or a solid barrier between enclosures for all animals, especially for known susceptible species.
- **Release animals** near where the animal was found. If an animal is sick and suspected of SARS-CoV-2 infection contact your provincial/territorial Wildlife Ministry or <u>CWHC</u> for information.





Specimen collection

This applies to animals that may be found dead or where there is concern about submitting a dead animal for sampling.

- **Record** location and any relevant information
- **Specimen collection:** Avoid contact with blood or body fluids and avoid punctures or cuts from bills, claws, teeth, or instruments during handling. Carcasses should be handled using a small shovel or large tongs or can be handled by hand if disposable gloves are worn. Carcasses of trapped/euthanized animals in the field must be placed individually in sealed plastic bags labeled with their unique identification number, kept cold (in fridge or, alternatively, frozen if no fridge is available). Carcasses should be brought directly to participating lab as soon as possible, ideally within 24 hours. For more information on specimen collection refer to the *Wildlife Surveillance Guidelines in Response to the Detection of SARS-CoV-2 in Farmed Mink in Canada*.
- **Disposal of specimens:** Carcasses should be disposed of following institutional, provincial or territorial regulations for biohazardous waste.
- Contact the CWHC regional center in your area for more guidance on how to <u>safely collect</u> and <u>submit dead</u> or sick animals. Contacts and information are available through the <u>CWHC online reporting tool</u>.

Cleaning workstations

- **Isolate** used work clothes and equipment (i.e., bag them) until decontaminated and waste until disposed.
- Clean and disinfect surfaces: Items available to animals, such as food and water dishes, enrichment items, cages, and workspaces should be cleaned frequently. Pay special attention to frequently touched surfaces like handles, knobs, and switches. Use an approved disinfectant effective against SARS-CoV-2.
- **Disposable of waste:** Properly dispose of biohazard waste (materials contaminated with blood, urine, and/or feces, used gloves, and sharps) according to local guidelines.





Annex IV. Deer and SARS-CoV-2: Guidelines for Wildlife Professionals Handling Deer

The following guidelines present additional recommendations for wildlife professionals working directly with deer. For specific guidance for wildlife researchers (Annex I), animal care facilities (Annex II), and nuisance animal control officers (Annex III) working with non-deer species, please consult the associated annexes.

SARS-CoV-2 in deer

<u>Canada</u> and the <u>United States</u> have reported the presence of SARS-CoV-2 in wild white-tailed deer, providing the first evidence that the virus can circulate in wild animal populations. Studies in the United States revealed widespread presence of SARS-CoV-2 in deer and have shown evidence that the virus has spread from humans to deer on multiple occasions, with subsequent spread from deer to deer (<u>Chandler et al. 2021</u>*, <u>Kuchipudi et al. 2021</u>*). While wild white-tailed deer testing positive for current strains of SARS-CoV-2 show no clinical signs of illness, it is unknown what impacts the virus will have in deer populations, other cervid species, or other potentially susceptible species that share their habitats. For more information on white-tailed deer and SARS-CoV-2, please refer to the <u>Wildlife and SARS-CoV-2</u>: <u>FAQ</u>.

Recommendations when working with deer

While these reports confirm the presence of the virus in white-tailed deer populations, it is important to remember that the greatest risk of exposure to SARS-CoV-2 is from other people. However, when it is necessary to be in contact with wildlife, we recommend that those handling animals take precautions to limit transmission of SARS-CoV-2 from deer *to* humans, as well as reducing the risk of exposure to the virus to deer *from* humans.

Up-to-date <u>vaccination</u> remains one of the most effective ways to help protect yourself, your family, and your community against COVID-19. Rapid antigen testing, within 24 hours prior to working with deer, is another tool that can be used to strengthen preventative measures and limit the risk of transmission of SARS-CoV-2 to deer. In addition, individuals should monitor themselves for symptoms of COVID-19 and ensure they are asymptomatic when working with deer. Individuals should not handle deer if you have been diagnosed with COVID-19 or have had contact with someone who has tested positive for COVID-19 in the last 10 days prior to handling deer.





Unless indicated, the following recommendations apply when working with live deer and when handling carcasses. To help protect yourself and reduce your risk, it is recommended that you:

- A <u>non-medical mask</u>, medical mask, or respirator can be used when working with deer. However, respirators provide an added level of protection when working with highly susceptible species, known infected animals, or in situations where aerosols or splashing, particularly from respiratory fluids, may be produced. Be advised that the use of certain respirators can require fit-testing and training for proper usage.
- When handling deer:
 - Wear a mask
 - Wear gloves (e.g., rubber, latex, nitrile, vinyl)
 - Do not eat, drink or smoke and avoid touching your face
 - Wear eye protection (e.g., goggles, safety glasses, face shields)
- Process deer outdoors or in a well-ventilated area
- When cutting into a deer carcass and handling tissues such as lungs, trachea (windpipe), mouth, and nasal cavity:
 - Avoid splashing or spraying fluids as much as possible
 - Wash knives, equipment and surfaces, and sanitize with a <u>bleach solution</u> or change equipment before handling other carcasses
- After handling the deer:
 - Wash equipment and surfaces and sanitize with a <u>bleach solution</u>
 - Remove your gloves and <u>wash your hands</u> with soap and water or use <u>hand</u> sanitizer
 - Change your clothing and footwear if possible
- Consult with local authorities for proper disposal of tissues or carcass
- Report any sick or dead animals to your local wildlife authority

The above precautions are particularly important for those who are <u>at higher risk of severe</u> <u>COVID-19 illness</u>, as well as those who are not fully vaccinated. Whenever possible, have a fully vaccinated person handling the deer. All individuals that do not need to be handling the deer should maintain a 2-meter distance.





Annex V. Deer and SARS-CoV-2: Guidelines for Animal Care and Rehabilitation Facilities Holding Deer

The following guidelines present additional recommendations for wildlife professionals holding deer in captivity. For specific guidance on handling deer, please consult **Annex IV**.

Prevention of SARS-CoV-2 transmission to and from deer

Given the recent reports of <u>active SARS-CoV-2</u> infection in wild white-tail deer in Canada, it is recommended that additional precautions be taken to limit the transmission of the virus at animal care and rehabilitation facilities that hold wild deer. To keep deer in captivity safely, the following measures are recommended.

Holding deer in captivity

- Hold deer in outdoor enclosures and isolated from other animals in the facility. Keep deer
 behind a solid barrier or enclosed in pens at least 2-meters apart from other animals, especially
 for known susceptible species. A list of susceptible species can be found on the <u>Animals and COVID-19</u> webpage and in the <u>OIE technical factsheet: infection with SARS-CoV-2 in
 animals.
 </u>
- **Keep deer in groups**: <u>Early experimental evidence</u> suggests that deer fawns shed infectious virus for up to 9 days. To reduce virus transmission, deer entering a facility should be kept in groups and not interact with other deer until all deer in the designated group have been isolated at least 9 days. A single fawn entering a facility may be added to a group, so long as provincial/territorial protocols for holding deer from different locations allow.

Order of care

• When performing regular duties in your operation, always visit deer after visiting other animals.

Cleaning in indoor facilities

- **Ensure good ventilation** to help protect against the spread of SARS-CoV-2 if deer must be handled indoors for veterinary care. Indoor facilities should have efficient air movement with minimal recycled or reused air. See <u>COVID-19</u>: <u>Improving indoor ventilation</u> for further guidance.
- **Keep animal enclosures clean:** Animal enclosures should be kept sanitary by having an adequate and routine cleaning regimen. Before a newly-acquired group of deer is introduced to an enclosure that has been previously used, the enclosure must be thoroughly cleaned and disinfected. Use an approved hard-surface disinfectant effective against SARS-CoV-2.
- **Keep bedding and furnishings clean:** Protocols for regular cleaning should be in place for all bedding (e.g., shavings), furnishings, or enrichment tools. Properly dispose of soiled bedding





according to local guidelines. Before a newly-acquired group of deer is introduced to a previously used enclosure, the bedding must be changed and any furnishings or enrichment tools cleaned and disinfected. Use an <u>approved hard-surface disinfectant effective against SARS-CoV-2</u>.

• Feeding utensils and water bowls: Bowls and feeding utensils should also be cleaned/replaced daily and disinfected between uses on different animals. Water bowls should be cleaned and/or changed as needed to keep them clear of debris.

Health monitoring

- Monitor the health status of animals daily and maintain records: When performing regular duties in your operation, always visit deer after visiting other healthy animals. Where possible, have a separate set of materials (e.g., stethoscope, ophthalmoscope, thermometer) for use on deer.
- Clinical signs of SARS-CoV-2 have not been reported in <u>experimentally infected deer</u>* and there are currently no reports of clinical illness associated with SARS-CoV-2 in <u>wild deer populations</u>*.
- Some animals may get sick and show signs of illness: Mustelids, canids, and felids, for example, may show signs of illness, including fever, fatigue, sneezing, coughing, loss of appetite, difficulty breathing, vomiting, and/or diarrhea. For more information, see the OIE technical factsheet: infection with SARS-CoV-2 in animals.
- Suspected SARS-CoV-2 infection: If an animal is sick and/or suspected of SARS-CoV-2 infection contact your provincial/territorial Ministry responsible for wildlife or <a href="https://www.cwi.org/
- Mortality through injury, illness, or euthanasia: Carcasses should be disposed of following institutional, provincial or territorial regulations.

Release of captive deer

• Release deer in the vicinity of where the animal was found and only after all deer in the designated group have been isolated for at least 9 days in order to reduce any potential transmission of SARS-CoV-2 in the wild. Be sure to consult with provincial/territorial guidance on the release of deer, particularly if in a jurisdiction where chronic wasting disease (CWD) has been confirmed.





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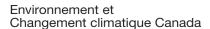


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^{*} Documents only available in English