



Wildlife and SARS-CoV-2: Handling Guidelines

Version 1.1, Date: June 15th, 2021

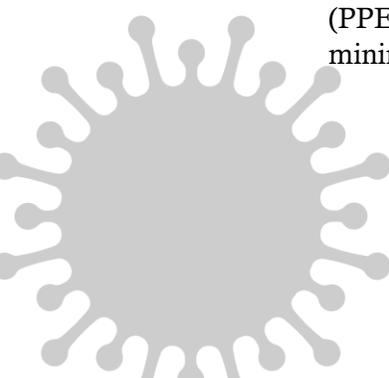
Introduction

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 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 (i.e., mink) 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](#).

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. As a supplement to the Handling Guidelines, we also provide recommendations specific to wildlife researchers conducting fieldwork ([Annex I](#)) and for animal care facilities and nuisance wildlife control officers ([Annex II](#)) on how to minimize the risks of transmission of SARS-CoV-2. This document represents the current state of knowledge on SARS-CoV-2 and will be updated as more information becomes available.

Plan your strategy to reduce the risk from COVID-19

1. **Minimize:** Minimize and delay activities until more is known about exposure, transmissibility, and sensitivity to SARS-CoV-2.
2. **Assess:** Identify the risks and perform regularly self-assessment for signs of COVID-19 in those working directly with wildlife.
3. **Reduce exposure:** Minimize contact and prioritize non-invasive approaches to replace animal capture and avoid close proximity to wildlife.
4. **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

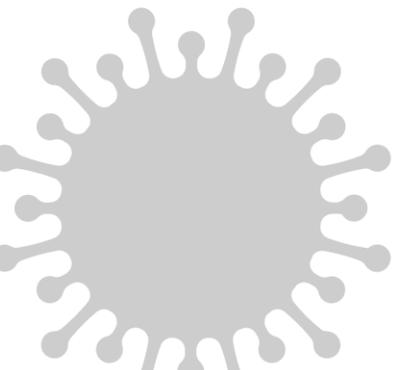
PPE should be used during operations/activities and when physical distancing between people and/or animal is not possible.

- **Nitrile or latex gloves**
- **Use a well-fitted 3-layer mask** designed to filter exhaled particles for the safety of the workers and wildlife. The Government of Canada website has [information on non-medical masks](#). For susceptible species, use a surgical mask. [Respirators](#) are only recommended if working with suspected or known infected animals. 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 [hard-surface disinfectants and hand sanitizers](#).

Worker safety

COVID-19 transmission is primarily from person-to-person. Information on [prevention and risk](#) is available through the Government of Canada.

- **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.



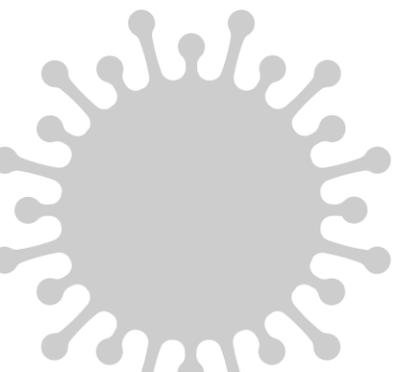


Cleaning and disinfecting

- **Isolate** used work clothes and equipment (i.e., bag them) until decontaminated and waste until disposed.
- **Disinfect equipment:** Any reusable equipment should be cleaned and then disinfected prior to transport and reuse. 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](#).
- **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 been in contact with someone who has tested positive for COVID-19 until you receive a negative COVID-19 test result.
- 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

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.
- **Personal Protective Equipment (PPE)** for capture and animal handling: 3-layer mask designed to filter exhaled particles and gloves should be used for the safety of the workers and wildlife. The Government of Canada website has [information on non-medical masks](#). If working with susceptible species, a surgical mask is recommended.
- **Learn how to wear PPE:** Become familiar with the [Sequence for Putting On Personal Protective Equipment*](#) for masks and gloves.
- **Dedicated field clothes:** Bring clothes to use only during fieldwork, such as coveralls, long-sleeve 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 [Government of Canada Wash Your Hands infographic](#).
- **Equipment and disinfectant:** Keep a spray bottle with disinfectant on hand for cleaning gear and surfaces. The Government of Canada provides recommendations for approved [hard-surface disinfectants](#). 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 [Government of Canada website](#).



Handling of animals

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

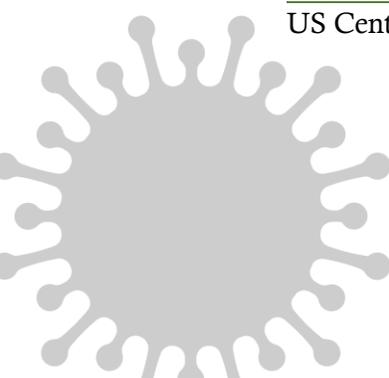
- **Minimize contact:** Whenever handling is not required, personnel should maximize distancing from animals.
- **Use of masks** should be mandatory when handling animals, in proximity (< 2m) to susceptible species, or in restricted close environments.
- **Do not touch your face:** Avoid touching the 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.
- **Contact the CWHC regional center in your area** for guidance on how to [safely collect and submit dead](#) or sick animals. Use the [online reporting tool](#) 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

- [Bats Health and SARS-CoV-2](#) — 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





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

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.
- **Use a well-fitted 3-layer mask** for the safety of the workers and wildlife. The Government of Canada website has [information on non-medical masks](#). For susceptible species, use a surgical mask. [Respirators](#) are only recommended if working with suspected or known infected animals. 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 [Sequence for Putting On Personal Protective Equipment*](#) for masks, face shields, and gloves.
- **Use hand and surface disinfectants** effective against SARS-CoV-2. The Government of Canada provides recommendations for approved [hard-surface disinfectants and hand sanitizers](#).

Personal safety when handling 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 [approved disinfectant effective against SARS-CoV-2](#). All reusable equipment that has been in direct contact with animals should be cleaned and then disinfected between uses.



Record keeping

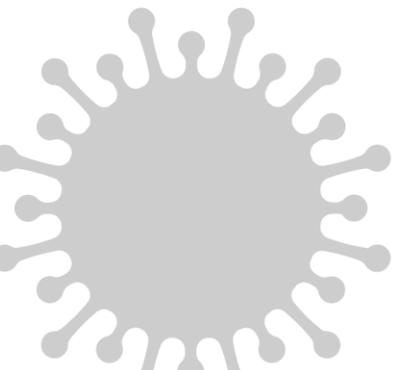
- **Records:** Maintain a log of contact with animals for workers and visitors to the facility (e.g. feed suppliers etc.). Consider ways to ensure consistency in the people who handle specific animals, particularly for susceptible or highly susceptible species.
- **Suspect death records:** keep track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

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 medical grade 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.
- **Housing:** Maintain space (2m), 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 [CWHC](#) for information.
- **Susceptible species:** If there is interest or reason for concerns about [collecting and submitting dead species](#) contact the CWHC regional center in your area for guidance. Contacts and information are available through the [CWHC online reporting tool](#).

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.





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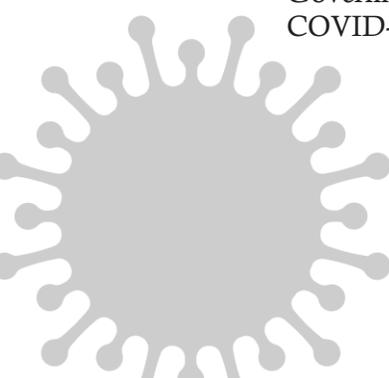
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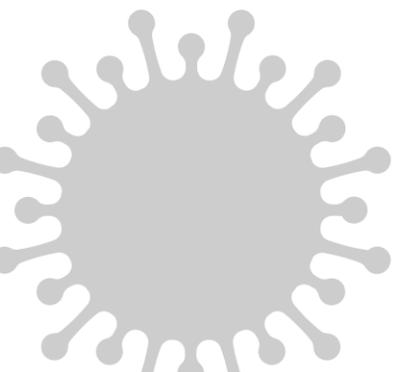
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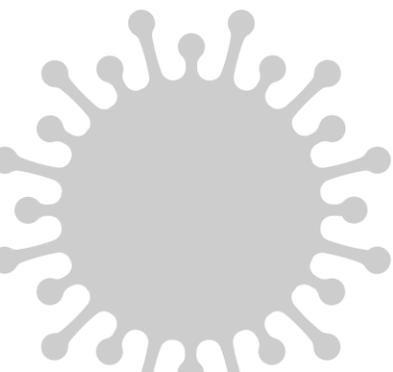




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* Documents only available in English

This document was developed with input from a working group consisting of Canadian wildlife and public health experts, with representation from federal, provincial and territorial governments, the Canadian Wildlife Health Cooperative, Parks Canada, Environment and Climate Change Canada, Canadian Food Inspection Agency, Public Health Agency of Canada, and academia.

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