

Updated September 2, 2020

## Moratorium on Bat Release Lifted in Iowa



In March 2020, the Iowa Department of Natural Resources (DNR) followed recommendations from state and federal partners to restrict the release of bats that had been overwintering at rehabilitation facilities. While bat rehab was permitted to continue, new intakes were also subject to this moratorium on release. This action allowed the Iowa DNR to evaluate the risk of reverse zoonosis, or transmission of SARS-CoV-2 from humans to animals, and specifically the potential for our native bat species to become reservoirs of disease following exposure. Based on the best available knowledge, reviewed in detail below, we deem bats in rehabilitation facilities a negligible risk to public health. Wildlife rehabilitators are hereby authorized to release the bats currently in their care from the 2019-2020 winter season following appropriate flight conditioning. Moreover, they may resume a normal release schedule for any recent or new bat intakes from this point forward, however are encouraged to continue using enhanced personal protective equipment, described in our “Updated COVID-19 Exposure and Wildlife Handling Guidance” document, report new intakes to [SCPermits@dnr.iowa.gov](mailto:SCPermits@dnr.iowa.gov) or by phone: 515-725-8273, and contact Dr. Rachel Ruden at [Rachel.Ruden@dnr.iowa.gov](mailto:Rachel.Ruden@dnr.iowa.gov) or by phone: 515-823-8544 if a bat in human care may have been exposed to an infected person or shows signs of respiratory illness.

### Research to Date

- A risk analysis produced by the United States Geological Survey found that use of appropriate personal protective equipment (PPE) could dramatically reduce the risk of human-to-bat transmission (<1% of encounters). The full assessment can be reviewed here: <https://pubs.usgs.gov/of/2020/1060/ofr20201060.pdf>.
- The National Wildlife Health Center completed an experimental challenge study in which big brown bats (*Eptesicus fuscus*) were inoculated with the SARS-CoV-2 virus. They found no evidence of viral shedding or transmission to uninfected pairs, and no virus was detected in tissues post-mortem.
  - This study suggests that big brown bats are poorly susceptible to infection and thus unlikely to become wildlife reservoirs. Of note, big brown bats are the most commonly rehabbed bat species in Iowa.
- An experimental challenge study in Egyptian fruit bats (*Rousettus aegyptiacus*) found evidence of viral shedding, transmission, and seroconversion. The full study can be reviewed here: [https://doi.org/10.1016/S2666-5247\(20\)30089-6](https://doi.org/10.1016/S2666-5247(20)30089-6).
  - SARS-CoV-2 is a beta-coronavirus similar to those found circulating in the Old World bats, which includes the Egyptian fruit bat. Our native species in Iowa belong to the New World bats. SARS-related beta-coronaviruses are not known to occur in the New World.

### Pre-Release Benchmarks for Overwintered Bats

- Ensure bats are in good body condition, as they will only have a brief window to acclimate back into the wild prior to preparing for hibernation
- Exercise bats daily and for increasing lengths of time prior to release - adequate flight conditioning will be critical to their survival in the wild
  - Bats should be able to sustain flight for 5-10 minutes
- Give all bats a full exit health exam
- Release bats as close to their site of collection as possible

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