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Thea Carroll
CITES Secretariat
International Environment House
11 Chemin des Anémones
CH-1219 Châtelaine, Geneva
Switzerland

VIA EMAIL:  thea.carroll@un.org; info@cites.org

Dear Ms. Carroll and CITES Secretariat,

Enclosed please find the U.S. response to Notification to the Parties No. 2023/028 – *Risk of future zoonotic disease emergence associated with international wildlife trade*, which requests information regarding Parties’ national measures to mitigate zoonotic disease risk in the wildlife trade.

If you have any questions concerning the U.S. response to the questionnaire or U.S. activities in this area, please feel free to contact my colleague Dara Satterfield, CITES Policy Specialist, Wildlife Trade and Conservation Branch, Division of Management Authority, at email: dara_satterfield@fws.gov; tel:  703-358-1818

Sincerely,

Rhyan Tompkins, Acting Manager
Wildlife Trade and Conservation Branch
Division of Management Authority
U.S. Fish and Wildlife Service

Enclosure
U.S. responses to Notification to the Parties No. 2023/028:

Risk of future zoonotic disease emergence associated with international wildlife trade
4/18/23

*The CITES Notification text is in BOLD below*

*U.S. responses are in blue, regular text below*

Request – Notification to the Parties No. 2023/028

At its nineteenth meeting (Panama City, 2022), the Conference of the Parties adopted Decision 19.15 on the Role of CITES in reducing risk of future zoonotic disease emergence associated with international wildlife trade. Paragraph a) of Decision 19.15 directs the Secretariat to:

Issue a Notification to the Parties, requesting Parties to report on any measures they have in place to prevent and mitigate the risk of pathogen spillover and transmission from wildlife trade and associated wildlife supply chains including markets, and make the results available on the CITES website as a compilation of responses that could be useful to other Parties.

An introductory note:

- Multiple agencies regulate the import of animals into the United States, and only certain regulations pertain to infectious disease control measures. In general: The U.S. Department of Agriculture (USDA) Animal & Plant Health Inspection Service (APHIS) regulates the import of mainly agricultural animals, and to a smaller extent, the import of some wildlife linked to diseases that affect agricultural animals. The U.S. Fish and Wildlife Service (USFWS) inspects and regulates the import of wild animals (and their parts and products), including those protected by U.S. or international law, such as CITES. USFWS’ primary aim in this effort is to facilitate legal wildlife trade and combat the illegal wildlife trade. The U.S. Centers for Disease Control and Prevention (CDC) also regulate the import of certain (mostly live) wild animal species that have been previously associated with zoonotic risk. Outside of import regulations, several other U.S. agencies focus in other ways on the health of wildlife (e.g., U.S. Geological Survey, Smithsonian Institution) and/or humans (e.g., Health and Human Services, U.S. Agency for International Development). We describe the various roles and activities of each agency throughout.

Measures to be reported on could include inter alia:

a) definitions adopted relating to zoonoses:

• CDC participated alongside other global experts in the [One Health High-Level Expert Panel](https://www.who.int/one-health), established in 2021 by the World Health Organization (WHO), World Organization for Animal Health (WOAH), United National Environmental Program (UNEP), and the Food & Agriculture Organization of the United Nations (FAO) – collectively known as the Quadripartite. A definition for One Health emerged from this work and was published:
• “One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals, and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent.”

b) multi-sectoral approaches adopted in the implementation of the Convention, including in terms of:
   i. the regulation of trade in specimens of wild animals species;
      • The U.S. supported decisions at CITES CoP19 on zoonoses, including promoting a One Health approach through CITES wildlife trade regulations.

   ii. the preparation and shipment of specimens traded in terms of the Convention; and
      • Our CITES-implementing regulations in the U.S. include requirements pertaining to the transport of live animals (e.g., 50 CFR 23.23(c)(7), 23.26(c)(8), 23.56(a)(2)). Consistent with CITES requirements, these regulations stipulate that shipments containing live specimens must comply with the International Air Transport Association (IATA) Live Animals Regulations (LAR, for animals) or the International Air Transport Association Perishable Cargo Regulations (PCR, for plants) or, in the case of non-air transport of species that may require transport conditions in addition to or different from the aforementioned regulations, the CITES Guidelines for the non-air transport of wild animals and plants. As part of routine inspections of wildlife imports, the U.S. Enforcement Authority checks that shipments abide by relevant regulations of IATA. If a shipment fails to meet these requirements, inspection personnel take enforcement actions as appropriate. Ensuring compliance with IATA regulations is essential for helping live animals to minimize stress and maintain health, which may result in reduced pathogen risk.

   iii. the regulation, registration and administration of captive-breeding, farming and ranching facilities;
      • Our CITES-implementing regulations in the U.S. include requirements for registering a commercial breeding operation for Appendix-I wildlife and commercially exporting specimens (50 CFR 23.46).

c) synergies with appropriate national and international animal and public health authorities that have been developed and strengthened; and
   • U.S. Government officials from U.S. Geological Survey (USGS) and from the National Institutes of Health (NIH) participate on WOAH Working Group on Wildlife and the WOAH One Health Group of Friends, respectively.
   • CDC has provided technical support to WHO, FAO, and WOAH for the development of the Tripartite Zoonoses Guide and its associated operational tools related to developing Multisectoral, One Health Coordination, Mechanisms, strengthening Surveillance and Information Sharing, and conducting Joint Risk Assessments.
• CDC’s One Health Office serves as the head of the WOAH Collaborating Centre for Emerging and Reemerging Zoonotic Diseases.

d) strategies developed to identify and reduce the risk of transmission and spillover of zoonotic diseases and pathogen emergence from traded wildlife, including *inter alia*:

• The U.S. Congress passed the American Plan Rescue Act in 2021 (H.R. 1319, Section 6003.3). This included, among many other efforts, funding for disease surveillance and monitoring in animals and wildlife. However, we note that only certain portions of this directly relate to wildlife trade specifically. To point out the most relevant components, the American Plan Rescue Act includes the following funding:
  - $45 million towards wildlife health monitoring to increase the early detection, rapid response, and science-based management of zoonotic pathogens in wildlife. The funding will also support a national wildlife disease database to address and prevent wildlife and zoonotic disease outbreaks (described further below);
  - $20 million towards addressing wildlife trafficking (including wildlife inspections, interdictions, and investigations);
  - $10 million towards implementing a U.S. law known as the Lacey Act, which allows USFWS to manage imports of wildlife deemed “injurious to the health and welfare of humans, the interests of agriculture, horticulture, or forestry, and the welfare and survival of wildlife resources in the U.S”;
  - Additional funding to USDA towards conducting surveillance for SARS-CoV-2 and other zoonoses in agricultural animals (see below).

• Under Section 361 of the Public Health Service Act (PHSA), CDC have long regulated the import of the following species to reduce disease risk:
  - Regulations to limit the import of certain turtles to prevent Salmonella infections;
  - Control measures and registration processes to reduce zoonotic risk from non-human primates;
  - Additional regulations on bats, civets and other Viverridae, and African rodents.

• USDA APHIS’s existing regulations on imports primarily focus on agricultural animals. APHIS also regulates the import of certain wildlife known to carry pathogens (e.g., bovine tuberculosis) that can infect agricultural animals.

i. assessment of risks associated with sources of traded wildlife specimens and associated wildlife support chains especially from areas or involving species known or suspected to be exposed to or linked to potentially harmful pathogens:
  • The Smithsonian Institution (with funding from USFWS) is conducting an analysis to identify zoonotic pathogens associated with wildlife imported into the U.S. While this study is focused on U.S. trade, the scientific outputs may be broadly useful. We welcome collaboration from other governments and partners and plan to share outcomes from this work.
  • The United States Agency for International Development (USAID) has been working with partners since 2020 to identify species and control points in the
supply chain that present high zoonotic disease risks in wildlife trade. This work is informing national and international policy, as well as disease risk reduction guides and management interventions for producers, consumers, and regulators.

ii. **testing wildlife specimen in trade, including in markets, and associated wildlife supply chains for pathogens, taking into account known or suspected pathogen infection risks:**
   - Related to wildlife farms: Specifically to detect COVID-19, the USGS using funds authorized by Coronavirus Aid, Relief, and Economic Security Act, CARES Act) integrated SARS-CoV-2 surveillance into their cause-of-death field investigations, and this included sampling wildlife around mink farms.
   - The USFWS Office of Law Enforcement (our CITES Enforcement Authority) established a “Zoonoses Enforcement Unit.” This small team of wildlife inspectors is discussing longer-term plans for sampling wildlife shipments in the future (if such authority were given to USFWS), how to obtain proper facilities (biohazard containment, secure evidence areas) and equipment, how to improve live animal quarantine and care, and how to strengthen partnerships within the U.S. Government towards these goals. The team is also aiming to partner with public health officials to assess biosafety challenges or concerns for wildlife inspectors and their communities.

iii. **containing or mitigating pathogen spillover from specimen known or suspected to be infected, including in markets, or associated wildlife support chains;**

iv. **organization, monitoring, administration of the abovementioned matters; and**
   - The USFWS National Wildlife Refuge System's Wildlife Health Office provides technical expertise and on-the-ground assistance for health and disease issues throughout the country, including supporting the Zoonoses Enforcement Unit (noted above) with planning, outbreak response, biosecurity, and biosafety at the nexus of wildlife trade and disease.

v. **building institutional capacity, including capacity for inter-agency collaboration (for example between agencies tasked with wildlife management, veterinary and public health, trade regulation, and CITES Authorities), as required to implement the abovementioned matters.**
   - The U.S. Department of State regularly convenes an expert interagency working group on the wildlife dimensions of zoonotic diseases. The group discusses efforts to address zoonotic spillover risks from wildlife, including from wildlife trafficking, illegal deforestation and encroachment, protected areas management, conservation, and the interface between wildlife, humans, and livestock. Key partners include CDC, the U.S. Department of Health and Human Services (HHS), USAID, USGS, USDA, USFWS, and the Smithsonian Institution.
The measures outlined above are simply examples of the types of measures Parties may have put in place. The Secretariat invites Parties to submit reports on any measures they have in place to prevent and mitigate the risk of pathogen spillover and transmission from wildlife trade and associated wildlife supply chains including markets, taking the above into consideration.

Additional information not specific to wildlife trade – U.S. efforts at the One Health & wildlife nexus in general

*This is only a partial list of U.S. Government efforts on One Health and wildlife in general. The following activities serve as examples:

Zoonotic disease surveillance, research, and mitigation in wildlife in general (not specific to wildlife trade)

- As mentioned above, the American Rescue Plan Act (2021, H.R. 1319, Section 6003.3) is enabling multiple efforts related to animal and wildlife health:
  - USFWS established the Zoonotic Disease Initiative grants program to prevent and prepare for wildlife diseases. The grants program provides up to $9 million in funding to U.S. states, Tribes, and territories for the early detection, response, and management of wildlife disease outbreaks – before they spillover to humans. The goal is to build a network of wildlife managers across the U.S. who are prepared for zoonotic disease outbreaks. In 2022, for instance, USFWS funded five Tribes and five U.S. states to develop organizational capacity for: managing and detecting wildlife diseases; monitoring buffalo health; surveilling marine ecosystems for infectious diseases; monitoring and preparing for avian influenza; and other activities.
  - In response to the COVID-19 pandemic, USGS is working with USFWS and other partners to develop a wildlife disease biosurveillance program to predict threats, assess impacts, and determine management options. USGS has started developing a national wildlife disease database (authorized under the American Rescue Plan Act) to enhance the existing database known as WHISPers (Wildlife Health Information Sharing Partnership Event Reporting System) and to create a new Aquatic Disease and Pathogen database (AquaDePTH).
  - USDA is developing an early warning system (authorized by the American Rescue Plan Act) to protect people and animals from future disease threats domestically and to enhance collaboration with national and international partners. Most immediately, as outlined in USDA APHIS’ Strategic Framework, the project expands disease surveillance for SARS-CoV-2 to more domestic and wild animal species and increases diagnostic capacity.
  - Even prior to the pandemic, USGS’s National Wildlife Health Center (the only biosafety-level three federal laboratory dedicated to wildlife health) has been working since 1975 to rapidly detect wildlife and zoonotic diseases (e.g., finding some of the first cases of West Nile virus), to conduct experimental research to learn about pathogen transmission and ecology (e.g., understanding effects of avian influenza on raptors; researching the dynamics of chronic wasting disease in wild deer), and to improve disease mitigation strategies (e.g., managing avian malaria; developing a vaccine for sylvatic plague in prairie dogs).
USFWS already maintains the National Wildlife Fish Health Survey, which works with natural resource managers to help inspect, diagnose, and share results of aquatic diseases. USFWS’s six Fish Health Centers around the country already conduct regular inspections, diagnostics, and research to actively manage diseases in captivity and the wild.

USGS (working with USFWS) developed an infection risk model for handling and researching bats in North America, in response to the COVID-19 pandemic. The tool has helped researchers, especially those studying white nose syndrome, to understand the risk of SARS-CoV-2 transmission from bats to humans in their work.

USFWS’ International Affairs program (using funds authorized by the American Rescue Plan Act) established the MENTOR-Bat grant opportunity. Through rigorous academic and field-based training, long-term mentoring, experiential learning, and project design and implementation, MENTOR-Bat aims to develop a team of 12 international MENTOR-Bat Fellows with representation from Africa, Asia, and Latin America. The program aims to promote healthy environments where bats and humans coexist with reduced risk of disease transmission.

Collaboration between U.S. agencies on One Health in general

- The U.S. Centers for Disease Control and Prevention (CDC) established a CDC One Health Federal Interagency Coordination Committee Call (OHFICC), which also meets monthly. This is part of the One Health Federal Interagency Network (OH-FINC) established in 2017, which brings together experts from key federal agencies to exchange information, updates, and opportunities for collaboration in support of One Health. OH-FICC was formed in response to COVID-19, and it worked to develop guidance, messaging, and research regarding the human-animal-environment interface, including for wildlife and zoo animals, production of wild animals (e.g., mink), and other topics.

- The U.S. Department of the Interior’s One Health Group is a community of practice that uses an interdisciplinary approach to promote health, apply sound science, and inform policy and management decisions at the interface of ecosystem, animal, and human health. Members represent the Bureau of Indian Affairs, the Bureau of Land Management, the National Park Service, USFWS, and USGS.

International engagement on One Health in general

- U.S. agencies (USAID, CDC, USGS) led the South America Network for One Health (SANO) workshop in February 2023. SANO is investigating the potential to strengthen collaboration across One Health sectors from universities, public entities, and other institutions in South America. SANO also aims to provide a One Health information hub and communication platform for rapid coordinated responses to and prevention of One Health threats.
- Starting in 2014, CDC conducts on-going work with other countries to conduct One Health Zoonotic Disease Prioritization workshops. These are voluntary, collaborative workshops to identify the top zoonotic diseases of concern for a country or region and to develop next steps and action plans to address those in a multi-sectoral approach. At least 26 workshops have been conducted around the world since 2014.
- The U.S. Government is engaged with the WHO Intergovernmental Negotiating Body (INB) and promoting addressing zoonotic disease from wildlife and the One Health Approach.