Factsheet #6

Keeping Wild Animals as Pets Endangers Public Health

COVID-19 underscored the link between disease and wildlife exploitation. In 2020, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) declared that we are now living in the "era of pandemics."[1] The public health risk created by the wildlife trade, particularly demand for wild animals as pets, cannot be overstated.

- The wild animal trade moves animals out of their natural range and forces them into close proximity with humans and other species they would never come into contact with in the wild.
- Whether wild-caught or captive-bred, animals are often highly-stressed and held in unsanitary conditions without veterinary care making them more susceptible to contracting and transmitting disease.[2]
- These factors create the perfect conditions for disease mutation and transmission.

Approximately 70% of emerging infectious diseases originate in wildlife, and most pandemics and epidemics are zoonotic – including HIV, Severe Acute Respiratory Syndrome (SARS), and the Ebola Virus Disease.[3,4] Federal health laws are designed to protect against established diseases, regulating the importation of species with known public health risks. They do not safeguard against emerging diseases. Zoonotic pandemics are preventable, but it requires changing the way the United States imports and breeds wild animals.

Spotlight on *Salmonella*:

Keeping wild animals as pets also exacerbates the spread of well-studied infections.

- Pet reptiles and amphibians are a significant source of *Salmonella* infection in humans.[5] *Salmonella* exists in the digestive tracts of healthy reptiles and amphibians, but it can cause severe illness or death in humans, particularly young children and persons over 65. It's shed in animals' droppings and is spread to humans who touch the animal or anything in their habitat.
- In 1975, the Food and Drug Administration banned the sale of turtles with shells smaller than four inches in length to reduce *Salmonella* outbreaks.[6] Federal investigators at the time determined that 14% of all *Salmonella* cases stemmed from interactions with baby turtles. People frequently purchased these cheap and attractive-looking animals as pets for children who were prone to putting them in their mouths.[7]
- *Salmonella* infections from pet reptiles and amphibians cause 74,000 infections in the US every year.[8]
- Turtles are a common source but interactions with captive bearded dragons, geckos, and African dwarf frogs, all popular pet store species, are just a few of the species implicated in *Salmonella* outbreaks.[9,10]
- Overuse of antibiotics at turtle hatcheries has also led to antibiotic-resistant strains of *Salmonella*, increasing the risk to humans.[11]

The Centers for Disease Control and Prevention advises against keeping reptiles and amphibians in homes with children under the age of five.[12] *Salmonella* infections stemming from reptiles are more likely to result in hospitalization and more frequently involve infants than *Salmonella* infections associated with contaminated food.[13] Yet these animals are often marketed to children and families as "beginner pets."

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3 Kate E. Jones, Nikkita G. Patel, Marc A. Levy, Adam Storeygard, Deborah Balk, John L. Gittleman, and Peter Daszak. *Global trends in emerging infectious diseases.* Nature, 451(7181). 2008. pp: 990-993. https://www.nature.com/articles/nature06536

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