

UNREGULATED AND INFORMAL WILDLIFE TRADE

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The global trade in wildlife provides disease transmission mechanisms that not only cause human disease outbreaks but also threaten livestock, international trade, rural livelihoods, native wildlife populations, and the health of ecosystems. In addition to providing a route for the direct threat of disease introduction, over-exploitation of wildlife for trade is the greatest threat to biodiversity after the degradation and loss of habitat. The illegal wildlife trade is considered the second largest black market after narcotics, evaluated at US\$ 20 billion per year, and it includes more than 13 million mammals, birds and reptiles extracted from ecosystems globally. At the local population level, this produces a 60-70% mean decline of wild populations and facilitates the introduction of alien invasive species. Eighty-seven percent of countries have officially reported illegal trade in wildlife or wildlife products. Notable disease outbreaks resulting from wildlife trade have resulted in hundreds of billions of dollars of economic damage globally. For the more insidious disease transmissions that are slowly devastating wildlife populations in parts of the world, detailed assessments of impact have yet to be made. Rather than attempting to eradicate pathogens or the wild species that may harbor them, a practical approach would include decreasing the contact rate among species, including humans, at the interface created by wildlife trade. Wild animals are captured, transported and sold either live or dead and co-mingled throughout this process, which functions as a system with major hubs rather than evenly distributed supply systems among countries, suppliers and consumers. These focal points for distribution and sales provide control opportunities to maximize the effects of regulatory efforts as demonstrated with domestic animal trading systems (processing plants, wholesale and retail markets for example). Focusing efforts at markets to regulate, reduce, or in some cases, eliminate the illegal trade in wildlife could provide a cost-effective approach to decrease the risks for disease for humans, domestic animals, wildlife, and ecosystems.

