

Comments in favor of House Bill 3204, March 16th 2021, by Christine Johnson, Professor of Epidemiology, University of California, Davis.

Diseases from animals regularly infect people and place an enormous burden on public health throughout the world. Most of the infectious diseases that threaten our well-being and progress as a global society, such as Ebola viurs, Zika Virus, and even AIDS, have wildlife origins.

COVID19 also has wildlife origins, and genetic characterization of this new virus indicates that this virus most likely emerged from bats in Asia.

There are 6 other coronaviruses that infect humans that preceded this virus, all suspected to have wild animal origins. Many infected a domestic species prior to infecting humans and some are now entirely human-to-human transmitted.

Emergence of new viruses from animals into people is a regular occurrence and future emergence is highly likely.

Our work at UC Davis to strengthen surveillance for emerging pandemic threats at the animal-human interface in partnership with countries in Africa and Asia suggests that spillover of zoonotic viruses from wild animals to people is likely more common than we realize.

In our studies of virus spillover risk, we found that wildlife in decline due to loss of habitat were more likely to share more viruses with people.

We also found that exploitation of wildlife, through poaching, capture, and trade in live wild animals, is an especially high-risk activity for virus transmission to people.

The movement of live wildlife around the world is a risk to public health and also driving many species toward extinction.

The US is one of the largest global importers of wildlife from other countries, especially for the exotic pet industry.

International trade of live wild animals is an epidemiologic setting for virus spillover from animals to people of major concern. Once animals are in the trade or supply chain, the risk increases from initial capture to point of sale due to crowding in cages, close contact among different species, and worsening health caused by captivity and transport. In this high-risk setting, animals and people mix in crowded conditions, and viruses can jump between diverse and different species that would normally never come together in the natural world.

A science- based approach to regulating wildlife trade will protect the workers involved in these activities as well as the public at large.

We need accelerated collaboration and coordination across agencies and science-based policy.

Science must inform public policy on zoonotic disease, and we need action at every level of government with close collaboration with the scientific community.

We need expertise and infrastructure in wildlife health to identify threats at the earliest possible stage of emergence.

State and federal wildlife agencies have the relevant expertise and will need support to investigate and manage ongoing wildlife disease risks. State and federal coordination across agencies dedicated to ensuring wildlife health, livestock health, and public health is needed to ensure a proactive and preventive approach to zoonotic disease.

HB 3204 is an important step towards this.

Thank you to the members of the committee for your consideration of this important issue.