

# GAO Highlights

Highlights of [GAO-23-105238](#), a report to congressional committees

## Why GAO Did This Study

Major outbreaks of zoonotic diseases have caused millions of human deaths and cost billions of dollars. Zoonotic diseases can spread to people from U.S. wildlife or animals imported from other countries.

A congressional report directed GAO to review issues related to the emergence of zoonotic diseases. This report examines (1) settings where zoonotic pathogens can spread and risk factors for outbreaks; (2) federal efforts to conduct and coordinate surveillance for zoonotic diseases in U.S. wildlife; and (3) federal regulation of imported wildlife to prevent introduction of zoonotic diseases into the U.S. GAO reviewed scientific articles and regulations; reviewed agency strategies and agreements; analyzed data; and interviewed federal officials and other experts. GAO also assessed agency collaboration against GAO's leading practices identified in prior work.

## What GAO Recommends

GAO is making five recommendations: two each to APHIS and USGS and one to CDC. The recommendations include that APHIS and USGS improve collaboration to establish a national wildlife disease surveillance system and that CDC comprehensively assess zoonotic disease risks for imported wildlife. Regarding the recommendations, APHIS did not comment, USGS concurred, and CDC did not concur. GAO continues to believe that addressing all five recommendations is important.

View [GAO-23-105238](#). For more information, contact Steve D. Morris at (202) 512-3841 or [MorrisS@gao.gov](mailto:MorrisS@gao.gov), or Karen L. Howard, at (202) 512-6888 or [HowardK@gao.gov](mailto:HowardK@gao.gov).

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## ZOONOTIC DISEASES

### Federal Actions Needed to Improve Surveillance and Better Assess Human Health Risks Posed by Wildlife

## What GAO Found

Zoonotic diseases, which are transmitted between animals and humans, can spread in any setting where people and animals interact—including forests, farms, or live animal markets. Zoonotic pathogens, such as coronaviruses and avian influenza viruses, are more likely to infect people in crowded, unsanitary settings, where multiple animal species from a wide geographic area intermingle. In general, the risks of a human outbreak increase when zoonotic pathogens are novel—because of a lack of immunity in humans—and when they can spread rapidly from person to person.

### Zoonotic Diseases Can Be Transmitted by Animals such as White-Tailed Deer, Nonhuman Primates, and Rodents



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Federal agencies conduct some surveillance for zoonotic diseases in U.S. wildlife but have not fully coordinated certain efforts. For example, the Animal and Plant Health Inspection Service (APHIS) and the U.S. Geological Survey (USGS) have taken initial steps to establish a national surveillance system that would better position the U.S. to address emerging wildlife diseases. As they work to establish this system, more fully following GAO's leading collaboration practices would enhance their efforts. These practices include clearly defining common outcomes and involving relevant participants. In addition, USGS is leading the development of a national wildlife disease database. The 2022 National Biodefense Strategy calls for agencies to develop the ability to rapidly detect and share information on emerging animal pathogens that pose a significant biological threat. However, obstacles related to interoperability and privacy currently prevent the incorporation of APHIS data into the national wildlife disease database. By working together to address these obstacles, the agencies could better support early detection of zoonotic disease outbreaks.

The Centers for Disease Control and Prevention (CDC) and other agencies regulate the importation of certain wildlife species, in part to mitigate the risk of introducing zoonotic diseases to the U.S. In some cases, CDC has issued regulations after outbreaks have occurred, such as banning rodents from Africa after they were linked to a 2003 monkeypox outbreak in the U.S. However, some species of imported wildlife known to be capable of carrying zoonotic diseases, such as rodents not from Africa, are allowed to enter the U.S. without CDC restrictions. Further, CDC has not comprehensively identified and characterized risks related to imported wildlife. As a result, CDC's current approach may not be sufficient to prevent outbreaks. If CDC comprehensively assessed disease risks to inform decisions about regulating imported wildlife, it could help prevent the introduction of zoonotic diseases into the U.S.