

## BEYOND OUR BORDERS

Vector-surveillance assists to direct vector-control initiatives of community-based methods to prevent mosquito breeding, kill mosquitoes and prevent mosquito bites. Personal protection may be gained through the use of long clothing, mosquito repellent and mosquito bed-nets.

Detection of yellow fever in human cases in endemic areas

must be followed by an active vaccination campaign and vector-control to prevent further cases in the area. Reporting of sick or dead monkey aids in detection of the yellow fever virus in these reservoir animals and helps to prioritise certain areas for intervention – Santa Catarina has reported 111 confirmed cases of yellow fever in monkeys.

## Avian influenza: Laos

A human case of avian influenza A(H5N6), colloquially known as “bird flu,” has been reported in a child in Laos. Like the more common human influenzas, the disease course of avian influenza ranges from mild respiratory and gastrointestinal symptoms to severe disease and death. The Laotian was hospitalised for his symptoms but has since recovered.

There are four known influenza virus types, of which A is found in both animals and humans and have the potential for sustained human-to-human transmission that can result in an influenza pandemic; B is found primarily in humans and is the cause of seasonal epidemics; C and D cause mild disease with C found in humans and pigs and D only in animals. Avian influenza is of subtype A and while it is found mostly in birds, it may spread to mammals including humans, and its potential to spread from human to human makes it a subtype of influenza of public health significance. Influenza virus subtypes are found in influenza A and denoted by an H and N number. Avian influenza are commonly of subtype H5, H7 and H9. Major outbreaks in humans have occurred in 1997 due to avian influenza A(H5N1) and in 2013 from A(H7N9) and the most recently implicated subtype detected in humans has been A(H5N8) causing asymptomatic diseases in 2020.

Generally, infected wild aquatic birds may develop asymptomatic disease rendering them contagious but well enough to maintain mobility. Along migration paths, these birds nest among domestic/farm birds causing infections which could spread across the flock through contact between birds, or between healthy birds and contaminated objects. Infection of humans most commonly occurs through direct or indirect contact with infected poultry while alive or dead, including preparation of poultry to eat. Eating well-cooked poultry or eggs are unlikely to transmit the virus.

Eradication of avian influenza seems unlikely due to the wild bird reservoir and its endemicity in poultry in Africa, Asia and Europe. Surveillance and management of animal cases is the mainstay for prevention of avian influenza in humans. It is mandatory to report to the World Organisation for Animal Health all H5 and H7 subtypes in animals due to the risk of them infecting humans and causing severe disease; and avian influenza of all subtypes if the infection causes severe disease in the animal. South Africa has reported the presence of H5 avian influenza in poultry farms in Gauteng in 2021. However, no human cases have been reported.



**Figure 6.** Current outbreaks/events that may have implications for travellers. Numbers correspond to text above. The red dot is the approximate location of the outbreak or event.

Source: Promed ([www.promed.org](http://www.promed.org)), World Health Organization ([www.who.int](http://www.who.int)), Centres for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)), World Organisation for Animal Health ([oie.int](http://oie.int)), National Institute for Communicable Diseases ([www.nicd.ac.za](http://www.nicd.ac.za))