

Ebola virus disease and household pets

Reports of Ebola virus disease (EVD) in persons residing in a household with a pet dog have prompted questions about the risk of EVD to household pets, including dogs, and what, if any role, they may play in EVD transmission.

Scientific evidence to address these questions is very limited. Dogs in Africa have been reported to eat potentially infected animals and have contact with body fluids from patients who may have had EVD.¹ There have been no reports, however, of symptomatic, clinical illness in dogs during the current outbreak or previous outbreaks of EVD in Africa. Nor is there any evidence that dogs or other pet animals have transmitted Ebola virus to people.

A seroprevalence survey of pet dogs was done in connection with the 2001-2002 EVD outbreak in Gabon. Antibodies to the Ebola virus were found in some dogs, including a small number of control dogs.² While these findings indicate that infection with Ebola virus in dogs might be possible, virus was not isolated from these dogs, and similar studies using current, more precise testing techniques have not been done. It is not possible to say at this time whether dogs or other household pets develop active infection or whether they shed virus in their body fluids.

In view of the substantial gaps in knowledge about EVD in pets, a careful risk assessment should be undertaken when a pet animal is found to have close contact, e.g. shared a residence with a person with laboratory-confirmed EVD:

- Local public health officials should assess the pet's risk of exposure to virus in the patient's blood and other body fluids and when the potential exposure occurred in relation to the patient's course of disease, e.g. before symptom onset or early in the disease when non-specific symptoms such as fever can occur or later when symptoms such as diarrhoea, vomiting or haemorrhaging can occur.
- If there was potential for exposure to virus, officials should ensure the pet is monitored closely under quarantine by a veterinarian for at least 21 days following the last potential exposure (based on the incubation period for EVD in humans).

Having procedures in place for the safe and humane monitoring and care of pets can ease concerns of persons with EVD who might otherwise delay seeking care for themselves or withhold information about contact with a pet.

Many EVD-affected areas of West Africa are challenged by gaps in biosecurity and limited access to sanitation and proper hygiene in villages and households. In these settings, dogs or other scavenging animals could act as mechanical vectors and bring contaminated material into contact with people. To minimize such opportunities for exposure, animal carcasses and other potentially contaminated objects should be promptly and safely removed and appropriately disposed of; safe burial practices for human remains should be followed.³

¹ Allela L, Bourry O, Pouillot R, et al. Ebola virus antibody prevalence in dogs and human risk. *Emerg Infect Dis* 2005;11:385-90.

² Ibid.

³ See http://apps.who.int/iris/bitstream/10665/137379/1/WHO_EVD_GUIDANCE_Burials_14.2_eng.pdf?ua=1.