Thursday March 27, 2014

Cases of TB in domestic cats and cat-to-human transmission – risk to public very low

Two people in England have developed tuberculosis after contact with a domestic cat infected with *Mycobacterium bovis* (*M. bovis*), Public Health England (PHE) and the Animal Health and Veterinary Laboratories Agency (AHVLA) have announced. *M. bovis* is the bacterium that causes tuberculosis (TB) in cattle (bovine TB) and in other species.

Nine cases of *M. bovis* infection in domestic cats in Berkshire and Hampshire were investigated by AHVLA and PHE during 2013. PHE offered TB screening to 39 people identified as having had contact with the infected cats as a precautionary measure. 24 contacts accepted screening. Following further investigations, a total of two cases of active TB and two cases of latent TB were identified. Latent TB means they had been exposed to TB at some point but they did not have active disease. Both cases of active TB disease have confirmed infection with *M. bovis* and are responding to treatment.

There have been no further cases of TB in cats reported in Berkshire or Hampshire since March 2013. PHE has assessed the risk of transmission of *M. bovis* from cats to humans as being very low.

Dr Dilys Morgan, head of gastrointestinal, emerging and zoonotic diseases department at PHE, said: “It’s important to remember that this was a very unusual cluster of TB in domestic cats. *M. bovis* is still uncommon in cats - it mainly affects livestock animals. These are the first documented cases of cat-to-human transmission, and so although PHE has assessed the risk of people catching this infection from infected cats as being very low, we are recommending that household and close contacts of cats with confirmed *M. bovis* infection should be assessed and receive public health advice.”
The findings of the animal health aspects of this investigation are published in *The Veterinary Record* today.

Molecular analysis at AHVLA showed that *M. bovis* isolated from the infected cats and the human cases with active TB infection were indistinguishable, which indicates transmission of the bacterium from an infected cat. In the other cases of latent TB infection, it is not possible to confirm whether these were caused by *M. bovis* or the source of their exposure.

Transmission of *M. bovis* from infected animals to humans can occur by inhaling or ingesting bacteria shed by the animal or through contamination of unprotected cuts in the skin while handling infected animals or their carcasses.

Professor Noel Smith, Head of the Bovine TB Genotyping Group at AHVLA, said: “Testing of nearby herds revealed a small number of infected cattle with the same strain of *M. bovis* as the cats. However, direct contact of the cats with these cattle was unlikely considering their roaming ranges. The most likely source of infection is infected wildlife, but cat-to-cat transmission cannot be ruled out.”

Cattle herds with confirmed cases of bovine TB in the area have all been placed under movement restrictions to prevent the spread of disease.

Local human and animal health professionals are remaining vigilant for the occurrence of any further cases of disease caused by *M. bovis* in humans, cats or any other pet and livestock animal species.

**Notes to Editors**


2. TB caused by *M. bovis* is diagnosed in less than 40 people in the UK each year. The majority of cases are in people over 65 years old, most likely due to reactivation of latent infection acquired many years ago before the introduction of control measures, including the routine pasteurisation of milk. Overall, human TB caused by *M. bovis* accounts for less than 1 per cent of the total TB cases diagnosed in the UK every year. Those working closely with livestock and/or regularly drinking unpasteurised (raw) milk have a greater risk of exposure.


5. The article ‘An unusual cluster of *Mycobacterium bovis* infection in cats’ will be published in *The Veterinary Record* today. Advice from the Chief Veterinary Officer Nigel Gibbens is being provided to vets in a letter to *The Veterinary Record*. This will include a recommendation that cats diagnosed with a *Mycobacterium bovis* infection should be euthanased. This is due to the lack of effective drugs licensed in the UK for treatment of TB in animals and to minimise the risk of infection to other animals or humans.


7. The Animal Health and Veterinary Laboratories Agency is an executive agency of the Department for Environment, Food and Rural Affairs, working across Great Britain on behalf of Defra, Scottish Government and Welsh Government. Our role is to safeguard animal health and welfare as well as public health, protect the economy and enhance food security through research, surveillance and inspection.

8. Public Health England’s mission is to protect and improve the nation’s health and to address inequalities through working with national and local government, the NHS, industry and the voluntary and community sector. PHE is an operationally autonomous executive agency of the Department of Health. For more information visit [www.gov.uk/phe](http://www.gov.uk/phe) or follow us on Twitter @phe_uk

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