Committee(s):	Date(s):
Port Health & Environmental Services	15 July 2015
Subject: An Update on Environmental Screening and Salmonella in Imported Animals.	**Public**
Report of: Director of Markets & Consumer Protection.	**For Information**

Summary

The purpose of this report is to provide interim information to members regarding the most recent sampling results at Heathrow Animal Reception Centre. A second round of environmental screening was carried out in September 2013, following improvements to biosecurity and hygiene protocol as identified by the initial sampling in March 2013. The disinfection of Personal Protective Equipment upon leaving quarantine has been improved, whilst cleaning equipment requires further review.

Non statutory testing of Salmonella and Campylobacter is underway, in conjunction with the Animal Health and Veterinary Laboratories Agency (AHVLA). Initial results show approximately 55% of samples sent are positive for Salmonella and include serotypes not regularly found in the UK. Two serotypes of Campylobacter have also been found in dog samples tested.

Recommendation(s)

Your Committee is requested to note the content of this report.

Main Report

Background

1. The purpose of this report is to inform members of the most recent sampling results at Heathrow Animal Reception Centre (HARC). Environmental screening of the facilities at HARC was first carried out in March 2013 for the purpose of informing managers of biological risks and assessing the effectiveness of the current biosecurity measures. A number of areas were identified as requiring attention to hygiene and screening was repeated in September 2013 to assess the effectiveness of measures taken.
2. Non-statutory sampling for zoonotic pathogens (those capable of transmission between animals and humans) is beneficial for the assessment of potential risks in imported animals. Previous sampling for Salmonella has identified a high rate of prevalence in imported reptiles. Whilst salmonella infections are commonly contracted from other sources, monitoring the strains of salmonellas occurring in domestic pets, birds and reptiles enables better assessment of risk to HARC staff, students, traders and pet owners. Identification of the bacteria to serotype will enable analysis of the likelihood of transmission and of the potential severity of disease.

3. Campylobacter is also a zoonotic pathogen that is present in mammals, birds and reptiles. HARC has not previously sampled for this before, but is currently undertaking screening in conjunction with the Animal Health and Veterinary Laboratories Agency (AHVLA). Again, identifying the strains of bacteria isolated from various animal groups will lead to a more informed assessment of risk. Should uncommon serotypes, or those that present a significant risk be found, this information can be disseminated to the pet trade and veterinary industry, with positive impact for the City of London.

Current Position

4. Results from the repeated environmental screening undertaken September 2013 showed no significant improvement in hygiene for the refrigerator storing animal feed, cleaning equipment, or the internal surface of a mammal enclosure. It should be noted that a certain level of pathogen count is to be expected in a non-sterile environment, but improvement in these areas was deemed possible. The staff room refrigerator also showed no significant improvement and further measures to improve this are in place,

5. Previous screening showed that the footbath leading out of quarantine was not sufficiently effective at disinfecting boots. The dilution rate was found to be too weak and was corrected; the repeat screening showed a significant improvement. Improved disinfection routines of reptile accommodation also proved effective.

6. Salmonella testing and serotyping recommenced October 2013 and three bird shipments and three reptile shipments have returned positive results, from a total of eleven results returned to date; approximately 55% positive. These eleven tests were of pooled samples collected from shipments containing a total of 2736 individual animals. The serotypes found included unusual ones not normally seen in the UK. Analysis of the impact of these serotypes is to follow.

7. Campylobacter testing and serotyping was also initiated in October 13 and two imported dogs have returned a positive result, from a total of three dogs, two reptiles and one bird shipment returned to date, which represents a total of 312 individual animals.

Implications

8. The cost of environmental screening of the HARC facility is approximately £400 per exercise plus variable costs associated with changing equipment or protocol in response to unfavourable results.

9. Each sample sent for Salmonella and Campylobacter isolation incurs a cost of £49.60, and a further cost of £114.80 for the serotyping of positive returns.

Conclusion

10. Environmental screening not only serves to inform risk assessment but could also provide information for diagnostic purposes when considering the health of resident animals. Many animals held at HARC will arrive in a stressed or otherwise poor state due to transport and so may be immune compromised. An environmental screening

programme will provide confidence that due vigilance is paid to hygiene, thus reasonably reducing the risk of infection.

11. Salmonella and Campylobacter pathogens present a risk to human health and monitoring the serotypes present in imported species will enable a more informed risk assessment. Interpretation of all results will follow completion of the study.

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