

Biosecurity advice when handling aborted material from horses

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Introduction

Abortions are not infrequent in horses and while not all abortions are caused by infectious agents, differentiating infectious from noninfectious causes by observation only is generally difficult. Biological material from mares who have aborted is often collected for veterinary examination and testing. It is very important to have good biosecurity to prevent the spread of infectious agents to either people or other animals when handling this material.

Infectious causes of abortion

Equine Herpes Virus infection (EHV-1) is the most common cause of infectious abortion in horses throughout the world and has been reported across Australia. While it does not affect people it is highly contagious and can easily be transmitted to other horses on the hands or clothing of people in contact with the horses or material from the horse such as uterine fluids, placentas or foetuses.

There are other less common infectious agents that can also cause abortion in horses and these can also be transmitted to other horses by people or equipment.

Human health risks

Chlamydia psittaci, a bacterium most commonly associated with birds, has recently been detected in aborted material from mares at a number of sites around NSW. This organism can cause serious illness in people. In southern NSW five people who had contact with an infected horse placenta developed serious respiratory illness, possibly psittacosis, with some requiring hospitalisation.

Leptospirosis is also a rare cause of abortion in mares and may cause a serious influenza-like illness in people.

What does an abnormal placenta look like?

A normal horse placenta is shown in Figure 1. The attachment of the horse placenta to the uterus is diffuse, unlike cattle which have button like attachments to the uterus. Placentas can also appear abnormal for non-infectious reasons.

Figure 2 shows an example of a non-infectious abnormality. The placenta shown in Figure 3 is dark coloured and swollen and was positive for *Chlamydia psittaci*. While these are all examples of abnormal placentas, diagnoses were unable to be made from visual appearance in these cases and they required laboratory examination and testing.

Fig 1: normal placenta from a mare.



Photo courtesy of Dr Scott Norman

Figure 2: equine placenta with a large avillous area.



Photo courtesy of Dr Scott Norman

Figure 3: equine placenta positive for Chlamydia



Photo courtesy of Dr Cyril Stephens

Biosecurity when handling aborted materials from mares

It is important to have good hygiene control when handling biological material from aborted mares such as placentas, foetuses and uterine fluids.

This will reduce the risk of human exposure to infectious agents that also affect people and will make the transfer of infection on clothes, hands or objects such as floats, leads and halters to other horses less likely.

To enable veterinary examination of biological material from aborted mares, the material will need to be placed in a *leak-proof bag* and then submitted to a veterinarian for examination and testing.

When preparing or handling this material:

Wash hands with soap and running water for 10 seconds before and after contact.

Always use disposable gloves when handling biological material. Cover cuts and abrasions before gloving.

Wear a properly fitted 'P2' respirator mask (available from pharmacies and hardware or other stores)– simple surgical masks will not protect you. Psittacosis is transmitted by the respiratory route and aerosol droplets are created when tissues are handled and lifted.

Use disposable overalls or a disposable apron and change clothing after handling the tissues.

Double bagging reduces the risk that small punctures will leak contaminated discharges onto the outside of the bag. Always use leak proof bags as woven bags quickly become contaminated.

After bagging is completed and protective equipment removed the face and arms should be washed thoroughly before handling other animals.

Dispose of gloves and other used personal protective equipment safely (i.e. in a sealed bag in normal waste)

Footwear should be sprayed with disinfectant all over including the soles.

Taking these precautions may make tasks take a little longer but they will dramatically reduce the risk of spread of infection to people and animals.

More information

For further information about psittacosis or general information about managing zoonotic risks talk to your private veterinarian or LLS District Veterinarian or visit the NSW DPI website

<http://www.dpi.nsw.gov.au/biosecurity/animal/humans/zoonoses>

For advice about human health risks, contact your local Public Health Unit on 1300 066 055 or visit:

<http://www.health.nsw.gov.au/Infectious/Pages/zoonoses.aspx>.

Acknowledgments



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www.dpi.nsw.gov.au/factsheets

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