EQUINE ABORTION

All equine abortions should be treated as infectious.

- *Chlamydia psittaci* has been documented in cases of equine abortion in Australia and is zoonotic.

- Equine herpes virus 1 (EHV-1) is endemic in Australia and is the most important viral cause of abortion in horses. EHV-1 is also a common cause of respiratory infection in young horses and may cause neurological disease. Most have antibodies to EHV-1 by the time they are two to three years old, and older horses rarely show clinical signs of infection. As with other herpes viruses, horses carry EHV-1 for life and the virus may be reactivated and excreted during times of stress. Abortion usually occurs between 8-11 months of gestation, but it can occur as early as 5 months. Abortion can occur 2 weeks to several months after infection. The aborted foetus, foetal membranes and fluids, and uterine discharges from an affected mare contain large amounts of infective virus. The mare may also remain infective for up to two weeks, shedding virus via the respiratory route. Infected foals may be born weak, and can serve as a source of infection to other healthy foals. The virus can contaminate pasture, feed, bedding and fomites and can also be spread via floats and on the boots and clothing of people. It remains infective in the environment and on horse hair for up to six weeks in cool moist conditions, therefore cleaning and disinfection is critical.

- Equine herpes virus 4 (EHV-4) typically only causes acute respiratory disease in foals greater than two months, weanlings and yearlings. It rarely causes isolated abortions but is not considered an important contagious risk for abortion.

- Use disposable gloves and outerwear which can be properly disinfected. A mask (P2/N95 or higher rating; surgical masks may not be effective) and goggles should be worn to protect the face from splashing fluids.

- Please provide PIC number (property identification code) as well as detailed history on the request form. EHV-1 is a notifiable disease in Victoria.

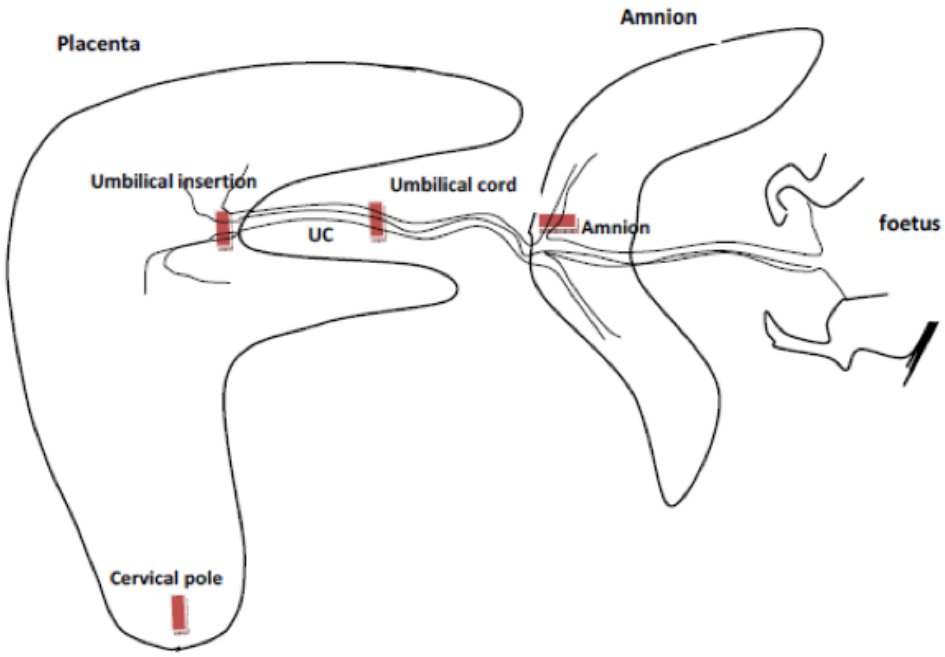
Sample Collection:

	EHV-1 PCR (+/- EHV-4 PCR)	***Chlamydia psittaci* PCR**	**Bacterial culture**	**Histopath**
Specimen	Fresh tissue	Fresh tissue (or dry swabs in saline)	Fresh tissue (or swabs in transport medium)	Formalin fixed tissues
Placenta	a	a		b
Stomach contents			+	
Lung	+	+	+	+
Liver	+	+		+
Spleen	+	+		+
Thymus	+			+
Kidney				Optional
Heart				Optional

Footnotes:

a = preferred sample is single dry swab of multiple sites across the placenta (amnion, umbilical cord between amnion and chorioallantois, chorioallantois near umbilical cord insertion). Alternative sample is fresh tissue (chorioallantois or pool of each of those sites).

b = amnion, umbilical cord between amnion and chorioallantois, chorioallantois near umbilical cord insertion, chorioallantois at cervical pole.



EHV-1 PCR, *Chlamydia psittaci* PCR

Submit individual tissues in separate sterile leak-proof pots. Label these pots e.g. “Fresh lung – PCR”. Duplicate sets of tissues are not required (i.e. the same piece of each tissue can be tested for both EHV-1 and *Chlamydia*).

Culture

Additional bacterial cultures can be added (e.g. placenta, other tissues showing lesions).
Fungal culture can be added as required (e.g. placenta, lesions).

Histopathology

Take one sample (1cm thick x 2-3 cm) of each tissue.
All tissues can be submitted in one leak-proof pot, if adequate formalin.
In addition to standard range of tissues, include any other lesion or tissue showing lesions.
Case will be billed based on number of tissues submitted.

SUMMARY

Fresh placenta, lung, liver, spleen, thymus for **EHV-1 PCR, *Chlamydia psittaci* PCR, +/- EHV-4 PCR**
- separate labelled sterile pots
- OR for placenta, single dry swab (multiple sites across placenta)

Fresh stomach contents, fresh lung for **Bacterial culture**
- separate labelled pot (or swabs)

Formalin-fixed placenta, lung, liver, spleen, thymus for **Histopatholog**y
- one leak-proof pot with adequate formalin