

GUIDELINES  
ON ARTIFICIAL  
INSEMINATION (AI)

## Introduction

These guidelines supplement the information contained in the Code of Practice for each specific disease. The purpose of the guidelines in the codes are to provide information about disease control and therefore the scope of this document is limited to biosecurity relating to semen collection and processing.

Transport, certification and the management of mares being inseminated is beyond the scope of this guidance and practitioners are signposted to relevant advice from British Equine Veterinary Association (BEVA) in particular its Guide to the use of Artificial Insemination in Horse Breeding for further practical advice and information [https://www.beva.org.uk/Portals/0/Documents/ResourcesForVets/AI/AI%20Guidance%20MARCH%202022\\_FV.pdf](https://www.beva.org.uk/Portals/0/Documents/ResourcesForVets/AI/AI%20Guidance%20MARCH%202022_FV.pdf)

DEFRA has a list of minimum requirements for DEFRA approved semen collection centres. This status is essential if semen is to be collected for export from the UK. Information on EU trade is at: <https://www.gov.uk/government/publications/livestock-and-equine-semen-collection-approved-premises>

## Stallion Biosecurity

All of the bacterial and viral venereal diseases which may be transmitted during natural mating can also be transmitted in artificially inseminated semen, be it fresh, chilled or frozen. Owing to the large number of mares that can be inseminated by an infected stallion and the fact that the diseases are endemic in many countries from which semen may be imported, the potential for disease transmission via the use of artificially inseminated semen is significant.

### Before collection of semen

Stallions must be shown free of the CEMO, *K. pneumoniae* capsule types 1, 2 and 5, *P. aeruginosa* and equine infectious anaemia according to the current HBLB Code of Practice Stallions must either

- a. be seronegative for Equine Arteritis Virus according to the current HBLB Code of Practice after 1st January of the current year or
- b. be vaccinated against EVA according to the current HBLB codes of practice or
- c. proven by virus isolation test not to be shedding the Equine Arteritis Virus in his semen

Stallions must be free of clinical signs of venereal disease

The entire phantom mare and surrounding collection area, including the floor area, must be fully disinfected between stallions, and must be constructed in a manner that enables this to be undertaken effectively.

### Handling and processing

1. A clean, sterilised artificial vagina (AV) should be used for each collection. Ideally, each stallion should have its own AV and lubricant.
2. Separate AVs should be used for collection of semen for UK distribution and for collection for EU/worldwide export. See British Equine Veterinary

Association Guide to the use of Artificial Insemination in Horse Breeding for more details (see introduction above for link)

3. Clean, sterilised collection bottles should be used during each collection process
4. Semen should be handled carefully to reduce external contamination
5. Gloves, and clean clothing/lab coat should always be worn when handling semen.
6. Extenders added to semen should be from a reputable manufacturer and should be used within the 'use by' date of the product
7. Semen extender ingredients must comply with international regulations if semen is to be shipped internationally
8. All equipment used in the processing of semen must be cleaned and disinfected between semen samples to prevent lateral spread of disease
9. All stored samples or samples for transport must be sealed in a manner, which will prevent contamination and spillage
10. Appropriate documentation including identification, labelling and record keeping must be maintained

It is essential that all transported semen is accompanied by certification provided by the sender confirming the disease free status of the stallion at the time of collection.

#### **Prior to use**

1. Artificial insemination of mares must not occur if the disease free status of the stallion has not been documented through negative testing in line with the HBLB Codes of Practice
2. Appropriate hygiene and preparation of the mare is essential
3. Gloves including sterile/unused disposable rectal gloves must be used when handling straws and performing insemination to reduce contamination
4. When handling semen, be careful not to contaminate hands or facilities with semen
5. Straws of frozen semen should be thawed in fresh water in a clean receptacle and use clean paper towels to dry straws to minimise risk of contamination
6. All equipment should be cleaned and disinfected or disposed of after each use

