

HOW TO MINIMISE THE RISK OF CONTAMINATION

In order for horses to compete in FEI events, they must be free from Prohibited Substances. There are a number of effective ways to minimise and mitigate the possibility of contamination that could lead to a positive Equine Anti-Doping and Controlled Medication (EADCM) test result.

The FEI has produced the following guidance and best practices to follow to reduce the risks of contamination.

HAY, FEED AND SUPPLEMENTS

1. Use a reputable supplier

Ensure hay, feed and supplements are obtained from a trusted source and have been correctly stored prior to purchase.

2. Use high quality feed that has undergone Naturally Occurring Prohibited Substances (NOPS) testing

This should guarantee that feed is free from commonly known contaminants such as caffeine, theobromine, theophylline, morphine, hyoscyne, hordenine and atropine.

3. Keep samples of hay, feed, supplements and any corresponding batch numbers

This enables a thorough investigation to be carried out should contamination be suspected.

4. Store feed carefully

Prohibited substances could easily be dropped or spilt into open feed bags or storage containers.

5. Make sure feed storage containers are clean

Old feed becomes mouldy quickly. Certain types of mould can result in the production of naturally occurring prohibited substances.

6. Supplements

Some supplements contain more substances than the ingredients list and some have been linked to contamination. The FEI provides a warning regarding the [use of supplements](#) and supplement use must be recorded in the horse's FEI Medication Logbook.

THE HORSE'S ENVIRONMENT

1. Check for environmental contaminants

Fields and/or surrounding land may contain plants that could lead to positive EADCM tests, e.g. poppies, crocuses, nightshade and lupins. Horses living in areas of the world in which high coffee production takes place are at risk of contamination from caffeine, paraxanthine, theobromine, theophylline. It is advisable to consult with local authorities or experts to check what substances may be present in your region.

2. Clean stables thoroughly between horses

Never put a horse into a stable that is not clean, especially when travelling or at an event. Certain substances, e.g. flunixin, have been proven to be reabsorbed by the horse via urine and droppings after they have been excreted.

It is vital that stables are kept as clean as possible whilst the horse is being medicated and it can be helpful to label the stable of a horse that is being treated. At the end of a course of treatment stables must be thoroughly cleaned.

Paddocks that have been used by horses during a course of treatment must not be used for several days after treatment has ended. All droppings must be removed from the paddock too.

3. Only use feed troughs or bowls that can be properly cleaned

It is not advisable to feed horses from stable fittings, e.g. troughs and bowls that are difficult to clean. Treatment or feed residues may remain and moulds may form which could result in contamination.

4. Ensure washing off areas are clean

Traces of liniments and shampoos can easily be found in washing off areas. Some may contain caffeine.

5. Contamination from yard personnel and other animals

Thorough hand washing is vital for personnel who are receiving medication and handling horses as topical medication and traces of medication resulting from the handling of tablets may remain on hands. There have also been cases of horses testing positive for human drugs after stable staff who have been taking medication or recreational drugs have urinated in their stables. Dogs and cats that may be receiving medication must not be allowed into horses' stables.

MEDICATING HORSES

1. Store medication carefully

Ensure medication is marked with the name of the horse that it is intended for. Medication packaging must be sealed shut to prevent accidental spillage whilst in storage and kept in a locked cupboard.

2. Take care when opening medication packaging

Open medication packages with care as spillages may occur. Powdered medication can produce clouds of powder, so mix the powder with small amounts of wet feed to reduce the risk of contamination. Gel, paste or liquid formulations, if available, are recommended. Always add and mix the medication into the feed of the treated horse in a separate area away from feed preparation for other horses.

3. Use separate feed bucket for administering in-feed medication

Despite thorough washing, traces of medication may remain in feed buckets. It is therefore strongly advised that separate feed buckets that are clearly labelled for this use are used to give

horses in-feed medication. Feed stirrers that may be used to mix medication with feed must also be kept separately and clearly labelled for this use only.

4. Dedicate one person to medication administration

This helps to reduce the risk of a horse receiving a double dose of medication which could lead to the medication remaining in the horse's body for prolonged periods of time and therefore result in a positive.

5. Medicate the horse in a location that can be easily cleaned

It may be difficult to clean stables thoroughly, particularly when using medication in powder or paste formulations. It may be necessary to medicate horses in alternative locations such as washing off areas.

6. Use disposable bandage materials

Following the application of topical medication, some instances may require the treated area to be bandaged. It is strongly advised that disposable bandages are used for this purpose and that they are disposed of safely immediately after removal.

7. Wear Gloves

Always wear gloves when giving horses topical medication e.g. cream and ointments, and certain types of oral medication e.g. sedative gels and anti-inflammatory pastes.

8. Wash your hands

Always wash your hands thoroughly after handling human or veterinary medication (including tablets and liquids) and before working with your own or any other horse, even if you were wearing gloves. Other hand sanitising methods which are used for biosecurity purposes will not remove medication residue effectively. Hand washing is best.

9. Dispose of empty medication packaging and unused medication correctly

Empty bottles or pots of medication must be correctly disposed of and not re-used. Residues of medication will remain in the bottle despite attempts at thorough cleaning. Unused medication must be disposed of properly and your veterinarian will be able to advise you accordingly.

MEASURES TAKEN BY THE FEI

For your additional protection, the FEI has built in a number of measures to the EADCM programme. These include screening limits, detection time and elective testing.

1. Screening limits

The FEI has established screening limits for substances where research is available in order to ensure that irrelevant concentrations are not reported as a positive. Concentrations of substances that exceed the screening limit are considered as positive cases whereas concentrations falling below the screening limits are negative. Screening limits are designed for the FEI to only take action where the concentration of Controlled Medications affect performance or are a welfare risk to the horse. They are set at fair levels and scientifically supported.

2. Detection times

The FEI produces a list of [detection times](#) for commonly used medication. Detection times indicate the amount of time medication remains in the horse's body and are not the same as withdrawal times or stand down periods. In order to determine when a horse is free from medication, an additional period of time (safety margin) must be added to the detection time to calculate the withdrawal time. Safety margins are unique to individual horses and your usual veterinarian can advise on appropriate withdrawal times.

3. Elective Testing

Elective testing allows horses that are registered with the FEI to undergo testing for a maximum of four Controlled Medication substances at any one time. The FEI strongly recommends the use of elective testing to ensure horses are free from Controlled Medication substances following treatment. Further details can be found on the [FEI Clean Sport website](#).

FEI PROHIBITED SUBSTANCES LIST

The [FEI Prohibited Substances List](#) is divided into two sections: **Controlled Medication** and **Banned Substances**. Controlled Medication substances are those that are regularly used to treat horses, but which must have been cleared from the horse's system by the time of competition. Banned (doping) Substances should never be found in the body of the horse and are prohibited at all times.

Information on all substances is available on the searchable [FEI Equine Prohibited Substances Database](#).

The FEI introduced the concept of **Specified Substances** in 2016. Specified Substances should not in any way be considered less important or less dangerous than other Prohibited Substances (i.e. whether Banned or Controlled). Rather, they are simply substances which are more likely to have been ingested by horses for a purpose other than the enhancement of sport performance, for example, through a contaminated food substance. Positive cases involving Specified Substances can be handled with a greater degree of flexibility within the structure of the FEI Regulations.