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# MANUAL FOR TESTING VETERINARIANS

## SAMPLE COLLECTION PROTOCOL

This document describes the sampling procedure to be used by Testing Veterinarians using Berlinger samplig kit.

Items are individually packaged and sent to the Testing Veterinarians by the Laboratoire LCH, Paris (FRA).

### 1 Kit description

#### 1.1 Sampling kit

Each kit is packed within a numbered box, as shown below :



Each kit contains :

- 2 pairs of gloves (packed in a plastic bag)
- 3 bottles with security caps
- 1 disinfection swabs
- 6 vacutainer tubes and a needle for blood sampling (packed in a sealed plastic bag). Four tubes without gel (dark green cap) for the first part of the sample, two tubes with gel (light green cap) for the second part of the sample
- 1 security bag
- Bar code labels (12 labels per sample)
- 1 plastic bag for the Laboratory section of the Control Form



## 1.2 Other items

These items are not included in the sampling kit. They are sent directly to the Testing Veterinarian, upon request, by the Laboratory :

- Plastic urine collection container (packed in a sealed plastic bag)



- Urine collection holder (you can use your own if you prefer)



- Needle holder
- Extra needles

### 1.3 Forwarding materials

- Blue carrying bag.
- Security clip.
- Freezer pack (the pack should be stored in a freezer for at least 12 hours before use).
- Isotherm bag



## 2 Sampling protocol

The utmost care must be taken to avoid any contamination of samples during and after collection. Testing Veterinarians should adhere to the following procedure :

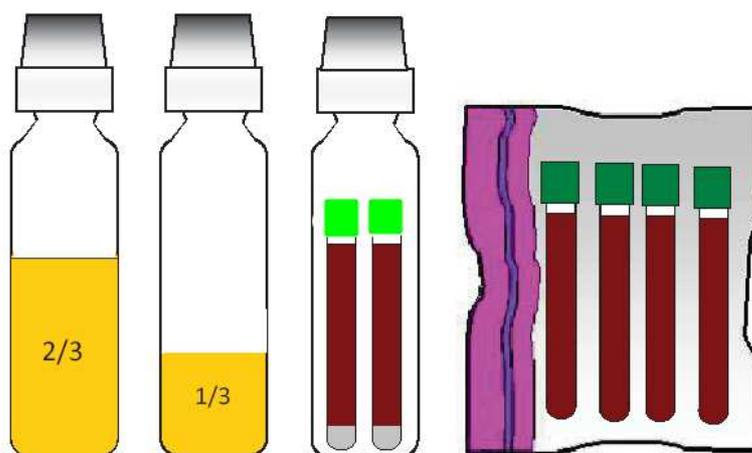
- Open the kit box and arrange all items on a clean bench.
- Put disposable gloves on both hands (gloves should only be removed when the urine bottles have been closed).

### 2.1 Summary of sampling Requirements

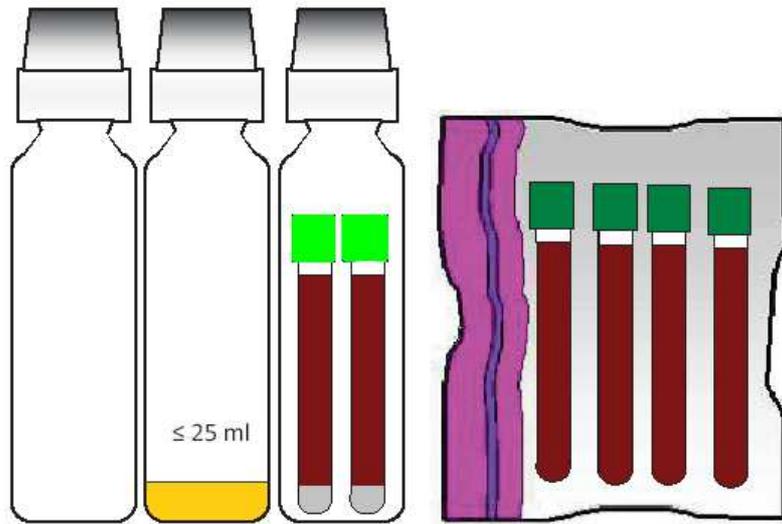
Warning : these instructions are given for general use, but if you receive specific request from your federation (or authorities) please complied with this last requirement.

Every attempt should be made by the Testing Veterinarian to collect firstly urine and then blood, as described in the following sections. However, it is recognised that sometimes only a small volume of urine can be collected and, on occasions, even after 60 minutes, a horse may produce no urine.

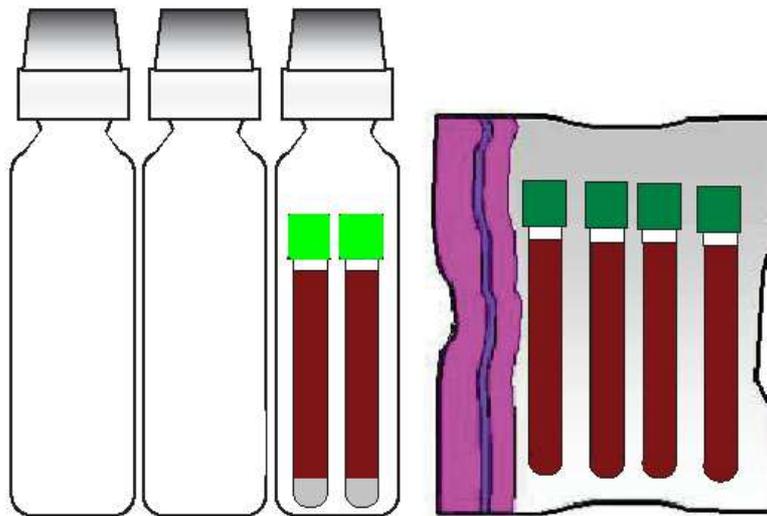
#### 2.1.1 – Urine volume > 25 mL



2.1.2 – Urine volume  $\leq 25$  mL



2.1.3 – No urine collected



## 2.2 Urine sampling

- Remove the red rings from the necks of the two collection bottles. Discard the rings.



- Remove the disposable urine collection container from its sealed plastic bag and place it in the ring of the collection handle.



- Collect the urine in the container.

- Transfer the urine to the bottles (the container can be slightly squeezed to facilitate the transfer). Divide the urine volume into the two bottles.



- Do not fill urine over the top line of the bottle



- Screw the caps onto the bottles (until they turn no further). It will be not possible to reopen the bottles once they are closed without breaking the security cap.

- Shake bottles and squeeze to check for any leakage.



**DO NOT PLACE THE URINE BOTTLES IN THE SECURITY BAG**

The urine bottles are equipped with a security cap. There is no need to put them into the plastic security bag.

## 2.3 Blood sampling

- Remove the tubes and the needle from their sealed plastic bag.
- Clean the injection site with the disinfectant swab
- Collect blood into the vacutainer tubes (the blood tubes must be filled entirely).
- Fix a bar code label onto each vacutainer tube.



On a flat, clean surface,

- place four tubes (dark green cap) in the security bag (first part of the sample)
- squeeze air out of the bag
- remove the protective strip
- stick the flap of the security bag carefully across the full width of the bag



- place two tubes with gel (light green cap) in a bottle (second part of the sample)



- close the bottle and check for the security cap to be sealed

## 2.4 Documents

- Complete the Control Form.

### 3 Packing the sample

- Place the Laboratory section of the Control Form in the small plastic bag
- Place the bottles, the blood tubes (in their security bags) and the Laboratory section of the Control Form (in its plastic bag) in the kit box



- Close the box with the adhesive strip

#### 4 Packing the kits

- Put all the kit boxes in the isothermal bag with freezer packs (maximum of two boxes per bag). The packs should be stored in a freezer for at least 12 hours before use.



- Put the isothermal bags in the blue carrying bag
- Close the bag with the security clip as shown below :





- Ship the bag to the laboratory.