Foal Kit Instruction Sheet

Purpose of the Foal Kit
Because of the great potential for infection in the neonatal foal, the Foal Kit has been designed to insure that the optimum specimens may be obtained to provide the Laboratory with everything necessary to diagnose the cause of foal diarrhea/septicemia. This kit can also be used for any infectious disease work up that may require blood culturing, fecal culturing, etc.

Shipping the Foal Kit
It is strongly suggested that the Kit be shipped by the fastest means possible, i.e., overnight commercial courier. USE PROVIDED MATERIALS TO PREVENT BREAKAGE, ASSURE GOOD SAMPLE QUALITY AND TO SATISFY DOT SHIPPING REGULATIONS. PLEASE LABEL ALL TUBES WITH AN ANIMAL IDENTIFICATION NAME OR NUMBER.

Using the Foal Kit
The Kit is to be used as a complete system. It is recommended that the entire kit be utilized and that all tubes are filled, etc., as indicated. The practitioner may elect not to have all of the tests performed based on their medical judgment.

A few important points to remember:
• Fill blood culture bottles if sepsis is suspected. If unknown, do blood cultures.
• Fill out the history form completely and place in separate plastic bag to accompany the Foal Kit’s contents.

Kit contents
1. Blood culture bottles: 4 (2 Aerobic / 2 Anaerobic)
2. Purple top (EDTA) vacuum tube (PTT) 2
3. Red top (serum) vacuum tube (RTT) 1
4. Plastic 3 oz fecal cup 2
5. Anaerobic transport media w/sterile swab 1
6. Amies bacterial transport media w/ charcoal & swab 1
7. 95kPa Bio-Hazard bag - Large 1
8. 95kPa Bio-Hazard bag - Small 1
9. Insulated thermal bag – silver / Large 1
10. Insulated bubble thermal bag – silver / Small 1
11. Absorbent Pad 2
12. Bubble Bag (pink) - Small 4
13. Ice Pack 1
14. 3-place Aqua pouch 1

If any assistance is needed with sampling or questions about this kit, please call the AHDC at: 607.253.3900 and ask for a Veterinary Service Support veterinarian.
**I. Blood Culture Technique**

The Foal Kit contains four (4) blood bottles to perform two complete sets (i.e., set =1 aerobic and 1 anaerobic bottle) of blood cultures if needed to determine the presence of bacteremia as decided by the clinician’s clinical work up of the foal.

- It is recommended to take samples a minimum of 1 hour between sets, but in a gravely ill animal a minimum of 15 minutes between sets can be done. A set is equal to 1 anaerobic and 1 aerobic blood culture bottles.
- Collect the blood specimen prior to instituting antibiotic therapy.
- If the animal is currently being treated with antibiotics, draw blood immediately prior to next administration of antibiotic, or sample three days after treatment has stopped. Note on submission form that animal is on antibiotics if sample is taken at that time.

1. Obtain the aerobic and anaerobic blood culture bottles. If they have been refrigerated, bring to room temperature. Both anaerobic and aerobic blood culture bottles are provided in this kit. Plan to inoculate 1 **anaerobic** and 1 **aerobic** bottle for **each blood draw**.
2. Label bottles with animal name/ID, date and time sample(s) were taken.
3. Clip hair and perform a complete surgical prep immediately prior to venipuncture.
   - Use normal procedures for aseptic surgical preparation.
   - Use povidone-iodine solution or alcohol chlorhexadine as the final skin preparation.
4. Allow the site to dry or wipe dry with sterile gauze pad.
   - Surgical preparation solutions in blood culture sample may render sample unsuitable.
5. Select one (1) syringe and needle capable of collecting 4-6 mls blood (enough for 2 bottles).
   - Do not add any anticoagulant.
6. Aseptically collect blood.
7. **DO NOT UNSCREW CAP on blood culture bottles.**
8. Remove (pop off) protective top of the screw cap on the blood culture bottle.
9. Disinfect the visible part of the rubber stopper
   - Use 70% isopropyl or ethyl alcohol and allow to dry or wipe dry with a sterile gauze pad.
10. Replace drawing needle with sterile needle. Discard used needle.
11. Puncture rubber area of lid with the new sterile needle and transfer 2-3 ml of blood into each bottle immediately after collecting.
12. Gently invert bottle(s) to mix blood with blood culture media. Blood will not clot due to anticoagulants in media.

**DO NOT REFRIGERATE BLOOD CULTURE BOTTLES AFTER INOCULATION.** Protect from temperature extremes when handling and shipping back to lab (wrap in insulating materials or Styrofoam box)
II. Additional sample(s) collection and procedures:

1. Fill the EDTA tube with blood and mix gently (for assessing selenium level and for routine CBC).
2. Fill the red-top tube with blood; after the clot has formed it is preferable to separate the serum for submission to the lab (this tube is for IgG level, chemistry profile and Lawsonia serology, if requested).
3. Fill both plastic 2 oz. specimen cups 2/3 full. These specimens are for parasitology, virology (rotavirus, Beta Corona virus )
4. and Clostridial toxin tests for C. difficile and C. perfringens, and potentially for Lawsonia PCR testing and archiving for possible further testing.
5. Use the swab and obtain fresh feces. Inoculate one (1) BBL™ Port-a-cul™ or Anaerobic Systems ATM anaerobic transport media with the fecal swab. (This specimen is for attempted isolation of Clostridia and Bacteroides). Include fecal material on the swab, not just a wet swab if possible.
6. Use another swab and inoculate one (1) Amies transport media with feces (this swab is for aerobic bacterial cultures to attempt isolation of Salmonellae, E. coli, and Rhodococcus, etc).

III. Packing the shipping box

Non-chilled shipping items – The samples below should not be chilled for shipping.
Blood culture bottles (if drawn)
BBL™ Port-a-cul™ or Anaerobic Systems ATM tube for anaerobic sample

Directions for packing
a. Wrap each blood culture bottle individually in pink bubble bag
b. Place blood bottles into the large (12 X 16) 95kPa Bio-hazard bag
c. Place anaerobic transport tube in the styrofoam tube mailer & rubber band shut
d. Place anaerobic transport tube into large (12 x 16) 95kPa Bio-hazard bag with the blood culture bottles and insert ½ sheet of absorbent material provided
e. Seal the large (12 X 16) 95kPa Bio-hazard bag
f. Place the large (12 x 16) 95kPa Bio-hazard bag into the large (12 X 16) insulated (silver) thermal bag to protect samples from cold and heat
g. Seal (12 X 16) insulated (silver)thermal bag
h. Do not put in ice pack
i. Place into cardboard shipping box
j. Pack smaller (9 X12) 95kPa Bio-hazard bag with purple EDTA tube, red-top (serum) blood tubes, Amies swab, and fecal cups.
k. Place remaining ½ sheet of absorbent material inside smaller (9 X12) 95kPa Bio-hazard bag
l. Seal (9 X12) 95kPa Bio-hazard bag
m. Place (9 X12) 95kPa Bio-hazard bag into the small (9 X12) silver thermal bubble pack
n. Place the previously frozen ice packs (1) inside the silver thermal bubble pack and seal shut
o. Place into cardboard shipping box
p. Seal box and apply appropriate courier label for overnight delivery
# Test Fees for Foal Diarrhea/Septicemia Test Kit

**TEST FEES - effective January 1, 2017**

<table>
<thead>
<tr>
<th>TEST</th>
<th>FEES</th>
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<tbody>
<tr>
<td><strong>SERUM</strong></td>
<td></td>
</tr>
<tr>
<td>IgG level: TIA (quantitative IgG)</td>
<td>30.00</td>
</tr>
<tr>
<td>Large Animal Chemistry Panel</td>
<td>48.00</td>
</tr>
<tr>
<td>Lawsonia intracellularis IPMA serology*</td>
<td>22.00 plus 30.00 referral fee</td>
</tr>
<tr>
<td>Lawsonia intracellularis qPCR</td>
<td>36.75</td>
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<thead>
<tr>
<th><strong>BLOOD</strong></th>
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<tbody>
<tr>
<td>Hemogram, Large Animal (CBC)</td>
<td>41.00</td>
</tr>
<tr>
<td>Selenium</td>
<td>28.00</td>
</tr>
<tr>
<td>Blood Cultures: done as a “Set” of 1 aerobic and 1 anaerobic bottle per set</td>
<td>30.00 aerobic plus 30.00 anaerobic per set</td>
</tr>
<tr>
<td>bacteremic foals more easily detected if 3 Sets</td>
<td>60.00 per set</td>
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<tr>
<th><strong>FECES</strong></th>
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<tbody>
<tr>
<td>Gram stain (if anaerobic transport medium was not submitted)</td>
<td>8.50</td>
</tr>
<tr>
<td>Enteric Bacterial Culture, Panel 1: (E. coli, Salmonellae, Rhodococcus)</td>
<td>59.00 per sample</td>
</tr>
<tr>
<td>Anaerobic bacterial culture (Clostridium, Bacteroides)</td>
<td>45.00</td>
</tr>
<tr>
<td>Lawsonia intracellularis qPCR</td>
<td>36.75</td>
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<tr>
<td>Parasitology, Fecal Quantitative</td>
<td>25.00</td>
</tr>
<tr>
<td>Rotavirus Latex Agglutination (Group A)</td>
<td>25.00</td>
</tr>
<tr>
<td>Coronavirus PCR, Beta</td>
<td>36.75</td>
</tr>
<tr>
<td>Clostridium perfringens Type A enterotoxin (latex agglutination)</td>
<td>28.00</td>
</tr>
<tr>
<td>Clostridium difficile toxins A/B (ELISA)</td>
<td>33.00</td>
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**NOTE to Veterinarian:** Fees subject to change without notice

- All tests can be done on an a la carte basis depending on case requirements and veterinary clinical assessment.
- For New York State contract eligible submissions, please include [NYS Contract Subsidy Submission form](#) as cover sheet
- Kit Cost: $35.00 (includes: tubes, cups, transport medium, mailer, blood culture bottles, shipping supplies, etc.)
- An accessioning fee will be added to each accession submitted.
**Foal Diarrhea or Septicemia Kit Submission Form**

**Animal Health Diagnostic Center**
College of Veterinary Medicine, Cornell University
In Partnership with the NYS Dept of Ag & Markets
US Postal Service Address: 240 Farrier Rd
Ithaca, NY 14852-5786

**AHDC Contacts**
Phone: 607-253-3900
Fax: 607-253-3943
Web: diagcenter.vet.cornell.edu
E-mail: diagcenter@cornell.edu

**LAB USE ONLY: Equine Abortion Kit**
AHDC Accession No./ Date
Pathology Case Number (if any)

**Enter COMPLETE ALL FIELDS, PRINT LEGIBLY, AND ENTER ONLY ONE OWNER PER FORM**

<table>
<thead>
<tr>
<th>Patient Date of Birth (DD-MM-YY)</th>
<th>Age of Animal (Month/Year)</th>
<th>Species</th>
<th>Breed</th>
<th>Sex</th>
<th>Accession No.</th>
<th>Reference No.</th>
</tr>
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**DIARRHEA □ Single diarrhea or □ Farm Problem**

**General History:** An adequate history must accompany submissions in order to qualify for NY State Contract charges (see AHDC Test & Fee Schedule).

- Date of onset of diarrhea on farm
- Age of animals w/ diarrhea

- No. animals on farm
- No. w/ diarrhea

**Foal on antibiotics:**
- Y Yes
- N No
- Name of drug:
- Dam on antibiotics:
- Y Yes
- N No
- Name of drug:

For previous related submissions, please enter Accession numbers and Dates here:

Check if related material has been submitted previously:
- for this animal(s):
- Y Yes
- N No
- Unknown

- for this herd:
- Y Yes
- N No
- Unknown

**NAME/ID NO.** | **Species** | **Breed** | **Sex** | **Age/DOB**
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<tbody>
<tr>
<td>1</td>
<td>EQ</td>
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</tr>
<tr>
<td>2</td>
<td>EQ</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>EQ</td>
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Do not use this form for more than three (3) diarrhea case tests. All three cases must have the same tests requested. Please use separate forms for cases if different tests requested.

Please note if you do not want complete testing on each item if more than one case or blood sample are included. Use separate general submission form for other testing.

**All tests listed at the right appropriate for the species and samples designated will be performed and associated fees per test/sample charged UNLESS test names are crossed out.**

The submitting veterinarian is responsible for the requested tests, fees associated with this submission, and to notify the owner of test results.

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**SPECIMEN(S) SUBMITTED**

**BLOOD**
- Blood culture bottles (1 or 2 sets)
  - Aerobic bottle
  - Anaerobic bottle
- EDTA tube
- EDTA tube
- Hemogram routine (CBC)

**SERUM**
- Red top blood collection tube
- IgG level (TIA-quantitative)
- Equine chemistry panel

**FECES**
- 2 oz. specimen cup
- 2 oz. specimen cup
- 2 oz. specimen cup
- Anaerobic transport media
- Aerobic swab (Amie's w/ charcoal)
- Aerobic swab/feaces (Amie's w/ charcoal)
- Gram stain

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**BY REQUEST ONLY: Check if desired**

- Serum sample - Lawsonia intracellularis serology referral test & fee
  - Animal Name/ID No.: _______________
- Fecal sample - Lawsonia intracellularis PCR referral test & fee
  - Animal Name/ID No.: _______________

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**LABEL BLOOD CULTURE WITH TIMES DRAWN***

**Ids used only by:**
- COURIER RECORD:
  - AB
  - FX
  - UPS-Grmd
  - UPS-ND
- DATE REC'D:
  - Frozen
  - Dry Ice
  - Not Frozen
  - Cold Pack
- TIME REC'D:
  - Comment:

PLEASE NOTE: SAMPLES SUBMITTED FOR TESTING BECOME THE PROPERTY OF THE ANIMAL HEALTH DIAGNOSTIC CENTER AND MAY BE SUBJECT TO REGULATORY TESTING AT NO ADDITIONAL COST

*If your Internal Reference No. is entered on this form, it will be used to identify this case on the test result form and on the billing statement (max. 17 character fields).*
### Foal Health – Farm Status and History Sheet

(ALL INFORMATION IS CONFIDENTIAL)

| Date | Animal Health Diagnostic Center  
|      | College Of Veterinary Medicine, Cornell University  
|      | Ithaca, New York 14853  
|      | 607-253-3900/Fax 607 253 3943 |

| Farm Name/Owner: | __________________________________________________________ |
| Animal: Foal (breed/sex/age/name): | __________________________________________________________ |
| Mare (age/name): | __________________________________________________________ |
| Veterinarian: | ___________________________________________________________________ |

1. Foal's birth date?  

2. Was an immunoglobulin analysis performed to evaluate passive transfer of immunity?  
   - Yes______ No______  
   - If yes, what was the test?_________________________________________  
   - what was the value?___________________________________________________

3. What was the foal's age at the onset of diarrhea?  ____ days

4. What is the foal's age now?  ____ days

5. Is the foal bright and alert?  
   - Yes______ No______

6. Is the foal still eating?  
   - Yes______ No______

7. What is the foal's temperature?  __________

8. Is the mare healthy?  
   - Yes______ No______  
   - Any major illness? __________________________________________
   - Mare's age  __________
   - Mare's breeding history: barren (# years_____), # foals____ maiden_____  
   - Mare's vaccination history__________________________________________

9. Has the mare received any antibiotics?  
   - Yes______ No_____  
   - If yes, what type and dosage date administered?__________________________

10. Has the foal received any antibiotics?  
    - Yes______ No_____  
    - If yes, what type? ________________________________________________
    - If yes, what dosage? ______________________________________________
    - If yes, on what date(s)? __________________________________________

11. Has the foal received any therapy other than antibiotics since the onset of diarrhea?  
    - Yes______ No_____  
    - If yes, please list_________________________________________________
12. Has the foal received any vaccinations?  Yes____ No____
   List: ____________________________________________________________

13. How many other foals on the farm have or have had diarrhea this season? ______
   Last year? _______  Two years ago? ________

13a. Have any other horses on the farm had diarrhea in the past 3 months (describe)?
   ______________________________________________________________________
   ______________________________________________________________________

14. How many foal deaths have occurred this season (include age at death and cause of death
   if determined)? __________________________________________________________
   Last year? _________  Two years ago? __________

15. How many foals are there on the farm? ____________________________
   Last year? _________  Two years ago? __________

16. How many mares are on the farm? ____________________________
   # Resident mares ________   # Non-Resident mares _________

17. How many stallions on the farm? _____________________________

18. How many other non-breeding Equidae are on the farm? __________
   Performance _______ Yearlings _________ Pleasure __________

18. Foaling?  Difficult _____ or Normal _____
   Retained Placenta _______________
   Placenta Exam _____ Weight _____
   Foal Weight: Estimated ________ or Measured ________
   Navel Treatment ________________________________

20. How would you briefly rate the overall management, including nutrition, and parasite
    control on this farm? (See also specific questions below) ____________________________

21. Could you briefly describe the parasite control program used on the farm, i.e, drugs used if any, age
    groups of animals treated, plus frequency and dose administered? ______________
    __________________________________________________________________________
    __________________________________________________________________________

22. Describe the feeding/nutrition program for the mare(s) on the farm. Provide some sense of the amount
    of grazing time and space available to the animals (i.e., density of grazing).____________
    __________________________________________________________________________
    __________________________________________________________________________

   Types of hay: legume ( ) grass ( ) pasture ( ) first cutting ( ) second cutting ( )
   type of plants in pastures: list:__________________________________________________
   __________________________________________________________________________
Any exposure to fescue-containing pasture _______________

Types of grain: oats ( ) sweet feed ( )
% protein __________

Are any of the feeds moldy? _______________

Are selenium supplements being used? ______________ by injection ( ) by feed ( )

23. MANURE HANDLING PRACTICES
How is manure from barn disposed of ________________________________________________
_______________________________________________________________________________;

What is frequency of cleaning of stalls(daily?_____ weekly?_____ other?____________________

Any farm areas with run-off and pooling of water? describe________________________________
_________________________________________________________________________________

24. SKETCH OF THE FARM

VERY IMPORTANT: On an additional sheet of paper or on the back of this sheet, please provide a brief sketch of the farm, including the LOCATION of the DIFFERENT GROUPINGS OF ANIMALS (especially note the location of the affected animals in relation to the well animals), their EXERCISE AREAS; also indicate TRAFFIC PATTERNS, LOCATIONS OF WATER SOURCES (including wells, ponds, streams, runoff/pooling), and location of stored FEEDSTUFFS, FEED TROUGHS.

For the BARNS include a diagram of the STALLS of this "case" in relation to other animals; indicate where ANIMALS ARE EXERCISED, PASTURED, etc.; location of FEED TROUGHS and WATER.
**Please note: Owner information, clinical history and differential diagnosis must be completed in full on submission form, as well as herd data and signature field below to qualify for contract pricing.**

*** HERD DATA ***

**Date:** onset of illness: ______________ In animals submitted: ____________

**Herd size:** Adult_____ Young_____ No. dead:_______ No. affected:_____

☐ Check here if add’l history is on back or attached.

I certify that this submission is for an animal located in NYS that is being raised for food or fiber production or it is a horse. In addition, I have listed in the differential diagnosis one or more conditions or contagious infectious diseases that is/are consistent with the clinical presentation for this animal or herd and that would threaten other animals or people. I also certify that this testing is not routine surveillance testing or testing to help eradicate a disease or condition already diagnosed in this herd or flock. Also, this submission includes samples and requests for testing or assistance from the lab to attempt to make a definitive diagnosis. This is not an insurance or legal case.

**Signature NYS licensed veterinarian**

I have attached the ☐ Contract subsidy submission continuation page or ☐ Other forms or pages