



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.



Cornell University Animal Health Diagnostic Center

P.O. Box 5786
Ithaca, New York 14852-5786
t. 607 253-3900
f. 607 253-3943
w. <http://ahdc.vet.cornell.edu>

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)



Cornell University
Animal Health Diagnostic Center

P.O. Box 5786
Ithaca, New York 14852-5786
t. 607 253-3900
f. 607 253-3943
w. <http://ahdc.vet.cornell.edu>

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 X 12) 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 X 12) 95kPa Bio-hazard bag
- l. Seal (9 X 12) 95kPa Bio-hazard bag
- m. Place (9 X 12) 95kPa Bio-hazard bag into the small (9 X 12) 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

SERUM

IgG level: TIA (quantitative IgG)	30.00
Large Animal Chemistry Panel	48.00
<u>Lawsonia intracellularis</u> IPMA serology*	22.00 plus 30.00 referral fee
Lawsonia intracellularis qPCR	36.75

BLOOD

Hemogram, Large Animal (CBC)	41.00
Selenium	28.00
Blood Cultures: done	30.00 aerobic
as a "Set" of 1 aerobic and 1 anaerobic bottle per set	30.00 anaerobic
bacteremic foals more easily detected if 3 Sets	60.00 per set
are done over a 24 hr period	

FECES

Gram stain (if anaerobic transport medium was not submitted)	8.50
Enteric Bacterial Culture, Panel 1: (<u>E. coli</u> , <u>Salmonellae</u> , <u>Rhodococcus</u>)	59.00 per sample
Anaerobic bacterial culture (<u>Clostridium</u> , <u>Bacteroides</u>)	45.00
<u>Lawsonia intracellularis</u> qPCR	36.75
Parasitology, Fecal Quantitative	25.00
Rotavirus Latex Agglutination (Group A)	25.00
Coronavirus PCR, Beta	36.75
<u>Clostridium perfringens</u> Type A enterotoxin (latex agglutination)	28.00
<u>Clostridium difficile</u> toxins A/B (ELISA)	33.00

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



Cornell University
Animal Health Diagnostic Center

P.O. Box 5786
Ithaca, New York 14852-5786
t. 607 253-3900
f. 607 253-3943
w. <http://ahdc.vet.cornell.edu>

- 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: PO Box 5786
Ithaca, NY 14852-5786

Courier Service Address: 240 Farrier Rd
Ithaca, NY 14853

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)

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

Enter Your Cornell AHDC Acct No. _____	Your Internal Case/Reference No.* _____
Veterinarian _____	Owner _____
Clinic Name _____	Address _____
Address _____	City, State, Zip _____
City, State, Zip _____	Phone Number (_____) _____
Phone Number (_____) _____ Fax Number (_____) _____	County _____ Town _____
Email _____	NYS Premise ID _____

ATTENTION:	Additional Instructions:
-------------------	--------------------------

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 N Name of drug: _____ Dam on antibiotics: Y N 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 N Unknown

for this herd: Y N Unknown

#	NAME/ID NO.	Species	BREED	SEX	AGE/ DOB	TYPE/SITE SPECIMEN(S) SUBMITTED	The first 14 tests will be done and will be billed. CROSS OFF the test numbers you do <i>not</i> desire.
1		EQ					Date Samples Taken: _____
2		EQ					
3		EQ					

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.

***** 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.: _____

- BLOOD** -----
- Blood culture bottles- (1 or 2 sets)
Aerobic bottle
Anaerobic bottle
EDTA tube.....
EDTA tube.....
1. Aerobic
 2. Anaerobic blood cultures
 3. Selenium level
 4. Hemogram routine (CBC)
- SERUM** -----
- Red top blood collection tube
5. IgG level (TIA-quantitative)
 6. 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/feces
(Amie's w/ charcoal)
7. Rotavirus latex agglutination, Betacorona
 8. Parasitology, fecal quantitative (not frozen)
 9. Clostridial toxins (tests 9 and 10) : (frozen)
 9. C. perfringens enterotoxin
 10. C. difficile toxin A/B
 11. Anaerobic culture: Clostridia, Bacteroides
 12. Enteric bacterial culture Panel 1:
Aerobic culture: E. coli, Rhodococcus
Salmonella culture
 13. Gram stain

***** LABEL BLOOD CULTURE WITH TIMES DRAWN *****

LAB USE ONLY OPENED BY: _____	COURIER RECORD: <input type="checkbox"/> AB <input type="checkbox"/> Mail <input type="checkbox"/> FX <input type="checkbox"/> Pri Mail <input type="checkbox"/> UPS-Grnd <input type="checkbox"/> Exp Mail <input type="checkbox"/> UPS-ND <input type="checkbox"/> Other: _____	DATE REC'D: _____ TIME REC'D: _____ DATE SHIP'D: _____	<input type="checkbox"/> Frozen <input type="checkbox"/> Dry Ice <input type="checkbox"/> Not Frozen <input type="checkbox"/> Cold Pack <input type="checkbox"/> None
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

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 TROUGHES.

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 TROUGHES and WATER.

NYS CONTRACT SUBMISSION ADDENDUM

****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