See reverse side for additional information. Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO.

include 21-R-0082, Cust ld 445

2. HEADC

FORM APPROVED OMB NO 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)

NOV 30 2000

COLUMBIA UNIVERSITY 630 W 168TH ST NEW YORK NEW YORK, NY 10032 red with USDA

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary)

**FACILITY LOCATIONS (Siles)** 

Black Bldg & Eye Institute Annex, 630 W. 168th

10032 New York, New York

A. Animals Covered By The Animal Wellare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquitizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or fests were conducted involving accompanying pain or distress. To the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report).	TOTAL NO OF ANIMAL:  (Cols. C + D + E)
4. Dogs	7	45	565	0	610
5. Cats	0	00	22	O	22
6. Guinea Pigs	0	51	105	0	156
7. Hamsters	0	0	35	0	35
B. Rabbits	12	79	95	0	174
9. Non-human Primates	6	0	42	0	42
10. Sheep	0	0	21	0	21
11. Pigs	00	0	44	0	44
12. Other Farm Animals					
Bovine	0	0	29	0	29
13. Other Animals					
Ferrets	0	24	0	0	24
Frogs	0	21	322	0	343

- Professionally acceptable standards governing the care, treatment, and use of animals, including approviate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to poinful procedures
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

(Chief Ex	recutive Officer or	QUARTES RESEARCH FACILITY OFFICIAL Legally Responsible Institutional Official) un, correct, and complete (7 U.S.C. Section 2143)		
SIGN <sub>2</sub>		NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED	)

#### SUMMARY OF EXCEPTIONS

# October 1, 1999 to September 31, 2000

- 1. In a single protocol, 12 rhesus monkeys must be chaired for periods greater than 12 hours and less the 24 hours. This is an exception to the standard set by the Laboratory Animal Welfare Act. The Act states that nonhuman primates must be given the opportunity for 1 hour of continuous unrestrained activity if more than 12 hours of restraint are required. Monkeys used in the protocol are chair-restrained approximately three to ten times per year. All animals are conditioned to this restraint to prevent any distress associated with chairing. The IACUC approved this restraint based upon the scientific requirements for continuous data collection.
- 2. Five ovariectomized female rhesus nonhuman primates will be transferred from a separate protocol to a new protocol that requires two additional survival surgeries over a time period of about two months. The purpose is to study endometriosis so that new treatments may be developed for humans suffering this disorder. The animals will not undergo any further major survival surgery after this protocol is completed. This is an exception to the standards set by the *Guide* and the Laboratory Animal Welfare Act (AWA), 9 CFR, § 2.31 (d)(x). The *Guide* states that multiple major survival surgical procedures on a single animal are discouraged but may be permitted if scientifically justified by the user and approved by the IACUC. The AWA standard states that no animal will be used in more than one major operative procedure unless justified for scientific reasons by the principal investigator, in writing and in special circumstances as determined by the USDA/APHIS Administrator. Both conditions were fulfilled. The USDA/APHIS Administrator approved the request for an exemption under 9 CFR, § 2.31(d)(x) to perform multiple survival surgeries on the five nonhuman primates used in the endometriosis study.

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The report is required by law (7 USC 2143). Feature to report according to the regulations can result in an order to cease and desist and to be subject to penalties as provided for in Section 2150.

2 0 See reverse side for additional information.

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 21-R-0082 CUSTOMER NO. 445

FORM APPROVED OMB NO. 0579-0038

# ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

HEADQUARTERS RESEARCH FACILITY (Name and Address, 4s registered with USCA.
Include Zip Code)
 COLUMBIA UNIVERSITY

COLUMBIA UNIVERSITY 630 W 168TH ST NEW YORK NEW YORK, NY 10032

NEW YORK NEW YORK, NY 10032 (212) 305-3837

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

See Attached Listing

FACILITY LOCATIONS(sites)

A. Animale Covered By The Animal Welfare Regulations	8. Number of aritmels being bried, conditioned, or held for use in teaching, tenting, experiments, research, or surgery but not yet used for such purposes.	G. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distrees, or use of pain- relieving drugs.	D. Number of animals upon which experiments, secting, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drups were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analogatic, or tranquitizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An experiments surgery, or tests. (An experiment and the reasons such drugs were not used must be attached to this report).	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs	10	47	436	. 0	483
5. Cats	0	0	2	0	2
6. Guinea Pigs	0	22	57	0	79
7. Harnsters	0	0	41	0	41
8. Rabbits	0	52	218	0	270
9. Non-Human Primates	6	2	99	0	101
10. Sheep	0	0	6	0	6
11. Pigs	0	0	110	0	110
12. Other Farm Animals		_			:
Calves	0	0	21	0	21
13. Other Animals					
Ferrets	0	2	0	0	2
Gerbils	0	0	3	0	3

- Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquitizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarism for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

	CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Responsible Institutional official) I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)	
SI:	IAL OFFICIAL NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED

APHIS FORM 7023 (AUG 91) (Replaces VS FORM 18-23 (Oct 88), which is obsolete

PART 1 - HEADQUARTERS

#### APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

21-R-0082

Customer Number:

445

Facility:

**COLUMBIA UNIVERSITY** 

630 W 168TH ST

NEW YORK NEW YORK, NY 10032

(212) 305-3837

() BLACK BLDG. & En L Institut Anna Gly.
630 WEST 168TH ST
NEW YORK NEW YORK, NY 10032

ST LUKES - ROOSEVELT HOSPITAL - CLARK BLDG - ANTEN 114 ST & AMSTERDAM AVE NEW YORK NEW YORK, NY 10032

ST. LUKES-ROOSEVELT HOSPITAL

AMSTERDAM AVE AND 59TH STREET NEW YORK NEW YORK, NY 10032

# SUMMARY OF EXCEPTIONS

October 1, 2000 to September 31, 2001

1. In a single protocol, 12 rhesus monkeys must be chaired for periods greater than 12 hours and less than 24 hours. This is an exception to the standard set by the Laboratory Animal Welfare Act. The Act states that nonhuman primates must be given the opportunity for 1 hour of continuous unrestrained activity if more than 12 hours of restraint are required. Monkeys used in the protocol are chair-restrained approximately three to ten times per year. All animals are conditioned to this restraint to prevent any distress associated with chairing. The IACUC approved this restraint based upon the scientific requirements for continuous data collection.

This report is required by law (7 USC 2143). Failure to report according to the regulations can result in an order to cease and desist and to be subject to penalties as provided for in Section 2150 See reverse side for additional information

Interagency Report Control No. 0180-00A-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 21-R-0082

CUSTOMER NO: 445

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

include Zip Code) COLUMBIA UNIVERSITY

630 W 166TH ST NEW YORK NEW YORK, NY 10032 (212) 305-3837

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USCA,

3. REPORTING FACILITY (List all locations where arenals were housed or used in actual research, lesting, teaching, or experimentation, or held for these purposes. Attach addedonal sheets if necessary )

FACILITY LOCATIONS(stes)

See Attached Listing

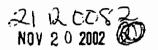
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, festing, experiments, nessarch, or surgery but not yet used for such purposes.	C. Number of anismale upon which issuching research, experiments, or assts were conducted involving no pain, dishress, or use of pain- nelieving drugs.	D. Number of animels upon which apparlments, leaching, research, surgery, or leats were conducted involving accompanying pain or distress to the arminals and for which appropriate anisthetic, analogssic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, respects, surgery or insist were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anisated, analysis, or transplicting drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests, (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report).	F. TOTAL NO OF ANIMALS [Cots. C + D + E)
4. Dags	6	65	434	0	499
5. Cats	0	0	0	0	. 0
6. Guinea Pigs	0	24	46	0	70
7. Hamstera	0	4	15	0	19
8. Rabbits	0	0	100	0	100
9. Non-Human Primates	4	0	128	0	128
10. Sheep	0	0	0	0	0
11. Pigs	0	0	196	0	196
12. Other Farm Animals					
calves	0	0	37	0	37
13. Other Animais					
gerbils	0	0	25	0	25
		<u> </u>			;

- Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Sech principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is etached to this annual report. In addition to identifying the IACUC-approved exceptions, thus summary includes a brief explanation of the exceptions, as well as the species and number of enimals affected.
- 4) The attenting veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other espects of ensure care and use.

	CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  tecutive Officer or Legally Responsible Institutional official)  that the above is true, correct, and complete (7 U.S.C. Section 2143)	
SIGNATUR	I NAME E TITLE DE CE O OB METITATIONAL DESIGNAL (Time of Driet)	DATE SIGNED

APHIS FORM 7023 (AUG 91)

(Replaces VS FORM 18-23 (Oct 88), which is obsolute and Dean, Faculty of Medicine PART 1 - HEADQUARTERS



### SUMMARY OF EXCEPTIONS

October 1, 2001 to September 31, 2002

- In a single protocol, 12 rhesus monkeys must be chaired for periods greater than 12 hours and less than 24 hours. This is an exception to the standard set by the Laboratory Animal Act. The Act states that nonhuman primates must be given the opportunity for 1 hour of continuous unrestrained activity if more than 12 hours of restraint are required. Monkeys used in the protocol are chair-restrained approximately three to ten times per year. All animals are conditioned to this restraint to prevent any distress associated with chairing. The IACUC approved this restraint based upon the scientific requirements for continuous data collection.
- 2. In a single protocol, 9 rhesus monkeys were fasted (food) one time for36 hours to investigate the potential effects of fasting on neuropeptides in the brains of primates.

# APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

21-R-0082

**Customer Number:** 

445

Facility:

**COLUMBIA UNIVERSITY** 

630 W 168TH ST ... NEW YORK NEW YORK, NY 10032

(212) 305-3837

BLACK BLDG. & EYE INSTITUTE 630 WEST 168TH ST NEW YORK NEW YORK, NY 10032

Interagency Report Control
No. 0180-DOA-AN
FORM APPROVED OMB NO.
0579-0036 HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code 3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, or experimentation, or held for these purposes. Attached additional sheets if See reverse side for additional information CUSTOMER NO. DURHAM, NC 27710 **DUKE UNIVERSITY** BOX 3180 DUMC (919) 681-6792 1. REGISTRATION NO. 55-R-0003 FACILITY LOCATIONS (sites) This report is required by law (7 USC 2143). Failure to report according to the regulations can result in an order to cease and desist and to be subject to penalties as provided for in Section 2150. ANNUAL REPORT OF RESEARCH FACILITY ANIMAL AND PLANT HEALTH INSPECTION SERVICE UNITED STATES DEPARTMENT OF AGRICULTURE (TYPE OR PRINT)

See Attached Listing

8	REPORT OF ANIMALS USE	D BY OR UNDER CON	TROL OF RESEARCH F	ACILITY (Attach additional sheet	USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Aftach additional sheets if necessary or use APHIS FORM 7023A)	
4		B. Number of animals being bred, conditioned, or had for use in teaching, testing, experiments, or research or surg. A but not yet it. A for surg.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-retieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain of distress to the animals anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgeais, or tranquillaring drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery or tests. (An expenation of experiments, surgery or tests, an expension of procedures producing pain or. stress in these animals and the reasons such 'rigs were not used must be attached to t'er, 'out.)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4	Dogs	2	8	83		88
τQ	Cats		5	-		9
G	Guinea Pigs		31	280		311
7	Hamsters			-		-
80	Rabbits		176	788		964
σi	Non-Human Primates		29	3		62
5	10. Sheep		8	14		22
Ę	11. Pigs	10	8	681		689
12	12. Other Farm Animals					



		71 74 141 25		665	3 86 141	Goats 13. Other Animals Ferrets Monodelpris Tree Strew
	65	141			141	Tree Shrew
141	6 65	99	3		99	Monodelphis
96	2 6	71	7	65	9	Ferrets
6 65	5					3. Other Animals
6 65 66 141	· ·	5		2	3	Goats

ASSURANCE STATEMENTS

- Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
  - Each principal investigator has considered atternatives to painful procedures.
- This facility is othering to the standards and regulations under the Act, and it has required that exceptions to the standards and explained by the principal investigator and approved by the institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected. 3
- The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal 4

	CERTIFICATE OF PRINCIPAL INVESTIGATOR	
	Leartify that the above is true, correct, and complete (7 U.S.C. Section 2143)	
1	NAME & TITLE OF PLOR INSTITUTIONAL OFFICIAL (Type or Print) DATE SIGNED	DATE SIGNED
		12/1/04
	I which is checkete)	PART 1 - HEADQUARTERS

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 74-R-0106 CUSTOMER NUMBER: 9464

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)

American Animal Health Inc. 2619 Skyway Drive Grand Prairie, TX 75052

Telephone: (972) -641-5420

3. REPORTING FACILITY ( List all locations where animals were housed or used in actual research, to sting, or experimentation, or he

FACILITY LOCATIONS (Sites) - See Attached Listing (Attachment #1)

A. Animals Covered By The Animal Welfare Regulations	8.	Number of animal being bred. conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C.	Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use or pain-relieving drugs.	D.	Number of animals upon which experiments, taeching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals an for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E	Number of animals upon which leaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for whithe use of appropriate anesthetic, analgesic, or tranquilize drugs would have adversely affected the procedures, reservinterpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reast such drugs were not used must be attached to this report	F	TOTAL NUMBES OF ANIMALS ( COLUMNS C + D + E )
4. Dogs						·	1			
5. Cats							1			
6. Guinea Pigs							T			
7. Hamsters							T			
8. Rabbits										
9. Non-human Primates							-			
0. Sheep							1		_	
1. Pigs					-					
2. Other Farm Animals							-			
Cattle				30			$\vdash$	*70 (Attachment #2)		100
3. Other Animais							-			100
Goats			6	500						600
										-
							-		_	<del> </del>

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anestesic, analgesic, and tranquilizing drugs, prior to, during, and following actual researching, testing, surgery, or experimentation were followed by this research facility.
- Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is achieving to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and applicational Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary interesting the investigator and required and required and required.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS	RESEARC	H FACE IT	YOFFICIAL
( Chief Executive Officer or Legally Re	sponsible i	netih dienal	Official \

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED

10/03/0

PHIS FORM 7023 (AUG 91)

(Replaces VS FORM 18-25 (OCT 85), which is obsolete.)

SIGNATURE OF CLEO, OR INSTITUTIONAL OFFICIAL

American Animal Health, Inc. 2619 Skyway Drive Grand Prairie, TX 75052 U.S. Vet License 315

October 3, 2002

Goats

# **FACILITY LOCATIONS**

**Burrer Testing Facility** 1.) 2.0 Miles N. on the Hayden Ranch Rd. from the Junction of Tivydale Rd. Fredericksburg, TX 78624 2.) Chester Spinrath Testing Facility Goats Allerkamp Rd. Comfort, TX 78013 3.) Farm Place Testing Facility Goats 8.5 Miles S. & 0.4 Miles West/Junction of Wilson Creek Rd. & FM 1341 Comfort, TX 78013 4.) Fredericksburg Texas Testing Facility Cattle & Goats Texas State Hwy 16 Fredericksburg, TX 78624 5.) Hillingdon Ranch Testing Facility Goats 346 Giles Ranch Rd. Comfort, TX 78013

6.) Johnson City Texas Testing Facility Rt. 1, Box 770 Johnson City, TX 78636

Guinea Pigs & White Mice

Goats

7.) Laboratory Animal Testing and Storage Facility Building #3 2625 Skyway Drive Suite 102 Grand Prairie, TX 75052

American Animal Health, Inc. 2619 Skyway Drive Grand Prairie, TX 75052 U.S. Vet License 315

October 3, 2002

8.) Squaw Creek Testing Facility2.8 Miles South of Junction of Doss Rd.(FM648) and Squaw Creek Rd.Doss, TX 78618

Goats

 Stieler Place Testing Facility
 15 Miles S. on Hwy 87 from junction of Highway St. and Hwy 87 Comfort, TX 78018 Goats

10.) White Oak Testing Facility5 Miles S. of the Junction of Tivydale Rd.(FM 2093) & White Oak Rd.Fredericksburg, TX 78624

Goats

American Animal Health, Inc. 2619 Skyway Drive Grand Prairie, TX 75052 U.S.Vet License 315

October 3, 2002

# Attachment #2

\* Host animal immunogenicity studies for Pasteurella Haemolytica Bacterin-Toxoid and Mycoplasma Bovis Bacterin have to be done by challenge protection evaluation as required by the U.S.D.A. Both vaccinated and non-vaccinated cattle have to go through the challenge stress for 4 days for P. haemolytica and 14 days for Mycoplasma bovis before being euthanized by captive bolt stunning and necropsied to evaluate the lung lesions.