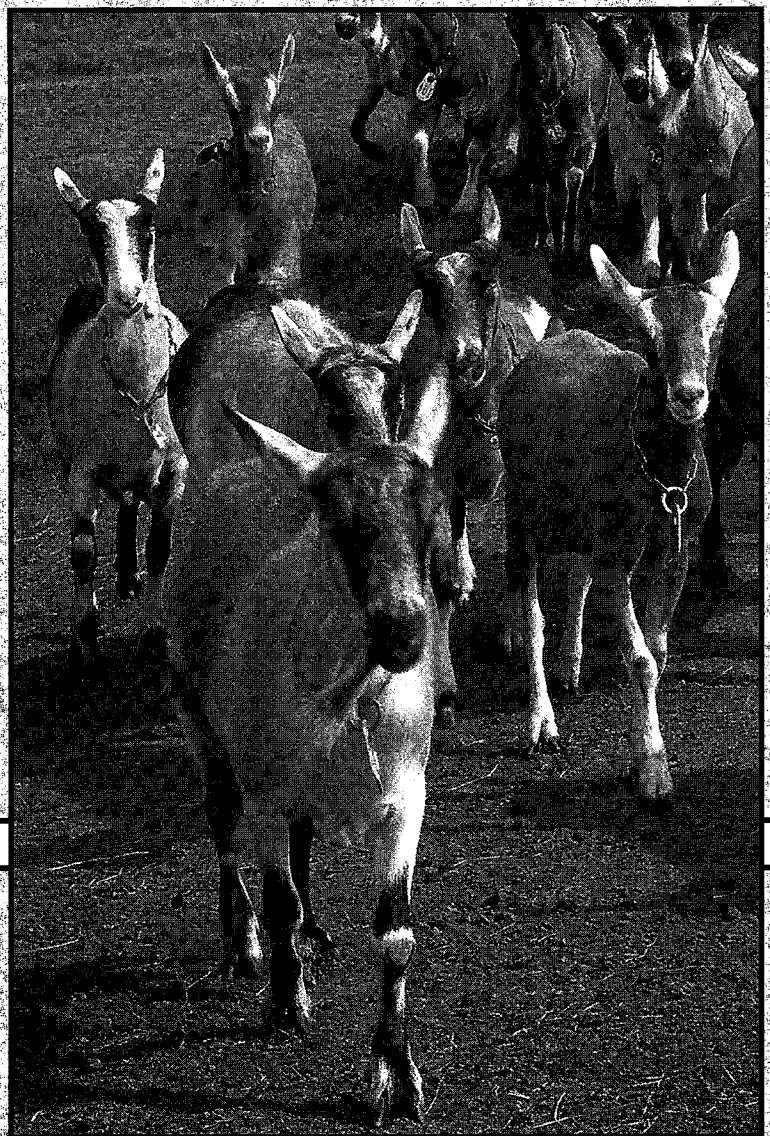


**Annual Report of the
Minnesota Veterinary Diagnostic Laboratory – 1999**

Animal Health in Minnesota



UNIVERSITY OF MINNESOTA

**Minnesota Agricultural Experiment Station
Miscellaneous Publication 101-1999**



Animal Health in Minnesota

**Annual Report of the
Minnesota Veterinary Diagnostic Laboratory
Fiscal Year 1999**
(July 1, 1998 – June 30, 1999)

in cooperation with

**Department of Veterinary Diagnostic Medicine
College of Veterinary Medicine
University of Minnesota**

and

Minnesota Board of Animal Health

**Miscellaneous Publication 101-1999
Minnesota Agricultural Experiment Station
University of Minnesota**

St. Paul, Minnesota

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FOREWORD

The Veterinary Diagnostic Laboratory (VDL) is a program of the College of Veterinary Medicine in the University of Minnesota Academic Health Center. The VDL was established in 1904 in the Agricultural Experiment Station of the University of Minnesota, by agreement between the Minnesota Livestock Sanitary Board and the University. Its purpose is to satisfy the need for accurate diagnosis of animal diseases that threaten Minnesota's livestock and poultry industries, companion animals, wildlife and human health.

As the official laboratory of the Minnesota Board of Animal Health, the VDL provides laboratory support to the state's animal disease control and eradication programs. The VDL was administratively separated from the College's Department of Veterinary Diagnostic Medicine on July 1, 1998. This was done to enhance the interdisciplinary service and research through the participation of faculty across several non-traditional Collegiate and University departments.

This year scientists in the VDL identified a new strain of influenza virus, subtype H3N2, in Minnesota swine herds. Collaborative research with St. Jude's Children Hospital led to a publication describing this virus, which is the first strain reported to have been derived by natural recombination of avian, human, and swine influenza viruses. Coinciding with the introduction and spread of H3N2 influenza, an epizootic of pseudorabies in swine lead to increased pseudorabies testing responsibilities for the VDL.

New diagnostic tests for emerging and existing pathogens of livestock, poultry, and companion animals continue to be developed as part of the VDL mission. Serologic or molecular tests have been developed for swine influenza H3N2, avian pneumovirus, PRRS virus, *Clostridium perfringens*, porcine adenovirus, *Clostridium difficile*, and porcine circovirus. BVD and *Mycobacterium paratuberculosis* polymerase chain reaction tests are in development.

The VDL was fortunate this year to have recruited three highly skilled veterinary pathologists to occupy positions created by retirements. Cathy Carlson, Rod Frank, and Kurt Rossow bring internationally recognized expertise in surgical and bone pathology, food animal pathology and infectious disease diagnosis that will significantly strengthen the VDL's national and international recognition in these areas.

On behalf of the Veterinary Diagnostic Laboratory faculty, staff and students, I thank the Minnesota Legislature, Minnesota Board of Animal Health, University of Minnesota, and animal organizations for their support. We look forward to continued improvements in laboratory services for the animal industries throughout the State.

James E. Collins
Director

Acknowledgement is given to Mark Hinton, M. Anwar Sheikh, Rod Frank and Wendy Hansen for compiling the data for this report, and to Larry Etkin of the Communication and Educational Technology Services Unit of the University of Minnesota Extension Service for editorial assistance.

Correspondence related to this publication, to the Department or to the Veterinary Diagnostic Laboratory should be addressed to: Minnesota Veterinary Diagnostic Laboratory, University of Minnesota, 1333 Gortner Avenue, St. Paul, MN 55108. Phone: 612-625-8787 Email: MVDL@tc.umn.edu

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Personnel

Faculty

Elizabeth A. Aird, DVM (ACVP)	Assistant Professor
Cathy S. Carlson, DVM, PhD (ACVP)	Associate Professor
James E. Collins, DVM, PhD (ACVP)	Professor, Director
Kay S. Faaberg, PhD	Assistant Professor
Rodney K. Frank, DVM, PhD (ACVP)	Associate Professor
Sagar M. Goyal, BVSc, PhD (SM-AAM)	Professor, Chair
David W. Hayden, DVM, PhD (ACVP)	Professor
Harold J. Kurtz, DVM, PhD (ACVP)	Professor
Michael J. Murphy, DVM, PhD (ABVT)	Associate Professor
Timothy O'Brien, DVM, PhD (ACVP)	Associate Professor
Terrance P. O'Leary, DVM, PhD	Associate Professor
Kurt D. Rossow, DVM, PhD	Assistant Professor
Daniel P. Shaw, DVM, PhD (ACVP)	Associate Professor
Ashok K. Singh, MS, PhD	Associate Professor
Mary M. Walser, DVM, PhD	Professor
Alvin Weber, DVM, PhD	Professor Emeritus

Professors Emeritus/Adjunct Professors

Martin E. Bergeland, DVM, PhD	Professor Emeritus
Donald M. Barnes, DVM, PhD	Professor Emeritus
Lawrence J. Felice, MS, PhD	Adj. Assoc. Professor
Vicki L. Horton, DVM, PhD	Adj. Assoc. Professor
Kenneth Johnson, DVM, PhD	Professor Emeritus
Glen H. Nelson, DVM	Professor Emeritus
Robert R. Roy, PhD	Adj. Assoc. Professor
Robert S. Skoglund, PhD	Adj. Assoc. Professor
Alvin Weber, DVM, PhD	Professor Emeritus
Ronald E. Werdin, DVM, PhD	Professor Emeritus

Residents/Research Assistants and Associates/Students

Mostafa Bouljihad, DVM, PhD	Vet. Med. Assistant
Maria Calsamiglia, DVM	Research Assistant
Shu-Ju Chiang, DVM	Research Assistant
Katherine Coyle, DVM	Vet. Med. Assistant
M. Arshud Dar, DVM, MS	PhD Candidate
Michael Henson, DVM	Teaching Assistant
Yin Jiang, MS, PhD	Research Assistant
Faris Jirjis, DVM, MS	PhD Candidate
Cindy O'Dell, DVM	Vet. Med. Assistant
Barbara Patten, BS	Research Assistant
M. Anwar Sheikh, DVM, MS	PhD Candidate
Dina Spassova, BS	Research Assistant
Thomas White, BS	Research Assistant

Minnesota Veterinary Diagnostic Laboratory Staff

Administration

James E. Collins, DVM, PhD (ACVP)	Director
Nola Burbeck	Principal Secretary
Dorene Coles	Senior Office Assistant
Joedeey Fraser	Computer Technician
Wendy Hansen	Medical Transcriptionist
Mark Hinton, MA, DVM	Scientist
Jennifer Holohan	Executive Secretary
Margaret Ingalls, BA	Associate Administrator
Bonnie Kloos	Executive Secretary
Jean Ludescher	Principal Secretary
Jane McMullen, BS	Principal Secretary
Jean Paavala	Accounts Specialist
Debra Schouville	Accounts Specialist
Patricia Schwartz	Principal Secretary
Janelle Wachter	Principal Secretary

Bacteriology/Mycology

Rodney K. Frank, DVM, PhD (ACVP)	Faculty Supervisor
Jennifer Feulner, BS	Senior Lab. Technician
Cynthia Lindeman, BS	Assistant Scientist
Jennifer M. Nelson	Principal Lab. Technician
Gayle Pantlin, CVT	Assistant Scientist
Joette Solberg, BS	Senior Lab. Technician
Mary VanBeusekom, BA	Senior Lab. Technician

Endocrinology

Ashok K. Singh, MS, PhD	Faculty Co-supervisor
Elizabeth A. Aird, DVM (ACVP)	Faculty Co-supervisor
Sharon Hardy, MT	Univ. Med. Technician
Analee Sower, PhD	Junior Scientist
Dina Spassova, BS	Research Assistant

Genetics

Timothy O'Brien, DVM, PhD	Faculty Supervisor
Lance Buoen, BS	Senior Scientist Alvin
Weber, DVM, PhD	Cytogeneticist

Personnel (continued)

Immunohistochemistry

Timothy O'Brien, DVM, PhD	Faculty Supervisor
Mary M. Walsler, DVM, PhD	Diagnostic Pathologist
Jan Shivers, BS	Scientist
Christopher Thurn, BA	Assistant Scientist

Pathology—Necropsy

David W. Hayden, DVM, PhD (ACVP)	Faculty Supervisor
Ron Joki, BA	Scientist
Richard Roback, AA	Assistant Scientist
Duane Weiss, BS	Scientist

Laboratory for Udder Health

Russell F. Bey, PhD	Co-Faculty Supervisor
Ralph Farnsworth, DVM, MS	Co-Faculty Supervisor
Beverly Bybee, AA	Principal Lab. Technician
Michelle LaValle, BA	Assistant Scientist

Serology

Sagar M. Goyal, BVSc, PhD (SM-AAM)	Faculty Supervisor
Judith Brees, BS	Principal Lab. Technician
Alan Ducommun, BA	Principal Lab. Technician
Amie Eisfeld, BA	Principal Lab. Technician
Elizabeth Ellert, CLA	Principal Lab. Technician
Melissa Eyre, BS	Senior Lab. Technician
Jerome Fahrman, BS	Sr. Univ. Med. Technician
Allison Heath, BS	Principal Lab. Technician
Lin Liu, MD	Assistant Scientist
Londa Kroone, CLA	Principal Lab. Technician
Thomas Yentsch, BS	Principal Lab. Technician

Molecular Diagnostics

Kurt D. Rossow, DVM, PhD	Faculty Co-supervisor
Kay S. Faaberg, PhD	Faculty Co-supervisor
Carrie Mahlum, MS	Assistant Scientist
Jessica Perry, BS	Senior Lab. Technician
Linda Schuveiller, RT	Senior Lab. Technician
Tracy Seda, BS	Senior Lab. Technician
Karen Timmons, BS	Assistant Scientist

Shipping and Receiving

Kristin Berg, BS	Junior Scientist
Renee Lietzau, BA	Junior Scientist
Elaine Matthys, BS	Senior Lab. Technician
Patricia Smith, AA	Office Specialist

Pathology—Anatomical

James E. Collins, DVM, PhD (ACVP)	Diagnostic Pathologist
Cathy S. Carlson, DVM, PhD (ACVP)	Diagnostic Pathologist
Rodney K. Frank, DVM, PhD (ACVP)	Diagnostic Pathologist
David W. Hayden, DVM, PhD (ACVP)	Diagnostic Pathologist
Harold J. Kurtz, DVM, PhD (ACVP)	Diagnostic Pathologist
Timothy O'Brien, DVM, PhD (ACVP)	Diagnostic Pathologist
Terrance P. O'Leary, DVM, PhD	Diagnostic Pathologist
Kurt D. Rossow, DVM, PhD	Diagnostic Pathologist
Daniel P. Shaw, DVM, PhD (ACVP)	Diagnostic Pathologist
Mary M. Walsler, DVM, PhD	Diagnostic Pathologist

Toxicology/Nutrition

Michael J. Murphy, DVM, PhD (ABVT)	Veterinary Toxicologist
Tom Arendt, BS	Assistant Scientist
Yin Jiang, MS, PhD	Research Assistant
Thomas White, BS	Research Assistant

Virology

Sagar M. Goyal, BVSc, PhD (SM-AAM)	Faculty Supervisor
Sigrun Haugerud, BS	Principal Lab. Technician
Pin King, BS, MS	Assistant Scientist
Kern Pomeroy, BS, PhD	Scientist; Elec. Microscopist
Wendy Wiese, BS	Senior Lab. Technician

Pathology—Clinical

Elizabeth A. Aird, DVM (ACVP)	Clinical Pathologist
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Pathology—Histotechnology

Timothy O'Brien, DVM, PhD (ACVP)	Faculty Supervisor
Susan Detmer, BA	Senior Lab. Technician
Jacalyn Evenson, AA, HT (ASCP)	Principal Lab. Technician
Kathy Gnasdoskey	Principal Lab. Technician
Donna Gulbranson, HT (ASCP)	Principal Lab. Technician

Student Assistants

Leah Becker	Student Office Assistant	Gianna Lang	Student Office Assistant
Svetlana Bolotskaya	Student Laboratory Assistant	Jennifer Lovgren	Student Laboratory Assistant
Jennifer Carter	Student Laboratory Assistant	Eric Melin	Student Laboratory Assistant
Trevor Denisen	Student Laboratory Assistant	Bayonle Obilade	Student Laboratory Assistant
Molly Diers	Student Office Assistant	John Rein	Student Laboratory Assistant
Sarah Harter	Student Office Assistant	Jeremy Schefers	Student Laboratory Assistant
Connie Hempler	Student Office Assistant	Jeremy Smith	Student Laboratory Assistant
Brandi Hohrman	Student Laboratory Assistant	Cathy Straight	Student Office Assistant
Amy Kobs	Student Laboratory Assistant	Lisa Westergard	Student Laboratory Assistant
Nancy Kokos-Fuchs	Student Laboratory Assistant	Suzette Zelm	Student Office Assistant
Jason Kutz	Student Laboratory Assistant		

Accessions by Month

July	4,174	February	3,324
August	3,898	March	4,238
September	3,486	April	4,599
October	3,255	May	4,211
November	3,064	June	4,085
December	3,241		
January	3,149	FY 1999 Total	44,724

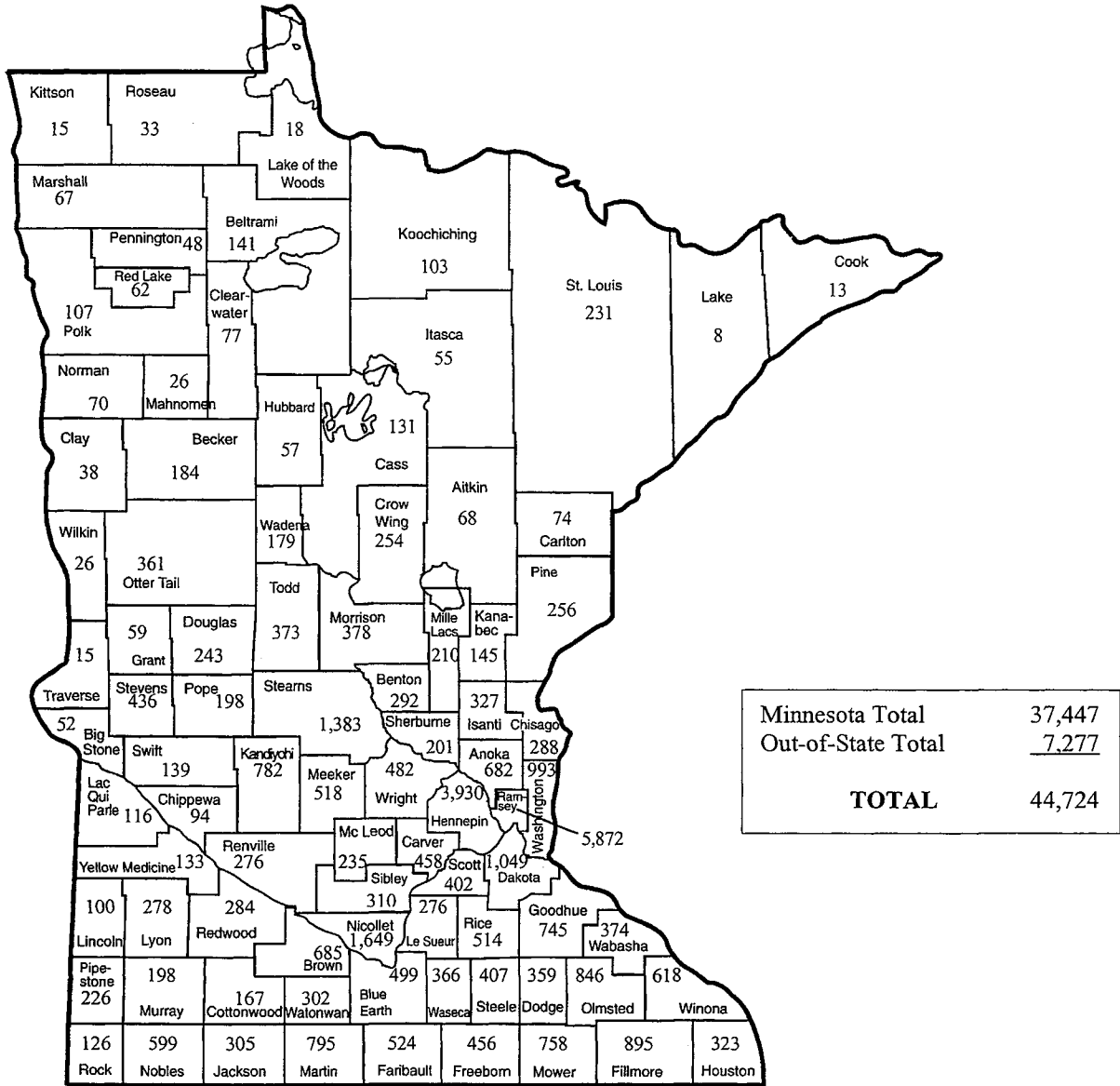
Accessions – Prior Fiscal Years

1960	3,277	1980	14,668
1961	3,450	1981	15,580
1962	3,285	1982	18,064
1963	2,635	1983	20,668
1964	4,225	1984	20,184
1965	2,635	1985	22,836
1966	3,166	1986	21,748
1967	3,680	1987	24,390
1968	4,581	1988	30,899
1969	5,552	1989	35,233
1970	6,451	1990	37,093
1971	6,926	1991	43,421
1972	7,951	1992	42,800
1973	10,527	1993	39,764
1974	8,635	1994	40,154
1975	7,593	1995	38,914
1976	8,782	1996	34,926
1977	8,953	1997	32,223
1978	10,591	1998	36,072
1979	12,803		

Accessions by Species by Month							
Species	July	August	September	October	November	December	January
Avian-Chicken	31	28	19	26	17	40	24
Avian-Miscellaneous	59	65	53	48	48	57	57
Avian-Turkey	113	88	83	80	99	89	70
Bovine	656	632	601	579	541	618	598
Canine	952	758	945	894	893	878	835
Caprine	19	16	14	14	9	19	5
Equine	374	366	333	184	126	121	127
Feline	359	280	315	339	316	300	258
Fish-Amphibian-Reptile	4	2	3	3	4	2	2
Miscellaneous Mammal	102	155	100	91	78	66	55
Miscellaneous Specimen	38	45	44	55	26	35	46
Ovine	30	26	23	28	16	16	22
Porcine	1,437	1,437	953	914	891	1,000	1,050
TOTAL	4,174	3,898	3,486	3,255	3,064	3,241	3,149

Species	February	March	April	May	June	TOTALS	%TOTAL
Avian-Chicken	30	28	33	31	22	329	0.7
Avian-Miscellaneous	60	62	42	50	51	652	1.5
Avian-Turkey	91	142	207	152	99	1,313	2.9
Bovine	626	749	666	578	579	7,423	16.6
Canine	775	1,023	1,046	1,032	996	11,027	24.7
Caprine	15	22	19	12	16	180	0.4
Equine	264	398	858	711	491	4,353	9.7
Feline	296	339	255	305	307	3,669	8.2
Fish-Amphibian-Reptile	3	3	4	7	6	43	0.1
Miscellaneous Mammal	73	73	70	64	129	1,056	2.4
Miscellaneous Specimen	30	42	49	43	64	517	1.1
Ovine	28	42	31	14	35	311	0.7
Porcine	1,033	1,315	1,319	1,212	1,290	13,851	31.0
TOTAL	3,324	4,238	4,599	4,211	4,085	44,724	100.0

Accessions by County



OUT OF STATE:

Alabama	4	Idaho	4	Missouri	261	Pennsylvania	66
Alaska	3	Illinois	231	Montana	19	South Carolina	4
Arizona	5	Indiana	123	Nebraska	650	South Dakota	365
Arkansas	197	Iowa	862	New Hampshire	3	Tennessee	17
California	33	Kansas	252	New Jersey	9	Texas	78
Colorado	249	Kentucky	596	New Mexico	5	Utah	6
Connecticut	4	Louisiana	1	New York	31	Vermont	13
Delaware	2	Maine	7	North Carolina	224	Virginia	14
Florida	21	Maryland	13	North Dakota	170	Washington	67
Georgia	32	Massachusetts	3	Ohio	103	West Virginia	2
Hawaii	1	Michigan	102	Oklahoma	653	Wisconsin	1,625
		Mississippi	12	Oregon	10	Wyoming	41

INTERNATIONAL:

Brazil	1	Canada	79	Germany	4
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Disease Diagnoses by Animal Species

Diagnoses for each animal species are listed in alphabetical order under various organ systems, which are arranged as follows in accordance with *Standard International Veterinary Nomenclature*:

- 0 Body as a Whole (multisystemic diseases and all toxicoses)
- 1 Integumentary (including mammary gland)
- 2 Musculoskeletal
- 3 Respiratory (including nasal passages)
- 4 Cardiovascular
- 5 Hemic and Lymphatic
- 6 Digestive (including lip, oral structures, liver, and pancreas)
- 7 Urogenital (including prepuce, scrotum, and vulva)
- 8 Endocrine
- 9 Nervous
- X Special Senses (including eyelid and pinna)

Note: Since one case may be diagnosed with several diseases, the number of cases may differ from the number of diagnoses. For select organ systems and species, this report provides both the number of cases (accessions) and the number of related diagnoses which were presented to the diagnostic laboratory this fiscal year.

AVIAN

CHICKEN	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
0 <u>Body as a Whole</u>													
Abdomen-Hemoperitoneum	1	-	-	-	-	-	-	-	1	-	-	-	-
Abscess	1	-	-	-	-	-	-	-	-	-	-	1	-
Bedding, Microbiologic Exam	1	-	-	1	-	-	-	-	-	-	-	-	-
Cannibalism	4	-	-	-	-	1	-	-	1	-	-	-	2
Dehydration	2	1	-	-	-	-	-	1	-	-	-	-	-
Edema, Generalized	1	-	-	-	-	-	-	-	-	-	1	-	-
Emaciation	8	-	-	-	-	3	-	2	1	-	1	1	-
Feed-Bacteriologic Exam	11	-	2	-	1	2	1	1	1	1	1	1	-
Gout	9	1	-	-	-	2	2	1	-	-	-	-	3
Growth Retardation	1	-	-	-	-	-	-	-	-	-	1	-	-
Health Evaluation, Normal	3	-	1	-	-	-	-	-	-	-	-	-	2
Marek's Disease	13	-	1	1	2	2	1	2	2	1	-	-	1
Metabolic Imbalance, Serum Electrolytes	1	-	-	-	-	1	-	-	-	-	-	-	-
Neonatal Death	44	1	1	5	4	2	5	3	6	7	2	4	4
Neonatal Weakness	1	-	-	-	-	-	-	-	-	1	-	-	-
Neoplasm, Carcinoma	1	-	-	-	-	-	-	-	-	-	1	-	-
Neoplasm, Carcinoma, Metastatic	1	-	-	-	-	1	-	-	-	-	-	-	-
Omphalitis	6	-	1	-	1	-	2	-	1	-	-	-	1
Parasitism	1	-	-	-	-	-	-	-	-	-	-	-	1
Peritonitis	9	-	-	-	-	4	1	2	-	1	1	-	-
Peritonitis, Egg Yolk	2	1	-	-	-	-	-	-	-	-	-	1	-
Septicemia, Bacterial	1	-	1	-	-	-	-	-	-	-	-	-	-
Septicemia, <i>Escherichia coli</i>	8	-	1	1	-	1	2	-	-	-	1	1	1
Septicemia, <i>Pasteurella multocida</i>	2	-	-	-	-	-	-	-	-	1	-	-	1
Septicemia, <i>Salmonella sp.</i>	13	1	4	3	1	1	-	1	1	1	-	-	-
Septicemia, <i>Staphylococcus sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Starvation	4	-	-	-	-	-	2	-	1	1	-	-	-
Trauma	2	-	-	-	-	-	-	1	-	-	-	1	-
Virus Infection, Pox	2	-	-	-	-	-	-	1	-	-	-	-	1
Yolk Sac Infection	5	-	-	-	1	1	1	1	1	-	-	-	-
1 <u>Integumentary</u>													
Abscess	1	-	-	-	-	-	-	-	-	-	-	-	1
Cellulitis	2	-	-	1	-	-	-	-	-	1	-	-	-
Dermatitis, Necrotic	1	-	-	-	-	1	-	-	-	-	-	-	-
Dermatitis, Ulcerative	1	-	-	-	-	-	-	-	-	1	-	-	-

CHICKEN (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
<u>2 Musculoskeletal</u>													
Arthritis, <i>Staphylococcus aureus</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Arthropathy	1	-	-	-	-	-	-	-	1	-	-	-	-
Bone-Malformation	1	-	-	-	-	1	-	-	-	-	-	-	-
Bone-Osteomalacia	3	1	-	-	-	1	-	1	-	-	-	-	-
Muscle-Degeneration	1	1	-	-	-	-	-	-	-	-	-	-	-
<u>3 Respiratory</u>													
Air Sac-Airsacculitis	6	-	-	-	-	1	-	1	-	1	1	1	1
Infectious Laryngotracheitis	5	-	-	-	-	-	2	2	1	-	-	-	-
Larynx-Laryngitis	1	-	-	-	-	-	-	1	-	-	-	-	-
Lung-Bronchitis	1	-	-	1	-	-	-	-	-	-	-	-	-
Lung-Pneumonia	2	-	-	-	-	-	1	-	-	-	-	-	1
Lung-Pneumonia, Mycotic	1	-	1	-	-	-	-	-	-	-	-	-	-
Respiratory Infect., <i>Pasteurella haemolytica</i>	2	1	-	-	-	-	-	1	-	-	-	-	-
Trachea-Tracheitis	11	-	-	1	-	4	1	1	-	1	-	2	1
Trachea-Trach., <i>Ornithobac. rhinotracheale</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
<u>4 Cardiovascular</u>													
Heart-Myocarditis	2	1	-	-	-	-	-	-	-	-	-	-	1
Heart-Pericarditis	1	-	1	-	-	-	-	-	-	-	-	-	-
<u>5 Hemic and Lymphatic</u>													
Bursa of Fabricius-Lymphoid Depletion	2	-	-	-	-	-	-	1	-	-	1	-	-
Neoplasm, Leukosis	2	-	-	-	-	-	1	1	-	-	-	-	-
<u>6 Digestive</u>													
Cecum-Typhlitis	1	-	-	-	-	-	1	-	-	-	-	-	-
Intestine-Neoplasm, Fibrosarcoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Intestine-Parasitism, Coccidia	13	2	3	1	-	1	-	-	-	-	1	3	2
Intestine-Parasitism, Heterakis	1	-	-	-	-	-	1	-	-	-	-	-	-
Intestine-Parasitism, Nematode	2	-	-	-	-	-	1	-	-	-	1	-	-
Intestine-Volvulus	1	-	-	-	-	-	-	1	-	-	-	-	-
Liver-Cirrhosis	2	-	-	-	-	-	-	-	1	-	1	-	-
Liver-Hepatitis	9	-	-	1	-	3	-	-	1	1	-	-	3
Liver-Hepatositis	1	-	1	-	-	-	-	-	-	-	-	-	-
Liver-Lipidosis	3	-	1	-	-	-	-	1	1	-	-	-	-
Liver-Neoplasm, Lymphosarcoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Proventriculus-Proventriculitis	1	-	-	-	-	-	-	-	-	-	-	-	1

CHICKEN (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
<u>7 Urogenital</u>													
Egg Production Decreased	1	-	-	-	-	1	-	-	-	-	-	-	-
Kidney–Nephritis, Interstitial	2	-	-	-	-	1	-	-	-	-	-	-	1
Kidney–Nephrosis	6	1	-	1	-	2	2	-	-	-	-	-	-
Kidney–Urolithiasis	5	-	-	-	-	2	1	1	-	-	-	-	1
Ovary–Neoplasm	1	-	-	-	-	-	-	-	-	-	-	-	1
Oviduct–Salpingitis	4	-	-	-	-	1	-	1	-	-	1	-	1
<u>9 Nervous</u>													
Brain–Encephalomalacia	3	1	2	-	-	-	-	-	-	-	-	-	-
<u>X Special Senses</u>													
Eye–Keratopathy	1	-	-	-	-	-	-	-	1	-	-	-	-
Eyelid–Blepharitis	1	-	-	-	-	-	-	-	-	-	-	1	-

TURKEY

0 Body as a Whole

Abdomen–Hemoperitoneum	2	-	-	-	-	-	2	-	-	-	-	-	-
Bedding, Microbiologic Exam	1	-	1	-	-	-	-	-	-	-	-	-	-
Effusion, Peritoneal	2	-	-	-	-	-	-	-	-	-	-	1	1
Emaciation	4	1	-	-	-	1	1	-	-	-	1	-	-
Gout	1	-	-	-	-	-	-	-	-	-	1	-	-
Neonatal Death	2	-	-	-	-	-	-	-	-	1	-	-	1
Paralysis	1	-	-	-	-	-	-	-	1	-	-	-	-
Parasitism, Histomonas	1	-	1	-	-	-	-	-	-	-	-	-	-
Peritonitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Septicemia, <i>Escherichia coli</i>	10	-	1	1	2	1	-	-	2	1	1	1	-
Septicemia, <i>Pasteurella multocida</i>	2	1	-	1	-	-	-	-	-	-	-	-	-
Septicemia, <i>Salmonella sp.</i>	9	1	1	2	-	-	1	1	1	-	1	1	-
Trauma	2	-	-	-	-	1	1	-	-	-	-	-	-
Virus Infection, Adenovirus	3	-	-	-	2	-	-	-	-	1	-	-	-
Virus Infection, Pneumovirus	4	-	-	1	-	-	-	-	-	-	2	1	-
Yolk Sac Infection	1	-	-	-	-	1	-	-	-	-	-	-	-

TURKEY (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
<u>1 Integumentary</u>													
Parasitism, Mites	1	1	-	-	-	-	-	-	-	-	-	-	-
<u>2 Musculoskeletal</u>													
Bone-Dyschondroplasia	2	-	-	-	2	-	-	-	-	-	-	-	-
Bone-Fracture	1	-	-	-	1	-	-	-	-	-	-	-	-
Bone-Malformation	1	-	-	-	-	-	-	-	-	-	-	-	1
Bone-Osteomalacia	2	-	-	-	-	-	-	-	-	-	-	1	1
Bone-Osteomyelitis	3	-	-	-	1	-	1	1	-	-	-	-	-
Muscle-Degeneration	1	-	-	-	-	-	1	-	-	-	-	-	-
Muscle-Myositis	3	1	1	-	-	-	-	-	-	-	1	-	-
Synovitis	2	-	-	-	1	-	1	-	-	-	-	-	-
<u>3 Respiratory</u>													
Air Sac-Airsacculitis	8	1	-	-	1	-	1	2	-	2	1	-	-
Aspergillosis	1	-	-	1	-	-	-	-	-	-	-	-	-
Lung-Hemorrhage	1	-	-	-	-	1	-	-	-	-	-	-	-
Lung-Pneumonia	6	-	-	2	-	-	2	-	-	1	1	-	-
Lung-Pneumonia, <i>Escherichia coli</i>	3	-	1	1	-	-	1	-	-	-	-	-	-
Lung-Pneumonia, <i>Pasteurella sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Respiratory Inf., <i>Arcanobacterium pyogenes</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Bordetella avium</i>	13	-	1	4	3	-	-	-	1	1	-	1	2
Respiratory Infection, Microbiologic Exam	3	-	-	1	-	-	-	-	-	-	1	1	-
Respiratory Infection, <i>Pasteurella multocida</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Sinus-Sinusitis	3	-	-	1	-	-	-	-	-	1	-	1	-
Trachea-Tracheitis	7	1	-	2	1	1	-	-	1	1	-	-	-
Trachea-Tracheitis, <i>Bordetella avium</i>	7	-	-	-	-	-	-	1	-	2	2	2	-
Trachea-Trach., <i>Ornithobac. rhinotracheale</i>	23	-	-	4	3	3	4	-	3	4	2	-	-
<u>4 Cardiovascular</u>													
Heart-Cardiomyopathy	3	-	-	1	-	-	-	1	-	-	1	-	-
Heart-Hemopericardium	1	-	-	-	-	1	-	-	-	-	-	-	-
Heart-Pericarditis	1	-	-	-	1	-	-	-	-	-	-	-	-
<u>5 Hemic And Lymphatic</u>													
Bursa of Fabricius-Lymphoid Depletion	2	-	1	-	-	-	-	-	-	-	-	-	1

TURKEY (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
<u>6 Digestive</u>													
Crop–Ingluvitis, Mycotic	1	-	1	-	-	-	-	-	-	-	-	-	-
Intestine–Enteritis, Adenovirus	2	-	-	-	1	-	1	-	-	-	-	-	-
Intestine–Enteritis, Idiopathic	4	2	1	-	-	-	-	-	-	-	-	-	1
Intestine–Enteritis, Rotavirus	13	1	2	2	-	-	-	-	-	2	5	1	-
Intestine–Enteritis, <i>Salmonella sp.</i>	2	-	-	-	-	-	-	-	1	1	-	-	-
Intestine–Parasitism, Ascaris	5	-	-	-	-	-	-	-	-	-	2	1	2
Intestine–Parasitism, Coccidia	18	2	1	-	1	1	-	1	1	-	4	4	3
Liver–Hepatitis	3	-	-	1	-	-	-	-	-	1	-	-	1
Ventriculus–Ventriculitis	1	-	-	-	-	-	1	-	-	-	-	-	-
<u>7 Urogenital</u>													
Kidney–Nephritis	1	-	-	-	-	-	-	-	-	-	1	-	-
Kidney–Nephrosis	1	-	-	-	-	-	1	-	-	-	-	-	-
<u>9 Nervous</u>													
Meninges–Meningitis, Suppurative	1	-	-	1	-	-	-	-	-	-	-	-	-

MISCELLANEOUS AVIAN SPECIES

CANARY

Abscess	1	-	-	-	1	-	-	-	-	-	-	-	-
Adrenal–Necrosis	1	-	-	-	-	-	-	-	-	-	-	1	-
Dermatitis, Podo	2	-	-	-	-	-	-	-	-	2	-	-	-
Heart–Cardiomyopathy	1	-	-	-	-	-	-	-	-	-	-	1	-
Heart–Myocarditis	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine–Parasitism, Coccidia	1	-	-	-	-	-	-	-	-	1	-	-	-
Kidney–Nephrosis	1	-	-	-	-	-	-	-	-	1	-	-	-
Liver–Hepatitis	1	-	-	1	-	-	-	-	-	-	-	-	-
Liver–Lipidosis	1	-	-	-	-	-	-	-	-	-	-	1	-
Lung–Parasitism, Air Sac Mites	1	-	-	-	-	-	-	-	-	1	-	-	-
Lung–Pneumonia	1	-	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Leukosis	1	-	-	-	-	-	-	-	1	-	-	-	-
Septicemia, Bacterial	1	-	-	-	-	-	-	-	-	1	-	-	-
Septicemia, <i>Escherichia coli</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Spleen–Splenitis	1	-	-	-	-	-	-	-	-	1	-	-	-

MISCELLANEOUS AVIAN (continued) Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
CANARY (continued)												
Sudden Unexpected Death	1	-	-	-	-	-	1	-	-	-	-	-
Tuberculosis	1	-	-	-	-	-	-	-	1	-	-	-
COCKATOO												
Brain-Encephalitis, Non-Suppurative	1	-	1	-	-	-	-	-	-	-	-	-
Chlamydiosis	1	-	1	-	-	-	-	-	-	-	-	-
Emaciation	1	-	-	1	-	-	-	-	-	-	-	-
Feces-Microbiologic Exam	2	-	1	-	-	-	-	1	-	-	-	-
Intestine-Parasitism, Cestode	1	-	1	-	-	-	-	-	-	-	-	-
Kidney-Nephrosis	1	-	1	-	-	-	-	-	-	-	-	-
Liver-Hemosiderosis	1	-	-	-	-	-	-	-	-	-	-	1
Liver-Hepatopathy	1	-	-	1	-	-	-	-	-	-	-	-
Liver-Lipidosis	1	-	-	-	-	-	-	-	-	-	-	1
Neurologic Disorder, Idiopathic	1	-	-	1	-	-	-	-	-	-	-	-
Proventriculus-Impaction	1	-	1	-	-	-	-	-	-	-	-	-
Psittacine Wasting Disease	2	-	1	-	-	-	-	-	-	-	-	1
Sudden Unexpected Death	2	-	-	-	-	-	1	1	-	-	-	-
Toxicosis, Zinc	1	-	-	-	-	-	-	-	1	-	-	-
Trauma	1	-	-	-	-	-	1	-	-	-	-	-
CRANE												
Brain-Hemorrhage	1	-	-	-	-	-	-	-	-	-	-	1
Trauma	1	-	-	-	-	-	-	-	-	-	-	1
DUCK (DOMESTIC)												
Emaciation	1	-	-	-	-	1	-	-	-	-	-	-
Toxicosis, Lead	1	-	-	-	-	-	1	-	-	-	-	-
DUCK (WILD)												
Amyloidosis	1	-	-	-	-	-	1	-	-	-	-	-
Blood-Parasitism, <i>Haemoproteus sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-
Blood-Parasitism, <i>Leukocytozoon sp.</i>	2	2	-	-	-	-	-	-	-	-	-	-
Crop-Ingluvitis	1	-	-	-	-	-	1	-	-	-	-	-
Emaciation	1	1	-	-	-	-	-	-	-	-	-	-
Esophagus-Esophagitis	2	1	-	-	-	-	1	-	-	-	-	-
Feces-Microbiologic Exam	1	-	-	1	-	-	-	-	-	-	-	-
Intestine-Enteritis, Hemorrhagic	1	-	-	-	-	-	1	-	-	-	-	-
Intestine-Obstruction	1	-	-	-	-	-	-	-	-	-	1	-

MISCELLANEOUS AVIAN (continued) Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
DUCK (WILD) continued												
Kidney–Glomerulosclerosis	1	-	-	-	-	-	-	-	-	-	1	-
Kidney–Mineralization	1	-	-	-	-	1	-	-	-	-	-	-
Liver–Hepatitis	2	1	-	-	-	-	-	-	1	-	-	-
Peritonitis	1	-	-	-	-	-	-	-	-	-	1	-
Polyserositis	1	1	-	-	-	-	-	-	-	-	-	-
Septicemia, <i>Staphylococcus sp.</i>	1	-	-	-	-	-	-	-	1	-	-	-
Spleen–Splinitis	1	-	-	-	-	-	-	-	-	-	1	-
Sudden Unexpected Death	1	-	-	-	-	-	-	-	-	-	1	-
Toxicosis, Lead	2	-	-	-	-	1	-	-	1	-	-	-
EAGLE												
Blood Vessel–Angiopathy	1	1	-	-	-	-	-	-	-	-	-	-
Blood Vessel–Thrombosis	1	1	-	-	-	-	-	-	-	-	-	-
Heart–Myocardial Degeneration	1	-	-	-	-	1	-	-	-	-	-	-
Intestine–Ulcer	1	-	-	-	-	-	-	1	-	-	-	-
Kidney–Nephrosis	1	-	-	-	-	1	-	-	-	-	-	-
Liver–Cholangiohepatitis	1	1	-	-	-	-	-	-	-	-	-	-
Liver–Hemosiderosis	1	-	-	-	-	-	-	1	-	-	-	-
Liver–Hepatitis	3	1	-	-	-	-	-	1	1	-	-	-
Liver–Hepatositis	2	2	-	-	-	-	-	-	-	-	-	-
Liver–Lipidosis	1	-	-	-	-	-	-	-	1	-	-	-
Lung–Neoplasm, Sarcoma, Metastatic	2	2	-	-	-	-	-	-	-	-	-	-
Lung–Pneumonia	1	-	-	-	-	-	-	-	1	-	-	-
Neoplasm, Fibrosarcoma	1	-	-	-	-	-	-	-	-	-	1	-
Neoplasm, Hemangiosarcoma	2	2	-	-	-	-	-	-	-	-	-	-
Peritonitis	1	-	-	-	-	-	-	1	-	-	-	-
Toxicosis, Lead	4	-	-	-	-	-	2	1	-	1	-	-
FALCON												
Air Sac–Airsacculitis	2	-	-	1	-	-	-	-	-	-	1	-
Blood Vessel–Angiopathy	1	-	-	-	-	-	-	-	-	1	-	-
Gout	2	-	-	-	-	-	-	-	-	1	1	-
Heart–Heart Failure, Acute	1	-	-	-	-	1	-	-	-	-	-	-
Kidney–Glomerulosclerosis	1	-	-	-	-	-	-	-	-	1	-	-
Kidney–Mineralization	1	-	-	-	-	-	-	1	-	-	-	-
Kidney–Nephrosis	3	-	-	1	-	-	-	-	-	1	1	-
Liver–Parasitism	1	-	-	1	-	-	-	-	-	-	-	-
Lung–Pneumonia, Foreign Body	1	-	-	1	-	-	-	-	-	-	-	-

MISCELLANEOUS AVIAN (continued) Total Jl Ag Sp Oc Nv Dc Jn Fb Mr Ap My Jn

FALCON (continued)

Neoplasm, Sarcoma, Metastatic	1	-	-	-	-	-	1	-	-	-	-	-
Sudden Unexpected Death	1	-	-	-	-	-	1	-	-	-	-	-

FLAMINGO

Neoplasm, Squamous Cell Carcinoma	1	-	-	-	-	1	-	-	-	-	-	-
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GOOSE

Blood-Hemorrhage, Focal	1	-	-	-	-	-	1	-	-	-	-	-
Eye-Keratitis	1	-	-	-	-	-	-	-	-	-	1	-
Intestine-Enteritis, Lymphoplasmacytic	1	-	-	1	-	-	-	-	-	-	-	-
Intestine-Enteritis, <i>Salmonella sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-
Intestine-Parasitism, Coccidia	1	1	-	-	-	-	-	-	-	-	-	-
Septicemia, Bacterial	1	-	1	-	-	-	-	-	-	-	-	-

GULL

Crop-Ingluvitis	1	-	-	-	-	-	-	-	-	1	-	-
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HAWK

Dermatitis, Eosinophilic	1	-	-	-	-	-	-	-	1	-	-	-
Dermatitis, Necrotic	1	-	-	-	-	-	-	-	-	-	-	1
Heart-Parasitism, <i>Sarcocystis sp.</i>	1	-	-	-	-	-	-	-	1	-	-	-
Intestine-Enteritis, Idiopathic	1	-	-	-	-	-	-	-	1	-	-	-
Intestine-Enteritis, Necrotic	1	-	-	-	-	-	-	-	1	-	-	-
Liver-Lipidosis	1	-	-	1	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Aspergillus sp.</i>	1	-	-	-	1	-	-	-	-	-	-	-
Septicemia, Bacterial	1	-	-	-	-	-	-	-	1	-	-	-
Spleen-Splenitis	1	-	-	1	-	-	-	-	-	-	-	-
Sudden Unexpected Death	1	-	-	-	1	-	-	-	-	-	-	-
Virus Infection, Herpes	1	-	1	-	-	-	-	-	-	-	-	-

KINGFISHER

Feces-Microbiologic Exam	1	-	-	1	-	-	-	-	-	-	-	-
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MISCELLANEOUS AVIAN SPECIES

Asphyxiation	1	-	-	-	-	-	-	-	-	-	1	-
Blood-Coagulation Disorder	1	-	-	-	-	-	-	-	-	-	-	1
Blood-Hemorrhage, Focal	1	-	-	-	-	-	-	-	-	-	-	1

MISCELLANEOUS AVIAN (continued) Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
MISCELLANEOUS AVIAN SPECIES (continued)												
Brain–Encephalomalacia	1	1	-	-	-	-	-	-	-	-	-	-
Brain–Encephalopathy	1	-	-	-	-	-	-	1	-	-	-	-
Crop–Impaction	1	-	-	-	-	-	-	-	-	-	-	1
Emaciation	2	-	-	-	-	1	-	-	-	-	-	1
Feces–Microbiologic Exam	11	2	1	1	-	1	1	-	-	1	3	1
Feed–Bacteriologic Exam	1	-	-	-	1	-	-	-	-	-	-	-
Gout	1	-	1	-	-	-	-	-	-	-	-	-
Health Evaluation, Normal	2	-	1	-	-	-	-	-	-	1	-	-
Heart–Cardiomyopathy	1	-	-	-	-	-	-	-	-	-	1	-
Heart–Myocarditis	1	-	1	-	-	-	-	-	-	-	-	-
Intestine–Parasitism, <i>Coccidia</i>	1	1	-	-	-	-	-	-	-	-	-	-
Kidney–Cyst	1	1	-	-	-	-	-	-	-	-	-	-
Kidney–Nephrosis	2	-	1	-	-	-	-	1	-	-	-	-
Liver–Hepatitis	3	-	2	-	-	-	1	-	-	-	-	-
Liver–Hepatositis	2	-	-	-	-	-	-	-	-	-	-	2
Liver–Lipidosis	1	-	-	-	-	-	-	-	-	-	-	1
Lung–Pneumonia	1	-	-	-	-	-	-	-	-	-	-	1
Lung–Pneumonia, Mycotic	1	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Squamous Cell Carcinoma	1	-	-	-	-	1	-	-	-	-	-	-
Neurologic Disorder, Idiopathic	2	-	1	-	-	-	1	-	-	-	-	-
Respiratory Infection, <i>Bordetella avium</i>	1	-	1	-	-	-	-	-	-	-	-	-
Respiratory Infection, Microbiologic Exam	1	1	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Staphylococcus aureus</i>	1	-	1	-	-	-	-	-	-	-	-	-
Septicemia, Bacterial	1	-	1	-	-	-	-	-	-	-	-	-
Septicemia, <i>Streptococcus sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-
Sudden Unexpected Death	5	2	-	-	1	-	1	-	-	-	-	1
Ventriculus–Ventriculitis	1	-	1	-	-	-	-	-	-	-	-	-
Virus Infection, Polyomavirus	2	-	-	-	-	-	-	-	-	-	-	2
OSTRICH												
Bone–Dyschondroplasia	1	-	1	-	-	-	-	-	-	-	-	-
Bone–Osteomalacia	1	-	1	-	-	-	-	-	-	-	-	-
Emaciation	1	-	-	1	-	-	-	-	-	-	-	-
Intestine–Enteritis, <i>Clostridium perfringens</i>	1	-	1	-	-	-	-	-	-	-	-	-
Kidney–Nephrosis	1	-	-	1	-	-	-	-	-	-	-	-
Proventriculus–Impaction	1	-	1	-	-	-	-	-	-	-	-	-
Weakness	1	-	-	-	-	-	-	1	-	-	-	-

MISCELLANEOUS AVIAN (continued) Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
OWL												
Blood Vessel–Atherosclerosis	1	1	-	-	-	-	-	-	-	-	-	-
Blood–Parasitism, <i>Haemoproteus sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-
B. Marrow–Neopl., Myeloprolif. Disorder	1	-	1	-	-	-	-	-	-	-	-	-
Cecum–Typhlitis	1	-	-	-	-	-	-	-	-	-	1	-
Granulomas, Generalized	1	-	1	-	-	-	-	-	-	-	-	-
Heart–Fibrosis	1	1	-	-	-	-	-	-	-	-	-	-
Kidney–Nephritis, Interstitial	1	-	-	-	-	-	-	-	-	-	1	-
Liver–Cirrhosis	1	-	-	-	-	-	-	-	-	-	1	-
Liver–Hepatitis	1	-	-	-	-	-	-	-	-	-	1	-
Liver–Infarction	1	-	-	-	-	-	-	-	-	-	1	-
Septicemia, Bacterial	1	-	-	-	-	-	1	-	-	-	-	-
Septicemia, <i>Mycobacterium sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-
Testicle–Atrophy	1	-	-	-	-	-	-	-	-	-	1	-
PARTRIDGE												
Respiratory Infection, <i>Mycoplasma sp.</i>	1	-	-	-	-	-	1	-	-	-	-	-
PEACOCK												
Liver–Hepatitis	1	-	1	-	-	-	-	-	-	-	-	-
Liver–Hepatositis	1	-	1	-	-	-	-	-	-	-	-	-
Liver–Parasitism, Ascaris (Larvae)	1	-	1	-	-	-	-	-	-	-	-	-
Parasitism, Histomonas	1	-	1	-	-	-	-	-	-	-	-	-
Septicemia, <i>Clostridium perfringens</i>	1	-	1	-	-	-	-	-	-	-	-	-
PENQUIN												
Kidney–Nephrosis	1	-	-	1	-	-	-	-	-	-	-	-
Liver–Hepatitis	1	-	-	1	-	-	-	-	-	-	-	-
Lung–Pneumonia, Interstitial	1	-	-	1	-	-	-	-	-	-	-	-
PHEASANT												
Aspergillosis	1	-	-	-	-	-	-	-	-	-	-	1
Blood Vessel–Vasculitis	1	-	-	1	-	-	-	-	-	-	-	-
Cannibalism	1	1	-	-	-	-	-	-	-	-	-	-
Cecum–Typhlitis	2	1	-	-	-	-	-	-	-	-	1	-
Eye–Conjunctivitis	1	-	-	-	-	-	1	-	-	-	-	-
Health Evaluation, Normal	1	-	-	-	-	-	-	-	-	-	-	1

MISCELLANEOUS AVIAN (continued) Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
PHEASANT (continued)												
Intestine-Enteritis, Rotavirus	1	-	-	-	-	-	-	-	-	-	1	-
Intestine-Obstruction	2	1	-	-	-	-	-	-	-	-	1	-
Intestine-Parasitism, Coccidia	1	-	-	1	-	-	-	-	-	-	-	-
Liver-Hepatitis	1	-	-	1	-	-	-	-	-	-	-	-
Lung-Pneumonia	1	-	-	-	1	-	-	-	-	-	-	-
Lung-Pneumonia, <i>Escherichia coli</i>	1	1	-	-	-	-	-	-	-	-	-	-
Meninges-Meningitis	1	1	-	-	-	-	-	-	-	-	-	-
Mortality, Increased	1	-	-	-	1	-	-	-	-	-	-	-
Neonatal Death	2	1	-	-	-	-	-	-	-	-	1	-
Parasitism, Histomonas	1	-	-	-	1	-	-	-	-	-	-	-
Polyserositis	1	1	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Mycoplasma sp.</i>	2	-	-	-	-	2	-	-	-	-	-	-
Septicemia, <i>Escherichia coli</i>	2	-	-	1	-	-	-	-	-	-	-	1
Septicemia, <i>Salmonella sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-
Sinus-Sinusitis	2	-	-	-	1	-	1	-	-	-	-	-
Spleen-Splenitis	1	-	-	1	-	-	-	-	-	-	-	-
Ventriculus-Rupture	1	1	-	-	-	-	-	-	-	-	-	-
Virus Infection, Adenovirus	2	-	-	1	1	-	-	-	-	-	-	-
PIGEON/DOVE												
Air Sac-Airsacculitis	1	1	-	-	-	-	-	-	-	-	-	-
Blood-Hemorrhage, Focal	1	1	-	-	-	-	-	-	-	-	-	-
Brain-Encephalitis, Non-Suppurative	1	-	-	1	-	-	-	-	-	-	-	-
Brain-Encephalopathy	1	-	-	-	-	1	-	-	-	-	-	-
Crop-Ingluvitis	1	-	-	-	-	-	-	-	-	1	-	-
Crop-Ingluvitis, Mycotic	1	-	-	1	-	-	-	-	-	-	-	-
Dermatitis, Folliculitis	2	-	-	1	1	-	-	-	-	-	-	-
Esophagus-Esophagitis	1	-	1	-	-	-	-	-	-	-	-	-
Eyelid-Neoplasm, Papilloma	1	-	-	-	-	-	-	-	-	-	1	-
Feces-Microbiologic Exam	3	-	1	-	-	1	1	-	-	-	-	-
Gout	1	-	-	-	-	-	-	-	-	-	-	1
Intestine-Parasitism, Ascaris	1	-	-	-	-	-	1	-	-	-	-	-
Intestine-Parasitism, <i>Capillaria sp.</i>	2	-	-	1	-	-	-	-	-	1	-	-
Intestine-Parasitism, Coccidia	8	-	-	3	-	1	1	-	1	-	1	1
Intestine-Parasitism, Nematode	1	-	-	-	-	-	-	-	-	-	1	-
Kidney-Mineralization	1	-	-	-	-	-	-	-	-	-	-	1
Kidney-Nephritis, Interstitial	6	-	-	-	-	1	-	1	-	2	1	1
Liver-Hemosiderosis	2	-	-	-	-	-	-	1	-	-	-	1

MISCELLANEOUS AVIAN (continued) Total JI Ag Sp Oc Nv Dc Jn Fb Mr Ap My Jn

PIGEON/DOVE (continued)

Liver–Hepatitis	14	1	1	1	-	-	1	3	2	-	2	2	1
Liver–Hepatosi	1	-	-	-	-	-	-	1	-	-	-	-	-
Lung–Hemorrhage	2	-	-	-	-	-	-	1	1	-	-	-	-
Lung–Pneumonia	1	-	-	-	-	-	-	1	-	-	-	-	-
Nerve–Neuropathy	1	-	-	-	-	-	1	-	-	-	-	-	-
Oral Cavity–Stomatitis	1	-	-	-	-	-	-	-	-	-	-	-	1
Peritonitis	2	1	-	1	-	-	-	-	-	-	-	-	-
Respiratory Infection, Microbiologic Exam	1	1	-	-	-	-	-	-	-	-	-	-	-
Septicemia, <i>Escherichia coli</i>	1	-	-	-	-	-	-	-	-	-	-	-	1
Septicemia, <i>Salmonella sp.</i>	4	-	-	-	-	-	-	2	-	-	-	1	1
Sudden Unexpected Death	3	-	-	1	-	-	-	-	-	1	1	-	-
Synovitis	1	-	-	-	-	-	1	-	-	-	-	-	-
Toxicosis, Iron	1	-	-	-	-	-	-	1	-	-	-	-	-
Virus Infection, Herpes	3	-	-	-	-	-	1	2	-	-	-	-	-
Virus Infection, Paramyxovirus	1	-	-	-	-	-	1	-	-	-	-	-	-
Weakness	2	-	1	-	-	-	-	-	-	-	-	-	1

PSITTACINE–MISCELLANEOUS

Air Sac–Airsacculitis	4	1	1	-	-	1	-	-	-	-	1	-	-
Amyloidosis	1	-	-	-	-	-	-	-	-	1	-	-	-
Aspergillosis	1	1	-	-	-	-	-	-	-	-	-	-	-
Blood Vessel–Angiopathy	2	1	-	-	-	-	-	-	-	-	-	-	1
Brain–Encephalitis, Non-Suppurative	3	-	-	1	1	-	-	-	-	-	-	-	1
Bursa of Fabricius–Lymphoid Depletion	2	-	-	-	-	-	-	-	-	-	2	-	-
Cellulitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Chlamydiosis	3	-	-	-	-	-	-	1	-	-	1	1	-
Crop–Impaction	1	-	-	-	-	-	-	-	-	1	-	-	-
Crop–Ingluvitis	1	-	-	-	1	-	-	-	-	-	-	-	-
Crop–Ingluvitis, Mycotic	2	-	-	-	-	-	-	-	-	-	1	1	-
Cyst, Epidermal	1	-	-	-	-	-	-	-	-	1	-	-	-
Dehydration	1	-	1	-	-	-	-	-	-	-	-	-	-
Emaciation	5	1	2	-	-	-	1	1	-	-	-	-	-
Feces–Microbiologic Exam	60	6	10	6	5	2	3	2	4	10	2	7	3
Gout	6	1	1	1	-	-	1	-	-	1	-	1	-
Heart–Myocarditis	1	-	-	-	-	-	-	-	-	-	-	-	1
Intestine–Enteritis, Yeast Overgrowth	1	1	-	-	-	-	-	-	-	-	-	-	-
Intestine–Parasitism, Trichomoniasis	1	1	-	-	-	-	-	-	-	-	-	-	-
Kidney–Cyst	1	-	-	-	-	1	-	-	-	-	-	-	-
Kidney–Mineralization	2	-	-	-	-	-	1	-	-	-	1	-	-

MISCELLANEOUS AVIAN (continued) Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
PSITTACINE-MISCELLANEOUS (continued)												
Kidney-Nephritis	2	-	-	-	-	2	-	-	-	-	-	-
Kidney-Nephritis, Glomerulo	2	-	-	-	-	1	1	-	-	-	-	-
Kidney-Nephrosis	10	1	1	-	1	-	-	-	2	3	-	2
Liver-Cirrhosis	2	-	-	-	-	-	-	-	1	-	-	1
Liver-Hemosiderosis	2	-	-	-	-	-	-	1	1	-	-	-
Liver-Hepatitis	6	-	-	-	-	1	-	1	1	-	1	2
Liver-Hepatositis	3	1	-	-	1	1	-	-	-	-	-	-
Liver-Lipidosis	3	-	-	-	-	1	-	-	1	1	-	-
Lung-Hemorrhage	3	2	-	-	-	-	-	-	-	-	1	-
Lung-Pneumonia	1	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia, Foreign Body	3	1	-	-	-	-	-	-	-	1	1	-
Lung-Pneumonia, Mycotic	1	-	-	-	-	1	-	-	-	-	-	-
Mineralization	2	-	-	-	-	-	1	-	-	-	-	1
Muscle-Degeneration	1	-	-	1	-	-	-	-	-	-	-	-
Muscle-Myopathy	1	1	-	-	-	-	-	-	-	-	-	-
Muscle-Myositis	1	-	-	-	-	-	-	-	-	1	-	-
Neoplasm, Hemangiosarcoma	1	-	-	-	-	-	-	-	-	-	-	1
Neoplasm, Lipoma	1	-	-	-	-	-	-	-	-	1	-	-
Neoplasm, Papilloma	1	-	-	-	-	-	-	-	-	-	1	-
Neurologic Disorder, Idiopathic	1	-	-	-	1	-	-	-	-	-	-	-
Pancreas-Atrophy	1	-	-	-	1	-	-	-	-	-	-	-
Proventriculus-Proventriculitis	2	-	-	2	-	-	-	-	-	-	-	-
Psittacine Wasting Disease	5	1	-	-	1	-	1	-	-	1	-	1
Respiratory Infection, <i>Bordetella avium</i>	1	-	-	-	-	-	-	-	-	1	-	-
Respiratory Infection, Microbiologic Exam	2	-	-	-	-	-	-	-	2	-	-	-
Septicemia, Bacterial	1	1	-	-	-	-	-	-	-	-	-	-
Septicemia, <i>Escherichia coli</i>	2	-	1	1	-	-	-	-	-	-	-	-
Sinus-Sinusitis	3	-	-	1	-	-	-	-	1	1	-	-
Spleen-Nodular Hyperplasia	1	-	-	1	-	-	-	-	-	-	-	-
Spleen-Splenitis	2	-	-	-	-	-	-	-	1	-	-	1
Sudden Unexpected Death	16	4	3	-	1	1	2	1	1	1	1	-
Thyroid-Atrophy	1	-	1	-	-	-	-	-	-	-	-	-
Toxicosis, Aerosolized Cleaning Solvent	1	-	-	-	1	-	-	-	-	-	-	-
Toxicosis, Lead	2	-	1	-	-	-	-	-	-	-	1	-
Trachea-Obstruction	1	-	1	-	-	-	-	-	-	-	-	-
Tuberculosis	1	-	-	-	-	-	-	-	1	-	-	-
Ventriculus-Ventriculitis	1	-	-	-	-	-	-	-	-	1	-	-
Virus Infection, Adenovirus	2	1	-	-	-	-	-	1	-	-	-	-
Virus Infection, Polyomavirus	5	-	-	1	-	-	-	-	-	3	-	1
Xanthoma	1	1	-	-	-	-	-	-	-	-	-	-

MISCELLANEOUS AVIAN (continued) Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
QUAIL												
Air Sac–Airsacculitis	1	-	-	-	-	-	-	1	-	-	-	-
Cecum–Typhlitis	1	-	1	-	-	-	-	-	-	-	-	-
Emaciation	1	-	-	-	-	-	-	1	-	-	-	-
Intestine–Enteritis, <i>Clostridium colinum</i>	1	-	-	-	-	-	-	-	-	1	-	-
Intestine–Parasitism, Coccidia	1	-	-	-	-	-	-	1	-	-	-	-
Intestine–Parasitism, Nematode	1	-	1	-	-	-	-	-	-	-	-	-
Kidney–Mineralization	1	-	-	-	-	1	-	-	-	-	-	-
Liver–Parasitism, <i>Histomonas sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-
Lung–Bronchitis	1	-	-	-	-	-	-	1	-	-	-	-
SONGBIRD												
Emaciation	1	-	-	-	-	1	-	-	-	-	-	-
Septicemia, <i>Salmonella sp.</i>	1	-	-	-	-	-	-	1	-	-	-	-
SWAN												
Air Sac–Airsacculitis	2	1	-	-	-	1	-	-	-	-	-	-
Aspergillosis	3	1	1	-	-	-	-	-	-	-	1	-
Emaciation	2	1	-	-	-	-	-	-	-	-	1	-
Feces–Microbiologic Exam	1	-	-	-	-	-	-	-	-	-	-	1
Kidney–Nephrosis	1	-	-	-	-	1	-	-	-	-	-	-
Liver–Hepatitis	1	-	-	-	-	-	-	-	-	-	1	-
Lung–Pneumonia, Mycotic	1	-	-	-	-	1	-	-	-	-	-	-
Neoplasm, Fibrosarcoma	1	-	-	-	-	-	1	-	-	-	-	-
Toxicosis, Lead	8	-	-	-	-	1	5	-	-	2	-	-
Trauma	1	-	-	-	-	1	-	-	-	-	-	-
UNKNOWN AVIAN SPECIES												
Feces–Microbiologic Exam	7	1	1	2	1	-	-	1	1	-	-	-

BOVINE

BOVINE	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
O <u>Body as a Whole</u>													
Abdomen–Hemoperitoneum	1	-	-	-	-	-	1	-	-	-	-	-	-
Abscess	3	2	-	1	-	-	-	-	-	-	-	-	-
Anomaly	5	-	1	-	-	-	1	1	2	-	-	-	-
Bedding, Microbiologic Exam	42	2	3	2	2	4	3	6	2	12	3	2	1
Bovine Viral Diarrhea	46	2	1	2	3	6	3	4	8	4	5	4	4
Deficiency, Copper	12	1	-	-	-	-	3	1	1	2	-	-	4
Deficiency, Manganese	1	-	-	-	-	-	1	-	-	-	-	-	-
Deficiency, Vitamin E	1	-	-	-	-	-	-	-	-	1	-	-	-
Deficiency, Zinc	3	-	-	-	-	-	1	-	1	-	-	1	-
Downer Cow Syndrome	9	-	-	1	1	-	1	-	1	1	1	1	2
Effusion, Peritoneal	1	-	-	-	1	-	-	-	-	-	-	-	-
Emaciation	47	1	-	-	7	6	7	15	3	5	2	-	1
Feed–Bacteriologic Exam	6	-	-	1	1	-	-	2	1	-	1	-	-
Grain Overload	6	-	-	1	1	-	-	1	1	-	1	-	1
Growth Retardation	1	-	-	-	-	1	-	-	-	-	-	-	-
Health Evaluation, Normal	1	-	-	-	-	-	-	1	-	-	-	-	-
Icterus	2	-	1	-	-	-	-	-	-	-	-	-	1
Infectious Bovine Rhinotracheitis	2	-	-	-	1	-	1	-	-	-	-	-	-
Metabolic Imbalance, Ketosis	6	-	-	-	-	-	-	-	1	1	1	2	1
Metabolic Imbalance, Serum Electrolytes	3	-	1	-	-	-	-	-	-	-	-	1	1
Neonatal Death	3	-	-	-	1	-	-	-	-	2	-	-	-
Neonatal Weakness	3	-	1	-	-	-	-	-	-	-	-	1	1
Neoplasm, Carcinoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Lymphosarcoma	2	-	-	-	-	-	-	-	-	-	1	-	1
Omphalitis	3	-	-	-	-	-	1	-	-	-	1	1	-
Peritonitis	34	2	-	3	3	3	4	4	2	1	6	3	3
Septicemia, <i>Actinobacillus suis</i>	2	-	-	-	-	-	-	1	1	-	-	-	-
Septicemia, <i>Arcanobacterium pyogenes</i>	1	-	-	-	-	-	-	-	1	-	-	-	-
Septicemia, Bacterial	9	2	2	-	3	-	-	-	1	-	-	-	1
Septicemia, <i>Clostridium chauvoei</i>	4	-	-	2	1	-	-	-	-	1	-	-	-
Septicemia, <i>Clostridium septicum</i>	2	-	-	-	-	1	-	-	-	1	-	-	-
Septicemia, <i>Clostridium sordelli</i>	1	-	-	-	-	-	-	-	-	-	-	-	1
Septicemia, <i>Escherichia coli</i>	20	2	2	2	-	1	1	2	2	2	2	1	3
Septicemia, <i>Haemophilus somnus</i>	2	-	-	-	1	-	-	-	-	1	-	-	-
Septicemia, <i>Listeria sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1	-
Septicemia, <i>Pasteurella haemolytica</i>	4	-	-	-	-	-	-	-	1	2	1	-	-

BOVINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Septicemia, <i>Salmonella sp.</i>	83	8	15	15	9	5	8	4	2	2	7	3	5
Starvation	5	-	-	-	-	1	1	3	-	-	-	-	-
Steatitis	2	-	-	1	-	-	-	-	-	1	-	-	-
Sudden Unexpected Death	93	6	4	4	11	4	8	13	9	7	11	6	10
Toxicosis, Copper	14	1	1	-	1	1	1	2	-	3	2	-	2
Toxicosis, Lead	2	-	1	-	-	1	-	-	-	-	-	-	-
Toxicosis, Organophosphate	1	-	-	1	-	-	-	-	-	-	-	-	-
Toxicosis, Selenium	2	-	-	-	-	-	1	-	-	-	1	-	-
Toxicosis, Zinc	17	-	-	-	2	-	2	1	4	4	-	-	4
Virus Infection, Herpes	8	-	1	1	-	-	-	-	-	1	2	2	1
Weakness	5	1	-	-	-	-	-	-	1	-	2	1	-
1 Integumentary													
Cellulitis	4	-	-	1	-	-	1	-	1	1	-	-	-
Dermatitis, Allergic	1	1	-	-	-	-	-	-	-	-	-	-	-
Dermatitis, Bacterial	1	-	-	-	-	-	-	-	-	-	-	1	-
Dermatitis, Eosinophilic	1	-	-	-	-	-	-	-	-	-	-	-	1
Dermatitis, Mycotic	1	-	-	-	-	-	-	-	-	1	-	-	-
Dermatitis, Podo	4	1	-	-	1	2	-	-	-	-	-	-	-
Dermatitis, Ulcerative	1	-	-	-	-	-	-	-	-	-	1	-	-
Dermatosis, Adnexal Dysplasia	2	-	-	-	-	-	-	-	2	-	-	-	-
Hematoma	1	-	-	-	1	-	-	-	-	-	-	-	-
Mammary–Mastitis	15	1	2	-	-	1	2	-	3	1	2	2	1
Mammary–Mastitis, <i>Arcanobac. pyogenes</i>	18	1	1	-	-	-	1	5	5	1	-	3	1
Mammary–Mastitis, <i>Bacillus sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Mammary–Mastitis, Coliforms	47	9	3	6	5	2	6	2	4	4	1	2	3
Mammary–Mastitis, <i>Kleb. pneumoniae</i>	46	5	2	7	4	4	-	4	7	5	3	2	3
Mammary–Mastitis, <i>Pseudomonas sp.</i>	19	-	2	2	2	2	3	2	2	2	-	-	2
Mammary–Mastitis, <i>Staph. aureus</i>	135	6	5	10	10	9	11	6	21	21	14	11	11
Mammary–Mastitis, <i>Staphylococcus sp.</i>	106	11	11	14	16	11	7	2	12	9	6	5	2
Mammary–Mastitis, <i>Strep. agalactiae</i>	16	-	1	3	-	-	1	1	1	2	4	1	2
Mammary–Mastitis, <i>Strep. dysgalactiae</i>	154	7	8	15	16	11	17	9	11	27	15	12	6
Mammary–Mastitis, <i>Streptococcus sp.</i>	3	1	-	-	-	1	-	-	1	-	-	-	-
Mammary–Mastitis, <i>Strep. uberis</i>	139	9	5	13	10	11	12	4	15	27	16	12	5
Mammary–Mastitis, Yeast	6	-	1	1	2	1	-	-	-	1	-	-	-
Milk–Bulk Tank, Bacteriologic Exam	301	26	27	22	23	27	10	24	39	40	26	15	22
Neoplasm, Lymphosarcoma	2	-	-	-	1	-	-	-	-	1	-	-	-
2 Musculoskeletal													
Arthritis	1	-	1	-	-	-	-	-	-	-	-	-	-
Arthritis, <i>Arcanobacterium pyogenes</i>	6	-	-	-	-	1	1	1	1	2	-	-	-
Arthropathy	1	-	-	-	-	-	1	-	-	-	-	-	-

BOVINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Bone-Dyschondroplasia	2	-	-	-	-	-	-	-	-	-	2	-	-
Bone-Fracture	3	-	-	-	1	-	-	-	2	-	-	-	-
Bone-Osteomalacia	1	-	-	-	-	-	-	-	1	-	-	-	-
Bone-Osteomyelitis	2	-	1	-	1	-	-	-	-	-	-	-	-
Bone-Osteopetrosis	1	-	-	-	-	-	-	-	-	-	1	-	-
Muscle-Atrophy	1	-	-	-	-	-	-	-	-	1	-	-	-
Muscle-Degeneration	7	-	1	-	2	-	-	1	1	1	1	-	-
Muscle-Myopathy	2	1	1	-	-	-	-	-	-	-	-	-	-
Muscle-Myositis	10	1	1	1	-	1	1	-	1	2	1	1	-
Muscle-White Muscle Disease	1	-	1	-	-	-	-	-	-	-	-	-	-
Synovitis	1	-	-	-	1	-	-	-	-	-	-	-	-
3 Respiratory													
<i>Respiratory Disorders, Total Cases</i>	373	18	28	31	30	31	37	38	39	35	33	28	25
Infectious Bovine Rhinotracheitis	1	-	-	-	-	-	1	-	-	-	-	-	-
Larynx-Laryngitis	2	-	1	-	-	-	-	1	-	-	-	-	-
Lung-Abscess	13	2	3	2	1	1	-	-	2	1	-	1	-
Lung-Congestion	1	-	-	-	-	-	-	-	-	-	1	-	-
Lung-Edema	14	3	1	3	-	-	1	-	1	1	1	1	2
Lung-Emphysema	8	-	-	1	3	-	-	3	-	-	1	-	-
Lung-Hemorrhage	6	-	-	-	-	-	1	-	2	3	-	-	-
Lung-Pneumonia	65	5	5	8	4	2	8	7	5	8	2	5	6
Lung-Pneu., <i>Arcanobacterium pyogenes</i>	54	4	3	2	5	5	4	3	5	5	5	5	8
Lung-Pneumonia, Atypical Interstitial	3	-	-	-	-	-	2	-	-	-	1	-	-
Lung-Pneu., Bov. Resp. Syncytial Virus	30	-	-	-	-	2	3	6	4	7	2	2	4
Lung-Pneumonia, Broncho	24	-	1	4	2	2	2	2	4	1	3	2	1
Lung-Pneumonia, <i>Escherichia coli</i>	5	1	-	-	2	-	-	-	1	1	-	-	-
Lung-Pneumonia, Foreign Body	11	-	1	-	1	-	2	1	1	1	4	-	-
Lung-Pneumonia, <i>Haemophilus somnus</i>	25	-	1	1	3	4	2	6	2	2	1	2	1
Lung-Pneumonia, Interstitial	21	5	5	2	1	-	2	-	3	-	1	2	-
Lung-Pneumonia, <i>Mycoplasma sp.</i>	8	-	-	-	2	4	-	-	-	2	-	-	-
Lung-Pneumonia, Mycotic	4	-	1	-	-	-	-	-	1	-	1	1	-
Lung-Pneumonia, <i>Pasteurella haemolytica</i>	50	1	4	3	1	7	8	4	7	3	4	4	4
Lung-Pneumonia, <i>Pasteurella multocida</i>	70	-	1	3	11	11	5	11	7	4	9	5	3
Lung-Pneumonia, <i>Pasteurella sp.</i>	2	-	-	-	-	-	1	-	-	-	1	-	-
Lung-Pneumonia, <i>Salmonella sp.</i>	6	-	-	2	2	-	-	-	-	-	1	1	-
Lung-Thrombosis	7	-	1	1	1	1	-	-	-	1	-	2	-
Pleura-Pleuritis	21	1	1	2	2	-	1	1	2	2	5	2	2
Respiratory Infection, <i>Actinobacillus suis</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Resp. Infection, <i>Arcanobacterium pyogenes</i>	2	-	-	-	1	-	-	-	-	-	-	1	-
Respiratory Infection, Microbiologic Exam	24	-	4	2	1	4	-	2	2	2	2	4	1

BOVINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Respiratory Infection, <i>Mycoplasma sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Resp. Infection, <i>Pasteurella haemolytica</i>	1	-	-	-	-	-	-	1	-	-	-	-	-
Respiratory Infection, <i>Pasteurella multocida</i>	4	-	1	-	-	-	-	-	1	-	1	1	-
Resp. Infection, <i>Salmonella typhimurium</i>	1	-	-	-	-	-	1	-	-	-	-	-	-
Trachea-Tracheitis	6	-	-	-	-	-	1	1	2	1	1	-	-
4 Cardiovascular													
Heart-Anomaly	2	-	-	-	-	-	1	-	1	-	-	-	-
Heart-Endocardiosis	1	-	-	-	-	-	-	-	-	-	1	-	-
Heart-Endocarditis	3	-	1	-	-	1	-	-	1	-	-	-	-
Heart-Epicarditis	7	-	3	1	-	-	-	-	-	1	-	-	2
Heart-Fibrosis	3	-	-	-	-	-	-	-	-	-	1	-	2
Heart-Heart Failure, Chronic	2	-	-	-	-	-	-	-	-	-	1	-	1
Heart-Myocardial Degeneration	11	2	-	1	-	2	-	1	1	-	2	1	1
Heart-Myocarditis	9	1	1	-	-	5	-	-	-	-	-	2	-
Heart-Neoplasm, Lymphosarcoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Heart-Parasitism, <i>Sarcocystis sp.</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Heart-Pericarditis	9	1	-	1	-	-	1	-	-	2	-	3	1
Heart-Thrombosis	1	-	-	-	-	-	-	-	-	-	-	1	-
5 Hemic and Lymphatic													
Blood-Hemorrhage, Focal	1	-	-	-	-	-	-	-	-	1	-	-	-
Blood-Hemorrhage, Generalized	2	-	-	1	-	-	-	1	-	-	-	-	-
Immune System-Hypogammaglobulinemia	24	-	3	1	2	1	1	5	2	5	2	-	2
Lymph Node-Hyperplasia	3	-	-	1	1	-	-	1	-	-	-	-	-
Lymph Node-Lymphadenitis	6	1	-	3	-	-	-	-	-	1	-	1	-
Lymph Node-Neoplasm, Lymphosarcoma	3	-	-	1	-	-	1	-	-	-	-	-	1
Spleen-Infarct	2	1	-	1	-	-	-	-	-	-	-	-	-
Spleen-Splenitis	3	1	2	-	-	-	-	-	-	-	-	-	-
Thymus-Hypoplasia	1	-	-	-	-	-	-	1	-	-	-	-	-
Tonsil-Tonsilitis	1	-	-	-	-	-	-	-	-	-	-	-	1
6 Digestive													
<i>Digestive Disorders, Total Cases</i>	1,251	115	114	113	79	80	98	140	114	117	121	94	66
Cecum-Typhlitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Esophagus-Esophagitis	2	-	1	-	-	-	-	-	-	1	-	-	-
Feces-Microbiologic Exam	308	39	38	34	16	15	24	33	33	18	25	19	14
Intestine-Anomaly	2	-	-	-	-	-	-	-	-	1	1	-	-
Intestine-Colitis	11	1	-	-	1	1	-	2	1	1	3	1	-
Intestine-Enteritis, <i>C. perfringens</i> Type A	2	-	-	-	-	-	-	1	-	-	1	-	-

BOVINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Intestine-Enteritis, <i>Clostridium perfringens</i>	6	-	-	-	-	1	1	2	1	1	-	-	-
Intestine-Enteritis, Coronavirus	117	7	2	6	8	9	15	12	17	15	21	4	1
Intestine-Enteritis, Enterovirus	1	-	-	-	-	1	-	-	-	-	-	-	-
Intestine-Enteritis, Eosinophilic	1	-	-	-	-	-	-	-	1	-	-	-	-
Intestine-Enteritis, <i>Escherichia coli</i>	64	6	3	8	4	3	4	7	4	9	8	3	5
Intestine-Enteritis, Hemorrhagic	8	-	-	-	-	1	-	2	-	1	-	3	1
Intestine-Enteritis, Idiopathic	76	7	3	8	4	3	2	18	8	7	4	6	6
Intestine-Enteritis, <i>Klebsiella sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Intestine-Enteritis, Lymphoplasmacytic	1	-	-	-	-	-	-	-	-	-	-	-	1
Int.-Ent., <i>M. paratuberculosis</i> (Johne's)	72	1	5	4	8	8	5	10	6	6	6	10	3
Intestine-Enteritis, Necrotic	10	-	1	3	1	2	2	-	1	-	-	-	-
Intestine-Enteritis, Rotavirus	183	9	7	11	13	13	15	25	17	28	24	12	9
Intestine-Enteritis, <i>Salmonella sp.</i>	140	13	17	21	11	15	12	12	7	7	13	8	4
Intestine-Enteropathy, Atrophic	6	-	-	-	-	3	2	-	-	-	-	-	1
Intestine-Hemorrhage	4	1	-	-	1	-	1	-	-	-	1	-	-
Intestine-Obstruction	3	-	-	-	-	1	-	-	1	-	-	1	-
Intestine-Parasitism, Coccidia	41	7	3	7	4	1	5	3	2	-	3	2	4
Intestine-Parasit., <i>Cryptosporidium sp.</i>	326	34	28	31	22	17	24	36	34	35	32	24	9
Intestine-Parasitism, <i>Moniezia sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Parasitism, Nematode	1	-	-	-	-	1	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Strongyloides sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Trichostrongyle sp.</i>	10	2	1	2	1	-	-	1	1	1	1	-	-
Intestine-Ulcer	1	-	1	-	-	-	-	-	-	-	-	-	-
Intestine-Volvulus	2	-	-	-	-	-	1	1	-	-	-	-	-
Liver-Abscess	7	1	-	-	-	-	1	1	1	1	-	2	-
Liver-Cholangiohepatitis	3	-	1	1	-	-	1	-	-	-	-	-	-
Liver-Hemosiderosis	2	-	-	-	-	-	-	-	-	1	-	-	1
Liver-Hepatitis	13	3	4	-	1	1	-	-	-	4	-	-	-
Liver-Hepatopathy	6	2	-	1	-	-	2	-	-	-	-	1	-
Liver-Hepatositis	16	1	3	-	2	1	2	-	-	1	2	2	2
Liver-Lipidosis	37	1	8	-	2	2	1	-	4	3	4	9	3
Liver-Parasitism, <i>Fascioloides sp.</i>	4	1	-	-	-	-	-	1	-	1	-	-	1
Oral Cavity-Dentition Abnormal	1	-	1	-	-	-	-	-	-	-	-	-	-
Oral Cavity-Glossitis	2	-	-	-	-	-	1	-	-	1	-	-	-
Oral Cavity-Stomatitis	2	-	-	-	-	-	-	-	-	-	-	-	2
Pancreas-Neoplasm, Adenocarcinoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Rumen-Acidosis	1	-	-	-	-	1	-	-	-	-	-	-	-
Stomach-Abomasal Dilatation	2	-	1	1	-	-	-	-	-	-	-	-	-
Stomach-Abomasal Displacement	8	1	-	-	-	1	1	1	1	1	1	-	1
Stomach-Abomasal Ulcer	20	1	1	2	-	1	4	3	1	1	2	1	3
Stomach-Abomasal Volvulus	3	-	-	-	-	-	-	2	-	-	1	-	-
Stomach-Abomasitis	16	1	-	-	2	3	1	1	-	2	4	-	2

BOVINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Stomach—Abomasitis, Mycotic	13	1	-	-	1	-	1	2	1	4	1	2	-
Stomach—Foreign Body	2	-	-	-	-	-	-	1	1	-	-	-	-
Stomach—Impaction	3	-	-	-	-	-	-	-	2	-	-	-	1
Stomach—Neoplasm, Lymphosarcoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Stomach—Rumen Tympany (Bloat)	5	1	1	-	-	-	-	2	-	1	-	-	-
Stomach—Rumenitis	12	1	1	-	1	1	1	3	-	2	1	-	1
Stomach—Rupture	2	-	-	-	-	-	-	-	-	1	1	-	-
Stomach—Traumatic Reticulitis	3	1	-	1	-	-	1	-	-	-	-	-	-
Stomach—Ulcer	2	-	-	-	-	-	1	-	1	-	-	-	-
7 Urogenital													
<i>Reproductive Disorders, Total Cases</i>	468	41	38	35	32	31	28	32	44	65	50	42	30
Abortion, Anasarca	1	-	-	-	-	-	1	-	-	-	-	-	-
Abortion, Anomaly	4	-	-	1	-	-	1	-	-	-	-	1	1
Abortion, Bacterial	4	-	-	1	1	-	-	-	-	-	-	2	-
Abortion, Bacterial, <i>Aeromonas hydrophilia</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Abortion, Bact., <i>Arcanobacterium pyogenes</i>	27	3	1	2	1	2	2	4	2	3	3	3	1
Abortion, Bacterial, <i>Bacillus sp.</i>	6	1	-	-	2	2	-	-	-	-	1	-	-
Abortion, Bacterial, <i>Campylobacter sp.</i>	5	1	2	-	-	1	-	-	-	-	1	-	-
Abortion, Bacterial, <i>Corynebacterium sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Abortion, Bacterial, <i>Escherichia coli</i>	4	-	-	-	2	-	-	-	-	1	1	-	-
Abortion, Bacterial, <i>Listeria sp.</i>	2	-	-	-	-	-	-	-	1	-	1	-	-
Abortion, Bacterial, <i>Pasteurella sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Abortion, Bacterial, <i>Salmonella sp.</i>	2	1	-	-	-	1	-	-	-	-	-	-	-
Abortion, Bacterial, <i>Streptococcus sp.</i>	3	1	-	1	-	-	-	1	-	-	-	-	-
Abortion, Encephalitis	9	1	1	-	-	-	-	-	-	2	2	1	2
Abortion, Epicarditis	30	3	1	4	1	-	1	3	-	7	6	3	1
Abortion, Goiter	1	-	-	-	-	-	-	-	-	-	1	-	-
Abortion, Hepatopathy	1	-	-	-	-	-	-	-	-	1	-	-	-
Abortion, Idiopathic	152	11	17	6	11	12	10	6	13	24	18	13	11
Abortion, Mycotic Placentitis	10	1	-	-	-	-	-	2	2	3	-	1	1
Abortion, Myocarditis	11	2	1	-	-	2	-	1	2	2	-	-	1
Abortion, Parasitism, <i>Neospora sp.</i>	20	4	1	-	3	1	2	2	-	3	1	2	1
Abortion, Placentitis	16	1	3	3	-	-	3	1	3	1	1	-	-
Abortion, Pneumonia	13	2	2	2	-	-	-	-	-	2	2	2	1
Abortion, Viral, Bovine Viral Diarrhea	11	1	-	-	-	-	-	1	4	2	1	-	2
Abortion, Viral, Infect. Bov. Rhinotracheitis	5	-	-	-	-	-	-	1	2	-	-	1	1
Abortion, Yeast	2	-	-	-	-	-	-	1	-	1	-	-	-
Genital Anomaly, Freemartin	102	8	7	13	9	8	6	5	14	7	11	10	4

BOVINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Genital—Anomaly	1	-	1	-	-	-	-	-	-	-	-	-	-
Genital—Bacteriologic Exam	11	-	1	2	-	1	-	1	1	3	1	-	1
Kidney—Cyst	1	-	-	-	-	-	-	1	-	-	-	-	-
Kidney—Hydronephrosis	1	-	-	-	-	-	-	-	-	-	-	1	-
Kidney—Infarction	5	-	-	-	-	1	1	-	-	-	-	3	-
Kidney—Mineralization	2	1	1	-	-	-	-	-	-	-	-	-	-
Kidney—Nephritis	2	-	-	-	-	-	1	-	1	-	-	-	-
Kidney—Nephritis, Glomerulo	3	-	1	-	-	-	-	-	1	-	1	-	-
Kidney—Nephritis, Interstitial	7	-	1	-	-	1	1	1	-	1	-	1	1
Kidney—Nephritis, Pyelo	2	-	-	1	-	-	-	-	-	-	1	-	-
Kidney—Nephrosis	8	2	1	-	2	-	2	-	-	-	-	1	-
Stillbirth, Idiopathic	8	-	-	-	-	-	-	2	-	3	1	1	1
Urinary Bladder—Rupture	1	-	-	-	-	-	-	1	-	-	-	-	-
Urinary Bladder—Urocystitis	1	-	-	-	-	-	-	-	1	-	-	-	-
Urinary Tract—Bact. Infection, <i>E. coli</i>	2	-	-	-	-	-	-	-	-	-	-	2	-
Urinary Tract—Bact. Infect., <i>Proteus mirabilis</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Urinary Tract—Bact. Infection, <i>Staph. sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Urine—Hematuria	1	-	-	-	-	-	-	-	-	-	-	-	1
Urine—Microbiologic Exam	3	-	-	1	1	1	-	-	-	-	-	-	-
Uterus—Metritis	18	1	3	-	1	-	2	1	2	2	1	2	3
Uterus—Perforation	2	-	-	-	1	1	-	-	-	-	-	-	-
Vagina—Vaginitis	1	-	-	-	-	-	-	-	-	1	-	-	-
8 Endocrine													
Adrenal—Adrenalitis	1	-	-	-	-	-	-	-	-	-	1	-	-
Thyroid—Goiter	2	-	-	-	-	-	-	-	-	-	-	-	2
9 Nervous													
<i>Neurological Disorders, Total Cases</i>	65	1	4	5	5	2	6	3	1	12	4	12	10
Brain—Encephalitis, <i>Listeria sp.</i>	10	-	1	-	-	-	-	-	-	2	1	5	1
Brain—Encephalitis, Non-Suppurative	6	-	-	-	2	1	-	1	-	1	-	-	1
Brain—Encephalitis, Rabies	7	-	-	-	1	-	2	1	1	2	-	-	-
Brain—Encephalitis, Suppurative	3	-	-	-	-	-	1	-	-	-	1	1	-
Brain—Encephalopathy	3	-	1	-	1	-	1	-	-	-	-	-	-
Brain—Hemorrhage	1	-	-	-	-	-	-	-	-	-	-	1	-
Brain—Polioencephalomalacia	6	1	1	2	-	-	-	-	-	1	1	-	-
Meninges—Meningitis, <i>Escherichia coli</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Meninges—Meningitis, Non-Suppurative	2	-	-	1	-	-	-	-	-	-	1	-	-

BOVINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Meninges—Meningitis, Suppurative	2	-	-	-	-	-	-	1	-	1	-	-	-
Nerve—Neuropathy	1	-	-	-	-	-	-	-	-	1	-	-	-
Neurologic Disorder, Idiopathic	24	-	-	2	2	1	2	-	-	4	-	5	8
Spinal Cord—Myelopathy	1	-	-	-	1	-	-	-	-	-	-	-	-
X Special Senses													
Eye—Amaurosis	1	-	-	-	-	1	-	-	-	-	-	-	-
Eye—Conjunctivitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Eye—Keratitis	1	-	-	-	-	-	-	-	-	-	-	1	-
Eye—Neoplasm, Squamous Cell Carcinoma	1	-	-	-	-	-	-	-	1	-	-	-	-
Eyelid—Neoplasm, Sq. Cell Carcinoma	2	-	-	-	-	-	-	1	-	-	1	-	-

CANINE

O Body as a Whole

Abdomen—Hemoperitoneum	28	4	2	3	-	-	2	3	4	3	1	2	4
Abdomen—Steatitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Abscess	2	1	-	-	-	-	-	-	-	-	-	1	-
Amyloidosis	9	-	-	2	-	3	1	-	1	1	-	-	1
Anomaly	16	4	3	-	2	3	1	1	-	-	1	-	1
Canine Distemper	1	-	-	-	-	-	-	-	-	1	-	-	-
Deficiency, Manganese	1	1	-	-	-	-	-	-	-	-	-	-	-
Deficiency, Zinc	2	1	-	-	-	-	-	-	-	-	-	1	-
Diabetes Mellitus	1	-	-	-	-	-	-	-	-	-	-	1	-
Drug Reaction	2	1	-	-	-	-	-	-	-	1	-	-	-
Edema, Generalized	2	-	-	-	-	-	1	-	-	-	-	1	-
Effusion, Chylothorax	3	1	-	1	-	-	-	1	-	-	-	-	-
Effusion, Pericardial	1	-	-	-	-	-	1	-	-	-	-	-	-
Effusion, Peritoneal	4	1	-	2	-	1	-	-	-	-	-	-	-
Effusion, Pleural	8	1	1	-	1	1	1	2	-	-	-	-	1
Effusion, Pyothorax	1	-	-	-	-	-	-	-	-	-	-	1	-
Emaciation	12	1	-	-	1	-	-	1	-	-	1	5	3
Gout	1	-	-	-	-	-	-	-	1	-	-	-	-
Health Evaluation, Normal	8	2	1	-	-	-	-	1	3	1	-	-	-
Hernia, Diaphragmatic	3	-	-	-	1	-	-	-	1	-	-	1	-
Hernia, Inguinal	1	-	-	-	-	-	-	-	-	-	1	-	-
Hernia, Umbilical	1	-	-	-	-	-	-	-	-	-	-	1	-
Icterus	6	1	-	2	-	-	1	-	1	-	-	-	1
Injection Site	1	-	-	-	-	-	-	1	-	-	-	-	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Mineralization	6	-	-	1	-	-	-	-	1	1	1	2	-
Mycosis, <i>Blastomyces sp.</i>	9	1	-	1	-	2	3	2	-	-	-	-	-
Mycosis, <i>Cryptococcus sp.</i>	2	-	1	-	1	-	-	-	-	-	-	-	-
Neonatal Death	6	1	-	-	-	1	-	-	1	1	-	1	1
Neoplasm	1	-	-	-	-	-	-	-	-	1	-	-	-
Neoplasm, Adenocarcinoma	1	-	-	-	-	-	-	-	-	-	-	-	1
Neoplasm, Carcinoma	1	-	-	-	1	-	-	-	-	-	-	-	-
Neoplasm, Carcinoma, Metastatic	5	2	-	-	-	-	2	-	-	-	-	1	-
Neoplasm, Fibroma	1	-	-	-	-	1	-	-	-	-	-	-	-
Neoplasm, Fibrosarcoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Fibrosarcoma, Metastatic	1	-	-	-	-	-	-	-	-	-	-	-	1
Neoplasm, Hemangiosarcoma	4	-	-	1	-	1	-	1	1	-	-	-	-
Neoplasm, Hemangiosarcoma, Metastatic	4	1	1	-	-	-	1	-	-	-	-	1	-
Neoplasm, Leiomyosarcoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Neoplasm, Lipoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Neoplasm, Lymphosarcoma	12	2	2	1	-	-	-	4	-	2	-	1	-
Neoplasm, Malignant Histiocytosis	2	-	-	-	1	1	-	-	-	-	-	-	-
Neoplasm, Mesothelioma	1	-	-	-	-	-	-	-	-	-	-	1	-
Neoplasm, Sarcoma	3	-	-	2	-	1	-	-	-	-	-	-	-
Neoplasm, Sarcoma, Metastatic	5	-	2	-	2	-	-	-	1	-	-	-	-
Parasitism, <i>Neospora sp.</i>	1	-	-	-	-	-	-	1	-	-	-	-	-
Peritonitis	27	2	1	1	3	4	2	2	2	5	2	1	2
Polyserositis	1	-	-	-	-	-	-	-	1	-	-	-	-
Septicemia, Bacterial	3	1	-	-	-	-	-	-	-	1	1	-	-
Septicemia, <i>Bordetella bronchiseptica</i>	2	-	-	1	-	-	-	1	-	-	-	-	-
Septicemia, <i>Borrelia burgdorferi</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Septicemia, <i>Enterococcus sp.</i>	2	-	-	-	-	-	1	-	-	-	1	-	-
Septicemia, <i>Escherichia coli</i>	8	1	1	1	-	1	-	2	-	-	1	-	1
Septicemia, <i>Leptospira sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Septicemia, <i>Salmonella sp.</i>	3	-	-	1	1	-	1	-	-	-	-	-	-
Septicemia, <i>Staphylococcus sp.</i>	2	1	-	1	-	-	-	-	-	-	-	-	-
Septicemia, <i>Streptococcus sp.</i>	5	-	-	1	2	-	-	1	-	-	-	-	1
Starvation	1	-	-	-	-	-	-	1	-	-	-	-	-
Steatitis	3	-	-	-	-	-	-	-	-	1	-	1	1
Sudden Unexpected Death	44	5	3	5	5	4	2	2	3	4	2	3	6
Thorax-Hemothorax	9	-	1	1	-	2	1	-	2	-	1	1	-
Thorax-Pneumothorax	6	-	-	-	1	1	1	-	1	-	-	-	2
Toxicosis, Anticoagulant	18	-	2	-	-	2	-	2	1	4	3	-	4
Toxicosis, Copper	3	-	-	1	-	-	-	-	-	-	-	1	1
Toxicosis, Ethylene Glycol	10	1	-	1	-	1	-	1	-	3	3	-	-
Toxicosis, Organophosphate	1	-	1	-	-	-	-	-	-	-	-	-	-
Toxicosis, Strychnine	11	-	-	1	1	-	-	-	3	2	2	-	2

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Toxicosis, Zinc	1	-	-	-	-	-	-	-	-	-	-	-	1
Trauma	19	3	-	1	1	4	1	1	1	1	3	2	1
Virus Infection, Herpes	3	1	-	-	-	-	1	-	-	-	-	-	1
Virus Infection, Parvovirus	12	1	-	-	-	-	1	1	-	3	1	3	2
Virus Infection, Pseudorabies	2	-	-	-	-	1	-	-	-	-	1	-	-
<u>1 Integumentary</u>													
Abscess	4	-	-	1	1	-	-	-	-	-	-	1	1
Alopecia	1	-	-	-	-	-	-	-	-	-	-	1	-
Anal Sac-Inflammation	3	-	-	-	-	-	-	-	1	-	1	1	-
Anomaly	4	1	-	-	-	-	-	-	-	-	3	-	-
Calcinosis Cutis	10	-	1	-	-	1	-	2	3	-	2	1	-
Cellulitis	22	1	-	3	1	3	2	3	4	-	2	2	1
Cyst, Adnexal	25	1	-	-	1	1	1	4	2	1	1	5	8
Cyst, Apocrine	1	-	-	-	-	-	-	-	-	-	-	-	1
Cyst, Epidermal	68	8	5	6	4	4	7	3	5	8	12	6	-
Cyst, Interdigital	1	1	-	-	-	-	-	-	-	-	-	-	-
Dermal Fibrosis	36	2	3	1	2	3	6	4	1	4	2	4	4
Dermatitis, Acral Lick Granuloma	18	1	1	-	4	1	-	3	1	2	4	-	1
Dermatitis, Allergic	40	6	4	-	6	3	2	4	3	3	2	6	1
Dermatitis, Bacterial	6	1	2	-	-	1	-	-	1	1	-	-	-
Dermatitis, Diffuse	1	-	-	-	-	-	-	-	-	-	1	-	-
Dermatitis, Eosinophilic	13	2	-	4	1	-	-	-	1	1	1	2	1
Dermatitis, Eosinophilic Granuloma	3	-	-	-	-	-	-	-	-	1	-	-	2
Dermatitis, Focal	19	2	1	-	4	-	-	1	1	2	3	5	-
Dermatitis, Folliculitis	45	3	-	10	2	5	5	3	4	4	1	7	1
Dermatitis, Granulation Tissue	9	-	3	-	3	-	1	-	-	1	-	1	-
Dermatitis, Granulomatous	79	6	9	7	8	6	5	7	2	5	12	8	4
Dermatitis, Lupus	20	-	2	3	1	1	1	1	1	3	2	3	2
Dermatitis, Lymphoplasmacytic	4	2	1	1	-	-	-	-	-	-	-	-	-
Dermatitis, Mycotic	7	2	1	-	1	3	-	-	-	-	-	-	-
Dermatitis, Necrotic	2	-	-	-	1	1	-	-	-	-	-	-	-
Dermatitis, Pemphigus	14	1	-	-	1	-	-	2	2	1	2	1	4
Dermatitis, Perivascular	2	-	-	1	1	-	-	-	-	-	-	-	-
Dermatitis, Podo	8	-	2	-	-	-	-	-	2	1	-	1	2
Dermatitis, Seborrhea	7	2	1	2	-	-	-	-	-	1	-	-	1
Dermatitis, Surgical	1	-	-	-	-	-	-	-	1	-	-	-	-
Dermatitis, Ulcerative	22	4	1	1	2	1	3	2	3	-	1	3	1
Dermatosis, Adnexal Dysplasia	31	4	3	3	6	4	1	-	2	4	1	2	1
Dermatosis, Cutaneous Mucinosis	2	-	-	-	-	1	-	-	-	-	1	-	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Dermatosis, Endocrine	18	1	1	2	-	2	5	1	1	1	-	3	1
Hematoma	4	-	-	-	-	-	-	-	-	1	2	-	1
Mammary-Duct Ectasia	1	-	-	-	1	-	-	-	-	-	-	-	-
Mammary-Dysplasia	2	-	-	-	-	1	-	-	-	-	-	-	1
Mammary-Hyperplasia	12	1	3	1	1	1	2	-	1	1	1	-	-
Mammary-Mastitis	5	1	1	-	-	-	1	2	-	-	-	-	-
Mammary-Mastitis, <i>Staphylococcus sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1	-
Mammary-Neoplasm, Benign Mixed	1	1	-	-	-	-	-	-	-	-	-	-	-
Mammary-Neoplasm, Adenocarcinoma	45	7	4	6	7	2	3	4	2	5	4	1	-
Mammary-Neoplasm, Adenoma	21	2	3	3	-	-	2	-	2	2	2	1	4
Mammary-Neoplasm, Duct Carcinoma	22	3	1	1	1	1	4	4	3	-	3	-	1
Mammary-Neoplasm, Mixed, Benign	50	4	4	8	5	6	3	7	1	2	2	1	7
Mammary-Neoplasm, Mixed, Malignant	19	6	1	1	2	2	-	1	-	2	2	-	2
Mammary-Neoplasm, Osteosarcoma	2	-	2	-	-	-	-	-	-	-	-	-	-
Mammary-Neoplasm, Sarcoma	2	-	-	1	-	-	-	-	-	1	-	-	-
Mammary-Neoplasm, Sq. Cell Carcinoma	2	-	-	1	-	-	1	-	-	-	-	-	-
Nail Bed-Neoplasm, Papilloma	1	-	-	-	-	-	-	1	-	-	-	-	-
Nail Bed-Neoplasm, Sq. Cell Carcinoma	3	-	-	-	-	-	-	-	1	2	-	-	-
Nail Bed-Perionychia	1	-	-	-	-	-	-	-	-	-	1	-	-
Neoplasm	1	-	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Adenocarcinoma	6	-	-	1	1	1	-	-	-	1	2	-	-
Neoplasm, Adenoma	15	3	2	-	2	-	3	1	1	-	1	2	-
Neoplasm, Anal Sac Carcinoma	1	-	-	-	-	-	1	-	-	-	-	-	-
Neoplasm, Apocrine Adenocarcinoma	2	1	1	-	-	-	-	-	-	-	-	-	-
Neoplasm, Basal Cell Tumor	57	3	1	8	6	6	5	3	2	7	6	7	3
Neoplasm, Carcinoma	7	-	-	-	-	1	-	1	2	1	-	1	1
Neoplasm, Epulis	1	-	-	-	-	-	-	-	1	-	-	-	-
Neoplasm, Fibroma	21	-	-	-	2	2	2	2	2	4	4	-	3
Neoplasm, Fibropapilloma	10	3	-	2	1	2	1	-	1	-	-	-	-
Neoplasm, Fibrosarcoma	60	2	4	6	11	4	9	4	3	3	4	6	4
Neoplasm, Hamartoma	6	-	-	2	-	1	-	1	1	-	-	1	-
Neoplasm, Hemangioma	35	1	1	4	3	2	3	2	4	7	4	3	1
Neoplasm, Hemangiopericytoma	100	8	9	9	8	6	6	9	7	5	13	10	10
Neoplasm, Hemangiosarcoma	19	1	2	1	3	1	4	4	1	2	-	-	-
Neoplasm, Histiocytoma	169	18	13	16	12	9	16	15	16	15	17	9	13
Neoplasm, Histiocytosis	1	-	1	-	-	-	-	-	-	-	-	-	-
Neopl., Intracut. Cornifying Epithelioma	9	-	-	2	2	2	-	1	1	-	-	1	-
Neoplasm, Leiomyosarcoma	2	-	-	-	1	-	-	-	-	-	-	-	1
Neoplasm, Lipoma	84	4	3	5	9	3	6	10	10	6	9	10	9
Neoplasm, Liposarcoma	7	-	-	-	1	-	1	1	-	1	-	2	1
Neoplasm, Lymphangiosarcoma	2	-	-	1	-	-	-	-	-	-	-	1	-
Neoplasm, Lymphosarcoma	12	1	1	1	-	2	2	-	1	1	-	1	2

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Neoplasm, Malignant Fibrous Histiocytoma	3	1	-	-	-	-	1	-	-	-	1	-	-
Neoplasm, Malignant Histiocytosis	1	-	-	-	-	-	-	1	-	-	-	-	-
Neoplasm, Mastocytoma	225	24	15	19	20	18	14	23	10	19	20	24	19
Neoplasm, Melanoma	62	4	8	4	7	3	9	6	-	6	6	4	5
Neoplasm, Myoepithelioma	1	-	-	-	-	-	-	-	-	-	-	-	1
Neoplasm, Myxosarcoma	4	2	-	-	-	-	-	-	1	-	1	-	-
Neoplasm, Neurofibrosarcoma	2	-	-	-	-	-	1	1	-	-	-	-	-
Neoplasm, Papilloma	8	1	1	-	-	1	-	3	-	-	-	2	-
Neoplasm, Perianal Gland Adenoma	71	6	6	11	4	2	3	5	6	2	11	7	8
Neoplasm, Perianal Gland Carcinoma	19	2	1	1	3	3	1	-	2	2	1	1	2
Neoplasm, Pilomatrixoma	14	2	2	-	3	1	-	2	-	1	2	1	-
Neoplasm, Plasmacytoma	25	3	2	3	2	5	1	1	-	3	1	2	2
Neoplasm, Rhabdomyosarcoma	1	-	-	-	1	-	-	-	-	-	-	-	-
Neoplasm, Sarcoma, Anaplastic	16	1	1	2	-	1	1	1	3	2	-	3	1
Neoplasm, Sebaceous Gland Adenoma	61	4	7	5	1	3	5	8	4	7	7	6	4
Neopl., Sebaceous Gland, Adenocarcinoma	2	-	-	-	-	-	1	-	-	-	-	1	-
Neoplasm, Squamous Cell Carcinoma	13	1	1	-	-	1	1	1	1	2	-	2	3
Neoplasm, Trichoepithelioma	18	1	2	1	1	2	1	-	1	4	2	1	2
Panniculitis	46	5	3	5	5	-	4	4	2	4	6	8	-
Parasitism, Demodex	3	-	-	-	-	-	1	-	-	-	-	1	1
Parasitism, Lice	1	-	-	-	-	-	-	-	-	-	-	-	1
Parasitism, Mites	2	-	1	-	-	-	-	-	-	-	-	1	-
Scar	1	-	1	-	-	-	-	-	-	-	-	-	-
Sebaceous Gland-Hyperplasia	10	-	-	2	-	2	-	2	-	-	-	-	4
Seroma	1	-	-	-	-	-	-	1	-	-	-	-	-
Skin-Hyperkeratosis	28	-	3	-	3	1	4	5	1	-	3	6	2
Skin-Parakeratosis	3	-	-	-	1	-	1	-	-	-	-	-	1
2 Musculoskeletal													
Arthritis	2	-	-	-	-	-	-	-	-	-	2	-	-
Arthropathy	25	5	-	-	1	5	-	2	1	3	2	3	3
Bone-Fracture	5	-	-	-	1	3	-	-	-	-	1	-	-
Bone-Hyperostosis	5	-	-	-	2	-	-	-	1	1	1	-	-
Bone-Malformation	3	2	-	-	-	-	-	-	-	1	-	-	-
Bone-Neoplasm	5	-	1	2	-	-	-	-	-	1	-	-	1
Bone-Neoplasm, Chondrosarcoma	4	-	1	-	-	-	-	1	-	-	1	1	-
Bone-Neoplasm, Fibrosarcoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Bone-Neoplasm, Osteoma	2	-	-	1	-	-	1	-	-	-	-	-	-
Bone-Neoplasm, Osteosarcoma	59	7	4	6	4	5	7	4	3	3	6	3	7
Bone-Neoplasm, Sarcoma	3	2	-	-	-	-	-	-	-	-	-	-	1
Bone-Osteochondrosis	2	-	-	-	-	-	1	-	-	1	-	-	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Bone–Osteomalacia	3	2	-	-	-	-	-	1	-	-	-	-	-
Bone–Osteomyelitis	2	-	-	-	-	-	-	-	-	1	1	-	-
Intervertebral Disc–Degeneration	20	5	-	1	1	4	2	-	1	1	2	2	1
Joint–Neoplasm, Synoviosarcoma	2	1	-	-	-	-	-	-	-	1	-	-	-
Muscle–Atrophy	3	-	-	-	-	-	1	-	-	-	1	1	-
Muscle–Degeneration	2	-	-	1	-	-	-	-	-	-	-	1	-
Muscle–Myositis	4	-	-	1	1	-	1	-	-	1	-	-	-
Muscle–Neoplasm, Sarcoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Synovitis	17	3	-	1	4	-	2	3	-	2	-	-	2
3 Respiratory													
<i>Respiratory Disorders, Total Cases</i>	315	30	21	35	31	30	24	25	20	33	24	20	22
Asphyxiation	3	-	-	-	-	-	-	1	-	1	-	-	1
Larynx–Laryngitis	2	-	-	-	-	-	-	1	-	1	-	-	-
Larynx–Neoplasm, Plasmacytoma	1	-	-	-	-	-	-	-	-	1	-	-	-
Larynx–Neoplasm, Sq. Cell Carcinoma	1	-	-	-	-	-	-	-	-	1	-	-	-
Lung–Abscess	1	-	-	1	-	-	-	-	-	-	-	-	-
Lung–Bronchitis	2	-	-	1	-	-	-	-	-	-	-	1	-
Lung–Congestion	6	3	-	1	1	1	-	-	-	-	-	-	-
Lung–Edema	23	6	-	5	3	1	1	2	2	-	1	-	2
Lung–Emphysema	2	-	1	1	-	-	-	-	-	-	-	-	-
Lung–Hemorrhage	2	-	-	-	1	-	-	-	-	1	-	-	-
Lung–Mineralization	3	-	-	1	-	1	-	-	-	-	-	-	1
Lung–Neoplasm, Adenocarcinoma	3	-	-	-	-	-	-	-	-	2	-	1	-
Lung–Neoplasm, Carcinoma	12	1	-	-	1	1	2	2	-	3	-	2	-
Lung–Neoplasm, Hemangiosarcoma	2	-	-	-	-	1	1	-	-	-	-	-	-
Lung–Neoplasm, Sarcoma, Metastatic	2	-	-	-	-	-	-	-	-	-	1	-	1
Lung–Pneumonia	30	5	3	5	2	4	1	1	2	4	-	1	2
Lung–Pneumonia, <i>Bordetella bronchiseptica</i>	3	-	-	1	1	-	-	-	-	-	1	-	-
Lung–Pneumonia, Broncho	2	1	1	-	-	-	-	-	-	-	-	-	-
Lung–Pneumonia, <i>Escherichia coli</i>	4	-	-	-	-	1	-	-	-	1	1	1	-
Lung–Pneumonia, Foreign Body	9	-	-	-	1	1	-	1	2	-	2	-	2
Lung–Pneumonia, Interstitial	18	5	2	2	4	2	-	-	-	1	-	1	1
Lung–Pneumonia, <i>Klebsiella sp.</i>	1	-	-	-	-	-	1	-	-	-	-	-	-
Lung–Pneumonia, <i>Mycoplasma sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Lung–Pneumonia, Mycotic	4	-	-	-	-	1	2	1	-	-	-	-	-
Lung–Pneumonia, <i>Pasteurella multocida</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Lung–Pneumonia, <i>Pasteurella sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Lung–Pneumonia, <i>Streptococcus sp.</i>	7	-	1	-	1	1	1	1	-	-	1	1	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Lung-Thrombosis	13	1	1	4	1	3	-	1	1	-	1	-	-
Nasal-Neoplasm, Adenocarcinoma	12	1	-	5	2	1	3	-	-	-	-	-	-
Nasal-Neoplasm, Carcinoma	7	-	-	-	-	1	-	-	-	-	4	1	1
Nasal-Neoplasm, Chondrosarcoma	2	-	-	-	-	-	-	-	-	1	-	1	-
Nasal-Neoplasm, Fibrosarcoma	3	-	-	-	1	-	-	-	-	-	-	1	1
Nasal-Neoplasm, Sarcoma	3	-	-	-	-	-	-	1	-	1	-	-	1
Nasal-Rhinitis	48	6	5	1	3	4	3	7	2	8	2	4	3
Pleura-Pleuritis	6	-	1	2	1	-	1	-	-	1	-	-	-
Respiratory Infection, <i>Acinetobacter sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Resp. Infection, <i>Bordetella bronchiseptica</i>	2	-	1	-	-	-	-	-	-	1	-	-	-
Respiratory Infection, <i>Klebsiella pneumoniae</i>	2	-	-	-	-	-	1	-	-	-	1	-	-
Respiratory Infection, Microbiologic Exam	76	4	4	7	8	4	6	6	11	6	9	5	6
Respiratory Infection, <i>Mycoplasma sp.</i>	2	-	1	-	-	-	-	-	-	1	-	-	-
Respiratory Infection, <i>Pasteurella multocida</i>	3	-	-	-	1	-	1	-	-	-	-	1	-
Resp. Infection, <i>Pseudomonas aeruginosa</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Respiratory Infection, <i>Staphylococcus sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Streptococcus sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Sinus-Sinusitis	3	1	-	-	-	-	-	-	-	1	-	1	-
Trachea-Neoplasm, Polyp	1	-	1	-	-	-	-	-	-	-	-	-	-
Trachea-Obstruction	1	1	-	-	-	-	-	-	-	-	-	-	-
Trachea-Tracheitis	1	-	-	-	-	-	-	-	-	1	-	-	-
4 Cardiovascular													
Blood Vessel-Angiopathy	3	-	-	-	1	-	1	-	-	-	-	1	-
Blood Vessel-Arteriosclerosis	5	1	1	-	-	2	-	-	-	-	1	-	-
Blood Vessel-Arteritis	2	-	-	-	1	-	-	1	-	-	-	-	-
Blood Vessel-Thrombosis	7	2	3	-	-	1	-	-	-	-	-	1	-
Blood Vessel-Vasculitis	3	-	-	1	-	1	-	-	1	-	-	-	-
Heart-Anomaly	8	2	-	-	2	1	1	-	-	-	-	-	2
Heart-Cardiomyopathy	44	3	4	2	2	9	8	2	2	2	3	2	5
Heart-Endocardiosis	45	9	5	7	2	4	1	3	-	4	2	2	6
Heart-Endocarditis	1	-	-	-	-	-	-	-	-	-	-	1	-
Heart-Epicarditis	2	-	-	1	-	-	-	-	1	-	-	-	-
Heart-Fibrosis	4	1	-	-	1	-	-	-	1	-	-	-	1
Heart-Heart Failure, Acute	8	-	1	-	2	1	-	1	-	-	-	2	1
Heart-Heart Failure, Chronic	13	1	2	2	2	1	-	-	1	-	2	2	-
Heart-Hemopericardium	19	2	1	2	1	4	1	2	2	3	1	-	-
Heart-Myocardial Degeneration	15	2	2	-	2	2	1	2	2	-	-	1	1
Heart-Myocardial Infarction	7	-	1	2	1	1	-	-	1	-	-	-	1
Heart-Myocarditis	15	3	1	3	2	-	-	2	-	3	1	-	-
Heart-Neoplasm, Hemangioma	1	-	-	-	-	-	-	-	-	1	-	-	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Heart-Neoplasm, Hemangiosarcoma	25	2	2	3	1	4	2	1	1	4	2	2	1
Heart-Neoplasm, Lymphosarcoma	1	-	-	-	-	-	-	-	-	-	-	-	1
Heart-Neoplasm, Mastocytoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Heart-Neoplasm, Neuroendocrine tumor	1	-	-	-	-	-	-	1	-	-	-	-	-
Heart-Parasitism, <i>Dirofilaria sp.</i>	3	-	-	-	-	-	1	-	-	1	-	-	1
Heart-Pericarditis	2	-	-	-	-	-	-	-	-	-	1	1	-
Heart-Thrombosis	7	2	-	-	-	-	-	1	-	-	1	1	2
Heart, Parasitism, <i>Neospora sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
5 Hemic and Lymphatic													
Blood-Anemia	6	-	-	-	-	2	-	-	1	-	-	3	-
Blood-Anemia, Hemolytic	11	-	1	3	-	-	1	1	-	-	2	2	1
Blood-Coagulation Disorder	14	-	3	4	-	1	3	1	-	-	-	1	1
Blood-Hemorrhage, Focal	7	-	-	1	1	1	-	2	1	-	-	1	-
Blood-Hemorrhage, Generalized	9	2	-	1	-	2	-	1	1	-	2	-	-
Blood-Leukopenia	1	-	-	-	-	-	-	-	-	-	-	1	-
Blood-Thrombocytopenia	2	-	1	-	-	-	-	-	-	-	-	1	-
Bone Marrow-Hyperplasia	1	-	-	-	-	-	-	-	1	-	-	-	-
Bone Marrow-Hypocellularity	4	1	1	-	-	-	-	-	-	-	1	1	-
Bone Marrow-Neopl., Multiple Myeloma	3	-	-	-	-	-	1	-	1	1	-	-	-
B. Marrow-Neopl., Myeloprolif. Disorder	2	-	-	-	-	-	1	-	-	1	-	-	-
Lymph Node-Hyperplasia	39	3	8	-	2	1	4	5	1	6	2	4	3
Lymph Node-Lymphadenitis	12	-	-	3	1	1	1	1	1	3	-	-	1
Lymph Node-Neoplasm, Lymphosarcoma	80	6	4	12	10	3	6	5	7	4	8	6	9
Lymph Node-Neoplasm, Metastatic	6	-	-	-	-	-	1	1	3	-	-	1	-
Lymph Vessel-Lymphangiectasia	3	-	-	3	-	-	-	-	-	-	-	-	-
Neoplasm, Lymphocytic Leukemia	2	-	-	-	-	-	-	1	-	-	-	-	1
Neoplasm, Myelogenous Leukemia	1	-	-	-	-	-	1	-	-	-	-	-	-
Spleen-Hematoma	13	1	-	2	2	1	-	1	-	1	1	2	2
Spleen-Infarct	13	2	2	1	1	-	-	1	2	2	-	1	1
Spleen-Neoplasm, Sarcoma	4	-	-	-	-	-	-	-	2	2	-	-	-
Spleen-Neoplasm, Hemangioma	1	-	-	-	-	-	1	-	-	-	-	-	-
Spleen-Neoplasm, Hemangiosarcoma	28	4	1	5	1	3	1	3	2	3	-	2	3
Spleen-Neoplasm, Leiomyosarcoma	2	-	1	-	1	-	-	-	-	-	-	-	-
Spleen-Neoplasm, Lymphosarcoma	2	-	-	-	1	-	-	-	-	-	-	-	1
Spleen-Neoplasm, Myelolipoma	2	-	-	1	-	1	-	-	-	-	-	-	-
Spleen-Nodular Hyperplasia	11	-	1	2	-	-	2	-	-	1	1	-	4
Spleen-Volvulus	2	-	1	-	-	1	-	-	-	-	-	-	-
Thymus-Hypoplasia	1	-	-	-	-	-	-	-	-	-	-	-	1
Thymus-Neoplasm, Thymoma	4	-	-	-	-	-	-	-	-	1	2	1	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Tonsil-Neoplasm, Lymphosarcoma	2	1	-	-	-	-	1	-	-	-	-	-	-
Tonsil-Neoplasm, Sarcoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Tonsil-Tonsillitis	1	-	-	-	-	-	-	-	-	-	-	-	1
6 Digestive													
Esophagus-Dilatation	8	-	2	1	1	1	-	-	-	-	1	-	2
Esophagus-Esophagitis	6	-	1	-	-	1	1	-	-	-	1	-	2
Feces-Microbiologic Exam	62	6	4	2	4	7	8	6	7	2	3	8	5
Gall Bladder-Cholecystitis	8	1	-	-	-	-	-	-	-	3	-	3	1
Intestine-Colitis	27	4	2	1	3	3	1	2	2	2	1	2	4
Intestine-Dilatation	2	-	1	-	-	-	-	-	-	-	-	1	-
Intestine-Enteritis, <i>Campylobacter sp.</i>	11	1	-	2	1	-	-	-	1	-	4	2	-
Intestine-Enteritis, <i>Clostridium perfringens</i>	2	-	-	-	-	-	-	-	-	-	1	-	1
Intestine-Enteritis, Coronavirus	3	1	-	-	-	-	-	-	-	-	-	2	-
Intestine-Enteritis, Eosinophilic	6	1	-	1	-	-	1	-	1	-	-	2	-
Intestine-Enteritis, <i>Escherichia coli</i>	2	1	-	-	-	-	-	1	-	-	-	-	-
Intestine-Enteritis, Granulomatous	3	1	1	-	-	-	-	1	-	-	-	-	-
Intestine-Enteritis, Hemorrhagic	3	-	-	1	-	2	-	-	-	-	-	-	-
Intestine-Enteritis, Idiopathic	48	8	7	3	1	9	2	3	-	4	4	6	1
Intestine-Enteritis, Lymphoplasmacytic	52	4	8	4	6	5	1	9	2	5	2	3	3
Intestine-Enteritis, Necrotic	4	1	-	-	-	1	1	1	-	-	-	-	-
Intestine-Enteritis, Parvovirus	26	3	1	6	1	-	2	2	1	2	2	3	3
Intestine-Enteritis, Rotavirus	1	-	-	-	-	-	-	-	-	-	-	-	1
Intestine-Enteritis, <i>Salmonella sp.</i>	4	-	1	-	-	-	-	-	1	-	1	-	1
Intestine-Enteropathy, Atrophic	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Hemorrhage	5	-	1	-	-	-	-	1	-	2	1	-	-
Intestine-Hemorrhage Syndrome	1	-	-	-	-	1	-	-	-	-	-	-	-
Intestine-Intussusception	4	-	1	2	-	1	-	-	-	-	-	-	-
Intestine-Neoplasm	1	-	-	-	-	1	-	-	-	-	-	-	-
Intestine-Neoplasm, Adenocarcinoma	7	-	3	-	1	-	-	-	-	1	-	2	-
Intestine-Neoplasm, Anaplastic Sarcoma	1	-	-	-	1	-	-	-	-	-	-	-	-
Intestine-Neoplasm, Carcinoma	2	-	-	-	-	-	-	1	-	-	-	1	-
Intestine-Neoplasm, Fibrosarcoma	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Neoplasm, Leiomyoma	2	-	-	-	-	-	1	-	-	-	-	-	1
Intestine-Neoplasm, Leiomyosarcoma	3	-	1	1	-	1	-	-	-	-	-	-	-
Intestine-Neoplasm, Lymphosarcoma	10	1	-	1	2	1	1	-	1	-	1	1	1
Intestine-Neoplasm, Polyp	1	-	-	1	-	-	-	-	-	-	-	-	-
Intestine-Obstruction	9	-	1	1	-	-	2	1	1	-	-	1	2
Intestine-Parasitism	1	-	-	1	-	-	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Ancylostoma sp.</i>	4	1	-	-	1	-	-	-	-	-	-	-	2
Intestine-Parasitism, Ascaris	8	-	-	1	1	2	-	-	-	2	1	1	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Intestine-Parasitism, Cestode	2	-	-	-	-	-	-	1	-	1	-	-	-
Intestine-Parasitism, Coccidia	15	2	-	3	2	-	-	-	1	3	2	1	1
Intestine-Parasitism, <i>Cryptosporidium sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Parasitism, <i>Giardia sp.</i>	3	-	1	-	-	-	-	1	-	1	-	-	-
Intestine-Parasitism, Trematode	1	-	-	-	-	-	1	-	-	-	-	-	-
Intestine-Parasitism, <i>Trichuris sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Intestine-Perforation	1	1	-	-	-	-	-	-	-	-	-	-	-
Intestine-Rupture	1	-	-	-	-	-	-	-	-	-	-	1	-
Intestine-Ulcer	5	1	-	-	1	1	-	1	-	1	-	-	-
Intestine-Volvulus	8	1	-	2	-	1	1	1	1	-	-	1	-
Lip-Chelitis	5	1	1	-	1	-	-	1	-	-	-	1	-
Lip-Neoplasm, Adenoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Lip-Neoplasm, Basal Cell Tumor	2	-	-	-	-	-	-	-	-	-	-	-	2
Lip-Neoplasm, Fibropapilloma	1	1	-	-	-	-	-	-	-	-	-	-	-
Lip-Neoplasm, Fibrosarcoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Lip-Neoplasm, Histiocytoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Lip-Neoplasm, Lipoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Lip-Neoplasm, Melanoma	6	-	1	1	3	-	-	-	-	-	1	-	-
Lip-Neoplasm, Myxosarcoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Lip-Neoplasm, Plasmacytoma	4	-	-	-	1	-	-	-	1	-	1	1	-
Lip-Neoplasm, Sebaceous Gland Adenoma	1	-	-	-	-	-	-	-	-	1	-	-	-
Lip-Neoplasm, Squamous Cell Carcinoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Liver-Cholangiohepatitis	10	-	-	2	1	-	2	1	-	-	2	2	-
Liver-Cirrhosis	22	-	4	1	2	3	1	3	-	2	3	2	1
Liver-Hemosiderosis	4	-	-	-	-	-	-	-	-	1	3	-	-
Liver-Hepatitis	56	6	7	5	7	7	1	2	1	6	9	1	4
Liver-Hepatopathy	129	14	6	16	14	15	11	3	4	13	10	9	14
Liver-Hepatositis	40	6	5	4	3	3	5	4	-	5	1	3	1
Liver-Infarction	2	1	-	-	-	-	-	-	1	-	-	-	-
Liver-Lipidosis	28	1	1	-	4	4	3	2	1	4	5	3	-
Liver-Neoplasm, Adenocarcinoma	8	-	2	2	1	1	-	1	-	-	-	1	-
Liver-Neoplasm, Adenoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Liver-Neoplasm, Carcinoma	4	-	-	-	-	-	1	-	-	-	2	1	-
Liver-Neoplasm, Fibrosarcoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Liver-Neoplasm, Hemangiosarcoma	5	2	-	-	-	-	2	-	-	-	-	-	1
Liver-Neoplasm, Hepatoma	6	-	-	2	1	-	1	-	-	-	2	-	-
Liver-Neoplasm, Leiomyosarcoma	2	-	-	1	-	-	-	-	-	-	-	-	1
Liver-Neoplasm, Lymphosarcoma	2	-	-	-	1	1	-	-	-	-	-	-	-
Liver-Neoplasm, Sarcoma	3	-	-	-	-	1	1	-	-	1	-	-	-
Liver-Nodular Hyperplasia	1	-	-	-	-	-	-	-	1	-	-	-	-
Oral Cavity-Dentition Abnormal	2	-	-	-	-	-	-	-	-	-	2	-	-
Oral Cavity-Gingivitis	29	4	2	3	-	7	3	1	1	2	1	3	2

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Oral Cavity–Glossitis	13	-	-	-	-	1	1	-	1	2	5	1	2
Oral Cavity–Neoplasm, Carcinoma	2	-	-	-	-	1	-	-	-	-	-	-	1
Oral Cavity–Neoplasm, Epulis	66	4	5	4	6	3	4	6	3	6	10	6	9
Oral Cavity–Neoplasm, Fibroma	1	-	-	-	-	-	-	-	-	-	-	1	-
Oral Cavity–Neoplasm, Fibropapilloma	1	-	-	-	1	-	-	-	-	-	-	-	-
Oral Cavity–Neoplasm, Fibrosarcoma	8	1	1	1	-	-	-	-	1	-	-	2	2
O. Cav.–Neopl., Granular Cell Myoblastoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Oral Cavity–Neoplasm, Granular Cell Tumor	2	-	-	-	-	-	1	-	-	-	1	-	-
Oral Cavity–Neoplasm, Lymphosarcoma	1	-	-	-	-	-	-	-	1	-	-	-	-
Oral Cavity–Neoplasm, Melanoma	22	2	3	4	-	3	2	1	1	3	-	2	1
Oral Cavity–Neoplasm, Neurofibroma	1	-	-	-	-	-	-	1	-	-	-	-	-
Oral Cavity–Neoplasm, Osteosarcoma	2	-	-	-	-	-	-	-	-	1	-	-	1
Oral Cavity–Neoplasm, Papilloma	1	-	-	-	-	-	-	-	-	-	-	-	1
Oral Cavity–Neoplasm, Plasmacytoma	8	2	-	-	1	-	-	1	-	-	-	3	1
Oral Cavity–Neoplasm, Sarcoma	2	1	-	-	-	-	-	-	-	-	-	-	1
Oral Cav.–Neoplasm, Sq. Cell Carcinoma	16	1	1	1	2	1	2	2	-	-	2	3	1
Oral Cav.–Neoplasm, Squamous Papilloma	2	1	-	-	-	-	-	-	-	-	-	-	1
Oral Cavity–Stomatitis	11	2	-	1	3	1	2	-	1	-	-	1	-
Pancreas–Atrophy	4	-	-	-	-	-	-	-	1	1	-	2	-
Pancreas–Neoplasm, Adenocarcinoma	6	-	-	1	2	1	1	1	-	-	-	-	-
Pancreas–Neoplasm, Adenoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Pancreas–Neoplasm, Carcinoma	5	1	-	-	-	-	-	-	2	-	1	1	-
Pancreas–Pancreatitis	22	3	-	1	2	1	2	2	3	1	1	1	5
Rectum–Neoplasm, Adenocarcinoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Rectum–Neoplasm, Adenoma	1	-	-	-	-	-	-	1	-	-	-	-	-
Rectum–Neoplasm, Leiomyosarcoma	1	-	-	-	-	-	-	1	-	-	-	-	-
Rectum–Neoplasm, Plasmacytoma	2	-	-	-	1	-	-	1	-	-	-	-	-
Rectum–Neoplasm, Polyp	5	1	-	-	-	-	1	1	-	1	-	1	-
Rectum–Perforation	1	-	-	-	-	-	-	-	-	1	-	-	-
Rectum–Proctitis	7	-	1	1	-	-	1	-	1	1	2	-	-
Salivary Gland–Cyst	2	1	-	-	-	-	-	-	1	-	-	-	-
Salivary Gland–Neoplasm, Carcinoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Salivary Gland–Sialoadenitis	1	-	1	-	-	-	-	-	-	-	-	-	-
Stomach–Dilatation	9	5	-	1	1	-	-	-	-	-	2	-	-
Stomach–Foreign Body	7	1	2	-	-	-	1	-	1	-	-	-	2
Stomach–Gastritis	89	10	14	7	9	10	2	8	6	7	6	3	7
Stomach–Neoplasm, Adenocarcinoma	3	-	-	-	-	-	-	-	-	-	1	1	1
Stomach–Neoplasm, Leiomyoma	3	1	-	-	-	1	-	1	-	-	-	-	-
Stomach–Neoplasm, Lymphosarcoma	8	-	-	-	1	1	-	-	2	-	3	-	1

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Stomach–Neoplasm, Polyp	1	-	-	1	-	-	-	-	-	-	-	-	-
Stomach–Rupture	3	-	-	1	1	-	1	-	-	-	-	-	-
Stomach–Ulcer	8	1	3	1	1	1	-	-	-	1	-	-	-
Stomach–Volvulus	15	7	2	2	-	1	1	1	-	-	1	-	-
<u>7 Urogenital</u>													
Abortion, Bacterial, <i>Brucella sp.</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Abortion, Idiopathic	2	1	-	-	-	-	-	-	-	-	-	1	-
Abortion, Myocarditis	1	1	-	-	-	-	-	-	-	-	-	-	-
Abortion, Specimen Unsuitable	4	-	-	-	1	-	-	2	1	-	-	-	-
Epididymis–Epididymitis	1	-	-	-	-	-	-	-	1	-	-	-	-
Genital–Anomaly	1	-	-	-	-	-	-	-	-	1	-	-	-
Genital–Bacteriologic Exam	88	5	5	4	7	3	15	7	11	7	6	10	8
Kidney–Cyst	2	-	-	-	-	-	-	-	-	1	-	-	1
Kidney–Dysplasia	11	-	1	1	-	1	1	-	3	1	-	2	1
Kidney–Glomerulosclerosis	28	-	5	1	-	5	2	1	1	2	6	3	2
Kidney–Hydronephrosis	7	-	1	1	-	-	-	-	1	1	2	-	1
Kidney–Infarction	13	2	2	3	1	1	-	-	2	2	-	-	-
Kidney–Mineralization	3	-	1	1	-	-	-	-	-	-	1	-	-
Kidney–Neoplasm	5	-	-	1	1	-	-	1	-	1	-	-	1
Kidney–Neoplasm, Carcinoma	3	-	-	-	-	-	3	-	-	-	-	-	-
Kidney–Neoplasm, Sarcoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Kidney–Nephritis	5	-	1	1	-	1	-	1	-	1	-	-	-
Kidney–Nephritis, End Stage	12	1	-	-	1	1	2	-	-	2	2	-	3
Kidney–Nephritis, Glomerulo	42	7	1	5	-	5	1	2	1	4	5	3	8
Kidney–Nephritis, Interstitial	9	-	-	1	-	4	1	-	-	-	2	1	-
Kidney–Nephritis, Pyelo	10	2	3	-	1	-	1	1	1	-	-	1	-
Kidney–Nephrosis	25	2	3	5	1	2	2	1	1	2	3	2	1
Kidney–Nephrosis, Oxalate	9	1	-	1	-	1	-	1	-	3	2	-	-
Kidney–Urolithiasis	4	-	-	-	1	1	-	-	-	-	1	1	-
Ovary–Neoplasm, Adenocarcinoma	2	1	-	-	-	-	-	-	-	-	-	-	1
Ovary–Neoplasm, Lipoma	1	-	-	-	-	-	-	1	-	-	-	-	-
Ovary–Neoplasm, Teratoma	1	-	-	-	-	-	-	-	-	-	1	-	-
Penis–Neoplasm, Hemangioma	1	-	-	-	-	-	-	-	-	1	-	-	-
Penis–Posthitis	1	-	-	-	-	-	-	-	-	-	-	1	-
Prostate–Cyst	1	-	1	-	-	-	-	-	-	-	-	-	-
Prostate–Hyperplasia	9	-	1	1	-	-	1	1	-	-	1	1	3
Prostate–Neoplasm, Carcinoma	2	-	-	-	-	-	1	-	-	-	1	-	-
Prostate–Neoplasm, Hemangiosarcoma	1	-	-	1	-	-	-	-	-	-	-	-	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Prostate-Neoplasm, Adenocarcinoma	2	-	-	1	-	-	-	-	-	-	-	1	-
Prostate-Prostatitis	3	-	-	2	-	-	-	-	-	-	1	-	-
Scrotum-Inflammation	1	-	-	-	-	-	-	-	1	-	-	-	-
Scrotum-Neoplasm, Hemangiosarcoma	1	-	-	-	-	-	-	-	-	-	-	-	1
Scrotum-Neoplasm, Mastocytoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Stillbirth	2	-	-	1	-	-	-	-	-	-	1	-	-
Stillbirth, Idiopathic	2	2	-	-	-	-	-	-	-	-	-	-	-
Testicle-Atrophy	3	-	-	-	-	-	-	-	-	1	1	1	-
Testicle-Cryptorchid	1	-	-	-	-	-	1	-	-	-	-	-	-
Testicle-Neoplasm, Interstitial Cell Tumor	9	-	1	2	-	-	-	1	2	-	-	1	2
Testicle-Neoplasm, Seminoma	9	-	-	3	1	1	1	-	-	1	1	-	1
Testicle-Neoplasm, Sertoli Cell Tumor	6	-	-	1	2	1	-	-	-	-	1	-	1
Testicle-Orchitis	4	1	-	-	1	-	-	1	-	-	-	-	1
Ureter-Neoplasm, Transitional Papilloma	1	-	-	-	-	-	-	-	-	-	-	-	1
Urethra-Neoplasm, Carcinoma	2	-	-	-	-	-	-	1	-	-	1	-	-
Urethra-Neopl., Transitional Cell Carcinoma	5	-	-	-	1	1	-	-	1	-	1	1	-
Urethra-Obstruction	1	-	-	-	-	-	-	-	1	-	-	-	-
Urinary Bladder-Neoplasm, Carcinoma	1	-	-	-	-	-	-	-	-	-	1	-	-
Urinary Bladder-Neopl., Leiomyosarcoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Urinary Bladder-Neoplasm, Polyp	1	-	-	-	-	-	-	-	-	-	-	-	1
Urin. Blad.-Neopl., Trans. Cell Carcinoma	15	-	2	1	1	1	1	1	1	-	4	1	2
Urinary Bladder-Urocystitis	24	-	2	2	3	3	3	1	2	3	2	2	1
Urinary Bladder-Urolithiasis	9	-	-	-	1	3	1	-	1	1	-	-	2
Urinary Tract-Bact. Infection, <i>E. coli</i>	145	17	14	20	12	19	10	4	8	7	11	17	6
Urin. Tract-Bact. Infect., <i>Enterococcus sp.</i>	19	1	1	4	-	1	2	1	4	1	2	1	1
Urinary Tract-Bact. Infect., <i>Klebsiella sp.</i>	10	-	-	2	1	2	3	1	-	-	1	-	-
Urin. Tract-Bact. Infect., <i>Proteus mirabilis</i>	35	6	9	5	2	-	4	1	2	-	-	2	4
Urin. Tract-Bact. Infect., <i>Pseudomonas sp.</i>	8	-	1	-	2	1	1	1	-	2	-	-	-
Urinary Tract-Bact. Infection, <i>Staph. aureus</i>	4	-	1	-	-	-	1	-	-	1	-	1	-
Urinary Tract-Bact. Infection, <i>Staph. sp.</i>	38	3	5	3	2	5	-	5	3	2	4	3	3
Urin. Tract-Bact. Infect., <i>Streptococcus sp.</i>	20	2	3	3	2	1	-	1	3	2	2	-	1
Urinary Tract-Mycotic Infection, Yeast	1	1	-	-	-	-	-	-	-	-	-	-	-
Urine-Microbiologic Exam	622	60	33	51	53	67	49	57	50	51	51	53	47
Uterus-Endometrial Biopsy	1	-	-	-	1	-	-	-	-	-	-	-	-
Uterus-Endometrial Hyperplasia	6	-	-	-	3	-	-	1	2	-	-	-	-
Uterus-Metritis	8	2	-	-	1	-	-	-	1	-	-	3	1
Uterus-Neoplasm, Leiomyosarcoma	1	-	-	-	1	-	-	-	-	-	-	-	-
Vagina-Neoplasm, Carcinoma	2	-	-	-	-	-	-	-	-	-	1	-	1
Vagina-Neoplasm, Fibroleiomyoma	1	-	-	-	-	-	-	-	1	-	-	-	-
Vagina-Neoplasm, Fibroma	2	-	-	-	-	-	-	-	-	1	1	-	-
Vagina-Neoplasm, Fibropapilloma	2	1	-	-	-	-	-	-	1	-	-	-	-
Vagina-Neoplasm, Fibrovascular Polyp	1	-	-	-	-	-	-	-	-	1	-	-	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Vagina-Neoplasm, Hemangioma	1	-	-	-	-	-	-	1	-	-	-	-	-
Vagina-Neoplasm, Leiomyoma	3	1	-	-	-	-	-	-	1	-	-	-	1
Vagina-Neoplasm, Mastocytoma	1	-	-	-	-	-	1	-	-	-	-	-	-
Vagina-Vaginitis	4	-	1	-	-	-	1	-	1	-	-	-	1
Vulva-Neoplasm, Fibroma	1	-	-	1	-	-	-	-	-	-	-	-	-
Vulva-Neoplasm, Hemangiosarcoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Vulva-Neoplasm, Melanoma	3	-	-	-	-	1	-	1	-	-	1	-	-
Vulva-Neoplasm, Sarcoma	1	-	-	-	-	-	-	-	-	-	-	-	1
8 Endocrine													
Adrenal-Adrenolitis	4	-	1	1	1	-	-	-	-	1	-	-	-
Adrenal-Atrophy	3	1	-	-	-	1	-	-	-	-	-	1	-
Adrenal-Hyperplasia	17	4	1	3	1	1	-	1	-	-	-	4	2
Adrenal-Hypoadrenalism	1	-	1	-	-	-	-	-	-	-	-	-	-
Adrenal-Neoplasm, Adenoma	13	-	2	2	-	2	1	-	1	2	-	1	2
Adrenal-Neoplasm, Carcinoma	2	-	-	-	-	-	1	-	1	-	-	-	-
Adrenal-Neoplasm, Pheochromocytoma	7	-	-	-	1	1	1	1	1	2	-	-	-
Parathyroid-Hyperplasia	6	-	-	1	1	2	-	-	-	1	-	-	1
Parathyroid-Neoplasm, Adenocarcinoma	1	-	-	-	1	-	-	-	-	-	-	-	-
Parathyroid-Neoplasm, Adenoma	3	-	-	-	-	1	-	-	1	-	1	-	-
Pituitary-Cyst	1	-	-	-	1	-	-	-	-	-	-	-	-
Pituitary-Neoplasm, Adenoma	5	1	-	-	1	-	-	-	-	-	-	-	3
Thyroid-Atrophy	12	1	2	-	1	1	1	-	-	1	2	2	1
Thyroid-Hyperplasia	1	-	-	-	-	-	-	-	1	-	-	-	-
Thyroid-Hypothyroidism	1	-	1	-	-	-	-	-	-	-	-	-	-
Thyroid-Neoplasm, Adenoma	4	-	1	1	-	-	-	-	1	-	-	-	1
Thyroid-Neoplasm, Carcinoma	14	1	-	2	3	1	2	1	1	1	1	1	-
Thyroid-Thyroiditis	1	-	1	-	-	-	-	-	-	-	-	-	-
9 Nervous													
<i>Neurological Disorders, Total Cases</i>	<i>118</i>	<i>6</i>	<i>10</i>	<i>10</i>	<i>7</i>	<i>15</i>	<i>11</i>	<i>8</i>	<i>10</i>	<i>10</i>	<i>7</i>	<i>10</i>	<i>14</i>
Brain-Abscess	1	-	-	-	-	-	-	-	-	-	1	-	-
Brain-Anomaly	10	1	2	-	-	3	-	1	-	1	-	-	2
Brain-Edema	1	-	-	-	-	-	-	-	1	-	-	-	-
Brain-Encephalitis	2	1	-	-	-	-	-	1	-	-	-	-	-
Brain-Encephalitis, <i>Escherichia coli</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Brain-Encephalitis, Granulomatous	8	-	2	-	-	-	1	-	-	1	-	2	2
Brain-Encephalitis, Non-Suppurative	11	-	-	2	2	1	2	-	2	2	-	-	-
Brain-Encephalitis, Pseudorabies	3	-	-	-	-	1	1	-	-	-	1	-	-
Brain-Encephalitis, Rabies	1	-	-	-	-	-	-	1	-	-	-	-	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Brain–Encephalitis, Suppurative	1	-	-	-	-	1	-	-	-	-	-	-	-
Brain–Encephalomalacia	2	-	-	-	-	-	-	-	-	-	-	-	2
Brain–Encephalopathy	8	1	-	2	-	1	1	-	1	1	-	1	-
Brain–Encephalopathy, Hepatic	1	-	-	-	-	-	-	-	-	-	-	-	1
Brain–Hemorrhage	3	1	-	1	-	-	-	-	-	-	-	1	-
Brain–Infarction	2	-	-	-	-	-	-	-	2	-	-	-	-
Brain–Neoplasm, Astrocytoma	3	-	-	1	-	1	-	-	-	-	-	1	-
Brain–Neoplasm, Choroid Plexus Papilloma	1	-	-	-	-	1	-	-	-	-	-	-	-
Brain–Neoplasm, Meningioma	5	-	1	1	-	1	-	1	-	1	-	-	-
Brain–Neoplasm, Sarcoma	1	-	-	-	-	-	-	-	1	-	-	-	-
Brain–Neoplasm, Schwannoma	1	-	-	-	-	-	1	-	-	-	-	-	-
Brain–Parasitism, <i>Encephalitozoon sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Brain–Parasitism, <i>Neospora sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Meninges–Meningitis, <i>Escherichia coli</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Meninges–Meningitis, Non-Suppurative	3	-	-	-	1	-	-	-	-	-	-	2	-
Meninges–Meningitis, Suppurative	2	-	-	-	1	-	-	-	1	-	-	-	-
Nerve–Neuropathy	1	-	-	-	-	-	-	-	-	-	1	-	-
Neurologic Disorder, Dysautonomia	1	-	-	1	-	-	-	-	-	-	-	-	-
Neurologic Disorder, Idiopathic	18	-	2	1	2	2	1	1	1	2	2	-	4
Spinal Cord–Myelomalacia	7	2	-	-	-	-	-	1	1	-	-	1	2
Spinal Cord–Myelopathy	6	-	1	1	-	-	1	-	-	1	-	1	1
Spinal Cord–Neoplasm, Astrocytoma	1	-	-	-	-	-	1	-	-	-	-	-	-
Spinal Cord–Neoplasm, Carcinoma	1	-	-	-	-	-	-	1	-	-	-	-	-
Spinal Cord–Neoplasm, Fibrosarcoma	1	-	-	-	-	-	-	1	-	-	-	-	-
Spinal Cord–Neoplasm, Lymphosarcoma	3	-	1	-	-	-	1	-	-	-	-	1	-
S. Cord–Neopl., Malign. Peri. Nerve Sh. Tum.	1	-	-	-	-	-	-	-	-	-	-	1	-
Spinal Cord–Neoplasm, Mastocytoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Spinal Cord–Neoplasm, Mesenchymal	1	-	-	-	1	-	-	-	-	-	-	-	-
Spinal Cord–Neoplasm, Neurofibrosarcoma	1	-	-	-	-	-	-	-	-	-	1	-	-
Spinal Cord–Neoplasm, Sarcoma	2	-	-	-	-	-	1	-	1	-	-	-	-
X Special Senses													
Ear–Necrosis	1	-	-	-	-	-	1	-	-	-	-	-	-
Ear–Neoplasm, Plasmacytoma	3	1	-	-	-	-	-	-	-	1	-	-	1
Ear–Neoplasm, Carcinoma	3	-	1	-	-	-	-	-	-	-	2	-	-
Ear–Neopl., Ceruminous Gland Adenoma	4	1	-	-	1	-	-	-	1	-	-	1	-
Ear–Neoplasm, Histiocytoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Ear–Neoplasm, Mastocytoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Ear–Neoplasm, Squamous Cell Carcinoma	1	-	-	-	-	-	-	-	-	-	-	-	1
Ear–Otitis	9	3	1	-	-	-	-	-	1	2	1	1	-
Ear–Otitis Externa, <i>Acinetobacter sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-

CANINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Ear-Otitis Ext., <i>Arcanobacterium pyogenes</i>	1	-	-	-	-	-	-	1	-	-	-	-	-
Ear-Otitis Externa, <i>Bacillus sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Ear-Otitis Externa, <i>Corynebacterium sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Ear-Otitis Externa, <i>Enterobacter sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Ear-Otitis Externa, <i>Enterococcus sp.</i>	32	6	2	4	1	-	1	2	1	4	4	5	2
Ear-Otitis Externa, <i>Escherichia coli</i>	24	1	2	2	3	-	1	2	-	6	4	2	1
Ear-Otitis Externa, <i>Malassezia sp.</i>	22	4	4	2	1	-	2	3	1	1	2	2	-
Ear-Otitis Externa, <i>Pasteurella canis</i>	1	-	-	-	-	-	-	-	-	-	-	1	-
Ear-Otitis Externa, <i>Pasteurella multocida</i>	2	-	-	1	-	-	-	-	-	-	1	-	-
Ear-Otitis Externa, <i>Proteus mirabilis</i>	30	5	1	3	2	-	-	4	1	6	3	3	2
Ear-Otitis Externa, <i>Proteus sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Ear-Otitis Ext., <i>Pseudomonas aeruginosa</i>	56	9	-	8	7	2	2	7	4	5	3	5	4
Ear-Otitis Externa, <i>Pseudomonas sp.</i>	3	-	1	1	-	-	-	-	-	1	-	-	-
Ear-Otitis Externa, <i>Staphylococcus sp.</i>	61	7	3	5	5	2	2	7	1	7	8	7	7
Ear-Otitis Externa, <i>Streptococcus sp.</i>	45	7	-	1	4	-	1	6	1	9	7	6	3
Ear-Otitis Externa, Yeast	2	-	-	-	1	-	-	-	-	1	-	-	-
Ear-Polyp	4	1	-	-	-	-	-	1	-	-	2	-	-
Eye-Cataract	1	-	-	-	-	-	-	-	-	-	-	-	1
Eye-Conjunctivitis	4	-	-	1	-	-	-	-	1	-	-	2	-
Eye-Glaucoma	11	-	-	1	3	1	-	-	1	-	1	1	3
Eye-Keratitis	6	-	-	-	1	-	-	1	1	-	-	1	2
Eye-Keratopathy	6	-	1	-	1	1	2	-	-	-	-	1	-
Eye-Neoplasm	1	-	-	-	-	-	1	-	-	-	-	-	-
Eye-Neoplasm, Adenocarcinoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Eye-Neoplasm, Adenoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Eye-Neoplasm, Ganglioneuroma	1	-	-	1	-	-	-	-	-	-	-	-	-
Eye-Neoplasm, Lymphosarcoma	3	-	-	1	-	-	-	-	1	-	-	-	1
Eye-Neoplasm, Melanoma	5	-	-	1	-	2	-	-	2	-	-	-	-
Eye-Neoplasm, Mesenchymal Tumor	1	-	-	-	1	-	-	-	-	-	-	-	-
Eye-Neoplasm, Neuroblastoma	1	-	-	-	-	-	-	-	-	-	-	-	1
Eye-Neoplasm, Nodular Fasciitis	1	-	-	-	1	-	-	-	-	-	-	-	-
Eye-Neoplasm, Retinoblastoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Eye-Neoplasm, Squamous Cell Carcinoma	1	-	-	-	-	-	-	-	-	1	-	-	-
Eye-Ophthalmitis	10	1	-	2	-	-	1	1	1	2	1	1	-
Eye-Retinopathy	7	-	-	1	1	1	-	-	1	1	-	1	1
Eyelid-Blepharitis	3	-	-	-	-	-	1	-	-	-	1	1	-
Eyelid-Neoplasm	3	-	-	-	1	-	1	-	-	1	-	-	-
Eyelid-Neoplasm, Basal Cell Tumor	1	-	-	-	-	-	-	-	-	-	-	1	-
Eyelid-Neoplasm, Melanoma	4	1	-	-	-	1	-	1	-	-	-	-	1
Eyelid-Neoplasm, Papilloma	2	-	-	-	-	1	-	1	-	-	-	-	-
Eyelid-Neopl., Sebaceous Gland Adenoma	36	4	1	2	1	1	3	2	1	4	4	5	8
Eyelid-Neoplasm, Sq. Cell Carcinoma	1	-	1	-	-	-	-	-	-	-	-	-	-

CAPRINE

CAPRINE	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
<u>0 Body as a Whole</u>													
Caseous Lymphadenitis	1	-	-	-	-	-	-	-	-	-	1	-	-
Deficiency, Copper	2	-	-	-	-	-	-	-	1	-	-	1	-
Deficiency, Vitamin E	1	-	-	-	-	-	-	-	-	-	1	-	-
Health Evaluation, Normal	1	-	-	-	-	-	-	-	-	-	1	-	-
Neonatal Death	2	-	-	-	-	-	1	-	-	1	-	-	-
Peritonitis	1	-	-	-	1	-	-	-	-	-	-	-	-
Sudden Unexpected Death	2	-	-	-	-	-	-	1	-	-	1	-	-
Toxicosis, Plant	1	-	-	-	-	-	-	-	-	-	1	-	-
<u>1 Integumentary</u>													
Abscess	1	-	-	1	-	-	-	-	-	-	-	-	-
Dermatitis, Allergic	2	-	-	-	-	-	-	-	-	2	-	-	-
Dermatitis, Eosinophilic	2	-	-	-	-	-	1	-	-	-	1	-	-
Dermatitis, Focal	2	-	-	-	-	-	1	-	1	-	-	-	-
Dermatitis, Granulomatous	1	-	-	-	1	-	-	-	-	-	-	-	-
Dermatitis, Lymphoplasmacytic	1	-	-	-	-	-	-	-	-	-	-	-	1
Mammary–Mastitis, Fungal	1	-	1	-	-	-	-	-	-	-	-	-	-
Mammary–Mastitis, <i>Klebsiella pneumoniae</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Mammary–Mastitis, Yeast	1	-	1	-	-	-	-	-	-	-	-	-	-
Skin–Hyperkeratosis	2	-	-	-	1	-	-	-	-	-	-	-	1
<u>2 Musculoskeletal</u>													
Arthritis	1	-	-	-	-	-	1	-	-	-	-	-	-
Arthropathy	2	-	-	-	-	-	-	-	1	-	-	1	-
Muscle–Myositis	2	-	-	-	-	-	-	-	1	-	1	-	-
<u>3 Respiratory</u>													
Lung–Abscess	1	-	-	-	-	-	-	-	-	-	1	-	-
Lung–Edema	2	-	-	1	-	-	1	-	-	-	-	-	-
Lung–Pneumonia	4	1	-	-	1	1	1	-	-	-	-	-	-
Lung–Pneumonia, Broncho	1	-	-	-	-	-	1	-	-	-	-	-	-
Lung–Pneumonia, Interstitial	5	-	-	-	1	-	1	-	-	1	1	1	-
Lung–Pneumonia, Ovine Progressive	1	-	-	-	-	-	-	-	-	-	-	-	1
Lung–Pneumonia, <i>Pasteurella multocida</i>	1	-	-	-	-	-	-	-	-	-	-	1	-

CAPRINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
4 Cardiovascular													
Blood Vessel–Vasculitis	1	-	-	1	-	-	-	-	-	-	-	-	-
Heart–Myocardial Degeneration	3	-	-	-	-	1	2	-	-	-	-	-	-
5 Hemic And Lymphatic													
Blood–Anemia	1	-	-	-	-	-	-	1	-	-	-	-	-
Lymph Node–Lymphadenitis	3	-	-	-	-	-	-	-	-	-	1	1	1
6 Digestive													
Cecum–Typhlitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Feces–Microbiologic Exam	8	4	-	-	-	1	-	-	1	-	1	1	-
Intestine–Colitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Intestine–Enteritis, <i>Clostridium perfringens</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Intestine–Enteritis, Hemorrhagic	1	-	-	-	1	-	-	-	-	-	-	-	-
Intestine–Enteritis, Idiopathic	4	1	-	1	-	-	-	-	-	1	-	-	1
Intestine–Ent., <i>M. paratuberculosis</i> (Johne's)	4	1	1	-	-	-	-	-	-	-	-	2	-
Intestine–Enteritis, <i>Salmonella sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1	-
Intestine–Parasitism, Coccidia	14	-	2	-	3	1	2	2	1	-	1	2	-
Intestine–Parasitism, <i>Strongyloides sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Intestine–Parasitism, <i>Trichostrongyle sp.</i>	7	-	1	-	1	-	2	1	-	-	1	1	-
Liver–Cholangiohepatitis	1	-	-	-	-	-	-	-	-	-	1	-	-
Liver–Hepatitis	2	-	-	-	-	-	-	-	1	-	-	1	-
Liver–Hepatopathy	3	1	-	-	1	-	1	-	-	-	-	-	-
Liver–Hepatositis	2	1	-	-	-	-	-	-	-	-	1	-	-
Liver–Lipidosis	4	-	-	1	1	-	1	-	-	-	-	1	-
Liver–Neoplasm, Sarcoma	1	-	-	-	-	-	1	-	-	-	-	-	-
Stomach–Abomasitis	2	1	-	-	1	-	-	-	-	-	-	-	-
Stomach–Abomasitis, Mycotic	1	-	-	-	-	-	-	-	-	1	-	-	-
Stomach–Parasitism, <i>Haemonchus sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Stomach–Rumenitis	1	-	-	-	-	-	1	-	-	-	-	-	-
7 Urogenital													
Abortion, Idiopathic	2	-	-	-	-	-	1	-	1	-	-	-	-
Abortion, Placentitis	1	-	-	-	-	-	-	-	-	1	-	-	-
Genital–Bacteriologic Exam	1	-	-	1	-	-	-	-	-	-	-	-	-
Kidney–Dysplasia	1	-	-	-	-	1	-	-	-	-	-	-	-
Kidney–Mineralization	1	-	-	-	-	-	1	-	-	-	-	-	-
Kidney–Nephritis, Glomerulo	1	1	-	-	-	-	-	-	-	-	-	-	-

CAPRINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Kidney–Nephritis, Pyelo	1	-	-	-	-	-	-	-	1	-	-	-	-
Kidney–Nephrosis	1	1	-	-	-	-	-	-	-	-	-	-	-
Penis–Posthitis	1	-	-	-	-	-	1	-	-	-	-	-	-
Urinary Bladder–Urocystitis	2	-	-	-	-	-	-	-	1	-	-	-	1
Urinary Bladder–Urolithiasis	1	-	-	-	-	-	-	-	-	-	-	-	1
Urinary Tract–Bact. Infect., <i>Streptococcus sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Urine–Microbiologic Exam	5	-	-	-	1	-	-	-	-	-	-	-	4
8 Endocrine													
Thyroid–Goiter	1	-	-	-	-	-	-	-	-	-	1	-	-
9 Nervous													
Brain–Encephalitis, <i>Listeria sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Meninges–Meningitis, <i>Streptococcus suis</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Spinal Cord–Myelopathy	1	-	-	-	-	-	1	-	-	-	-	-	-
X Special Senses													
Eye–Conjunctivitis	2	-	-	2	-	-	-	-	-	-	-	-	-

EQUINE

0 Body as a Whole													
Abdomen–Hemoperitoneum	3	-	1	-	-	-	-	-	-	-	1	1	-
Abscess	3	2	-	1	-	-	-	-	-	-	-	-	-
Amyloidosis	2	-	-	-	-	-	1	-	-	-	-	1	-
Anomaly	5	1	-	-	-	-	-	-	-	-	1	2	1
Effusion, Peritoneal	3	-	-	-	-	2	1	-	-	-	-	-	-
Effusion, Pleural	1	-	-	-	-	1	-	-	-	-	-	-	-
Emaciation	1	-	-	-	-	-	-	-	-	-	-	1	-
Hernia, Diaphragmatic	3	-	1	-	-	-	1	-	1	-	-	-	-
Hernia, Umbilical	1	1	-	-	-	-	-	-	-	-	-	-	-
Neonatal Death	9	1	1	-	-	-	-	1	2	1	-	3	-
Neonatal Weakness	2	-	-	-	-	-	-	-	-	1	-	-	1
Neoplasm, Rhabdomyosarcoma	1	-	-	-	-	-	-	1	-	-	-	-	-
Neoplasm, Lipoma	4	-	-	1	2	1	-	-	-	-	-	-	-
Neoplasm, Lymphosarcoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Omphalitis	3	1	-	-	-	-	-	-	-	-	-	-	2

EQUINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Paralysis	1	-	-	-	-	-	-	-	-	-	-	-	1
Peritonitis	5	-	1	1	-	1	-	-	-	1	-	1	-
Septicemia, <i>Actinobacillus sp.</i>	3	-	-	-	-	-	-	-	-	-	3	-	-
Septicemia, Bacterial	4	1	-	-	-	-	-	-	-	1	-	1	1
Septicemia, <i>Enterobacter sp.</i>	1	-	-	-	-	-	-	-	-	-	-	-	1
Septicemia, <i>Escherichia coli</i>	1	-	-	-	-	-	-	-	-	-	-	1	-
Septicemia, <i>Rhodococcus equi</i>	2	1	1	-	-	-	-	-	-	-	-	-	-
Sudden Unexpected Death	7	-	2	-	-	-	-	-	1	-	-	1	3
Thorax-Hemothorax	1	-	-	-	-	-	-	-	-	-	-	1	-
Toxicosis, Plant	1	1	-	-	-	-	-	-	-	-	-	-	-
Trauma	14	3	1	2	2	-	1	-	-	-	1	2	2
Virus Infection, Herpes	1	-	-	-	-	-	-	-	-	-	-	1	-
Weakness	1	-	1	-	-	-	-	-	-	-	-	-	-
1 Integumentary													
Cellulitis	6	1	1	-	-	-	-	-	-	-	-	2	2
Cyst, Epidermal	2	1	-	-	-	-	1	-	-	-	-	-	-
Dermatitis, Allergic	3	-	-	-	-	-	2	-	-	-	-	1	-
Dermatitis, Bacterial	2	-	-	-	-	-	-	-	-	-	-	1	1
Dermatitis, Diffuse	1	-	1	-	-	-	-	-	-	-	-	-	-
Dermatitis, Eosinophilic	10	-	3	1	4	-	-	-	-	-	1	1	-
Dermatitis, Eosinophilic Granuloma	3	1	-	1	-	-	1	-	-	-	-	-	-
Dermatitis, Focal	5	-	-	1	-	-	1	-	1	-	1	1	-
Dermatitis, Folliculitis	1	-	-	-	-	-	-	-	-	-	1	-	-
Dermatitis, Granulation Tissue	3	-	-	-	-	-	-	1	1	1	1	-	-
Dermatitis, Granulomatous	2	-	-	-	-	1	-	-	-	-	1	-	-
Dermatitis, Lymphoplasmacytic	2	1	-	-	-	-	-	-	-	-	1	-	-
Dermatitis, Mycotic	1	-	-	-	-	1	-	-	-	-	-	-	-
Dermatitis, Pemphigus	2	-	-	-	-	-	2	-	-	-	-	-	-
Dermatitis, Podo	1	-	-	-	-	-	-	-	-	-	-	1	-
Dermatitis, Ulcerative	3	1	-	-	-	-	-	-	1	-	-	-	1
Dermatosis, Adnexal Dysplasia	2	-	-	-	-	-	1	-	1	-	-	-	-
Mammary-Mastitis	2	-	-	-	-	1	-	-	-	-	-	1	-
Mammary-Mastitis, <i>Klebsiella pneumoniae</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Neoplasm, Adenoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Basal Cell Tumor	2	-	1	-	-	-	-	-	-	-	1	-	-
Neoplasm, Carcinoma	2	-	1	1	-	-	-	-	-	-	-	-	-
Neoplasm, Fibroma	1	-	-	-	-	-	-	-	-	1	-	-	-
Neoplasm, Fibrosarcoma	3	-	1	-	1	-	-	-	1	-	-	-	-

EQUINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Neoplasm, Lipoma	3	-	-	-	1	-	1	-	-	-	-	1	-
Neoplasm, Lymphangiosarcoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Neoplasm, Lymphosarcoma	2	-	-	1	-	-	-	-	-	-	-	1	-
Neoplasm, Mastocytoma	4	2	1	-	-	-	-	-	-	-	-	-	1
Neoplasm, Melanoma	4	-	1	-	1	2	-	-	-	-	-	-	-
Neoplasm, Myxosarcoma	1	-	-	-	-	-	-	-	-	-	1	-	-
Neoplasm, Papilloma	1	-	-	-	-	-	-	-	-	-	-	1	-
Neoplasm, Sarcoid	36	5	6	4	4	2	2	1	2	3	3	2	2
Neoplasm, Schwannoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Neoplasm, Squamous Cell Carcinoma	3	-	-	1	-	1	1	-	-	-	-	-	-
Parasitism, Tick	1	-	-	-	-	-	-	-	-	-	-	1	-
Skin-Hyperkeratosis	3	-	-	-	-	-	1	-	1	-	1	-	-
2 Musculoskeletal													
Arthritis	7	2	-	2	2	-	-	-	-	-	-	-	1
Arthropathy	8	1	2	-	-	-	1	1	-	1	1	-	1
Bone-Fracture	14	1	3	1	-	1	-	2	-	2	-	3	1
Bone-Hyperostosis	1	-	-	-	-	-	1	-	-	-	-	-	-
Bone-Malformation	6	-	1	1	-	-	-	-	-	1	2	1	-
Bone-Malformation, Wobbler	3	-	1	-	-	-	-	-	-	-	-	-	2
Bone-Neoplasm, Osteoma	1	-	-	-	-	-	-	-	1	-	-	-	-
Bone-Osteodystrophy	1	-	-	-	-	-	-	1	-	-	-	-	-
Bone-Osteomalacia	1	-	-	-	-	-	-	-	-	-	-	-	1
Bone-Osteomyelitis	2	1	-	-	-	-	1	-	-	-	-	-	-
Hoof-Laminitis	7	1	-	-	1	-	2	-	-	-	1	1	1
Muscle-Degeneration	7	-	-	-	-	3	-	-	1	-	1	2	-
Muscle-Myositis	2	-	-	1	-	-	-	-	-	-	-	1	-
Synovitis	5	-	2	-	1	1	-	-	-	1	-	-	-
3 Respiratory													
<i>Respiratory Disorders, Total Cases</i>	<i>116</i>	<i>19</i>	<i>8</i>	<i>14</i>	<i>5</i>	<i>8</i>	<i>6</i>	<i>4</i>	<i>4</i>	<i>12</i>	<i>11</i>	<i>7</i>	<i>18</i>
Aspergillosis	1	-	-	-	-	-	-	-	-	-	-	-	1
Guttural Pouch-Mycosis	2	-	-	-	-	1	1	-	-	-	-	-	-
Lung-Abscess	3	-	1	2	-	-	-	-	-	-	-	-	-
Lung-Bronchitis	3	2	-	-	-	-	-	-	-	-	1	-	-
Lung-Congestion	1	1	-	-	-	-	-	-	-	-	-	-	-
Lung-Edema	4	1	-	-	-	1	-	-	-	1	-	1	-
Lung-Emphysema	1	-	-	-	-	-	-	-	-	-	-	-	1
Lung-Hemorrhage	3	-	-	-	-	-	-	-	-	-	1	-	2
Lung-Mineralization	2	-	1	1	-	-	-	-	-	-	-	-	-

EQUINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Lung-Parasitism	1	-	1	-	-	-	-	-	-	-	-	-	-
Lung-Pneumonia	2	1	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia, Broncho	4	-	1	1	-	-	-	-	-	-	-	-	2
Lung-Pneumonia, <i>Escherichia coli</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Lung-Pneumonia, Foreign Body	4	-	2	-	-	-	-	-	-	-	2	-	-
Lung-Pneumonia, Interstitial	2	-	-	-	-	-	-	1	-	-	-	1	-
Lung-Pneumonia, <i>Klebsiella sp.</i>	1	-	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia, Mycotic	1	-	-	-	-	-	1	-	-	-	-	-	-
Lung-Pneumonia, <i>Rhodococcus equi</i>	4	2	1	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia, <i>Streptococcus sp.</i>	3	-	-	1	-	-	-	-	-	-	1	-	1
Lung-Thrombosis	1	-	-	-	-	1	-	-	-	-	-	-	-
Nasal-Neoplasm, Squamous Papilloma	1	-	-	-	-	-	-	-	1	-	-	-	-
Nasal-Rhinitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Nasal-Rhinitis, <i>Streptococcus sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Pleura-Pleuritis	6	-	-	-	-	-	-	2	-	1	-	-	3
Respiratory Infection, <i>Actinobacillus suis</i>	2	-	-	-	-	-	-	-	1	-	1	-	-
Respiratory Infection, <i>Aspergillus sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Respiratory Infection, Microbiologic Exam	55	9	1	8	5	5	3	1	2	8	4	4	5
Resp. Infection, <i>Pseudomonas aeruginosa</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Respiratory Infection, <i>Rhodococcus equi</i>	2	1	1	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Rhodococcus sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Streptococcus equi</i>	3	-	-	2	-	-	-	-	-	-	-	-	1
Respiratory Infection, <i>Streptococcus sp.</i>	6	-	1	-	-	-	-	-	1	1	-	1	2
Sinus-Sinusitis	3	1	-	-	-	-	1	-	-	-	1	-	-
4 Cardiovascular													
Blood Vessel-Angiopathy	2	-	-	-	-	1	-	-	-	-	-	1	-
Blood Vessel-Thrombosis	4	1	-	-	-	-	1	-	-	1	-	1	-
Blood Vessel-Vasculitis	2	-	1	-	1	-	-	-	-	-	-	-	-
Heart-Anomaly	3	1	-	-	-	-	-	-	1	-	1	-	-
Heart-Cardiomyopathy	1	-	-	-	-	-	-	-	-	-	-	1	-
Heart-Endocarditis	1	1	-	-	-	-	-	-	-	-	-	-	-
Heart-Epicarditis	1	-	1	-	-	-	-	-	-	-	-	-	-
Heart-Heart Failure, Chronic	1	-	-	-	-	-	-	-	-	-	-	-	1
Heart-Myocardial Degeneration	4	-	-	-	-	1	-	-	-	-	-	1	2
Heart-Pericarditis	1	-	-	-	-	-	-	-	-	-	-	1	-
Heart-Thrombosis	1	-	-	-	-	-	-	-	1	-	-	-	-

EQUINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
<u>5 Hemic and Lymphatic</u>													
Blood–Coagulation Disorder	1	-	1	-	-	-	-	-	-	-	-	-	-
Blood–Hemorrhage, Generalized	1	-	-	1	-	-	-	-	-	-	-	-	-
Bone Marrow–Hypocellularity	2	2	-	-	-	-	-	-	-	-	-	-	-
Immune System–Hypogammaglobulinemia	1	-	-	-	-	-	-	-	-	-	-	1	-
Lymph Node–Hyperplasia	1	1	-	-	-	-	-	-	-	-	-	-	-
Lymph Node–Lymphadenitis	5	-	-	-	1	-	-	-	-	1	1	2	-
Spleen–Neoplasm, Hemangiosarcoma	1	-	1	-	-	-	-	-	-	-	-	-	-
<u>6 Digestive</u>													
Cecum–Typhlitis	1	-	-	-	-	1	-	-	-	-	-	-	-
Esophagus–Dilatation	1	-	-	1	-	-	-	-	-	-	-	-	-
Esophagus–Esophagitis	2	-	2	-	-	-	-	-	-	-	-	-	-
Esophagus–Obstruction (Choke)	2	-	1	-	-	1	-	-	-	-	-	-	-
Feces–Microbiologic Exam	168	5	27	14	12	9	10	12	24	12	12	15	16
Intestine–Colitis	2	-	-	-	-	1	-	-	1	-	-	-	-
Intestine–Dilatation	1	-	-	-	-	-	-	-	-	-	1	-	-
Intestine–Enteritis, Eosinophilic	2	-	-	-	-	-	-	1	-	-	-	1	-
Intestine–Enteritis, Granulomatous	1	-	-	-	-	-	-	-	-	-	-	-	1
Intestine–Enteritis, Hemorrhagic	1	-	-	1	-	-	-	-	-	-	-	-	-
Intestine–Enteritis, Idiopathic	12	2	3	2	-	1	-	-	-	-	-	3	1
Intestine–Enteritis, Lymphoplasmacytic	2	-	2	-	-	-	-	-	-	-	-	-	-
Intestine–Enteritis, Necrotic	3	-	-	1	-	-	1	-	-	-	-	-	1
Intestine–Enteritis, Rotavirus	3	-	-	1	-	-	-	-	-	-	1	-	1
Intestine–Enteritis, <i>Salmonella sp.</i>	23	5	-	-	-	-	-	3	-	7	5	3	-
Intestine–Infarction	2	-	-	-	-	-	-	1	1	-	-	-	-
Intestine–Intussusception	4	-	1	-	-	-	-	-	-	-	-	3	-
Intestine–Neoplasm, Fibroma	1	-	-	-	-	-	-	-	-	-	-	1	-
Intestine–Neoplasm, Leiomyoma	2	-	-	-	-	-	-	-	1	-	-	-	1
Intestine–Obstruction	13	-	2	1	1	-	1	1	1	1	1	2	2
Intestine–Parasitism, Ascaris	2	-	1	1	-	-	-	-	-	-	-	-	-
Intestine–Parasitism, Cestode	2	-	1	1	-	-	-	-	-	-	-	-	-
Intestine–Parasitism, <i>Cryptosporidium sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Intestine–Parasitism, Nematode	1	-	-	1	-	-	-	-	-	-	-	-	-
Intestine–Rupture	3	-	1	-	-	-	-	-	1	-	-	-	1
Intestine–Ulcer	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine–Volvulus	15	3	4	1	-	-	2	-	2	-	2	-	1
Lip–Chelitis	1	-	-	-	-	-	-	-	-	-	1	-	-
Liver–Abscess	2	-	-	-	-	-	-	-	-	-	1	-	1
Liver–Cholangiohepatitis	6	1	-	-	-	-	-	1	1	-	-	3	-

EQUINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Liver–Cirrhosis	5	1	-	-	-	1	-	-	-	-	2	1	-
Liver–Hepatitis	6	-	-	2	-	1	-	1	-	-	1	1	-
Liver–Hepatopathy	3	-	-	1	1	-	-	-	-	-	-	1	-
Liver–Hepatositis	2	1	1	-	-	-	-	-	-	-	-	-	-
Liver–Lipidosis	6	3	-	-	1	-	1	-	-	-	-	1	-
Liver–Neoplasm, Hemangiosarcoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Oral Cavity–Dentition Abnormal	1	-	-	-	-	-	-	-	-	-	1	-	-
Oral Cavity–Glossitis	2	-	-	1	-	-	-	-	-	-	-	1	-
Oral Cavity–Neoplasm, Fibrosarcoma	1	-	-	-	-	-	-	1	-	-	-	-	-
Stomach–Dilatation	1	-	-	1	-	-	-	-	-	-	-	-	-
Stomach–Gastritis	2	-	-	-	-	-	-	-	1	1	-	-	-
Stomach–Impaction	2	-	1	-	-	-	-	-	-	-	1	-	-
Stomach–Neoplasm, Sq. Cell Carcinoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Stomach–Rupture	3	-	2	-	-	1	-	-	-	-	-	-	-
Stomach–Ulcer	11	2	3	1	-	-	-	-	-	-	1	2	2
7 Urogenital													
<i>Reproductive Disorders, Total Cases</i>	281	23	20	18	9	10	8	19	25	29	47	40	33
Abortion, Anomaly	1	-	-	-	-	-	-	-	1	-	-	-	-
Abortion, Bacterial, <i>Leptospira sp.</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Abortion, Bacterial, <i>Staphylococcus aureus</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Abortion, Bacterial, <i>Streptococcus sp.</i>	1	-	-	-	-	-	-	1	-	-	-	-	-
Abortion, Bacterial, <i>Strep. zooepidemicus</i>	1	-	-	-	-	-	-	-	1	-	-	-	-
Abortion, Idiopathic	24	1	-	1	2	3	3	5	1	4	4	-	-
Abortion, Mummified Fetus	2	-	-	-	1	-	-	-	1	-	-	-	-
Abortion, Mycotic Placentitis	1	-	-	-	-	-	-	-	-	-	1	-	-
Abortion, Placentitis	3	-	-	1	-	-	-	-	-	1	1	-	-
Abortion, Umbilical Cord Torsion	2	-	-	-	1	-	-	-	-	1	-	-	-
Abortion, Viral	2	-	-	-	-	-	-	-	1	1	-	-	-
Abortion, Viral, Herpes Group 5	1	-	-	-	-	-	-	-	-	-	-	1	-
Genital–Bacteriologic Exam	217	20	17	14	3	5	4	12	17	20	40	36	29
Kidney–Cyst	1	1	-	-	-	-	-	-	-	-	-	-	-
Kidney–Hydronephrosis	2	-	-	-	-	-	-	-	1	-	1	-	-
Kidney–Infarction	3	-	-	-	-	-	2	-	-	-	-	1	-
Kidney–Mineralization	1	-	-	-	-	1	-	-	-	-	-	-	-
Kidney–Nephritis	1	1	-	-	-	-	-	-	-	-	-	-	-
Kidney–Nephritis, End Stage	1	1	-	-	-	-	-	-	-	-	-	-	-
Kidney–Nephritis, Glomerulo	3	1	-	-	-	-	1	1	-	-	-	-	-
Kidney–Nephritis, Pyelo	1	-	-	-	-	-	-	-	-	-	1	-	-

EQUINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Kidney–Nephrosis	5	1	-	-	-	-	2	-	-	-	-	2	-
Ovary–Neoplasm, Granulosa Cell Tumor	3	-	-	-	-	1	1	-	1	-	-	-	-
Penis–Neoplasm, Papilloma	1	-	-	-	-	-	-	-	-	1	-	-	-
Penis–Neoplasm, Squamous Cell Carcinoma	2	-	-	-	-	-	-	1	-	-	-	1	-
Prepuce–Neoplasm, Lymphosarcoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Prepuce–Neoplasm, Mastocytoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Prepuce–Neoplasm, Sq. Cell Carcinoma	2	-	-	-	-	-	-	-	-	-	-	-	2
Prepuce–Neoplasm, Squamous Papilloma	1	-	1	-	-	-	-	-	-	-	-	-	-
Stillbirth	3	-	-	-	-	-	-	-	1	-	-	2	-
Stillbirth, Idiopathic	1	-	-	1	-	-	-	-	-	-	-	-	-
Testicle–Cryptorchid	1	-	-	-	-	-	-	-	-	-	-	-	1
Urinary Bladder–Urocystitis	2	-	-	-	-	-	2	-	-	-	-	-	-
Urinary Tract–Bact. Infection, <i>E. coli</i>	2	1	-	-	-	-	-	-	-	-	1	-	-
Urinary Tract–Bact. Infect., <i>Enterococcus sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Urinary Tract–Bact. Infection, <i>Staph. aureus</i>	1	-	-	-	-	-	1	-	-	-	-	-	-
Urinary Tract–Bact. Infection, <i>Strep. sp.</i>	3	1	-	-	-	-	-	-	-	-	2	-	-
Urine–Microbiologic Exam	11	1	-	4	-	-	1	1	-	1	1	1	1
Uterus–Metritis	5	2	-	-	-	-	-	-	1	1	1	-	-
Uterus–Perforation	1	-	-	-	-	-	-	-	-	-	-	-	1
Vulva–Neoplasm, Sq. Cell Carcinoma	2	-	-	1	1	-	-	-	-	-	-	-	-
8 Endocrine													
Adrenal–Neoplasm, Carcinoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Pituitary–Neoplasm, Adenoma	2	-	-	-	-	1	-	-	-	-	-	1	-
Thyroid–Atrophy	2	-	2	-	-	-	-	-	-	-	-	-	-
Thyroid–Goiter	4	-	2	-	-	-	-	-	1	-	-	-	1
Thyroid–Hypothyroidism	1	-	-	-	-	-	-	-	-	-	-	-	1
Thyroid–Neoplasm, Adenoma	2	-	-	1	-	1	-	-	-	-	-	-	-
Thyroid–Neoplasm, Carcinoma	3	-	-	-	1	-	-	-	-	-	-	-	2
Thyroid–Thyroiditis	1	-	-	-	-	-	-	-	-	-	-	-	1
9 Nervous													
<i>Neurological disorders, Total Cases</i>	<i>34</i>	<i>5</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>3</i>	<i>5</i>	<i>5</i>
Brain–Anomaly	2	1	-	-	-	-	-	-	-	-	1	-	-
Brain–Encephalitis, Non-Suppurative	1	-	-	-	-	-	-	-	-	-	-	1	-
Brain–Encephalitis, Rabies	1	-	-	-	-	-	-	-	1	-	-	-	-
Brain–Encephalopathy	4	1	-	1	1	-	-	1	-	-	-	-	-
Brain–Encephalopathy, Hepatic	1	-	-	-	-	-	-	-	-	-	-	1	-
Brain–Hemorrhage	1	-	-	-	-	-	-	-	-	-	1	-	-

EQUINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Brain–Leukoencephalomalacia	1	-	-	-	-	-	-	-	-	-	-	-	1
Meninges–Meningitis, Non-Suppurative	1	-	-	1	-	-	-	-	-	-	-	-	-
Meninges–Meningitis, Suppurative	1	1	-	-	-	-	-	-	-	-	-	-	-
Neurologic Disorder, Idiopathic	16	2	1	1	3	1	1	1	-	-	-	3	3
Spinal Cord–Myelitis, Non-Suppurative	1	-	-	-	-	-	-	-	-	-	1	-	-
Spinal Cord–Myelopathy	9	1	1	1	1	-	-	2	-	1	1	-	1
<u>X Special Senses</u>													
Eye–Cataract	1	-	1	-	-	-	-	-	-	-	-	-	-
Eye–Conjunctivitis	1	-	-	-	-	-	-	-	1	-	-	-	-
Eye–Keratitis	9	1	1	-	2	1	1	-	2	-	1	-	-
Eye–Neoplasm, Squamous Cell Carcinoma	4	-	1	-	-	-	-	-	2	1	-	-	-
Eye–Ophthalmitis	3	-	-	1	-	1	-	-	-	-	-	1	-
Eye–Retinopathy	1	-	-	-	-	-	-	-	-	-	-	1	-
Eyelid–Blepharitis	1	-	-	-	-	1	-	-	-	-	-	-	-
Eyelid–Neoplasm, Melanoma	2	-	-	-	-	-	1	-	1	-	-	-	-
Eyelid–Neoplasm, Sq. Cell Carcinoma	1	1	-	-	-	-	-	-	-	-	-	-	-

FELINE

0 Body as a Whole

Abdomen–Hemoperitoneum	6	1	-	-	-	1	-	-	1	-	1	-	2
Abdomen–Steatitis	1	-	1	-	-	-	-	-	-	-	-	-	-
Amyloidosis	37	4	4	2	5	-	3	3	2	6	-	4	4
Anomaly	2	-	1	-	-	-	-	1	-	-	-	-	-
Dehydration	1	-	-	-	-	-	-	-	-	1	-	-	-
Diabetes Mellitus	2	-	-	-	-	-	-	1	1	-	-	-	-
Drug Reaction	1	-	1	-	-	-	-	-	-	-	-	-	-
Edema, Generalized	1	-	-	-	-	-	-	-	1	-	-	-	-
Effusion, Chylothorax	4	-	-	1	-	1	-	-	-	-	1	1	-
Effusion, Pericardial	1	-	-	1	-	-	-	-	-	-	-	-	-
Effusion, Pleural	5	-	-	-	1	1	-	-	1	1	-	-	1
Effusion, Pyothorax	4	1	-	-	-	1	-	1	-	-	1	-	-
Emaciation	14	3	1	-	1	1	2	-	-	1	-	1	4
Feline Infectious Peritonitis	24	2	3	5	2	5	4	1	-	-	-	1	1
Feline Leukemia	2	-	-	-	-	-	-	-	-	2	-	-	-
Feline Panleukopenia	26	3	1	3	5	3	3	2	2	-	1	2	1
Health Evaluation, Normal	1	-	-	-	-	-	-	-	-	1	-	-	-
Hernia, Diaphragmatic	2	-	-	-	1	-	-	-	-	-	-	1	-

FELINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Hernia, Inguinal	1	-	-	-	-	-	-	-	-	-	-	1	-
Icterus	9	2	-	1	2	1	-	-	-	2	-	1	-
Injection Site	1	-	-	-	-	-	1	-	-	-	-	-	-
Mycosis, <i>Blastomyces sp.</i>	3	-	-	-	-	-	-	1	1	-	-	-	1
Mycosis, <i>Cryptococcus sp.</i>	3	-	-	-	1	-	-	-	1	-	-	-	1
Neonatal Weakness	1	-	-	-	-	1	-	-	-	-	-	-	-
Neoplasm, Carcinoma, Metastatic	7	1	-	-	1	1	-	-	2	1	-	-	1
Neoplasm, Lymphosarcoma	8	1	-	1	-	-	-	1	-	2	1	1	1
Obesity	2	-	-	-	-	-	-	-	-	-	-	-	2
Parasitism, <i>Toxoplasma sp.</i>	6	2	1	-	1	2	-	-	-	-	-	-	-
Peritonitis	8	-	2	1	-	1	1	1	-	-	-	2	-
Septicemia, Bacterial	1	-	-	-	1	-	-	-	-	-	-	-	-
Septicemia, <i>Bordetella bronchiseptica</i>	1	-	-	-	-	-	-	-	1	-	-	-	-
Septicemia, <i>Enterococcus sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Septicemia, <i>Escherichia coli</i>	11	1	3	-	1	-	2	1	1	-	-	2	-
Septicemia, <i>Pasteurella multocida</i>	7	3	-	-	1	-	-	-	-	1	-	1	1
Septicemia, <i>Pseudomonas sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Septicemia, <i>Salmonella sp.</i>	6	-	-	1	-	2	1	1	-	-	-	-	1
Septicemia, <i>Streptococcus sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Starvation	1	-	-	1	-	-	-	-	-	-	-	-	-
Steatitis	2	-	-	1	-	-	-	-	-	-	1	-	-
Sudden Unexpected Death	22	3	2	2	2	-	2	2	5	-	2	-	2
Thorax-Hemothorax	3	-	-	-	1	-	-	1	-	-	-	1	-
Thorax-Pneumothorax	2	-	-	-	-	-	-	-	-	1	-	-	1
Toxicosis, Ethylene Glycol	4	1	-	1	2	-	-	-	-	-	-	-	-
Trauma	13	2	-	-	2	1	3	-	-	1	-	1	3
Virus Infection, Herpes	5	1	-	1	-	1	-	-	1	1	-	-	-
1 Integumentary													
Abscess	4	2	-	-	1	-	1	-	-	-	-	-	-
Anomaly	1	-	-	-	-	-	-	-	-	-	1	-	-
Cellulitis	2	1	-	1	-	-	-	-	-	-	-	-	-
Cyst, Adnexal	5	-	-	-	1	1	-	-	1	-	-	-	2
Cyst, Epidermal	8	1	1	-	1	-	-	2	1	-	1	1	-
Dermal Fibrosis	6	-	-	1	-	1	1	2	-	-	-	-	1
Dermatitis, Allergic	20	2	1	-	3	2	1	3	1	2	1	2	2
Dermatitis, Diffuse	1	-	1	-	-	-	-	-	-	-	-	-	-
Dermatitis, Eosinophilic	2	-	-	1	1	-	-	-	-	-	-	-	-
Dermatitis, Eosinophilic Granuloma	12	-	2	1	2	2	1	-	1	2	-	-	1
Dermatitis, Focal	2	-	-	-	1	-	-	-	-	-	1	-	-
Dermatitis, Folliculitis	5	-	-	1	-	-	1	-	-	1	1	-	1

FELINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Dermatitis, Granulation Tissue	2	-	-	-	1	-	-	-	-	-	1	-	-
Dermatitis, Granulomatous	9	1	-	-	1	-	-	3	2	-	1	-	1
Dermatitis, Mycotic	5	1	-	-	1	-	1	-	1	-	-	1	-
Dermatitis, Necrotic	1	-	-	-	-	-	-	-	-	1	-	-	-
Dermatitis, Pemphigus	2	-	-	1	-	-	-	-	1	-	-	-	-
Dermatitis, Podo	3	-	-	-	-	1	-	-	1	-	-	1	-
Dermatitis, Seborrhea	1	-	-	-	-	-	-	-	1	-	-	-	-
Dermatitis, Ulcerative	5	-	1	-	-	-	-	-	1	1	1	1	-
Dermatosis, Endocrine	1	-	-	-	1	-	-	-	-	-	-	-	-
Mammary-Hyperplasia	2	-	-	-	1	-	-	-	-	-	-	1	-
Mammary-Neoplasm, Adenocarcinoma	28	1	3	2	2	3	-	2	5	2	2	5	1
Mammary-Neoplasm, Adenoma	2	1	-	-	-	-	-	-	1	-	-	-	-
Mammary-Neoplasm, Carcinoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Mammary-Neoplasm, Duct Carcinoma	5	2	-	1	1	-	-	-	-	-	1	-	-
Neoplasm, Adenocarcinoma	4	1	-	1	-	1	-	-	1	-	-	-	-
Neoplasm, Adenoma	5	1	-	-	-	-	-	1	2	-	-	-	1
Neoplasm, Apocrine Adenocarcinoma	3	-	1	-	-	1	-	1	-	-	-	-	-
Neoplasm, Basal Cell Tumor	26	5	1	1	2	2	1	3	3	2	3	1	2
Neoplasm, Fibroma	2	-	-	-	-	-	-	-	-	-	1	1	-
Neoplasm, Fibrosarcoma	48	4	3	5	6	5	2	3	4	3	5	5	3
Neoplasm, Hemangioma	3	-	-	-	-	-	-	-	-	-	-	1	2
Neoplasm, Hemangiosarcoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Neoplasm, Histiocytoma	2	-	-	-	-	1	-	-	1	-	-	-	-
Neoplasm, Lipoma	11	3	1	-	2	-	1	-	1	1	-	2	-
Neoplasm, Lymphangiosarcoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Lymphosarcoma	3	-	1	-	-	-	-	-	-	-	1	-	1
Neoplasm, Malignant Giant Cell Tumor	1	-	-	-	-	-	-	-	-	1	-	-	-
Neoplasm, Mastocytoma	38	5	4	3	1	2	6	-	5	6	2	2	2
Neoplasm, Melanoma	3	1	-	1	-	-	-	-	-	-	1	-	-
Neoplasm, Round Cell Tumor	1	-	-	-	-	-	-	-	1	-	-	-	-
Neoplasm, Sarcoid	1	-	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Sarcoma, Anaplastic	18	-	5	2	1	-	1	2	1	2	2	1	1
Neoplasm, Sebaceous Gland Adenoma	17	1	1	1	1	2	1	3	2	4	1	-	-
Neopl., Sebaceous Gland, Adenocarcinoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Squamous Cell Carcinoma	12	1	4	2	2	-	-	1	-	1	-	1	-
Neoplasm, Trabecular Trichoblastoma	1	-	-	-	1	-	-	-	-	-	-	-	-
Neoplasm, Trichoepithelioma	1	-	1	-	-	-	-	-	-	-	-	-	-
Panniculitis	16	2	1	1	-	1	-	1	-	3	3	1	3
Sebaceous Gland-Hyperplasia	3	-	-	1	1	-	-	-	1	-	-	-	-
Skin-Hyperkeratosis	2	-	-	-	1	-	1	-	-	-	-	-	-

FELINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
2 Musculoskeletal													
Arthritis	1	-	-	1	-	-	-	-	-	-	-	-	-
Arthropathy	2	-	1	-	-	-	-	-	-	-	-	-	1
Bone-Fracture	3	-	-	-	-	-	1	-	-	-	1	-	1
Bone-Hyperostosis	1	-	-	-	-	1	-	-	-	-	-	-	-
Bone-Neoplasm	1	-	-	-	-	-	-	-	-	-	-	-	1
Bone-Neoplasm, Osteosarcoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Bone-Osteomyelitis	1	-	-	-	-	-	-	-	-	-	1	-	-
Muscle-Atrophy	1	-	-	-	-	-	-	-	-	-	1	-	-
Muscle-Degeneration	3	-	-	-	-	-	1	1	1	-	-	-	-
Muscle-Myositis	1	-	-	-	-	-	-	-	-	1	-	-	-
3 Respiratory													
<i>Respiratory Disorders, Total Cases</i>	151	22	9	12	17	11	17	10	13	11	9	13	7
Asphyxiation	1	-	-	-	-	1	-	-	-	-	-	-	-
Larynx-Laryngitis	4	1	-	-	2	-	-	-	-	-	-	-	1
Larynx-Neoplasm	1	-	-	-	1	-	-	-	-	-	-	-	-
Larynx-Neoplasm, Sarcoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Larynx-Neoplasm, Sq. Cell Carcinoma	2	-	-	-	-	-	-	-	-	-	2	-	-
Lung-Abscess	2	-	-	-	-	-	-	-	-	-	-	2	-
Lung-Bronchitis	5	1	1	1	-	1	-	-	1	-	-	-	-
Lung-Congestion	2	2	-	-	-	-	-	-	-	-	-	-	-
Lung-Edema	17	3	2	-	2	2	1	2	1	1	1	2	-
Lung-Hemorrhage	2	2	-	-	-	-	-	-	-	-	-	-	-
Lung-Neoplasm, Adenocarcinoma	10	-	-	-	1	1	1	1	2	1	-	2	1
Lung-Neoplasm, Carcinoma	8	-	-	3	-	-	2	-	-	2	-	-	1
Lung-Pneumonia	6	1	-	-	-	-	1	-	2	-	1	-	1
Lung-Pneumonia, <i>Bordetella bronchiseptica</i>	7	-	1	-	1	1	1	-	1	-	-	1	1
Lung-Pneumonia, Broncho	2	-	-	-	-	-	1	-	-	-	-	1	-
Lung-Pneumonia, Calicivirus	2	-	-	-	1	-	-	-	-	-	1	-	-
Lung-Pneumonia, <i>Escherichia coli</i>	2	1	-	1	-	-	-	-	-	-	-	-	-
Lung-Pneumonia, Foreign Body	2	-	-	-	1	-	-	-	-	-	-	-	1
Lung-Pneumonia, Herpesvirus	1	-	-	-	-	-	-	-	-	-	-	1	-
Lung-Pneumonia, Interstitial	9	2	-	-	1	1	1	2	1	-	-	1	-
Lung-Pneumonia, <i>Mycoplasma sp.</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Lung-Pneumonia, <i>Pasteurella multocida</i>	5	-	-	-	3	-	1	-	-	-	-	1	-
Lung-Pneumonia, <i>Staphylococcus sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1	-
Lung-Thrombosis	11	1	1	2	1	1	2	-	1	-	-	1	1

FELINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Nasal–Neoplasm, Lymphosarcoma	2	-	-	-	1	-	-	1	-	-	-	-	-
Nasal–Rhinitis	15	4	1	-	-	1	2	3	2	-	1	1	-
Nasal–Rhinitis, <i>Bordetella sp.</i>	3	1	-	-	-	-	1	-	-	1	-	-	-
Nasal–Rhinitis, <i>Pasteurella multocida</i>	2	-	-	-	-	-	1	-	-	1	-	-	-
Pleura–Pleuritis	6	-	-	1	-	1	1	1	1	-	1	-	-
Respiratory Infection, Calicivirus	1	1	-	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, Microbiologic Exam	21	2	1	3	1	2	2	-	2	6	1	1	-
Respiratory Infection, <i>Mycoplasma sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Pasteurella multocida</i>	7	1	2	1	1	-	-	-	-	-	1	-	1
Trachea–Tracheitis	3	-	-	1	-	-	1	-	-	-	-	1	-
4 Cardiovascular													
Blood Vessel–Angiopathy	2	-	-	-	-	-	1	1	-	-	-	-	-
Blood Vessel–Arteriosclerosis	2	-	-	-	-	-	-	-	1	-	-	-	1
Blood Vessel–Atherosclerosis	1	-	-	1	-	-	-	-	-	-	-	-	-
Blood Vessel–Thrombosis	7	1	-	1	-	1	-	1	-	1	1	1	-
Heart–Anomaly	3	1	-	-	-	-	-	1	-	-	-	1	-
Heart–Cardiomyopathy	90	6	7	10	4	6	9	7	5	10	5	8	13
Heart–Endocardiosis	4	-	-	1	1	-	-	-	-	-	-	-	2
Heart–Fibrosis	4	-	-	-	-	-	-	-	-	1	1	-	2
Heart–Heart Failure, Acute	8	-	-	-	-	-	1	1	1	-	-	2	3
Heart–Heart Failure, Chronic	3	-	-	-	-	-	-	1	-	1	-	1	-
Heart–Hemopericardium	1	-	-	-	-	-	-	-	-	-	-	-	1
Heart–Myocardial Degeneration	6	2	1	1	-	-	-	2	-	-	-	-	-
Heart–Myocardial Infarction	2	1	-	-	-	-	1	-	-	-	-	-	-
Heart–Myocarditis	5	2	-	-	-	-	1	1	-	-	-	-	1
Heart–Thrombosis	6	1	-	-	1	-	-	1	1	-	1	1	-
5 Hemic and Lymphatic													
Blood–Anemia	7	1	1	-	-	-	1	-	-	1	1	1	1
Blood–Anemia, Aplastic	1	-	-	-	-	-	-	1	-	-	-	-	-
Blood–Coagulation Disorder	2	1	-	-	-	-	-	-	-	-	-	-	1
Blood–Hemorrhage, Generalized	1	-	-	-	-	-	-	-	-	-	1	-	-
Bone Marrow–Hyperplasia	3	-	-	-	-	1	-	-	-	1	-	1	-
Bone Marrow–Hypocellularity	2	-	-	-	-	-	-	-	-	1	-	-	1
Bone Marrow–Neopl., Multiple Myeloma	2	-	1	-	1	-	-	-	-	-	-	-	-
Bone Marrow–Neopl., Myeloprolif. Disorder	5	-	-	-	1	1	1	-	1	-	1	-	-
Lymph Node–Hyperplasia	6	1	2	-	-	-	-	-	1	1	-	1	-
Lymph Node–Lymphadenitis	2	-	-	-	-	-	1	-	-	-	-	1	-
Lymph Node–Neoplasm, Lymphosarcoma	10	1	1	-	1	1	1	1	1	-	1	2	-
Lymph Node–Neoplasm, Metastatic	1	-	-	-	-	-	-	1	-	-	-	-	-

FELINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Spleen-Infarct	1	-	1	-	-	-	-	-	-	-	-	-	-
Spleen-Neoplasm, Adenocarcinoma	1	-	-	-	-	-	-	-	-	-	1	-	-
Spleen-Neoplasm, Hemangiosarcoma	1	-	-	-	-	-	-	-	1	-	-	-	-
Spleen-Neoplasm, Myelolipoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Spleen-Neoplasm, Plasmacytoma	1	-	-	-	-	-	-	-	-	-	1	-	-
Spleen-Nodular Hyperplasia	1	-	1	-	-	-	-	-	-	-	-	-	-
Thymus-Neoplasm, Lymphosarcoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Thymus-Neoplasm, Thymoma	5	-	-	-	-	1	1	-	-	-	-	-	3
6 Digestive													
Esophagus-Dilatation	2	1	-	-	-	-	-	-	1	-	-	-	-
Esophagus-Neoplasm, Carcinoma	1	-	-	-	-	-	-	-	-	1	-	-	-
Esophagus-Obstruction (Choke)	1	-	-	-	-	-	1	-	-	-	-	-	-
Feces-Microbiologic Exam	27	1	5	2	3	1	3	1	2	2	1	2	4
Gall Bladder-Cholecystitis	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Colitis	11	2	-	1	1	2	-	1	-	3	-	1	-
Intestine-Enteritis, <i>Campylobacter sp.</i>	2	-	-	-	-	-	-	1	1	-	-	-	-
Intestine-Enteritis, Coronavirus	5	-	-	1	1	-	1	-	-	-	-	1	1
Intestine-Enteritis, Enterovirus	1	-	-	-	-	-	-	-	-	-	-	-	1
Intestine-Enteritis, <i>Escherichia coli</i>	2	-	-	-	1	-	1	-	-	-	-	-	-
Intestine-Enteritis, Hemorrhagic	2	-	-	-	2	-	-	-	-	-	-	-	-
Intestine-Enteritis, Idiopathic	25	4	3	2	-	2	1	-	3	3	1	2	4
Intestine-Enteritis, Lymphoplasmacytic	23	1	3	1	4	2	1	5	-	5	-	1	-
Intestine-Enteritis, Necrotic	4	1	-	1	-	1	-	-	-	-	-	-	1
Intestine-Enteritis, Parvovirus	4	1	-	-	1	-	-	-	-	-	1	-	1
Intestine-Enteritis, <i>Salmonella sp.</i>	5	-	-	-	1	1	-	-	1	1	-	1	-
Intestine-Enteropathy, Atrophic	2	1	-	-	-	-	-	-	-	1	-	-	-
Intestine-Neoplasm, Adenocarcinoma	7	-	-	-	-	2	-	1	1	-	-	2	1
Intestine-Neoplasm, Leiomyosarcoma	1	-	-	-	-	-	-	-	1	-	-	-	-
Intestine-Neoplasm, Lymphosarcoma	20	1	1	1	1	4	3	1	-	4	1	2	1
Intestine-Neoplasm, Plasmacytoma	1	-	-	-	-	-	-	1	-	-	-	-	-
Intestine-Obstruction	4	-	-	-	-	-	-	2	-	-	1	-	1
Intestine-Parasitism, <i>Ancylostoma sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1	-
Intestine-Parasitism, Ascaris	8	1	1	-	1	-	2	-	-	-	-	2	1
Intestine-Parasitism, Cestode	3	-	-	-	-	-	1	-	-	-	-	1	1
Intestine-Parasitism, Coccidia	12	6	-	-	2	-	1	-	-	1	-	-	2
Intestine-Parasitism, <i>Giardia sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Parasitism, Nematode	1	-	-	-	-	1	-	-	-	-	-	-	-
Intestine-Ulcer	2	-	1	-	-	1	-	-	-	-	-	-	-
Lip-Neoplasm, Squamous Cell Carcinoma	1	-	-	-	1	-	-	-	-	-	-	-	-

FELINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Liver–Abscess	1	-	-	-	-	-	-	-	-	-	-	1	-
Liver–Atrophy	1	-	-	-	-	-	-	-	-	-	-	1	-
Liver–Cholangiohepatitis	22	4	2	2	2	1	4	1	3	2	-	1	-
Liver–Cirrhosis	2	1	1	-	-	-	-	-	-	-	-	-	-
Liver–Cyst	2	-	-	1	1	-	-	-	-	-	-	-	-
Liver–Hepatitis	15	3	1	1	-	2	2	1	1	1	1	2	-
Liver–Hepatopathy	23	3	1	1	4	3	-	3	2	3	-	1	2
Liver–Hepatositis	8	2	-	1	-	2	-	-	1	-	-	1	1
Liver–Lipidosis	77	4	10	4	9	12	9	2	7	11	1	3	5
Liver–Neoplasm, Adenocarcinoma	4	1	-	-	-	-	-	-	1	-	-	1	1
Liver–Neoplasm, Adenoma	3	-	-	-	-	1	1	-	-	-	-	-	1
Liver–Neoplasm, Biliary Adenoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Liver–Neoplasm, Cystadenoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Liver–Neoplasm, Lymphosarcoma	2	-	1	-	-	-	-	-	-	1	-	-	-
Liver–Torsion	1	-	-	-	1	-	-	-	-	-	-	-	-
Oral Cavity–Gingivitis	21	2	-	1	-	1	2	3	4	2	-	3	3
Oral Cavity–Glossitis	3	-	1	-	-	1	1	-	-	-	-	-	-
Oral Cav.–Neopl., Odont. Ghost Cell Carcin.	1	-	-	-	-	-	1	-	-	-	-	-	-
Oral Cavity–Neoplasm, Carcinoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Oral Cavity–Neoplasm, Epulis	1	-	-	-	-	-	-	1	-	-	-	-	-
Oral Cavity–Neoplasm, Fibrosarcoma	3	1	-	-	-	-	1	-	-	-	-	-	1
Oral Cav.–Neoplasm, Sq. Cell Carcinoma	32	-	-	2	5	2	3	1	4	7	3	1	4
Oral Cavity–Stomatitis	19	2	2	1	2	1	1	1	3	2	1	2	1
Oral Cavity–Stom., Eosinophilic Granuloma	4	-	2	-	1	1	-	-	-	-	-	-	-
Pancreas–Atrophy	1	-	-	-	-	-	-	-	-	-	-	1	-
Pancreas–Hyperplasia	6	-	1	-	1	-	-	-	1	-	2	1	-
Pancreas–Neoplasm, Adenocarcinoma	8	1	-	-	1	-	-	1	2	1	-	2	-
Pancreas–Neoplasm, Adenoma	2	-	-	-	-	-	-	1	-	1	-	-	-
Pancreas–Pancreatitis	28	5	1	5	3	1	2	3	2	4	-	1	1
Rectum–Neoplasm, Polyp	1	-	-	1	-	-	-	-	-	-	-	-	-
Rectum–Proctitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Salivary Gland–Cyst	1	1	-	-	-	-	-	-	-	-	-	-	-
Salivary Gland–Sialoadenitis	3	1	1	-	1	-	-	-	-	-	-	-	-
Stomach–Foreign Body	5	-	-	-	-	2	1	1	-	-	1	-	-
Stomach–Gastritis	36	8	2	-	4	4	2	3	1	7	1	-	4
Stomach–Neoplasm, Lymphosarcoma	3	-	-	-	-	-	-	1	-	1	-	1	-
Stomach–Ulcer	3	-	-	1	-	-	-	-	-	1	-	-	1

FELINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
7 Urogenital													
Abortion, Idiopathic	1	-	-	1	-	-	-	-	-	-	-	-	-
Abortion, Specimen Unsuitable	4	-	-	-	-	-	3	-	-	-	-	-	1
Genital-Anomaly	1	-	-	-	-	-	1	-	-	-	-	-	-
Genital-Bacteriologic Exam	3	-	-	-	-	-	1	-	2	-	-	-	-
Kidney-Atrophy	2	-	1	-	-	-	-	-	-	1	-	-	-
Kidney-Cyst	6	1	1	-	1	-	-	1	-	-	-	-	2
Kidney-Dysplasia	1	-	-	-	-	-	-	-	-	-	-	1	-
Kidney-Glomerulosclerosis	12	1	2	-	-	1	1	1	-	2	-	3	1
Kidney-Hypoplasia	2	-	-	-	1	-	-	-	-	-	-	-	1
Kidney-Infarction	10	-	2	2	-	1	1	2	1	-	-	1	-
Kidney-Mineralization	3	-	-	-	-	-	-	-	1	1	1	-	-
Kidney-Neoplasm	2	-	-	1	1	-	-	-	-	-	-	-	-
Kidney-Nephritis	20	6	3	-	1	1	3	1	2	-	1	-	2
Kidney-Nephritis, End Stage	3	-	-	-	1	-	1	-	-	-	1	-	-
Kidney-Nephritis, Glomerulo	9	-	-	1	1	-	1	1	2	-	-	1	2
Kidney-Nephritis, Interstitial	16	1	3	1	2	2	-	1	1	1	-	2	2
Kidney-Nephritis, Pyelo	1	-	-	1	-	-	-	-	-	-	-	-	-
Kidney-Nephrosis	11	2	1	-	-	3	3	-	1	-	-	-	1
Kidney-Nephrosis, Oxalate	4	1	-	1	2	-	-	-	-	-	-	-	-
Kidney-Urolithiasis	8	-	1	-	-	-	2	-	1	-	1	-	3
Ovary-Neoplasm, Teratoma	1	1	-	-	-	-	-	-	-	-	-	-	-
Prepuce-Neoplasm, Fibrosarcoma	1	-	-	-	-	-	-	-	-	1	-	-	-
Urethra-Obstruction	7	1	1	-	-	-	1	-	-	2	2	-	-
Urethra-Urethritis	2	1	-	-	-	-	-	-	-	-	1	-	-
Urin. Blad.-Neoplasm, Adenocarcinoma	2	-	-	-	-	-	2	-	-	-	-	-	-
Urin. Blad.-Neopl., Trans. Cell Carcinoma	1	-	-	1	-	-	-	-	-	-	-	-	-
Urinary Bladder-Urocystitis	16	1	2	-	2	1	1	-	-	3	4	2	-
Urinary Bladder-Urolithiasis	3	1	-	-	-	1	-	-	-	1	-	-	-
Urinary Tract-Bact. Infection, <i>E. coli</i>	44	4	4	2	4	3	1	4	5	3	5	5	4
Urin. Tract-Bact. Infect., <i>Enterococcus sp.</i>	7	-	2	1	-	-	2	2	-	-	-	-	-
Urin. Tract-Bact. Infect., <i>Proteus mirabilis</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Urin. Tract-Bact. Infect., <i>Pseudomonas sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Urinary Tract-Bact. Infection, <i>Staph. sp.</i>	12	1	2	2	-	-	1	-	1	-	1	1	3
Urinary Tract-Bact. Infection, <i>Strep. sp.</i>	7	1	-	-	1	-	-	1	1	-	2	-	1
Urinary Tract-Mycotic Infection, Yeast	1	-	-	-	1	-	-	-	-	-	-	-	-
Urine-Microbiologic Exam	352	29	20	39	31	30	38	21	22	35	28	33	26
Uterus-Endometrial Hyperplasia	3	-	-	-	-	-	3	-	-	-	-	-	-
Uterus-Metritis	1	-	-	1	-	-	-	-	-	-	-	-	-
Uterus-Neoplasm, Adenoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Uterus-Neoplasm, Leiomyoma	1	-	-	-	-	-	-	-	-	-	-	1	-

FELINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
8 Endocrine													
Adrenal-Adrenitis	1	-	-	-	1	-	-	-	-	-	-	-	-
Adrenal-Atrophy	1	-	-	-	-	-	-	-	1	-	-	-	-
Adrenal-Hyperplasia	2	1	-	-	-	-	-	-	-	1	-	-	-
Adrenal-Necrosis	3	-	-	1	-	1	-	1	-	-	-	-	-
Adrenal-Neoplasm, Adenoma	2	-	1	1	-	-	-	-	-	-	-	-	-
Adrenal-Neoplasm, Carcinoma	1	-	-	-	-	1	-	-	-	-	-	-	-
Pituitary-Neoplasm, Adenoma	1	-	-	-	-	-	-	1	-	-	-	-	-
Thyroid-Atrophy	3	-	-	1	1	-	-	-	-	-	-	1	-
Thyroid-Hyperplasia	4	-	-	1	1	-	-	1	1	-	-	-	-
Thyroid-Neoplasm, Adenoma	24	5	1	2	-	1	-	-	2	3	1	5	4
Thyroid-Neoplasm, Carcinoma	1	-	-	-	-	-	-	-	-	1	-	-	-
9 Nervous													
<i>Neurological Disorders, Total Cases</i>	46	5	4	7	2	6	2	3	3	2	2	3	7
Brain-Anomaly	6	-	1	1	-	2	1	1	-	-	-	-	-
Brain-Edema	1	-	-	-	-	1	-	-	-	-	-	-	-
Brain-Encephalitis	1	-	-	-	-	-	-	-	-	-	-	-	1
Brain-Encephalitis, Eosinophilic	1	-	1	-	-	-	-	-	-	-	-	-	-
Brain-Encephalitis, Granulomatous	1	-	-	-	-	-	-	-	-	-	-	-	1
Brain-Encephalitis, Non-Suppurative	3	-	-	-	-	1	-	-	1	-	-	-	1
Brain-Encephalitis, <i>Pasteurella multocida</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Brain-Encephalitis, Suppurative	2	-	-	-	-	-	-	-	-	-	1	-	1
Brain-Encephalomalacia	4	1	1	1	-	-	-	-	-	-	-	-	1
Brain-Encephalopathy	4	-	-	-	-	1	1	-	1	1	-	-	-
Brain-Neoplasm, Lymphosarcoma	2	-	-	-	-	1	-	1	-	-	-	-	-
Brain-Neoplasm, Meningioma	3	1	-	-	1	-	-	1	-	-	-	-	-
Brain-Neoplasm, Oligodendroglioma	1	-	-	-	-	-	-	-	-	-	-	1	-
Brain-Parasitism, <i>Toxoplasma sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Brain-Polioencephalomalacia	2	-	-	2	-	-	-	-	-	-	-	-	-
Brain-Vasculitis	1	1	-	-	-	-	-	-	-	-	-	-	-
Meninges-Meningitis, Non-Suppurative	1	-	-	-	-	-	-	-	-	1	-	-	-
Meninges-Meningitis, Suppurative	3	1	-	-	1	-	-	-	-	-	1	-	-
Neurologic Disorder, Idiopathic	8	-	1	2	-	-	-	-	1	-	-	2	2
Spinal Cord-Myelopathy	1	-	-	-	-	1	-	-	-	-	-	-	-
Spinal Cord-Neoplasm, Lymphosarcoma	1	1	-	-	-	-	-	-	-	-	-	-	-

FELINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
X Special Senses													
Ear-Dermatitis	1	-	1	-	-	-	-	-	-	-	-	-	-
Ear-Neoplasm, Carcinoma	2	-	-	-	1	-	-	-	-	-	-	-	1
Ear-Neopl., Ceruminous Gland Carcinoma	5	-	1	-	-	1	2	-	-	-	-	1	-
Ear-Neoplasm, Mastocytoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Ear-Neoplasm, Sarcoma	1	-	-	-	-	-	1	-	-	-	-	-	-
Ear-Neoplasm, Squamous Cell Carcinoma	6	2	-	-	-	-	-	-	-	2	1	-	1
Ear-Otitis	5	1	-	-	1	-	-	-	-	-	-	3	-
Ear-Otitis Externa, <i>Malassezia sp.</i>	3	-	-	-	1	1	-	1	-	-	-	-	-
Ear-Otitis Externa, <i>Pasteurella multocida</i>	5	1	-	2	-	-	-	-	1	1	-	-	-
Ear-Otitis Externa, <i>Proteus mirabilis</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Ear-Otitis Externa, <i>Staphylococcus sp.</i>	7	-	-	2	-	1	-	-	-	3	-	-	1
Ear-Otitis Externa, <i>Streptococcus sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Ear-Polyp	8	-	1	-	-	-	-	1	-	3	1	2	-
Eye-Conjunctivitis	4	1	-	1	1	-	-	-	-	-	-	1	-
Eye-Keratitis	5	2	-	-	1	-	-	-	-	1	-	1	-
Eye-Keratopathy	6	-	-	1	1	1	2	-	-	-	-	1	-
Eye-Neoplasm, Melanoma	2	-	-	-	-	-	-	1	-	1	-	-	-
Eye-Neoplasm, Squamous Cell Carcinoma	1	-	-	-	-	-	-	-	-	-	1	-	-
Eye-Ophthalmitis	6	2	-	-	-	-	1	1	-	1	1	-	-
Eye-Retinopathy	4	-	1	-	-	-	1	-	-	1	1	-	-
Eyelid-Blepharitis	1	-	-	-	-	-	1	-	-	-	-	-	-
Eyelid-Neoplasm, Sq. Cell Carcinoma	1	-	-	-	-	-	1	-	-	-	-	-	-

FISH, AMPHIBIANS & REPTILES

AQUARIUM FISH

Gill-Branchitis	1	-	-	-	-	-	-	-	-	-	1	-	-
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FRESH WATER FISH

Emaciation	1	-	-	-	-	-	-	-	-	-	-	1	-
Gill-Branchitis	1	-	-	-	-	-	-	-	-	-	-	1	-
Sudden Unexpected Death	2	-	-	-	-	-	-	-	-	-	-	2	-

FROG

Eye-Ophthalmitis	1	-	-	-	-	-	-	-	-	-	-	1	-
Heart-Myocarditis	1	-	-	-	-	-	-	-	-	-	-	1	-

FISH, AMPHI. & REPTILES (cont.)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
LIZARD/IGUANA													
Feces–Microbiologic Exam	3	-	-	2	-	-	1	-	-	-	-	-	-
Intestine–Parasitism, <i>Cryptosporidium sp.</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Kidney–Glomerulosclerosis	1	-	-	-	-	-	-	1	-	-	-	-	-
Kidney–Mineralization	1	-	-	-	-	-	-	-	-	-	-	-	1
Kidney–Nephritis, Interstitial	1	-	-	-	-	-	-	1	-	-	-	-	-
Kidney–Nephrosis	2	-	1	-	-	-	-	-	-	-	-	-	1
Lung–Mineralization	1	-	1	-	-	-	-	-	-	-	-	-	-
Lung–Pneumonia, Foreign Body	1	-	-	-	-	-	-	-	-	-	1	-	-
Mineralization	2	-	-	-	-	-	-	-	-	-	1	-	1
Neoplasm, Sarcoma, Anaplastic	1	-	-	-	-	-	-	1	-	-	-	-	-
Rectum–Prolapse	1	-	-	-	-	-	-	-	-	-	-	1	-
Septicemia, <i>Salmonella sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
SALAMANDER													
Sudden Unexpected Death	2	-	-	-	-	-	-	-	-	-	-	1	1
SNAKE													
Emaciation	1	1	-	-	-	-	-	-	-	-	-	-	-
Kidney–Glomerulosclerosis	1	1	-	-	-	-	-	-	-	-	-	-	-
Liver–Hepatopathy	2	2	-	-	-	-	-	-	-	-	-	-	-
Lung–Edema	1	1	-	-	-	-	-	-	-	-	-	-	-
Lung–Pneumonia	1	1	-	-	-	-	-	-	-	-	-	-	-
Mineralization	2	2	-	-	-	-	-	-	-	-	-	-	-
Neoplasm, Adenocarcinoma	1	-	-	-	-	-	-	-	-	-	-	1	-
Xanthoma	1	-	-	-	-	-	-	-	-	1	-	-	-
TOAD													
Septicemia, <i>Mycobacterium sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
TURTLE													
Feces–Microbiologic Exam	1	-	-	-	-	-	-	-	-	-	1	-	-
Parasitism	1	-	-	-	-	-	-	-	-	-	-	-	1

MISCELLANEOUS MAMMALS

MISCELLANEOUS MAMMALS	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
AMERICAN MINIATURE HORSE													
Abortion, Idiopathic	1	-	-	-	-	-	-	-	1	-	-	-	-
Eye-Keratitis	1	-	-	-	-	-	-	-	-	-	-	1	-
Eye-Ophthalmitis	1	-	-	-	-	-	-	-	-	-	-	1	-
Genital-Bacteriologic Exam	3	-	-	2	-	-	-	-	-	-	-	-	1
Neurologic Disorder, Idiopathic	1	1	-	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, Microbiologic Exam	1	-	-	1	-	-	-	-	-	-	-	-	-
ANTELOPE													
Heart-Pericarditis	1	-	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia, Foreign Body	1	-	-	-	-	-	-	-	-	-	-	-	1
Trachea-Tracheitis	1	-	-	-	-	-	-	-	-	-	-	-	1
BABOON													
Intestine-Volvulus	1	-	-	1	-	-	-	-	-	-	-	-	-
BAT													
Brain-Encephalitis, Rabies	1	-	1	-	-	-	-	-	-	-	-	-	-
Emaciation	1	-	-	-	-	-	1	-	-	-	-	-	-
Heart-Myocarditis	1	-	-	-	-	-	-	-	1	-	-	-	-
Intestine-Intussusception	1	1	-	-	-	-	-	-	-	-	-	-	-
Liver-Hepatitis	2	2	-	-	-	-	-	-	-	-	-	-	-
Lung-Pneumonia, Interstitial	6	3	1	-	-	1	-	1	-	-	-	-	-
Lung-Pneumonia, <i>Staphylococcus sp.</i>	1	-	-	-	-	-	-	-	1	-	-	-	-
Sudden Unexpected Death	3	-	1	-	-	1	-	-	-	-	-	-	1
BEAR													
Dermal Fibrosis	1	-	1	-	-	-	-	-	-	-	-	-	-
Feces-Microbiologic Exam	1	-	-	1	-	-	-	-	-	-	-	-	-
Respiratory Infection, Microbiologic Exam	1	-	-	-	1	-	-	-	-	-	-	-	-
Urine-Microbiologic Exam	2	-	-	-	-	-	-	1	-	-	-	1	-
BEAVER													
Brain-Encephalitis, Eosinophilic	1	-	-	-	-	-	-	-	-	-	-	1	-

MISCELLANEOUS MAMMALS (cont.)Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
CARIBOU												
Lung-Pneumonia	1	-	-	-	1	-	-	-	-	-	-	-
Respiratory Infection, Microbiologic Exam	1	-	-	-	1	-	-	-	-	-	-	-
COUGAR												
Adrenal-Neoplasm, Adenoma	1	-	-	-	-	-	-	-	-	1	-	-
Arthropathy	1	-	-	-	-	-	-	-	-	1	-	-
Thyroid-Hyperplasia	1	-	-	-	-	-	-	-	-	1	-	-
Uterus-Endometrial Hyperplasia	1	-	-	-	-	-	-	-	-	1	-	-
Uterus-Metritis	1	-	-	-	-	-	-	-	-	1	-	-
DEER												
Anomaly	1	-	1	-	-	-	-	-	-	-	-	-
Blood-Hemorrhage, Generalized	1	-	-	-	-	1	-	-	-	-	-	-
Bone-Fracture	1	-	-	-	-	-	-	-	1	-	-	-
Bone-Malformation	1	1	-	-	-	-	-	-	-	-	-	-
Brain-Anomaly	1	1	-	-	-	-	-	-	-	-	-	-
Emaciation	4	-	2	-	-	-	-	-	-	-	-	2
Hernia, Diaphragmatic	1	-	1	-	-	-	-	-	-	-	-	-
Immune System-Hypogammaglobulinemia	1	-	-	-	-	-	-	-	-	-	1	-
Intestine-Enteritis, Adenovirus	1	-	-	1	-	-	-	-	-	-	-	-
Intestine-Enteritis, Enterovirus	1	-	-	1	-	-	-	-	-	-	-	-
Intestine-Enteritis, Idiopathic	4	-	1	-	-	-	-	-	1	-	1	1
Intestine-Enteritis, Rotavirus	2	-	1	-	1	-	-	-	-	-	-	-
Intestine-Hemorrhage Syndrome	1	-	-	-	-	1	-	-	-	-	-	-
Intestine-Parasitism, <i>Strongyloides sp.</i>	3	-	2	1	-	-	-	-	-	-	-	-
Intestine-Ulcer	1	-	-	1	-	-	-	-	-	-	-	-
Kidney-Nephritis, Interstitial	1	-	-	-	-	-	1	-	-	-	-	-
Kidney-Nephrosis	1	-	-	1	-	-	-	-	-	-	-	-
Liver-Hepatitis	1	-	-	-	1	-	-	-	-	-	-	-
Liver-Infarction	2	-	-	-	-	2	-	-	-	-	-	-
Liver-Parasitism, <i>Fascioloides sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-
Lung-Edema	3	-	-	-	-	2	-	1	-	-	-	-
Lung-Pneu., <i>Arcanobacterium pyogenes</i>	2	-	1	-	-	-	1	-	-	-	-	-
Lung-Pneumonia, Broncho	1	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia, Foreign Body	1	-	-	-	-	-	1	-	-	-	-	-
Muscle-White Muscle Disease	1	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Fibropapilloma	1	-	-	-	1	-	-	-	-	-	-	-
Neoplasm, Fibrosarcoma	1	-	-	-	-	1	-	-	-	-	-	-

MISCELLANEOUS MAMMALS (cont.)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
DEER (continued)													
Peritonitis	1	-	-	1	-	-	-	-	-	-	-	-	-
Pleura-Pleuritis	1	-	-	1	-	-	-	-	-	-	-	-	-
Stillbirth	1	1	-	-	-	-	-	-	-	-	-	-	-
Stomach-Rumenitis	1	-	-	-	1	-	-	-	-	-	-	-	-
Sudden Unexpected Death	1	-	-	-	-	-	-	-	-	-	-	-	1
Toxicosis, Copper	1	-	-	-	-	-	-	-	-	-	-	-	1
Trauma	1	-	-	-	1	-	-	-	-	-	-	-	-
ELK													
Abortion, Idiopathic	1	-	-	-	-	-	-	-	-	-	1	-	-
Arthritis	1	-	-	-	1	-	-	-	-	-	-	-	-
Arthritis, <i>Arcanobacterium pyogenes</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Blood-Parasitism, <i>Babesia sp.</i>	2	-	-	-	2	-	-	-	-	-	-	-	-
Bone-Osteomyelitis	1	-	-	-	1	-	-	-	-	-	-	-	-
Brain-Encephalitis, <i>Escherichia coli</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Brain-Encephalitis, Non-Suppurative	1	-	-	-	1	-	-	-	-	-	-	-	-
Brain-Encephalopathy	1	-	-	-	-	-	-	-	-	-	1	-	-
Cecum-Typhlitis	1	-	-	-	-	-	-	-	-	-	-	-	1
Emaciation	5	-	-	-	1	1	2	-	-	-	1	-	-
Feces-Microbiologic Exam	6	1	-	-	-	1	-	1	-	1	1	-	1
Health Evaluation, Normal	8	-	-	-	-	-	2	1	1	-	2	2	-
Heart-Myocardial Degeneration	1	-	-	-	-	-	-	-	1	-	-	-	-
Hernia, Diaphragmatic	1	-	-	-	-	-	-	-	-	-	1	-	-
Icterus	1	-	-	-	-	-	-	-	-	-	-	1	-
Intestine-Enteritis, Idiopathic	2	1	-	-	-	-	-	-	-	-	1	-	-
Intestine-Hemorrhage	1	-	-	-	1	-	-	-	-	-	-	-	-
Intestine-Parasitism, Coccidia	3	-	-	1	-	-	-	-	-	1	1	-	-
Intestine-Parasitism, <i>Cryptosporidium sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Parasitism, <i>Giardia sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Parasitism, <i>Moniezia sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Intestine-Parasit., Strongyles (Unidentified)	3	-	-	1	-	1	-	-	-	1	-	-	-
Intestine-Parasitism, <i>Strongyloides sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Parasitism, <i>Trichostrongyle sp.</i>	3	-	-	-	2	-	-	-	1	-	-	-	-
Kidney-Infarction	1	-	1	-	-	-	-	-	-	-	-	-	-
Kidney-Nephritis, Glomerulo	1	-	-	-	-	-	-	-	1	-	-	-	-
Liver-Cirrhosis	1	-	-	-	-	-	1	-	-	-	-	-	-
Lung-Edema	1	-	-	-	-	-	1	-	-	-	-	-	-
Lung-Pneumonia	1	-	-	-	1	-	-	-	-	-	-	-	-
Lung-Pneumonia, Foreign Body	2	1	-	-	-	-	-	-	-	-	-	1	-

MISCELLANEOUS MAMMALS (cont.)Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
ELK (continued)												
Lung–Pneumonia, <i>Pasteurella sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-
Lung–Thrombosis	1	1	-	-	-	-	-	-	-	-	-	-
Muscle–Myositis	1	-	-	-	-	-	1	-	-	-	-	-
Neurologic Disorder, Idiopathic	1	-	-	-	-	-	-	1	-	-	-	-
Oral Cavity–Glossitis	1	-	-	-	-	-	-	1	-	-	-	-
Peritonitis	2	-	-	1	-	-	-	-	1	-	-	-
Pleura–Pleuritis	1	-	-	-	-	-	-	-	-	1	-	-
Septicemia, <i>Clostridium novyi</i>	1	-	-	-	-	-	1	-	-	-	-	-
Septicemia, <i>Clostridium sordellii</i>	1	-	-	-	-	-	-	-	-	1	-	-
Septicemia, <i>Escherichia coli</i>	3	-	-	-	1	-	-	1	-	-	1	-
Stillbirth, Idiopathic	1	-	-	-	-	-	-	-	-	-	1	-
Sudden Unexpected Death	4	1	-	1	1	-	1	-	-	-	-	-
Trauma	1	-	-	1	-	-	-	-	-	-	-	-
Uterus–Metritis	1	-	-	-	-	-	-	-	-	-	1	-
FERRET												
Adrenal–Neoplasm, Adenoma	5	1	-	1	1	-	-	1	1	-	-	-
Adrenal–Neoplasm, Carcinoma	2	-	-	1	-	-	-	-	1	-	-	-
Blood–Anemia	1	-	-	-	-	1	-	-	-	-	-	-
Cyst, Adnexal	1	-	-	-	1	-	-	-	-	-	-	-
Eye–Conjunctivitis	1	-	-	-	-	-	-	-	-	-	1	-
Feces–Microbiologic Exam	1	-	-	1	-	-	-	-	-	-	-	-
Intestine–Enteritis, Yeast Overgrowth	1	-	-	-	-	-	-	-	-	-	1	-
Intestine–Obstruction	1	-	-	-	-	1	-	-	-	-	-	-
Intestine–Parasitism, Coccidia	1	-	1	-	-	-	-	-	-	-	-	-
Intestine–Parasitism, <i>Cryptosporidium sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-
Intestine–Ulcer	1	-	-	-	-	-	-	-	1	-	-	-
Liver–Hepatopathy	1	-	-	-	-	-	-	-	-	1	-	-
Liver–Hepatitis	1	-	-	-	-	-	-	-	1	-	-	-
Liver–Lipidosis	2	-	-	-	-	-	-	-	-	-	1	1
Liver–Neoplasm, Lymphosarcoma	1	-	-	-	-	-	-	-	1	-	-	-
Lymph Node–Hyperplasia	1	-	-	-	-	-	-	-	1	-	-	-
Lymph Node–Neoplasm, Lymphosarcoma	1	-	-	-	-	-	1	-	-	-	-	-
Metabolic Imbalance, Hypoglycemia	1	-	-	-	1	-	-	-	-	-	-	-
Neoplasm, Carcinoma	1	-	-	-	-	1	-	-	-	-	-	-
Neoplasm, Fibrosarcoma	1	-	-	-	-	-	-	-	1	-	-	-
Neoplasm, Mastocytoma	1	-	-	-	-	-	1	-	-	-	-	-
Neoplasm, Sarcoma, Anaplastic	2	-	-	-	-	-	-	1	-	-	-	1
Pancreas–Neoplasm, Carcinoma	1	-	-	1	-	-	-	-	-	-	-	-
Septicemia, <i>Escherichia coli</i>	1	-	-	-	-	-	-	-	-	-	-	1

MISCELLANEOUS MAMMALS (cont.)Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
FERRET (continued)												
Septicemia, <i>Pseudomonas sp.</i>	1	-	-	-	-	-	-	-	1	-	-	-
Stomach-Dilatation	1	-	-	-	-	1	-	-	-	-	-	-
Stomach-Gastritis	2	1	-	-	-	-	-	-	-	-	1	-
Sudden Unexpected Death	1	-	-	-	-	-	-	-	1	-	-	-
Testicle-Neoplasm, Sertoli Cell Tumor	1	-	-	-	-	-	-	-	-	-	-	1
Urine-Microbiologic Exam	1	-	-	1	-	-	-	-	-	-	-	-
FOX												
Intestine-Parasitism, Cestode	1	-	-	-	-	-	-	-	-	1	-	-
Liver-Hepatopathy	1	-	1	-	-	-	-	-	-	-	-	-
Parasitism, Mites	2	-	-	-	1	-	-	-	1	-	-	-
Toxicosis, Anticoagulant	1	-	-	-	-	-	-	-	-	1	-	-
GIBBON												
Feces-Microbiologic Exam	1	-	-	-	1	-	-	-	-	-	-	-
GUINEA PIG												
Cyst, Epidermal	1	-	-	-	-	-	-	1	-	-	-	-
Emaciation	2	-	-	-	-	2	-	-	-	-	-	-
Feces-Microbiologic Exam	1	-	-	-	1	-	-	-	-	-	-	-
Heart-Fibrosis	1	-	-	-	-	-	-	-	-	-	1	-
Heart-Hemopericardium	1	-	-	-	-	-	-	1	-	-	-	-
Intestine-Enteritis, <i>Escherichia coli</i>	1	-	-	-	-	-	-	-	-	1	-	-
Kidney-Glomerulosclerosis	1	-	1	-	-	-	-	-	-	-	-	-
Kidney-Nephritis, Interstitial	1	-	1	-	-	-	-	-	-	-	-	-
Liver-Hepatitis	1	-	1	-	-	-	-	-	-	-	-	-
Liver-Hepatosclerosis	1	-	-	-	1	-	-	-	-	-	-	-
Lung-Neoplasm, Adenoma	1	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia	1	-	-	-	-	-	-	1	-	-	-	-
Lung-Pneumonia, Interstitial	2	-	1	-	-	-	-	-	-	-	-	1
Lung-Pneumonia, <i>Streptococcus sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-
Lymph Node-Hyperplasia	1	-	-	-	-	-	-	-	-	-	-	1
Neurologic Disorder, Idiopathic	1	-	-	-	-	1	-	-	-	-	-	-
Sudden Unexpected Death	1	-	-	-	-	1	-	-	-	-	-	-
Weakness	1	-	-	-	1	-	-	-	-	-	-	-

MISCELLANEOUS MAMMALS (cont.)Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
HAMSTER												
Ovary-Neoplasm, Carcinoma	1	-	-	-	-	-	-	-	-	-	1	-
Septicemia, <i>B. piliformis</i> (Tyzzer's Disease)	1	-	-	-	-	1	-	-	-	-	-	-
LEOPARD												
Feline Panleukopenia	1	-	-	-	-	-	-	-	-	1	-	-
Heart-Cardiomyopathy	1	-	-	-	-	-	1	-	-	-	-	-
Intestine-Enteritis, <i>Campylobacter sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-
Intestine-Enteritis, Lymphoplasmacytic	1	-	-	-	-	-	1	-	-	-	-	-
Intestine-Enteritis, <i>Salmonella sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-
Kidney-Glomerulosclerosis	1	-	-	-	-	-	1	-	-	-	-	-
Liver-Hepatitis	1	-	-	-	-	-	1	-	-	-	-	-
Thyroid-Hyperplasia	1	-	-	-	-	-	1	-	-	-	-	-
Urine-Microbiologic Exam	1	-	-	-	-	-	1	-	-	-	-	-
LLAMA												
Abortion, Idiopathic	5	-	1	-	-	-	1	-	-	-	2	1
Anomaly	1	-	-	-	1	-	-	-	-	-	-	-
Arthritis	1	-	-	-	-	1	-	-	-	-	-	-
Arthropathy	2	-	-	-	-	1	-	-	-	1	-	-
Bone Marrow-Hypocellularity	1	1	-	-	-	-	-	-	-	-	-	-
Bone-Malformation	1	-	-	-	-	-	-	-	-	-	-	1
Brain-Anomaly	1	-	-	-	-	-	-	-	-	1	-	-
Brain-Encephalomalacia, Parasitism	1	-	-	-	1	-	-	-	-	-	-	-
Brain-Encephalopathy	1	-	-	1	-	-	-	-	-	-	-	-
Deficiency, Vitamin E	1	-	-	-	-	-	-	-	-	1	-	-
Drug Reaction	2	-	-	-	-	-	1	-	-	1	-	-
Ear-Otitis	1	-	-	-	1	-	-	-	-	-	-	-
Ear-Otitis Externa, <i>Bacillus sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-
Ear-Otitis Externa, <i>Staphylococcus sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-
Effusion, Peritoneal	2	-	-	-	-	-	1	-	-	1	-	-
Effusion, Pleural	2	-	-	-	-	-	1	-	-	1	-	-
Emaciation	4	-	-	1	-	1	2	-	-	-	-	-
Feces-Microbiologic Exam	3	1	1	-	-	-	1	-	-	-	-	-
Genital-Bacteriologic Exam	2	-	-	-	-	2	-	-	-	-	-	-
Heart-Cardiomyopathy	1	-	-	1	-	-	-	-	-	-	-	-
Heart-Fibrosis	3	-	-	-	-	-	1	-	-	1	1	-
Heart-Heart Failure, Chronic	1	-	-	-	-	-	-	-	1	-	-	-
Heart-Pericarditis	1	-	-	-	-	1	-	-	-	-	-	-
Heart-Thrombosis	1	-	-	-	-	-	1	-	-	-	-	-

MISCELLANEOUS MAMMALS (cont.) Total JI Ag Sp Oc Nv Dc Jn Fb Mr Ap My Jn

LLAMA (continued)

Hernia, Diaphragmatic	1	-	-	-	-	1	-	-	-	-	-	-	-
Intestine-Enteritis, <i>Clostridium perfringens</i>	1	-	-	-	-	-	1	-	-	-	-	-	-
Intestine-Parasitism, Coccidia	3	-	-	-	-	1	1	-	-	-	-	-	1
Intestine-Parasitism, <i>Cryptosporidium sp.</i>	3	2	1	-	-	-	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Trichostrongyle sp.</i>	2	-	-	-	-	1	-	-	-	-	-	-	1
Intestine-Parasitism, <i>Trichuris sp.</i>	1	-	-	-	-	-	1	-	-	-	-	-	-
Intestine-Volvulus	1	-	-	-	-	-	-	1	-	-	-	-	-
Kidney-Glomerulosclerosis	1	-	-	-	-	-	-	-	-	-	1	-	-
Kidney-Nephritis, Glomerulo	1	-	-	1	-	-	-	-	-	-	-	-	-
Liver-Hepatitis	4	-	-	-	-	-	1	-	-	-	3	-	-
Liver-Hepatopathy	2	-	-	-	-	-	1	-	-	-	1	-	-
Liver-Parasitism, <i>Fascioloides sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Lung-Pneumonia	2	-	-	1	1	-	-	-	-	-	-	-	-
Lung-Pneumonia, Foreign Body	1	-	-	-	-	-	-	1	-	-	-	-	-
Lung-Pneumonia, Interstitial	3	-	-	-	1	-	2	-	-	-	-	-	-
Lung-Thrombosis	1	-	-	-	-	-	-	-	-	-	1	-	-
Meninges-Meningitis	1	-	-	-	-	-	-	-	-	1	-	-	-
Meninges-Meningitis, Non-Suppurative	1	-	1	-	-	-	-	-	-	-	-	-	-
Meninges-Meningitis, Suppurative	1	1	-	-	-	-	-	-	-	-	-	-	-
Muscle-Degeneration	1	-	-	-	-	-	-	-	-	-	1	-	-
Neonatal Weakness	1	-	-	1	-	-	-	-	-	-	-	-	-
Neurologic Disorder, Idiopathic	3	1	1	-	-	-	-	-	-	-	-	-	1
Parasitism	1	-	-	-	-	-	1	-	-	-	-	-	-
Peritonitis	2	-	-	-	-	1	1	-	-	-	-	-	-
Pleura-Pleuritis	1	-	-	-	-	-	1	-	-	-	-	-	-
Septicemia, Bacterial	1	1	-	-	-	-	-	-	-	-	-	-	-
Spinal Cord-Myelopathy	1	-	-	-	1	-	-	-	-	-	-	-	-
Stillbirth, Idiopathic	1	-	1	-	-	-	-	-	-	-	-	-	-
Stomach-Abomasal Ulcer	1	-	-	-	1	-	-	-	-	-	-	-	-
Stomach-Impaction	1	-	-	-	-	-	-	1	-	-	-	-	-
Stomach-Ulcer	1	-	-	-	-	-	1	-	-	-	-	-	-
Testicle-Atrophy	1	1	-	-	-	-	-	-	-	-	-	-	-
Toxicosis, Copper	1	-	1	-	-	-	-	-	-	-	-	-	-
Trauma	1	-	-	1	-	-	-	-	-	-	-	-	-
Uterus-Prolapse	1	-	-	-	-	-	-	1	-	-	-	-	-

LYNX

Neoplasm, Squamous Cell Carcinoma	1	-	1	-	-	-	-	-	-	-	-	-	-
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MISCELLANEOUS MAMMALS (cont.)Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
MINK												
Abscess	1	-	-	-	-	1	-	-	-	-	-	-
Brain-Encephalitis	1	-	-	-	-	-	-	-	-	-	1	-
Brain-Encephalitis, Non-Suppurative	1	-	-	-	-	-	-	-	-	-	-	1
Canine Distemper	2	-	-	-	1	-	-	-	-	-	1	-
Esophagus-Dilatation	1	-	-	-	-	-	-	-	-	-	-	1
Heart-Cardiomyopathy	1	-	-	-	1	-	-	-	-	-	-	-
Heart-Myocarditis	1	-	-	-	1	-	-	-	-	-	-	-
Intestine-Hemorrhage	1	-	-	-	1	-	-	-	-	-	-	-
Intestine-Parasitism, Coccidia	1	-	-	-	-	-	1	-	-	-	-	-
Kidney-Nephritis, Interstitial	2	-	-	1	-	1	-	-	-	-	-	-
Liver-Hepatitis	1	-	-	-	1	-	-	-	-	-	-	-
Liver-Lipidosis	2	-	-	-	-	1	-	-	-	-	1	-
Lung-Pneumonia	1	-	-	-	-	-	-	-	-	-	-	1
Meninges-Meningitis, Non-Suppurative	1	-	-	1	-	-	-	-	-	-	-	-
Parasitism	1	-	-	-	-	1	-	-	-	-	-	-
Parasitism, <i>Toxoplasma sp.</i>	2	-	-	-	-	-	-	-	-	-	2	-
Septicemia, <i>Streptococcus sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-
Urinary Bladder-Urolithiasis	1	-	-	-	-	-	-	-	-	-	-	1
MISCELLANEOUS SPECIES												
Adrenal-Hyperplasia	1	-	-	-	-	-	-	-	-	-	1	-
Blood Vessel-Angiopathy	1	-	-	-	-	-	-	-	1	-	-	-
Feces-Microbiologic Exam	2	-	-	1	-	-	-	-	-	-	-	1
Genital-Bacteriologic Exam	1	-	-	-	1	-	-	-	-	-	-	-
Heart-Cardiomyopathy	1	-	1	-	-	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Trichuris sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-
Intestine-Volvulus	1	-	1	-	-	-	-	-	-	-	-	-
Kidney-Nephritis, End Stage	1	-	-	-	-	-	-	-	1	-	-	-
Kidney-Nephritis, Glomerulo	4	-	1	-	1	-	-	-	1	-	1	-
Kidney-Nephritis, Pyelo	1	-	-	-	-	-	-	-	1	-	-	-
Liver-Cholangiohepatitis	1	-	-	-	1	-	-	-	-	-	-	-
Liver-Hepatopathy	2	-	2	-	-	-	-	-	-	-	-	-
Liver-Lipidosis	1	-	-	1	-	-	-	-	-	-	-	-
Lung-Neoplasm, Carcinoma	1	-	1	-	-	-	-	-	-	-	-	-
Lung-Pneumonia, Mycotic	1	-	-	1	-	-	-	-	-	-	-	-
Mammary-Neoplasm, Adenocarcinoma	1	-	-	-	-	1	-	-	-	-	-	-
Neoplasm, Adenocarcinoma	1	-	1	-	-	-	-	-	-	-	-	-
Neoplasm, Sarcoma, Anaplastic	1	-	1	-	-	-	-	-	-	-	-	-

MISCELLANEOUS MAMMALS (cont.) Total JI Ag Sp Oc Nv Dc Jn Fb Mr Ap My Jn

MISCELLANEOUS SPECIES (continued)

Pancreas–Pancreatitis	2	-	1	-	-	-	-	-	-	1	-	-	-
Spleen–Hematoma	1	-	1	-	-	-	-	-	-	-	-	-	-
Sudden Unexpected Death	1	1	-	-	-	-	-	-	-	-	-	-	-
Thyroid–Neoplasm, Carcinoma	1	-	-	-	-	-	1	-	-	-	-	-	-
Urine–Microbiologic Exam	2	-	-	-	-	-	1	-	1	-	-	-	-

MONKEY

Feces–Microbiologic Exam	1	-	-	-	-	-	-	-	-	-	1	-	-
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MOOSE

Emaciation	1	-	-	-	-	1	-	-	-	-	-	-	-
Feces–Microbiologic Exam	3	-	-	1	-	-	-	-	2	-	-	-	-
Intestine–Colitis	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine–Enteritis, <i>Campylobacter sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Intestine–Enteritis, Idiopathic	1	-	-	-	-	1	-	-	-	-	-	-	-
Intestine–Enteritis, Parvovirus	2	-	-	2	-	-	-	-	-	-	-	-	-
Intestine–Enteritis, <i>Salmonella sp.</i>	1	-	-	-	-	-	1	-	-	-	-	-	-

MOUSE

Blood–Anemia	1	-	-	-	-	-	-	-	-	-	-	-	1
Dermatitis, <i>Staphylococcus aureus</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Growth Retardation	1	-	-	-	-	-	-	-	-	-	-	-	1
Kidney–Glomerulosclerosis	1	1	-	-	-	-	-	-	-	-	-	-	-
Kidney–Nephrosis	1	1	-	-	-	-	-	-	-	-	-	-	-
Liver–Neoplasm, Lymphosarcoma	1	-	-	-	-	-	-	-	1	-	-	-	-
Lung–Pneumonia, Interstitial	1	-	-	-	-	-	-	-	-	-	-	-	1
Neoplasm, Lymphosarcoma	1	-	-	-	-	-	-	-	-	-	-	-	1
Parasitism	1	-	-	-	-	-	-	-	-	-	-	-	1
Parasitism, Lice	1	-	-	-	-	-	-	-	-	-	-	-	1
Parasitism, Mites	1	-	-	-	-	-	-	-	-	-	-	-	1
Spleen–Neoplasm, Lymphosarcoma	1	-	-	-	-	-	-	-	1	-	-	-	-
Sudden Unexpected Death	1	-	-	1	-	-	-	-	-	-	-	-	-

OTTER

Genital–Bacteriologic Exam	2	-	-	-	-	-	-	-	-	-	-	1	1
Intestine–Enteropathy, Atrophic	1	-	-	1	-	-	-	-	-	-	-	-	-
Lymph Node–Atrophy	1	-	-	1	-	-	-	-	-	-	-	-	-
Urine–Microbiologic Exam	3	-	1	-	-	-	-	-	-	-	-	1	1

MISCELLANEOUS MAMMALS (cont.) Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
RABBIT												
Brain–Encephalitis, Granulomatous	2	-	-	-	-	-	1	-	-	-	1	-
Brain–Encephalitis, Non-Suppurative	1	-	-	-	-	-	-	-	-	-	1	-
Dermatitis, Bacterial	1	1	-	-	-	-	-	-	-	-	-	-
Ear–Otitis Externa, <i>Enterobacter sp.</i>	1	-	-	-	1	-	-	-	-	-	-	-
Emaciation	1	-	-	-	1	-	-	-	-	-	-	-
Heart–Myocarditis	1	-	-	-	-	-	-	1	-	-	-	-
Hematoma	1	1	-	-	-	-	-	-	-	-	-	-
Hemosiderosis	1	-	1	-	-	-	-	-	-	-	-	-
Intestine–Parasitism, Coccidia	4	1	1	-	1	-	-	1	-	-	-	-
Kidney–Nephritis, Glomerulo	1	-	-	-	-	-	1	-	-	-	-	-
Kidney–Nephritis, Interstitial	2	-	-	-	-	-	-	-	-	-	2	-
Kidney–Nephrosis	1	-	-	-	1	-	-	-	-	-	-	-
Kidney–Urolithiasis	1	-	1	-	-	-	-	-	-	-	-	-
Liver–Lipidosis	1	-	-	-	-	-	-	-	1	-	-	-
Lung–Congestion	2	2	-	-	-	-	-	-	-	-	-	-
Lung–Edema	2	2	-	-	-	-	-	-	-	-	-	-
Lung–Pneumonia	3	1	-	-	-	-	-	-	-	-	2	-
Lung–Pneumonia, Interstitial	1	-	-	-	1	-	-	-	-	-	-	-
Meninges–Meningitis	1	-	-	1	-	-	-	-	-	-	-	-
Mineralization	1	-	-	-	-	-	-	-	-	-	1	-
Nasal–Rhinitis	1	-	-	-	-	-	-	1	-	-	-	-
Neoplasm, Lipoma	1	-	-	1	-	-	-	-	-	-	-	-
Neoplasm, Myxosarcoma	1	-	1	-	-	-	-	-	-	-	-	-
Oral Cavity–Gingivitis	1	-	-	-	-	-	-	1	-	-	-	-
Parasitism, <i>Encephalitozoon sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-
Respiratory Infection, Microbiologic Exam	3	-	1	-	1	-	-	-	-	1	-	-
Septicemia, <i>Escherichia coli</i>	1	-	1	-	-	-	-	-	-	-	-	-
Septicemia, <i>Pasteurella haemolytica</i>	1	-	-	-	-	-	-	-	1	-	-	-
Septicemia, <i>Pasteurella multocida</i>	1	-	-	1	-	-	-	-	-	-	-	-
Septicemia, <i>Staphylococcus sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-
Sudden Unexpected Death	4	2	1	1	-	-	-	-	-	-	-	-
Thorax–Hemothorax	1	-	-	-	-	-	-	-	-	-	-	1
Toxicosis, Iron	1	-	-	-	1	-	-	-	-	-	-	-
Urinary Tract–Bact. Infection, <i>E. coli</i>	1	-	1	-	-	-	-	-	-	-	-	-
Uterus–Metritis	1	-	-	-	-	-	-	-	-	-	-	1
Uterus–Neoplasm, Adenocarcinoma	1	-	-	-	-	-	-	1	-	-	-	-

MISCELLANEOUS MAMMALS (cont.) Total JI Ag Sp Oc Nv Dc Jn Fb Mr Ap My Jn

RACCOON

Bone-Fracture	1	-	-	-	-	-	-	-	1	-	-	-
Brain-Encephalitis, Distemper	4	-	-	-	-	-	-	-	1	-	1	2
Brain-Encephalitis, Non-Suppurative	3	-	-	-	-	1	-	-	-	1	-	1
Emaciation	1	-	-	-	-	-	-	-	-	-	-	1
Feces-Microbiologic Exam	1	-	-	-	-	-	-	-	-	-	-	1
Heart-Cardiomyopathy	1	-	-	-	-	-	-	-	1	-	-	-
Intestine-Parasitism, Cestode	1	-	-	-	-	-	-	-	1	-	-	-
Intestine-Parasitism, Coccidia	3	-	-	-	-	-	-	-	1	-	-	2
Intestine-Parasitism, <i>Trichostrongyle sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1
Intestine-Parasitism, <i>Trichuris sp.</i>	1	-	-	-	-	-	-	-	1	-	-	-
Kidney-Nephrosis	1	-	-	-	-	-	-	-	-	1	-	-
Liver-Lipidosis	1	-	-	-	-	-	-	-	-	-	1	-
Liver-Parasitism, Ascaris (Larvae)	1	-	-	-	-	-	-	-	-	-	1	-
Lung-Parasitism	1	-	-	-	-	-	-	-	1	-	-	-
Lung-Pneumonia	1	-	-	-	-	-	-	-	-	-	1	-
Neurologic Disorder, Idiopathic	1	-	-	-	-	-	-	-	-	-	1	-
Trauma	1	-	-	-	-	-	-	-	1	-	-	-

RAT

Brain-Abscess	2	-	-	-	-	-	-	1	-	-	-	1
Brain-Infarction	1	-	-	-	-	-	-	-	1	-	-	-
Ear-Otitis Media/Interna, <i>Mycoplasma sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1
Ear-Otitis Media/Interna, <i>Streptococcus sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1
Intestine-Parasitism	1	-	-	-	-	-	-	-	1	-	-	-
Lung-Edema	1	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia	1	-	-	-	-	-	-	1	-	-	-	-
Lung-Pneumonia, <i>Mycoplasma sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia, <i>Streptococcus sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1
Neoplasm, Fibrosarcoma	1	-	-	-	-	-	-	-	-	1	-	-
Neurologic Disorder, Idiopathic	1	-	-	-	-	-	-	-	-	-	-	1
Thyroid-Atrophy	1	-	-	-	-	-	-	-	-	-	-	1

REINDEER

Emaciation	1	-	-	1	-	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Moniezia sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-
Kidney-Nephrosis	1	-	-	1	-	-	-	-	-	-	-	-
Liver-Hepatitis	1	-	-	1	-	-	-	-	-	-	-	-
Lymph Node-Lymphadenitis	1	-	1	-	-	-	-	-	-	-	-	-
Neurologic Disorder, Idiopathic	1	1	-	-	-	-	-	-	-	-	-	-
Oral Cavity-Stomatitis	1	-	-	1	-	-	-	-	-	-	-	-

MISCELLANEOUS MAMMALS (cont.) Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn	
SKUNK													
Brain-Encephalitis, Rabies	46	4	7	-	4	2	3	3	3	2	5	5	8
Neurologic Disorder, Idiopathic	1	-	-	-	-	-	-	-	-	-	-	-	1
SQUIRREL													
Brain-Encephalomalacia, Parasitism	1	-	-	-	-	-	-	-	-	-	-	1	-
Dermatitis, Bacterial	1	-	-	1	-	-	-	-	-	-	-	-	-
Dermatitis, Ulcerative	1	-	-	1	-	-	-	-	-	-	-	-	-
Kidney-Glomerulosclerosis	1	-	-	-	-	-	-	-	-	-	-	1	-
Liver-Hepatopathy	1	-	-	-	-	-	-	-	-	-	-	1	-
Lung-Pneumonia, <i>Pasteurella multocida</i>	1	-	-	-	-	-	-	-	-	-	-	-	1
Trauma	1	-	-	-	-	-	-	-	-	-	-	1	-
TIGER													
Esophagus-Dilatation	1	-	-	-	-	-	-	-	-	-	-	-	1
Esophagus-Esophagitis	1	-	-	-	-	-	-	-	-	-	-	-	1
Feces-Microbiologic Exam	1	-	-	-	-	-	-	-	-	-	-	-	1
Lip-Neoplasm, Squamous Cell Carcinoma	1	-	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia	1	-	-	-	-	-	-	-	-	-	-	-	1
Urine-Microbiologic Exam	1	1	-	-	-	-	-	-	-	-	-	-	-
WOLF													
Sudden Unexpected Death	1	-	-	-	-	-	1	-	-	-	-	-	-
ZEBRA													
Intestine-Obstruction	1	-	-	-	-	-	-	-	-	1	-	-	-
Lung-Pneumonia, Broncho	1	-	-	-	-	-	-	-	-	-	-	1	-
Neurologic Disorder, Idiopathic	1	-	-	-	-	-	-	-	-	1	-	-	-
Septicemia, Bacterial	1	-	-	-	-	-	-	-	-	-	-	1	-
Stomach-Ulcer	1	-	-	-	-	-	-	-	-	1	-	-	-
Thymus-Hypoplasia	1	-	-	-	-	-	-	-	-	-	-	1	-
UNKNOWN													
Feces-Microbiologic Exam	1	-	-	-	-	-	-	-	-	-	1	-	-

OVINE

OVINE	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
<u>0 Body as a Whole</u>													
Caseous Lymphadenitis	2	-	-	-	-	-	1	-	-	1	-	-	-
Contagious Echthyma	3	-	-	-	1	-	-	-	-	-	1	1	-
Deficiency, Vitamin E	1	-	-	-	-	-	-	-	-	-	-	1	-
Effusion, Peritoneal	1	-	-	-	-	-	-	-	-	-	1	-	-
Effusion, Pleural	1	-	-	-	-	-	-	-	-	-	1	-	-
Emaciation	2	-	-	-	-	-	-	-	-	-	2	-	-
Grain Overload	6	1	-	-	1	-	1	-	-	-	-	-	3
Health Evaluation, Normal	1	-	-	-	-	-	-	-	-	-	1	-	-
Mineralization	1	-	-	1	-	-	-	-	-	-	-	-	-
Neonatal Death	1	-	-	-	-	-	-	-	1	-	-	-	-
Paralysis	1	-	-	-	-	-	-	-	-	-	-	-	1
Peritonitis	1	-	-	-	-	-	-	-	-	-	-	1	-
Septicemia, <i>Escherichia coli</i>	2	-	1	-	-	-	-	-	-	-	-	1	-
Septicemia, <i>Pasteurella haemolytica</i>	2	-	1	-	-	-	-	-	-	1	-	-	-
Septicemia, <i>Salmonella sp.</i>	1	-	-	-	-	-	-	-	-	-	-	-	1
Sudden Unexpected Death	7	1	-	-	2	-	-	1	1	1	-	-	1
Toxicosis, Copper	4	-	-	-	-	-	-	1	1	1	1	-	-
Trauma	1	-	-	-	-	-	-	-	-	-	-	-	1
<u>1 Integumentary</u>													
Dermatitis, Allergic	3	3	-	-	-	-	-	-	-	-	-	-	-
Dermatitis, Lymphoplasmacytic	2	2	-	-	-	-	-	-	-	-	-	-	-
Dermatitis, Ulcerative	1	1	-	-	-	-	-	-	-	-	-	-	-
Mammary–Mastitis	1	-	-	-	-	-	-	-	-	-	-	-	1
Mammary–Mastitis, <i>Staphylococcus sp.</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
<u>2 Musculoskeletal</u>													
Muscle–White Muscle Disease	1	-	1	-	-	-	-	-	-	-	-	-	-
<u>3 Respiratory</u>													
<i>Respiratory Disorders, Total Cases</i>	19	1	3	1	1	-	-	1	3	3	2	2	2
Lung–Abscess	2	-	-	-	-	-	-	-	-	-	1	-	1
Lung–Emphysema	1	-	-	-	-	-	-	1	-	-	-	-	-
Lung–Pneumonia	1	-	-	-	-	-	-	-	-	1	-	-	-

OVINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Lung-Pneu., <i>Arcanobacterium pyogenes</i>	2	-	-	-	-	-	-	-	-	-	-	1	1
Lung-Pneumonia, Foreign Body	1	-	-	-	-	-	-	-	1	-	-	-	-
Lung-Pneumonia, <i>Haemophilus somnus</i>	1	-	-	-	-	-	-	-	-	-	-	-	1
Lung-Pneumonia, <i>Mycoplasma sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Lung-Pneumonia, Ovine Progressive	1	-	-	-	-	-	-	-	1	-	-	-	-
Lung-Pneumonia, <i>Pasteurella haemolytica</i>	8	-	2	1	1	-	-	-	-	2	-	2	-
Lung-Pneumonia, <i>Pasteurella multocida</i>	4	1	-	-	-	-	-	-	1	-	-	1	1
Respiratory Infect., <i>Pasteurella haemolytica</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Salmonella arizona</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
4 Cardiovascular													
Heart-Endocarditis	1	-	1	-	-	-	-	-	-	-	-	-	-
Heart-Heart Failure, Chronic	1	-	1	-	-	-	-	-	-	-	-	-	-
Heart-Pericarditis	1	-	-	-	-	-	-	-	-	1	-	-	-
5 Hemic and Lymphatic													
Blood-Anemia	3	2	1	-	-	-	-	-	-	-	-	-	-
Lymph Node-Lymphadenitis	2	-	-	-	-	-	-	-	1	-	-	-	1
Spleen-Splenitis	1	-	-	-	-	-	-	-	-	-	-	1	-
6 Digestive													
Cecum-Typhlitis	1	-	-	-	-	-	-	-	-	-	1	-	-
Esophagus-Esophagitis	1	-	-	-	-	-	-	-	-	-	-	-	1
Feces-Microbiologic Exam	3	1	-	-	-	1	-	-	-	-	-	1	-
Intestine-Enteritis, Granulomatous	1	-	-	-	-	-	-	-	-	1	-	-	-
Intestine-Enteritis, Idiopathic	3	-	-	-	1	-	-	-	1	-	-	1	-
Intestine-Ent., <i>M. paratuberculosis</i> (Johne's)	3	-	1	-	-	-	-	-	1	-	1	-	-
Intestine-Enteritis, <i>Salmonella sp.</i>	1	-	-	-	-	-	-	-	-	-	-	-	1
Intestine-Enteropathy, Atrophic	2	-	-	-	1	-	-	-	-	1	-	-	-
Intestine-Parasitism, Cestode	4	-	1	-	-	-	-	2	-	-	-	-	1
Intestine-Parasitism, Coccidia	23	4	1	1	5	-	-	1	-	1	2	1	7
Intestine-Parasitism, <i>Haemonchus sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Moniezia sp.</i>	4	-	1	-	3	-	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Nematodirus sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Strongyloides sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Intestine-Parasitism, <i>Trichostrongyle sp.</i>	12	2	1	-	4	-	-	-	-	1	2	-	2
Intestine-Parasitism, <i>Trichuris sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Liver-Abscess	1	-	-	-	-	-	-	-	-	-	-	1	-
Liver-Hepatitis	5	1	-	-	-	-	-	-	1	2	-	-	1

OVINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Liver–Hepatopathy	1	-	-	1	-	-	-	-	-	-	-	-	-
Liver–Hepatitis	3	1	1	-	-	-	-	-	-	-	1	-	-
Liver–Lipidosis	1	-	-	-	-	-	-	1	-	-	-	-	-
Liver–Parasitism, <i>Fascioloides sp.</i>	1	-	-	-	-	-	-	-	-	-	-	-	1
Rumen–Acidosis	1	-	-	-	1	-	-	-	-	-	-	-	-
Stomach–Abomasitis, Mycotic	1	-	-	-	-	-	-	-	1	-	-	-	-
Stomach–Parasitism, <i>Haemonchus sp.</i>	6	3	2	-	-	-	-	-	-	1	-	-	-
Stomach–Rumenitis	2	-	-	-	-	-	-	-	1	-	-	-	1
7 Urogenital													
<i>Reproductive Disorders, Total Cases</i>	20	-	-	-	-	-	3	4	5	5	1	1	1
Abortion, Bacterial, <i>Campylobacter sp.</i>	1	-	-	-	-	-	-	-	-	1	-	-	-
Abortion, Idiopathic	12	-	-	-	-	-	2	2	4	3	1	-	-
Abortion, Mummified Fetus	1	-	-	-	-	-	-	-	1	-	-	-	-
Abortion, Placentitis	1	-	-	-	-	-	-	1	-	-	-	-	-
Kidney–Mineralization	1	-	-	1	-	-	-	-	-	-	-	-	-
Kidney–Nephritis, Pyelo	1	-	-	-	-	-	-	-	-	-	-	-	1
Kidney–Nephrosis	2	-	-	-	-	-	-	1	1	-	-	-	-
Stillbirth	1	-	-	-	-	-	-	-	-	-	-	1	-
Stillbirth, Idiopathic	2	-	-	-	-	-	-	1	-	1	-	-	-
Testicle–Atrophy	1	-	-	-	-	-	1	-	-	-	-	-	-
Urethra–Urethritis	1	-	-	-	-	-	-	-	-	-	-	-	1
Uterus–Metritis	1	-	-	-	-	-	-	-	-	1	-	-	-
9 Nervous													
<i>Neurological Disorders, Total Cases</i>	16	3	1	1	2	-	-	3	2	2	1	-	1
Brain–Encephalitis, <i>Listeria sp.</i>	2	1	-	1	-	-	-	-	-	-	-	-	-
Brain–Encephalitis, Non-Suppurative	2	-	1	-	1	-	-	-	-	-	-	-	-
Brain–Encephalomalacia	1	-	-	-	-	-	-	1	-	-	-	-	-
Brain–Encephalomalacia, Parasitism	1	-	-	-	1	-	-	-	-	-	-	-	-
Brain–Encephalopathy	3	-	-	-	-	-	-	2	1	-	-	-	-
Brain–Polioencephalomalacia	3	1	-	-	-	-	-	-	1	-	-	-	1
Meninges–Meningitis, Non-Suppurative	1	-	-	-	-	-	-	-	-	-	1	-	-
Neurologic Disorder, Idiopathic	3	1	-	-	-	-	-	-	-	2	-	-	-

PORCINE

PORCINE	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
<u>0 Body as a Whole</u>													
Abdomen-Hemoperitoneum	1	1	-	-	-	-	-	-	-	-	-	-	-
Abscess	3	-	2	-	-	-	-	1	-	-	-	-	-
Cannibalism	1	-	-	-	-	-	-	1	-	-	-	-	-
Chlamydiosis	2	-	1	-	-	-	-	-	-	-	-	-	1
Deficiency, Copper	7	-	-	1	-	-	2	-	1	-	1	1	1
Deficiency, Vitamin E	2	-	-	-	1	-	-	-	-	-	-	-	1
Deficiency, Zinc	12	-	-	1	-	1	2	1	2	2	1	1	1
Downer Sow	2	-	-	-	-	-	-	1	-	-	-	1	-
Edema Disease	3	-	1	1	-	-	-	-	-	-	1	-	-
Edema, Generalized	1	1	-	-	-	-	-	-	-	-	-	-	-
Emaciation	7	1	-	-	1	-	-	2	1	-	1	-	1
Feed-Bacteriologic Exam	1	-	-	-	-	-	-	-	-	-	1	-	-
Growth Retardation	8	-	2	-	1	1	-	1	-	2	-	-	1
Health Evaluation, Normal	70	2	-	4	9	9	2	1	9	11	12	6	5
Hernia, Inguinal	2	-	-	-	1	-	-	-	-	1	-	-	-
Hernia, Umbilical	1	-	-	-	1	-	-	-	-	-	-	-	-
Injection Site	4	-	2	-	1	1	-	-	-	-	-	-	-
Metabolic Imbalance, Serum Electrolytes	1	-	-	-	-	-	-	-	-	-	1	-	-
Mortality, Increased	4	-	-	-	-	-	2	1	-	-	-	1	-
Neonatal Death	10	-	2	1	-	-	1	3	1	-	-	2	-
Neonatal Weakness	35	2	3	1	5	6	4	2	5	-	1	1	5
Omphalitis	4	-	-	-	2	1	1	-	-	-	-	-	-
Paralysis	3	-	-	-	-	-	1	-	-	-	-	1	1
Peritonitis	39	1	3	2	3	4	3	3	6	1	7	5	1
Polyserositis	35	3	1	3	3	5	5	1	3	4	3	2	2
Postpartum Stress	1	-	-	-	-	-	-	-	-	1	-	-	-
Septicemia, <i>Actinobacillus equuli</i>	4	-	-	-	1	-	1	1	-	1	-	-	-
Septicemia, <i>Actinobacillus sp.</i>	2	-	-	-	-	-	1	-	1	-	-	-	-
Septicemia, <i>Actinobacillus suis</i>	42	2	5	5	5	-	3	4	4	4	7	2	1
Septicemia, <i>Arcanobacterium pyogenes</i>	7	-	-	2	2	1	1	-	1	-	-	-	-
Septicemia, Bacterial	9	-	1	-	2	-	-	-	-	1	1	2	2
Septicemia, <i>Bordetella bronchiseptica</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Septicemia, <i>Clostridium septicum</i>	5	-	-	2	3	-	-	-	-	-	-	-	-
Septicemia, <i>Corynebacterium sp.</i>	1	-	-	-	-	-	-	-	-	-	-	1	-
Septicemia, <i>Enterococcus durans</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Septicemia, <i>Erysipelothrix sp.</i>	12	1	-	-	-	-	2	-	2	4	1	1	1

PORCINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Septicemia, <i>Escherichia coli</i>	25	2	-	1	2	1	2	6	3	3	3	1	1
Septicemia, <i>Haemophilus parasuis</i>	18	2	1	1	2	-	2	2	4	1	1	2	-
Septicemia, <i>Haemophilus sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Septicemia, <i>Pasteurella multocida</i>	19	-	1	1	3	3	1	1	3	2	2	2	-
Septicemia, <i>Pasteurella sp.</i>	2	-	-	-	-	1	-	-	-	1	-	-	-
Septicemia, <i>Salmonella sp.</i>	92	5	6	7	13	7	6	12	7	7	7	7	8
Septicemia, <i>Staphylococcus sp.</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Septicemia, <i>Streptococcus sp.</i>	12	1	-	2	-	1	-	3	1	1	2	1	-
Septicemia, <i>Streptococcus suis</i>	68	2	3	6	3	8	9	5	8	4	8	9	3
Starvation	9	-	-	-	1	1	-	1	2	-	2	1	1
Sudden Unexpected Death	137	13	16	9	12	8	9	12	10	17	13	7	11
Tetanus	1	1	-	-	-	-	-	-	-	-	-	-	-
Toxicosis, Zinc	3	-	-	-	-	-	1	2	-	-	-	-	-
Trauma	2	-	1	-	-	-	-	-	-	-	-	1	-
Virus Infection, Adenovirus	1	-	-	-	-	1	-	-	-	-	-	-	-
Virus Infection, Circovirus	40	-	2	3	6	9	6	1	1	2	7	2	1
Virus Infection, Enterovirus	7	-	-	1	-	1	-	-	-	-	1	2	2
Virus Infection, Por. Repro. & Resp. Syn.	501	21	27	43	52	40	66	42	37	47	52	50	24
Virus Infection, Pseudorabies	18	-	-	-	-	-	3	7	3	3	2	-	-
Virus Infection, Reovirus	1	-	-	-	-	-	-	-	-	-	-	1	-
Weakness	1	-	-	-	-	-	-	-	1	-	-	-	-
1 Integumentary													
Cellulitis	3	-	1	-	-	-	1	-	-	-	1	-	-
Dermatitis, <i>Actinobacillus suis</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Dermatitis, Bacterial	2	-	-	-	-	1	-	-	-	-	1	-	-
Dermatitis, Diffuse	1	-	-	-	-	-	-	-	1	-	-	-	-
Dermatitis, Exudative Epidermitis	16	-	1	1	1	1	-	4	-	3	2	1	2
Dermatitis, Focal	4	-	-	-	-	-	1	1	1	1	-	-	-
Dermatitis, Lymphoplasmacytic	1	-	1	-	-	-	-	-	-	-	-	-	-
Dermatitis, Necrotic	2	1	-	-	-	-	-	-	-	1	-	-	-
Dermatitis, Perivascular	1	-	1	-	-	-	-	-	-	-	-	-	-
Dermatitis, Pityriasis Rosea	1	-	-	-	-	-	-	1	-	-	-	-	-
Dermatitis, <i>Staphylococcus aureus</i>	1	-	-	-	-	-	-	1	-	-	-	-	-
Dermatitis, <i>Staphylococcus sp.</i>	3	-	-	-	-	-	-	-	1	1	-	1	-
Dermatitis, Ulcerative	5	1	1	-	-	-	-	-	-	-	-	2	1
Neoplasm	1	-	-	-	-	-	-	1	-	-	-	-	-
Seroma	2	-	-	-	-	-	-	-	-	1	-	1	-
Skin-Hyperkeratosis	2	1	-	-	-	-	-	-	-	-	-	-	1
Skin-Parakeratosis	2	-	-	1	-	1	-	-	-	-	-	-	-

PORCINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
2 Musculoskeletal													
Arthritis	15	1	-	3	-	1	3	-	-	3	1	1	2
Arthritis, <i>Arcanobacterium pyogenes</i>	3	-	-	1	1	-	-	-	-	-	-	1	-
Arthritis, <i>Escherichia coli</i>	2	-	-	-	-	-	1	-	-	-	1	-	-
Arthritis, <i>Haemophilus parasuis</i>	3	-	-	-	-	-	2	-	-	1	-	-	-
Arthritis, <i>Staphylococcus aureus</i>	3	-	-	-	1	-	2	-	-	-	-	-	-
Arthritis, <i>Staphylococcus sp.</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Arthritis, <i>Streptococcus sp.</i>	6	-	-	-	1	-	1	2	1	-	-	1	-
Arthritis, <i>Streptococcus suis</i>	8	1	-	-	-	2	1	-	-	3	-	-	1
Arthritis, Suppurative	1	-	-	1	-	-	-	-	-	-	-	-	-
Arthropathy	4	-	1	-	-	-	-	1	-	1	1	-	-
Bone-Fracture	1	-	-	-	-	-	1	-	-	-	-	-	-
Bone-Hyperostosis	2	-	1	-	-	-	-	-	-	-	1	-	-
Bone-Osteochondrosis	4	1	1	1	-	-	-	-	-	-	1	-	-
Bone-Osteomalacia	1	-	-	-	-	-	1	-	-	-	-	-	-
Bone-Osteomyelitis	4	-	-	-	1	-	1	1	-	-	-	-	1
Bone-Perosis	1	-	-	-	-	-	-	-	1	-	-	-	-
Lameness	12	3	1	1	1	3	-	1	-	1	-	-	1
Muscle-Atrophy	1	-	-	-	-	-	-	-	-	1	-	-	-
Muscle-Degeneration	2	-	-	1	-	-	-	1	-	-	-	-	-
Muscle-Myositis	3	-	-	1	2	-	-	-	-	-	-	-	-
Splayleg	1	-	-	-	-	-	-	-	-	1	-	-	-
Synovitis	13	-	-	1	-	3	2	-	2	1	3	-	1
3 Respiratory													
<i>Respiratory Disorders, Total Cases</i>	1,313	84	82	112	120	94	133	116	104	115	149	118	86
Asphyxiation	2	-	-	-	1	-	-	-	-	-	-	-	1
Lung-Abscess	16	1	1	1	2	1	2	1	2	1	-	1	3
Lung-Bronchitis	30	1	2	3	2	3	3	3	2	1	3	4	3
Lung-Congestion	2	2	-	-	-	-	-	-	-	-	-	-	-
Lung-Edema	30	3	1	2	4	1	-	4	2	2	3	3	5
Lung-Emphysema	1	-	1	-	-	-	-	-	-	-	-	-	-
Lung-Hemorrhage	17	5	2	1	1	2	1	-	-	-	4	-	1
Lung-Parasitism, <i>Ascaris</i> (Larvae)	7	1	1	1	2	1	-	-	-	-	1	-	-
Lung-Parasitism, <i>Metastrongyles</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Lung-Pneumonia	47	6	5	3	1	3	-	6	7	5	6	3	2
Lung-Pneumonia, <i>Actinobacillus equuli</i>	2	-	-	-	-	-	-	-	-	1	-	-	1
Lung-Pneu., <i>Actino. pleuropneumoniae</i>	52	1	5	5	5	3	7	2	6	6	7	3	2

PORCINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Lung-Pneumonia, <i>Actinobacillus sp.</i>	2	-	-	-	-	-	-	1	-	1	-	-	-
Lung-Pneumonia, <i>Actinobacillus suis</i>	44	2	3	5	3	2	6	3	2	5	6	5	2
Lung-Pneu., <i>Arcanobacterium pyogenes</i>	83	6	4	5	9	4	6	10	7	8	13	9	2
Lung-Pneu., <i>Bordetella bronchiseptica</i>	64	-	1	6	7	8	6	6	5	10	5	5	5
Lung-Pneumonia, Broncho	37	1	5	-	1	1	2	4	3	1	8	5	6
Lung-Pneumonia, <i>Escherichia coli</i>	4	-	-	-	-	-	1	1	-	-	-	1	1
Lung-Pneumonia, Foreign Body	5	-	1	1	1	-	-	2	-	-	-	-	-
Lung-Pneumonia, <i>Haemophilus parasuis</i>	197	8	12	28	21	16	24	21	13	13	21	11	9
Lung-Pneumonia, Influenza	172	7	6	4	13	20	24	17	10	19	24	14	14
Lung-Pneumonia, Interstitial	69	8	4	1	9	4	4	5	6	7	8	8	5
Lung-Pneu., <i>Mycoplasma hyopneumoniae</i>	413	23	30	48	35	25	47	33	37	45	37	30	23
Lung-Pneumonia, <i>Mycoplasma sp.</i>	3	-	1	1	-	1	-	-	-	-	-	-	-
Lung-Pneumonia, <i>Pasteurella multocida</i>	397	24	26	37	38	29	49	45	29	38	36	27	19
Lung-Pneu., Por. Repro. & Resp. Syn.	308	10	17	25	31	28	47	26	25	32	26	25	16
Lung-Pneumonia, <i>Salmonella sp.</i>	25	2	1	4	5	1	1	3	3	-	1	2	2
Lung-Pneumonia, <i>Staphylococcus sp.</i>	3	-	-	1	1	-	-	-	-	1	-	-	-
Lung-Pneumonia, <i>Streptococcus sp.</i>	18	1	1	4	1	1	1	1	1	1	2	2	2
Lung-Pneumonia, <i>Streptococcus suis</i>	280	14	18	22	27	22	33	23	24	33	33	21	10
Lung-Thrombosis	7	2	-	2	-	-	-	-	-	2	-	1	-
Nasal-Rhinitis	16	1	1	1	1	1	3	3	2	-	-	2	1
Nasal-Rhinitis, <i>Arcanobacterium pyogenes</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Nasal-Rhinitis, <i>Bordetella sp.</i>	4	-	1	-	1	-	1	-	1	-	-	-	-
Nasal-Rhinitis, Cytomegalovirus	5	-	1	-	1	-	1	-	-	-	1	1	-
Nasal-Rhinitis, <i>Haemophilus parasuis</i>	3	1	-	1	-	-	-	-	1	-	-	-	-
Nasal-Rhinitis, <i>Pasteurella multocida</i>	20	1	-	1	2	-	5	-	1	1	6	-	3
Nasal-Rhinitis, <i>Streptococcus suis</i>	4	1	-	1	-	-	-	-	-	-	2	-	-
Pleura-Pleuritis	71	2	1	7	8	6	12	10	5	10	6	3	1
Respiratory Infection, <i>Actinobacillus suis</i>	2	-	1	-	1	-	-	-	-	-	-	-	-
Resp. Infect., <i>Arcanobacterium pyogenes</i>	13	2	4	-	3	-	1	-	-	-	1	2	-
Resp. Infect., <i>Bordetella bronchiseptica</i>	18	-	1	4	-	1	1	2	1	1	-	4	3
Respiratory Infect., <i>Haemophilus parasuis</i>	19	1	1	3	1	4	2	1	3	-	1	2	-
Respiratory Infection, <i>Haemophilus sp.</i>	2	2	-	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, Influenza virus	1	-	-	-	-	-	-	-	-	-	-	1	-
Respiratory Infection, Microbiologic Exam	19	1	-	1	1	-	1	-	1	1	5	4	4
Resp. Infect., <i>Mycoplasma hyopneumoniae</i>	49	-	3	4	4	1	4	6	4	8	5	6	4
Respiratory Infect., <i>Pasteurella multocida</i>	28	2	4	2	2	2	5	4	-	2	3	2	-
Respiratory Infection, <i>Pasteurella sp.</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Respiratory Infection, <i>Streptococcus sp.</i>	1	-	-	-	-	-	-	-	-	-	1	-	-
Respiratory Infection, <i>Streptococcus suis</i>	21	-	3	2	1	4	2	3	2	-	4	-	-
Sinus-Sinusitis	1	-	-	-	-	-	-	-	-	1	-	-	-
Trachea-Obstruction	1	-	-	-	1	-	-	-	-	-	-	-	-
Trachea-Tracheitis	2	-	-	1	-	-	-	-	1	-	-	-	-

PORCINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
4 Cardiovascular													
Blood Vessel–Arteritis	5	1	-	-	1	1	1	-	-	-	-	1	-
Blood Vessel–Thrombosis	2	-	-	1	-	-	1	-	-	-	-	-	-
Blood Vessel–Vasculitis	2	-	-	-	-	-	1	-	-	-	1	-	-
Heart–Cardiomyopathy	2	-	-	-	-	-	-	1	-	1	-	-	-
Heart–Endocardiosis	1	-	-	-	-	-	1	-	-	-	-	-	-
Heart–Endocarditis	21	3	1	1	-	3	2	4	-	2	1	3	1
Heart–Epicarditis	49	1	2	7	2	3	3	6	6	7	6	4	2
Heart–Fibrosis	1	1	-	-	-	-	-	-	-	-	-	-	-
Heart–Heart Failure, Acute	1	-	-	-	1	-	-	-	-	-	-	-	-
Heart–Heart Failure, Chronic	2	-	-	-	1	-	-	1	-	-	-	-	-
Heart–Mulberry Heart Disease	17	1	-	1	3	1	1	1	6	-	1	-	2
Heart–Myocardial Degeneration	6	-	-	2	1	-	-	1	1	-	-	-	1
Heart–Myocardial Infarction	2	-	-	-	-	-	-	-	2	-	-	-	-
Heart–Myocarditis	41	2	2	1	4	8	5	4	2	3	2	4	4
Heart–Pericarditis	23	2	1	2	2	4	4	-	1	2	1	3	1
Heart–Thrombosis	1	1	-	-	-	-	-	-	-	-	-	-	-
5 Hemic and Lymphatic													
Blood–Anemia	6	1	-	1	1	-	-	-	1	-	2	-	-
Lymph Node–Hyperplasia	1	-	-	-	-	-	-	-	-	-	1	-	-
Lymph Node–Lymphadenitis	50	1	-	3	5	7	7	1	6	7	8	3	2
Lymph Node–Neoplasm, Lymphosarcoma	2	-	-	-	-	-	1	-	1	-	-	-	-
Lymph Node–Neoplasm, Metastatic	1	-	-	-	-	-	-	1	-	-	-	-	-
Neoplasm, Lymphocytic Leukemia	1	-	-	-	-	-	-	-	-	-	-	-	1
Spleen–Infarct	2	-	-	-	-	-	1	-	-	-	-	-	1
Spleen–Splinitis	3	1	-	-	1	1	-	-	-	-	-	-	-
Spleen–Volvulus	3	-	-	1	-	-	-	-	-	2	-	-	-
Tonsil–Tonsilitis	4	-	-	-	-	2	-	-	-	2	-	-	-
6 Digestive													
<i>Digestive Disorders, Total Cases</i>	<i>946</i>	<i>65</i>	<i>81</i>	<i>70</i>	<i>80</i>	<i>69</i>	<i>69</i>	<i>80</i>	<i>98</i>	<i>103</i>	<i>90</i>	<i>77</i>	<i>64</i>
Esophagus–Perforation	1	-	-	-	-	-	-	-	-	1	-	-	-
Feces–Microbiologic Exam	40	4	3	2	2	2	2	5	4	3	4	7	2
Intestine–Colitis	81	2	9	9	3	7	6	8	8	7	7	9	6
Intestine–Enteritis, Adenovirus	4	1	1	1	-	-	1	-	-	-	-	-	-
Intestine–Ent., <i>Brachyspira hyodysenteriae</i>	2	-	-	-	-	1	-	-	-	-	1	-	-
Intestine–Enteritis, <i>Brachyspira pilosicoli</i>	7	-	1	1	-	-	-	-	-	-	-	-	5

PORCINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Intestine-Enteritis, <i>C. perfringens</i> Type A	33	-	2	-	2	1	4	3	8	4	3	3	3
Intestine-Enteritis, <i>Clostridium perfringens</i>	9	-	-	-	-	5	-	2	2	-	-	-	-
Intestine-Enteritis, Coronavirus	1	-	-	-	-	-	-	-	-	-	1	-	-
Intestine-Enteritis, <i>Enterococcus</i> sp.	8	-	-	1	1	-	-	1	1	2	1	-	1
Intestine-Enteritis, Enterovirus	2	-	-	-	-	-	-	-	1	-	-	1	-
Intestine-Enteritis, Eosinophilic	1	-	1	-	-	-	-	-	-	-	-	-	-
Intestine-Enteritis, <i>Escherichia coli</i>	133	6	8	9	15	11	13	11	11	18	18	6	7
Intestine-Enteritis, Hemorrhagic	4	-	1	-	-	-	-	1	-	1	-	1	-
Intestine-Enteritis, Idiopathic	60	3	5	4	4	5	8	5	9	2	4	6	5
Intestine-Enteritis, Necrotic	13	3	2	1	3	-	-	1	-	1	1	-	1
Intestine-Enteritis, Porcine Proliferative	62	4	4	4	3	2	6	3	8	4	7	5	12
Intestine-Enteritis, Rotavirus	220	15	17	15	22	18	18	20	22	27	26	12	8
Intestine-Enteritis, <i>Salmonella</i> sp.	101	6	10	9	10	10	7	12	7	12	8	6	4
Intestine-Enteritis, Specimen Unsuitable	1	-	-	-	-	1	-	-	-	-	-	-	-
Int.-Ent., Transmissible Gastroenteritis	18	-	-	-	1	1	-	1	3	6	2	3	1
Intestine-Enteropathy, Atrophic	117	5	12	7	4	10	8	11	11	11	18	9	11
Intestine-Hemorrhage	7	-	1	2	-	-	-	1	-	1	2	-	-
Intestine-Hemorrhage Syndrome	11	-	2	1	1	1	-	1	1	-	-	4	-
Intestine-Infarction	2	-	-	-	-	-	-	1	-	1	-	-	-
Intestine-Obstruction	2	-	-	-	-	2	-	-	-	-	-	-	-
Intestine-Parasitism, Ascaris	4	-	-	-	-	-	1	-	1	1	-	-	1
Intestine-Parasitism, Coccidia	125	12	21	16	14	9	9	7	6	8	6	8	9
Intestine-Parasitism, <i>Cryptosporidium</i> sp.	25	2	-	2	2	3	4	-	3	2	2	2	3
Intestine-Parasitism, <i>Trichuris</i> sp.	4	-	-	-	1	1	2	-	-	-	-	-	-
Intestine-Volvulus	5	-	-	1	-	-	3	-	-	1	-	-	-
Liver-Cirrhosis	1	-	1	-	-	-	-	-	-	-	-	-	-
Liver-Hepatitis	28	3	2	4	1	2	3	2	2	1	-	5	3
Liver-Hepatopathy	2	1	-	-	-	-	-	1	-	-	-	-	-
Liver-Hepatositis	26	4	3	1	5	2	-	1	2	-	3	3	2
Liver-Lipidosis	10	1	-	-	1	1	-	1	1	2	2	1	-
Liver-Neoplasm, Lymphosarcoma	1	-	-	-	1	-	-	-	-	-	-	-	-
Liver-Parasitism, Ascaris (Larvae)	65	5	4	4	8	3	3	6	8	5	2	8	9
Oral Cavity-Stomatitis	1	-	-	-	-	-	-	-	-	-	-	1	-
Rectum-Proctitis	1	-	-	-	-	-	-	1	-	-	-	-	-
Stomach-Gastritis	9	1	-	1	2	-	-	-	-	2	-	2	1
Stomach-Ulcer	21	1	4	3	3	-	2	-	2	4	2	-	-
7 Urogenital													
<i>Reproductive Disorders, Total Cases</i>	297	19	21	24	32	34	19	34	18	29	24	25	18
Abortion, Anomaly	2	-	-	-	-	1	-	-	-	-	-	1	-
Abortion, Bacterial	5	-	-	1	1	-	1	-	-	-	1	-	1

PORCINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Abortion, Bacterial, <i>Actinobacillus sp.</i>	9	1	-	2	1	1	1	-	-	3	-	-	-
Abortion, Bact., <i>Arcanobacterium pyogenes</i>	1	-	-	1	-	-	-	-	-	-	-	-	-
Abortion, Bacterial, <i>Campylobacter sp.</i>	1	-	-	-	-	1	-	-	-	-	-	-	-
Abortion, Bacterial, <i>Escherichia coli</i>	17	1	1	-	-	4	4	1	2	2	-	1	1
Abortion, Bacterial, <i>Pasteurella multocida</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Abortion, Bacterial, <i>Staphylococcus aureus</i>	1	1	-	-	-	-	-	-	-	-	-	-	-
Abortion, Bacterial, <i>Staphylococcus sp.</i>	4	-	-	-	2	-	-	-	-	-	-	1	1
Abortion, Bacterial, <i>Streptococcus sp.</i>	3	-	1	-	-	1	-	-	-	1	-	-	-
Abortion, Encephalitis	1	-	-	-	-	-	-	1	-	-	-	-	-
Abortion, Epicarditis	2	-	-	-	-	-	-	-	-	1	1	-	-
Abortion, Idiopathic	150	10	9	14	14	21	7	23	9	12	9	12	10
Abortion, Mummified Fetus	7	-	-	-	1	-	-	-	-	1	-	4	1
Abortion, Placentitis	4	-	-	1	-	-	-	1	1	-	1	-	-
Abortion, Pneumonia	7	-	1	-	-	1	-	1	-	4	-	-	-
Abortion, Viral	1	-	-	-	-	-	-	-	-	-	1	-	-
Abortion, Viral, Por. Repro. & Resp. Syn.	20	1	2	3	5	2	-	2	4	-	1	-	-
Abortion, Yeast	1	-	-	-	-	-	-	-	-	1	-	-	-
Dystocia	1	-	-	-	-	-	1	-	-	-	-	-	-
Genital-Bacteriologic Exam	19	1	-	1	2	3	1	1	1	2	4	2	1
Kidney-Cyst	2	-	-	-	-	-	-	-	-	-	2	-	-
Kidney-Hydronephrosis	1	-	1	-	-	-	-	-	-	-	-	-	-
Kidney-Hypoplasia	1	-	-	-	-	1	-	-	-	-	-	-	-
Kidney-Infarction	1	1	-	-	-	-	-	-	-	-	-	-	-
Kidney-Mineralization	1	-	-	-	-	-	-	-	-	-	-	1	-
Kidney-Nephritis	7	-	-	-	-	-	-	-	1	2	2	1	1
Kidney-Nephritis, End Stage	2	-	1	1	-	-	-	-	-	-	-	-	-
Kidney-Nephritis, Glomerulo	26	3	2	4	2	-	3	1	1	1	3	3	3
Kidney-Nephritis, Interstitial	11	-	1	2	-	1	1	-	1	-	1	1	3
Kidney-Nephritis, Pyelo	2	-	1	-	-	-	-	-	1	-	-	-	-
Kidney-Nephrosis	6	-	2	1	1	-	-	-	-	1	1	-	-
Mummified Fetus	7	1	1	-	-	-	-	-	-	1	1	3	-
Stillbirth	4	-	2	-	1	-	-	1	-	-	-	-	-
Stillbirth, Idiopathic	25	1	3	1	1	-	3	3	2	3	3	2	3
Testicle-Atrophy	1	-	-	-	1	-	-	-	-	-	-	-	-
Testicle-Orchitis	3	1	-	-	2	-	-	-	-	-	-	-	-
Urethra-Obstruction	1	-	1	-	-	-	-	-	-	-	-	-	-
Urinary Bladder-Rupture	1	-	1	-	-	-	-	-	-	-	-	-	-
Urinary Bladder-Urocystitis	8	1	1	-	1	1	-	-	-	1	2	1	-
Urinary Bladder-Urolithiasis	1	-	-	-	-	-	-	-	-	-	-	-	1
Urinary Tract-Bact. Infection, <i>E. coli</i>	1	-	-	-	-	-	-	-	1	-	-	-	-
Urine-Microbiologic Exam	1	-	-	-	-	-	-	-	-	1	-	-	-
Uterus-Metritis	11	-	1	-	2	-	1	3	-	-	2	2	-

PORCINE (continued)	Total	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn
Uterus—Prolapse	1	-	-	-	-	-	1	-	-	-	-	-	-
Vas Deferens—Normal	4	2	-	-	-	-	-	-	-	-	1	-	1
9 Nervous													
<i>Neurological Disorders, Total Cases</i>	157	5	13	9	13	10	12	16	11	24	23	13	8
Brain—Anomaly	1	-	-	-	-	-	1	-	-	-	-	-	-
Brain—Enceph., <i>Arcanobacterium pyogenes</i>	1	-	-	-	-	-	-	1	-	-	-	-	-
Brain—Encephalitis, Non-Suppurative	36	1	5	3	3	-	3	3	3	5	7	2	1
Brain—Encephalitis, Pseudorabies	6	-	-	-	-	-	-	3	-	1	2	-	-
Brain—Encephalitis, Suppurative	2	-	-	-	-	-	1	-	-	-	1	-	-
Brain—Encephalomalacia	3	-	-	-	1	-	-	-	-	-	1	1	-
Brain—Tox., Sodium (Water Deprivation)	5	-	1	-	2	-	-	1	1	-	-	-	-
Congenital Tremor	2	-	-	-	-	-	-	-	-	2	-	-	-
Meninges—Meningitis	5	-	-	-	2	1	-	-	-	2	-	-	-
Meninges—Men., <i>Arcanobacterium pyogenes</i>	1	-	1	-	-	-	-	-	-	-	-	-	-
Meninges—Meningitis, <i>Escherichia coli</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Meninges—Men., <i>Haemophilus parasuis</i>	12	-	1	2	1	3	2	-	-	-	-	2	1
Meninges—Meningitis, Non-Suppurative	8	-	-	1	-	1	1	1	2	-	2	-	-
Meninges—Meningitis, <i>Streptococcus sp.</i>	3	-	-	-	2	-	-	-	1	-	-	-	-
Meninges—Meningitis, <i>Streptococcus suis</i>	28	1	3	-	1	3	1	2	1	4	4	5	3
Meninges—Meningitis, Suppurative	45	2	2	2	-	2	5	5	3	11	7	4	2
Neurologic Disorder, Idiopathic	8	1	-	1	1	1	-	1	-	2	-	-	1
Neurologic Disorder, Idiopathic	2	-	-	-	1	1	-	-	-	-	-	-	-
X Special Senses													
Ear—Necrosis	1	-	-	-	-	1	-	-	-	-	-	-	-
Ear—Necrosis, <i>Staphylococcus hyicus</i>	1	-	-	-	1	-	-	-	-	-	-	-	-
Eye—Ophthalmitis	2	-	-	-	-	-	2	-	-	-	-	-	-

MISCELLANEOUS SPECIMENS

BEDDING

Bedding, Microbiologic Exam	19	-	3	2	2	-	-	4	1	-	-	1	6
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FEED

Feed—Bacteriologic Exam	9	1	-	3	-	-	1	1	1	-	-	-	2
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Laboratory Procedures Summary

I. Pathology		
A.	Necropsies (whole animals)	6,426
B.	Tissues from field necropsies (accessions)	7,064
C.	Formalin-fixed tissues (surgical or necropsy)	4,280
D.	Cytology (accessions)	679
E.	Hematology (specimens)	372
F.	Histopathology (procedures)	
	1) Slides – H & E stain	42,145
	2) Slides – special stains	2,497
	3) Other	16,636
G.	Rabies (specimens)	<u>2,166</u>
	Sub-total	82,283
II. Bacteriology/Mycology		
A.	Specimens cultured (aerobic)	34,890
B.	Specimens cultured (anaerobic)	1,228
C.	Specimens cultured – special procedures	
	1) <i>Brachyspira</i> spp.	225
	2) <i>Campylobacter</i>	450
	3) Chlamydia (culture & antigen detection ELISA)	473
	4) <i>Mycobacterium paratuberculosis</i>	627
	5) <i>Mycoplasma</i>	463
	6) <i>Ureaplasma</i>	5
D.	Direct tissue examinations	
	1) Darkfield/phase contrast (specimens)	238
	2) Immunofluorescence – Chlamydia	24
	3) Immunofluorescence – <i>Clostridium</i> spp.	64
	4) Immunofluorescence – <i>E. coli</i> pili	1,649
	5) Immunofluorescence – <i>Leptospira</i>	669
	6) Immunofluorescence – <i>Mycoplasma</i>	73
E.	Microbial susceptibility panels	5,244
F.	Mycology (specimens)	552
G.	Serotyping	
	1) <i>Actinobacillus pleuropneumoniae</i> (cultures)	47
	2) <i>Pasteurella multocida</i> (cultures)	23
	3) <i>Salmonella</i> spp. (cultures)	809
	4) <i>Streptococcus suis</i> (cultures)	27
H.	Toxin Testing (<i>Pasteurella multocida</i>)	35
I.	Udder Health	
	1) Cultures	9,857
	2) Microbial Susceptibility panels	<u>1,459</u>
	Sub-total	59,131
III. Clinical Chemistry (specimens)		1,431
IV. Endocrinology (specimens)		3,630

(continued)

Laboratory Procedures Summary (continued)

V. Genetics (specimens karyotyped)	280
VI. Immunohistochemistry	
A. Diagnostic	
1) Infectious Agents	4,821
2) Tissue Markers	959
B. Research	<u>2,327</u>
	Sub-total 8,107
VII. Immunology/Serology	
A. Immunology (specimens)	734
B. Serology (tests)	<u>468,446</u>
	Sub-total 469,180
VIII. Molecular Diagnostics	
A. Avian Pneumovirus	
1) Clinical	335
2) Research	24
B. Circovirus	3
C. <i>Lawsonia intracellularis</i>	43
D. <i>Mycoplasma hyopneumoniae</i>	
1) Clinical	196
2) Research	526
E. PRRS-PCR	19,309
F. PRRS Sequencing	<u>293</u>
	Sub-total 20,726
IX. Parasitology	
A. Direct Smears	2,396
B. Direct Smears – Cryptosporidium	1,279
C. Flotation Fecal Exams	1,092
D. IFA – Cryptosporidium	69
E. Parasite Identification	<u>94</u>
	Sub-total 4,930
X. Toxicology (analytical)/Nutrition	19,376
XI. Virology	
A. Tissue immunofluorescence (tests)	9,287
B. Virus antigen detection (influenza virus)	1,130
C. Virus assay (immunoperoxidase for BVD)	674
D. Virus identification (electron microscopy)	2,244
E. Virus isolation (cell culture)	<u>8,933</u>
	Sub-total 22,268
TOTAL LABORATORY PROCEDURES	691,342

Necropsies (Accessions/Whole Animals)							
Species	July	August	September	October	November	December	
Avian—Chicken	11/60	10/72	10/96	6/65	11/85	13/103	
Avian—Miscellaneous	18/34	23/41	11/17	7/26	7/7	17/21	
Avian—Turkey	9/40	3/8	4/30	6/91	3/15	3/15	
Bovine	43/43	40/45	23/28	30/31	40/44	43/50	
Canine	130/134	97/97	101/103	83/83	133/134	93/93	
Caprine	2/4	1/1	2/2	1/1	1/1	9/14	
Equine	24/24	26/26	15/15	11/11	13/14	16/16	
Feline	73/73	56/56	56/56	61/62	67/68	58/59	
Fish—Amphibian—Reptile	3/3	2/2	-/-	1/1	-/-	-/-	
Miscellaneous Mammal	15/16	19/23	15/21	17/27	11/12	16/19	
Ovine	7/7	9/11	3/3	7/7	11/11	5/5	
Porcine	28/70	38/155	35/124	38/141	44/169	40/150	
TOTAL	363/508	324/537	275/495	268/546	341/560	313/545	
Species	January	February	March	April	May	June	TOTALS
Avian—Chicken	12/184	11/114	9/83	11/82	9/58	13/126	126/1,128
Avian—Miscellaneous	14/17	14/32	5/9	12/21	16/20	18/26	162/271
Avian—Turkey	4/25	5/33	5/45	4/24	3/11	3/6	52/343
Bovine	47/52	35/41	57/65	54/64	36/86	27/29	475/578
Canine	105/103	84/84	117/117	84/85	113/113	140/141	1,280/1,287
Caprine	1/1	4/6	4/12	5/7	4/7	2/2	36/58
Equine	13/13	15/15	14/14	21/21	31/31	24/24	223/224
Feline	42/42	50/50	51/51	34/34	51/51	66/67	665/669
Fish—Amphibian—Reptile	1/1	-/-	-/-	3/3	6/6	4/4	20/20
Miscellaneous Mammal	7/7	13/13	11/11	10/14	20/21	25/34	179/218
Ovine	13/15	9/16	30/69	7/7	6/6	19/20	126/177
Porcine	44/174	35/89	40/119	35/122	35/86	18/54	430/1,453
TOTAL	303/634	275/493	343/595	280/484	330/496	359/533	3,774/6,426

Tissue Accessions		
Species	Tissues from Field Necropsies	Formalin Fixed Tissues Only (Surgical or Necropsy)
Avian-Chicken	13	6
Avian-Miscellaneous	100	66
Avian-Turkey	160	7
Bovine	1,764	36
Canine	189	2,886
Caprine	21	10
Equine	116	183
Feline	68	669
Fish-Amphibian-Reptile	5	4
Miscellaneous Mammal	85	33
Miscellaneous Specimen	10	310
Ovine	44	4
Porcine	4,489	66
TOTAL	7,064	4,280

Positive Rabies Cases														
Species	Jl	Ag	Sp	Oc	Nv	Dc	Jn	Fb	Mr	Ap	My	Jn	Total	Percent Total
Bat	-	2	-	-	1	-	-	-	1	-	-	1	5	5.8
Bovine	-	-	1	1	1	2	1	1	3	-	-	-	10	11.6
Canine	1	-	-	-	1	2	1	-	-	-	1	-	6	7.0
Equine	-	-	-	-	-	-	-	1	-	-	1	-	2	2.3
Feline	1	1	1	1	-	-	-	-	-	-	2	-	6	7.0
Skunk	8	8	-	5	2	4	4	3	2	6	6	9	57	66.3
TOTAL	10	11	2	7	5	8	6	5	6	6	10	10	86	100.0

Rabies Examinations*

Species	Human Exposure				Non-Human Exposure				TOTALS
	Pos	Neg	No Test	Total	Pos	Neg	No Test	Total	
Bat	4	151	3	158	1	59	1	61	219
Beaver	-	-	-	-	-	1	-	1	1
Bovine	4	34	-	38	6	54	-	60	98
Buffalo	-	-	-	-	-	1	-	1	1
Canine	5	723	1	729	1	54	1	56	785
Caprine	-	5	-	5	-	2	-	2	7
Chipmunk	-	1	-	1	-	-	-	-	1
Coyote	-	1	-	1	-	1	-	1	2
Donkey	-	2	-	2	-	-	-	-	2
Equine	1	7	-	8	1	21	-	22	30
Feline	6	597	5	608	-	60	-	60	668
Ferret	-	3	-	3	-	1	-	1	4
Fox	-	7	-	7	-	10	-	10	17
Gopher	-	2	-	2	-	-	-	-	2
Guinea Pig	-	-	-	-	-	1	-	1	1
Llama	-	-	-	-	-	2	-	2	2
Mink	-	4	-	4	-	-	-	-	4
Mole	-	1	-	1	-	-	-	-	1
Mountain Lion	-	1	-	1	-	-	-	-	1
Mouse	-	10	-	10	-	1	-	1	11
Muskrat	-	4	-	4	-	7	-	7	11
Opossum	-	3	-	3	-	3	-	3	6
Ovine	-	1	-	1	-	8	-	8	9
Pocket Gopher	-	2	-	2	-	-	-	-	2
Porcine	-	2	-	2	-	2	-	2	4
Rabbit	-	4	-	4	-	1	-	1	5
Raccoon	-	63	1	64	-	55	-	55	119
Rat	-	3	-	3	-	-	-	-	3
Reindeer	-	-	-	-	-	1	-	1	1
Shrew	-	3	-	3	-	2	-	2	5
Skunk	9	18	-	27	48	39	3	90	117
Squirrel	-	16	-	16	-	1	-	1	17
Woodchuck	-	3	-	3	-	7	-	7	10
TOTAL	29	1,671	10	1,710	57	394	5	456	2,166

*Fluorescent antibody testing performed by the Minnesota Department of Health

Clinical Chemistry Laboratory Summary*

Test	No. of Tests
Serum Profiles	
Avian	1
Large Animal	139
Small Animal	61
1. canine	46
2. feline	15
CX3	1
Renal	3
2-4 Test	113
5-8 Test	4
Trypsin-like Immunoreactivity (TLI)	265
Serum Individual Tests	
Amylase	3
Bile Acids	100
Blood Urea Nitrogen (BUN)	5
Glucose	3
Lipase	24
Magnesium	6
Phenobarbitol	595
Protein, Total	3
Triglycerides	17
Miscellaneous Chemistries	10
Feces	
Fecal Occult Blood	6
Fecal Fat/Starch	1
Spinal Fluid	
CSF-Protein	7
Urine	
Urinalysis	23
Protein/Creatinine Ratio	27
Sediment only	12
Miscellaneous Chemistries	2
TOTAL	1,431

*Dr. Victor Perman, Laboratory Supervisor

Cytology Laboratory Summary*

Species	Avian	Bovine	Canine	Equine	Feline	Fish-Amphi.- Reptile	Misc. Mammal	Porcine	TOTAL
No. of Specimens	1	3	490	21	153	2	8	1	679

*Dr. Victor Perman, Laboratory Supervisor

Endocrinology Laboratory Summary						
Species	Adrenocortico- trophic hormone (ACTH)	ACTH Stimulation	Cortisol	Dexamethasone Suppression Low Dose	Dexamethasone Suppression High Dose	Digoxin
Avian	-	-	-	-	-	-
Bovine	-	-	-	-	-	-
Canine	65	410	18	79	8	31
Caprine	-	-	-	-	-	-
Equine	3	-	12	4	-	-
Feline	-	11	2	2	-	2
Miscellaneous Mammal	-	-	4	-	-	-
Porcine	-	-	-	-	-	-
TOTAL	68	421	36	85	8	33
Species	Human Chorionic Gonadotropin (HCG) Response	Insulin	Progesterone	Testosterone	Thyroid Profile	Thyroid Registry (canine)
Avian	-	-	-	-	-	-
Bovine	-	-	6	-	-	-
Canine	-	23	284	4	115	9
Caprine	-	-	-	-	-	-
Equine	11	-	69	11	3	-
Feline	-	1	3	1	15	-
Miscellaneous Mammal	-	-	20	1	-	-
Porcine	-	-	-	-	-	-
TOTAL	11	24	382	17	133	9
Species	Thyroid Stimulating Hormone (TSH)	Free Thyroxin (FT4D)	Thyroxin (T-4)	Triiodothyronine (T-3)	T-3 Suppression	TOTALS
Avian	-	-	-	-	-	-
Bovine	-	5	5	5	-	21
Canine	17	53	1,032	14	1	2,163
Caprine	-	-	-	-	-	-
Equine	-	-	269	209	-	591
Feline	-	46	683	2	4	772
Miscellaneous Mammal	-	-	17	41	-	83
Porcine	-	-	-	-	-	-
TOTAL	17	104	2,006	271	5	3,630

Hematology Laboratory Summary*

Test	No. of Tests
Blood Typing	7
Bone Marrow Core and Aspirate	3
Buffy Coat	12
Coagulation Profile	3
Activated Partial Thromboplastin Time (APTT)	1
Fibrinogen	4
Complete Blood Cell Count (CBC)	174
CBC w/o differential, fibrinogen, or TPP	6
Complete Body Fluids	18
Differential	11
Hematocrit	15
Hemoglobin (Hb)	6
Packed Cell Volume (PCV)	3
Platelet count	30
Red Blood Cell Count (RBC)	5
Total Plasma Protein (TPP)	1
Screens	
Anaplasma	1
Ehrlichia	23
Red Blood Cell Parasite	37
White Blood Cell Count (WBC)	9
Miscellaneous	3
TOTAL	372

*Dr. Victor Perman, Laboratory Supervisor

Histopathology Laboratory Summary

Slides (H&E Stain)	Special Stains	Unstained Slides	Recut Block	Decalcification	Block Embedded Only	TOTALS
42,145	2,497	13,897	998	351	1,390	61,278

Bacterial Cultures - Susceptibilities

Species	Accessions	Aerobic Cultures	Anaerobic Cultures	Antimicrobial Susceptibility
Avian-Chicken	114	1,880	-	62
Avian-Miscellaneous	195	840	14	63
Avian-Turkey	159	620	4	87
Bovine	2,094	5,988	199	762
Canine	2,000	3,158	154	1,068
Caprine	82	203	8	34
Equine	850	1,296	130	331
Feline	814	1,621	28	276
Fish-Amphibian-Reptile	31	108	20	13
Miscellaneous Mammal	318	1,105	57	84
Miscellaneous Specimen	148	1,316	4	9
Ovine	150	579	84	44
Porcine	2,617	16,176	526	2,411
TOTAL	9,572	34,890	1,228	5,244

Bacterial Cultures – Special Procedures (Campylobacter and Mycobacterium)

Species	<i>Campylobacter spp.</i>								<i>Mycobacterium paratuberculosis</i>		
	Samples	coli	fetus-fetus	hyoint.	jejuni	sputorum	upsal.	misc.	Access	Samples	Pos
Avian-Chicken	1	-	-	-	-	-	-	-	-	-	-
Avian-Miscellaneous	1	-	-	-	-	-	-	-	-	-	-
Avian-Turkey	-	-	-	-	-	-	-	-	-	-	-
Bovine	35	9	1	-	-	-	-	4	235	577	86
Canine	47	2	-	-	2	-	10	10	-	-	-
Caprine	6	-	-	-	-	-	-	-	17	23	2
Equine	2	-	-	-	-	-	-	-	-	-	-
Feline	16	-	-	-	-	-	3	1	-	-	-
Miscellaneous Mammal	20	-	-	-	-	-	1	5	18	18	0
Ovine	28	-	-	-	2	-	-	-	9	9	0
Porcine	294	3	-	-	-	-	-	84	-	-	-
TOTAL	450	14	1	-	4	-	14	104	279	627	88

Species	Chlamydia (culture)			Chlamydia (antigen detection ELISA)		
	Access	Samples	Positive	Access	Samples	Positive
	Avian-Chicken	-	-	-	-	-
Avian-Miscellaneous	80	94	3	69	95	1
Avian-Turkey	-	-	-	-	-	-
Bovine	-	-	-	1	2	0
Canine	-	-	-	-	-	-
Caprine	-	-	-	2	2	0
Equine	-	-	-	-	-	-
Feline	-	-	-	8	8	1
Fish-Amphibian-Reptile	-	-	-	-	-	-
Miscellaneous Mammals	-	-	-	-	-	-
Ovine	1	1	0	8	8	0
Porcine	-	-	-	19	263	26
TOTAL	81	95	3	107	378	28

Species	Brachyspira			Mycoplasma			Ureaplasma		
	Access	Samples	Positive	Access	Samples	Positive	Access	Samples	Positive
	Avian-Chicken	-	-	-	2	9	0	-	-
Avian-Miscellaneous	-	-	-	13	52	2	-	-	-
Avian-Turkey	-	-	-	3	33	0	-	-	-
Bovine	-	-	-	21	60	24	2	5	0
Canine	-	-	-	8	17	10	-	-	-
Caprine	-	-	-	2	4	2	-	-	-
Equine	-	-	-	-	-	-	-	-	-
Feline	-	-	-	2	5	2	-	-	-
Fish-Amphibian-Reptile	-	-	-	-	-	-	-	-	-
Miscellaneous Mammals	-	-	-	1	14	3	-	-	-
Ovine	-	-	-	2	5	2	-	-	-
Porcine	123	225	15	49	264	47	-	-	-
TOTAL	123	225	15	103	463	92	2	5	0

Bacterial Immunofluorescence in Tissues* (Clostridia)

Species	Accessions	Samples	Positives			
			<i>C. chauvoei</i>	<i>C. novyi</i>	<i>C. sordelli</i>	<i>C. septicum</i>
Bovine	31	40	6	5	3	0
Equine	1	2	0	0	0	0
Porcine	7	13	0	0	0	12
Miscellaneous	6	9	0	0	0	0
TOTAL	45	64	6	5	3	12

*Frozen Section or Tissue Imprints

Bacterial Immunofluorescence in Tissues* (*Escherichia coli* Pilus Antigens)

Species	Accessions	K88		K99		987P		2134P/F18	
		Samples	Positive	Samples	Positive	Samples	Positive	Samples	Positive
Bovine	266	1	0	293	64	1	0	1	0
Porcine	341	426	68	355	8	351	0	316	52
Miscellaneous	4	0	0	5	0	0	0	0	0
TOTAL	611	427	68	553	72	352	0	317	52

*Frozen Section or Tissue Imprints

Bacterial Immunofluorescence in Tissues* (*Chlamydia*, *Leptospira* and *Mycoplasma*)

Species	<i>Chlamydia psittaci</i>			<i>Leptospira sp.</i>			<i>Mycoplasma hyopneumoniae</i>		
	Accessions	Samples	Pos	Accessions	Samples	Pos	Accessions	Samples	Pos
Avian	2	6	0	-	-	-	-	-	-
Bovine	-	-	-	32	40	0	-	-	-
Canine	-	-	-	3	3	0	-	-	-
Caprine	-	-	-	1	1	0	-	-	-
Equine	-	-	-	7	9	0	-	-	-
Feline	7	18	0	1	2	0	-	-	-
Miscellaneous	-	-	-	7	7	0	-	-	-
Ovine	-	-	-	2	2	0	-	-	-
Porcine	-	-	-	275	605	0	30	73	0
TOTAL	9	24	0	328	669	0	30	73	0

*Frozen Section or Tissue Imprints

Bovine Mastitis Cultures and Drug Susceptibility Tests

Bovine Mastitis Cultures: 9,018

Number with Significant Isolates: 6,576 (72.9%)

Number with No Growth: 2,441 (27.1%)

Number with Mold Overgrowth: 1 (0.0%)

Bedding Cultures: 209

Bulk Tank Samples: 394

Culture Identification, Mastitis Related: 37

Mycoplasma Cultures: 165 (9 positive)

Water Cultures, Mastitis Related: 34

TOTAL Cultures: 9,857

Isolate	Percent Susceptible				
	Number Isolated	Number Tested	Amoxicillin/ Clavulanic acid	Ampicillin	Ceftiofur
<i>Arcanobacter (Actinomyces) pyogenes</i>	37	0	-	-	-
<i>Bacillus spp.</i>	26	3	66	33	66
<i>Corynebacterium bovis</i>	113	25	55	66	55
<i>Corynebacterium spp.</i>	133	20	33	33	99
<i>Enterobacter spp.</i>	64	32	99	33	99
<i>Enterococcus spp.</i>	63	40	75	22	85
<i>Escherichia coli</i>	309	176	74	58	89
<i>Klebsiella spp.</i>	235	153	81	22	50
<i>Lactococcus spp.</i>	3	0	-	-	-
<i>Pasteurella multocida</i>	10	8	93	83	100
<i>Proteus spp.</i>	5	0	-	-	-
<i>Pseudomonas spp.</i>	150	38	2	28	50
<i>Serratia spp.</i>	11	0	-	-	-
<i>Staphylococcus spp.</i> -coagulase neg.	2,944	399	92	64	91
<i>Staphylococcus spp.</i> -coagulase pos.	960	191	95	64	94
<i>Streptococcus agalactiae</i>	84	0	-	-	-
<i>Streptococcus bovis</i>	12	0	-	-	-
<i>Streptococcus dysgalactiae</i>	1,026	221	91	77	88
<i>Streptococcus spp.</i> -Group C	8	0	-	-	-
<i>Streptococcus uberis</i>	966	153	95	78	92
Yeasts	30	0	-	-	-

(Continued)

Bovine Mastitis Cultures and Drug Susceptibility Tests (continued)

Isolate	Percent Susceptible				
	Cephalothin	Cloxacillin	Erythromycin	Novobiocin	Penicillin
<i>Arcanobacter (Actinomyces) pyogenes</i>	-	-	-	-	-
<i>Bacillus spp.</i>	66	0	66	66	66
<i>Corynebacterium bovis</i>	55	50	62	55	44
<i>Corynebacterium spp.</i>	99	0	20	99	0
<i>Enterobacter spp.</i>	50	0	0	0	0
<i>Enterococcus spp.</i>	78	45	52	22	15
<i>Escherichia coli</i>	90	2	4	1	1
<i>Klebsiella spp.</i>	55	0	0	7	5
<i>Lactococcus spp.</i>	-	-	-	-	-
<i>Pasteurella multocida</i>	100	38	46	42	86
<i>Proteus spp.</i>	-	-	-	-	-
<i>Pseudomonas spp.</i>	48	0	0	0	0
<i>Serratia spp.</i>	-	-	-	-	-
<i>Staphylococcus spp.</i> —coagulase neg.	90	34	88	58	43
<i>Staphylococcus spp.</i> —coagulase pos.	89	64	71	78	58
<i>Streptococcus agalactiae</i>	-	-	-	-	-
<i>Streptococcus bovis</i>	-	-	-	-	-
<i>Streptococcus dysgalactiae</i>	80	35	46	41	57
<i>Streptococcus spp.</i> —Group C	-	-	-	-	-
<i>Streptococcus uberis</i>	92	17	40	52	55
Yeasts	-	-	-	-	-

Isolate	Percent Susceptible				
	Penicillin/ Novobiocin	Pirlimycin	Sulfadiazine	Tetracycline	Ticarcillin
<i>Arcanobacter (Actinomyces) pyogenes</i>	-	-	-	-	-
<i>Bacillus spp.</i>	33	0	1	99	50
<i>Corynebacterium bovis</i>	60	44	22	55	25
<i>Corynebacterium spp.</i>	99	99	0	99	0
<i>Enterobacter spp.</i>	0	0	0	99	99
<i>Enterococcus spp.</i>	48	36	30	5	36
<i>Escherichia coli</i>	20	10	20	57	84
<i>Klebsiella spp.</i>	13	7	37	71	44
<i>Lactococcus spp.</i>	-	-	-	-	-
<i>Pasteurella multocida</i>	86	0	60	38	50
<i>Proteus spp.</i>	-	-	-	-	-
<i>Pseudomonas spp.</i>	15	10	10	55	88
<i>Serratia spp.</i>	-	-	-	-	-
<i>Staphylococcus spp.</i> —coagulase neg.	88	64	28	59	80
<i>Staphylococcus spp.</i> —coagulase pos.	85	66	31	69	85
<i>Streptococcus agalactiae</i>	-	-	-	-	-
<i>Streptococcus bovis</i>	-	-	-	-	-
<i>Streptococcus dysgalactiae</i>	70	60	18	33	88
<i>Streptococcus spp.</i> —Group C	-	-	-	-	-
<i>Streptococcus uberis</i>	83	48	8	25	80
Yeasts	-	-	-	-	-

***Actinobacillus pleuropneumoniae* Serotyping (Porcine Origin)**

	Serotype*						Total
	1	3	5	7	9	Untypable	
Number of Accessions	16	1	4	13	-	13	47
Percent	34.0	2.1	8.5	27.7	-	27.7	100.0

*Laboratory of Dr. Carlos Pijoan

***Pasteurella multocida* Serotyping**

Species	Number of Accessions	Serotype							Total	Percent
		3	3X4	4	12	Untypable	A	D		
Avian-Turkey*	13	6	6	-	2	3	-	-	17	73.9
Porcine**	6	-	-	-	-	-	3	3	6	26.1
TOTAL	19	6	6	-	2	3	3	3	23	100.0
Percent		26.1	26.1	-	8.8	13.0	13.0	13.0	100.0	

*Serotyping conducted by National Veterinary Services Laboratory

**Laboratory of Dr. K. Nagaraja

***Streptococcus suis* Serotyping (Porcine Origin)**

Source	Serotype*											Total	Percent		
	1	1-2	2	3	4	5	6	7	8	9	10			11	Untypable
Brain/Meninges	-	1	2	-	-	-	-	-	-	-	-	-	1	4	14.8
Heart	-	-	1	-	-	-	-	-	-	-	-	-	-	1	3.7
Joint	-	-	-	-	-	-	-	-	-	-	-	-	1	1	3.7
Kidney	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Liver	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lung	-	2	2	-	-	-	-	-	-	-	-	-	-	4	14.8
Nasal Turbinates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	4	6	-	1	3	-	-	-	-	1	-	1	16	59.3
Spleen	-	-	-	-	-	-	-	-	-	-	-	1	-	1	3.7
TOTAL	-	7	11	-	1	3	-	-	-	-	1	1	3	27	100.0
Percent	-	25.9	40.8	-	3.7	11.1	-	-	-	-	3.7	3.7	11.1	100.0	

*Laboratory of Dr. Carlos Pijoan

Salmonella Serotyping*

Serotype	Avian		Avian	Bovine	Canine	Equine	Feline	Ovine	Porcine	Misc.	Environ-	Feed
	Chicken	Turkey	Misc.							Species	mental	
<i>agona</i>	1	1	-	4	-	-	-	-	7	-	4	-
<i>alachua</i>	-	-	-	-	-	-	-	-	2	-	-	-
<i>anatum</i>	-	1	-	2	-	-	-	-	5	1	-	-
<i>arizona</i>	-	-	-	-	-	-	-	3	-	1	-	-
<i>bardo</i>	-	1	-	-	1	-	-	-	-	-	-	-
<i>bareilly</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>berta</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>binza</i>	-	6	-	-	-	-	-	-	-	-	-	-
<i>braenderup</i>	-	-	-	-	-	-	-	-	-	-	9	-
<i>brandenburg</i>	-	-	-	-	1	-	-	-	2	-	-	-
<i>brendeney</i>	-	-	-	2	-	-	-	-	4	-	1	1
<i>carrav</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>cerro</i>	2	-	-	2	-	-	-	-	-	-	5	-
<i>cholerasuis</i>	-	-	-	-	-	-	-	-	1	-	-	-
<i>c. kunzendorf</i>	-	-	-	-	-	-	-	-	30	-	-	-
<i>cubana</i>	-	-	-	-	-	1	-	-	-	-	-	-
<i>derby</i>	-	-	-	2	-	-	-	-	20	-	-	-
<i>drypool</i>	-	1	-	2	-	-	-	-	-	-	-	1
<i>dublin</i>	-	-	-	18	-	-	-	-	-	-	-	-
<i>enteriditis</i>	1	-	2	-	-	-	-	-	-	-	2	-
<i>florida</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>give</i>	1	-	-	-	-	-	-	-	-	-	1	-
<i>hadar</i>	-	1	-	-	-	-	-	-	-	-	1	-
<i>havana</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>heidelberg</i>	8	2	-	2	-	-	-	-	23	-	109	-
<i>houten</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>illinois</i>	-	-	-	-	-	-	-	-	-	-	-	1
<i>indiana</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>infantis</i>	-	-	-	2	-	-	-	-	15	-	-	1
<i>inverness</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>java</i>	-	-	-	-	-	1	-	-	-	-	-	-
<i>johannesburg</i>	-	-	-	-	-	-	-	-	2	-	-	-
<i>kentucky</i>	2	-	-	1	-	-	-	-	1	-	41	-
<i>kiambu</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>lille</i>	1	-	-	-	-	-	-	-	-	-	-	-
<i>litchfield</i>	-	1	-	1	-	-	-	-	-	-	-	-
<i>livingstone</i>	-	-	-	-	-	-	-	-	1	-	-	-
<i>lohbruegge</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>london</i>	-	-	-	-	-	-	-	-	2	-	-	-
<i>madelia</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>mbandaka</i>	3	-	-	3	-	-	-	-	1	1	3	-
<i>meleagridis</i>	-	-	-	10	-	-	-	-	1	1	-	-

Salmonella Serotyping* (continued)

Serotype	Avian			Bovine	Canine	Equine	Feline	Ovine	Porcine	Misc. Species	Environ-mental	Feed
	Chicken	Turkey	Misc.									
<i>menhaden</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>montevideo</i>	-	-	-	18	2	-	-	-	10	1	3	1
<i>muenchen</i>	-	-	-	-	-	-	-	-	1	-	-	-
<i>muenster</i>	-	-	-	8	1	-	-	-	-	1	-	-
<i>new brunswick</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>new port</i>	-	-	-	3	-	-	-	-	-	2	-	-
<i>newington</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>norwich</i>	-	-	-	-	-	1	-	-	-	-	-	-
<i>ohio</i>	-	1	-	-	-	-	-	-	-	-	-	1
<i>oranienburg</i>	-	-	-	2	-	-	-	-	1	1	-	-
<i>orion</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>pomona</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>poona</i>	-	-	-	-	-	-	-	-	-	1	-	-
<i>putten</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>reading</i>	-	1	-	-	-	-	-	-	1	-	-	-
<i>rissen</i>	-	-	-	-	1	-	-	-	-	-	-	-
<i>saint paul</i>	-	-	-	-	-	-	-	-	2	-	-	-
<i>schwarzengrund</i>	4	-	-	-	-	-	-	-	-	-	3	1
<i>senftenburg</i>	2	7	-	-	-	-	-	-	-	-	6	2
<i>tennessee</i>	-	-	-	-	-	1	-	-	1	-	-	1
<i>thomasville</i>	1	-	-	-	-	-	-	-	-	-	-	1
<i>thompson</i>	-	-	-	2	-	-	-	-	-	-	-	1
<i>typhimurium</i>	-	-	2	17	-	4	3	-	49	-	10	-
<i>t. copenhagen</i>	-	-	3	108	1	2	7	-	50	-	4	1
<i>uganda</i>	-	-	-	2	-	3	-	-	-	-	-	-
<i>wassenaar</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>worthington</i>	-	2	-	-	-	-	-	-	7	-	-	-
9,12 non-motile	-	-	-	15	-	-	-	-	-	-	-	-
4,5,12-monophasic	-	-	-	6	1	1	-	-	-	-	10	-
Multiple serotypes	-	-	-	2	-	-	-	-	1	-	-	-
Untypable	-	-	-	3	-	-	-	-	3	1	-	-
TOTAL	26	25	7	237	8	14	10	3	243	11	212	13

*Serotyping conducted by National Veterinary Services Laboratory – Ames, IA.

Pasteurella multocida* Toxin Testing

Species	Accessions	Samples	Positives	Percent
Porcine	26	35	2	5.7

*Laboratory of Dr. Carlos Pijoan

In Vitro Antimicrobial Drug Susceptibility Tests***Avian (Chicken)**

Isolate	No. Tested	Percent Susceptible					
		Amikacin	Ampicillin	Cetiofur	Clindamycin	Enrofloxacin	Erythromycin
<i>Bordetella avium</i>	1	100	100	100	0	100	0
<i>Escherichia coli</i>	18	100	89	94	0	94	0
<i>Ornithobacterium rhinotracheale</i>	2	NA	100	100	50	100	50
<i>Pasteurella hemolytica</i>	15	100	87	100	0	100	0
<i>Pasteurella multocida</i>	5	80	100	100	0	100	0
<i>Salmonella spp.</i>	15	100	100	100	0	100	0
<i>Staphylococcus aureus</i>	4	100	75	100	100	75	75

Isolate	Percent Susceptible						
	Gentamicin	Neomycin	Penicillin	Spectinomycin	Sulfa dimethoxine	Tetracycline	Trimethprim Sulfa
<i>Bordetella spp.</i>	100	100	0	NA	0	100	100
<i>Escherichia coli</i>	61	25	0	13	6	22	100
<i>Ornithobacterium rhinotracheale</i>	100	NA	100	NA	0	50	50
<i>Pasteurella hemolytica</i>	100	50	0	0	7	13	93
<i>Pasteurella multocida</i>	100	100	0	0	20	100	100
<i>Salmonella spp.</i>	67	100	0	0	0	53	100
<i>Staphylococcus aureus</i>	100	100	75	0	0	0	100

*The susceptibility section of this report is not inclusive and only reflects the major microbes and antimicrobial agents tested

In Vitro Antimicrobial Drug Susceptibility Tests

Avian (Turkey)

Isolate	No. Tested	Percent Susceptible					
		Amikacin	Ampicillin	Cetiofur	Clindamycin	Enrofloxacin	Erythromycin
<i>Bordetella avium</i>	8	100	50	0	0	63	0
<i>Escherichia coli</i>	26	100	58	96	0	92	0
<i>Ornithobacterium rhinotracheale</i>	26	NA	100	78	100	44	100
<i>Pasteurella hemolytica</i>	2	100	100	100	0	100	0
<i>Pasteurella multocida</i>	2	100	100	100	0	100	0
<i>Salmonella spp.</i>	14	100	93	93	0	100	0
<i>Staphylococcus aureus</i>	1	100	0	100	100	0	100

Isolate	Percent Susceptible						
	Gentamicin	Neomycin	Penicillin	Spectinomycin	Sulfa dimethoxine	Tetracycline	Trimethprim Sulfa
<i>Bordetella spp.</i>	100	50	0	0	0	88	75
<i>Escherichia coli</i>	31	38	0	0	0	4	81
<i>Ornithobacterium rhinotracheale</i>	23	NA	65	100	0	69	0
<i>Pasteurella hemolytica</i>	100	100	0	0	0	0	100
<i>Pasteurella multocida</i>	100	100	50	NA	100	100	100
<i>Salmonella spp.</i>	79	86	0	0	0	79	86
<i>Staphylococcus aureus</i>	0	0	0	100	0	0	100

In Vitro Antimicrobial Drug Susceptibility Tests (continued)

Bovine							
Isolate	No. Tested	Percent Susceptible					
		Amikacin	Ampicillin	Apramycin	Ceftiofur	Cephalothin	Clindamycin
<i>Actinomyces pyogenes</i>	20	NA	100	NA	100	100	45
<i>Escherichia coli</i>	279	99	26	85	73	43	0
<i>Haemophilus somnus</i>	25	NA	96	NA	96	96	24
<i>Listeria monocytogenes</i>	10	100	100	100	0	100	30
<i>Pasteurella hemolytica</i>	63	97	75	51	98	95	3
<i>Pasteurella multocida</i>	85	94	96	37	99	95	0
<i>Salmonella spp.</i>	222	99	32	97	92	81	0

Isolate	Percent Susceptible						
	Enrofloxacin	Erythromycin	Gentamicin	Neomycin	Novobiocin	Penicillin	Spectinomycin
<i>Actinomyces pyogenes</i>	NA	80	100	NA	NA	100	100
<i>Escherichia coli</i>	92	0	63	25	0	0	0
<i>Haemophilus somnus</i>	NA	84	76	NA	NA	92	64
<i>Listeria monocytogenes</i>	60	90	100	90	100	100	40
<i>Pasteurella hemolytica</i>	97	5	94	71	10	0	5
<i>Pasteurella multocida</i>	99	0	98	83	88	4	0
<i>Salmonella spp.</i>	99	0	94	41	0	0	0

Isolate	Percent Susceptible					
	Sulfachloro-pyridazine	Tetracycline	Tiamulin	Tilmicosin	Trimethprim Sulfa	Tylosin
<i>Actinomyces pyogenes</i>	0	25	95	82	75	NA
<i>Escherichia coli</i>	13	10	0	0	54	0
<i>Haemophilus somnus</i>	60	92	100	64	86	89
<i>Listeria monocytogenes</i>	60	90	40	60	100	100
<i>Pasteurella hemolytica</i>	49	73	19	90	86	5
<i>Pasteurella multocida</i>	10	82	20	94	92	1
<i>Salmonella spp.</i>	9	31	0	0	92	0

In Vitro Antimicrobial Drug Susceptibility Tests (continued)

Canine

Isolate	No. Tested	Percent Susceptible				
		Amikacin	Ampicillin	Amoxicillin/ Clavulanic Acid	Carbenicillin	Cefoxitin
<i>Bordetella bronchiseptica</i>	10	100	30	78	0	0
<i>Enterococcus spp.</i>	90	2	90	90	0	4
<i>Escherichia coli</i>	276	100	74	83	0	94
<i>Klebsiella pneumoniae</i>	23	100	0	74	0	95
<i>Pasteurella canis</i>	14	100	100	100	0	100
<i>Pasteurella multocida</i>	21	88	100	100	0	88
<i>Proteus mirabilis</i>	92	95	88	96	0	91
<i>Pseudomonas aeruginosa</i>	90	87	0	0	97	0
<i>Salmonella spp.</i>	7	100	86	86	0	100
<i>Staphylococcus aureus</i>	16	94	31	100	0	100
<i>Staphylococcus intermedius</i>	167	98	49	98	31	95
<i>Streptococcus spp.-beta</i>	97	84	92	100	0	100

Isolate	Percent Susceptible					
	Ceftiofur	Cephalothin	Chloramphenical	Clindamycin	Enrofloxacin	Erythromycin
<i>Bordetella bronchiseptica</i>	0	0	89	0	90	0
<i>Enterococcus spp.</i>	10	7	66	4	12	36
<i>Escherichia coli</i>	97	64	75	0	94	1
<i>Klebsiella pneumoniae</i>	90	67	57	0	74	0
<i>Pasteurella canis</i>	100	100	93	8	100	69
<i>Pasteurella multocida</i>	94	95	100	19	100	62
<i>Proteus mirabilis</i>	96	92	71	0	93	0
<i>Pseudomonas aeruginosa</i>	0	0	0	0	24	0
<i>Salmonella spp.</i>	100	86	86	0	100	0
<i>Staphylococcus aureus</i>	100	100	69	81	94	69
<i>Staphylococcus intermedius</i>	97	97	87	91	93	88
<i>Streptococcus spp.-beta</i>	99	99	68	72	47	70

In Vitro Antimicrobial Drug Susceptibility Tests (continued)**Canine** (continued)

Isolate	Percent Susceptible					
	Gentamicin	Neomycin	Nitrofurantoin	Orbifloxacin	Oxacillin	Penicillin
<i>Bordetella bronchiseptica</i>	100	100	0	80	0	0
<i>Enterococcus spp.</i>	7	4	83	0	2	78
<i>Escherichia coli</i>	96	93	99	93	0	0
<i>Klebsiella pneumoniae</i>	95	100	100	81	0	0
<i>Pasteurella canis</i>	100	100	100	100	100	57
<i>Pasteurella multocida</i>	95	100	100	90	94	43
<i>Proteus mirabilis</i>	83	83	0	72	0	0
<i>Pseudomonas aeruginosa</i>	78	65	0	5	0	0
<i>Salmonella spp.</i>	86	67	100	100	0	0
<i>Staphylococcus aureus</i>	100	100	100	92	100	31
<i>Staphylococcus intermedius</i>	94	98	98	92	97	47
<i>Streptococcus spp.</i> -beta	88	80	100	6	97	96

Isolate	Percent Susceptible					
	Sulfa dimethoxine	Sulfa dimethoxine/ ormetoprim	Tetracycline	Ticarcillin	Ticarcillin/ Clavulanic Acid	Trimethoprim Sulfa
<i>Bordetella bronchiseptica</i>	33	67	100	80	100	90
<i>Enterococcus spp.</i>	0	96	56	29	31	94
<i>Escherichia coli</i>	4	86	80	78	88	89
<i>Klebsiella pneumoniae</i>	0	60	91	0	67	87
<i>Pasteurella canis</i>	67	100	100	100	100	100
<i>Pasteurella multocida</i>	18	100	100	100	100	97
<i>Proteus mirabilis</i>	22	75	2	88	99	85
<i>Pseudomonas aeruginosa</i>	0	0	3	93	92	15
<i>Salmonella spp.</i>	0	33	71	86	86	65
<i>Staphylococcus aureus</i>	13	100	81	31	100	85
<i>Staphylococcus intermedius</i>	16	98	60	47	97	87
<i>Streptococcus spp.</i> -beta	10	100	38	99	98	93

In Vitro Antimicrobial Drug Susceptibility Tests (continued)

Equine

Isolate	No. Tested	Percent Susceptible				
		Amikacin	Ampicillin	Amoxicillin/ Clavulanic Acid	Cefoxitin	Ceftiofur
<i>Actinobacillus equuli</i>	2	100	100	100	100	100
<i>Actinobacillus suis</i>	18	100	83	94	100	100
<i>Escherichia coli</i>	49	100	69	83	94	98
<i>Pseudomonas aeruginosa</i>	15	100	0	0	0	0
<i>Rhodococcus equi</i>	9	75	22	78	50	75
<i>Salmonella spp.</i>	14	100	57	58	83	86
<i>Staphylococcus aureus</i>	6	100	17	100	100	100
<i>Streptococcus equi</i>	17	88	100	100	94	100
<i>Streptococcus zooepidemicus</i>	75	66	99	100	97	97

Isolate	Percent Susceptible				
	Cephalothin	Chloramphenicol	Enrofloxacin	Erythromycin	Gentamicin
<i>Actinobacillus equuli</i>	100	100	100	50	50
<i>Actinobacillus suis</i>	100	100	100	6	94
<i>Escherichia coli</i>	52	79	100	0	77
<i>Pseudomonas aeruginosa</i>	0	0	40	0	71
<i>Rhodococcus equi</i>	0	67	67	100	100
<i>Salmonella spp.</i>	50	58	100	0	57
<i>Staphylococcus aureus</i>	100	83	100	100	100
<i>Streptococcus equi</i>	100	76	6	76	94
<i>Streptococcus zooepidemicus</i>	99	75	15	72	77

Isolate	Percent Susceptible				
	Penicillin	Sulfa dimethoxine	Tetracycline	Ticarcillin	Trimethoprim Sulfa
<i>Actinobacillus equuli</i>	0	100	100	100	100
<i>Actinobacillus suis</i>	6	59	100	82	89
<i>Escherichia coli</i>	0	9	73	72	70
<i>Pseudomonas aeruginosa</i>	0	0	7	86	21
<i>Rhodococcus equi</i>	11	0	56	50	10
<i>Salmonella spp.</i>	0	0	36	58	50
<i>Staphylococcus aureus</i>	17	67	100	17	100
<i>Streptococcus equi</i>	100	0	76	100	100
<i>Streptococcus zooepidemicus</i>	96	3	39	97	97

In Vitro Antimicrobial Drug Susceptibility Tests (continued)**Feline**

Isolate	No. Tested	Percent Susceptible				
		Amikacin	Ampicillin	Amoxicillin/ Clavulanic Acid	Carbenicillin	Cefoxitin
<i>Bordetella bronchiseptica</i>	12	100	17	83	0	0
<i>Enterococcus spp.</i>	19	11	74	79	0	6
<i>Escherichia coli</i>	99	100	77	92	0	96
<i>Klebsiella pneumoniae</i>	4	100	0	75	0	75
<i>Pasteurella multocida</i>	46	95	98	96	0	95
<i>Proteus mirabilis</i>	3	100	100	100	NA	100
<i>Pseudomonas aeruginosa</i>	4	100	0	0	100	0
<i>Salmonella spp.</i>	9	89	11	33	0	78
<i>Staphylococcus aureus</i>	3	100	33	100	0	100
<i>Staphylococcus intermedius</i>	6	100	67	83	100	100
<i>Streptococcus spp.</i> -beta	8	100	100	100	0	100

Isolate	Percent Susceptible					
	Ceftiofur	Cephalothin	Chloramphenical	Clindamycin	Enrofloxacin	Erythromycin
<i>Bordetella bronchiseptica</i>	0	17	92	0	92	0
<i>Enterococcus spp.</i>	6	11	79	0	11	17
<i>Escherichia coli</i>	99	75	91	0	96	0
<i>Klebsiella pneumoniae</i>	100	50	100	0	100	0
<i>Pasteurella multocida</i>	95	100	89	0	96	2
<i>Proteus mirabilis</i>	100	100	67	0	100	0
<i>Pseudomonas aeruginosa</i>	0	0	0	0	25	0
<i>Salmonella spp.</i>	78	67	44	11	89	0
<i>Staphylococcus aureus</i>	100	100	67	100	67	100
<i>Staphylococcus intermedius</i>	100	100	100	83	100	100
<i>Streptococcus spp.</i> -beta	100	100	75	63	50	63

In Vitro Antimicrobial Drug Susceptibility Tests (continued)

Feline (continued)

Isolate	Percent Susceptible					
	Gentamicin	Neomycin	Nitrofurantoin	Orbifloxacin	Oxacillin	Penicillin
<i>Bordetella bronchiseptica</i>	100	100	0	50	0	0
<i>Enterococcus spp.</i>	11	0	100	7	0	67
<i>Escherichia coli</i>	99	93	100	96	0	0
<i>Klebsiella pneumoniae</i>	100	100	100	100	0	0
<i>Pasteurella multocida</i>	100	100	100	90	76	10
<i>Proteus mirabilis</i>	100	NA	NA	100	0	0
<i>Pseudomonas aeruginosa</i>	100	100	0	0	0	0
<i>Salmonella spp.</i>	78	50	100	86	11	0
<i>Staphylococcus aureus</i>	100	100	100	100	100	33
<i>Staphylococcus intermedius</i>	100	100	100	100	100	83
<i>Streptococcus spp.</i> -beta	100	100	100	17	100	100

Isolate	Percent Susceptible					
	Sulfa dimethoxine	Sulfa dimethoxine/ ormetoprim	Tetracycline	Ticarcillin	Ticarcillin/ Clavulanic Acid	Trimethoprim Sulfa
<i>Bordetella bronchiseptica</i>	33	50	100	75	83	33
<i>Enterococcus spp.</i>	0	100	21	22	22	100
<i>Escherichia coli</i>	12	96	87	81	95	93
<i>Klebsiella pneumoniae</i>	0	100	50	0	75	100
<i>Pasteurella multocida</i>	15	100	98	98	98	98
<i>Proteus mirabilis</i>	33	NA	0	100	100	100
<i>Pseudomonas aeruginosa</i>	0	0	0	100	75	0
<i>Salmonella spp.</i>	0	100	22	0	0	100
<i>Staphylococcus aureus</i>	33	100	100	33	100	100
<i>Staphylococcus intermedius</i>	0	100	83	83	100	90
<i>Streptococcus spp.</i> -beta	25	100	38	100	100	100

In Vitro Antimicrobial Drug Susceptibility Tests (continued)**Ovine**

Isolate	No. Tested	Percent Susceptible				
		Amikacin	Ampicillin	Apramycin	Ceftiofur	Cephalothin
<i>Coryne. pseudotuberculosis</i>	5	NA	100	NA	100	100
<i>Escherichia coli</i>	10	100	80	100	100	70
<i>Pasteurella hemolytica</i>	12	100	100	42	100	100
<i>Pasteurella multocida</i>	5	100	100	75	80	100
<i>Salmonella spp.</i>	2	100	100	100	100	100

Isolate	No. Tested	Percent Susceptible					
		Clindamycin	Enrofloxacin	Erythromycin	Gentamicin	Neomycin	Novobiocin
<i>Coryne. pseudotuberculosis</i>	100	NA	100	100	100	NA	NA
<i>Escherichia coli</i>	0	100	0	90	100	0	0
<i>Pasteurella hemolytica</i>	0	100	0	100	92	0	0
<i>Pasteurella multocida</i>	0	100	0	100	100	100	100
<i>Salmonella spp.</i>	0	100	0	100	100	0	0

Isolate	No. Tested	Percent Susceptible				
		Penicillin	Spectinomycin	Sulfachloro-pyridazine	Tetracycline	Trimethoprim Sulfa
<i>Coryne. pseudotuberculosis</i>	100	100	100	20	100	100
<i>Escherichia coli</i>	0	0	0	44	50	95
<i>Pasteurella hemolytica</i>	0	0	0	25	100	100
<i>Pasteurella multocida</i>	0	0	0	0	80	100
<i>Salmonella spp.</i>	0	0	0	0	100	100

In Vitro Antimicrobial Drug Susceptibility Tests (continued)

Porcine

Isolate	No. Tested	Percent Susceptible					
		Amikacin	Ampicillin	Apramycin	Ceftiofur	Cephalothin	Clindamycin
<i>Actinobacillus pleuro.</i>	59	100	64	89	100	98	2
<i>Actinobacillus suis</i>	93	97	91	96	99	97	1
<i>Actinomyces pyogenes</i>	17	NA	100	NA	100	100	50
<i>Bordetella bronchiseptica</i>	104	98	18	13	2	16	0
<i>Clostridium perfringens</i>	6	0	100	0	100	100	17
<i>Erysipelothrix rhusio.</i>	13	NA	100	NA	100	100	62
<i>Eschericia coli</i>	386	99	47	68	92	61	0
<i>Haemophilus parasuis</i>	278	NA	99	NA	100	99	62
<i>Pasteurella multocida</i>	527	97	96	32	97	97	0
<i>Salmonella spp.</i>	216	99	54	92	97	88	0
<i>Staphylococcus hyicus</i>	36	100	28	100	94	94	39
<i>Staphylococcus aureus</i>	31	100	26	97	97	97	48
<i>Streptococcus suis</i>	462	89	98	51	100	99	0
<i>Streptococcus spp.-beta</i>	64	87	95	90	100	95	2

Isolate	Percent Susceptible					
	Enrofloxacin	Erythromycin	Gentamicin	Neomycin	Novobiocin	Penicillin
<i>Actinobacillus pleuro.</i>	98	3	100	88	28	3
<i>Actinobacillus suis</i>	99	2	99	93	8	15
<i>Arcanobacterium pyogenes</i>	NA	59	94	NA	NA	100
<i>Bordetella bronchiseptica</i>	99	0	98	98	38	0
<i>Clostridium perfringens</i>	100	17	0	0	0	33
<i>Erysipelothrix rhusio.</i>	NA	79	0	NA	NA	100
<i>Eschericia coli</i>	100	0	71	52	0	0
<i>Haemophilus parasuis</i>	NA	96	99	NA	NA	96
<i>Pasteurella multocida</i>	99	1	99	98	91	8
<i>Salmonella spp.</i>	100	0	91	73	0	0
<i>Staphylococcus hyicus</i>	100	31	94	97	97	28
<i>Staphylococcus aureus</i>	100	45	84	90	100	29
<i>Streptococcus suis</i>	98	0	97	88	99	85
<i>Streptococcus spp.-beta</i>	92	0	84	90	97	89

Isolate	Percent Susceptible					
	Spectinomycin	Sulfachloro-pyridazine	Tetracycline	Tiamulin	Trimethoprim Sulfa	Tylosin
<i>Actinobacillus pleuro.</i>	5	83	19	63	98	2
<i>Actinobacillus suis</i>	5	86	58	69	99	11
<i>Arcanobacterium pyogenes</i>	94	18	17	100	79	NA
<i>Bordetella bronchiseptica</i>	1	39	97	1	85	0
<i>Clostridium perfringens</i>	33	60	17	100	33	20
<i>Erysipelothrix rhusio.</i>	85	0	23	69	0	NA
<i>Eschericia coli</i>	0	20	6	0	76	0
<i>Haemophilus parasuis</i>	99	56	87	99	85	NA
<i>Pasteurella multocida</i>	1	11	77	3	98	1
<i>Salmonella spp.</i>	0	12	22	0	94	0
<i>Staphylococcus hyicus</i>	0	19	31	89	58	42
<i>Staphylococcus aureus</i>	0	55	19	84	94	48
<i>Streptococcus suis</i>	22	22	0	94	99	15
<i>Streptococcus spp.-beta</i>	44	39	0	59	97	35

Mycology (Specimens Cultured)

Species	Total Cultures
Avian-Chicken	3
Avian-Miscellaneous	21
Avian-Turkey	2
Bovine	118
Canine	143
Caprine	13
Equine	145
Feline	29
Fish-Amphibians-Reptiles	3
Miscellaneous Mammals	19
Miscellaneous Specimens	1
Ovine	12
Porcine	43
TOTAL	552

Genetics Laboratory Summary

Species Breed	No. of specimens Karyotyped	No. with abnormal Chromosomes	Chromosomal Defect
Bovine			
Charolais	18	5	1/29 Robertsonian Translocation
Holstein	205	173	Freemartin / 1/21 R. Translocation
Canine	20	4	Sex Chromosome Abnormalities
Elk	3	0	Freemartin
Equine	23	5	Sex Chromosome Abnormalities
Feline	8	1	Sex Chromosome Abnormalities
Llama/Alpaca	1	0	"Minute" Chromosome
Porcine	2	0	Reciprocal Translocations
TOTAL	280	188	

Immunohistochemistry

Tissue Antigens	Avian		Bovine		Canine		Equine		Feline	
	Access	Sample	Access	Sample	Access	Sample	Access	Sample	Access	Sample
Actin	-	-	-	-	25	25	2	2	7	8
ACTH	-	-	-	-	-	-	2	3	1	1
Alpha-1-Antitrypsin	-	-	-	-	5	6	-	-	-	-
Calcitonin	-	-	-	-	3	3	2	2	2	3
Calcitonin Gene Related	-	-	-	-	-	-	1	1	1	1
Chromogranin A	-	-	-	-	6	6	-	-	1	1
Cytokeratin MNF116	1	1	-	-	59	64	4	5	20	21
Cytokeratin NCL5D3	-	-	1	1	4	4	-	-	1	1
Cyokeratin OVTL12/30	-	-	-	-	5	5	-	-	-	-
Cytokeratin 34BE12	-	-	-	-	4	6	2	3	3	3
Desmin	-	-	1	1	24	24	2	2	2	2
Factor VIII-related Antigen	1	1	-	-	27	28	1	2	1	1
Gastrin	-	-	-	-	3	4	-	-	-	-
Glial Fibrillary Acidic Protein	-	-	-	-	13	15	-	-	6	9
Glucagon	-	-	1	1	9	11	-	-	-	-
Growth Hormone	-	-	-	-	-	-	1	2	1	1
IAPP	-	-	-	-	7	7	-	-	-	-
Insulin	-	-	1	1	15	18	-	-	1	1
Lipase	-	-	-	-	1	1	-	-	1	1
Lysozyme/Muramidase	-	-	-	-	15	16	-	-	1	1
Myeloid/Histiocyte Antigen	-	-	-	-	22	26	1	1	1	1
Myoglobin	-	-	-	-	3	3	-	-	1	2
Neurofilament Protein	-	-	1	1	9	11	1	2	3	3
Neuron-specific Enolase	-	-	-	-	16	18	-	-	1	1
Pancreatic Polypeptide	-	-	-	-	6	7	-	-	1	1
Parathyroid Hormone	-	-	-	-	5	5	-	-	1	2
Prolactin	-	-	-	-	-	-	1	2	1	1
Prostate Specific Antigen	-	-	-	-	1	1	-	-	-	-
S-100 Protein	-	-	-	-	36	38	1	1	4	4
Serotonin	-	-	-	-	-	-	1	2	-	-
Somatostatin	-	-	1	1	5	6	-	-	1	1
Synaptophysin	-	-	-	-	6	7	1	2	1	1
Thyroglobulin	-	-	-	-	7	7	2	2	3	4
Thyroid Stimulating Hormone	-	-	-	-	-	-	1	1	-	-
Thyroxine, T4	-	-	-	-	4	4	2	2	2	3
Trypsin	-	-	-	-	1	1	-	-	1	1
Vimentin	-	-	1	1	78	85	7	9	20	22
Immunologic Markers										
CD3 (T cell)	-	-	1	1	60	69	5	6	16	18
CD20 (B cell)	-	-	1	1	60	69	5	6	16	18
IgA	-	-	-	-	4	4	-	-	-	-
IgG	-	-	-	-	4	4	1	1	1	1
IgM	-	-	-	-	4	4	-	-	1	1
Kappa Ig Light Chain	-	-	-	-	30	32	1	1	3	3
Lambda Ig Light Chain	-	-	-	-	30	32	1	1	3	3

Immunohistochemistry (continued)

Tissue Antigens	Misc.		Porcine		Unknown		TOTAL	
	Access	Sample	Access	Sample	Access	Sample	Access	Sample
Actin	1	1	-	-	2	2	37	38
ACTH	-	-	-	-	-	-	3	4
Alpha-1-Antitrypsin	-	-	-	-	1	1	6	7
Calcitonin	-	-	-	-	-	-	7	8
Calcitonin Gene Related	-	-	-	-	-	-	2	2
Chromogranin A	1	2	-	-	-	-	8	9
Cytokeratin MNF116	3	4	1	1	4	4	92	100
Cytokeratin NCL5D3	-	-	-	-	-	-	6	6
Cyokeratin OVTL12/30	-	-	-	-	-	-	5	5
Cytokeratin 34BE12	-	-	-	-	-	-	9	12
Desmin	1	1	-	-	2	2	32	32
Factor VIII-related Antigen	-	-	-	-	2	2	32	34
Gastrin	-	-	-	-	-	-	3	4
Glial Fibillary Acidic Protein	-	-	-	-	-	-	19	24
Glucagon	1	2	-	-	1	1	12	15
Growth Hormone	-	-	-	-	-	-	2	3
IAPP	-	-	-	-	-	-	7	7
Insulin	1	2	-	-	1	1	19	23
Lipase	-	-	-	-	-	-	2	2
Lysozyme/Muramidase	-	-	1	1	1	1	18	19
Myeloid/Histiocyte Antigen	-	-	2	3	1	1	27	32
Myoglobin	-	-	-	-	-	-	4	5
Neurofilament Protein	-	-	-	-	-	-	14	17
Neuron-specific Enolase	-	-	-	-	-	-	17	19
Pancreatic Polypeptide	-	-	-	-	-	-	7	8
Parathyroid Hormone	-	-	-	-	-	-	6	7
Prolactin	-	-	-	-	-	-	2	3
Prostate Specific Antigen	-	-	-	-	-	-	1	1
S-100 Protein	1	1	-	-	1	1	43	45
Serotonin	-	-	-	-	-	-	1	2
Somatostatin	-	-	-	-	-	-	7	8
Synaptophysin	-	-	-	-	-	-	8	10
Thyroglobulin	-	-	-	-	1	1	13	14
Thyroid Stimulating Hormone	-	-	-	-	-	-	1	1
Thyroxine, T4	-	-	-	-	1	1	9	10
Trypsin	-	-	-	-	-	-	2	2
Vimentin	4	4	1	1	1	1	112	123
Immunologic Markers								
CD3 (T cell)	-	-	2	2	-	-	84	96
CD20 (B cell)	-	-	2	2	-	-	84	96
IgA	-	-	-	-	-	-	4	4
IgG	-	-	3	8	-	-	9	14
IgM	-	-	2	7	-	-	7	12
Kappa Ig Light Chain	-	-	-	-	2	2	36	38
Lambda Ig Light Chain	-	-	-	-	2	2	36	38

Immunohistochemistry (continued)

Infectious Agents	Avian		Bovine		Canine		Equine		Feline	
	Access	Sample	Access	Sample	Access	Sample	Access	Sample	Access	Sample
<i>Borrelia burgdorferi</i>	-	-	-	-	7	10	-	-	-	-
Bovine Coronavirus	-	-	203	247	-	-	-	-	-	-
Bovine Resp. Syncytial Virus	-	-	73	86	-	-	-	-	-	-
Bovine Viral Diarrhea Virus	-	-	490	668	-	-	-	-	-	-
<i>Brachyspira sp.</i>	-	-	-	-	-	-	-	-	-	-
Canine Distemper Virus	-	-	-	-	5	6	-	-	-	-
Canine Parvovirus	-	-	-	-	26	31	-	-	1	1
<i>Ehrlichia sp.</i>	-	-	-	-	2	4	1	2	-	-
<i>Lawsonia intracellularis</i>	-	-	-	-	-	-	-	-	-	-
<i>Neospora sp.</i>	-	-	52	70	8	8	-	-	1	1
Por. Resp. & Repro. Syn. Virus	-	-	-	-	-	-	-	-	-	-
Porcine Rotavirus	-	-	-	-	-	-	-	-	-	-
Swine Influenza Virus	-	-	-	-	-	-	-	-	-	-
<i>Toxoplasma gondii</i>	-	-	1	1	4	4	-	-	10	11
Trans. Gastroenteritis Virus	-	-	-	-	-	-	-	-	1	1
TOTAL	2	2	828	1,081	668	739	49	63	143	160

Infectious Agents	Misc.		Porcine		Unknown		TOTAL	
	Access	Sample	Access	Sample	Access	Sample	Access	Sample
<i>Borrelia burgdorferi</i>	-	-	-	-	-	-	7	10
Bovine Coronavirus	-	-	-	-	-	-	203	247
Bovine Resp. Syncytial Virus	1	1	-	-	-	-	74	87
Bovine Viral Diarrhea Virus	1	1	-	-	-	-	491	669
<i>Brachyspira sp.</i>	-	-	4	5	-	-	4	5
Canine Distemper Virus	-	-	-	-	-	-	5	6
Canine Parvovirus	-	-	-	-	-	-	27	32
<i>Ehrlichia sp.</i>	-	-	-	-	-	-	3	6
<i>Lawsonia intracellularis</i>	-	-	12	24	-	-	12	24
<i>Neospora sp.</i>	2	2	1	1	1	1	65	83
Por. Resp. & Repro. Syn. Virus	-	-	1,082	2,323	-	-	1,082	2,323
Porcine Rotavirus	-	-	48	98	-	-	48	98
Swine Influenza Virus	-	-	168	282	-	-	168	282
<i>Toxoplasma gondii</i>	4	7	1	2	4	5	24	30
Trans. Gastroenteritis Virus	-	-	356	918	-	-	357	919
TOTAL	21	28	1,686	3,678	28	29	3,425	5,780

Parasitology (Microscopic Examinations)

Species	No. of Accessions	No. of Samples	Direct smear exams	Flotation exams	<i>Cryptosporidium sp.</i> exams			
					Carbolfuchsin stain		IFA*	
					Samples	Positive	Samples	Positive
Avian—Chicken	73	112	111	2	-	-	1	-
Avian—Miscellaneous	90	119	113	7	3	0	-	-
Avian—Turkey	58	99	94	5	-	-	-	-
Bovine	1,043	1,292	629	267	905	374	2	1C
Canine	175	190	79	106	14	0	29	1C, 3G
Caprine	29	37	5	34	3	0	-	-
Equine	63	63	16	46	15	1	-	-
Feline	127	142	59	86	7	0	13	1G
Fish—Amphi.—Reptile	18	18	11	8	4	0	-	-
Misc. Mammals	153	209	75	129	33	4	17	1C, 1G
Misc. Specimens	2	2	-	-	-	-	2	-
Ovine	73	79	11	67	10	0	-	-
Porcine	697	1,624	1,193	335	285	1	5	1C
TOTALS	2,599	3,984	2,396	1,092	1,279	380	69	5G, 4C

*The IFA examination for Cryptosporidia(C) also identifies Giardia(G). Exams conducted by Gary Averbek/Dr. Bert Stromberg.

Parasitology (Special Examinations)

Host Species	Ectoparasites	No. Cases	Endoparasites	No. Cases
Avian—Chicken	<i>Dermatophagoides sp.</i>	1	<i>Eimeria brunetti</i>	1
			<i>Eimeria tennella</i>	3
Avian—Miscellaneous			<i>Ascaridia sp.</i>	2
			<i>Clinostomum sp.</i>	1
			<i>Hemanolepis sp.</i>	1
Bovine	<i>Linognathus vituli</i>	1		
Canine			<i>Alaria sp.</i>	1
			<i>Dirofilaria immitis</i>	5
			<i>Dracunculus sp.</i>	1
			<i>Isospora ohioensis</i>	1
			<i>Isospora sp.</i>	1
			<i>Mesocestoides sp.</i>	1
			<i>Toxocara canis</i>	1

Parasitology* (Special Examinations-continued)

Host Species	Ectoparasites	No. Cases	Endoparasites	No. Cases
Equine			<i>Paranoplocephala mamillana</i>	1
Feline			<i>Aleurostrongylus sp.</i>	1
			<i>Dipylidium caninum</i>	2
			Filarid worm	1
			<i>Isospora sp.</i>	1
			<i>Spirometra sp.</i>	1
			<i>Taenia sp.</i>	2
			<i>Taenia taeniaformis</i>	1
			<i>Toxocara cati</i>	2
Fish-Amphibian-Reptile			Diplostomatid metacercaria	1
			Flagellates	1
			Fluke eggs	1
			Pin worm	1
Miscellaneous	<i>Polyplax spinulosa</i>	1	<i>Eimeria sp.</i>	2
Mammals	<i>Polyplax serrata</i>	1	<i>Fascioloides magna</i>	1
	<i>Myobia musculi</i>	1	<i>Moneizia sp.</i>	1
			Pinworm	1
			Strongyle eggs	3
			<i>Strongyloides sp.</i>	1
			<i>Syphaeia muris</i>	1
			<i>Taenia sp.</i>	1
Ovine			<i>Eimeria sp.</i>	2
			<i>Haemonchus contortus</i>	1
			<i>Moniezia sp.</i>	2
			Trichostrongyle	1
			<i>Trichostrongylus colubriformis</i>	1
Miscellaneous and Pseudoparasites	<i>Amblyomma americanum</i>	1	Ciliate cysts	1
	<i>Cimex lectularis</i>	1	Curculionid larvae	1
	<i>Drosophila sp.</i>	1	<i>Eimeria sp.</i>	1
	<i>Dermacentor variabilis</i>	1	Flagellate cysts	1
	<i>Dermestes ater</i>	1	<i>Monocystis sp.</i>	1
	Earthworm	1	Strongyle egg	1
	Horsehair worm	2	<i>Saccormycopsis guttulatus</i>	3
	<i>Ixodes scapularis</i>	2		
	Larval beetle	1		
	Staphylinid beetle larvae	1		

*94 total examinations conducted by Gary Averbeck/Dr. Bert Stromberg

Serology Test Summary by Species

Species Disease/Agent	Procedure	No. of Cases	No. of Samples	Positive Titer	No. Positive	Percent Positive
Avian—Chicken						
Avian Influenza	AGID	5	32	N/A	0	0.0
Avian Pneumovirus	ELISA	8	79	N/A	0	0.0
<i>Bordetella avium</i> (BART)	Plate	1	5	N/A	0	0.0
Hemorrhagic Enteritis (HE)	AGID	1	4	N/A	0	0.0
Infectious Bronchitis, Arkansas	HI	107	1,251	≥8	1,214	97.0
Infectious Bronchitis, Connecticut	HI	3	69	≥8	69	100.0
Infectious Bronchitis, Massachusetts	HI	43	581	≥8	557	95.9
<i>Mycoplasma gallisepticum</i> (MG)	Plate	29	856	NA	231	27.0
	HI	17	308	≥80	61	19.8
<i>Mycoplasma synoviae</i> (MS)	Plate	27	832	NA	243	29.2
	HI	17	553	≥80	70	12.7
Newcastle Disease (NDV)	HI	33	405	≥8	274	67.7
Ornithobacterium (ORT)	Plate	92	938	N/A	316	33.7
<i>Salmonella pullorum</i>	Plate	3	159	N/A	2	1.3
<i>Salmonella typhimurium</i>	Plate	2	5	N/A	0	0.0
Avian—Turkey						
Avian Influenza	AGID	48	934	N/A	0	0.0
Avian Pneumovirus	ELISA	950	10,591	N/A	3,537	33.4
<i>Bordetella avium</i> (BART)	Plate	58	1,222	N/A	857	70.1
Hemorrhagic Enteritis (HE)	AGID	42	872	N/A	206	23.6
Infectious Bronchitis, Arkansas	HI	1	20	≥8	0	0.0
Infectious Bronchitis, Massachusetts	HI	1	20	≥8	0	0.0
<i>Mycoplasma gallisepticum</i> (MG)	Plate	24	720	NA	127	17.6
	HI	8	163	≥80	1	0.6
<i>Mycoplasma meleagridis</i> (MM)	Plate	23	678	NA	177	26.1
	HI	10	175	≥80	1	0.6
<i>Mycoplasma synoviae</i> (MS)	Plate	25	698	NA	169	24.2
	HI	12	222	≥80	1	0.5
Newcastle Disease (NDV)	HI	85	1,728	≥8	399	23.1
Ornithobacterium (ORT)	Plate	81	1,472	N/A	391	26.6
Paramyxovirus-2 (PMV-2)	HI	1	15	≥8	0	0.0
Paramyxovirus-3 (PMV-3)	HI	1	15	≥8	0	0.0
<i>Salmonella pullorum</i>	Plate	2	28	N/A	4	14.3
<i>Salmonella typhimurium</i>	Plate	2	28	N/A	1	3.6
Avian—Miscellaneous						
Avian Influenza	AGID	7	20	N/A	0	0.0
Avian Pneumovirus	ELISA	4	14	N/A	0	0.0
<i>Bordetella avium</i> (BART)	Plate	1	1	N/A	0	0.0
Chlamydia	CF	5	5	≥10	0	0.0
Hemorrhagic Enteritis (HE)	AGID	2	13	N/A	0	0.0
<i>Mycoplasma gallisepticum</i> (MG)	Plate	2	16	NA	11	68.8
	HI	1	3	≥80	0	0.0
<i>Mycoplasma gallisepticum</i> (MM)	Plate	2	5	NA	0	0.0
<i>Mycoplasma synoviae</i> (MS)	Plate	2	5	NA	1	20.0
Newcastle Disease (NDV)	HI	8	32	≥8	0	0.0
Paramyxovirus-2 (PMV-2)	HI	2	11	≥8	0	0.0
Paramyxovirus-3 (PMV-3)	HI	2	11	≥8	0	0.0

Serology Test Summary by Species (continued)

Species Disease/Agent	Procedure	No. of Cases	No. of Samples	Positive Titer	No. Positive	Percent Positive
Avian-Miscellaneous (continued)						
<i>Salmonella pullorum</i>	Plate	5	19	N/A	0	0.0
<i>Salmonella typhimurium</i>	Plate	5	19	N/A	2	10.5
Bovine						
Anaplasmosis	Card	8	10	N/A	0	0.0
	CF	207	1,630	≥5	77	4.7
Blue Tongue	AGID	24	92	N/A	1	1.1
	ELISA	49	180	≥50	4	2.2
<i>Borrelia burgdorferi</i> (Lyme)	IFA	1	1	≥320	0	0.0
Bovine Adenovirus	SN	56	352	≥8	22	6.3
Bovine Herpesvirus-4/DN 599	IFA	16	119	≥20	83	69.8
Bovine Herpes Mammillitis (BHV-2)	SN	12	83	≥8	36	43.4
Bovine Leukosis	AGID	40	106	N/A	48	45.3
	ELISA	596	4,268	≥50	1,497	35.1
Bovine Parainfluenza-3	HI	114	297	≥80	109	36.7
Bovine Parvovirus	HI	1	2	≥64	0	0.0
Bovine Respiratory Syncytial Virus	SN	89	244	≥8	223	91.4
Bovine Viral Diarrhea-1	SN	780	1,945	≥8	1,540	79.2
Bovine Viral Diarrhea-2	SN	1	2	≥8	1	50.0
<i>Brucella abortus</i>	CF	20	32	≥10	0	0.0
Chlamydia	CF	4	15	≥10	1	6.7
Epizootic Hemorrhagic Disease	AGID	8	10	N/A	0	0.0
Infectious Bovine Rhinotracheitis	SN	893	1,633	≥8	1,283	78.6
Leptospirosis	MA	490	1,026	≥100	519	50.6
<i>Mycobacterium paratuberculosis</i> (Johne's disease)	AGID	302	383	N/A	178	46.5
	ELISA	2,615	36,936	N/A	3,660	9.9
	CF	16	22	≥32	0	0.0
<i>Neospora caninum</i>	ELISA	360	1,006	N/A	209	20.8
<i>Toxoplasma gondii</i>	IHA/Latex	1	4	≥64	0	0.0
Vesicular Stomatitis, Indiana	SN	90	618	≥8	8	1.3
Vesicular Stomatitis, New Jersey	SN	90	618	≥8	43	7.0
Canine						
<i>Borrelia burgdorferi</i> (Lyme)	IFA	134	135	≥320	46	34.1
<i>Brucella canis</i>	Card	298	387	N/A	30	7.8
	Tube	45	81	≥50	15	18.5
Canine Parvovirus	HI	13	23	≥128	13	56.5
Leptospirosis	MA	61	67	≥100	34	50.8
<i>Toxoplasma gondii</i>	IHA/Latex	4	4	≥64	0	0.0
Caprine						
Blue Tongue	ELISA	3	3	≥50	0	0.0
Caprine Arthritis Encephalitis	AGID	35	125	N/A	53	42.0
Chlamydia	CF	1	2	≥10	2	100.0
Leptospirosis	MA	2	3	≥100	1	33.3
<i>Mycobacterium paratuberculosis</i>	AGID	20	334	N/A	18	5.4
<i>Toxoplasma gondii</i>	IHA/Latex	3	5	≥64	0	0.0
Equine						
<i>Borrelia burgdorferi</i> (Lyme)	IFA	29	55	≥320	14	25.5

Serology Test Summary by Species (continued)

Species Disease/Agent	Procedure	No. of Cases	No. of Samples	Positive Titer	No. Positive	Percent Positive
Equine (continued)						
Equine Infectious Anemia	AGID	961	1,887	N/A	4	0.2
	CELISA	1,803	3,631	N/A	6	0.2
Equine Viral Rhinopneumonitis	SN	25	46	≥8	37	80.4
Leptospirosis	MA	41	59	≥100	49	83.1
Feline						
Feline Immunodeficiency Virus	ELISA		3			
Feline Infectious Peritonitis	cELISA	28	30	N/A	18	60.0
Feline Leukemia Virus	ELISA		8			
Leptospirosis	MA	2	2	≥100	1	50.0
<i>Toxoplasma gondii</i>	IHA/Latex	21	24	≥64	6	25.0
Ovine						
Blue Tongue	AGID	1	1	N/A		100.0
Chlamydia	CF	3	28	≥10	7	25.0
Leptospirosis	MA	12	39	≥100	7	18.0
<i>Mycobacterium paratuberculosis</i>	AGID	28	151	N/A	1	0.6
Ovine Progressive Pneumonia	AGID	115	1,396	N/A	199	14.3
<i>Toxoplasma gondii</i>	IHA/Latex	13	17	≥64	0	0
Porcine						
Brucellosis	CF	1	30	≥10	0	0.0
Encephalomyocarditis	SN	80	700	≥32	15	2.1
Hemagglutinating Encephalomyelitis	HI	18	251	≥80	53	21.1
Leptospirosis	MA	546	8,108	≥100	4,878	60.2
<i>Mycoplasma hyopneumoniae</i>	ELISA	479	9,483	N/A	2,639	27.8
Porcine Parvovirus	HI	467	5,531	≥128	4,120	74.5
Porcine Repro. & Resp. Syndrome	ELISA	3,745	94,042	N/A	44,371	47.2
American strain	IFA	87	2,040	≥16	183	9.0
Pseudorabies	ELISA	485	6,058	N/A	183	3.0
	GPI ELISA	3,165	145,563	N/A	8,063	5.5
	GPX ELISA	11	349	N/A	50	14.3
	LAT	3,175	73,289	N/A	4,521	6.2
	SN	36	3,568	≥4	64	1.8
Swine Influenza Virus, H1N1	HI	1,059	17,623	>40	4,235	24.0
Swine Influenza Virus, H3N2	HI	262	4,661	>40	1,427	30.6
<i>Toxoplasma gondii</i>	IHA/Latex	69	730	≥64	24	3.3
Transmissible Gastroenteritis	SN	360	8,615	≥8	4,114	47.8
Miscellaneous						
Anaplasmosis	Card	9	42	N/A	0	0.0
	CF	94	629	≥5	5	0.8
Blue Tongue	AGID	30	189	N/A	0	0.0
	ELISA	73	444	≥50	3	0.7
Brucellosis	CF	39	107	≥10	0	0.0
Epizootic Hemorrhagic Disease	AGID	1	2	N/A	0	0.0
<i>Mycobacterium paratuberculosis</i>	AGID	4	38	N/A	0	0.0
Leptospirosis	MA	8	321	≥100	155	48.3
<i>Toxoplasma gondii</i>	IHA/Latex	1	1	≥64	0	0.0
TOTAL SEROLOGY		26,698	468,446			

Serology by Species (No. of Accessions/No. of Specimens by month)

Species	July	August	September	October	November	December	January
Avian (totals)	86/907	66/593	52/469	75/703	79/740	85/1,150	63/554
Avian—Chicken	17/223	10/105	4/60	14/165	1/2	19/477	5/77
Avian—Miscellaneous	1/4	2/16	1/12	1/5	1/1	1/10	1/7
Avian—Turkey	68/680	54/472	47/397	60/533	77/737	65/663	57/470
Bovine	367/6,711	340/4,448	295/2,254	320/2,350	280/2,777	332/4,490	279/3,058
Canine	44/47	40/49	38/48	42/48	36/36	43/68	40/51
Caprine	6/24	8/15	3/3	3/3	6/12	1/2	2/209
Equine	216/443	207/360	210/401	89/156	44/71	33/59	46/96
Feline	4/4	1/1	3/4	3/3	4/4	6/8	6/6
Fish—Amp.—Rept.	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Miscellaneous Mammal	4/483	6/56	15/73	10/51	7/95	7/27	15/36
Ovine	8/103	10/196	16/111	14/122	4/36	10/73	4/51
Porcine	1,096/21,779	1,078/22,251	568/15,967	472/15,313	504/16,894	556/17,831	567/19,960
TOTAL	1,831/30,501	1,756/27,969	1,200/19,330	1,028/18,749	964/20,665	1,073/23,708	1,022/24,021

Species	February	March	April	May	June	TOTALS	%TOTAL
Avian (totals)	85/1,254	119/1,711	191/2,370	147/1,785	88/1,229	1,136/13,465	6.5/4.1
Avian—Chicken	13/163	8/86	12/120	12/139	5/232	120/1,849	0.7/0.6
Avian—Miscellaneous	2/6	1/8	3/5	1/1	1/1	16/76	0.1/0.0
Avian—Turkey	70/1,085	110/1,617	176/2,245	134/1,645	82/996	1,000/11,540	5.7/3.5
Bovine	307/3,132	371/3,331	334/3,450	306/2,311	341/2,759	3,872/41,071	22.3/12.4
Canine	40/56	47/63	50/61	43/138	49/54	512/719	2.9/0.2
Caprine	4/74	4/67	6/7	4/5	3/12	50/433	0.3/0.1
Equine	154/284	278/641	691/1,446	533/1,100	342/606	2,843/5,663	16.4/1.7
Feline	9/9	3/4	3/3	2/3	8/8	52/57	0.3/0.0
Fish—Amp.—Rept.	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Miscellaneous Mammal	18/527	14/347	4/18	2/2	5/21	107/1,736	0.6/0.5
Ovine	12/113	9/303	15/148	4/21	14/124	120/1,401	0.7/0.4
Porcine	629/23,935	837/28,480	792/29,267	707/25,507	875/31,253	8,681/268,437	50.0/80.6
TOTAL	1,258/29,384	1,682/34,947	2,086/36,770	1,748/30,872	1,725/36,066	17,373/332,982	100.0/100.0

Leptospirosis Serology (Serotyping)*

Species	Bratislava	Canicola	Grippotyphosa	Hardjo	Icterohemorrhagiae	Pomona
Bovine	92	330	348	186	218	240
Canine	20	17	22	2	10	11
Caprine	1	-	-	-	-	-
Equine	40	18	15	3	24	13
Feline	1	-	-	-	-	-
Porcine	3,742	1,590	1,389	360	2,808	589
Miscellaneous Species	-	-	2	1	-	-
Ovine	5	1	-	-	1	-
Raccoon	58	70	143	-	33	2
TOTAL	3,959	2,026	1,919	552	3,094	855

*positive results by Microscopic Agglutination Test

Immunology

Species	Antinuclear Antibody	Antiplatelet Antibody	Direct Coombs	Immunoglobulins Fetal Fluid
Bovine	-	-	-	162
Canine	23	1	41	-
Caprine	-	-	-	-
Equine	-	-	5	-
Feline	8	-	28	-
Miscellaneous Mammal	-	-	-	1
Ovine	-	-	-	1
Porcine	-	-	-	227
TOTAL	31	1	74	391

Species	Immunoglobulins Serum	LE Clot	Rheumatoid Factor	TOTAL
Bovine	193	-	-	355
Canine	-	16	5	86
Caprine	1	-	-	1
Equine	8	-	-	13
Feline	-	6	-	42
Miscellaneous Mammal	6	-	-	7
Ovine	-	-	-	1
Porcine	2	-	-	229
TOTAL	210	22	5	734

Analytical Toxicology/Nutrition*

Analyses	Avian		Bovine		Canine		Caprine		Equine	
	Access	Sample	Access	Sample	Access	Sample	Access	Sample	Access	Sample
Algae, Blue Green	-	-	-	-	-	-	-	-	-	-
Anticoagulants	5	7	2	2	134	137	-	-	5	5
Arsenic	65	83	355	391	108	111	14	20	69	76
Cadmium	65	83	355	391	108	111	14	20	69	76
Calcium	-	-	45	447	1	1	3	25	8	76
Carboxyhemoglobin	-	-	-	-	-	-	-	-	-	-
Chlorine	-	-	-	-	-	-	-	-	-	-
Cholinesterase	30	30	30	30	41	41	1	1	9	9
Cobalt	65	83	355	391	108	111	14	20	69	76
Copper	67	85	420	864	115	119	20	49	69	76
Cyanide	-	-	-	-	1	1	-	-	1	1
Ergot	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	-	-	-	-	7	7	-	-	-	-
Fumonisin	-	-	-	-	-	-	-	-	-	-
GC/MS	-	-	1	1	-	-	1	1	-	-
Ionophores	4	4	1	1	-	-	-	-	6	6
Iron	67	86	402	841	109	112	17	45	69	76
Lead	294	327	395	433	226	229	14	20	76	83
Magnesium	65	83	400	838	109	112	17	45	78	154
Manganese	65	83	355	391	108	111	14	20	69	76
Mold Count	-	-	-	-	-	-	-	-	-	-
Molybdenum	65	83	355	391	108	111	14	20	69	76
Mycotoxin Screen	-	-	-	-	-	-	-	-	-	-
Nitrates	-	-	16	18	-	-	-	-	-	-
Particle size	-	-	-	-	-	-	-	-	-	-
pH	-	-	33	36	-	-	2	2	1	2
Phosphorus	-	-	-	-	-	-	-	-	8	76
Plant ID	-	-	-	-	-	-	-	-	-	-
Potassium	-	-	45	447	1	1	3	25	8	76
Rapid Scan	-	-	-	-	-	-	-	-	-	-
Reinsch	7	8	27	30	27	27	-	-	6	7
Selenium	86	119	481	948	108	111	16	33	106	115
Sodium	5	8	49	452	1	1	3	25	9	77
Strychnine	1	1	1	1	80	82	-	-	2	2
Total Diss. Solids	-	-	-	-	-	-	-	-	-	-
Vitamin A	-	-	4	34	-	-	-	-	-	-
Vitamin E	8	10	158	626	1	1	6	29	56	58
Zinc	109	128	404	842	116	119	17	45	71	80
Zinc Phosphide	-	-	-	-	1	1	-	-	-	-
TOTAL	1,073	1,311	4,689	8,846	1,618	1,657	190	445	933	1,359

*Positive Results are reported in the *Disease Diagnoses by Animal Species* section.

Analytical Toxicology/Nutrition (continued)

Analyses	Feline		Misc. Animal		Misc. Non-Ani.		Ovine		Porcine		TOTALS	
	Access	Sample	Access	Sample	Access	Sample	Access	Sample	Access	Sample	Access	Sample
Algae, Blue Green	-	-	-	-	3	4	-	-	-	-	3	4
Anticoagulants	13	13	5	9	6	6	1	1	4	5	175	185
Arsenic	36	40	110	121	13	17	39	48	137	194	946	1,101
Cadmium	36	40	110	121	13	17	39	48	137	194	946	1,101
Calcium	-	-	4	26	3	3	1	2	1	12	66	592
Carboxyhemaglob	-	-	-	-	-	-	-	-	1	5	1	5
Chlorine	-	-	-	-	1	1	-	-	-	-	1	1
Cholinesterase	14	15	5	8	-	-	4	4	2	3	136	141
Cobalt	36	40	110	121	13	17	39	48	137	194	946	1,101
Copper	38	42	121	170	19	23	49	61	140	209	1,058	1,698
Cyanide	-	-	-	-	-	-	-	-	-	-	2	2
Ergot	-	-	-	-	1	1	-	-	-	-	1	1
Ethylene Glycol	1	1	-	-	-	-	-	-	-	-	8	8
Fumonisin	-	-	-	-	1	1	-	-	1	1	2	2
GC/MS	-	-	-	-	-	-	-	-	-	-	2	2
Ionophores	-	-	-	-	7	11	-	-	-	-	18	22
Iron	37	41	113	145	16	20	40	49	143	216	1,013	1,631
Lead	65	70	118	129	15	20	44	53	137	194	1,384	1,558
Magnesium	36	40	115	163	16	20	40	50	138	206	1,014	1,711
Manganese	36	40	110	121	13	17	39	48	137	194	946	1,101
Mold Count	-	-	-	-	8	11	-	-	-	-	8	11
Molybdenum	36	40	110	121	14	18	39	48	137	194	947	1,102
Mycotoxin Screen	-	-	-	-	79	117	-	-	-	-	79	117
Nitrates	-	-	1	1	31	46	1	1	-	-	49	66
Particle size	-	-	-	-	-	-	-	-	1	1	1	1
pH	-	-	4	5	1	1	9	13	-	-	50	59
Phosphorus	-	-	-	-	1	2	-	-	-	-	9	78
Plant ID	-	-	-	-	2	2	-	-	-	-	2	2
Potassium	-	-	3	24	3	3	1	2	1	12	65	590
Rapid Scan	-	-	-	-	3	7	-	-	1	1	4	8
Reinsch	6	8	5	5	1	1	4	4	1	1	84	91
Selenium	36	40	129	178	20	26	43	53	184	318	1,209	1,941
Sodium	-	-	4	25	4	4	2	3	11	35	88	630
Strychnine	10	10	6	6	1	1	-	-	-	-	101	103
Total Diss. Solids	-	-	-	-	5	6	-	-	-	-	5	6
Vitamin A	-	-	-	-	-	-	1	4	-	-	5	38
Vitamin E	-	-	17	40	-	-	7	12	45	90	298	866
Zinc	38	42	117	150	16	20	40	50	145	217	1,073	1,693
Zinc Phosphide	1	1	-	-	2	5	-	-	-	-	4	7
TOTAL	475	523	1,317	1,689	331	448	482	602	1,641	2,496	12,749	19,376

Viral Immunofluorescence in Tissues*

Species Virus for Identification	No. of Cases/ No. of Samples	No. of Procedures	No. Positive	Percent Positive
Bovine	635/1,389			
Bovine Coronavirus		511	64	12.5
Bovine Parainfluenza-3		344	-	-
Bovine Respiratory Syncytial		278	2	-
Bovine Rotavirus		465	2	0.4
Bovine Virus Diarrhea		1,087	24	2.2
Infectious Bovine Rhinotracheitis		677	6	0.9
Subtotal		3,362	98	2.9
Canine	27/53			
Canine Adenovirus		5	-	-
Canine Distemper		41	-	-
Canine Parvovirus		14	1	7.1
Subtotal		60	1	1.7
Caprine	2/6			
Bovine Parainfluenza-3		1	-	-
Bovine Respiratory Syncytial		1	-	-
Bovine Virus Diarrhea		6	-	-
Infectious Bovine Rhinotracheitis		1	-	-
Subtotal		9	-	-
Equine	60/121			
Equine Adenovirus		2	-	-
Equine Rhinopneumonitis		119	5	4.1
Subtotal		121	5	4.1
Feline	51/95			
Feline Coronavirus		1	-	-
Feline Infectious Peritonitis		1	-	-
Feline Parvovirus		18	-	-
Feline Rhinotracheitis		84	2	2.4
Subtotal		104	2	1.9
Miscellaneous	30/93			
Bovine Coronavirus		6	-	-
Bovine Parainfluenza-3		10	-	-
Bovine Respiratory Syncytial		9	-	-
Bovine Rotavirus		1	-	-

*Frozen Sections or Tissue Imprints

Viral Immunofluorescence in Tissues (continued)

Species Virus for Identification	No. of Cases/ No. of Samples	No. of Procedures	No. of Positives	Percent Positive
Miscellaneous (continued)				
Bovine Virus Diarrhea		19	-	-
Canine Distemper		69	5	7.3
Canine Parvovirus		3	-	-
Infectious Bovine Rhinotracheitis		15	-	-
Subtotal		132	5	3.8
Ovine	5/6			
Bovine Parainfluenza-3		5	-	-
Bovine Respiratory Syncytial		3	-	-
Bovine Rotavirus		1	-	-
Bovine Virus Diarrhea		4	-	-
Infectious Bovine Rhinotracheitis		3	-	-
Subtotal		16	-	-
Porcine	1,309/3,850			
Porcine Adenovirus		25	-	-
Porcine Parvovirus		449	1	0.2
Porcine Rotavirus		1,221	141	11.6
Porcine Repro. & Resp. Syndrome		1,342	91	6.8
Pseudorabies		855	21	2.5
Swine Influenza		403	4	1.0
Transmissible Gastroenteritis		1,188	21	1.8
Subtotal		5,483	279	-
TOTALS	2,119/5,613	9,287	390	4.2

Virus Antigen Detection (Influenza)

Species	Equine Influenza			Swine Influenza		
	Access	Samples	Positive	Access	Samples	Positive
Equine	2	2	-	-	-	-
Porcine	-	-	-	1,042	1,127	156
Tapir	-	-	-	1	1	-
TOTALS	2	2	-	1,043	1,128	156

Virus Assay (Immunoperoxidase for Bovine Viral Diarrhea Virus)				
Species	Accessions	Samples	No. Positive	Percent Positive
Bovine	41	674	6	0.9
TOTAL	41	674	6	0.9

Virus Identification* (Electron Microscopy)							
Species	Accessions	Specimens	No. Positive	Adenovirus	Calicivirus	Coronavirus	Enterovirus
Avian	118	142	39	5	-	15	-
Bovine	797	808	232	-	-	79	2
Canine	129	132	27	-	-	4	-
Caprine	12	14	0	-	-	-	-
Equine	23	23	3	-	-	-	-
Feline	96	101	32	-	3	4	2
Miscellaneous	95	134	30	1	-	-	6
Ovine	9	11	4	1	-	-	-
Porcine	806	879	266	1	-	5	9
TOTAL	2,085	2,244	633	8	3	107	19

Species	Herpesvirus	Parainfluenza	Parvovirus	Pox Virus	Reovirus	Rotavirus	Misc.	Number of Viruses/Specie
Avian	1	-	-	-	-	17	1	39
Bovine	-	-	-	-	-	193	-	274
Canine	-	-	22	-	-	1	-	27
Caprine	-	-	-	-	-	-	-	-
Equine	-	-	-	-	-	3	-	3
Feline	4	-	19	-	-	-	-	32
Miscellaneous	2	4	8	-	-	2	7	30
Ovine	-	-	-	3	-	-	-	4
Porcine	-	-	-	-	2	241	10	268
TOTAL	7	4	49	3	2	457	18	677

*Fecal or Tissue Specimens

Virus Isolation (Cell Culture)				
Species Virus for Isolation	No. of Cases/ Samples	No. of Cases/ Procedures*	No. Positive	Percent Positive
Avian	19/43			
Avian Adenovirus		3/3	-	-
Avian Influenza		5/7	-	-
Herpesvirus		6/6	-	-
Infectious Bronchitis		10/33	9	27.3
Newcastle Disease		2/4	-	-
Polymyxovirus		1/2	-	-
Subtotal		27/55	9	16.4
Bovine	1,248/1,564			
Bovine Adenovirus		2/5	1	20.0
Bovine Herpesvirus		5/5	-	-
Bovine Herpesvirus DN599		6/10	10	100.0
Bovine Parainfluenza-3		45/52	-	-
Bovine Respiratory Syncytial		37/56	-	-
Bovine Virus Diarrhea		1,236/1,559	51 **	3.3
Infectious Bovine Rhinotracheitis		471/501	7	1.4
Porcine Repro & Resp Syndrome		1/1	-	-
Pseudorabies		4/4	-	-
Subtotal		1,807/2,193	69	3.2
Canine	42/44			
Canine Adenovirus		4/6	-	-
Canine Distemper		19/19	-	-
Canine Parvovirus		2/2	-	-
Herpesvirus		16/16	-	-
Parainfluenza-2		1/1	-	-
Pseudorabies		6/6	3	50.0
Subtotal		48/50	3	6.0
Caprine	5/5			
Border Disease		4/4	-	-
Infectious Bovine Rhinotracheitis		1/1	-	-
Subtotal		5/5	-	-
Equine	70/70			
Equine Adenovirus		1/1	-	-
Equine Encephalomyelitis		2/2	-	-
Equine Rhinopneumonitis		64/64	-	-
Herpesvirus		12/12	-	-
Subtotal		79/79	-	-
Feline	42/44			
Feline Calicivirus		39/41	2	4.9
Feline Parvovirus		4/5	-	-
* The number of procedures indicated include only those initially designated for virus isolation at time of receiving				
** 17 cytopathic and 34 non-cytopathic viruses identified				

Virus Isolation (Cell Culture) continued

Species Virus for Isolation	No. of Cases/ Samples	No. of Cases/ Procedures	No. of Positives	Percent Positive
Feline (continued)				
Herpesvirus		45/47	4	8.5
Pseudorabies		1/1	-	-
Subtotal		89/94	6	6.4
Miscellaneous 48/55				
Adenovirus		1/1	-	-
Coronavirus		1/1	-	-
Bovine Parainfluenza-3		1/1	-	-
Bovine Respiratory Syncytial		2/2	-	-
Bovine Virus Diarrhea		34/37	-	-
Canine Distemper		4/5	-	-
Equine Rhinotracheitis		2/2	-	-
Hemagglutinating Encephalomyelitis		1/1	-	-
Herpesvirus		3/3	-	-
Infectious Bovine Rhinotracheitis		14/17	-	-
Parvovirus		5/5	-	-
Porcine Repro. & Resp. Syndrome		3/6	-	-
Pseudorabies		1/1	-	-
Subtotal		72/82	-	-
Ovine 26/29				
Border Disease		25/26	-	-
Bovine Parainfluenza-3		2/2	-	-
Bovine Respiratory Syncytial		1/1	-	-
Infectious Bovine Rhinotracheitis		3/3	-	-
Pseudorabies		4/4	-	-
Subtotal		35/36	-	-
Porcine 2,386/5,428				
Bovine Virus Diarrhea		1/1	-	-
Encephalomyocarditis		1/7	-	-
Hemagglutinating Encephalomyelitis		26/53	1	1.9
Herpesvirus		1/1	-	-
Porcine Adenovirus		1/1	-	-
Porcine Calicivirus		1/2	-	-
Porcine Cirovirus		173/262	67	25.8
Porcine Coronavirus		1/2	1	50.0
Porcine Enterovirus		22/61	12	19.7
Porcine Parvovirus		16/35	-	-
Porcine Repro. & Resp. Syndrome		2,141/3,837	582*	15.2
Pseudorabies		1,324/1,505	24	1.6
Swine Influenza		229/572	68	11.6
Subtotal		3,937/6,339	755	2.7
TOTALS	3,886/7,282	6,099/8,933	842	9.4

* 62 positives in MARC 145; 285 in PAM; 235 in both cell lines.

APPENDIX A

Minnesota Veterinary Diagnostic Laboratory

Minnesota Brucellosis Testing Laboratory (Personnel)

William Hartmann, DVM, MS	Supervisor
Robert Tiller	Laboratory Supervisor
David Wiklund	Medical Laboratory Technician
Brent Furlano	Medical Laboratory Technician

Minnesota Brucellosis Testing Laboratory (Laboratory Procedures)

I. Cattle		
A. Serum		
1) On Farm	14,714	
2) Market	40,476	
3) Slaughter Surveillance	<u>396,380</u>	
Sub-total		451,570
B. Milk Ring Tests		9,511
II. Swine (Slaughter Surveillance)		69,574
III. Other Species		
A. Canine	59	
B. Deer	433	
C. Elk	1,314	
D. Goats	136	
E. Horses	1	
F. Llamas	185	
G. Miscellaneous	<u>33</u>	
Sub-total		2,161
TOTAL		532,816

Minnesota Poultry Testing Laboratory (Personnel)

Willmar, Minnesota

Dr. Dale C. Lauer	Supervisor
Lucinda Dalberg	Senior Laboratory Technician
Stacy Pollock	Senior Laboratory Technician
Joanne B. Slagter	Senior Laboratory Technician

Minnesota Poultry Testing Laboratory (Laboratory Procedures)

	<u>Serology</u>	<u>Cultures</u>
I. Pullorum – Typhoid Program		
A. Chickens – Commercial	1,800	
B. Turkeys	26,835	
C. Waterfowl and Game Birds	5,072	145
D. Exhibition Testing	<u>13,530</u>	
Sub-total	47,237	<u>145</u>
II. <i>Salmonella enteritidis</i> Program		
Sanitation Monitoring of Chicken Breeding Flocks/Hatcheries	3,000	1,786
III. Cooperative Program for the control of <i>Salmonella</i> in Turkeys (includes <i>Salmonella typhimurium</i>)		
A. Blood Samples	26,835	
B. Cloacal Swabs		38,600
C. Environmental/Hatchery		<u>4,745</u>
Sub-total	26,835	43,345
IV. Mycoplasma Program		
A. Turkey		
1) <i>M. gallisepticum</i>	57,218	
2) <i>M. meleagridis</i>	58,180	
3) <i>M. synoviae</i>	56,815	
B. Chicken		
1) <i>M. gallisepticum</i>	26,384	
2) <i>M. synoviae</i>	26,039	
C. Wild/Exhibition Turkeys		
1) <i>M. gallisepticum</i>	150	
2) <i>M. meleagridis</i>	28	
3) <i>M. synoviae</i>	<u>131</u>	
Sub-total	224,945	
V. Avian Influenza Monitoring Program		
Turkey and Broilers	49,863	
TOTAL	351,880	45,276

**Minnesota Veterinary Diagnostic Laboratory
Income Statement**

July 1, 1998 – June 30, 1999

I. Services

A. State Special Appropriation	2,097,470	
B. University Operations and Maintenance Fund	76,064	
C. Laboratory User Fees		
1) Public	2,543,662	
2) Other University Departments	309,417	
3) Interest Income	<u>18,323</u>	
	Sub-total	5,044,936

II. Other

A. Minnesota Poultry Testing Laboratory – Willmar		
1) Contract, Board of Animal Health	169,971	
2) Other	14,574	
B. Private Gifts		
1) Fenstermacher Fund		
Contributions	20,225	
Endowment Earnings	7,638	
2) W.T.S. Thorp Fellowship in Veterinary Diagnostic Pathology		
Endowment Earnings	18,141	
3) Other University of Minnesota Funds		
Endowment Earnings	<u>387</u>	
	Sub-total	230,936

TOTAL INCOME

\$ 5,275,872

University of Minnesota

William E. Hogan II – Chair, Board of Regents
Mark G. Yudof – President
Frank Cerra – Senior Vice-President, Academic Health Center
Jeffrey S. Klausner – Acting Dean, College of Veterinary Medicine

Board of Animal Health

John A. Howe – President, Grand Rapids
Joni Scheffel – Vice President, Watertown
Sharon Baker, Morris
Mahesh Kumar, St. Cloud
Todd Searles, Spring Valley
Russell Wirt, Lewiston
Thomas J. Hagerty – Executive Director

**University of Minnesota
College of Veterinary Medicine Advisory Council**

Jodi Day – Chair, Minnesota Turkey Growers Association, St. Paul, Minnesota
Gary R. Leff – Vice-chair, Mixed Animal Practice, Buffalo, Minnesota

APPENDIX B

Department of Veterinary Diagnostic Medicine

**Department of Veterinary Diagnostic Medicine
College of Veterinary Medicine
University of Minnesota**

DEPARTMENTAL MISSION

The faculty and staff of the Department have the following responsibilities ranked in order of priority.

1. Help reduce loss from disease in Minnesota's livestock, poultry, wildlife, and companion animals and help protect the public health by providing accurate and timely discipline-related animal health diagnostic services through the Minnesota Veterinary Diagnostic Laboratory, and by providing official laboratory services for the Minnesota Board of Animal Health.
2. Teach veterinary students the principles of diagnostic medicine and prepare them to utilize the Diagnostic Laboratory as a resource for diagnostic assistance and continuing education throughout their professional careers.
3. Advance knowledge in veterinary medicine by conducting animal health research and communicating the results through publications in scientific journals and presentations at scientific meetings.
4. Provide continuing education for veterinary practitioners and animal owners by consultation, diagnostic investigation, and participation in continuing education programs of professional organizations and the College of Veterinary Medicine.
5. Prepare students for a career in diagnostic medicine through residency and graduate training programs.
6. Support other programs of the University by providing various laboratory services for the Veterinary Teaching Hospital, research projects, and other University departments.
7. Serve the veterinary profession by participating in local, state, national, and international professional organizations and by providing consultation to local, state and federal governments.
8. Serve the University community through committees and other activities.

Approved by the VDM faculty December 19, 1985

Departmental Courses

Quarter	Course	Title	Lect/Lab Hours	Credits	No. of Students	Instructor
Summer Session 98						
	VDM 5011	Hospital Necropsy Rotation	0/250	2.0	16	Hayden* VDM Faculty
	VDM 5111	Diagnostic Medicine Rotation	25/225	2.0	16	Frank* VDM Faculty
	Grad 8777	Masters Thesis			1	Goyal
	Grad 8888	Doctoral Thesis			2	Goyal
Fall 98						
	VDM 5012	Hospital Necropsy Rotation	0/250	2.0	20	Hayden* VDM Faculty
	VDM 5112	Diagnostic Medicine Rotation	25/225	2.0	20	Frank* VDM Faculty
	VDM 5122	Directed Studies	0/0	1.0	1	Aird
	VDM 5164	Toxicology of Poisonous Plants	15/0	1.0	76	Murphy
	VDM 5622	Problems in Diagnostic Virology	8/16	4.0	4	Goyal
	Grad 8777	Masters Thesis			1	Goyal
	Grad 8888	Doctoral Thesis			2	Goyal
Winter 99						
	VDM 5013	Hospital Necropsy Rotation	0/250	2.0	20	Hayden* VDM Faculty
	VDM 5113	Diagnostic Medicine Rotation	25/225	2.0	20	Frank* VDM Faculty
	VDM 5622	Problems in Diagnostic Virology	8/16	4.0	4	Goyal
	Grad 8888	Doctoral Thesis			2	Goyal
Spring 99						
	VDM 5014	Hospital Necropsy Rotation	0/250	2.0	20	Hayden* VDM Faculty
	VDM 5114	Diagnostic Medicine Rotation	25/225	2.0	20	Frank* VDM Faculty
	VDM 5165	Veterinary Toxicology	30/0	3.0	76	Murphy
	VDM 5503	Diagnostic Pathology	32/0	3.0	75	Rossow* VDM Faculty
	VDM 5524	Problems in Diagnostic Pathology	0/50	4.0	1	Rossow
	VDM 8531	Hospital Pathology	0/63	1.0	1	Aird
	Grad 8888	Doctoral Thesis			2	Goyal

*Course Coordinator

VDM Faculty Participation in Other Courses

Quarter	Course	Title	Lect/Lab Hours	Credits	No. of Students	Instructor
Summer Session 98						
	VPB 5021	Clinical Hematology/Cytology	60/30	2.0	12	Aird
Fall 98						
	VPB 5022	Clinical Hematology/Cytology	180/60	2.0	36	Aird
	Txcl 5215	Organ System Toxicology	18/0	3.0	6	Murphy
	CVM 5220	Cells & Tissues	0/4	5.0	75	Aird
	SACS 5232	Advanced Clinical Oncology	2/0	4.0	4	Aird
	CVM 5300	Veterinary Pathology	57/59	2.0	75	Walser* VDM Faculty
	CAPS 5615	Advanced Swine Disease Diagnostics, Therapeutics, and Prevention	2/0	4.0	1	Collins
	VPB 5701	Host Defenses	166/32	6.0	75	Carlson
	VPB 5721	Senior Poultry Health Rotation	16/0	4.0	2	Shaw
	CVM 6202	Infectious Agents-2	63/0	5.0	76	Goyal
	VPB 8531	Hospital Pathology	0/0	1.0	1	Aird
	VPB 8700	Seminars	2/0	1.0	30	Goyal
Winter 99						
	CAPS 3502	Animal Health and Disease	4/0	2.0	24	Murphy
	ID 5125	Garbage, Gov. & Globe	80/0	4.0	12	Singh
	CVM 5162	Large Animal Medicine	2/0	5.0	76	Murphy
	PubH 5171	Environmental Microbiology	15/6	3.0	5	Goyal
	Txcl 5216	Chemical & Environmental Toxicology	4/0	3.0	7	Singh
	CAPS 5273	Medical Management of Zoo Animals	1/0	2.0	25	Hayden
	CVM 5320	Infectious Agents-1	16/0	5.0	76	Goyal
	CAPS 5570	Reproductive Diseases of Domestic Animals	2/0	5.0	53	Collins
	VPB 8531	Hospital Pathology	0/0	1.0	1	Aird
	VPB 8700	Seminars	2/0	1.0	30	Goyal
	Txcl 8800	Directed Research	10/0	3.0	3	Murphy
	MVB 8202	Cellular Mechanisms	6/0	3.0	4	Goyal
Spring 99						
	ID 5126	Garbage, Gov. & Globe	20/0	4.0	12	Singh
	Txcl 5214	Principals of Toxicology	40/0	3.0	6	Singh
	CVM 5880	Avian Core Course	23/0	3.0	72	Shaw
	VPB 8700	Seminars	2/0	1.0	30	Goyal
	Txcl 8672	Investigative Toxicology	10/0	3.0	1	Murphy

*Course Coordinator

Residents/Graduate Students

Name	Program	Degree Sought	Degree Granted	Advisor/Co-advisor
Barbara Patten	Mol. Vet. Biosci.	Ph.D.		Carlson
Cindy O'Dell Dingee	Vet. Pathology	Resident		Hayden
Dina Spassova	Toxicology	Ph.D.		Singh
Faris Jirjis	Pathobiology	Ph.D.		Shaw
Glenn Langenberg	Toxicology	Ph.D.		Murphy
M. Anwar Sheikh	Vet. Medicine	Ph.D.		Goyal
M. Arshud Dar	Mol. Vet Biosci.	Ph.D.		Goyal
Michael Henson	Vet. Medicine	Ph.D.		O'Brien
Nicole Kirchhof	Pathobiology	Ph.D.		O'Brien
Ofelia Tapia	Toxicology	Ph.D.		Murphy
Sue Chang	Toxicology	Ph.D.		Murphy

Research Projects (Principal or Co-Investigator)

*Carlson, C.S. 1998. *New techniques in diagnosing osteoarthritis*. NIH. \$62,000.

*Goyal, S.M. 1998. *Vaccination of turkeys against avian pneumovirus*. Minnesota Turkey Growers Association and Avian Disease Rapid Response Initiatives from Minnesota Legislature. \$129,500.

Goyal, S.M. 1998. *Bioecology, epidemiology, and characterization of avian pneumovirus*. Minnesota Turkey Research and Promotion Council. \$50,000.

Goyal, S.M. and Shaw, D.P. 1998. *Control of viral respiratory diseases of turkeys*. Minnesota Turkey Research and Promotion Council. \$80,000.

*Goyal, S.M. 1998. *Development and use of ELISA tests for determining the seroprevalence of porcine circovirus antibodies in pigs*. National Pork Producer Council. \$22,500.

*Goyal, S.M. 1998. *ELISA test for porcine circovirus*. Xenodiagnostics. \$55,200.

Goyal, S.M. 1998. *ELISA tests for PCMV and PHEV*. Xenodiagnostics. \$135,000.

*Hayden, D.W. 1998. *Interdisciplinary investigation of congenital hypothyroidism and musculoskeletal defects in foals: mechanisms, diagnosis and epidemiology*. MERC. \$4,350.

*Hayden, D.W. 1998. *Quantitation of Ki-67 nuclear antigen in equine thyroid glands using conventional and computerized morphometric methods*. PI with sophomore veterinary student. UROP. \$1,300.

Joo, H.S. and Collins, J.E. 1999. *Demonstration of pathogenicity in CDCD pigs with a cytopathic agent isolated from farms with "Sow Abortion and Mortality Syndrome (SAMS)"*. National Pork Producers. \$21,110.

*Murphy, M.J. 1998. *Survey of Copper, Zinc and Molybdenum status in Minnesota dairy cattle*. Industry: Zinpro, Inc., Hubbard Feeds and Land O'Lakes. \$40,000.

*O'Brien, T.D. 1998. *Feline diabetes mellitus: pathophysiology of feline beta-cell secretion and gene expression*. Morris Animal Foundation. \$20,000.

*O'Brien, T.D. 1998. *Molecular biology of feline diabetes mellitus: construction of cDNA libraries from isolated feline pancreatic islets cultured under high and low glucose conditions*. Companion Animal Research Grant-College of Veterinary Medicine. \$4,000.

*O'Brien, T.D. 1998. *Mechanism(s) for TNF in xenobiotic liver injury*. NIH (NIEHS). \$146,011.

*O'Brien, T.D. 1998. *Oral hypoglycemic therapy for feline diabetes: relationships between plasma islet amyloid polypeptide concentrations and the progression of disease*. Robert H. Winn Foundation. \$14,972.

*Shaw, D.P. 1998. *Pathogenesis of pneumovirus infection of turkeys*. Minnesota Turkey Growers Association and Avian Disease Rapid Response Initiatives from Minnesota Legislature. \$20,000.

Shaw, D.P. 1998. *Ornithobacterium rhinotracheale infection in turkeys*. Minnesota Turkey Growers Association and Avian Disease Rapid Response Initiatives from Minnesota Legislature. \$30,000.

*As principal or co-principal investigator

Diagnostic Laboratory Service and Research Contracts

Collins, J.E. et al. 1998-1999. Johne's Testing (Paratuberculosis). MN Board of Animal Health, \$180,000.

Collins, J.E. et al. 1998-1999. Minnesota Poultry Testing Laboratory. MN Board of Animal Health, \$160,000.

Collins, J.E. et al. 1998-1999. Pseudorabies Testing. MN Board of Animal Health, \$144,000.

Publications: Refereed Journals

Chiang, S.J., Dar, A., Goyal, S.M., Nagaraja, K.V., Halvorson, D., Kapur, V., and Panigrahy, B. 1998. Isolation of avian pneumovirus in QT-35 cells. *Vet. Rec.* 143:596.

DiCesare, P.E., Carlson, C.S., Attur, M., Kale, A.A., Abramson, S.B., Della Valle, C.J., Steiner, G. and Armin, A.R. 1998. Up-regulation of inducible nitric oxide synthase and production of nitric oxide by the swarm rat and human chondrosarcoma. *J. Orthop. Res.* 16:667-674.

Guarino, H., Goyal, S.M., Murtaugh, M.P., Morrison, R.B. and Kapur, V. 1999. Detection of porcine reproductive and respiratory syndrome virus by reverse-transcription-polymerase chain reaction using different regions of the viral genome. *J. Vet. Diag. Invest.* 11:27-33.

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Janzen, M.A., Alexander, L.J., Rohrer, G.A., Beattie, C.W., Buoen, L.C. and Louis, C.F. 1998. Physical assignment of two porcine cosmid clones containing polymorphic microsatellites. *Anim. Genetics.* 1:70-1.

Janzen, M.A., Buoen, L.C., Zhao, F. and Louis, C.F. 1999. Characterization of a swine chromosome-specific centromeric higher-order repeat. *Mamm Genome.* 6:579-84.

- Jayo, M.J., Register, T.C. and Carlson, C.S. 1998. Effects on bone of oral hormone replacement therapy initiated two years after ovariectomy in young adult monkeys. *Bone* 23:361-366.
- Johnson, D.L., Urban, W.P. Jr., Caborn, D.N.M., Vanarthos, W.J. and Carlson, C.S. 1998. Articular cartilage pathology of magnetic resonance imaging detected bone bruises associated with acute anterior cruciate ligament rupture. *Am. J. Sports Med.* 26:409-414.
- Khanna, C., Lund, E.M., Redic, K.A., Hayden, D.W. and Bell, F.W. 1998. Randomized controlled trial of doxorubicin versus dactinomycin in a multiagent protocol for the treatment of dogs with lymphoma. *J. Am. Vet. Med. Assoc.* 213:985-990.
- Lees, C.J., Jerome, C.P., Register, T.C. and Carlson, C.S. 1998. Changes in bone mass and bone biomarkers of cynomolgus monkeys during pregnancy and lactation. *J. Clin. Endocrinol Metab.* 83:4298-4302.
- Ma, Z., Westermark, G.T., Johnson, K.H., O'Brien, T.D. and Westermark, P. 1998. Quantitative immunohistochemical analysis of islet amyloid polypeptide (IAPP) in normal, impaired glucose tolerant, and diabetic cats. *Amyloid* 5:255-261.
- Manning, J.B., Steinberg, H., Rossow, K., Ruth, G.R. and Collins, M.T. 1998. Epizootic of paratuberculosis in farmed elk. *J. Am. Vet. Med. Assoc.* 213:1320-1322.
- Nie, G.J., Johnston, S.D., Hayden, D.W., Buoen, L.C. and Stephens, M. 1998. Theriogenology question of the month; azoospermia associated with 79, XXY chromosome complement (canine Klinefelter's syndrome). *J. Am. Vet. Med. Assoc.* 10:1545-7.
- Rossow, K.D., Shivers, J.L., Yeske, P.E., Polson, D.D., Rowland, R.R.R., Lawson, S.R., Murtaugh, M.P., Nelson, Aird, B. and Collins, J.E. 1999. Porcine reproductive and respiratory syndrome virus infection in neonatal pigs characterized by marked neurovirulence. *Vet. Rec.* 144:444-448.
- Salleng, K., Sulistiawati, E., Jayo, M., O'Sullivan, G. and Carlson, C.S. 1998. Burkholderia pseudomallei infection in imported cynomolgus macaques. *Vet. Pathol.* 35:452.
- Singh, A.K. 1998. The comparative endocrinology of calcium regulation, Book Review. *Trends in Endocrinology* 9:209.
- Solano-Aguilar, G.I., Pijoan, C., Rapp-Gabrielson, V., Collins, J., Carvalho, L.F., Collins, J.E. and Winkelman, N. 1999. Protective role of maternal antibodies against *Haemophilus parasuis* infection. *Am. J. Vet. Res.* 60:81-87.
- Stone, E.G., Walser, M.M., Redig, P.T., Rings, B. and Howard, D.J. 1999. Synovial chondromatosis in raptors. *J. Wildlife Dis.* 35:137-140.

Publications: Abstracts

- Bender, J.B., Leano, F.T., Boxrud, D., Lindeman, C.J., Smith, K.E., Besser, J., Hedberg, C.W. and Collins, J.E. 1999. *Molecular characterization and antimicrobial susceptibility of animal Salmonella typhimurium isolates, Minnesota, 1996-1998.* American Society of Microbiology, Chicago, IL, May 30-June 3, 1999.
- Bouljihad, M., Lindeman, C.J. and Hayden, D.W. 1998. *Cerebral phaeohyphomycosis in a cat.* AAVLD Histopathology Slide Conference. 41st Annual Meeting of the American Association of Veterinary Laboratory Diagnosticians, Minneapolis, MN, October 4, 1998.

Dar, A., Tune, K., Goyal, S.M. and Kapur, V. 1998. *Characterization of the fusion and matrix protein genes of a newly emerging avian pneumovirus*. 79th Conference of Research Workers in Animal Diseases, Chicago, IL, November 8-10, 1998.

Dar, A., Tune, K., Panigrahy, B., Goyal, S.M. and Kapur, V. 1998. *PCR-based detection of an emerging avian pneumovirus*. 41st Annual Meeting of the American Association of Veterinary Laboratory Diagnosticians, Minneapolis, MN, October 2-5, 1998.

Dar, A., Tune, K., Panigrahy, B., Goyal, S.M. and Kapur, V. 1998. *PCR-based detection of avian pneumovirus infection*. 79th Conference of Research Workers in Animal Diseases, Chicago, IL, November 8-10, 1998.

Goyal, S.M., 1998. *Avian pneumovirus-experience of a Diagnostic Laboratory*. Turkey Pneumovirus Workshop, Roche Diagnostics, St. Cloud, MN, June 30-July 1, 1998.

Goyal, S.M., 1999. *Vaccination strategies against avian pneumovirus*. Midwest Poultry Federation Convention, St. Paul, MN, March 16-18, 1999.

Halvorson, D.A., Nagaraja, K.V., Shaw, D.P., Friendshuh, K. and Lauer, D. 1998. *Epidemiology and control of avian pneumovirus*. 49th North Central Avian Disease Conference, Indianapolis, IN., September 27-29, 1998, p 82.

Molitor, T.W. and Goyal, S.M. 1998. *Prevalence and significance of infectious agents in xenotransplantation*. Allen D. Leman Swine Conference for Veterinarians, Minneapolis, MN, September 18-22, 1998.

Olson, W.G., Auza, N., Murphy, M.J. and Linn, J.G. 1999. *Survey of copper status in dairy cows in 5 geographic areas of Minnesota*. Annual Meeting of the American Dairy Science Association, Memphis, TN, June 21-24, 1999.

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Rossow, K.D., Shivers, J.L., Yeske, P.E., Polson, D.D., Rowland, R.R., Lawson, S.R., Murtaugh, M.P., Nelson, E.A., Aird, B. and Collins, J.E. 1998. *Porcine reproductive and respiratory syndrome virus infection in neonatal pigs characterized by marked neurovirulence*. Annual Meeting of the American Association of Veterinary Laboratory Diagnosticians, Minneapolis, MN. October 3-9, 1998.

Shaw, D.P., Murphy, M.J. and Halvorson, D.A. 1998. *Selenosis in leghorn pullets*. 49th North Central Avian Disease Conference, Indianapolis, IN., September 27-29, 1998, p 84.

Publications: Books, Book Chapters and Monographs

Collins, J.E. and Lager, K. 1999. Diagnosis of porcine reproductive and respiratory syndrome. *In: Diseases of Swine*. (Leman, A.D., et al, 8th ed). Iowa State University Press, Ames, IA, pp 201-232.

Rossow, K.D. 1999. Pathogenesis of porcine reproductive and respiratory syndrome. *In: Diseases of Swine*. (B.E. Straw and S. D'Allaire, W.L. Mengeling and D.J. Taylor, eds., 8th ed). Iowa State University Press, Ames, IA.

Rossow, K.D., Chase, C.C.L. 1999. Porcine Reproductive and Respiratory Syndrome. *In: Current Veterinary Therapy, Food Animal Practice*. (J.L. Howard and R.A. Smith, eds.). W.B. Saunders Company, Philadelphia, PA, 7:311-315.

Publications: Proceedings

Aird, B. and Collins, J.E. 1999. Fatal Babesiosis in captive North American Elk. *Winter 1999 conference on Elk management*. University of Minnesota, St. Paul, MN, January 8, unbound handout, pp 1-4.

Benfield, D.A., Nelson, J., Rowland, R.R., Lawson, S.R., Steffan, M., Rossow, K.D. and Collins, J.E. 1999. Persistence of porcine reproductive and respiratory syndrome virus. *30th Annual Meeting of the Proceedings of the American Association of Swine Practitioners*. St. Louis, MO, March 1, pp 305-307.

Collins, J.E. 1999. Detecting the infected pig. *30th Annual Meeting of the Proceedings of the American Association of Swine Practitioners*. St. Louis, MO, March 1, pp 313-317.

Collins, J.E. 1998. PRRS: the disease. *International Pig Veterinary Society*. Birmingham, England, July 8, pp 149-158.

Collins, J.E., Molitor, T.W., Shin, J., Rossow, K.D., Pijoan, A.C., Casamiglia, M. and Kapur, V. 1999. Necesidad de los medicos veterinarios de diagnosticar enfermedades porcinas, por medio de la reaccion en cadena de la polimerasa (PCR). *Proceedings of the actualidades en la produccion porcina y en el diagnostico de enfermedades*. Universidad Nacional Autonoma de Mexico. Mexico City, Mexico, March 26, pp 13-17.

Collins, J.E., Rossow, R., Molitor, T., Kapur, V., Pijoan, C. and Calsamiglia, M. 1999. Practitioners need for polymerase chain reaction. *Proceedings of the Swine Health Conference*. Ames, IA, November 12, pp 148-153.

Hallberg, J.W., Rzepkowski, R.A., Frank, R.K., Evans, R.A., Hanson, B.J. and Dame, K.J. 1998. Efficacy of ceftiofur crystalline free acid sterile suspension for the treatment of *Actinobacillus pleuropneumoniae* in a swine model disease study (dose determination). *Proceedings of the 15th International Pig Veterinary Society Congress*. Birmingham, England, July 5-9.

Weber, A.F., Buoen, L.C. and Hurtgen, J.P. 1998. *Cytogenetic and hereditary sources of infertility in stallions*. 1998. Proceedings of the Stallion Symposium, Baltimore, MD, December, pp 45-48.

Wilson, J.H., Hayden, D.W. and dela Corte, F. 1998. Equine congenital hypothyroidism - a case report and overview. *Proceedings of the Annual Fall Conference, College of Veterinary Medicine, University of Minnesota*, St. Paul, MN, October 28, pp 120-123.

Publications: Miscellaneous

Collins, J.E., Hinton, M.J., Bergeland, M.E. and Frank, R.K. 1998. Animal Health in Minnesota. Annual Report of the Minnesota Veterinary Diagnostic Laboratory, Minnesota Agricultural Experiment Station, University of Minnesota, Miscellaneous Publication 97-1999.

Halvorson, D.A., Nagaraja, K.V., Shaw, D.P., Friendshuh, K. and Lauer, D. 1998. Epidemiology and control of avian pneumovirus. *College of Veterinary Medicine Reporter*.

Wyatt, G. and Murphy, M.J. *Mycotoxin Guide*. Watowan County Extension Office. 1998.

Continuing Education Presentations for Veterinarians

Collins, J.E. January 7, 1999. *Diagnostic Laboratory Report*. Minnesota Board of Animal Health. St. Paul, MN.

Collins, J.E. and Aird, B. January 8, 1999. *Babesiosis*. Health and Nutritional Management of Elk Conference for Veterinarians. University of Minnesota, St. Paul, MN.

Collins, J.E., Molitor, T.W., Shin, J., Rossow, K.R., Pijoan, A.C., Casamiglia, M. and Kapur, V. March 26, 1999. Necesidad de los medicos veterinarios de diagnosticar enfermedades porcinas, por medio de la reaccion en cadena de la polimerasa (PCR). *Proceedings of the actualidades en la produccion porcina y en el diagnostico de enfermedades*. Universidad Nacional Autonoma de Mexico. Mexico City, Mexico.

Collins, J.E., Rossow, R., Molitor, T., Kapur, V., Pijoan, C. and Calsamiglia, M. November 12, 1999. *Practitioners need for polymerase chain reaction*. Swine Disease Conference, Ames, IA.

Frank, R.K. September 19, 1999. *Foot lesions as the primary manifestation in a case of selenium toxicosis in weaned pigs*. Allen D. Leman Swine Conference for Veterinarians, Minneapolis, MN.

Frank, R.K. February 4, 1999. *Review of enteric and other diagnostic cases*. Minnesota Veterinary Medical Association Convention, Bloomington, MN.

Frank, R.K. February 5, 1999. *Respiratory disease case review*. Minnesota Veterinary Medical Association Convention, Bloomington, MN.

Frank, R.K. December 1-2, 1998. *Viral contribution to the porcine respiratory disease complex*. Minnesota Pork Conference, Marshall and St. Cloud, MN.

Frank, R.K. September 18, 1998. *Foreign animal disease review: African Swine Fever*. Allen D. Leman Swine Conference for Veterinarians, Minneapolis, MN.

Murphy, M.J. May 21, 1999. *Plant poisoning in companion animals*. Symposium: *poisonous plants everything you need to know*. Hennepin County Medical Center & Poison Control System, Minneapolis, MN.

Murphy, M.J. May 27, 1999. *A review of copper toxicity in dairy cattle*. Minnesota Dairy Herd Health Conference, St. Paul, MN.

Rossow, K.D. May 26, 1999. *Neospora diagnostic update*. Minnesota Dairy Health Conference, St. Paul, MN.

Rossow, K.D. August 18, 1999. *PRRSV, porcine circovirus, cutaneous lymphosarcoma*. Annual Meeting of the South Dakota Veterinary Medical Association, Sioux Falls, SD.

Rossow, K.D. October 30, 1998. *Porcine circovirus*. Swine Extension Seminar, Fairmont and Owatonna, MN.

Rossow, K.D. April 10, 1999. *Swine seminar for Austrian veterinarians-PRRSV*, St. Paul, MN.

Lecture, Seminar and Workshop Presentations

Abrahamsen, M., Collins, J.E., Molitor, T. and Rutherford, M. September 19, 1998. *Molecular Diagnostics in the Minnesota Veterinary Diagnostic Laboratory*. Molecular Biology Workshop, Allen D. Leman Swine Conference for Veterinarians, Brooklyn Park, MN.

- Carlson, C.S. April 8, 1998. *Morphological evaluation of animal models of osteoarthritis*. Extracellular Matrix Journal Club, University of Minnesota, Minneapolis, MN.
- Carlson, C.S. March 6, 1999. *Quantitative morphological evaluation of animal models of osteoarthritis*. SmithKline Beecham Pharmaceuticals, King of Prussia, PA.
- Murphy, M.J. October 1, 1998. Past, present and future. Department of Veterinary and Microbiological Sciences, North Dakota State University, Fargo, ND.
- Murphy, M.J. October 22, 1998. Timely toxins in Minnesota. VDM Department Seminar, St. Paul, MN.
- Rossow, K.D. April, 1999. Field Investigation – Swine. Abortion Investigation, Maple Valley, MN.
- Shaw, D.P. March 17-18, 1999. Pathogenicity and challenge studies with avian pneumovirus. Turkey Health Workshop, Midwest Poultry Federation Convention, St. Paul, MN.
- Shaw, D.P. September 22, 1998. Case report: selenium toxicity in commercial pullets. 14th Minnesota Poultry Service Workshop, Bloomington, MN.
- Shaw, D.P. November 4-5 1998. Layer School I. Diseases of laying hens. Coordinated by D.A. Halvorson and D.P. Shaw, St. Paul, MN.
- Shaw, D.P. May 10-12, 1999. Layer School II. Management and feeding of laying hens. Coordinated by D.A. Halvorson and D.P. Shaw, St. Paul, MN.

Scientific Meeting Presentations

- Collins, J.E. March 1, 1999. *PRRS: detecting the infected pig*. Proceedings of the 30th Annual Meeting of the American Association of Swine Practitioners, St. Louis, MO.
- Hoenig, M., Johnson, K.H. and O'Brien, T.D. September 8-12, 1998. *Comparison of development of islet amyloidosis in diabetic cats treated with oral hypoglycemic agents versus insulin*. Annual Meeting of the European Association for the Study of Diabetes, Barcelona, Spain.
- Ma, Z., Westermark, G.T., Johnson, K.H., O'Brien, T.D. and Westermark, P. August 7-11, 1998. *Quantitative immunohistochemical analysis of islet amyloid polypeptide in normal, impaired glucose tolerant, and diabetic cats*. VIII International Symposium on Amyloidosis, Mayo Clinic, Rochester, MN.
- Shaw, D.P., Sprenger, S.J., Back, A., Nagaraja, K.V. and Halvorson, D.A. July 25-29, 1998. *Ornithobacterium rhinotracheale and laying chickens*. 135th Annual Convention of the American Association of Avian Pathologists, Baltimore, MD.

Awards and Citations

- | | |
|-------------------|--|
| Averbeck, Gary | Civil Service Longevity Award – 25 years |
| Ellert, Elizabeth | Civil Service Longevity Award – 25 years |
| Brees, Judith | Civil Service Longevity Award – 20 years |

Buoen, Lance	Civil Service Longevity Award – 20 years
Paavala, Jean	Civil Service Longevity Award – 20 years
Ducommun, Alan	Civil Service Longevity Award – 15 years
Coles, Dorene	Civil Service Longevity Award – 10 years
Kloos, Bonnie	Civil Service Longevity Award – 10 years

Professional Organizations

Aird, Betsy	American Society of Veterinary Clinical Pathologists Education Committee
Carlson, Cathy S.	American College of Veterinary Pathologists Bone and Joint session – Co-chair designate American Federation for Aging Research National Scientific Advisory Committee Reviewer for multiple journals Reviewer for USDA grants
Frank, Rodney K.	Minnesota Veterinary Medical Association Planning Committee
Goyal, Sagar M.	Reviewer for multiple journals and granting agencies
Hayden, David W.	Veterinary Pathology (Journal) Reviewer
Murphy, Michael J.	American Board of Veterinary Toxicology Education Committee American Association of Poison Control Centers Veterinary Toxicology Advisory Committee Northland Society of Toxicology Councillor
O'Brien, Timothy D.	Veterinary Pathology (Journal) Associate Editor John Beargrease Sled Dog Marathon Pathologist
Rossov, Kurt D.	American Association of Swine Practitioners Subcommittee on Porcine Reproductive and Respiratory Syndrome

Shaw, Daniel P. 1999 North Central Avian Conference
Program Chair

Walser, Mary M. Avian Diseases (Journal)
Member of Editorial Board

University Committees

Carlson, Cathy S. Awards and Scholarship Committee – CVM
Animal Care and Use Committee – U of M

Collins, James E. Administrative Council – CVM

Goyal, Sagar M. Administrative Council – CVM
International Programs Committee – CVM
Grievance Panel – U of M

Hayden, David W. Curriculum Committee – CVM
Strategic Planning Committee – CVM
Faculty Council – CVM
Administrative Council – CVM

Kurtz, Harold J. Animal Care Committee – CVM
International Programs Committee – CVM

Murphy, Michael J. Post Tenure Review, ad hoc Committee – CVM
Research Committee – CVM

O'Brien, Timothy D. Admissions and Scholastic Standing Committee – CVM
Faculty Council – CVM

Shaw, Daniel P. Outreach Programs Committee – CVM
Alternate for University Senate – U of M

Singh, Ashok K. Faculty Council – CVM
Alternate for University Senate – U of M

Walser, Mary M. Admissions and Scholastic Standing Committee – CVM
Careers Committee – CVM
Promotion and Tenure Committee – CVM
Search Committee for the Dean – U of M

Department of Veterinary Diagnostic Medicine
Income Statement

July 1, 1998 – June 30, 1999

I.	Instruction		
	A. University Operations and Maintenance Fund	\$ 622,152	
	B. Toxicology Graduate Program	15,000	
	C. Start Up Funds	<u>25,000</u>	
		Sub-total	662,152
II.	Grants		
	A. Turkey Growers Matching Funds	114,800	
	B. MERC Grant – Agriculture Experiment Station	<u>5,500</u>	
		Sub-total	120,300
III.	University of Minnesota Foundation Research		
	A. Contributions		
	1) 3M Toxicology Graduate Fellowship	6,000	
	2) Graduate Research	1,300	
	3) Professional Development	2,838	
	B. Endowment Earnings	<u>869</u>	
		Sub-total	11,007
	TOTAL INCOME		\$ <u>793,459</u>