

Appendix 1: Statistics on Major Commodities

TABLE A1.1: Major commodity surveys conducted by NASS

Commodity	Month conducted	Approximate sample size	No. States
Cattle and calves	January	50,000	50
	July	10,000	50
Sheep and lambs	January	22,000	50
	July	2,800	50
Cattle on feed	Monthly	2,200 (1,000 head or more feedlot capacity)	17
Hogs and pigs	December	12,800	50
	March, June, September	10,600 each	30
Catfish	January, July	1,200 each	13
Trout	January	700	20
Livestock slaughtered	Monthly	806 federally inspected plants, 2,087 State-inspected or custom-exempt plants	50
Poultry slaughtered	Monthly	319 federally inspected plants	50
Turkeys raised	December	1,000	32
Chickens and eggs	December	900 (30,000 or more layers)	50
Broiler hatchery production	Weekly	NA	19
Honey	January	6,600	49

NA = not available.

TABLE A1.2: Value of production for selected agricultural commodities for 2004 and 2005

Commodity	2004 (\$1,000)	Percent of total value	2005 (\$1,000)	Percent of total value
Cattle	34,830,872	16.4	36,739,445	17.4
Milk from milk cows	27,567,726	13.0	26,903,822	12.8
Poultry	28,857,215	13.6	28,241,351	13.4
Swine	13,072,025	6.1	13,643,568	6.5
Catfish and trout	551,220	0.3	556,316	0.3
Sheep, including wool	441,199	0.2	482,298	0.2
Honey	196,259	0.1	157,795	0.1
Total of preceding livestock and products ¹	105,516,516	49.7	106,724,595	50.7
Field and miscellaneous crops	80,671,272	38.0	76,784,412	36.4
Fruits and nuts	15,004,161	7.1	16,027,929	7.6
Commercial vegetables	11,097,062	5.2	11,086,505	5.3
Total value of preceding crops	106,772,495	50.3	103,898,846	49.3
All commodities above	212,289,011	100.0	210,623,441	100.0

¹ Production data for equids were not available.

TABLE A1.3: Cattle and calves production, 2004 and 2005

	2004	2005
January 1 following-year inventory (1,000 head)		
All cattle and calves	95,438	97,102
All cows	41,920	42,311
Cattle on feed	13,745	14,132
Operations with cattle and calves	989,460	982,510
Size of operation	Percentage op	perations (percentage inventory)
1–49 head	62.5 (11.3)	62.3 (11.0)
50–99 head	16.6 (11.6)	16.7 (11.6)
100–499 head	18.0 (35.4)	18.1 (35.0)
500 or more head	2.9 (41.7)	2.9 (42.4)
Total	100.0 (100.0)	100.0 (100.0)
Calf crop (1,000 head)	37,505	37,780
Deaths—cattle (1,000 head)	1,711	1,718
Deaths—calves (1,000 head)	2,292	2,335
Commercial calves slaughter (1,000 head)		
Federally inspected	823	718
Other	19	17
Total commercial	842	¹ 734
Commercial cattle slaughter (1,000 head)		
Federally inspected		
Steers	16,192	16,797
Heifers	10,345	9,761
All cows	5,069	4,775
Bulls and stags	550	498
Other	573	556
Total commercial	¹ <i>32,728</i>	¹32,388
Farm cattle and calves slaughter (1,000 head)	185	189
Total cattle and calves slaughter (1,000 head)	33,755	33,311
Value of production (\$1,000)	34,830,872	36,739,445

¹ May not total due to rounding.

TABLE A1.4: Milk cow production, 2004 and 2005

	2004	2005
January 1 following-year inventory (1,000 head)		
Milk cows	9,005	9,058
Milk replacement heifers	4,118	4,278
Operations with milk cows	81,520	78,295
Size of operation	Percentage oper	ations (percentage inventory)
1–29 head	29.2 (2.1)	28.7 (2.0)
30–49 head	19.0 (6.6)	19.0 (6.4)
50–99 head	29.5 (17.8)	29.6 (17.1)
100–199 head	12.8 (15.1)	12.8 (14.6)
200–499 head	5.8 (15.5)	6.0 (15.4)
500 or more head	3.7 (42.9)	3.9 (44.5)
Total	100.0 (100.0)	100.0 (100.0)
Cows slaughtered (1,000 head), federally inspected		
Dairy cows	2,363	2,252
Other cows	2,706	2,523
All cows	5,069	4,775
Milk production		
Average number of milk cows during year (1,000 head)	9,012	9,041
Milk production per milk cow (lb)	18,967	19,576
Milk fat per milk cow (lb)	696	716
Percentage of fat	3.67	3.66
Total milk production (million lb)	170,934	176,989
Value of milk produced (\$1,000)	27,567,726	26,903,822

 ${\it Source:} \ {\tt USDA-NASS}.$

TABLE A1.5: Beef cow production, 2004 and 2005

	2004	2005
January 1 following-year inventory (1,000 head)		
Beef cows	32,915	33,253
Beef replacement heifers	5,691	5,905
Operations with beef cows	774,930	770,170
Size of operation	Percentage operations	(percentage inventory)
1–49 head	77.7 (28.1)	77.5 (27.9)
50-99 head	12.3 (19.1)	12.3 (19.0)
100-499 head	9.3 (38.3)	9.5 (38.5)
500 or more head	0.7 (14.5)	0.7 (14.6)
Total	100.0 (100.0)	100.0 (100.0)
Cows slaughtered (1,000 head), federally inspected		
Dairy cows	2,363	2,252
Other cows	2,706	2,523
All cows	5,069	4,775

Source: USDA-NASS.

TABLE A1.6: Cattle-on-feed production, 2004 and 2005

	2004	2005
January 1 following-year inventory (1,000 head) for all lots	13,745	14,132
January 1 inventory (1,000 head) for lots 1,000+ capacity		
Steers and steer calves	7,175	7,570
Heifers and heifer calves	4,046	4,147
Cows and bulls	78	87
Total	11,299	11,804

Feedlot capacity (head)	Number of feedlots	%	January 1, 2006, inventory (1,000 head)	%	Marketed (1,000 head)	%
<1,000	86,000	97.5	2,328	16.5	3,620	14.0
1,000–1,999	855	1.0	506	3.6	811	3.2
2,000–3,999	547	0.6	777	5.5	1,307	5.1
4,000–7,999	350	0.4	1,009	7.1	1,780	6.9
8,000–15,999	184	0.2	1,363	9.6	2,609	10.1
16,000–31,999	137	0.2	2,438	17.3	4,574	17.7
≥ 32,000	126	0.1	5,711	40.4	11,091	43.0
All feedlots	88,199	100.0	14,132	100.0	25,792	100.0

TABLE A1.7: Hog and pig production, 2004 and 2005

	;	2004		2005
December 1 inventory (1,000 head)				
Breeding	Ę	5,969		6,011
Market	55	5,005		55,438
All hogs and pigs	² 60	0,975		61,449
Operations with hogs and pigs	69	9,500		67,330
Size of operation	Percent	age op	erations (percentage inv	entory)
1–99 head	60.6	(1.0)	60.3	(1.0)
100–499 head	14.9	(4.0)	15.0	(4.0)
500–999 head	7.4	(6.0)	7.1	(6.0)
1,000–1,999 head	6.4 ((10.0)	6.3	(10.0)
2,000-4,999 head	7.4 ((26.0)	7.8	(26.0)
≥ 5,000 head	3.3 ((53.0)	3.5	(53.0)
Total	100.0 (1	100.0)	100.0	(100.0)
Pig crop (1,000 head)				
December-November ¹	102	2,780	1	103,965
Pigs per litter				
December-November ¹		8.94		9.01
Deaths (1,000 head)		7,462		7,757
Slaughter (1,000 head), federally inspected				
Barrows and gilts	98	8,831		99,123
Sows	3	3,271		3,116
Stags and boars		259		280
Other	,	1,103		1,063
Total commercial	²103	3,463	1	103,582
Farm slaughter		114		109
Total slaughter	103	3,577	2	103,691
Value of production (\$1,000)	13,072	2,025	13,6	643,568

¹ December of the preceding year.

² May not total due to rounding.

TABLE A1.8: Sheep production in the United States, 2004 and 2005

	20	004	2005
January 1 following-year inventory (1,000 head)			
Ewes 1 year old and older	3,5	573	3,657
Rams 1 year old and older		190	196
All sheep and lambs	6,7	135	6,230
Operations with sheep	67,5	580	68,280
Size of operation	Percentage	e operations (percentage in	ventory)¹
1–99 head	92.0 (30	0.3) 90.	3 (28.7)
100–499 head	6.5 (22	2.0) 7.	6 (24.0)
500-4,999 head	1.4 (33	3.5) 1.	5 (33.8)
≥ 5,000	0.1 (14	4.2) 0.	1 (13.5)
Total	100.0 (100	0.0) 100.	0 (100.0)
Lamb crop (1,000 head)	4,0	096	4,125
Deaths-sheep (1,000 head)	2	215	216
Deaths—lambs (1,000 head)	3	385	384
Slaughter (1,000 head), federally inspected			
Mature sheep	,	147	129
Lambs	2,5	529	2,425
Other	•	163	143
Total commercial	2,8	839	²2,698
Farm slaughter		65	65
Total slaughter	2,9	904	2,763
Wool production			
Sheep shorn (1,000 head)	5,0	073	5,072
Shorn wool production (1,000 lb)	37,6	622	37,232
Value of wool production (\$1,000)	29,9	921	26,272
Value of production (\$1,000)	411,2	278	456,026

¹ End-of-year survey for breeding sheep (inventory).

² May not total due to rounding.

TABLE A1.9: Poultry production in the United States, 2004 and 2005

	2004	2005
December 1 total layers (1,000 head)	343,922	347,917
Annual average number of layers (1,000 head)	341,956	343,501
Eggs per layer	261	262
Total egg production (million eggs)	89,091	89,960
Number of broilers produced (1,000 head)	8,740,650	8,870,350
Number of chickens lost (1,000 head)	100,616	92,867
Number of turkeys raised (1,000 head)	263,207	256,270
Young turkeys lost as a percentage of total poults placed	10.4	10.4
Number slaughtered (1,000 head)		
Chickens—young	8,752,436	8,853,809
Chickens—mature	143,312	146,664
Chickens—total	8,895,748	9,000,473
Turkeys—young	251,563	245,642
Turkeys-old	2,745	2,452
Turkeys-total	254,308	248,094
Ducks	25,967	27,890
Value of production (\$1,000)		
Broilers	20,446,086	20,901,939
Eggs	5,299,185	4,042,282
Turkeys	3,054,329	3,232,576
Chickens (value of sales)	57,615	64,554
Total	28,857,215	28,241,351

TABLE A1.10: Equine production in the United States, 1997, 1998, and 2002

	1997¹	1998¹	2002²
January 1 following-year inventory (1,000 head)			
All equine	5,250	5,317	
On farms	3,200	NA	² 3,750
On nonfarms	2,050	NA	
Number sold	540	558	
Value of sales (\$1,000)	1,641,196	1,753,996	

¹ USDA-NASS (March 2, 1999).

² The 2002 Census of Agriculture reported 3,644,278 head of horses and ponies located on 542,223 farms. In addition, there were 105,358 mules, burros, and donkeys reported. The combination rounds to 3,750,000.

TABLE A1.11: Catfish and trout production in the United States, 2004 and 2005

	2004	2005
Catfish		
Number of fish on January 1, following year (1,000)		
Foodsize	344,085	327,680
Stockers	643,280	778,205
Fingerlings	654,660	1,039,415
Broodfish	1,034	1,106
Number of operations on January 1, following year	1,158	1,035
Sales (\$1,000)		
Foodsize	450,873	449,879
Stockers	6,260	5,994
Fingerlings	22,175	24,107
Broodfish	867	2,145
Total sales	480,175	482,125
Trout		
Number of fish sold (1,000)		
≥ 12 inches	49,591	55,501
6–12 inches	5,518	4,785
1–6 inches	5,550	7,059
Sales (\$1,000)		
≥ 12 inches	59,397	62,554
6–12 inches	5,852	5,180
1–6 inches	966	1,320
Total	66,215	69,054
Eggs sold		
Number of eggs (1,000)	289,620	307,472
Total value of sales (\$1,000)	4,831	5,136
Total value of fish sold plus value of eggs sold (\$1,000)	¹71,045	¹ 74,191
Number of operations selling trout	365	346
Number of operations selling or distributing trout, or both	592	601

¹ May not total due to rounding.

TABLE A1.12: Honey production¹ in the United States, 2004 and 2005

	2004	2005
Honey-producing colonies (1,000)	2,556	2,410
Yield per colony (lb)	71.8	72.5
Production (1,000 lb)	183,582	174,643
Stocks on December 15 (1,000 lb)	61,222	62,406
Value of production (\$1,000)	196,259	157,795

Source: USDA-NASS.

TABLE A1.13: Production data on miscellaneous livestock, 2002

Commodity	Number of farms	Inventory	Number sold
Milk goats	22,389	290,789	113,654
Angora goats	5,075	300,753	91,037
Meat and other goats	74,980	1,938,924	1,109,619
Mules, burros, donkeys	29,936	105,358	17,385
Mink	310	1,113,941	2,506,819
Rabbits	10,073	405,241	886,841
Ducks	26,140	3,823,629	24,143,066
Geese	17,110	173,000	200,564
Pigeons	4,405	449,255	1,160,364
Pheasants	4,977	2,267,136	7,206,460
Quail	3,742	4,888,196	19,157,803
Emus	5,224	48,221	15,682
Ostriches	1,643	20,560	16,038
Bison	4,132	231,950	57,210
Deer	4,901	286,863	43,526
Elk	2,371	97,901	16,058
Llamas	16,887	144,782	18,653

Source: USDA-NASS 2002 Census of Agriculture.

TABLE A1.14: Slaughter statistics, 2005

Commodity	Federally inspected plants (no.)	Slaughter in federally inspected plants (1,000 head) ¹	Slaughter in State-inspected or custom-exempt plants (1,000 head)
Cattle	657	31,832	556
Calves	227	718	17
Hogs	630	102,519	1,063
Sheep and lambs	496	2,555	143

Source: USDA-NASS Livestock Slaughter 2005 Summary, March 2006.

¹ For producers with five or more colonies.

 $^{^{\}rm 1}$ Includes data from week ending January 8 through December 31, 2005.

Appendix 2: Tables on FAD Investigations

TABLE A2.1: FAD Investigations by State, 2005

A 17		•
AK	Alaska	3
AL	Alabama	2
AR	Arkansas	10
AZ	Arizona	57
CA	California	25
СО	Colorado	146
СТ	Connecticut	4
DE	Delaware	0
FL	Florida	16
GA	Georgia	25
НІ	Hawaii	2
IA	lowa	8
ID	Idaho	20
IL	Illinois	12
IN	Indiana	4
KS	Kansas	10
KY	Kentucky	10
LA	Louisiana	11
MA	Massachusetts	7
MD	Maryland	5
ME	Maine	1
MI	Michigan	6
MN	Minnesota	6
МО	Missouri	3
MS	Mississippi	9
MT	Montana	45

NC	North Carolina	6
ND	North Dakota	1
NE	Nebraska	27
NH	New Hampshire	0
NJ	New Jersey	11
NM	New Mexico	44
NV	Nevada	4
NY	New York	2
ОН	Ohio	13
ОК	Oklahoma	10
OR	Oregon	5
PA	Pennsylvania	9
PR	Puerto Rico	11
RI	Rhode Island	0
sc	South Carolina	4
SD	South Dakota	7
TN	Tennessee	11
TX	Texas	47
UT	Utah	144
VA	Virginia	15
VT	Vermont	4
WA	Washington	31
WI	Wisconsin	11
WV	West Virginia	1
WY	Wyoming	130
Total		995

TABLE A2.2: Complaints, by species disclosed in FAD investigations, 2005

Complaints	Totals	Species	Counts
Central nervous system	41	Avian (birds)	5
		Bovine (cattle)	12
		Canine (dogs)	1
		Chicken, egg-type	2
		Chicken, meat-type	0
		Equine (e.g., horses, donkeys, mules)	11
		Feral swine	1
		Game fowl	0
		Porcine (hogs)	7
		Poultry (chickens and turkeys)	0
		Rabbit	2
		Waterfowl, exhibition poultry, and game birds	0
Diarrhea and discharge	10	Avian (birds)	1
		Bovine (cattle)	1
		Chicken, egg-type	2
		Game fowl	0
		Ovine (sheep)	1
		Porcine (hogs)	1
		Poultry (chickens and turkeys)	1
		Rabbits	2
		Waterfowl, exhibition poultry, and gamebirds	1
Epidemic abortion	0	Ovine (sheep)	0
•		Porcine (hogs)	0
Hemorrhagic vessels	7	Avian (birds)	0
		Bovine (cattle)	1
		Canine (dogs)	1
		Caprine (goats)	0
		Porcine (hogs)	2
		Rabbit	3
ligh death rate	54	Avian (birds)	15
		Bison	0
		Bovine (cattle)	4
		Caprine (goats)	1
		Cervidae	1
		Chicken, egg-type	7
		Chicken, meat-type	2
		Crustacean	0
		Elk	0
		Equine (e.g., horses, donkeys, mules)	2
		Fish	1
		Game fowl	<u>'</u> 1
		Ovine (sheep)	1
		Porcine (hogs) Poultry (chickens and turkeys)	6 5
		Rabbit	5
		Turkey	1
		Waterfowl, exhibition poultry, and gamebirds	2

TABLE A2.2: continued

Complaints	Totals	Species	Counts
Illegal Import-surveillance	0	Avian (birds)	0
Maggots or ticks	11	Bovine (cattle)	5
		Canine (dogs)	4
		Equine (e.g., horses, donkeys, mules)	0
		Feline (cats)	1
		Reptiles	1
Positive surveillance sample	6	Avian (birds)	0
		Bovine (cattle)	3
		Crustacean	0
		Equine (e.g., horses, donkeys, mules)	3
		Fish	0
Respiratory	18	Avian (birds)	5
		Bison	0
		Bovine (cattle)	0
		Caprine (goats)	0
		Chicken, egg-type	5
		Chicken, meat-type	0
		Exotic Bovidae	0
		Porcine (hogs)	0
		Poultry (chickens and turkeys)	6
		Rabbit	2
Septicemia	2	Bovine (cattle)	1
		Equine (e.g., horses, donkeys, mules)	1
		Fish	0
		Porcine (hogs)	0
Skin other than muzzle and feet	29	Avian (birds)	1
		Bovine (cattle)	6
		Caprine (goats)	6
		Cervidae	0
		Chicken, egg-type	1
		Equine (e.g., horses, donkeys, mules)	14
		Ovine (sheep)	1
		Porcine (hogs)	0
/esicular—skin of muzzle and feet	817	Alpaca	4
		Bison	1
		Bovine (cattle)	146
		Camelidae	0
		Caprine (goats)	37
		Cervidae	0
		Deer	0
		Equine (e.g., horses, donkeys, mules)	603
		Exotic Bovidae	0
		Marine mammals	0
		Ovine (sheep)	14
		Porcine (hogs)	12
Total			995

TABLE A2.3: United States of America's status of the occurrence of OIE¹-reportable diseases in 2005

Disease	Status	Date of last occurrence/Notes
Multiple-species diseases		
Anthrax	Present	Sporadic/limited distribution
Aujeszky's disease	Present	Sporadic (feral)/limited distribution, national eradication program
Echinococcosis/Hydatidosis	Present	Sporadic (uncommon in all species)
Heartwater	Free	Never occurred
Leptospirosis	Present	
Q fever	Present	Sporadic
Rabies	Present	
Paratuberculosis	Present	National control program
New World screwworm	Free	1982
Old World screwworm	Free	Never occurred
Trichinellosis	Present	Sporadic (wild animals)/limited distribution/national control program
Foot-and-mouth disease	Free	1929
Vesicular stomatitis	Seasonal	2005 Sporadic/limited distribution
Lumpy skin disease	Free	Never occurred
Bluetongue	Present	Limited distribution
Rift Valley fever	Free	Never occurred
Cattle diseases		
Bovine anaplasmosis	Present	
Bovine babesiosis	Present	Limited distribution (endemic in the territories of Puerto Rico and the U.S. Virgin Islands; last occurrence on the U.S. mainland was in 1943)
Bovine brucellosis	Present	Sporadic/limited distribution/national eradication program
Bovine genital campylobacteriosis	?	
Bovine tuberculosis	Present	Sporadic/limited distribution/national eradication program
Bovine cysticercosis	Present	Limited distribution
Dermatophilosis	Present	Limited distribution
Enzootic bovine leucosis	Present	
Hemorrhagic septicemia	?	Sporadic/limited distribution (bison)
Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis	Present	
Theileriosis	Free	Never occurred
Trichomonosis	Present	
Trypanosomosis	Free	Never occurred
Malignant catarrhal fever	Present	Sporadic (sheep-related form only)
Rinderpest	Free	Never occurred
Bovine spongiform encephalopathy	One case	2005 (Texas)
Contagious bovine pleuropneumonia	Free	1892
Sheep and goat diseases		
Ovine epididymitis (Brucella ovis)	Present	
Caprine and ovine brucellosis (excluding <i>B. ovis</i>)	Free	1999
Caprine arthritis/encephalitis	Present	
Contagious agalactia	Present	Sporadic (non-Mediterranean form)
Contagious caprine pleuropneumonia	Free	Never occurred
Enzootic abortion of ewes (ovine chlamydiosis)	Present	Limited distribution

TABLE A2.3: continued

Disease	Status	Date of last occurrence/Notes
Ovine pulmonary adenomatosis	Present	2005 Sporadic/limited distribution
Nairobi sheep diseases	Free	Never occurred
Salmonellosis (S. abortusovis)	Present	Sporadic/limited distribution
Scrapie	Present	National eradication program
Maedi-visna	Present	Sporadic/limited distribution
Peste des petits ruminants	Free	Never occurred
Sheep pox and goat pox	Free	Never occurred
Equine diseases		
Contagious equine metritis	Free	1978
Dourine	Free	1934
Epizootic lymphangitis	Free	Never occurred
Equine encephalomyelitis (Eastern and Western)	Present	Sporadic/limited distribution
Equine infectious anemia	Present	National control program (very low prevalence)
Equine influenza	Present	
Equine piroplasmosis	Present	Limited distribution (limited to Puerto Rico and the U.S. Virgin Islands)
Equine rhinopneumonitis	Present	
Glanders	Free	1942
Horse pox	Free	Never occurred
Equine viral arteritis	Present	
Japanese encephalitis	Free	Never occurred
Horse mange	?	Sporadic/limited distribution
Surra (Trypanosoma evansi)	Free	Never occurred
Venezuelan equine encephalomyelitis	Free	1971
African horse sickness	Free	Never occurred
Swine diseases		
Atrophic rhinitis of swine	Present	
Porcine cysticercosis	Free	
Porcine brucellosis	Present	Sporadic (feral)/limited distribution/national control program
Transmissible gastroenteritis	Present	
Enterovirus encephalomyelitis	Free	Never occurred
Porcine reproductive and respiratory syndrome	Present	
Swine vesicular disease	Free	Never occurred
African swine fever	Free	Never occurred
Classical swine fever	Free	1976
Avian diseases		
Avian infectious bronchitis	Present	
Avian infectious laryngotracheitis	Present	Sporadic (primarily vaccine-related)
Avian tuberculosis	Present	Sporadic (backyard poultry; prevented in commercial flocks by continuous replacement of birds)
Duck viral hepatitis	Free	1998
Duck viral enteritis	?	Sporadic/limited distribution
Fowl cholera	Present	
Fowl pox	Present	
Fowl typhoid	Free	1981
Infectious bursal disease (gumboro disease)	Present	

TABLE A2.3: continued

Disease	Status	Date of last occurrence/Notes
Marek's disease	Present	
Avian mycoplasmosis (M. gallisepticum)	Present	All commercial poultry breeding flocks are under a surveillance program to confirm infection-free status. Commercial table-egg layers may be vaccinated.
Avian chlamydiosis	?	Sporadic (wild birds, pet birds, backyard poultry)
Pullorum disease	?	Sporadic (Commercial production flocks are free; disease may occur in some backyard poultry.)
High-pathogenicity avian influenza	Free	2004
Newcastle disease (neurotropic and viscerotropic strains)	Free	2003
Lagomorph diseases		
Myxomatosis	?	
Tularemia	Present	Sporadic (wild animals)/limited distribution
Rabbit hemorrhagic disease	Present	2005/sporadic/limited distribution
Bee diseases		
Acarapisosis of honey bees	Present	
American foulbrood of honey bees	Present	
European foulbrood of honey bees	Present	
Varoosis of honey bees	Present	
Tropilaelaps infestation of honey bees	Free	
Other listed disease		
Leishmaniasis	?	Sporadic (canine)/limited distribution
Fish diseases		
Viral hemorrhagic septicemia	+?	
Spring viremia of carp	Free	2004
Infectious hematopoietic necrosis	Present	
Epizootic hematopoietic necrosis	Free	Never occurred
Oncorhynchus masou virus disease	Free	Never occurred
Mollusc diseases		
Bonamiosis (Bonamia exitiosus, B. ostreae, Mikrocytos roughleyi)	Present	Limited distribution
MSX disease (Haplosporidium nelsoni)	Present	Limited distribution
Perkinsosis (Perkinsus marinus, P. olseni/ atlanticus)	Present	Limited distribution
Marteiliosis (Marteilia refringens, M. sydneyi)	Free	Never occurred
Mikrocytosis (Mikrocytos mackini)	Present	Limited distribution
Crustacean diseases		
Taura syndrome	Free	
White spot disease	Free	

 $Sporadic = occurring \ only \ occasionally.$

Limited distribution = limited geographic distribution.

Free = negative occurrence of the disease.

^{? =} presence of the disease suspected but not confirmed.

⁺? = identification of the presence of infection/infestation.

OIE stands for L'Office International des Epizooties, which recently changed its name to the World Animal Health Organization.

Appendix 3: Animal Health Infrastructure in the United States

Introduction

The U.S. animal health infrastructure is a complex network of activities, programs, and people that includes but is not limited to

- Livestock producers and markets,
- Transporters,
- Veterinarians.
- Processors.
- Stakeholder organizations,
- Diagnostic and research laboratories,
- Manufacturers of animal drugs and vaccines,
- Importers and exporters,
- Colleges and universities, and
- Multiple regulatory agencies.

This network responds to animal health issues; scientific, economic, and political conditions pertinent to consumers; public-health issues; and trade interests, as well as environmental, wildlife, food-safety, and animal-welfare concerns.

By implementing measures that mitigate risks and deter hazardous activities, the U.S. animal health infrastructure works to ensure healthy animal populations, wholesome and safe food supplies, rapid response to animal-health emergencies, effective disease-control programs, functional surveillance and reporting systems, and the expansion of export markets. Among the key components of the infrastructure are

- Federal animal health services,
- State animal health authorities,
- Diagnostic laboratories,
- Federally accredited veterinarians,

- The United States Animal Health Association (USAHA) and other animal health organizations, and
- The global animal health infrastructure.

These organizations and facilities directly improve animal health, work toward eliminating disease risks, and limit transmission of diseases from animal to animal and from animals to people. Success requires cooperation across the network.

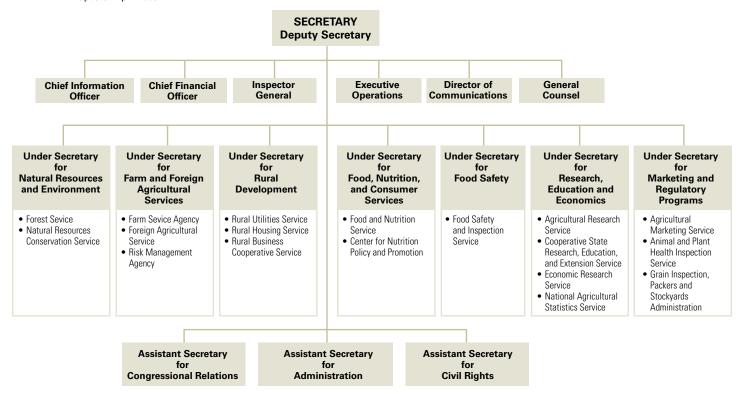
Federal Animal Health Services

Ensuring the health of U.S. livestock is the responsibility of many Federal agencies, most of which are part of the U.S. Department of Agriculture (USDA) (fig. 32). Each agency is charged with specific tasks and responsibilities, and all work to protect the health and vitality of U.S. agriculture through established rules and regulations.

Federal animal-health and food-safety regulations are outlined in the U.S. Code of Federal Regulations (CFR). The CFR, which is revised annually, codifies regulations developed by Government agencies under laws passed by Congress and signed by the President. Animal-health and food-safety regulations are detailed in Titles 9 and 21 of the code (9 CFR, 21 CFR). Before adoption, proposed regulations appear for public review and comment in the Federal Register, which is published each business day. All proposed rules that may impact U.S. trade in livestock and animal health products are also provided to the World Trade Organization (WTO) to allow for comment by foreign governments and overseas suppliers. Further, VS publishes Uniform Methods and Rules, which are minimum program standards for the implementation of specific animal-health programs covered by regulations.

FIGURE 32: USDA organizational chart. APHIS falls under the Marketing and Regulatory Programs branch of the Department.

Updated April 2003



Animal and Plant Health Inspection Service (APHIS)

USDA–APHIS plays a lead role in animal health matters through its legal authorities, national perspectives, and role as the Nation's representative in international livestock issues. There are six program units within APHIS: Animal Care (AC), Biotechnology Regulatory Services (BRS), International Services (IS), Plant Protection and Quarantine (PPQ), Veterinary Services (VS), and Wildlife Services (WS).

AC is responsible for administering the Animal Welfare and the Horse Protection Acts and for providing leadership in establishing acceptable standards of humane animal care and handling.

BRS regulates the field-testing (confined release of genetically engineered organisms into the environment), interstate movement, and importation of genetically engineered organisms through a permit and notification process. BRS assesses the agricultural and environmental safety of genetically engineered organisms and evaluates petitions to USDA to cease the regulation of specific engineered organisms.

IS provides animal- and plant-health experts overseas and in Washington, DC, who enhance USDA's capacity to safeguard American agricultural health and promote agricultural trade.

PPQ develops regulations, policies, and guidelines to safeguard agricultural and natural resources from the risks associated with the entry, establishment, or spread of plant pests and noxious weeds.

WS provides leadership for managing wildlife damage and resolving wildlife-related conflicts involving human activities, agricultural production, and natural-resource protection.

VS plays a lead role in protecting and improving the health, quality, and marketability of U.S. livestock, animal products, and veterinary biologics by preventing, controlling, and eradicating animal diseases and monitoring and promoting animal health and productivity.

VS employs nearly 1,700 people with a wide range of scientific, technical, and administrative skills (table A3.1). The VS workforce includes veterinarians, animal health technicians, animal caretakers, budget analysts, biological technicians, computer specialists, economists, entomologists, epidemiologists, geographers, management analysts, microbiologists, pathologists, statisticians, spatial analysts, and other scientists, and administrative and animal-health support professionals.

VS maintains headquarters facilities in Riverdale, MD, and Washington, DC, where much of the program policy and regulatory development for the organization is established (fig. 33). These offices also provide liaison with other

TABLE A3.1: Veterinary Services permanent workforce, 2005

Occupation	Number	Percent of workforce
Veterinarians	526	29.9
Animal health technicians	337	19.2
Administrative and clerical support	395	22.5
Biological sciences	222	12.6
Information technology	73	4.2
Other	200	11.6
Total	1,753	100.0

Federal agencies, members of the executive branch, and congressional offices.

The VS field infrastructure is distributed nationally. VS maintains area offices in most of the 50 States and major ports-of-entry, although some area offices serve multiple States. VS also has personnel and offices in Puerto Rico and in U.S. territories. VS disease-eradication and -control activities, export certification, and surveillance actions take place primarily out of these field-office sites. Regional

offices located in Raleigh, NC, and Fort Collins, CO, oversee the field offices.

The emergency management arm of VS is comprised of three groups: Emergency Management and Diagnostics (EMD), the National Veterinary Services Laboratories (NVSL), and the Center for Veterinary Biologics (CVB).

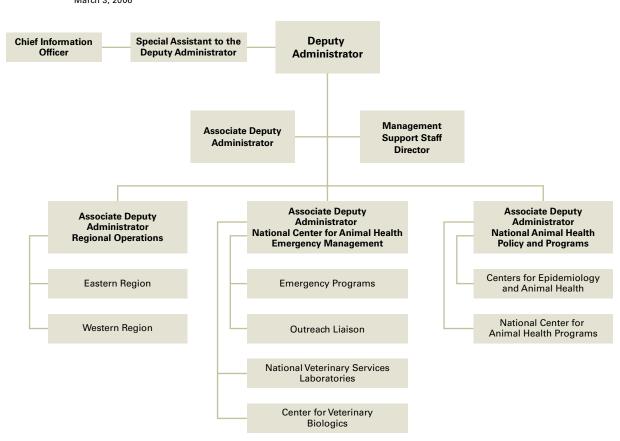
EMD is responsible for preventing, preparing for, and coordinating the response to animal health emergencies caused by foreign or emerging animal diseases and pests and natural disasters. In the event of an emergency, EMD reacts immediately to minimize the adverse effects on the health of animal and human populations.

NVSL are divided into two campuses located in Ames, IA, and Plum Island, NY. The Ames campus houses the Diagnostic Bacteriology Laboratory, the Diagnostic Virology Laboratory, and the Pathobiology Laboratory. The Foreign Animal Disease Diagnostic Laboratory is located at the Plum Island campus.

NVSL's responsibilities include

- Diagnosing domestic and foreign animal diseases;
- Providing diagnostic support for disease control, disease eradication, and animal-health monitoring programs;

FIGURE 33: Organizational chart for APHIS-VS.
March 3, 2006



- Testing samples from animals for import and export;
- Training APHIS and other U.S. and international personnel;
- Certifying laboratories in the United States to handle the testing for selected diseases; and
- Acting as a comprehensive reference laboratory.

CVB regulates animal vaccines, bacterins, diagnostic test kits, and other veterinary biologics used to prevent, treat, or diagnose animal diseases. CVB implements the Virus–Serum–Toxin Act to ensure the availability of safe and effective veterinary biologics.

CVB's responsibilities include

- Reviewing biologics product license applications and associated studies;
- Issuing biologics product licenses and permits;
- Testing biologics products for purity and potency;
- Inspecting biologics product manufacturing facilities;
- Regulating the release of biologics products to the marketplace;
- Conducting postmarketing surveillance of biologics products, and;
- Certifying vaccines and diagnostics for export.

In the course of fulfilling its mission, CVB plays a key role in many of the VS activities noted in this report. For example, CVB is active in soliciting bids and evaluating technical proposals for the National Veterinary Stockpile vaccine banks. Without relaxing its rigorous licensing standards, CVB expedites the evaluation of vaccines and diagnostics for national disease-eradication or -control programs.

Both NVSL and CVB are collaborating centers of the World Organization of Animal Health for the diagnosis of animal disease and vaccine evaluation in the Americas.

Within VS, two groups—Animal Health Programs (AHP) and the Centers for Epidemiology and Animal Health (CEAH)—are associated with VS' National Animal Health Policy and Programs. AHP initiates, leads, coordinates, and facilitates national certification and eradication programs that promote, protect, and improve U.S. animal health by preventing, minimizing, or eradicating animal diseases of economic and public-health concern. AHP includes four subunits: the National Center for Import and Export (NCIE), National Center for Animal Health Programs (NCAHP), professional development staff, and information systems support staff. NCIE is discussed in detail in chapter 6.

The NCAHP includes three subunits: Ruminant Health Programs (RHP); Aquaculture, Swine, Equine, and Poultry Health Programs (ASEPHP); and Surveillance and Identification Programs (SIP).

RHP and ASEPHP are responsible for campaigns to eradicate the following diseases:

- Bovine brucellosis,
- Swine brucellosis,
- Bovine tuberculosis,
- Swine pseudorabies, and
- Scrapie.

The RHP and ASEPHP also are responsible for the following disease-control programs and activities:

- Johne's disease program,
- National Low-Pathogenicity Avian Influenza Program,
- Aquaculture disease programs,
- Chronic wasting disease efforts,
- Equine disease programs,
- Exotic Newcastle disease surveillance,
- Classical swine fever surveillance, and the
- National Poultry Improvement Plan and
- Slaughter Horse Transport Program.

SIP helps coordinate national surveillance, animal indentification, veterinary accreditation, and livestock markets.

CEAH includes three subunits: the Center for Emerging Issues (CEI), the Center for Animal Disease Information and Analysis (CADIA), and the National Center for Animal Health Surveillance (NCAHS).

The CEI is responsible for

- Rapidly assessing the impacts of foreign and domestic disease outbreaks, economic events, and natural disasters;
- Developing surveillance approaches for emerging diseases; and
- Providing geographic information systems support to VS activities.

The CADIA is responsible for

- Import and domestic risk analysis, and
- Program disease support via database development and maintenance.

The NCAHS is responsible for

- Coordinating national animal-health surveillance, and
- Providing baseline information on health, disease, and production through the National Animal Health Monitoring System.

For animal-disease information systems and risk analysis, CEAH is a collaborating center of the World Organization for Animal Health (formerly called the International Office of Epizootics and still using "OIE" as its acronym). CEAH personnel also develop technology applications, maintain key databases, and conduct epidemiologic, economic, and spatial analyses.

The Web site for VS is http://www.aphis.usda.gov/vs. The site provides updates on VS programs and electronic copies of various VS forms.

Other Federal Agencies Providing Animal Health Services

In addition to APHIS, several other Federal agencies exercise authority and responsibility for maintaining domestic animal health. These agencies include, but are not limited to, the Food and Drug Administration (FDA), the U.S. Department of Homeland Security's (DHS) Customs and Border Protection (CPB), the U.S. Department of Commerce's National Marine Fisheries Service (NMFS), and four USDA agencies: the Agricultural Research Service (ARS), the Cooperative State Research, Education, and Extension Service (CSREES), the Food Safety and Inspection Service (FSIS), and the Foreign Agricultural Service (FAS).

FDA oversees the manufacture, importation, and use of human and animal pharmaceuticals, including antimicrobial and antiinflammatory drugs, and a variety of natural and synthetic compounds. FDA also regulates food labeling, food product safety (except meat, poultry, and certain egg products), livestock feed, and pet food.

DHS has responsibility for emergencies related to animal diseases. CBP, an agency of DHS, has agricultural inspection responsibility at the Nation's borders and portsof-entry to prevent the introduction of foreign animal and plant pests and diseases that could harm the country's agricultural resources.

NMFS provides a voluntary inspection service to fisheries and aquaculture industries.

ARS is the primary research agency within USDA for livestock and crop-related production issues, including animal health and food safety.

CSREES seeks to advance knowledge for agriculture, the environment, human health and well-being, and communities by supporting research, education, and extension programs in the Land-Grant University System and other partner organizations.

FSIS inspects all meat, poultry, and egg products sold in interstate commerce to ensure that they are safe, wholesome, and properly labeled, and reinspects imported products.

FAS reports on outbreaks of animal diseases worldwide and on the quarantine and trade measures that countries adopt because of these outbreaks. FAS publishes Food and Agricultural Import Regulations and Standards (FAIRS) Reports, FAIRS Certificate Reports, and Sanitary and Phytosanitary Food Safety Reports that identify the entry requirements for livestock and livestock products. FAS also helps remove unfair trade barriers to U.S. products.

State Animal Health Authorities

Animal health authorities in each State are responsible for monitoring and controlling diseases in its domestic livestock and poultry. States control diseases through inspections, testing, vaccinations, treatments, quarantines, and other activities. States have authority to prohibit the entry of livestock, poultry, aquaculture species, and animal products from other States if those animals or products are considered health risks to local animal populations. Consequently, each State develops its own respective domestic commerce regulations. VS cooperates with States at markets where interstate movements may occur and, in conjunction with States, conducts disease surveillance programs at slaughter plants and livestock concentration points. States and VS also cooperate in national and State animal disease-control and -education programs. In addition, States maintain veterinary diagnostic laboratories, provide animal disease information to veterinary practitioners, and encourage prompt reporting of specific conditions. Also, there is communication with departments of public health, colleges of veterinary medicine, and wildlife agencies within each State.

To participate in national programs, States must adhere to specific requirements. However, on the basis of individual States' needs, State-specific requirements can be developed. Generally, State-specific requirements are more stringent than national program requirements.

In addition, States cooperate with Federal agencies to develop animal health emergency plans. States also implement producer education programs for disease management and control.

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Diagnostic Laboratories

Frequently, diagnosing livestock and poultry diseases requires laboratory tests. Diagnostic laboratories diagnose endemic and exotic diseases, support disease-control and -reporting programs, and meet expectations of trading partners. OIE reference laboratories confirm FADs.

In the United States, the American Association of Veterinary Laboratory Diagnosticians (AAVLD) accredits laboratories. Accreditation is dependent on several criteria, including promoting excellence in diagnostic service, establishing internal quality control, hiring and retraining qualified staff and professional personnel, developing innovative techniques, and operating adequate facilities to conduct laboratory diagnostic services. Additionally, laboratories can become certified by VS to conduct specific tests to certify animals for movement or to participate in disease-eradication programs.

Multiple APHIS-approved laboratories serve livestock and poultry producers (see http://www.aphis.usda.gov/vs/nvsl/Labs/labcertification.htm). To coordinate the capabilities of Federal, State, and university laboratories, a laboratory network has been created. See chapter 4 for more information on the APHIS laboratory network.

Federally Accredited Veterinarians

Private veterinary practitioners are an integral part of the U.S. veterinary infrastructure. Through their interactions with producers, practitioners function as a key resource for the enhancement of U.S. animal health. VS' National Veterinary Accreditation Program (NVAP) is a voluntary program that certifies private veterinary practitioners to work cooperatively with Federal veterinarians and State animal health officials. Since 1921, the United States has used these private practitioners, known as accredited veterinarians, as representatives of the Federal Government. Accredited veterinarians identify and inspect animals, collect specimens, vaccinate livestock, and prepare point-of-origin health certificates for interstate movement and export. VS grants national accreditation to private veterinary practitioners only after specific training and eligibility requirements are met.

In 2005, there were more than 72,000 accredited veterinarians in the NVAP database. This number represents more than 80 percent of all U.S. veterinarians. Accredited veterinarians enhance the capability of the United States to perform competent health certifications (including inspecting, testing, and certifying the health of animals) and to effectively maintain extensive disease surveillance, including timely monitoring and reporting of changes in animal health status.



and public health. USAHA also serves as a clearinghouse for new information and methods. USAHA develops solutions to animal health issues based on science, new information and methods, and public-policy risk-benefit analysis.

USAHA works to develop consensus among varied groups for changing laws, regulations, policies, and programs. Committees are formed within USAHA dedicated to specific topics and issues. USAHA provides input to, and makes requests of, VS and other Federal agencies in the form of resolutions from the committees.

Other nationally oriented associations with important roles in U.S. animal health are

- The National Institute for Animal Agriculture, which functions as a forum for building consensus and advancing solutions for animal agriculture and provides continuing education and communication linkages for animal agriculture professionals;
- The American Veterinary Medical Association, which advances veterinary medicine and its role in public health, biological science, and agriculture and serves as an advocate for the veterinary profession by presenting views to government, academia, agriculture, and other concerned publics;
- The AAVLD, which works to establish uniform diagnostic techniques as well as to develop and improve them, to coordinate activities of diagnostic laboratories, and to disseminate animal disease diagnostic information.
- The Animal Agriculture Coalition, which is an alliance of livestock, poultry, and aquaculture trade associations and the veterinary and scientific communities, all of which monitor and influence animal health, the environment, food safety, research, and education issues; and
- The National Association of State Departments of Agriculture, which represents the State and U.S. Territory departments of agriculture in the development, implementation, and communication of public policy and programs related to the agriculture industry.

Working With Other Nations' Animal Health Infrastructures

The United States is a signatory country of the WTO and is obligated to comply with the WTO's Agreement on the Application of Sanitary and Phytosanitary Standards (SPS Agreement). The SPS Agreement's main intent is to facilitate trade while recognizing the right of countries to protect the life and health of humans, animals, and plants. To prevent the use of SPS measures as unjustified trade

barriers, the SPS Agreement dictates that all protective measures be scientifically based and not unnecessarily restrictive.

The WTO assigned standards-setting authority to the OIE for international trade-related animal-health issues, to the International Plant Protection Convention (IPPC) for planthealth issues, and to the Codex Alimentarius Commission of the United Nations for food safety.

For more than 25 years, VS has reported to OIE data from State officials, veterinary journals, diagnostic test results, and disease surveillance programs and, since 1998, data from the National Animal Health Reporting System (NAHRS). NAHRS is a joint effort of USAHA, AAVLD, and APHIS. NAHRS assimilates data from chief State animal health officials on the presence of confirmed OIE-reportable diseases in specific commercial livestock, poultry, and aquaculture species in the United States. This information is used by the United States and OIE member countries to

- Improve livestock and public-health strategies,
- Prioritize animal-health programs and research activities,
- Strengthen border security,
- Provide a basis for trade negotiations, and
- Certify point-of-origin health status of exported animals, poultry, and related products.

USDA agencies (including APHIS, the Foreign Agricultural Service, and FSIS) regularly send representatives to negotiate animal-health issues in bilateral, regional (such as the North America Free Trade Agreement), and multilateral forums, including the WTO. These representatives also work in dozens of specialized animal-health and food-safety committees under the OIE, IPPC, and Codex Alimentarius. Working together, U.S. specialists promote sound science, transparent rulemaking, and effective monitoring to reduce the risk of exposure to animal disease, while at the same time promoting fair and safe trade.

Animal-health officials from Canada, Mexico, and the United States have created the North American Animal Health Committee, which meets regularly to discuss common animal health issues. Similarly, U.S. animal-health officials meet regularly with their Australian, New Zealand, and Canadian counterparts in the Quadrilateral Animal Health Committee.

Appendixes

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Appendix 4: Animal Health Contacts in the United States



USDA National Animal Health Policy and Programs

Dr. Jere Dick, Associate Deputy Administrator 4700 River Rd., Unit 33 Riverdale, MD 20737–1231 Phone: (301) 734–5034

Fax: (301) 734–8818

OIE Delegate

Dr. Peter Fernandez
Minister, Regional Director
Europe, Middle East, Africa
United States Mission to the European Union
Boulevard du Regent, 27
1000 Brussels, Belgium
Phane: (32, 2)508, 2762

Phone: (32-2)508-2762 Fax: (32-2)511-0918

International Standards Team

Dr. Michael David, Director 4700 River Rd., Unit 33 Riverdale, MD 20737–1231 Phone: (301) 734–5324 Fax: (301) 734–8818

National Veterinary Services Laboratories

Dr. Elizabeth Lautner, Director 1800 Dayton Rd. P.O. Box 844 Ames, IA 50010

Phone: (515) 663-7301 Fax: (515) 663-7397

Center for Veterinary Biologics

Dr. Richard Hill, Director 510 South 17th St., Suite 104 Ames, IA 50010

Phone: (515) 232–5785 Fax: (515) 232–7120

Centers for Epidemiology and Animal Health

Directo

2150 Centre Ave., Bldg. B, MS 2W3 Fort Collins. CO 80526–8117

Phone: (970) 494–7200 Fax: (970) 472–2668

United States Animal Health Association

Dr. Bret Marsh Indiana State Board of Animal Health 800 Beachway Drive, Suite 50 Indianapolis, IN 46224

Phone: (317) 227–0300 Fax: (317) 227–0330

USDA-APHIS Eastern Region

Dr. Jack Shere, Regional Director Venture II Building, Centennial Campus North Carolina State University 920 Main Campus Dr., Suite 200 Raleigh, NC 27606

Phone: (919) 855–7250 Fax: (919) 855–7295

USDA-APHIS Western Region

Regional Director 2150 Centre Ave., Bldg. B, MS 3E13 Fort Collins, CO 80526–8117

Phone: (970) 494-7400 Fax: (970) 494-7355

USDA Area Veterinarians-in-Charge

Alabama

Dr. O. W. Hester Phone: (334) 223-7141

Alaska

Dr. Gary L. Brickler Phone: (360) 753–9430

Arizona

Dr. Hortentia Harris Phone: (480) 491–1002

Arkansas Vacant

Phone: (501) 224-9515

California Dr. Kevin Varner

Phone: (916) 857–6170

Colorado

Dr. Roger Perkins Phone: (303) 231–5385

Connecticut
Dr. William G. Smith
(508) 865–1421

Delaware and District of Columbia

Dr. Steven N. Finch Phone: (410) 349–9708

Florida

Dr. Robert E. Southall Phone: (352) 333–3120

Georgia

Dr. Edgardo Arza Phone: (770) 922–7860

Hawaii

Dr. Gary L. Brickler Phone: (360) 753–9430

Idaho

Dr. Cynthia Gaborick Phone: (208) 378–5631

Illinois

Dr. Lennis Knight Phone: (217) 241–6689 Indiana

Dr. Francisco Collazo–Mattei Phone: (317) 290–3300

Iowa

Dr. Kevin L. Petersburg Phone: (515) 284–4140

Kansas

Dr. David F. Vogt Phone: (785) 235–2365

Kentucky

Dr. Kathleen Burda Phone: (502) 227–9651

Louisiana

Dr. Joel Goldman Phone: (225) 389–0436

Maine

Dr. William G. Smith (508) 865–1421

Maryland

Dr. Steven N. Finch Phone: (410) 349–9708

Massachusetts
Dr. William G. Smith
Phone: (508) 865–1421

Michigan

Dr. Reed Macarty Phone: (517) 324–5290

Minnesota

Dr. Michael L. Stine Phone: (651) 290–3691

Mississippi

Dr. Charles P. Nettles Phone: (601) 965–4307

Missouri

Dr. David Hopson Phone: (573) 636–3116

Montana

Dr. Paul Sciglibaglio Phone: (406) 449–2220

Nebraska Dr. Kathleen Akin Phone: (402) 434–2300 Nevada

Dr. Kevin Varner Phone: (916) 857–6170

New Hampshire Dr. William G. Smith Phone: (508) 865–1421

New Jersey Dr. Jonathan Zack Phone: (609) 259–8387

New Mexico

Dr. Michael T. Greenlee Phone: (505) 761–3160

New York

Dr. Roxanne Mullaney Phone: (518) 869–9007

North Carolina Dr. Eric Coleman

North Dakota
Dr. Larry A. Schuler
Phone: (701) 250–4210

Phone: (919) 855-7700

Ohio

Dr. Susan Skorupski Phone: (614) 469–5602

Oklahoma
Dr. Burke Healey
Phone: (405) 427–9413

Oregon

Dr. Don Herriott Phone: (503) 399–5871

Pennsylvania Dr. Gary Ross

Phone: (717) 782-3442

Puerto Rico

Dr. Miguel A. Borri-Diaz Phone: (787) 766-6050

Rhode Island Dr. William G. Smith (508) 865–1421

South Carolina Dr. Delorias Lenard Phone: (803) 788–1919 South Dakota Dr. Lynn A. Tesar Phone: (605) 224–6186

Tennessee

Dr. Allen M. Knowles Phone: (615) 781–5310

Texas

Dr. Paul O. Ugstad Phone: (512) 916–5551

Utah

Dr. Robert A. DeCarolis Phone: (801) 524–5010

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Dr. William G. Smith Phone: (508) 865–1421

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Dr. Terry L. Taylor Phone: (804) 771–2774

Washington Dr. Gary L. Brickler Phone: (360) 753–9430

West Virginia Dr. Susan Skorupski Phone: (614) 469–5602

Wisconsin
Dr. Thomas Varty
Phone: (608) 270–4000

Wyoming

Dr. Bret A. Combs Phone: (307) 432–7960

Appendix 5: Key U.S. Animal Health Web Sites



Agricultural Marketing Service http://www.ams.usda.gov

Agricultural Research Service http://www.ars.usda.gov

American Association of Bovine Practitioners http://www.aabp.org

American Association of Equine Practitioners http://www.aaep.org

American Association of Swine Veterinarians http://www.aasp.org

American Sheep Industry Association http://www.sheepusa.org

American Veterinary Medical Association http://www.avma.org

Animal and Plant Health Inspection Service http://www.aphis.usda.gov

Centers for Disease Control and Prevention http://www.cdc.gov

Centers for Epidemiology and Animal Health http://www.aphis.usda.gov/vs/ceah

Center for Veterinary Biologics http://www.aphis.usda.gov/vs/cvb

Code of Federal Regulations http://www.gpoaccess.gov/nara

Commodity Credit Corporation http://www.fsa.usda.gov/ccc

Economic Research Service http://www.ers.usda.gov

Environmental Protection Agency http://www.epa.gov

Exotic Wildlife Association
http://www.exoticwildlifeassociation.com

Federal Emergency Management Agency http://www.fema.gov

Federal Register http://www.archives.gov/federal_register

Food Animal Residue Avoidance Databank http://www.farad.org

Food Safety and Inspection Service http://www.fsis.usda.gov

Foreign Agricultural Service http://www.fas.usda.gov

Grain Inspection, Packers and Stockyards Administration http://www.gipsa.usda.gov

Holstein Association USA, Inc. http://www.holsteinusa.com

International Organization for Standardization http://www.iso.ch/iso/en/ISOOnline.openerpage

National Agricultural Statistics Service http://www.usda.gov/nass

National Animal Health Emergency Management System http://www.usaha.org/NAHEMS National Cattlemen's Beef Association http://www.beef.org

National Center for Animal Health Surveillance http://www.aphis.usda.gov/vs/ceah/ncahs

National Center for Import and Export http://www.aphis.usda.gov/vs/ncie

National Marine Fisheries Service http://www.nmfs.noaa.gov

National Pork Producers Council http://www.nppc.org

National Poultry Improvement Plan http://www.aphis.usda.gov/vs/npip

National Veterinary Services Laboratories http://www.aphis.usda.gov/vs/nvsl

North American Deer Farmers Association http://www.nadefa.org

North American Elk Breeders Association http://www.naelk.org

Plant Protection and Quarantine http://www.aphis.usda.gov/ppq

United States Animal Health Association http://www.usaha.org

U.S. Department of Agriculture http://www.usda.gov

U.S. Department of Defense http://www.defenselink.mil

U.S. Department of Health and Human Services http://www.hhs.gov

U.S. Department of Homeland Security http://www.dhs.gov/dhspublic

U.S. Fish and Wildlife Service http://www.fws.gov

U.S. Food and Drug Administration http://www.fda.gov

Veterinary Services http://www.aphis.usda.gov/vs

World Animal Health Organization http://www.oie.int

World Trade Organization http://www.wto.org

Appendix 6: Acronyms and Abbreviations



AAVLD	American Association of Veterinary Laboratory Diagnosticians	CVB	Center for Veterinary Biologics
	Laboratory Diagnosticians	CWD	Chronic wasting disease
AEC	Area Emergency Coordinator	eCVI	Electronic certificate of veterinary
AHT	Animal Health Technician	ecvi	inspection
AI	Avian influenza	EHV	Equine herpesvirus
AMS	Agricultural Marketing Service	ELISA	Enzyme-linked immunosorbent
APHIS	Animal and Plant Health Inspection		assay
	Service	EMD	Emergency Management and
AVIC	Area Veterinarian-in-Charge		Diagnostics
		EMS	Emergency Management System
BMST	Brucellosis milk surveillance test	END	Exotic Newcastle disease
BSE	Bovine spongiform encephalopathy	END	Exotic Newcastie disease
BTV	Bluetongue virus	EPA	Environmental Protection Agency
	•	eVAP	Electronic Veterinary Accreditation Program
CAHFSE	Collaboration on Animal Health and		
	Food Safety Epidemiology		Emerging veterinary event
CBP	Customs and Border Protection	e V e	,
CEAH	Centers for Epidemiology and	FAD	Foreign animal disease
	Animal Health	FADDL	Foreign Animal Disease Diagnostic
CEI	Center for Emerging Issues		Laboratory
		FAS	Foreign Agricultural Service
cELISA	Competitive enzyme-linked	FDA	Food and Drug Administration
	immunosorbent assay	FDA	Food and Didg Administration
CFR	U.S. Code of Federal Regulations	FMD	Foot-and-mouth disease
CNS	Central nervous system	FSIS	Food Safety and Inspection Service
CSF	Classical swine fever	FWS	U.S. Fish and Wildlife Service
CSREES	Cooperative State Research, Education, and Extension Service	HPAI	High-pathogenicity avian influenza

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ICS	Interagency Coordination staff	OIE	World Organization for Animal Health Polymerase chain reaction	
IREGS	International Regulation Retrieval System	PCR		
IS	International Services	PRV	Pseudorabies virus	
ISA	Infectious salmon anemia	RESI Regionalization Evaluation Services—Import		
JSA	Joint Subcommittee on Agriculture	nece	Regulatory Scrapie Slaughter	
LBMS	Live-bird market system	RSSS	Surveillance	
LPAI	Low-pathogenicity avian influenza	SFCP Scrapie Flock Certification Program		
MAP	Mycobacterium avium paratuberculosis	SPS	Sanitary and Phytosanitary	
MCI	Market Cattle Identification	ТВ	TB Tuberculosis	
NAAHP	National Aquatic Animal Health Plan	TBT Tropical bont tick		
NAHEMS	National Animal Health Emergency Management System	TSE	Transmissible spongiform encephalopathy	
NAHLN	National Animal Health Laboratory	UM&R	Uniform methods and rules	
	Network	USAHA	HA United States Animal Health Association	
NAHMS	National Animal Health Monitoring System	USDA	U.S. Department of Agriculture	
NAHRS	National Animal Health Reporting System	USTCP	U.S. Trichinae Certification Program	
NAHSS	National Animal Health Surveillance	VBJDCP	Voluntary Bovine Johne's Disease Control Program	
	System	VMO	Veterinary Medical Officer	
NAIS	National Animal Identification System	VS	Veterinary Services	
NASS	National Agricultural Statistics Service	WTO	World Trade Organization	
NCAHS	National Center for Animal Health Surveillance			
NCIE	National Center for Import and Export			
NOAA	National Oceanic and Atmospheric Administration			
NPIP	National Poultry Improvement Plan			
NSU	National Surveillance Unit			
NVAP	National Veterinary Accreditation Program			
NVS	National Veterinary Stockpile			
NVSL	National Veterinary Services Laboratories			