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Upcoming Events

Kansas Dairy Tour • June 12 Details on page 2.

Oklahoma

4-H Dairy Quiz Bowl • May 31 1:30 p.m. Ag Hall Oklahoma State University

Field Days and Judging Clinics Details on page 3.



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DAIRY RESEARCH & EXTENSION NEWS

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Foot and Mouth Disease Facts

Mike Brouk and John Smith Kansas State University

The recent foot and mouth disease (FMD) outbreak in Europe has increased the biosecurity awareness of the United States dairy industry. Questions concerning FMD and its control are on the minds of many producers. Service people visiting dairies have increased the use of disposable boots and coveralls. Some companies have required personnel to wash boots and car tires at the entrance and exit of a farm. Many producers have limited access to animals to reduce the risk of FMD. As a result of the many questions and concerns about the disease, the following article was developed using resources available from USDA.

Disease Characteristics

Foot and mouth disease is a viral disease of cattle, sheep, swine, deer, goats and other cloven-hooved animals. It is severe and highly communicable. In cattle, sheep, swine and deer, infection rates are generally 100 percent of the animals exposed. Currently, seven different types of FMD and many subtypes of the virus have been identified. Vaccines exist but immunity to one type does not provide protection for other types. Therefore to provide protection, vaccines must be specific for the FMD type infecting the animals. Animals generally do not die as a result of the disease, however, milk production and weight gain are not recovered and the animals are generally debilitated. It is not considered a threat to humans.

Clinical signs

Clinical signs of the disease include fever and blister-like lesions and erosions. These are present on the tongue, lips, mouth, teats and between the hooves of infected animals as indicated by the name of the disease. Clinical signs of the disease may appear after an incubation period of only 1 to 8 days. However, the incubation period can be longer for sheep and goats, and the disease may go undetected. Animals affected by the virus exhibit a marked increase in body temperature that generally decreases 2-3 days later. Vesicles rupture and discharge a clear or cloudy fluid leaving the surrounding tissue ragged and loose. The discharge from the mouth generally appears as a sticky, foamy, stringy saliva. Feed intake is dramatically reduced due to the pain caused by the lesions of the tongue and mouth. Milk production and growth are greatly reduced. Animals often exhibit lameness and are reluctant to move. Several other diseases have similar clinical signs and laboratory tests are necessary to determine if FMD is present.

Transmission

The disease is easily transmitted and will survive in the environment for up to one month depending upon temperature and other conditions. Because of its ease of transmission and threat to U.S. agriculture, research and diagnostic work with FMD is restricted to a single facility located on an island off the eastern U.S. coast. Obviously, animal-to-animal contact will easily spread the disease. Soil and manure contaminated with FMD on

Continued from page 1

shoes, tires, equipment, clothing, etc. can spread the disease to non-infected animals. The virus can survive in the human nasal passage for up to 28 hours resulting in possible transmission to animals. People who have been abroad in areas where FMD exists should avoid contact with animals for a minimum of five days after returning to the United States. All clothing including shoes should be washed and disinfected prior to returning to the United States. It is also spread through feeding raw or improperly cooked garbage containing FMD virus. In addition, animals may contract the disease from feeds, water, semen, hides or biologics contaminated with the virus. Even the wind can spread the disease to adjoining farms.

Occurrence of FMD

Many may have the impression that before the recent outbreak of FMD in Europe, the disease was not a threat to U.S. agriculture. While North America, Central America, Australia, New Zealand, Chile, and some European countries were considered free of FMD, it existed daily in Africa, South America, Asia and other countries. The United States has been free of FMD since 1929. Many regulations, inspectors, and scientists have worked together to keep the disease out of our borders. While the recent European outbreak has increased awareness of FMD, daily controls have been in place for many years to maintain the FMD-free status of the United States.

Preventing the Spread of the FMD to the U.S.

The United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) has been very active in developing precautionary measures that have been effective to this date in preventing a FMD outbreak in the United States. Officials have restricted the importation of live ruminants and swine as well as their products from European Union member states. This regulation had already been in effect for ruminants due to bovine spongiform encephalopathy (BSE). Additional inspectors and dog teams have been placed at points of entry into the United States to assure that all passengers, luggage, cargo and mail are adequately checked and prohibited products confiscated and destroyed. In addition, APHIS has communicated with veterinarians, U.S. Customs, U.S. Postal Service, shipping companies and the media as to the dangers of FMD. Private veterinarians are encouraged to contact APHIS if suspicious lesions are found on livestock and reports are investigated immediately by one of the 450 nationwide foreign animal disease diagnosticians. To this date, many reports have been received and investigated. No positive cases have been identified.

Preventing FMD on Your Farm

If all regulations are followed, your farm should be safe from the FMD virus. In England, the start of the outbreak was likely the result of people avoiding several regulations that would have prevented the outbreak. Since FMD is not currently in the U.S., the greatest threat is possible contamination via people or items that have been in contact with the FMD virus. Travelers coming from areas where FMD is present should not have contact with livestock for a minimum of 5 days, and all clothing and shoes should be washed and disinfected. Regulations concerning the importation of animals and animal products including semen and embryos should be observed. Even the military has strict regulations concerning the return of equipment and personnel from areas affected by FMD.

What to Do if Signs of FMD Are Observed

If you observe any of the symptoms of FMD, contact your veterinarian immediately and keep traffic to an absolute minimum until it can be determined if FMD is present. This is a serious disease, and it will not just go away. Trying to hide its presence will only result in a greater spread of the disease. A FMD response plan has been developed by APHIS and would be implemented immediately if a positive case of FMD were identified in the United States.

Additional Information

USDA, APHIS Veterinary Services Emergency Programs 4700 River Road, Unit 41 Riverdale, Maryland 20737-1231 Telephone (301) 734-8073 Fax: (301) 734-7817

APHIS Emergency Operations Center Telephone (800) 601-9327 e-mail: *emoc@aphis.usda.gov* Web site: *http://www.aphis.usda.gov*

Kansas Dairy Tour June 12, 2001

K-State Research and Extension

10 a.m. Whitehill's La-Par Dairy, Latham, Kan.

Topics: Calf and Heifer Raising. The Whitehill's have recently added calf and heifer rearing facilities that have resulted in marked improvement in their heifer program. Family members and K-State extension specialists will discuss hutches, calf grouping and facilities.

Directions: Latham – 5 miles south and 1/2 mile west. Cambridge – 11 miles north and 1/2 mile west. Atlanta – 7 miles east, 2 miles north and 1/2 mile west.

Noon Carrol Campbell Dairy, Winfield, Kan.

The Campbells recently added a 2-row freestall barn with sand and manure solids settling basins.

Lunch RESERVATIONS REQUIRED

Topics: Manure Collection, Flushing and Sand Separation, Joe Harner; Udder Health, Mike Brouk; Cow Cooling, John Smith.

Directions: Intersection of 77 and 160 in Winfield Take 160 east to College St. Turn north on College St. and follow through town. Farm is located on the left just past the state facilities.

2:30 p.m. Adjourn

For lunch reservations, contact Tamie Redding by **Friday June 8** at 785-532-1280, FAX 785-532-5681 or e-mail tredding@oznet.ksu.edu

Heart of America Dairy Herd Improvement Summary					
	Quartiles			V	
	1	2	3	4	Herd
Avrshire					
Rolling Herd Average	18,387	15,335	13,697.5	11,625.5	
Summit Milk Yield 1st	60.50	29	48.50	21.5	
Summit Milk Yield 2nd	77.0	36.5	59.50	26.0	
Summit Milk Yield 3rd	85.5	0	68.5	63.0	
Summit Milk Yield Avg.	74.0	65.5	59	62.0	
SCC Average	337.50	238.0	457.0	132.0	
Days to 1st Service	81.5	0	96.5	71.0	
Days Open	177.5	131.0	170.5	129	
Projected Calving Interval	15.05	13.55	14.8	13.45	
Brown Swiss					
Rolling Herd Average	20,852	17,956	15711.1	414102.0	
Summit Milk Yield 1st	60.43	59.75	51.14	49.63	
Summit Milk Yield 2nd	79.43	71.38	66.57	63.25	
Summit Milk Yield 3rd	88.71	77.50	70.14	68.25	
Summit Milk Heid Avg.	/5./1	09.03	02.57	00.5	
SCC Average	623 71	313.63	1,148.83	346.14	
Days to 1st Service	80.0	114.88	66.57	65.50	
Days Open	189.86	176.88	165.86	214.38	
Projected Calving Interval	15.46	15.03	14.66	16.26	
Guernsev					
Rolling Herd Average	15,403	13,756.67	13,034	11,887.33	
Summit Milk Yield 1st	56.50	48.33	41.50	45.33	
Summit Milk Yield 2nd	69.0	57.33	68.0	54.0	
Summit Milk Yield 3rd	67.0	61.67	62.0	59.67	
Summit Milk Yield Avg.	63.0	55.67	59.0	52.67	
Income/Feed Cost	1044.5	1046.67	990.0	1090.50	
Days to 1st Service	470.0	230.07 94 33	58.50	119.67	
Days Open	170.0	160.33	252.50	251.0	
Projected Calving Interval	14.80	14.47	17.5	17.47	
Holstein					
Rolling Herd Average	23,207,68	320.079.7	17.902.5	14,490.9	
Summit Milk Yield 1st	73.56	65.97	60.47	51.82	
Summit Milk Yield 2nd	94.21	82.88	74.83	62.51	
Summit Milk Yield 3rd	99.64	89.28	80.27	68.1	
Summit Milk Yield Avg.	87.97	79.61	72.11	62.16	
Income/Feed Cost	1631.70	1345.39	1146.46	860.43	
SCC Average	369.86	410.68	441.51	260.80	
Days to 1st Service	94.09	96.99	89.78	203.46	
Projected Calving Interval	14.63	14.87	15.14	15.91	
Jersev	11100	11107	10111	10101	
Rolling Herd Average	17.353.75	14.831.38	8 13.702	11.996.75	
Summit Milk Yield 1st	55.38	49.13	43.13	43.25	
Summit Milk Yield 2nd	66.63	63.63	59.63	53.63	
Summit Milk Yield 3rd	73.88	65.38	57.50	53.50	
Summit Milk Yield Avg.	65.50	59.25	53.63	50.75	
Income/Feed Cost	1,588.43	1,361.38	1,167.33	825.71	
SCC Average	282.63	311.0	423.25	548.0	
Days to 1st Service	134 75	139.80	67.0 158.75	87.50	
Projected Calving Interval	134.75	139.80	14 43	13 75	
Milking Shorthorn	15.01	15.00	11.15	15.75	
Rolling Herd Average	16 620	14 849 5	14 415	11 462 5	
Summit Milk Yield 1st	50.0	55.50	58.0	50.0	
Summit Milk Yield 2nd	66.0	72.0	71.50	27.50	
Summit Milk Yield 3rd	74.0	76.0	75.50	65.0	
Summit Milk Yield Avg.	69.0	69.0	68.50	61.0	
Income/Feed Cost	—	1177.5	906.5	981.0	
SCC Average	237	251.5	221.5	252.0	
Days to 1st Service	0	41.0	29.50	38.50	
Days Open	217	225	235.5	153.50	
Projected Calving Interval	16.40	16.60	16.95	14.25	

	Location	Quality	Price (\$/ton)		
Alfalfa	Southwestern Kansas	Supreme	11100 (\$1000)		
Alfalfa	Southwestern Kansas	Premium			
Alfalfa	Southwestern Kansas	Good	_		
Alfalfa	South Central Kansas	Supreme	100-110		
Alfalfa	South Central Kansas	Premium	100		
Alfalfa	South Central Kansas	Good	_		
Alfalfa	Southeastern Kansas	Supreme	_		
Alfalfa	Southeastern Kansas	Premium	90		
Alfalfa	Southeastern Kansas	Good			
Alfalfa	Northwestern Kansas	Supreme	_		
Alfalfa	Northwestern Kansas	Premium	_		
Alfalfa	Northwestern Kansas	Good			
Alfalfa	North Central/East Kansas	Supreme	110-120		
Alfalfa	North Central/East Kansas	Premium	100-110		
Alfalfa	North Central/East Kansas	Good	_		
	Supreme = over 180 RFV (less than 27 ADF)				

Premium = 150-180 RFV (27–30 ADF)

Good = 125 - 150 RFV (30 - 32 ADF)

Source: USDA Kansas Hay Market Report, May 8, 2001.

Hay Prices—Oklahoma

	Location	Quality	Price (\$/ton)
Alfalfa	Central/Western, OK	Premium	90-100
Alfalfa	Central/Western, OK	Good	80-85
Alfalfa	Panhandle, OK	Premium	95-110
Alfalfa	Panhandle, OK	Good	90-105
a	0111 D	10 2001	

Source: Oklahoma Department of Agriculture, May 10, 2001

Feed Stuffs Prices

Location	Price (\$/ton)
Central US	320-350
	135-152
Kansas City	53-60
Kansas City	230
Kansas City	58
Kansas City	148-149
Memphis	111
Central Illinois	85-90
Texas Panhandle	150-155
Kansas City	157-164
	80
Kansas City	37-39
	Location Central US Kansas City Kansas City Kansas City Kansas City Memphis Central Illinois Texas Panhandle Kansas City Kansas City

Source: USDA Feedstuff Market Review, May 9, 2001

Field Days and Judging Clinics

Registration 9:00 a.m. Contests 10:00 a.m. Holstein Field Day: June 4, 2001 Smithex Holsteins, Arnett, OK Guernsey Field Day: June 6, 2001 Chupp's Guernsey Farm, Inola, OK Brown Swiss Field Day: June 8, 2001 Evans Agri. Center, Perkins, OK Milking Shorthorn Field Day: June 11, 2001 Marak Farm, Meeker, OK Grady Co. Dairy Judging Clinic: June 12, 2001 Fairgrounds, Chickasha, OK Jersey Field Day: June 14, 2001 : Cancelled COOPERATIVE EXTENSION SERVICE U.S. DEPARTMENT OF AGRICULTURE KANSAS STATE UNIVERSITY MANHATTAN, KANSAS 66506 OFFICIAL BUSINESS PENALTY FOR PRIVATE USE. \$300

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