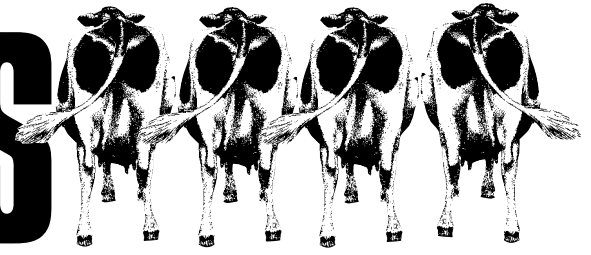


July 1997

Dairy Lines



Volume 3, Number 7

DAIRY EXTENSION SERVICE NEWS

http://www.oznet.ksu.edu/dp_ansi/dairylin.htm

Co-Editors

James R. Dunham

Extension Specialist, Dairy Science

John F. Smith

Extension Specialist, Dairy Science

Dan Waldner

Extension Specialist, Dairy Science

Contributors

Karen Schmidt

Associate Professor, Dairy Products

John Shirley

Associate Professor, Dairy Science

Jeff Stevenson

Professor, Dairy Science

Dave Sukup

Manager, Heart of America DHI

Upcoming Events

Kansas & Oklahoma

July 31–Aug 2

Sooner State Dairy Show
Stillwater, OK

August 7 & 8

Northeast Kansas Dairy
Expansion Conference
Seneca, KS



Printing sponsored by



Bovine Leukosis

by J. E. Shirley, J. F. Smith,
and G. L. Stokka

Introduction

Most foreign markets demand that heifers, semen, and embryos be free of bovine leukosis virus (BLV). This is cause for economic concern because most dairies in the United States have at least some infected cows. Isolating cattle that test positive and implementing new management techniques will reduce the exposure of seronegative cattle to seropositive cattle, thus decreasing the prevalence of BLV.

General Description

Bovine leukosis, bovine leukemia, lymphosarcoma and malignant lymphoma are all names given to a retrovirus disease caused by BLV in cattle. All of these terms refer to a neoplastic condition of tissues that affects lymph nodes and lymphocytes. True leukemias, in which the entire body is affected, are rare. BLV usually develops in organs or lymph nodes and is not expressed until adulthood. Cattle with the adult (enzootic) form of BLV are usually 4 years of age or older, but the disease can occur as early as 2 years of age. Cows with BLV may be culled because of poor milk production that, in some instances, results from poor appetite and weight loss. Poor appetite may be attributable to

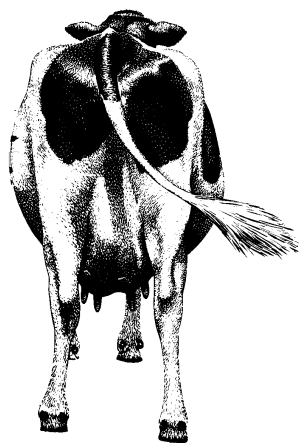
neoplastic growths in the pharyngeal area that inhibit the ability to swallow. Other signs of the disease vary. Affected cows may be diagnosed as having such problems such as traumatic reticuloperitonitis/reticulopericarditis; abomasal problems; and spinal cord lesions, especially affecting the rear legs. Abortions and infertility also may occur if the uterus or other reproductive organs are involved.

Diagnosis and Transmission

Rectal palpation is the best diagnostic tool to locate internal tumors if peripheral lymph node enlargement or exophthalmos is not observed. Using the agar gel immunodiffusion (AGID) test, BLV-infected cattle can be identified by testing sera for BLV antibodies. The virus often remains dormant in infected cows until they are stressed, such as during extremely hot or cold weather, parturition, or illness. Clinical signs are apparent in BLV-infected cattle less than 1 percent of the time. However, the number of cows condemned at slaughter plants is on the rise, suggesting that the number of infected cows is increasing nationally. A recent USDA study indicates that 89 percent of U.S. dairy herds contain BLV-positive cattle.

continued on next page

	Quartiles				Your Herd
	1	2	3	4	
Ayrshire					
Rolling Herd Average	16,419	15,000	13,737	11,765	
Peak Milk Yield 1st	60.0	58.0	49.0	45.7	
Peak Milk Yield 2nd	74.5	72.5	68.5	60.7	
Peak Milk Yield 3rd	92.0	75.5	68.5	62.3	
Peak Milk Yield Avg.	73.5	70.0	59.5	57.7	
Income/Feed Cost	987	904	795	764	
SCC Average	267	307	423	506	
Days to 1st Service	75	73	76	82	
Days Open	134	115	116	157	
Projected Calving Interval	13.6	13.0	13.0	14.4	
Brown Swiss					
Rolling Herd Average	20,729	16,229	14,734	13,721	
Peak Milk Yield 1st	69.3	55.7	55.0	50.0	
Peak Milk Yield 2nd	88.0	69.3	72.3	62.0	
Peak Milk Yield 3rd	91.3	81.0	76.3	69.0	
Peak Milk Yield Avg.	83.0	71.0	67.7	58.7	
Income/Feed Cost	1,507	1,460	988	734	
SCC Average	349	338	572	226	
Days to 1st Service	70	64	110	75	
Days Open	143	143	176	133	
Projected Calving Interval	13.9	13.9	15.0	13.6	
Holstein					
Rolling Herd Average	21,927	19,032	16,987	13,632	
Peak Milk Yield 1st	77.3	67.5	61.9	52.4	
Peak Milk Yield 2nd	95.3	84.8	76.5	64.2	
Peak Milk Yield 3rd	102.3	91.0	83.1	69.4	
Peak Milk Yield Avg.	91.2	81.4	74.7	63.8	
Income/Feed Cost	1,722	1,457	1,226	909	
SCC Average	339	375	432	514	
Days to 1st Service	86	88	86	87	
Days Open	147	150	165	178	
Projected Calving Interval	14.0	14.1	14.7	15.1	
Jersey					
Rolling Herd Average	15,582	13,445	11,737	9,237	
Peak Milk Yield 1st	53.9	47.6	39.4	35.4	
Peak Milk Yield 2nd	65.6	58.1	53.1	42.9	
Peak Milk Yield 3rd	71.9	59.1	58.1	45.4	
Peak Milk Yield Avg.	64.0	55.0	51.6	42.4	
Income/Feed Cost	1,560	1,105	1,059	511	
SCC Average	332	278	322	456	
Days to 1st Service	93	68	102	63	
Days Open	133	129	147	143	
Projected Calving Interval	13.6	13.5	14.1	13.9	



The virus is usually transmitted through contact with the blood of an infected animal. Only .0005 ml of blood is needed for the virus to infect lymphocytes of healthy animals. BLV can spread through such procedures as injections, castration, dehorning, and rectal palpation, as well as through insect vectors, such as horse flies. Balling guns, or any instrument that comes in contact with cattle, should be sanitized properly after each use. Natural-service breeding may also be a source of infection because blood may be transferred during copulation. The calves of infected dams become infected with the virus at birth about 5 percent of the time. In addition, calves fed BLV-positive milk have a greater risk of contracting the infection.

Recommendations to reduce transmission of BLV follow:

- Use only single-use disposable needles and palpation sleeves and then discard.
- Thoroughly clean all surgical instruments that come into contact with blood, such as those for dehorning, castration, extra teat removal, tagging and tattooing. Disinfect instruments between uses.
- Reduce numbers of biting insects.
- Test all cattle entering the herd for BLV, and isolate them for 30 to 60 days. Test again at the end of the isolation period.
- Implement annual testing for all animals. A 3- to 4-month testing interval is preferred but may be impractical. Use artificial insemination for all breedings.
- Do not use colostrum or milk from BLV-positive cows. Feed calves milk replacer or pasteurized milk when BLV-free milk is not available.
- Store intravenous tubing or needles in a disinfectant solution, such as chlorhexidine .
- Cold sterilize calf-delivery equipment between uses.
- Do not use BLV-positive cows as recipients for embryo transfer. If a highly valuable donor tests positive, implant the embryos in BLV-negative cows and test the offspring to be sure they are BLV-free.
- Remove extra teats, insert eartags, and dehorn while calves are housed individually.
- Use bloodless dehorning methods, such as electric, hot iron, or caustic paste.
- Clean feed and water containers regularly to reduce blood contamination.
- Perform all veterinary procedures on BLV-positive cows last .
- Milk all BLV-positive cows last.

Kansas All Breeds Junior Dairy Show

The 1997 Kansas All Breeds Junior Dairy Show is being expanded this year to include more activities for dairy youth members. The show will be August 14 to 16, 1997, at Kenwood Park in Salina.

New to the show this year will be the Dairy Quiz Bowl and a judging school. The Kansas Interbreed Dairy Cattle Council felt that the Junior Show was a good place for these activities since there were many dairy youth already attending the show and there should be less competition from school activities than at the Kansas State Fair.

The cattle need to arrive by 8:00 p.m. on the 14th. This will allow entries from several surrounding counties to come after school, if school has already begun.

Fitting and Showing will begin at 9:00 a.m. on the 15th, hopefully while it is still cool. A sponsored lunch will be available to the youth members.

A judging school will be conducted at 1:00 p.m. followed by the Quiz Bowl at 3:00 p.m. The Exhibitors Banquet will be at 6:30 p.m.

The Quiz Bowl will have a Senior division made up of county teams. This competition will determine the team that will compete at the national contest. There will be an open division for members from counties that do not have a team. These members will be assigned to teams according to age. Anyone wanting to compete in a Quiz Bowl will be able to even though there may not be a team from their county.

The regular classes for the dairy show will be shown beginning at 8:00 a.m. on Saturday, August, 15. The show is usually completed and the cattle released by 2:00 p.m.

July 15-18
Commercial Agriculture Dairy Tour
University of Missouri, Columbia,
Missouri

This tour will include an opportunity for dairy producers to explore methods of how they can position the family dairy operation for the next generation. Many of the farms we will be visiting have recently undergone change in facilities and business structure to adapt to the changing dairy industry. Tour participants will also have the opportunity to exchange ideas with fellow dairy producers to gain a greater appreciation for the dairy industry. For questions, call 573-882-7848.

July 12
Kansas Jersey Field Day
Nichols Dairy, Westphalia, Kansas
Directions: Twelve miles west of Garnett on 7th Street Road, then south 1/4 mile or from US75 take Wolf Creek exit 4 miles to Garnett sign and continue on 12 miles then 1/4 mile south.

Program:
10:00 a.m. Registration
10:30 a.m. Jersey type demonstration and youth and adult judging contest
Noon Lunch—compliments of sponsors
1:00 p.m. Judging contest results and program

July 18
Kansas Holstein Field Day
Andyacres Holstein Farm, White City, Kansas
Directions: One mile north and 1/2 mile east of White City

Program:
9:00 a.m. Registration
10:00 a.m. Retail Dairy Sales
Noon Lunch—compliments of sponsors
1:00 p.m. Tour facilities
Continue program

Hay Prices*—Kansas

	Location	Quality	Price (\$/ton)
Alfalfa	Southwestern Kansas	Premium	100-110
Alfalfa	Southwestern Kansas	Good	90
Alfalfa	South Central Kansas	Premium	100-110
Alfalfa	South Central Kansas	Good	90
Alfalfa	Southeastern Kansas	Premium	100-115
Alfalfa	Southeastern Kansas	Good	90-100
Alfalfa	Northwestern Kansas	Premium	100-110
Alfalfa	Northwestern Kansas	Good	90-100
Alfalfa	North Central Kansas	Premium	100-130
Alfalfa	North Central Kansas	Good	75-100

Source: USDA Weekly Hay Report, *Week ending June, 1997*

*Premium Hay RFV = 170-200
Good Hay RFV = 150-170

Hay Prices—Oklahoma

	Location	Quality	Price (\$/ton)
Alfalfa	Central/Western, OK	Premium	100-130
Alfalfa	Central/Western, OK	Premium	90-100
Alfalfa	Panhandle, OK	Good	—
Alfalfa	Panhandle, OK	Good	80-90

Source: Oklahoma Department of Ag, *June, 1997*

Feed Stuffs Prices

	Location	Price (\$/ton)
SBM 48%	Kansas City	299-304
Cotton Seed Meal	Kansas City	209-211.50
Whole Cottonseed	Memphis	165
Meat and Bone Meal	Central United States	279-285
Blood Meal	Central United States	320
Corn Hominy	Kansas City	93-96
Corn Gluten Feed	Kansas City	90
Corn Gluten Meal 60%	Kansas City	355-360
Distillers Dried Grain	Central Illinois	110-130
Brewers Dried Grain	St. Louis	120
Wheat Middlings	Kansas City	81-84

Source: USDA Weekly Feed Stuffs Report, *Week ending May 28, 1997*

Don't Forget These Dates . . .

Department of Animal Sciences & Industry
125 Call Hall
Manhattan, Kansas 66506-1600

Nonprofit Organization
U.S. POSTAGE
PAID
Permit #525
Manhattan, Kan. 66502

Dairy Lines is jointly published for dairy producers by the Department of Animal Sciences and Industry, K-State Research and Extension, and the Department of Animal Science, Oklahoma Cooperative Extension Service.

For more information or questions, please contact 913.532.5654 (K-State) or 405.744.6058 (OSU).

The Department of Animal Sciences and Industry at Kansas State University greatly appreciates the sponsor(s) of the Dairy Lines Newsletter. These sponsorships in no way imply the Department's endorsement of the products and services offered by the sponsors. The Department welcomes inquiries from other individuals, associations and firms that may be interested in cosponsoring this publication.

KSU, County Extension Councils and U.S. Department of Agriculture Cooperating. All educational programs and materials available without discrimination on the basis of color, race, national origin, sex, age, or disability.



Dick Dunham
Extension Specialist,
Dairy Science
K-State



John Smith
Extension Specialist,
Dairy Science
K-State



Dan Waldner
Extension Specialist,
Dairy Science
Oklahoma State

Dairy Lines



DAIRY EXTENSION SERVICE NEWS
K-State Research and Extension
and Oklahoma State University

1997 Northeast Kansas Dairy Expansion Conference

Valentino's Southroom—Seneca, Kansas

August 7 & 8, 1997

Thursday, August 7

10:00 a.m. *Planning a Dairy Expansion*, John F. Smith, Extension Dairy Specialist, Kansas State University
10:40 a.m. *Financial Planning*, Terry Smith, Dairy Extension Specialist, University of Wisconsin
Noon Lunch
2:30 p.m. *Herd Health Considerations*, Gerald L. Stokka, Extension Beef Veterinarian, Kansas State University

Friday, August 8

10:00 a.m. *Hiring and Managing Employees*, Bernie Erven, Professor and Extension Specialist, The Ohio State University
Noon Lunch
2:00 p.m. *Options in Purchasing and Raising Replacement Heifers*, Mike Brouk, Commercial Ag Dairy Specialist, University of Missouri
3:00 p.m. *Waste Management Considerations in Expanding Dairies*, Joe Harner, Extension Agricultural Engineer, Kansas State University

Co-chairs

David Key, Ag Agent
K-State Research and Extension
Nemaha County
Seneca, Kansas

John F. Smith, Extension Specialist
K-State Research and Extension
Animal Sciences and Industry
Manhattan, Kansas

Hotel Information

Seneca Motel (next to Valentino's)
Highway 36 West, Seneca, KS 66538
913-336-6127
Single: \$27.53 (tax included)
Double: \$33.89 (tax included)

Starlight Motel
Highway 36 (North Street), Seneca, KS 66538
913-336-2191
Single: \$29.65
Double: \$37.05

Sponsors

Alfa Laval Agri, Kansas City, Missouri
Bern-Sabetha Veterinary Clinic, P.A., Bern, Kansas
Citizens State Bank, Seneca, Kansas
Community National Bank, Seneca, Kansas
Farmers State Bank, Sabetha, Kansas
Farmland Industries, Mulvane, Kansas
Flory-Weiss Dairy Equipment Inc., Lawrence, Kansas
Joe Mitchell Dairy Service, Inc., Seneca, Kansas
Kansas Dairy Commission, Wamego, Kansas
Eco-Lab Food & Beverage Division, Shawnee, Kansas

Mid America Dairymen, Inc., Kansas City Missouri
Protiva—A Unit of Monsanto, Chesterfield, Missouri
Purina Mills, Holton, Kansas
Blue River Feed Supply
Lortscher Agri Service
Nortonville Farmers Supply
Farmers Cooperative Association
Firth Cooperative Co.
Firth & Diller Nebraska
The Elk State Bank, Clyde, Kansas

About the Conference

The Northeast Kansas Dairy Expansion Conference is designed to aid producers who wish to construct new dairy facilities or remodel existing facilities. The goal of the conference is to provide producers with information to aid them through the expansion process. We would like to invite all dairy producers and allied industry interested in dairy expansion to attend.

Kansas State University is committed to making its services, activities, and programs accessible to all participants. If you have special requirements because of a physical, mental, learning, vision, hearing or other impairment, or a dietary restriction, please contact David Key at 913-336-2184.

Cooperative Extension Service, Manhattan, Kansas
KSU, County Extension Councils, Extension Districts and U.S. Department of Agriculture Cooperating. All educational programs and materials available without discrimination on the basis of color, race, national origin, sex, age or disability.



Registration Form—Deadline is July 25!

Northeast Area Expansion Conference

Name _____ Title _____

Farm/Business Name _____

Address _____

City _____ State _____ ZIP _____

Telephone Number _____

FAX Number _____

Number of Cows Milked _____

Registration Fee

Check the following categories; total for payment

- | | | |
|--------------------------|---|----------|
| <input type="checkbox"/> | Individual Registration Fee (includes 2 lunches, 1 copy of proceedings) | \$25 |
| <input type="checkbox"/> | Couple Registration Fee (includes 4 lunches, 1 copy of proceedings) | \$35 |
| <input type="checkbox"/> | Extra copy of proceeding(s) ____ @ \$15/each | \$ _____ |

Total Registration \$ _____

(Make checks payable to Nemaha County Ag Advisory)

Send Checks and Registration to:

David Key

K-State Research and Extension, Nemaha County Office

609 Nemaha, Suite 201

Seneca, KS 66538-1763

913-336-2184