Penn State Develops Biosecurity Evaluation, Action Plan

Extension veterinarians David R. Griswold and David R. Wolfgang, Penn State University, have developed a biosecurity plan for herd health. This plan could be useful to not only determine but also evaluate your own biosecurity risks. For more information contact a Penn State extension agent in your area.

PA Biosecurity Evaluation

General Herd Information

Owner:_____ Phone:_____

Address:_____ Fax:_____

_____ E-mail:_____

County:_____ Zip:_____

Veterinarian:_____ Phone:_____

: :_____

Nutritionist (Co.):_____ Phone:_____

Co. Agent & Other consultants:_____ Phone:_____

_____ _____ :_____

Type of operation_____ No. of adult animals_____ No. of youngstock _____

Farm history of infectious disease:_____

_____

Immunization practices

	Pre-weaned	Weaned to Breeding age	Bred heifers to Pre-fresh	Dry cows	Lactating Animals
Vaccine used When given					

Protocol for Colostrum management:_____

Protocol for feeding pre-weaned calves: (pooled milk Y /N) (milk replacer Y /N)

Describe (rate, frequency, etc.)_____

_____

Does this farm buy or sell livestock? Y or N If yes, age groups_____ _____ _____

Ave. # of animals_____ Years in the last 5 animals were purchased _____

Prepurchase testing (age group and tests)_____

How are animals delivered?_____ Quarantined Y or N if Y

Where quarantined?_____How long? _____ Monitoring tests_____

How are cull and market animals removed? _____

PA Biosecurity Area Evaluation

Biological, physical, or chemical risk factors

	Management Area ▶ / ▼ Control Point	Group Rank 5 to 1 Excellent → poor	Group Rank 5 to 1 Excellent → poor
Animals	Clean and dry-Hide and udder Ave. BCS correct for stage Animal density Separated by groups Imports and sick segregated Vaccination program in place Proper vaccine protocols		
Other animals	Rodents/birds Pets/low number/apparent health/range Other Livestock species		
Manure	Frequent removal Minimal runoff Minimal buildup on dividers Minimal buildup in stalls Movement contained		
Feed	Quality forages Fresh feed provided at least daily No manure contamination Feeding of refusals Same equipment used to feed and clean manure Cleaned between uses		
Water	Quality/tested/seasonality Quantity/adequacy in weather extremes Waterers cleaned frequently No manure contamination		
Facilities	Types of stalls Adequate space+at feed & water Clean and well lit Temperature/humidity/air quality		
Equipment	Clean Disinfected: Feces/blood/saliva Good repair/minimal cracks Allowed to dry between uses Stored in a protected area		
People	Employees understand biosecurity basics Visitors restricted/boots provided Areas of highest risk restricted		

Additional notes or comments _____

_____

_____

NYSCHAP Area Assessment Model

Johne's Disease: High Risk Factors

	Calving in pen used by sick cows Or other cows	Calving cows have dirty udders	Calves nurse cows	Feeding of pooled colostrum or milk	Contact with manure of older animals
Pre-weaned Calves					
Weaned calves					
Heifers under 1 yr.					

	Feed or water shared with adults	Cows and heifers share pastures	Manure spread on pastures and then grazed	Manure contamination of feed or water	Purchase of untested replacements
Weaned calves					
Heifers 8 mo - 18 mo					
Bred Heifers					
Adult cattle					

Salmonella: High Risk Factors

	Cows calving in pens with other or sick cows	Calving cows have dirty udders	Calves nurse cows	Feeding of unpasturized milk or colostrum	"dirty" stock hauling vehicles/used on other farms	Contact with adult manure
Pre-weaned calves						
Weaned calves						
Heifers 8 mo-18 mo						
Bred heifers						

	Feed or water shared with adults	Cows and heifers share pastures	Rodents/birds/ pets can contaminate feed with manure	Cow manure can contaminate feed or water	Purchase of untested replacements	Monitoring tests of animals with possible exposure
Weaned calves						
Heifers 8 mo-18 mo						
Bred heifers						
Adults-lactating						
Dry cows						

BVD: High Risk Factors

	Improper or no vaccination program	Purchase of untested replacements	'Dirty" Stock – hauling vehicles/other livestock areas	Direct contact between youngstock and pregnant animals	Manure/urine contamination of feed or water	Contact with aborted fetus or placentas
Calves						
Heifers						
Bred heifers						
Adults						
Dry cows						

BLV: High Risk Factors

	Poor or no biting insect control	Separate housing	Use of common needles, rectal sleeves,surgical or gouge dehorners	Feeding of colostrum from untested dams	Feeding unpasturized pooled milk	Purchase of untested replacements	No chlorination of water supply
Calves							
Heifers							
Adults							
Dry cows							

BRD: High Risk Factors

	Animals in wet or dirty conditions	Animals in poorly ventilated or drafty conditions	Direct animal to animal contact	Lack or adequate vaccination program	Herd additions are not quarantined for 2-4 wks.	Potential exposure to off farm sources such as trucks
Pre-weaned calves						
Weaned calves						
Heifers 8mo-24 mo						
Adults						

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