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## Study to Identify Causes of Abortion and Pregnancy Wastage in Horses

## Lyme Disease Study Enters Second Phase

The Chester County Lyme Disease study by University of Pennsylvania School of Veterinary Medicine researchers entered its second phase in January 1999. Between January and March Chester County residents will be contacted by phone to identify and recruit persons who have not contracted Lyme Disease during 1998. They will be asked to join the study as a control group.

The study, funded by the Centers for Disease Control, and conducted in cooperation with the Chester County Health Department (CCHD) by Dr. Paul Wileyto and Dr. Gary Smith began in July. During the first phase Chester County residents who had contracted Lyme Disease were asked to answer survey questions about recreational activities, lifestyle, employment and other potential risk factors. These surveys of cases are continuing at this time. These same survey questions now need to be answered by the control group. The researchers then will analyze both sets of answers and compare the frequency of risk factors among the case and non-case (control) groups. They will look for associations

between disease occurrence and environmental or lifestyle factors which may put people at risk.

The data will provide information about the strongest risk association. For example, hunting, fishing or camping may emerge as high risk activities, or the findings may indicate that living in a house on a densely wooded lot where deer congregate regularly may present a high risk. Once risk factors have been determined the CCHD can develop specific educational measures to address those most at risk in an effort to reduce the incidence of Lyme Disease in the county. Chester County in recent years has experienced an explosive growth in the number of Lyme Disease cases, a reportable disease.

Dr. Gary Smith is professor of population biology and epidemiology and chief of the Section of Epidemiology and Public Health at Penn's School of Veterinary Medicine. Dr. Wileyto is a research associate in the section. Both are located at New Bolton Center, the School's large animal facility in Chester County. The study received funding from the Centers for Disease Control and is conducted in cooperation with the CCHD. 🐾

## Study to identify causes of abortion and pregnancy wastage in horses

Researchers at the School received funding from the Pennsylvania Department of Agriculture for a three year study to identify the causes of abortion and pregnancy wastage in horses in Pennsylvania.

Dr. Patricia Sertich, assistant professor of reproduction, is the chief investigator. Early in 1999, horse breeders in the state will be sent a survey to determine their preventative management of broodmares and to solicit their participation in this project. Veterinarians who provide reproductive care for these breeding farms will be solicited to participate in the project and receive information and materials to properly submit diagnostic specimens for determination of the cause of pregnancy loss in any aborting mares. Owners who are willing to complete a management survey and provide properly submitted specimens will receive a complete necropsy of any aborted fetuses. The Pennsylvania Department of Agriculture grant will underwrite the cost of necropsy and diagnostic tests.

Horse breeding is a viable industry in Pennsylvania. A large amount of money, time, and effort is invested in preparing mares for breeding, getting them bred, and maintaining them throughout pregnancy and delivery. In the mare, twin pregnancy is the most common documented cause of abortion. The introduction of ultrasonography in the 1980's to examine early pregnancy in mares has permitted the development of methods to manage twins early in gestation before abortion or neonatal loss occurs. Little has changed over the last 15 years with regard to management recommendations of the late pregnant broodmare. Insufficient information is available about the control of other causes of abortion in horses. Information obtained in this study will allow recommendations to be made on how to prevent these losses and may identify new areas of research in pregnancy loss.

Interested veterinarians and horse breeders in Pennsylvania are encouraged to contact Dr. Patricia Sertich at New Bolton Center, School of Veterinary Medicine, University of Pennsylvania, 382 West Street Road, Kennett Square, PA, 19348-1692, Tel.: 610-444-5800. 🐾



Mrs. Anne F. Thorington's young homebred pair of Morgans (aged three and four) by Kennebec Count have their first outing at the 1998 Brandywine Carriage Driving Show. Mrs. Lisa Singer is the whip and Mrs. Thorington, a member of the School's Equine Committee accompanies her in the carriage. The Fifth Annual Show, which will again benefit New Bolton Center's Field Service, will be held on June 13, 1999 at Willowdale, Pennsylvania.