

Course announcement: Epidemiologic simulation modeling

Fort Collins, Colorado
January 14 - 18, 2008 or August 4 - 8, 2008

Sponsored by

Animal Population Health Institute at Colorado State University;

**United States Department of Agriculture - Animal and Plant Health Inspection Service -
Veterinary Services - Centers for Epidemiology and Animal Health**

North American Animal Disease Spread Model Development Team

Course description

Simulation modeling is an increasingly well established and essential tool for many epidemiologic investigations, including studies of population disease dynamics and evaluation of mechanisms of disease control. This course will serve as an introduction to the principles, methods, and applications of simulation models of epidemiological systems.

The course will address concepts of disease spread and control from the perspective of the modeler. These epidemiologic principles will be presented and developed in the context of disease models, beginning with simple, deterministic models of disease spread within a population. Several approaches to disease modeling, including chain binomial, Markov chain, and state transition models will be covered. Additional levels of complexity will be incorporated as stochasticity and concepts of spatial and temporal aspects of disease spread modeling are introduced. Participants will also have the opportunity to explore the economic aspects of disease control.

The course will culminate in the use of and development of parameters for a detailed stochastic, temporal, spatial simulation model of contagious disease using the *North American Animal Disease Spread Model (NAADSM)*.

Target audience

This course is intended for epidemiologists, veterinarians, graduate students, and other workers in the fields of animal health and preparedness planning. Previous experience with modeling is not required. Participants should be familiar with basic operations in Microsoft Excel (including the use of formulas, the use of relative and absolute cell references, and production of charts).

Logistics

Dates: The course will be offered January 14 - 18 2008, and again August 4 - 8 2008.

This is a 4½- day course, which will run all day Monday through Thursday and until noon on Friday. Participants should allow sufficient time for travel before Monday and after noon on Friday.

Location: USDA Centers for Epidemiology and Animal Health, Natural Resources Research Center, 2150 Centre Avenue Building B, Fort Collins, Colorado.

Cost: Participants will be responsible for the costs of their own travel, lodging, meals, and related expenses. There is no cost for course tuition or materials. A block of hotel rooms for course participants will be available for those who wish to take advantage of it.

Availability: Space is limited to approximately 20 participants.

To apply to participate: *If you are an employee of the United States Department of Agriculture,* please contact contact Dr. Kim Forde-Folle, USDA-APHIS-VS-CEAH, at Kim.N.Forde-Folle@aphis.usda.gov. *If you are not a USDA employee,* please contact course coordinator Aaron Reeves at Aaron.Reeves@colostate.edu.

Please note that these courses fill quickly: if we cannot accommodate you, we will ensure that you have high priority the next time the course is offered.

For more information

Please visit our web page at <http://www.naadsm.org/training>.