# TEACHING VETERINARY EPIDEMIOLOGY AND ECONOMICS TO DVM STUDENTS : THE APPROACH AT THE ONTARIO VETERINARY COLLEGE (OVC)

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*Currently, the material for the undergraduate epidemiology courses is presented in semesters 1 (16 lecture hrs, 6 hrs lab) and 3 (32 lecture hrs, 12 hrs lab). In semester 1, students learn the basics of understanding health in populations including measuring health status, survey and analytic study sampling procedures, screening programs for monitoring and disease detection, features of descriptive epidemiology, and aspects of herd immunity. Technically they learn to use Epi-Info[R], Statistix[R], and spreadsheet packages as aids to data storage and analysis. In semester 3, the topics covered include observational and experimental study design, rules of causal inference, control of confounding, detecting interaction, clinical epidemiology including the hypothetico-deductive diagnostic process, health economics, and disease control. Helping students integrate epidemiology with knowledge from other disciplines is very important.*

Currently, the material for the undergraduate epidemiology courses is presented in semesters 1 (16 lecture hrs, 6 hrs lab) and 3 (32 lecture hrs, 12 hrs lab) of the 8 semester DVM program. Assessment of students is via open-book examinations and, in semester 3, the grade includes an evaluation of a major term assignment. Our major objective is to help students actively learn the material in preparation for later careers in either public or private practice. Thus epidemiology and economics are seen as prerequisites to clinical practice and health management activities rather than as ends in and of themselves.

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By taking this approach to learning epidemiological methods, the students take an active part in understanding how data on spontaneous cases can be used to test hypotheses and develop inferences of value in private and public practice. Students also develop a more intuitive understanding of what the statistics mean in relation to their particular data, and facilitates their becoming wise consumers of the published literature.

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