

New and Emerging Diseases Disease Project

You are to research some new, emerging, reemerging, or “capable of emerging” infectious disease. You may choose a disease from the list of new diseases in the past decade or one from the surveillance list of the Center for Disease Control (both will be posted on the website).

The project should include information on the following topics:

Agent of infection:

Type of agent, life cycle, hosts, interactions with the hosts, adaptations to the hosts; evolution of the agent;

Epidemiology

Who does it attack, how it is spread, mode of transmission, vector(s) (if any), special populations, resistant populations

Pathology

Signs, symptoms, virulence factors, how the agent causes disease both in the organism and on the molecular level (including genes or lack of genes that contribute to virulence), rate of infection, mortality

Treatment

Drugs, none, vaccines, drug resistance

Effect/Consequences on Society

Economic, social, political, public health issues

The paper should be 3-5 pages. Alternatively, a project could be submitted in lieu of a paper. This project could be specific to your major or involve some approach you found particularly interesting. You may also investigate a subject that we have yet to cover in class. You may focus in depth on one topic listed above, but you must address **all of the topics** in some way in your project.