1023-92-469 **Daniel Maxin*** (dmaxin@math.purdue.edu), 705 N 5th apt 7, Lafayette, IN 47901, and **Fabio A. Milner**. *The influence of segregation from reproduction in the long term dynamics of persistent sexually transmitted diseases.*

We describe several two-sex population models exposed to a mild and long-lasting sexually transmitted disease. i.e. without disease-induced mortality and recovery. We modify these models to include non-reproductive groups and analyze their potential impact on the general population dynamics and of the disease in particular. The transmission of the disease is modeled through formation/separation of heterosexual couples assuming that one infected individual automatically infects his/her partner. We are interested in how the non-reproductive class may curb the growth of the infected group while keeping the healthy one at acceptable levels. A comparison with our previous results from one-sex models is also provided. (Received September 13, 2006)