1135-92-1577 **Abdul-Aziz Yakubu*** (ayakubu@howard.edu), Howard University, Mathematics Department, 2441 6th Street NW, Washington, DC 20059, and **Pauline van den Driessche**. *A discrete-time anthrax epidemic model.* Preliminary report.

A discrete-time mathematical model of anthrax (caused by Bacillus anthracis) transmission is formulated that includes live animals, infected carcasses and spores in the environment. The basic reproduction number R0 is calculated, and existence of at least one endemic equilibrium is established for R0 above the threshold value 1. In particular, if R0 <1 we prove global asymptotic stability of the disease-free equilibrium. If R0 >1 we prove the uniform persistence of the anthrax model. (Received September 23, 2017)