ANALISA KESTABILAN MODEL *SIRC* UNTUK INFLUENZA TIPE A

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Abstract. Influenza is a disease caused by virus that always changes genetically. This paper will explain the spread of influenza type A. We introduce cross-immune (C) class i.e., those that recovered after being infected by different strains of the same viral subtype in the past years. Generally, the mathematical model for the spread of influenza A has two kinds of equilibrium point: free disease equilibrium and endemic equilibrium. Furthermore, the equilibrium point of system is investigated its stability. There is no influenza in the nature if contact rate less than sum of death rate and recovery rate. Then, there is influenza in the nature if contact rate more than sum of death rate and recovery rate

Keywords: influenza, mathematical model, equilibrium point, stability