Tricia Phillips* (tphill30@vols.utk.edu), Suzanne Lenhart (slenhart@utk.edu) and Christopher Strickland (cstric12@utk.edu). A Data-Driven Approach to Modeling the Heroin and Fentanyl Epidemic. Preliminary report.

A preliminary report will be given on the formulation and analysis of a heroin/fentanyl epidemic model. This model, consisting of a system of ordinary differential equations, aims to better understand the dynamics between prescription opioid use, prescription opioid addiction, heroin/fentanyl addiction, and recovery from opioid addiction. (Received September 05, 2019)