1163-92-1274 Yanyu Xiao\* (xiaoyu@ucmail.uc.edu), POBox 210025, Cincinnati, OH 45219. Investigations of the impact of contact patterns on disease transmissions.

Contact rates play an important role in modeling the transmissions of infectious diseases. Here, we investigate the contact patterns at different locations and examine the different effects on the disease dynamics. A study case will be presented for COVID-19 transmission dynamics. (Received September 15, 2020)