

Dear congregants,

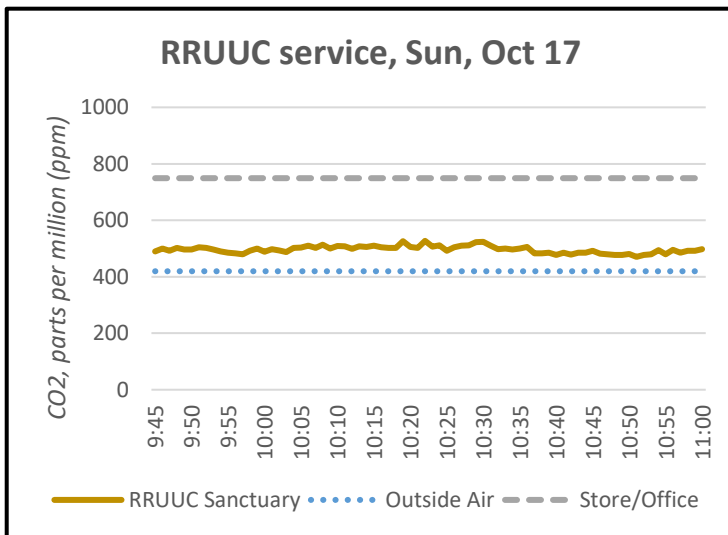
Over the past couple of months, we have been working with RRUUC staff, and with experts on the building's HVAC operation and design, to construct a detailed mathematical model of our specific Covid-19 virus infection risks. This model is based on the groundbreaking research by Prof. Jose-Luis Jimenez at CU-Boulder and Prof. Martin Bazant at MIT on airborne virus transmission. It takes into account the type and duration of events; the numbers of people in relation to room occupancy and their physical distancing; the age, vaccination status, and mask usage of participants; the effects of air ventilation and filtering; and the number of new cases currently being reported in our area. The model allows us to predict the likelihood of someone becoming infected with the virus when participating in current and future activities, including worship services, choir practices and performances, and religious education; and to assess the benefits of various mitigation strategies.

Based on this research, we have found that the risk reduction measures recommended by our Covid-19 advisory committee to date have been very effective. Even as we head into the winter months and need to close outside doors and windows, the risks of becoming infected with the Covid-19 virus at RRUUC events should be extremely low. We plan to further refine this model, to help the committee and our staff as they continue to map out a responsible plan for resuming more indoor activities.

Sincerely,

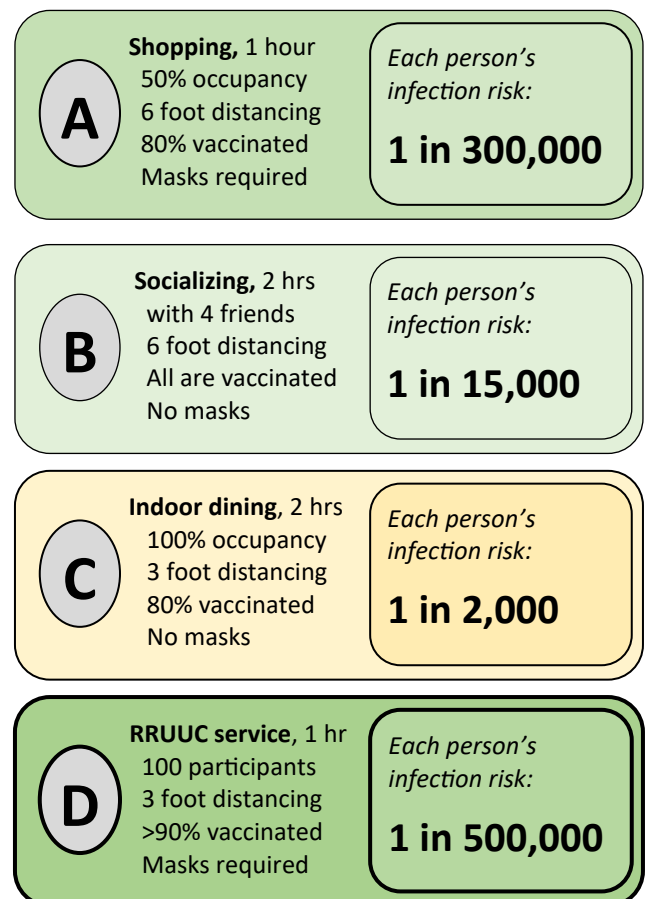
Walt Scott & Crescent Martin

Walt and Crescent have been members of RRUUC and the choir since 2014, and are the proud parents of Eli Martin-Scott, born July 2020. Walt is a PhD Economist at Fannie Mae, where he develops models of home mortgage default. He has been greatly assisted in this research by Crescent, who has a Masters of Public Health in Epidemiology, and works at the National Center for Health Statistics (CDC). These research findings are those of the authors working in their personal capacity, and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



Carbon dioxide monitor readings (above) taken in the Sanctuary during a recent Sunday service show concentrations (500 ppm) close to that of outdoor air (420 ppm). For comparison, indoor CO2 levels are typically 700 to 800 ppm in commercial buildings. Ongoing CO2 monitoring at RRUUC helps us verify that our building is well-ventilated—a critical component of infection control.

Scenarios A through D (right) show how a congregant's expected risk of infection at winter worship services would be lower than many other activities, even with 100 participants and with outside doors closed.



Based on vaccination rates and reported Covid-19 cases for Montgomery County in November 2021