

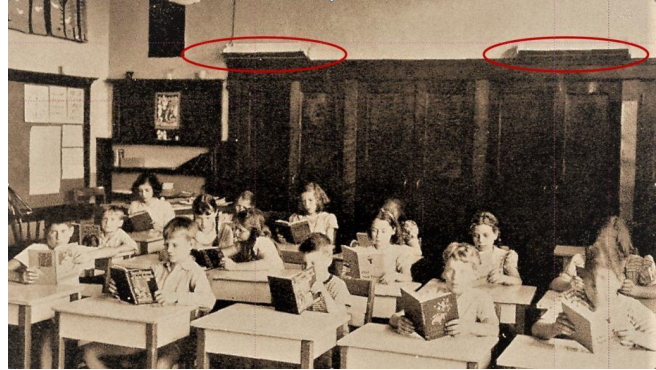
START Coalition Study (2020-Current), Oklahoma City, OK

Building a COVID-safe community is the goal of the START Coalition, an Oklahoma City-based collaboration of science, commerce and public health. Much of the group's research has centered on improving air quality with upper-room UVC germicidal lighting.

To effectively clean the air using an HVAC system alone is difficult. Experts recommend six to 10 air exchanges each hour with 100% fresh air, a solution that can be costly. Another option is adding MERV-13 filters, but that slows the rate of exchange.

Based on research, the group recommends a combination of HVAC improvements and UVC germicidal lighting — a safe form of UV lighting that kills bacteria and viruses. When deployed in combination with ventilation improvements, it can significantly reduce the presence of the virus.

The technology was pioneered in the 1930s in schools to successfully combat measles, which had been the most infectious airborne pathogen before the more recent variants of SARS-COV-2.



Upper room UV systems were installed in three churches, a synagogue, a mosque and five homeless shelters in Oklahoma City. The first test was implemented at the Salvation Army homeless shelter. Two world-recognized experts in the field of UVC lighting, Dr. Paul Jensen and Dr. Ed Nardell, both Equity Air members, came to the city to train people around light placement, quantity and installation. The average cost of installing the fixtures is \$3.60 a square foot, but can drop as low as \$2.65 or grow as high as \$9.04 depending on the space and architecture.

“These are an important layer of interventions that are going to allow us to be open safely,” said Dr. Salman Keshavjee, professor of global health and social medicine, Harvard Medical School, START Coalition. *“These methods are tried, tested, and available for businesses.”*



Figure 3 START Coalition shelter in Oklahoma showing UR UVGI fixture commissioning and deployments (Source: Equity Air member Bill Palmer of AeroMed)