Back to School: Learning If Air Purifiers Can Lower COVID-19 Transmission Risk in Closed Spaces

Four air purifiers (AP) equipped with high efficiency particulate air (HEPA) filters installed in a closed high school classroom.

Within 30 minutes, >90% reduction in aerosol concentration.

This reduction was homogeneous across the classroom.

Multiple smaller HEPA-AP units could be more advantageous than one large unit for achieving high air exchange rates and homogeneous mixing throughout the room.

In schools and other enclosed spaces, mobile air purifiers are a potential solution for reducing the risk of airborne COVID-19 virus transmission.

Measurement of aerosol particle concentration and size distribution.