# APPENDIX A

***Methods: Indoor Environmental Parameter Thresholds for Sending Symptom Surveys***

 In addition to sending the two symptom surveys to participants’ smartphone apps at pre-scheduled times, symptom surveys were also sent to participants’ smartphones when participants’ sensors indicated that the following indoor environmental parameter thresholds were met:

* Indoor temperature <22 C
* Indoor temperature 22 C – 24 C
* Indoor temperature 22 C – 26 C and indoor RH 30% - 60%
* Indoor PM2.5 < 12 $μ$g/m3
* Indoor PM2.5 < 6 $μ$g/m3
* Indoor PM2.5 > 12 $μ$g/m3
* Indoor PM2.5 > 35 $μ$g/m3

For each threshold, the survey was sent once to each participant when their nearby sensor indicated the threshold was met. If the participant completed that initial survey, it would not be re-sent when that threshold was met again. If the participant did not complete the survey sent the first time their sensor indicated a threshold was met, the survey was re-sent subsequent times the threshold was met by their nearby sensor until they completed the survey.



***Figure A1.*** *Cumulative distribution functions of hourly device average indoor RH measurements on weekdays between 9:00 and 17:00 by ventilation type, heating- or cooling-dominated conditions, and region in the buildings in the Global CogFx Study. In this analysis, heating-dominated months were defined as months when the mean daily HDDs exceeded four and the mean daily CDDs did not exceed four. Similarly, cooling-dominated months were defined as months when the mean daily CDDs exceeded four and the mean daily HDDs did not exceed four. Months when neither heating nor cooling conditions dominated were defined as months when mean daily HDDs and mean daily CDDs both did not exceed four.*