

**Figure S1** Fold changes in particle numbers and 95% confidence intervals plotted on a log scale with different aerosol generating procedures AGP and masks. A) fold change in particles, relative to quiet breathing, for high flow nasal oxygen (HFNO) at the flows shown in L.min<sup>-1</sup>. B) fold change in particles relative to quiet breathing for both non-invasive positive pressure ventilation, single and dual circuits, NIVVP-S and NIVVP-D respectively, at the Inspiratory Positive Airway Pressure (IPAP) and Expiratory Positive Airway Pressure (EPAP); shown, in cm.H<sub>2</sub>O. C) the relative fold change for the three respiratory therapies used during exercise at their highest settings, compared to exercise alone. D) the fold change for HFNO during four different respiratory activities relative to the same activity without HFNO. E) the change in particle counts of six activities with face masks, relative to the particle counts of the same activity without face masks.

