# Supplemental Figure legends

Supplemental Figure 1: Schlieren images and velocity colormaps of the exhaled airflow when nasal high-flow was used with and without the surgical mask.

# Supplemental Video legends

The video sequences demonstrate air flow captured by the schlieren imaging system. The video content is as follows:

Video 1: Spontaneous unassisted breathing.

Video 2: Breathing with nasal high-flow at 20 l/min.

Video 3: Breathing with nasal high-flow at 20 l/min while nose, mouth and the high-flow cannula is covered with a surgical mask.

Video 4: Breathing with nasal high-flow at 40 l/min.

Video 5: Breathing with nasal high-flow at 40 l/min while nose, mouth and the high-flow cannula is covered with a surgical mask.

Video 6: Breathing with nasal high-flow at 60 l/min.

Video 7: Breathing with nasal high-flow at 60 l/min while nose, mouth and the high-flow cannula is covered with a surgical mask.