Rationale for PPE Use in Healthcare

When COVID-19 started, Ontario led by adopting the precautionary principle and mandating N95 masks for healthcare workers providing care to patients with potential or actual diagnosis of COVID-19. Unfortunately, that didn't last. On March 10, 2020, Ontario's Chief Medical Officer of Health asserted power pursuant to Section 77.7 of the Health Protection and Promotion Act (HPPA) to issue Directive #1 that declared COVID-19 as droplet and contact spread and mandated using surgical masks, gloves, gowns, and eye protection for close contact with actual/probable cases and N95 masks for aerosol generating procedures.

Supply issues exist and PPE is unevenly distributed in the system. OPSEU has demanded that the province issue a directive to distribute the available equipment to the people who are at highest risk until supplies are ramped up. At best, the research on COVID-19 is unclear. Once supply ramps up, maximum protection (such as N95s and powered air-purifying respirators (PAPRs) should be the standard.

Ontario's Rationale against airborne. They Say….	Based on research (avail on request), OPSEU Says….
1. A summary of China's 75465 cases indicate no airborne spread	Depends on how you define airborne. Drops bigger than 20 micrometers settle. Drops under 5 micrometers float (and are considered "airborne"). But drops between 5 and 20 may very well float and indeed do if affected by humidity, air currents, vent design etc.
2. The absence of clusters suggests that it is not airborne	The absence of evidence is not evidence of absence. Research says that just because there are no clusters does not mean the spread is not airborne. The bus study caused China to upgrade their 6th version of guidance to include airborne
3. Active follow-up of US 10 cases say its close contact in the household	This is jumping to conclusions too soon. With 3536 cases in the US (Mar 18 2020) how can we be sure of something after studying the first 10 cases?
4. HCW who used droplet/contact PPE did not contract virus	The absence of evidence is not evidence of absence. Just because they didn't catch it doesn't mean they couldn't have.
5. The lack of transmission to people nearby on planes	Same as #2.
6. 2 studies conducting air samples on planes did not find virus	Other studies since have showed virus in air samples. This is study cherry-picking.
7. Random control trials with N95 don't prove they are better	We don't move to lower precautions because issues with using the higher precautions arise. Fit-testing and training, donning and doffing issues need to be in place for N95 to work.
8. N95 are uncomfortable and workers infect themselves	Same as #7

OPSEU position: Available PPE (N95 and PAPRs) to be distributed and used by the workers at highest risk until supplies are ramped up. At best, the research on COVID-19 is unclear. Once supply ramps up, maximum protection should be the standard.

High risk procedures include at a minimum, endotracheal intubation, including during cardio-pulmonary resuscitation, cardio-pulmonary resuscitation, open airway suctioning, bronchoscopy (diagnostic or therapeutic), surgery and autopsy, sputum induction (diagnostic or therapeutic), non-invasive positive pressure ventilation for acute respiratory failure (CPAP, BiPAP3-5), and high flow oxygen therapy. March 22, 2020