Introduction:
Percutaneous dilatational tracheotomy (PDT) and surgical tracheostomy (ST) are documented techniques for patients undergoing prolonged mechanical ventilation and difficult weaning. During CoViD-19 pandemia many patients require mechanical ventilation for several days/weeks and suffer prolonged weaning, making PDT/ST a possible option. Due to pandemia, setting issues became more complex arising several questions about safety both for operators and for patients. In this paper we describe the approach adopted in a “red zone” Italian Hospital during CoViD-19 spread.

Methods:
PDT-Dolphin BT™ Ciaglia and/or Ciaglia Blue Rhino® sets- was programmed at patient's bed inside the CoViD-ICU and patient was transferred to a surgical table and workstation was set up with essential surgical equipment. A multidisciplinary team was enrolled: an expert intensivist and ENT surgeon as 1st and 2nd operator respectively, performing PDT; another expert ENT surgeon managing airways and fibroscopy. Instrumental nurse and anesthesia nurse for airways assistance were involved, as they both were always in staff daytime to support ICU-nurse due to ICU beds surge.

Results:
To April 30th, we performed 22 procedures as described: 15 patients safely underwent PDT without any complication, in 3 patients we converted PDT to ST due to hemorrhagic complications (2) and anatomical complications (1). ST was performed in 4 patients due to PDT set shortage.

Conclusion:
This method allowed us to perform a potentially high-risk procedure safely for patient and operators, as setting was ready for rapid surgical conversion in case of need and operators were already completely equipped with individual protection devices and environmental protection devices. This approach was possible thanks to ENT surgeons increased availability due to elective operating room shut down, in addition, it saved one intensivist maintaining the highest safety profile. We believe that this model can be successfully used in other contexts similar to CoViD-19 pandemia.