

## COVID-19 in Critically Ill Children – A Narrative Review of the Literature

### INFANTS <1 YEAR MAY BE AT HIGHEST RISK FOR SEVERE ILLNESS

10% (n= 40 infants out of 379 cases) had severe disease (O2 saturation <92%), while the rate of severe or critical disease in the other age groups was lower (7.3% in 1-5, 4.2% in 6-10, 4.1% in 11-15 and 3% > 16 years)\*

### CHILDREN APPEAR TO BE RELATIVELY SPARED OF SEVERE DISEASE

94.1% of children were asymptomatic or had mild/moderate disease

0.6% OF COVID+ CHILDREN (n=13) of the 2,143 children progressed to ARDS or MODS\*

5.2% OF COVID+ CHILDREN (n=113) of the 2,143 children had respiratory distress or hypoxia\*



\* Dong Y, Mo X, Hu Y, et al. Epidemiological Characteristics of 2143 Pediatric Patients With 2019 Coronavirus Disease in China. Pediatrics, 2020 March 16

### CONCLUSIONS

Critically ill COVID-19 pediatric patients remain rare, as the majority of pediatric cases have mild symptoms. The substantial rise in international numbers necessitates early planning in consideration of a rise in cases.

Management considerations in your pediatric intensive care unit:

1. Consider using non-invasive ventilation in mild disease, if negative pressure rooms are available; be wary of aerosolisation
2. Intubate patients with minimal personnel in room, run simulations, practice donning/doffing
3. 90% of caregivers/parents may be COVID+
4. Treat cases that fit clinical picture as COVID+ until tests come back negative
5. Prepare for surge capacity in your unit
6. Use global resources (#pedsICU, #COVID19)
7. Cater to mental wellbeing of staff