

Pediatric Protocol – Extubated in CVICU 30 days – 18 years

Assess SBS, Pain Score every 2 hr and PRN

SBS > Goal

Consider non-pharmacologic interventions and consider Acetaminophen

SBS at Goal

SBS < Goal

Consider decrease in sedation infusion rate

Pain Score ≥ 4

Give Morphine PRN

Pain Score < 4

Initiate/increase Dexmedetomidine gtt or Start Lorazepam PRN

SBS < Goal

Contact Provider

Pain Score ≥ 4

Repeat additional PRN after 15 min

SBS > Goal

Give/repeat Lorazepam PRN up to 2 total doses
Additional dose given 15 min after initial dose

Pain Score ≥ 4

Notify Provider after 2nd PRN

SBS > Goal

Consider delirium – Notify Provider

CVICU Pain and Sedation Protocol References

- Smith, H. A., Besunder, J. B., Betters, K. A., Johnson, P. N., Srinivasan, V., Stormorken, A., Farrington, E., Golianu, B., Godshall, A., Acinelli, L., Almgren, C., Bailey, C. H., Boyd, J., Michael, C., Mihaela, D., deAlmeida, M. L., Jamer, F., Fenton, K., Gilliland, F., ... Berkenbosch, J. W. (2022). 2022 Society of Critical Care Medicine clinical practice guidelines on prevention and management of pain, agitation, neuromuscular blockade, and delirium in critically ill pediatric patients with consideration of the ICU environment and early mobility. *Pediatric Critical Care Medicine*, 23(2), e74-e110. <https://doi:10.1097/PCC.0000000000002873> (Level V)
- Grant, M. J. C., Schneider, J. B., Asaro, L. A., Dodson, B. L., Hall, B. A., Simone, S. L., Cowl, A. S., Munkwitz, M. M., Wypij, D., & Curley, M. A. (2016). Dexmedetomidine use in critically ill children with acute respiratory failure. *Pediatric Critical Care Medicine: A Journal of the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies*, 17(12), 1131-1141. <https://doi:10.1097/PCC.0000000000000941> (Level II)
- Curley, M. A. Q., Wypij, D., Watson, R. S., Grant, M. J. C., Asaro, L. A., Cheifetz, I. M., Dodson, B. L., Franck, L. S., Gedeit, R. G., Angus, D. C., & Matthay, M. A. (2015). Protocolized sedation vs usual care in pediatric patients mechanically ventilated for acute respiratory failure: a randomized clinical trial. *JAMA*, 313(4), 379-389. <https://doi:10.1001/jama.2014.18399> (Level II)
- Curley, M. A. Q., Harris, S. K., Fraser, K. A., Johnson, R. A., & Arnold, J. H. (2006). State Behavioral Scale (SBS): a sedation assessment instrument for infants and young children supported on mechanical ventilation. *Pediatric Critical Care Medicine*, 7(2), 107-114. <https://doi:10.1097/01.pcc.0000200955.40962.38> (Level IV)
- Crellin, D. J., Harrison, D., Santamaria, N., & Babl, F. E. (2015). Systematic review of the Face, Legs, Activity, Cry and Consolability scale for assessing pain in infants and children: is it reliable, valid, and feasible for use? *Pain*, 156(11), 2132-2151. <https://doi:10.1097/j.pain.0000000000000305> (Level I)
- Mody, K., Kaur, S., Mauer, E. A., Gerber, L. M., Greenwald, B. M., Silver, G., & Traube, C. (2018). Benzodiazepines and development of delirium in critically ill children: estimating the causal effect. *Critical Care Medicine*, 46(9), 1486-1491. <https://doi:10.1097/CCM.00000000000003194> (Level IV)
- Walker, T., & Kudchadkar, S. R. (2019). Pain and sedation management: 2018 update for the Rogers' textbook of pediatric intensive care. *Pediatric Critical Care Medicine*, 20(1), 54-61. <https://doi:10.1097/PCC.0000000000001765> (Level V)
- Pan, W., Wang, Y., Lin, L., Zhou, G., Hua, X., & Mo, L. (2016). Outcomes of dexmedetomidine treatment in pediatric patients undergoing congenital heart disease surgery: a meta-analysis. *Paediatric Anaesthesia*, 26(3), 239-248. <https://doi:10.1111/pan.12820> (Level I)