

**This large-scale surveillance study provides estimates of the risk of common HAIs in neurocritical care patients and their effect on hospitalization. Preventive strategies kept rates of infection very low, in particular CAUTI, CLABSI, and Clostridium difficile infections, and inhibited the emergence of resistant organisms” Abulhasan et al (2018).**

Abstract:

**BACKGROUND:** Healthcare-associated infections (HAIs) occur frequently in neurological intensive care units (neuro-ICUs); however, data differentiating associations with various diagnostic categories and resulting burdens are limited. This prospective cohort study reported incidence rates, pathogen distribution, and patient-related outcomes of HAIs in a neuro-ICU population from April 2010 to March 2016.

ReTweet if useful... Routes to administer medication during prolonged neonatal resuscitation [@ivteam #ivteam](https://ctt.ec/c14Ob+)

Click To Tweet

**METHODS:** Laboratory results and specific clinical indicators were used to categorize infections as per National Healthcare Safety Network nosocomial infection surveillance definitions. Patient outcomes studied included length of stay and mortality.

**RESULTS:** There were 6,033 neuro-ICU admissions resulting in 20,800 neuro-ICU days over the 6-year study period. A total of 227 HAIs were identified for a rate of 10.9/1,000 ICU days. Device-associated infections accounted for 80.6% of HAIs, with incidence rates (per 1,000 device days) being 18.4 for ventilator-associated pneumonia; 4.9 for catheter-associated urinary tract infections (CAUTIs); 4.0 for ventriculostomy-associated infections; and 0.6 for central line-associated blood stream infections (CLABSIs). Of the various diagnostic categories, subdural hematoma and intracerebral/intraventricular hemorrhage were associated with the highest pooled HAIs, with incidence rates of 21.3 and 21.1 per 1,000 neuro-ICU days, respectively. Prolonged neuro-ICU length of stay was strongly associated with all HAIs.

**CONCLUSIONS:** This large-scale surveillance study provides estimates of the risk of common HAIs in neurocritical care patients and their effect on hospitalization. Preventive strategies kept rates of infection very low, in particular CAUTI, CLABSI, and Clostridium difficile infections, and inhibited the emergence of resistant organisms.

Reference:

Wagner, M., Olischar, M., O'Reilly, M., Goeral, K., Berger, A., Cheung, P.Y. and Schmölder, G.M. (2018) Review of Routes to Administer Medication During Prolonged Neonatal Resuscitation. Pediatric Critical Care Medicine. February 5th. .

doi: 10.1097/PCC.0000000000001493.

**Thank you to our partners for supporting IVTEAM**