

## Are Nighttime Extubations More Risky?



A study presented at the American Thoracic Society (ATS) 2016 International Conference in San Francisco today has found that overnight extubation in intensive care units (ICUs) is associated with higher likelihood of being reintubated as well as higher mortality.

Lead author <u>Hayley Gershengorn</u>, MD, assistant professor at Albert Einstein College of Medicine and attending physician at <u>Montefiore Medical Center</u> in New York City pointed out that their findings are particularly relevant as U.S. ICUs increasingly have physicians present at night either in person or via telemedicine. She added: "One of the goals of this movement has been to transform ICUs into truly '24 hour operations' in which the same level of care is available throughout the day. Our results demonstrate more information is needed before we can say it is in our patients' best interest to make extubation a service we provide all of the time."

See Also: Having a Nighttime Critical Care Physician in the ICU Doesn't Improve Patient Outcomes

## **Findings**

The researchers analysed the data of 32,760 patients admitted to 76 ICUs, from the APACHE Outcomes database.

Overnight extubation was defined as occurring between 7.00pm and 06:59am. The researchers found that one fifth of the patients in the study (18.2 percent) were extubated overnight, mainly patients diagnosed with cardiovascular disease, sepsis, trauma or other neurologic disease. Fifty percent had mechanical ventilation for less than 12 hours.

Patients extubated overnight: 18.2% Mortality rate (overnight extubations): 28.2% Mortality rate (daytime extubations): 15.9%

## **Next Steps**

Dr. Gershengorn says that further prospective studies are needed to confirm these findings as well as to find out if there are some subgroups of patients for whom overnight extubation is safe and effective.

Source and image credit: American Thoracic Society

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