

Institute for Medical Microbiology and Hospital Epidemiology
Hannover Medical School
December 2, 2011

Study: Two Out Of Three Medical Students Don't Know When To Wash Hands

Only 21 percent of surveyed medical students could identify five true and two false indications of when and when not to wash their hands in the clinical setting, according to a study published in the December issue of the *American Journal of Infection Control*, the official publication of APIC - the Association for Professionals in Infection Control and Epidemiology.

Three researchers from the Institute for Medical Microbiology and Hospital Epidemiology at Hannover Medical School in Hannover, Germany collected surveys from 85 medical students in their third year of study during a lecture class that all students must pass before bedside training and contact with patients commences. Students were given seven scenarios, of which five ("before contact to a patient," "before preparation of intravenous fluids," "after removal of gloves," "after contact to the patient's bed," and "after contact to vomit") were correct hand hygiene (HH) indications. Only 33 percent of the students correctly identified all five true indications, and only 21 percent correctly identified all true and false indications.

Additionally, the students expected that their own HH compliance would be "good" while that of nurses would be lower, despite other published data that show a significantly higher rate of HH compliance among nursing students than among medical students. The surveyed students further believed that HH compliance rates would be inversely proportional to the level of training and career attainment of the physician, which confirms a previously discovered bias among medical students that is of particular concern, as these higher-level physicians are often the ones training the medical students at the bedside.

"There is no doubt that we need to improve the overall attitude toward the use of alcohol-based hand rub in hospitals," conclude the authors. "To achieve this goal, the adequate behavior of so-called 'role models' is of particular importance."