

Publication**A retrospective analysis of nosocomial viral gastrointestinal and respiratory tract infections****JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)****ID** 2833166**Author(s)** Sidler, Jan A.; Haberthuer, Cedric; Heininger, Ulrich**Author(s) at UniBasel** [Hirsch, Hans H.](#) ;**Year** 2012**Title** A retrospective analysis of nosocomial viral gastrointestinal and respiratory tract infections**Journal** Pediatric infectious disease journal**Volume** 31**Number** 12**Pages / Article-Number** 1233-1238**Keywords** nosocomial infection, respiratory tract infection, rhinovirus, rotavirus, gastroenteritis

BACKGROUND: Viral nosocomial infections (NIs) in children are common and most frequently affect the gastrointestinal or respiratory tract. Few studies are dedicated to this topic. We aimed to determine incidence and characteristics of these specific viral NIs at our hospital. **METHODS:** This was a retrospective analysis of nosocomial gastroenteritis and respiratory tract infections (RTIs) of hospitalized patients at the University Children's Hospital Basel over a 12-month period. Patients with new-onset gastroenteritis or RTI during hospitalization or a physician diagnosis of NI on discharge were included for analysis. NIs were defined by use of Centers for Disease Control and Prevention recommendations and specific agents' incubation periods. **RESULTS:** Overall, 5493 patients were hospitalized accounting for 22,251 hospital days. Forty-five (0.8%) patients acquired an NI: 15 cases of gastroenteritis (mean age, 9.9 months; range: 3-24; NI incidence: 0.7 per 1000 hospitalization days) and 30 cases of RTI (mean age, 63.7 months; range: 1-174; NI incidence: 1.3 per 1000 hospitalization days). Main agents were rotavirus (10/15 gastroenteritis, 67%) and rhinovirus (22/30 nosocomial RTI; 73%). Physicians reported 9 cases of NI, of which 2 (22%) did not fulfill the criteria for an NI, 3 were surgical site infections, 1 was a case of rotavirus gastroenteritis and 3 were RTIs by rhinovirus. **CONCLUSIONS:** Viral NIs, especially caused by rotavirus and rhinovirus, are frequent in children of all ages but underestimated if exclusively reported by physicians. Prospective studies should further investigate the role and epidemiology of rhinovirus in nosocomial RTI, ideally by use of automated information technology support.

Publisher Lippincott Williams & Wilkins**ISSN/ISBN** 0891-3668**edoc-URL** <http://edoc.unibas.ch/dok/A6338477>**Full Text on edoc** No;**Digital Object Identifier DOI** 10.1097/INF.0b013e31826781d1**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/23190745>**ISI-Number** WOS:000311794100010**Document type (ISI)** Article