

Infection Control in Pediatrics

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ABSTRACT

Infection control in Pediatric settings has become increasingly concerned with the impact of evolving sophisticated treatments and the emergence and re-emergence of various infectious diseases. Because of their dependency and immunological naivety, children are more prone than adults to contract infectious diseases and to exhibit prolonged transmission. This leads to some unique characteristics when considering the control of pediatric infections. Healthcare-associated infections (HAIs) in pediatrics can be divided into 2 groups including 1) transmission occurring from hospitalized index cases who previously acquired infection from the community (e.g., rotavirus, pertussis, and influenza) and 2) transmission truly originating in healthcare settings (e.g. device associated infections in intensive care units). Other factors influencing HAIs are the use of breastmilk, toys, type of caring, and the environment. Generally, the incidence of HAIs in children differs from that observed in adults. Viruses are the main pathogens in general pediatric units. However, bacteria are the main causes of device-associated infections, including catheter-related blood stream infections, and ventilator-associated pneumonia in neonatal and pediatric intensive care units. An increased trend of infections with multidrug-resistant bacteria has been observed in some units. Basic infection control policies including standard precautions, transmission-based precautions, isolation precautions, hand hygiene, respiratory and cough etiquette, and antibiotic control programmes are the fundamentals in pediatric infection control. Not all site-specific infection control measures recommended in adult populations apply to pediatric populations because of differences in host characteristics and the limited number of research studies in children. Pediatric units should establish their own policies and should ensure of adherence based on the ongoing researches. (*J Infect Dis Antimicrob Agents* 2008;25:153-64.)

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Received for publication: November 12, 2008.

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Keywords: Infection control measures, Pediatrics, Epidemiology, Associated factors