Aims and objectives. This study aimed to determine the occurrence of nosocomial infections (NIs), including infection rates, main infection sites, and common microorganisms. Patients included in the study were taken from a newborn intensive care unit (NICU), in a hospital in South Korea.

Background. Nosocomial infections (NIs) have been a widely recognized problem in newborn intensive care units.

Methods. A retrospective cohort study was performed by reviewing chart. The subjects were 489 neonates who were admitted to the NICU, survived longer than 72 hours, and not transferred to another unit, between Jan. 1, 1995 to Sep. 30, 1999. NIs were identified according to the NNIS definition. Data were analyzed with descriptive statistics.

Results. Cumulative incidence rate for NIs was 30.3 neonates out of 100 admissions, with a total of 44.6 infections. The incidence density was average 10.2 neonates and 15.1 infections per 1000 patient days. The most common infections were pneumonia (28%), bloodstream infection (26%), and conjunctivitis (22%). Major pathogens were Gram-positives such as Staphylococcus aureus and coagulase-negative staphylococci. The factors associated with NI was less than 1500g of birth weight, less than 32 weeks of gestational age, and less than 8 of apgar score. There's no statistical difference in discharge status between two groups, but hospital stay was longer in subjects with nosocomial infection than those without infection.

Conclusions. Although the distribution of pathogens was similar to previous reports, a high rate of nosocomial infection and in particular conjunctivitis was observed in this study that merits further evaluation.