Presence of Pathogenic Bacteria and Viruses in the Daycare Environment

The number of children in daycare centers (DCCs) is rising. This increases exposure to microorganisms and infectious diseases. Little is known about which bacteria and viruses are present in the DCC environment and where they are located. In the study described in this article, the authors set out to determine the prevalence of pathogenic bacteria and viruses and to find the most contaminated fomites in DCCs. Fifteen locations in each DCC were sampled for bacteria, respiratory viruses, and gastrointestinal viruses. The locations were in the toilet, kitchen, and playroom areas and included nursery pillows, toys, and tables, among other things. Coliform bacteria were primarily found in the toilet and kitchen areas whereas nasopharyngeal bacteria were found mostly on toys and fabric surfaces in the playroom. Respiratory viruses were omnipresent in the DCC environment, especially on the toys.

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