Epidemiologic patterns of acute diarrhea and endemic shigella infections in children in a poor periurban setting in Santiago, Chile

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To prepare a field site for evaluating preventive interventions against endemic shigellosis, the authors followed prospectively a cohort of 360 children (90 each of children aged 0-11,12-23, 24-35, and 36-47 months) in Santa Julia, a low socioeconomic area in Santiago, Chile, from November 1986 through April 1989 with twice weekly household visits for diarrheal disease; infants replaced children who reached 60 months of age. Coprocultures on 2 consecutive days from children with diarrhea and from age-matched controls within the cohort were cultured for Shigella. Bacteriologic surveillance was also maintained in the health center and children's hospital serving Santa Julia. In this community, where all households had access to potable water (68% inside) and all but 3% had access to a toilet, but where there was marked crowding, the overall incidence of diarrheal disease in the cohort was low (2.26 episodes/12 child months of observation in children aged 0-11 months and 2.09 in those age