Vibrio cholerae, etiologic agent of cholera, is transmitted to humans by ingestion of contaminated food or water. Even though serogroups O1 and O139 are the ones usually associated to epidemic cholera, isolates from other serogroups also cause gastroenteritis and extraintestinal infections. During the period 2003-2005, presence of V. cholerae in stools was investigated in children with diarrhea that seaked assistance at the Niño Jesús Hospital in Tucumán. Thirty four isolates of V. cholerae non-O1, non-O139 were recovered. We characterized the isolates studying its virulence factors by PCR, antimicrobial susceptibility patterns and genetic diversity by pulsed-field gel electrophoresis. Eight virulence patterns were obtained although no isolate was positive for the cholera toxin or the thermostable toxin. Four isolates were positive for the type three secretion system. The 17.6% of the isolates were resistant or intermediate to ampicillin and 5.9% were resistant to trimethoprim-sulfamethoxazole. By SfiI-PFGE, all isolates were genetically very diverse, as 27 different patterns were identified in 29 typeable isolates by pulsed-field gel electrophoresis. Although it has a low incidence, V. cholerae continues to be a causative agent of diarrhea in children, who are affected by a variety of circulating strains of V. cholerae non-O1, non-O139.

Keywords
V. cholerae non-O1 and non-O139 isolates, Virulence factors, PFGE