

Molecular epidemiology of human rotaviruses in Santiago, Chile

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Background. Protective immunity against rotavirus infection is directed against antigenic epitopes on the outer capsid proteins VP7 and VP4. Our aim was to characterize the epidemiology of rotavirus antigenic types over time in Santiago, Chile. **Methods.** We prospectively obtained 2097 stool samples for rotavirus testing, VP7 (G1 to G4) and VP4 (P4, P6, P8, P9) typing from children with diarrhea evaluated in emergency rooms of 5 base hospitals of Santiago. In addition 256 rotavirus-positive samples collected between 1985 and 1987 in the north health care area of Santiago were studied. **Results.** Of 995 rotavirus-positive samples obtained 825 (82%) were typable for 1 or more VP7 types. G1 represented 81% of the G-typed samples during 1993 through 1995 and 77% during 1985 through 1987, predominating in all health care areas. G2 was next most common in all 5 areas, representing 6 to 23% of typed samples, with 1 area, the Southeast concentrating a significantly higher number of G2 infections.