OCCURRENCE OF ENTEROVIRUSES IN RECREATIONAL AREAS OF OAK CREEK, ARIZONA

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Abstract

No previous studies have been conducted in the United States on the occurrence of human pathogenic enteric viruses in freshwater recreation areas. Recent epidemiological studies have shown a significant amount of gastroenteritis associated with swimming in recreational waters meeting current bacteriological standards. Evidence also suggests that the observed gastroenteritis has a viral etiology. This study was designed to determine the occurrence of enteroviruses in a heavily used recreational area during the summers of 1982 and 1983. Positively charged Zeta-plus filters were used for collection of virus samples which ranged in size from 67 to 210 gallons. Enteroviruses, including poliovirus type 1, were isolated from several samples. Coliforms and fecal coliform standards for recreational use were exceeded in several samples. It is possible that the presence of enteric viruses in this popular recreational area may be a source of enteric viral disease during the summer months.