

## عنوان مقاله:

SURVEY AND IDENTIFICATION OF ENTEROVIRUSES IN BOTTLED WATER BY PCR-RT METHOD

## محل انتشار:

نوزدهمین کنگره بین المللی میکروب شناسی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

**Background and Aim:** In view of water health and water borne diseases prevalence, Enterovirus 71 (EV71) infections, one of the major etiologic agents of hand, foot, and mouth disease, are considered as the most important public health concern in the Asia-Pacific region including Iran country. Enteroviruses are grouped into five types. The aim of this analytical study is to identify the Enterovirus contamination of bottled water in Tehran city. **Methods:** In this analytical study, random sampling is used. 22 samples are taken from different brands of bottled water of Tehran city during February to March 2018. The bottled water samples are transported in cold box and sterile condition according to procedure detailed in standard methods. Total virus numbers recovered are measured by quantitative reverse transcription-PCR (qRT-PCR). **Results:** The pH, temperature, and turbidity range of 22 samples are 7.2-7.8, 14-24 °C, and 0.4-1.3 NTU, respectively. The Enterovirus contamination range of 22 bottled water selected samples in Tehran city are 0 genome copies/L. The pH, and turbidity in all of samples present under than national standard values of bottled water. **Conclusion:** Bottled water is not sterile. This method is considered as the most performance in detecting Enterovirus in bottled water. We perform quantitative detection of Enterovirus in bottled water. The low number of samples is considered as our research limitation. It is concluded that supervision on bottled water production, transporting, and storage lead to prevent water viral contamination. Growth conditions play a critical role in the recovery of Enterovirus in bottled water.

## کلمات کلیدی:

Bottled water, Enterovirus, Genome copies, PCR-RT method, pH

## لینک ثابت مقاله در پایگاه سیویلیکا:

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