

III II I

\*

WHO :

(Polio-free)

Serum-Survey

HEP2

III II I

% / % / % /  
% / % / % /

II

III

III I

\*)  
( )

[ ]

°c

[ ]

(Acute Floppy Palsy: AFP)

/ III II I

HEP2

SPSS

II I

[ ]

III

% / % / % /

III II I

% / % / % /

Downloaded from ebnesina.ajajums.ac.ir at 12:01 +0430 on Thursday May 13th 2021

B A  
 III  
 .[ ]  
 III  
 OPV III  
 II )  
**Serum Survey** .( A  
 III I II  
 ]  
 % / III II,I  
 / % / % /  
 % / % / %  
 II I  
 .[ ]  
 VP3, VP2, VP1  
 VP1  
 III I II  
 III .[ ]

WHO

( III

1. The history of Poliovirus.2003, available from: <http://www.polio-eradication.org/>.
2. White DO, Fenner FJ. Picornaviridae. In: Medical Virology, 4<sup>th</sup> ed, USA:Academic press, 1994: 381-405.
5. Pallansch MA, Ross RP. Enteroviruses:Polioviruses, coxsakieviruses, Echoviruses and newer Enteroviruses. in : Knipe DM; Howley PM and et all eds. Field's Virology, 4<sup>th</sup> ed, USA: L.Williams & Wilkins. 2001; 1: 723-75.
6. Rocaniello VR, Picornaviridae. In: Kinpe DM; Howley PM and et all eds. Field's Virology, 4<sup>th</sup> ed, USA:L. Williams & Wilkins. 2001;l: 685-799.

## Survey of immunity level of type I, II and III poliovirus among children aged 2-3 and adolescents aged 11-15 in Yazd province

### **Abstract**

**Introduction:** One of the goals of the WHO is the worldwide eradication of poliomyelitis in the future years. Eradication programs in Iran Started in 1994 and in the year 2003 Iran was certified polio-free by the international commission for the certification of polio eradication. But our neighboring countries are not in the same state of eradication and wild Poliovirus is still circulating in some of them. Presence of Susceptible people to this viruses, can allow The circulation of wild poliovirus in our country.

Thus Serum Survey Study can help to determine high risk groups immunization Status.

**Materials and Methods:** In this study serum samples are collected from 699 children aged 2-3 and 570 adolescents aged 11-15, in urban and rural parts of Yazd province.

Presence of type specific neutralizing antibodies for poliovirus type I, II, III have been determined in  $1/_{10}$  dilution of serum samples by microneutralization test using Hep-2 cell line.

**Results:** Overall, neutralizing antibodies against Poliovirus type I, II and III were detected in 98.6%, 99.7% and 96.7% of children samples and in 90.9%, 95.4% and 85.3% of adolescent samples respectively.

In this study, the relation between Immunity level and mother education, the size of family, sex and location were evaluated.

**Conclusion:** The results of this study determined that Immunity of poliovirus type II was upper Than I and III and the immune status of poliovirus type III was lower than other two serotypes.

**Keywords:** Poliovirus, Polio-free, Microneutralization

**Khosravi M, M.S.**

Air force Be'sat hospital

**Nategh R, Ph.D.**

Tehran University of Med. Sciences

**Tabatabaiy H, Ph.D.**

Tehran University of Med. Sciences

**Khanafari A, Ph.D.**

Azad University of Med. Sciences