2001 Serological survey in the Czech Republic – poliomyelitis

Matyášová I.¹, Rainetová P.¹, Částková J.²

¹Centre of Epidemiology and Microbiology, NRL for Enteroviruses
²Centre of Epidemiology and Microbiology, Dept. of Epidemiology, National Institute of Public Health, Prague, Czech Republic

SUMMARY

Regular vaccination against poliomyelitis was started in 1960 with oral polio vaccine (OPV). Since 1992 a trivalent OPV has been administered in five doses within a nationwide vaccination campaign. The immunization coverage varies between 96.8 % and 98.2 % after 4 OPV doses, reaching 98.0 % to 98.9 % after the fifth dose. No case of indigenous poliomyelitis has been reported in the Czech Republic since the second half of 1960. In 2001, 3,230 sera were tested for the presence of antibodies against poliovirus of types 1, 2 and 3 using a virus neutralization microassay. The prevalence rates of antibodies vary between 96.0 % and 100 % for types 1 and 2 and between 95.1 % and 100 % for type 3, with the exception of the highest age group, in which the prevalence rates of antibodies against poliovirus of all three types are 92.2 %.

Key words: poliomyelitis, serological survey, seroconversion, OPV, oral poliovaccine

Address for correspondence: I. Matyášová, National Reference Laboratory for Enteroviruses, Centre for Epidemiology and Microbiology, National Institute of Public Health, Šrobárova 48, 10042 Prague 10, Czech Republic. E-mail: matyasova@szu.cz