

**CIRCULATION OF ANTIBODIES AGAINST INFLUENZA VIRUS HEMAGGLUTININS IN EPIDEMIC SEASON 2014/2015 IN POLAND.**

D. Kowalczyk, K. Szymański, K. Cieślak and L.B. Brydak

Department of Influenza Research, National Influenza Centre, National Institute of Public Health-National Institute of Hygiene, 24 Chocimska St., 00-791 Warsaw, Poland

The aim of this study was to determine the level of anti-hemagglutinin antibodies in sera of people in different age groups during the 2014/2015 epidemic season in Poland. A total of 1050 sera were tested. The level of anti-hemagglutinin antibodies was determined using haemagglutinin inhibition test (HAI). Based on the results, the incidence of circulating A/California/7/2009(H1N1)pdm09, A/Texas/50/2012(H3N2) and B/Massachusetts/2/2012 viruses could be confirmed. The level of antibodies against influenza differed between age groups. Protection rate values in all age groups were the highest for antigen B/Massachusetts/2/2012, with the highest values for the age groups:  $\geq 65$  (76.67%), 15-25 (72.67%) and 0-4 (62%), the average values for the age groups 22-64 (43.33%), 5-9 (40%) and 45-64 (39.33%), while the lowest in 10-14 years of age group (22.67%). In the epidemic season 2014/2015 in Poland only 3,57% of people were vaccinated. This is why the presented results should be interpreted as the response of the immune system of patients after infection caused by influenza virus.

**Keywords: flu, HAI, protection factor, antibodies, vaccination**