

VIROLOGICAL MONITORING OF INFLUENZA ACTIVITY AND INFLUENZA-LIKE ILLNESS IN POLAND IN THE EPIDEMIC SEASON 2011/2012

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Influenza and influenza-like illnesses are recorded in all latitudes and in every age group. In Poland, the number of cases varies between several thousand and several million depending on the epidemic season. These figures are probably an underestimate since large numbers of patients avoid consulting the doctor. To some extent, this situation is caused by the fear of financial loss resulting from being on sick leave. The influenza virus is classified into three types A, B and C according to antigenic differences in their nucleoprotein and the matrix protein. Influenza viruses are characterized by their high changeability in terms of hemagglutinin (HA) and neuraminidase (NA). The changes may be referred to as antigenic drift, which consists of point mutations in the genes encoding the HA and NA or sudden changes, referred to as antigenic shift which results from an exchange of gene segments encoding haemagglutinin and neuraminidase. Since there is an animal reservoir of influenza type A virus, re-assortment of different subtypes of this virus may occur with type A virus strains which occur solely in the human. This can result in the creation of an entirely new strain with hemagglutinin and / or neuraminidase subtypes which had not been encountered in humans previously, to which a large part of the population will not be resistant and which therefore has pandemic potential. Poland participates in the Global Influenza Surveillance Response System for influenza and influenza-like infection throughout the year and also during the epidemic season. The main objective of supervision is the continuous monitoring of the influenza situation within the country and the most rapid detection of the emergence of a new strain of influenza virus with pandemic potential.