IMPACT OF A MEASLES ELIMINATION STRATEGY ON MEASLES INCIDENCE IN MALAYSIA

TS Saraswathy¹, H Nor Zahrin², H Norhashmimi³, A Az-Ulhusna¹, S Zainah¹ and J Rohani²

¹Institute for Medical Research, Jalan Pahang, Kuala Lumpur; ²Surveillance Unit, Disease Control Division, Ministry of Health; Kuala Lumpur; ³National Public Health Laboratory, Sg Buloh, Selangor, Malaysia

Abstract. In Malaysia, the two dose measles - mumps - rubella (MMR) vaccine was introduced in the Expanded Program on Immunization in 2002. The Ministry of Health then initiated a measles elimination strategy which included enhanced case-based surveillance with laboratory testing of all suspected cases. The objective of our study was to analyse national measles laboratory data from 2004 to 2008 to study the impact of the nationwide strategy on measles case incidence. Blood samples collected from suspected measles cases during the acute stage of the illness were investigated for measles specific IgM. The estimated incidence of measles ranged from 22.3 cases (in 2004) to 2.27 cases (in 2006) per 100,000 population. During this time, the measles vaccination coverage was above 85%. Laboratory confirmed measles cases dropped from 42.2% in 2004, when sporadic outbreaks were reported, to 3.9% in 2007. Screening for measles IgG levels in 2008 showed that 82.8% of those > 7 years old had adequate immunity. The measles control strategy appears to have been successful in reducing the incidence of measles. Continuing high vaccination coverage rates and ongoing measles surveillance are necessary to achieve our goal of measles elimination.