

## **Risk Assessment And Control Measures of Measles Epidemics in Taiwan**

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Measles is an acute, highly contagious viral disease. Since 1991 up to the present time, Taiwan has actively implemented four successive terms of "Eradication Program of Polio, Measles, Congenital Rubella Syndrome and Neonatal Tetanus." Consequently, the confirmed measles cases found in Taiwan in recent years were somewhat restrained under ten cases per year, which is apparently due to our concerted public health efforts by all involved over those years, and our goal of eradicating measles seems to be nowhere but getting closer than ever. However, we realize that we are constantly facing a fact that some of our neighboring countries, particularly Mainland China and Japan, have recently and occasionally suffered from outbreaks of measles in epidemic proportions, which posts an undeniable real threat to our people's health because those countries happen to be frequent traveling destinations of our people and the same

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can be said for their people as well. Thus there is definitely a possibility to inflict measles epidemics on us with some accidentally imported virus from those countries. In order to stay vigilant and responsive to current international measles outbreaks close by and to protect our fellow countrymen and women, Taiwan CDC has lately launched a risk assessment project for domestic incidents of measles outbreaks and looked empathetically into the vaccination policy of measles and its completion rate among our people. First of all, we do believe the best way to protect an individual from getting infected with measles is receiving measles vaccine inoculation in advance. The current vaccination policy of the health authorities and actual practice against measles in Taiwan relies on two mandatory doses of MMR vaccine (which is a combination vaccine for measles, mumps, and rubella) given to each and every child, one at the age of 12 to 15 months and the other during the first year the child attending elementary school. It has been a long process over the past years to promote this measles preventive vaccination policy and the process been divided into several stages. Now we have managed to urge all local residents born after September 1976 to take the free measles vaccine provided by the government, and the records show that the vaccination rates of both the post one year old measles shots for our fellow citizens has been maintained above 95% every time for the past few years. Therefore, in view of the preventive vaccination policy and the performances of its execution, coupled with the surveillance results of rather high positive rates of measles serum antibody in the folks, the odds of occurrence of any great scale measles epidemics in Taiwan is extremely small, but that does not mean the possibility of moderate clustering infections of measles outbreaks can be completely ruled out. To avert the measles outbreaks from happening in Taiwan, some control measures are indeed required, which should include keeping up with

the further improvement of measles prevalence surveillance, ascertaining the thoroughness of outbreak investigations, maintaining current regular measles vaccination policy and practice, completing the required relevant vaccination rate to well above 95%, and actively conducting propaganda campaigns in all possible ways to remind local people making plans to travel abroad to be vigilant and stay safe while they are away from home. That is also the key control approach of how we shall respond to the international measles epidemics whenever they happen.