

# Prevalence of maternal immunisation with seasonal influenza vaccine in Hong Kong

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## KEY MESSAGES

1. Influenza vaccination uptake is extremely low among pregnant women in Hong Kong.
2. Influenza vaccination uptake can be increased by providing more education to pregnant women about the importance of vaccination during pregnancy, informing them about current Centre for Health Protection recommendations about use of the vaccine during pregnancy, and having health care providers advise pregnant women to be vaccinated.

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In Hong Kong, seasonal influenza vaccination is recommended for all pregnant women, regardless of gestational age, to reduce the cardiopulmonary complications and hospitalisations associated with influenza infection.<sup>1</sup> The World Health Organization has identified pregnant women as the highest priority for seasonal influenza vaccination.<sup>2</sup> Concerns regarding vaccine safety during pregnancy, side effects, and possible birth defects are the major reasons pregnant women are reluctant to receive the vaccine during pregnancy.<sup>3-5</sup> It is important to further understand the barriers to vaccination uptake among this group so as to enable better pandemic planning and preparedness. This study aimed to assess the uptake rate of influenza vaccine among pregnant women and to determine the predictors of influenza vaccination.

In Hong Kong, 2846 postnatal women admitted to the obstetric unit of all eight public hospitals were recruited after giving birth during a 10-week period from April to June 2011. Data collected consisted of baseline sociodemographic data, maternal influenza status, knowledge and attitudes toward influenza vaccination during pregnancy, and maternal and infant data.

Of the 2846 women recruited, only 49 (1.7%) reported receiving the seasonal influenza vaccine during pregnancy. The most common reasons for not being vaccinated were fear of side effects that could harm the foetus or self. Vaccinated women were more likely to have a higher education level, to have more knowledge about the risks of influenza infection during pregnancy, to be aware of the vaccination recommendations, and to have received a vaccination recommendation from a health care provider. Participants in this study who were aware

of the Centre for Health Protection recommendation were three times more likely to be vaccinated and participants who were advised by their health care provider to be vaccinated were almost seven times more likely to do so.

These findings show a very low seasonal influenza vaccination uptake rate among pregnant women in Hong Kong one year after the 2009 A/H1N1 influenza pandemic. In addition, the rate of influenza vaccine uptake in this study is one of the lowest reported in the recent literature. Despite their priority status for vaccination, there appears to be little actual promotion of influenza vaccine to pregnant women in Hong Kong. Encouraging and incentivising obstetric health care providers to recommend such vaccination and the on-site provision of influenza vaccine in antenatal clinics would also help to improve vaccination uptake. Interventions to increase influenza vaccine knowledge and uptake among both health care providers and pregnant women should be a priority for future pandemic planning and seasonal influenza vaccination campaigns.

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