

# 本論文より

**Table 2 | Association between 2009 pandemic H1N1 influenza vaccination during pregnancy and pediatric health outcomes**

Outcome	2009 pH1N1 influenza vaccination during pregnancy		No 2009 pH1N1 influenza vaccination during pregnancy		Crude estimate (95% CI)	Adjusted estimate (95% CI)*
	No of events	Incidence rate (95% CI) per 1000 person years	No of events	Incidence rate (95% CI) per 1000 person years		
Immune related morbidity outcomes:						
Atopic disease:						
Asthma†	4359	30.7 (29.9 to 31.6)	10100	30.6 (30.0 to 31.1)	1.00 (0.97 to 1.04)	1.05 (1.02 to 1.09)
Infectious diseases:						
Upper respiratory tract infections‡	20132	130.6 (128.2 to 132.9)	46677	130.0 (128.4 to 131.5)	1.01 (0.98 to 1.03)	1.01 (0.98 to 1.03)
Lower respiratory tract infections‡	8102	52.5 (51.4 to 53.7)	19335	53.8 (53.1 to 54.6)	0.98 (0.94 to 1.01)	0.99 (0.95 to 1.03)
Gastrointestinal infections‡	6138	39.8 (38.9 to 40.7)	15320	42.7 (42.1 to 43.3)	0.93 (0.90 to 0.97)	0.94 (0.91 to 0.98)
Otitis media‡	10129	65.7 (64.3 to 67.1)	22732	63.3 (62.4 to 64.2)	1.04 (1.00 to 1.07)	1.03 (1.00 to 1.06)
All infections‡	44501	288.6 (284.1 to 293.2)	104064	289.7 (286.8 to 292.7)	1.00 (0.97 to 1.04)	1.01 (0.98 to 1.03)
Non-immune related morbidity outcomes:						
Neoplasm†	48	0.30 (0.29 to 0.31)	97	0.27 (0.26 to 0.28)	1.12 (0.79 to 1.59)	1.12 (0.79 to 1.59)
Sensory disorder†	42	0.27 (0.26 to 0.28)	110	0.30 (0.29 to 0.30)	0.89 (0.62 to 1.27)	0.94 (0.67 to 1.33)
Non-specific morbidity outcomes:						
Urgent and inpatient health services use‡	104043	674.7 (666.5 to 683.1)	246292	685.7 (680.2 to 691.2)	0.98 (0.97 to 1.00)	0.99 (0.98 to 1.01)
Pediatric complex chronic condition§	134	0.88 (0.85 to 0.91)	310	0.87 (0.85 to 0.89)	1.01 (0.82 to 1.23)	0.98 (0.80 to 1.20)
5 year mortality†¶	77	0.50 (0.47 to 0.53)	220	0.61 (0.59 to 0.63)	0.83 (0.63 to 1.06)	0.83 (0.64 to 1.08)

\*Adjusted using stabilized inverse probability of treatment weights.

†Number of events represents total unweighted number of children diagnosed as having outcome. Point estimates shown are hazards ratios generated using Cox proportion hazards regression model.

‡Number of events represents total unweighted number of occurrences for each outcome. Point estimates shown are incidence rate ratios generated using negative binomial regression model.

§Number of events represents total unweighted number of children diagnosed as having two or more of composite chronic conditions. Original indicator also includes categories of conditions related to prematurity and congenital or genetic defects. These have been excluded from modified indicator. Point estimates shown are risk ratios generated using log binomial regression model, restricted to infants with full 5 years of follow-up (n=101611).

¶Analysis based on number of deaths up to age of 5 years, excluding those that occurred on date of birth.

# UPTODATEより

**Pregnancy** — Based upon evidence that influenza infection is associated with excess complications and death in pregnant women, the ACIP recommends the inactivated influenza vaccination of pregnant women regardless of the stage of pregnancy and of women who might be pregnant during the influenza season [4]. Influenza vaccination in pregnant women is discussed in detail separately. (See ["Immunizations during pregnancy", section on 'Inactivated influenza vaccine'](#).)

**Rationale, efficacy, and safety** — Influenza is particularly morbid in pregnant and postpartum women, as it increases the risk of serious medical and pregnancy complications and hospitalization. Vaccination can reduce the risk of these complications and provide passive protection to the neonate. Inactivated influenza vaccines are safe for pregnant, postpartum, and breastfeeding women. Multiple studies have evaluated the safety of the [inactivated influenza vaccine](#) during pregnancy, including vaccines against the pandemic H1N1 influenza virus, and none demonstrated an increased risk of either maternal complications or adverse fetal outcomes. (See ["Seasonal influenza and pregnancy", section on 'Infant protection'](#) and ["Seasonal influenza and pregnancy", section on 'Safety'](#).)