



Govern de les Illes Balears

Conselleria de Salut

Direcció General de Salut Pública i Participació

Evidències de la vacunació antigripal a embarassades: necessitat, beneficis i seguretat

Programa de vacunacions de Salut Pública

Introducció

- ✓ La grip és una malaltia que cada any causa un **gran nombre de casos de diversa gravetat**. L'embaràs, pels canvis fisiològics que suposa (fonamentalment respiratoris, cardíacs i immunològics) afavoreix l'aparició de malaltia greu i complicacions i l'augment de la mortalitat. La grip suposa també una càrrega important de malaltia, amb altes taxes d'ingrés i complicacions, en els nins petits, especialment als menors de 6 mesos. A més té efectes negatius sobre el fetus, uns demostrats i altres encara sense evidència suficient.
- ✓ Hi ha **evidències de les beneficis** de la vacunació antigripal a embarassades tant per a les dones com per al fetus i els infants en els primers mesos de vida.
- ✓ La principal preocupació és la **seguretat**, en especial la seguretat per al fetus. L'evidència també ha demostrat que és segura tant per a la dona com per a l'embrió o el fetus i, en tot cas, els beneficis superen àmpliament els efectes adversos.
- ✓ Pel que fa als dubtes sobre si ho paga **administrar a grans grups poblacionals una vacuna amb una eficàcia vacuna (EV) "baixa"**:
 - Evita infecció i complicacions.
 - La vacunació és dirigeix majoritàriament a persones amb risc augmentat de complicacions.
 - La incidència anual de grip és tan alta que "baixes" EV (30–40%) suposen un gran nombre de casos, complicacions i ingressos evitats.

Càrrega de la malaltia

✓ Per a l'embarassada:

- Taxes d'ingrés molt superiors a no embarassades. Diferències segons: virus circulants (temporades gripals), poblacions, disseny estudis, comorbiditat, trimestre de l'embaràs.
 - En general: 5 – 18 vegades més risc
 - Augmenta en el 3er. trimestre i en presència de comorbiditat.

✓ Per al fetus:

- S'ha observat major risc d'avortaments i de prematuritat (més en el 3r. trimestre); més si hi ha pneumònia.
- Malformacions congènites, llavi leporí, tub neural: associació, no evidència clara; associat amb febre?. Metanàlisi: Defectes tub neural i hipertèrmia materna 1er.trimestre OR=1,93 IC significatiu.

✓ Per al nadó:

- Grip → Causant de les majors taxes d'hospitalització a nins menors de 6 mesos.
- Lactants amb factors de risc → 2–3 vegades més risc d'ingrés.
- Risc de complicacions, UCI → 40% més en < 6 mesos.

Beneficis

- ✓ Per a la dona:
 - ✓ Efectivitat vacunal (EV) similar a la resta de població adulta.
 - ✓ EV front a malaltia respiratòria febril (no diagnòstic de grip): 36%
- ✓ Per al fetus, **reducció de risc de:**
 - Prematuritat.
 - Baix pes gestacional: efectivitat similar a cessació tabàquica.
 - Mort fetal.
 - Avortament.
- ✓ Per al nadó:
 - IgG: pas actiu placentari 3er. tri (IgG nadó > mare), durada fins a 6 mesos; IgA: llet materna.
 - EV front a malaltia respiratòria febril (no diagnòstic de grip): 29%
 - EV a menors de 6 mesos: 91% (grip confirmada per laboratori)
 - Hospitalitzacions evitables als EEUU: 8.200 – 9.200.

Seguretat.

- ✓ Estudis de seguretat: assajos clínics, estudis observacionals, dades de fàrmacovigilància activa i passiva.
- ✓ Informació: milions de dosis administrades a països amb bons sistemes de recollida i anàlisi de dades de seguretat.
- ✓ Resultats:
 - Perfil de seguretat per a les dones: similar al de qualsevol altre adult.
 - Cap evidència de teratogenicitat o de qualsevol altre impacte negatiu en els resultats de l'embaràs.

Resultats d'alguns estudis, com a exemple

Estudi de seguretat fetal:
estudiant un possible augment del risc de prematuritat o baix pes gestacional es posa en evidència la protecció contra aquests resultats.

Table 2. Delivery and Neonatal Outcomes for the Entire Cohort

	Vaccination (n=8,864)	No Vaccination (n=76,919)	P
Estimated gestational age (wk)	39.3±1.8	39.3±2.0	.9
36 or less	460 (5)	4,612 (6)	.004
31 or less	65 (0.7)	962 (1.3)	<.001
Birth weight (g)	3,329±577	3,324±581	.43
Less than 10 th percentile	944 (11)	8,183 (11)	.9
Less than 3 rd percentile	311 (4)	2,579 (3)	.5
Greater than 90 th percentile	971 (11)	7,939 (11)	.1
Major malformations	136 (2)	1,163 (2)	.9
Stillbirth	30 (0.3)	436 (0.6)	.006
NICU admission	210 (2)	2,043 (3)	.1
Neonatal death	19 (0.2)	298 (0.4)	.01
Neonatal pneumonia	96 (1)	627 (1)	.01
Hyperbilirubinemia	305 (3)	2,694 (4)	.7

NICU, neonatal intensive care unit.
 Data are mean±standard deviation or n (%) unless otherwise specified.

Efecte de la vacunació sobre prematuritat i baix pes gestacional: els resultats de 4 de 8 estudis revisats mostren evidència significativa.

	Vaccine	Number of pregnancies (number immunised)	Unadjusted OR (95% CI)	
			For preterm birth	For small for gestational age*
Bangladesh ^{3,†}	S	340 (168)	0.72 (0.3–1.7)	0.63 (0.4–1.0)
USA ^{7,‡}	S	4168 (578)	0.27 (0.08–0.86)	0.29 (0.09–0.91)
Canada ⁸	S	9781 (1957)	0.84 (0.69–1.02)	0.75 (0.62–0.92)
Canada ⁹	P	55570 (23340)	0.91 (0.85–0.98)	0.83 (0.79–0.88)
USA ¹⁰	P	3327 (1125)	0.60 (0.46–0.79)	1.15 (0.87–1.52)
Argentina ^{11,§}	P	30448 (7293)	0.73 (0.65–0.83)	NR
Sweden ¹²	P	241073 (18844)	0.86 (0.77–0.96)	1.04 (0.92–1.17) [¶]
Canada ¹³	S	12223 (1958)	0.75 (0.60–0.93)	0.93 (0.77–1.12)
Summary	..	356930 (55263)	0.78 (0.74–0.82)	0.83 (0.79–0.87)

OR=odds ratio (vaccine vs control). S=seasonal vaccine. P=2009 H1N1 pandemic vaccine. NR=not reported. *Fetal growth restriction. †Randomised controlled trial. ‡Adjusted for several variables including exposure to influenza. §This study was excluded when calculating the summary odds ratio because of the missing information. ¶With ≤ 2 SD expected weight criterion. ||Average of reports after weighting by number of patients, excluding reference 7, which did not report number of patients.

Table 2: Effect of influenza immunisation during pregnancy on birth outcomes in eight studies with 356 930 mother-infant pairs

Major càrrega de la malaltia en embarassades i beneficis de la vacunació

	Influenza infection effect	Antenatal vaccine effect	Nature of evidence
Pregnancy ¹			
Hospitalisation	Increased 200–500%	Decreased 40–50%	Retrospective cohorts
Fetus–newborn (table 2)			
Preterm birth	Increased	Decreased 10–20%	Retrospective cohorts
Fetal growth restriction	Increased	Decreased 10–20%	Retrospective cohorts, RCT
Infant (0–6 months) ^{2,3}			
Hospitalisation/burden of influenza infection	About 1/100	Decreased 40–63%	Retrospective cohorts, RCT
Adult ^{4,5}	Long-term outcomes of fetal effects	--	Retrospective studies needed

RCT=randomised controlled trial.

Table 1: Effects of influenza infection and immunisation in pregnancy

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