



# At Home or Not at Home





# COMMITTEE OPINION

Number 669 • August 2016

(Replaces Committee Opinion Number 476, February 2011)

## Committee on Obstetric Practice

This Committee Opinion was developed by the American College of Obstetricians and Gynecologists' Committee on Obstetric Practice in collaboration with committee members Joseph R. Wax, MD, and William H. Barth Jr, MD.

This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

## Planned Home Birth

# Home Births

- **Less Interventions (episiotomy, cesarean, epidurals)**
- **More maternal hemorrhage/transfusions**
- **More adverse neonatal outcomes such as mortality, low Apgar scores, seizures and/or neurologic dysfunction**

**Table 1.** Maternal Events Associated With U.S. Planned Out-of-Hospital Births Versus Hospital Births ↔

Event	Planned Out-of-Hospital Birth (Events per 1,000 births)	Planned Hospital Birth (Events per 1,000 births)	Adjusted Odds Ratio	95% CI
Labor induction	48	304	0.11	0.09–0.12
Labor augmentation	75	263	0.21	0.19–0.24
Operative vaginal delivery	10	35	0.24	0.17–0.34
Cesarean delivery	53	247	0.18	0.16–0.22
Blood transfusion/hemorrhage	6	4	1.91	1.25–2.93
Severe perineal lacerations	9	13	0.69	0.49–0.98

Abbreviation: CI, confidence interval.

Data from Snowden JM, Tilden EL, Snyder J, Quigley B, Caughy AB, Cheng YW. Planned out-of-hospital birth and birth outcomes. *N Engl J Med* 2015;373:2642–53.

**Table 2.** Adverse Perinatal Events Associated With U.S. Planned Home Births Versus Hospital Births ↔

Event	Planned Home Birth (Events per 1,000 Births)	Hospital Birth (Events per 1,000 Births)	Odds Ratio	95% CI	
5-minute Apgar score	<7	24.2*	11.7*	2.42*	2.13–2.74*
		23 <sup>†</sup>	18 <sup>‡</sup>	1.31 <sup>†</sup>	1.04–1.66 <sup>‡</sup>
<4	3.7*	2.43*	1.87*	1.36–2.58*	
	6 <sup>‡</sup>	4 <sup>‡</sup>	1.56 <sup>‡</sup>	0.98–2.47*	
0 <sup>†</sup>	1.63	0.16	10.55	8.62–12.93	
Neonatal seizures (or serious neurologic dysfunction <sup>§</sup> )	0.58*	0.22*	3.08*	1.44–6.58*	
	0.86 <sup>‡</sup>	0.22 <sup>‡</sup>	3.80 <sup>‡</sup>	2.80–5.16 <sup>‡</sup>	
	1.3 <sup>†</sup>	0.4 <sup>†</sup>	3.60 <sup>†</sup>	1.36–9.50 <sup>†</sup>	
Perinatal mortality (fetal death and neonatal mortality <sup>¶</sup> )	3.9	1.8	2.43	1.37–4.30	

Abbreviation: CI, confidence interval.

\*Cheng YW, Snowden JM, King TL, Caughy AB. Selected perinatal outcomes associated with planned home births in the United States. *Am J Obstet Gynecol* 2013;209:325.e1–8.

<sup>†</sup>Grunebaum A, McCullough LB, Sapiro KJ, Brent RL, Levene MI, Arabin B, et al. Apgar score of 0 at 5 minutes and neonatal seizures or serious neurologic dysfunction in relation to birth setting. *Am J Obstet Gynecol* 2013;209:323.e1–5.

<sup>‡</sup>Snowden JM, Tilden EL, Snyder J, Quigley B, Caughy AB, Cheng YW. Planned out-of-hospital birth and birth outcomes. *N Engl J Med* 2015;373:2642–53.



# COMMITTEE OPINION

Number 669 • August 2016

(Replaces Committee Opinion Number 476, February 2011)

## Committee on Obstetric Practice

This Committee Opinion was developed by the American College of Obstetricians and Gynecologists' Committee on Obstetric Practice in collaboration with committee members Joseph R. Wax, MD, and William H. Barth Jr, MD.

This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

## Planned Home Birth

## Home Births

- Less Interventions (episiotomy, cesarean, epidurals)
- More maternal hemorrhage/transfusions
- More adverse neonatal outcomes such as mortality, low Apgar scores, seizures and/or neurologic dysfunction

**Included both  
planned and  
unplanned, high  
and low risk**

**Table 1.** Maternal Events Associated With U.S. Planned Out-of-Hospital Births Versus Hospital Births ↵

Event	Planned Out-of-Hospital Birth (Events per 1,000 births)	Planned Hospital Birth (Events per 1,000 births)	Adjusted Odds Ratio	95% CI
Labor induction	48	304	0.11	0.09–0.12
Labor augmentation	75	263	0.21	0.19–0.24
Operative vaginal delivery	10	35	0.24	0.17–0.34
Cesarean delivery	53	247	0.18	0.16–0.22
Blood transfusion/hemorrhage	6	4	1.91	1.25–2.93
Severe perineal lacerations	9	13	0.69	0.49–0.98

Abbreviation: CI, confidence interval.

Data from Snowden JM, Tilden EL, Snyder J, Quigley B, Caughy AB, Cheng YW. Planned out-of-hospital birth and birth outcomes. *N Engl J Med* 2015;373:2642–53.

**Table 2.** Adverse Perinatal Events Associated With U.S. Planned Home Births Versus Hospital Births ↵

Event	Planned Home Birth (Events per 1,000 Births)	Hospital Birth (Events per 1,000 Births)	Odds Ratio	95% CI	
5-minute Apgar score	<7	24.2*	11.7*	2.42*	2.13–2.74*
		23 <sup>†</sup>	18 <sup>‡</sup>	1.31 <sup>†</sup>	1.04–1.66 <sup>‡</sup>
<4	3.7*	2.43*	1.87*	1.36–2.58*	
	6 <sup>‡</sup>	4 <sup>‡</sup>	1.56 <sup>‡</sup>	0.98–2.47*	
0 <sup>†</sup>	1.63	0.16	10.55	8.62–12.93	
Neonatal seizures (or serious neurologic dysfunction <sup>§</sup> )	0.58*	0.22*	3.08*	1.44–6.58*	
	0.86 <sup>†</sup>	0.22 <sup>†</sup>	3.80 <sup>†</sup>	2.80–5.16 <sup>†</sup>	
	1.3 <sup>‡</sup>	0.4 <sup>‡</sup>	3.60 <sup>‡</sup>	1.36–9.50 <sup>‡</sup>	
Perinatal mortality (fetal death and neonatal mortality <sup>¶</sup> )	3.9	1.8	2.43	1.37–4.30	

Abbreviation: CI, confidence interval.

\*Cheng YW, Snowden JM, King TL, Caughy AB. Selected perinatal outcomes associated with planned home births in the United States. *Am J Obstet Gynecol* 2013;209:325.e1–6.


<sup>†</sup>Grunebaum A, McCullough LB, Szara KJ, Brent RL, Levene MI, Arabin B, et al. Apgar score of 0 at 5 minutes and neonatal seizures or serious neurologic dysfunction in relation to birth setting. *Am J Obstet Gynecol* 2013;209:323.e1–6.

<sup>‡</sup>Snowden JM, Tilden EL, Snyder J, Quigley B, Caughy AB, Cheng YW. Planned out-of-hospital birth and birth outcomes. *N Engl J Med* 2015;373:2642–53.

..and Prime Minister,  
how is Canada doing  
on maternity care  
integration?

# Snowden 2015

**Perinatal and maternal outcomes by planned place of birth for healthy women with low risk pregnancies: the Birthplace in England national prospective cohort study**

 OPEN ACCESS

Birthplace in England Collaborative Group

*For nulliparous women, there is some evidence that **planning birth at home** is associated with a higher risk of an adverse perinatal outcome.*



Hmmm...  
we've done  
some of our  
own studies  
lately...

Should Canada follow the US/UK  
conclusions?



# Low-risk births just as safe at home as in hospital: McMaster study

'It does provide some credibility for home as a choice of birth place,' says head researcher

By Samantha Craggs, CBC News | Posted: Dec 21, 2015 12:30 PM ET | Last Updated: Dec 22, 2015 1:06 PM ET



A McMaster University study suggests there's no increased risk of harm to a baby if the mom gives birth at home. (Shutterstock)



When a birth is low risk and a midwife helps, the chances of harm to the baby is about the same as in a hospital birth, a new study suggests.

Published in the Canadian Medical Association Journal (CMAJ), the study carried out by McMaster University researchers looked at 11,493 planned Ontario home births and an equal number of planned hospital births.

It has long been thought that home births are riskier, said Eileen Hutton, one of the researchers in the department of obstetrics and gynecology and the midwifery education program. But the study results suggest giving birth at home is a valid option.

"You'll never convert those who are the true opponents of home birth," said Hutton, co-author of the study. "But it does provide some credibility for home as a choice of birth place."

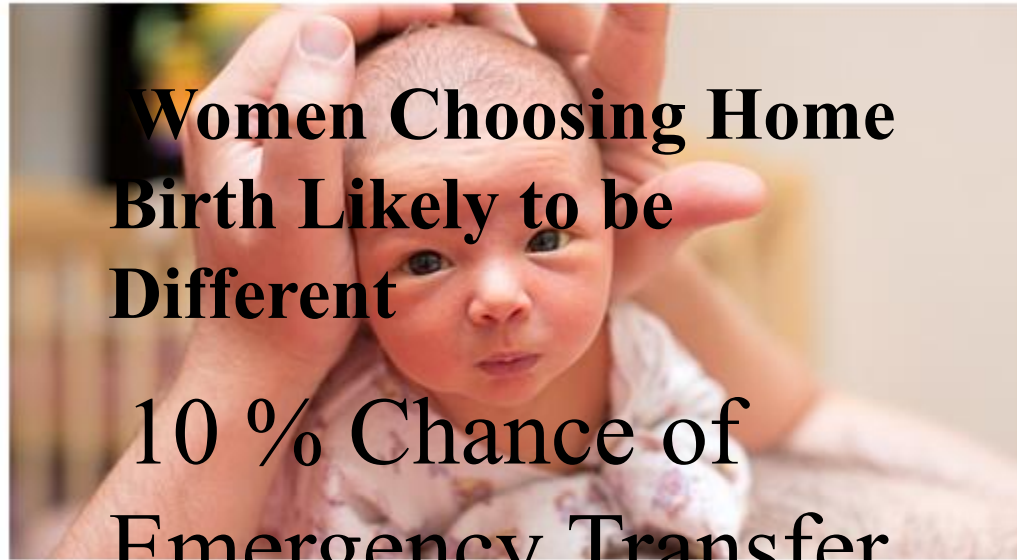
**'There's a huge stigma around home birth, but I think that's shifting.'**

- Eileen Hutton, McMaster University researcher

# Low-risk births just as safe at home as in hospital: McMaster study

'It does provide some credibility for home as a choice of birth place,' says head researcher

By Samantha Craggs, CBC News | Posted: Dec 21, 2015 12:30 PM ET | Last Updated: Dec 22, 2015 1:06 PM ET



**Women Choosing Home Birth Likely to be Different**  
**10 % Chance of Emergency Transfer**

A McMaster University study suggests there's no increased risk of harming a baby if the mom gives birth at home. (Shutterstock)



When a birth is low risk and a midwife helps, the chances of harm to the baby is about the same as in a hospital birth, a new study suggests.

Published in the Canadian Medical Association Journal (CMAJ), the study carried out by McMaster University researchers looked at 11,493 planned Ontario home births and an equal number of planned hospital births.

It has long been thought that home births are riskier, said Eileen Hutton, one of the researchers in the department of obstetrics and gynecology and the midwifery education program. But the study results suggest giving birth at home is a valid option.

"You'll never convert those who are the true opponents of home birth," said Hutton, co-author of the study. "But it does provide some credibility for home as a choice of birth place."

**'There's a huge stigma around home birth, but I think that's shifting.'**

- Eileen Hutton, McMaster University researcher

# So how should we approach situations in which choices based on comparable risks?



VBAC Risk 1:400?

- According to Allstate insurance, between 2013-2015 there was a **Collision Claims Frequency** (per 100 cars) of **6.45%** in Toronto
- If we assume that every accident is reported, and that there are approximately **1.1 million cars in Toronto**
- 
- **1.1 million x 6.45/100 cars = 70,950 collisions between 2013 and 2015. = 65 accidents per day in Toronto (approximately).**
- According to [Torontotransforms.com](http://Torontotransforms.com), on average there are **350,000 cars on the road each day.**
- So, 65 accidents/day / 350,000 cars on the road per day = **0.02% chance of getting into an accident on any given day in Toronto.**



# So how should we approach situations in which choices based on comparable risks may not be considered similarly by families?



- High quality training in obstetrics, midwifery, nursing
- Judicious use of interventions with access when needed
- Collaboration and integration across community and hospital settings tailored to population health needs
- Embedded team-based quality improvement programs

