



# WHO guideline Intrapartum care for a positive childbirth experience

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*"There has been a substantial increase over the last two decades in the application of labour practices to initiate, terminate, regulate or monitor the physiology of labour with the aim of improving outcomes for women and babies. This increasing medicalization of childbirth tends to undermine the woman's own capability to give birth and negatively impacts her childbirth experience".*

# Achtergrond



- 140 miljoen geboortes per jaar wereldwijd
- Verbeteren van de zorg rond de geboorte is meest belangrijk om maternale en perinatale sterfte te beïnvloeden (In lagelonenlanden).
- Geboortezorg niet altijd respectvol, mensenrechten worden geschaad

# Achtergrond



Aanzienlijk deel van de gezonde zwangeren ondergaat een interventie:

- Inleiden of bijstimuleren van de baring (in 2016 22,4% en 20,3%) [www.perined.nl](http://www.perined.nl)
- Vaginale kunstverlossing (8%)
- Sectio Caesarea (16%)
- Episiotomie (37,6%)

Inefficiënte of schadelijke routine interventies blijven toegepast worden:

- Amniotomie, IV toegang, antibiotica toediening bij normale baring, clysma, scheren, niet eten en drinken, baren in bed, routine CTG en routine VT

# Recommendations N= 56

Voor zwangeren met een laag risico op complicaties

- + *Care Throughout Labour and Birth*
- + *First Stage of Labour*
- + *Second Stage of Labour*
- + *Third Stage of Labour*
- + *Care of the Woman and Newborn After Birth*

03

# Methode

- WHO steering group, doel guideline, vraagstelling, supervisie
- Guideline development group
  - Expertise klinisch, research, beleidsmakers gezondheidszorgprogramma's
- Technical working group
  - Methodologen, richtlijn ontwikkelaars synthetiseren van evidence
- Peer review final guideline in 6 WHO regio's
- Meelezers: FIGO, ICM, RCOG, UNFPA, USAID

## ALL WOMEN HAVE A RIGHT TO A POSITIVE CHILDBIRTH EXPERIENCE THAT INCLUDES:



- Respect and dignity
- A companion of choice
- Clear communication by maternity staff
- Pain relief strategies
- Mobility in labour and birth position of choice



World Health Organization

# Respectvolle geboortezorg

- Privacy, waardigheid en vertrouwelijkheid zijn daarbij van groot belang.
- Effectieve communicatie , geïnformeerde keuzes, uitleg en begrip procedures.
- Continue support en een begeleider naar keuze van de vrouw.



# **LABOUR PROGRESSION AT 1 CM/HR DURING THE ACTIVE FIRST STAGE MAY BE UNREALISTIC FOR SOME**



# Wat is de normale duur van de baring?

- van de latente fase
- van de actieve fase
- van de uitdrijvingsfase
- Is er verschil tussen primiparae en multiparae?

# Definitie en duur latente fase

- The latent first stage is a period of time characterized by **painful uterine contractions** and **variable changes of the cervix**, including some degree of effacement and slower **progression of dilatation up to 5 cm for first and subsequent labours**
- *Women should be informed that a standard duration of the latent first stage has not been established and can vary widely from one woman to another*

# Definitie en duur actieve fase

- The active first stage is a period of time characterized by regular painful uterine contractions, a substantial degree of cervical effacement and **more rapid cervical dilatation from 5 cm until full dilatation for first and subsequent labours**
- *The duration of active first stage usually does not extend beyond **12 hours** in first labours, and usually does not extend beyond **10 hours** in subsequent labours.*

Table 3.16 Time to advance centimetre by centimetre in nulliparous women

N = 43.000

Cervical dilatation	No. of studies	Pooled median traverse time (hours)	95th percentiles (range, hours)	Median rate of dilatation (cm/hour)	Certainty of evidence
2–3 cm	3	5.28	7.20–15.00	0.19	Low
3–4 cm	6	2.00	4.20–17.70	0.50	High
4–5 cm	6	1.46	4.00–15.70	0.68	High
5–6 cm	6	0.92	2.50–10.70	1.09	High
6–7 cm	6	0.70	1.80–9.30	1.43	High
7–8 cm	6	0.55	1.40–6.80	1.82	High
8–9 cm	5	0.52	1.30–4.40	1.92	High
9–10 cm	5	0.49	1.00–2.60	2.04	High

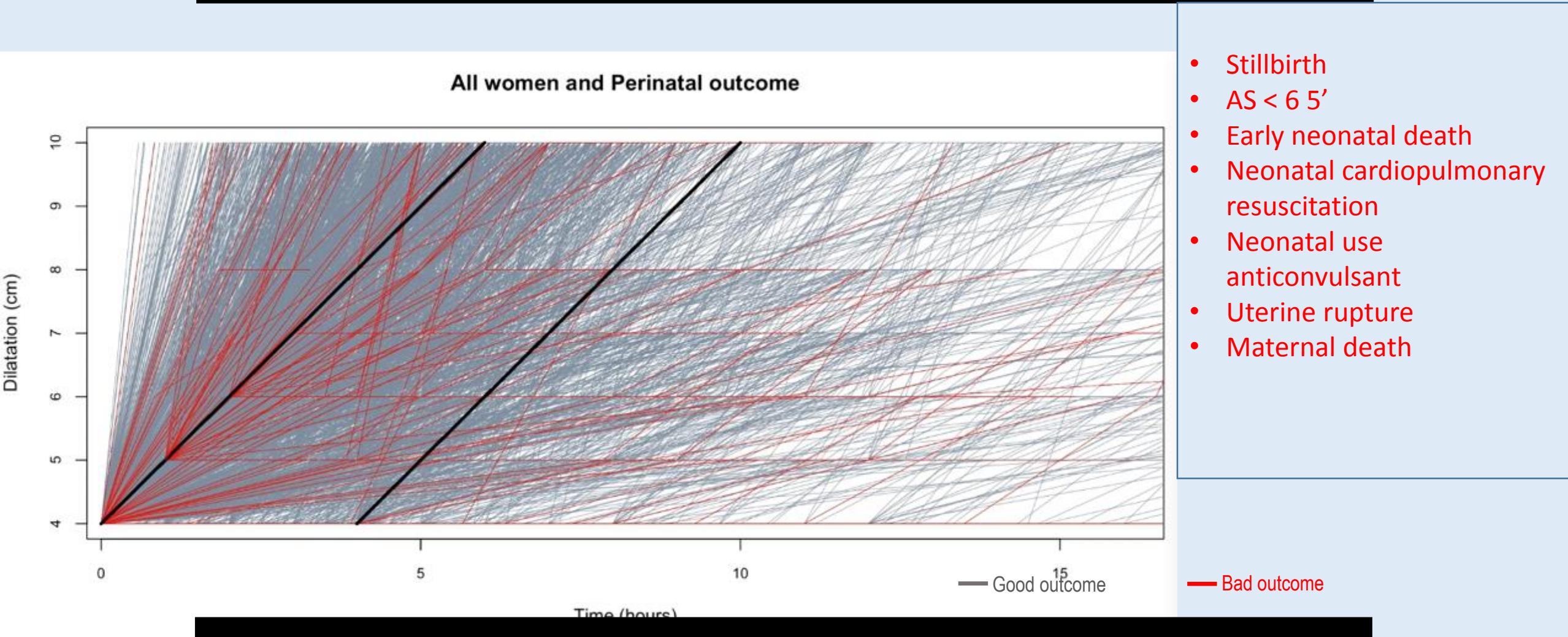
N=56.000

**Table 3.17 Time to advance centimetre by centimetre in parous women**

Cervical dilatation	Number of studies	Pooled median traverse time (hours)	95th percentiles (range, hours)	Median rate of dilatation (cm/hour)	Certainty of evidence
3 – 4 cm	1	2.38	14.18–17.85	0.42	Low
4 – 5 cm	3	1.17	3.30–8.05	0.85	High
5 – 6 cm	3	0.67	1.60–6.24	1.49	High
6 – 7 cm	3	0.44	1.20–3.67	2.27	High
7 – 8 cm	3	0.35	0.70–2.69	2.86	High
8 – 9 cm	2	0.28	0.60–1.00	3.57	High
9 – 10 cm	2	0.27	0.50–0.90	3.70	High

Oladapo OT et all. Cervical dilatation patterns of low risk women in spontaneous labour and normal birth outcome. Systematic review BJOG 2017

# LABOUR PROGRESSION PROFILES OF ≈10,000 WOMEN VERSUS ALERT LINE



SOURCE: SOUZA ET AL. BJOG 2018

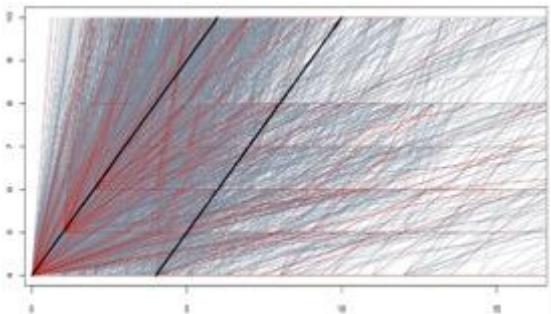
## **EVERY BIRTH IS UNIQUE**

Some labours progress quickly, others don't.  
Unnecessary medical interventions  
should be avoided if the woman  
and her baby are in good condition.



# PROGRESS OF THE FIRST STAGE OF LABOUR

*There is insufficient evidence to support the use of the partograph alert line as a classifier to detect women at risk of adverse birth outcomes.*



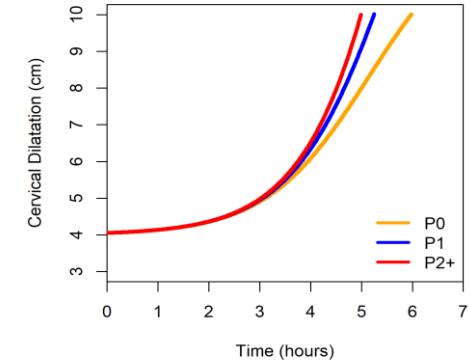
## 1 cm per hour rule inaccurate

For pregnant women with spontaneous labour onset, the cervical dilatation rate threshold of 1 cm/hour during active first stage (as depicted by the partograph alert line) is inaccurate to identify women at risk of adverse birth outcomes and is therefore not recommended for this purpose.



## < 1 cm/hour ≠ obstetric intervention

A minimum cervical dilatation rate of 1 cm/hour throughout active first stage is unrealistically fast for some women and is therefore not recommended for identification of normal labour progression. A slower than 1-cm/hour cervical dilatation rate alone should not be a routine indication for obstetric intervention.

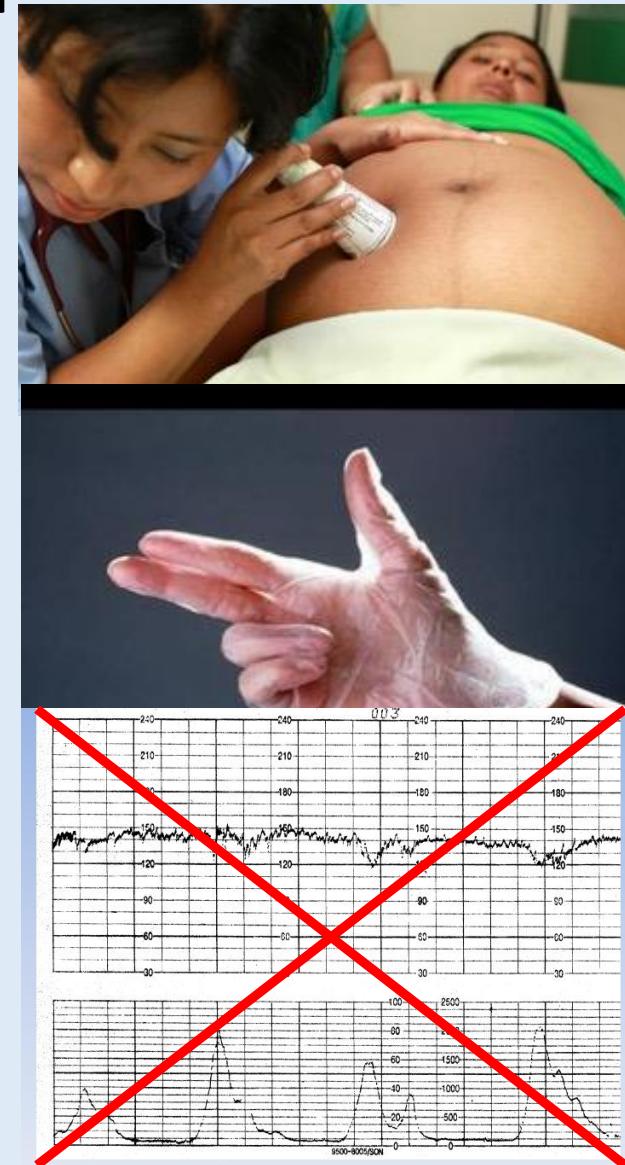


## Every birth is unique

Labour may not naturally accelerate until a cervical dilatation threshold of 5 cm is reached. Therefore the use of medical interventions to accelerate labour and birth (such as oxytocin augmentation or caesarean section) before this threshold is not recommended, provided fetal and maternal conditions are reassuring.

# Zorg in de ontsluiting foetale monitoring bij zwangeren met laag risico op complicaties

- Geen routine CTG bij opname VK
  - Verhoogt interventies en risico op SC zonder betere uitkomsten
  - Vermindert de bewegingsvrijheid
- Wel bewegingsvrijheid zoals lopen en houdingswisselingen
- VT met interval van **4 uur in actieve fase**
- Foetale hartfrequentie met Doptone
  - In actieve fase iedere 15-30 minuten
  - Iedere 5 minuten bij de uitdrijving
  - Luister 60 sec gedurende een contractie en min. 30 sec daarna
  - Noteer BHF, acceleraties en deceleraties



# PAIN RELIEF DURING LABOUR

*It is likely that the care context and the type of care provision and care provider have a strong effect on the need for labour pain relief, and on the choices women make in relation to this need.*



## *Relaxation and Massage Techniques*

Most women desire some form of pain relief during labour, and qualitative evidence indicates that relaxation techniques can reduce labour discomfort, relieve pain and enhance the maternal birth experience.



## *Epidural Analgesia*

Epidural analgesia appears to be the more effective pain relief option but compared with opioid analgesia it also requires more resources to implement and to manage its adverse effects, which are more common with epidural analgesia.



## *Parenteral Opioids*

Despite being widely available and used, pethidine is not the preferred opioid option, as shorter-acting opioids tend to have fewer undesirable side-effects

Before use, health care providers should counsel women about the potential side-effects of opioids, including maternal drowsiness, nausea and vomiting, and neonatal respiratory depression, and about the alternative pain relief options available.

# Definitie en duur uitdrijvingsfase

- The second stage is the period of time between **full cervical dilatation** and birth of the baby, during which the woman **has an involuntary urge to bear down**, as a result of expulsive uterine contractions.
- Women should be informed that the duration of the second stage **varies from one woman to another**. In **first labours**, birth is usually completed **within 3 hours** whereas in **subsequent labours**, birth is usually completed **within 2 hours**.

**Table 4**

Duration of second stage, nulliparous women.

**Nulliparous women**

<b>Study</b>	<b>N</b>	<b>Study quality</b>	<b>Epidural analgesia (%)</b>	<b>Definition of starting reference points</b>	<b>Median duration (min)</b>	<b>5th percentile (min)</b>	<b>95th percentile (min)</b>
Oladapo 2018 <sup>34</sup>	2166	A	0	10 cm to birth	14	3.0	65
Zhang 2010(2)-1 <sup>9</sup>	4100	B	0	10 cm to birth	36	—	168
Zhang 2002 <sup>12</sup>	1162	A	48	10 cm to birth	53	18	138*
Zhang 2010(2)-2 <sup>9</sup>	21524	B	100	10 cm to birth	66	—	216
Paterson 1992 <sup>35</sup>	8270	C	0	10 cm or urge to bear down	45	—	—
					<b>Mean duration (min)</b>	<b>SD (min)</b>	<b>+2SD (min)</b>
Albers 1999 <sup>17</sup>	806	A	0.0	10 cm to birth	54	46	146
Diegmann 2000-1 <sup>20</sup>	373	C	0.0	10 cm to birth	32	23	78*
Diegmann 2000-2 <sup>20</sup>	157	C	0.0	10 cm to birth	44	33	110*
Kilpatrick 1989 <sup>30</sup>	2032	C	0.0	10 cm to birth	54	39	132*
Schiff 1998 <sup>38</sup>	69	B	NR	10 cm to birth	66	36	138*
Albers 1996 <sup>18</sup>	347	C	NR	10 cm to birth	53	47	147
Duignan 1975 <sup>22</sup>	437	B	0.0	10 cm or urge to bear down	42	—	—
Abdel-Aleem 1991 <sup>16</sup>	175	A	0.0	Undefined	43	24	91*
Chen 1986 <sup>19</sup>	500	B	0.0	Undefined	43	—	—
Jones 2003 <sup>28</sup>	120	B	0.0	Undefined	54	43	140*
Studd 1973 <sup>41</sup>	176	B	0.0	Undefined	46	—	—
Lee 2007 <sup>31</sup>	66	C	0.0	Undefined	54	34	122*
Wusteman 2003 <sup>45</sup>	66	C	0.0	Undefined	36	5	46
Studd 1975 <sup>42</sup>	194	A	4.1	Undefined	40	—	—
Juntunen 1994 <sup>29</sup>	42	B	42.9	Undefined	20	20	60*
Schorn 1993 <sup>39</sup>	18	B	NR	Undefined	66	54	174
Dior 2013 <sup>21</sup>	12631	C	NR	Undefined	78	—	—
Shi 2016 <sup>7</sup>	1091	C	NR	Undefined	116	50	216

Risk of bias: A = at least four (out of five) domains scored as low risk; B = three domains scored as low risk; C = two domains or less scored as low risk

NR = Not reported.

SD = Standard deviation.

min = min.

\* Estimated by authors.

# Uitdrijvingsfase

## Nulliparae mediaan

	Minuten	Gemiddeld
• Mediane uitdrijvingsduur	14-45	20-116
• P95	65-168	78-216
• Mediane met epidurale analg.	53-66	20
• P95 met epiduraal	138-216	60
• <b>Sensitiviteitsanalyse</b>	<b>20-78 en p95 60-174 min</b>	

## Multiparae mediaan

	Minuten	Gemiddeld
• Mediane uitdrijvingsduur	6-12	6-30
• P95	58-76	17-78
• Mediane met epidurale analg.	18-24	
• P95 met epiduraal	96-120	
• <b>Sensitiviteitsanalyse</b>	<b>6-30 en p95 16-78 min</b>	

# Zorg ontsluitingsperiode

- Medicamenteuze pijnstilling ter preventie van trage ontsluiting en voorkomen van bijstimuleren **NIET** aanbevolen
- Active management of labour (preventive support) om trage progressie te voorkomen **NIET** aanbevolen
- Amniotomie ter preventie van trage ontsluiting **NIET** aanbevolen.
- Vroege amniotomie en vroeg bijstimuleren ter preventie van trage progressie **NIET** aanbevolen.

# Zorg uitdrijvingsfase

- Vrijheid van baringshoudingen
- Geen houding opdringen
- Verticale houding aanbevolen

*Women in the explosive phase of the second stage of labour should be encouraged and supported to follow their own urge to push.*



# Zorg uitdrijvingsfase/ perineum



- Massage perineum tijdens contracties in uitdrijving/standaardzorg
  - Meer intacte perinea (6 trials, 2618 women, RR 1.74, 95% CI 1.11–2.73)
  - Minder 3e 4e gr rupturen (5 trials, 2477 women, RR 0.49, 95% CI 0.25–0.94).
- Warme kompressen tijdens de uitdrijving/handsoff
  - Geen effect op intact perineum (4 trials, 1799 women, RR 1.02, 95% CI 0.85–1.21)
  - Minder 3<sup>e</sup> 4<sup>e</sup> gr rupturen (4 trials, 1799 women, RR 0.46, 95% CI 0.27–0.79).
- Hands off/hands on
  - Geen effect op intact perineum (2 trials, 6547 women, RR 1.03, 95% CI 0.95–1.12).
  - Evidence on second-third- fourth-degree tears and episiotomy is of very low certainty.



# Zorg uitdrijvingsfase/zorg pasgeborene

- “Routine or liberal use” van episiotomie **niet** aanbevolen
- Fundusexpressie **niet** aanbevolen
- Alle babies huid op huid en aan de borst eerste uur pp
- Vitamine K i.m.
- Geen routine AB



# Zorg nageboortetijdperk

## Uterotonica (10 IE oxytocine im/iv) voor alle bevallingen

Comparison 1. Oxytocin versus no uterotronics

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size	Oxytocine vergeleken met placebo
» 1 PPH (clinically estimated blood loss > or = 500 mL)	6	4203	Risk Ratio (M-H, Random, 95% CI)	0.53 [0.38, 0.74]	47% Minder vaak > 500 ml bloedverlies PP bij gebruik van oxytocine vs placebo
» 2 Therapeutic uterotronics	4	3174	Risk Ratio (M-H, Random, 95% CI)	0.56 [0.36, 0.87]	Minder gebruik therapeutische uterotonica
» 3 Severe PPH (clinically estimated blood loss > or = 1000 mL)	5	4162	Risk Ratio (M-H, Random, 95% CI)	0.62 [0.44, 0.87]	38% Minder vaak HPP > 1000ml
» 4 Mean blood loss (mL)	5	1402	Mean Difference (IV, Random, 95% CI)	-99.46 [-181.97, -16.95]	Ca 100 ml minder bloedverlies
» 5 Maternal haemoglobin concentration (Hb) < 9 g/dL 24 to 48 hours postpartum	3	1645	Risk Ratio (M-H, Random, 95% CI)	0.78 [0.60, 1.00]	Geen verschil in Hb 24-48 uur pp
» 6 Blood transfusion	3	3120	Risk Ratio (M-H, Random, 95% CI)	0.89 [0.44, 1.78]	Geen verschil bloedtransfusie
» 7 Third stage greater than 30 minutes	1	1947	Risk Ratio (M-H, Fixed, 95% CI)	2.55 [0.88, 7.44]	Geen verschil in nageboortetijdperk > 30 min
» 8 Mean length of third stage (minutes)	3	294	Mean Difference (IV, Random, 95% CI)	-3.61 [-9.06, 1.83]	Geen verschil in duur van derde tijdperk
» 9 Manual removal of the placenta	6	4320	Risk Ratio (M-H, Random, 95% CI)	1.26 [0.88, 1.81]	Geen verschil in voorkomen manuele placentaverwijdering

## Uit Cochrane review

Westhoff G, Cotter AM, Tolosa JE. Prophylactic oxytocin for the third stage of labour to prevent postpartum haemorrhage. Cochrane Database of Systematic Reviews 2013, Issue 10. Art. No.: CD001808. DOI: 10.1002/14651858.CD001808.pub2.



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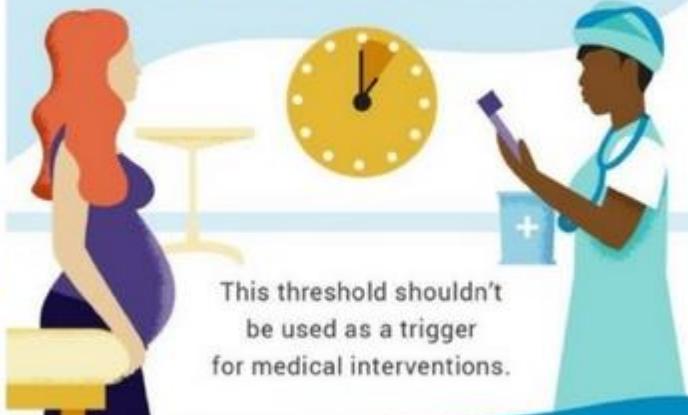
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# WHO's New Labor & Birth Guidelines

#### LABOUR PROGRESSION AT 1 CM/HR DURING THE ACTIVE FIRST STAGE MAY BE UNREALISTIC FOR SOME



This threshold shouldn't  
be used as a trigger  
for medical interventions.



# De toekomst

