



*The Royal College of*  
**Midwives**

# Evidence Based Guidelines *for* *Midwifery-Led Care in Labour*

Second Stage  
of Labour



## Practice Points

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NICE (2007) suggest the following definitions of the second stage of labour

Passive second stage:

- the finding of full dilatation of the cervix prior to or in the absence of involuntary expulsive contractions

Onset of active second stage:

the baby is visible

- expulsive contractions with a finding of full dilatation of the cervix or other signs of full dilatation.

The mother can exhibit many signals indicating the transition into the active phase of the second stage of labour: change in facial expressions, words, and actions (Enkin et al. 2000; Bergstrom et al. 1992; McKay et al. 1990;). However, if the progress of labour gives reason to believe that the cervix is not fully dilated, a vaginal examination should be carried out (Enkin et al. 2000).

Limited quality of evidence makes it difficult to assess the significance of a prolonged second stage (NICE 2007; Altman and Lydon-Rochelle 2006).

NICE (2007) recommend that a diagnosis of delay in the active second stage should be made for nulliparous women when it has lasted 2 hours, and for parous women when it has lasted 1 hour.

There is little ground for intervention while maternal and fetal conditions are satisfactory and there is clear progress with the descent of the presenting part (Janni et al. 2002; Menticoglou et al. 1995; Watson 1994; Paterson et al. 1992).

There is no evidence to suggest that women need to be taught when and how to push (NICE 2007; Bloom et al. 2005; Sleep 1990). The practice of sustained breath holding in directed pushing may be harmful (Prins et al. 2011; Cooke 2010; Yildirim and Beji 2008; Thomson 1993). Women should be given confidence in following their own urge to push.

A "no noise" rule is unacceptable: "a woman's sounds in labour should be expected, supported and explained" (McKay and Roberts 1990).

Use of upright positions for the second stage of labour confers several benefits including a shorter second stage, fewer instrumental births, fewer episiotomies, although estimated blood loss is greater (De Jonge et al. 2004; Gupta et al. 2004).

Women should be encouraged to combine spontaneous pushing with upright postures and helped to adopt whatever positions they find most comfortable throughout labour (NICE 2007).

## Second Stage of Labour

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The mother can exhibit many signals indicating the transition into the active phase of the second stage of labour: change in facial expressions, words, and actions (Enkin et al. 2000; McKay et al. 1990; Bergstrom et al. 1992). Clear signs of having moved into the active phase are breathing hard, powerful sounds, and an overwhelming urge to push. However, if the progress of labour gives reason to believe that the cervix is not fully dilated, a vaginal examination should be carried out (Enkin et al. 2000).

There is no good evidence to justify the imposition of arbitrary time limits on the length of the second stage (Enkin et al. 2000). While maternal and fetal conditions are satisfactory, and there is evidence that progress is occurring with the descent of the presenting part, there are no grounds for intervention (Myles and Santolaya 2003; Janni et al. 2002; Kuo et al. 1996; Menticoglou et al. 1995; Watson 1994; Paterson et al. 1992). Cheng et al. (2004) and Saunders et al. (1992) in their large retrospective studies, conclude that although second stage labours of up to three hours do not seem to carry undue risk to the fetus, women who remain in the second stage for this length of time suffer a higher rate of early morbidity (postpartum haemorrhage and infection), though this effect is less marked in women who deliver spontaneously. Allen et al. (2009), Cheng et al. (2004), Myles and Santolaya (2003) and Janni et al. (2002) found maternal morbidity associated with second stages of longer than two hours. This increase in risk needs to be weighed against the risk of instrumental delivery (Murphy 2001).

NICE (2007) state that for nulliparous women, birth should be expected to take place within 3 hours and for multiparous women within 2 hours of the start of the active second stage. They recommend that a diagnosis of delay in the active second stage should be made for nulliparous women when it has lasted 2 hours and for parous women when it has lasted 1 hour.

There is no good evidence to justify the use of directed pushing using the Valsalva manoeuvre (“take a deep breath in, hold it and push”) and there are many papers which consider fetal compromise associated with this practice because of the reduction in maternal arterial pressure and the oxygenation of maternal blood (Cooke 2010; Roberts 2002; Thomson 1993). There is also some evidence to suggest that coached pushing may weaken pelvic floor function (Prins et al. 2011, Schaffer et al. 2005). In her small study, Thomson (1995) observed that women do not instinctively take a deep breath, they do not start expulsive effort with the commencement of the contraction and both open and closed glottis pushing are used. A study of 100 women (Yildirim and Beji 2008) randomised to either spontaneous pushing or Valsalva type pushing reported that the second stage of labour was significantly longer in the Valsalva-type pushing group and the women in the spontaneous group were more satisfied with their pushing technique. There is no evidence to suggest that women need to be taught how and when to push (Bloom et al. 2005; Sleep 1990). The midwife should encourage the woman to follow the directives of her own body rather than to seek direction from a carer (NICE 2007; Roberts 2002; Grant 1987). Midwives should be aware of the language they use when supporting women in the second stage. McKay et al.’s (1990) study of women’s views of the second stage found that carers’ instructions commonly did not seem to be in synchrony with physiological responses. This study primarily investigated maternal sounds made during labour, and concluded that the “no noise” rule often invoked in hospital is helpful neither to labouring women nor to their carers; that a “woman’s sounds in labour should be expected, supported and explained, and when they indicate that help is needed, it should be offered”. The experience of women with epidurals in labour is clearly different: and midwives need to be aware how this will affect their clinical decision making.

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A Cochrane review has compared the use of any upright or lateral position with supine or lithotomy positions in the second stage (Gupta et al. 2004). This review shows that women being upright results in a shorter second stage; fewer assisted births and episiotomies; more second degree perineal tears; more women with a blood loss estimated as over 500ml; fewer reports of severe pain and fewer fetal heart rate abnormalities. The upright position during the second stage was achieved in a number of ways: by the woman squatting or through use of equipment such as birth stools, chairs or cushions. For that reason, and due to the variation in methodological quality across the trials, the results should be interpreted with caution. However, the reviewers suggest that, in the absence of ill-effect (apart from increased blood loss) women should be encouraged to adopt positions of comfort during the second stage of labour. This recommendation is supportive of current NICE guidance on positions for vaginal birth (NICE 2007).

De Jonge et al. (2004) discuss in detail the problems of subjectivity of estimated blood loss. They suggest that in an upright position the blood loss may appear more than in a supine position because it can be collected in a receptacle. They comment that even if the decreased blood loss was found to be statistically significant, it was only 60 mls and a difference in the requirement for blood transfusion was not found.

Current NICE guidance (2007) is that women should be advised that they should be guided by their own urges to push, as there is no high level evidence to support the benefit of directed pushing during the second stage.

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The guidelines have been developed under the auspices of the RCM Guideline  
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Development, Professional Midwifery Lead.

The guideline review process will commence in 2016 unless evidence requires  
earlier review.

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## Appendix A

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### Sources

The following electronic databases were searched: The Cochrane Database of Systematic Reviews, MEDLINE, Embase and MIDIRS. As this document is an update of research previously carried out, the publication time period was restricted to 2008 to March 2011. The search was undertaken by Mary Dharmachandran, Project Librarian (RCM Collection), The Royal College of Obstetricians and Gynaecologists.

### Search Terms

Separate search strategies were developed for each section of the review. Initial search terms for each discrete area were identified by the authors. For each search, a combination of MeSH and keyword (free text) terms was used.

### Journals hand-searched by the authors were as follows:

- Birth
- British Journal of Midwifery
- Midwifery
- Practising Midwife
- Evidence-based Midwifery