# THE COALITION FOR IMPROVING MATERNITY SERVICES: EVIDENCE BASIS FOR THE TEN STEPS OF MOTHER-FRIENDLY CARE

# Step 4: Provides the Birthing Woman With Freedom of Movement to Walk, Move, Assume Positions of Her Choice

The Coalition for Improving Maternity Services:

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# ABSTRACT

Step 4 of the Ten Steps of Mother-Friendly Care insures that women have the freedom to walk, move, and assume positions of their choice during labor and birth. The rationales and the evidence in support of this step are presented.

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Step 4: Provides the birthing woman with the freedom to walk, move about, and assume the positions of her choice during labor and birth (unless restriction is specifically required to correct a complication) and discourages the use of the lithotomy position.

Freedom of movement in labor appears to facilitate the progress of labor and enhance childbirth satisfaction. Restricting women's movement may have adverse effects.

#### **Freedom of Movement**

Rationale for Compliance Evider		de
No evidence of harm found for freedom to ambulate, move about, or change position during labor and birth when restriction is not required to correct a complication.		NEH
The lithotomy position reduces blood flow to the fetus, adversely affecting the fetal heart rate. In addition, the lithotomy position raises levels of maternal stress hormones, thereby reducing uterine contractility and labor progress (Simkin, 2002).	Quality: Quantity: Consistency:	A B A**
Ambulation, movement, and changes of position during the first stage of labor may shorten labor; no evidence suggests ambulation increases duration of labor (Albers, 1997; Simkin, 2002).	Quality: Quantity: Consistency:	A B B ( <i>Continued</i> )

For a description and discussion of the methods used to determine the evidence basis of the Ten Steps of Mother-Friendly Care, see this issue's "Methods" article by Henci Goer on pages 5S-9S.

ore information on alition for Improving nity Services (CIMS) pies of the Mothery Childbirth Initiative companying Ten of Mother-Friendly log on to the zation's Web site motherfriendly.org) CIMS toll-free at 2-2467.

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Members of the CIMS Expert Work Group

### (Continued) **Freedom of Movement**

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Henci Goer, BA, Project Director Mayri Sagady Leslie, MSN, CNM Judith Lothian, PhD, RN, LCCE, FACCE Amy Romano, MSN, CNM Karen Salt, CCE, MA Katherine Shealy, MPH, IBCLC, RLC Sharon Storton, MA, CCHT, LMFT Deborah Woolley, PhD, CNM, LCCE	Women who ambulated during the first stage of labor were less likely to have a surgical delivery,	Quality:	A
	defined as cesarean section or forceps or vacuum extraction (Albers, 1997).	Quantity: Consistency:	B NA*
	When allowed the freedom to ambulate, move, and change position during labor and birth, most women choose to do so and find this to be an effective form of pain relief (DeClerq, 2002; Simkin, 2002).	Quality: Quantity: Consistency:	A B A
	Changes of position during second-stage labor—including ambulation, standing, kneeling, squatting, and the use of a chair or stool—in women with epidural analgesia provided no significant reductions in instrumental and operative delivery, as well as no increased risk of harm to the mother or infant from allowing the mother to use these positions when her muscle tone permitted (Roberts, 2005).	Quality: Quantity: Consistency:	A B A**
	Women who chose a nonsupine position for birth had shorter second stages of labor, required less pain relief medication, and had fewer abnormal fetal heart rate patterns (Simkin, 2002).	Quality: Quantity: Consistency:	A B A**
	Women who assumed a nonsupine position for birth had fewer perineal injuries (Shorten, 2002; Soong, 2005; Terry, 2006), less vulvar edema, and less blood loss (Terry, 2006).	Quality: Quantity: Consistency:	A A A
	Hands-and-knees positioning of a woman during the first stage of labor when her fetus is in a cephalic presentation but occipitoposterior position increased the chance of fetal rotation to the occipitoanterior position and significantly reduced her experience of persistent back pain (Stremler, 2005).	Quality: Quantity: Consistency:	A B A
	Hands-and-knees positioning of a woman, as compared with sitting, during the second stage of labor is associated with a more favorable maternal experience and less pain with no significant difference in the duration of labor (Ragnar, 2006).	Quality: Quantity: Consistency:	A B NA*
	Birth attendant preference rather than maternal preference most often indicated maternal position for birth (Shorten, 2002; Soong, 2005; Terry, 2006).	Quality: Quantity: Consistency:	A B A
	A = a a b b and $B = fair NA = a b a b b b b b b b b b b b b b b b b$		

good, B = fair, NA = not applicable, NEH = no evidence of harm, SR = systematic review

Quality = aggregate of quality ratings for individual studies

Quantity = magnitude of effect, numbers of studies, and sample size or power

Consistency = the extent to which similar findings are reported using similar and different study designs \*only one study

\*\*multiple studies in SR

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