High-quality research on the safety of out-of-hospital birth with professional midwives is an essential support to good practice and to continuous improvement in the delivery of services to women and infants. Unfortunately, the recent meta-analysis by Wax, et al, of the Maine Medical Center in Portland, Maine published online on July 1, 2010 in the American Journal of Obstetrics and Gynecology (AJOG) on newborn outcomes in planned home birth vs. planned hospital birth, is far from the high-quality rigorous review that health care providers and the public expect. Not only are Wax’s conclusions in direct conflict with a growing international body of quality research that demonstrates the safety of home birth for low-risk women and their infants when attended by trained professional midwives, but his methodology is deeply flawed. Rather than contributing to the improvement of services and reliable information for childbearing women and providers, his alarmist conclusions will only serve to support the increased use of medical interventions in childbirth that have consistently been shown to cause more harm than good to women and infants.

The widely publicized conclusion that implies risk to neonates is not supported by the best quality data. Indeed this author acknowledges the similar outcomes of low neonatal mortality shown by most of the articles he reviews, yet amazingly arrives at an opposite conclusion by using statistics drawn from several highly criticized and poor quality studies. Michael C. Klein, MD, a University of British Columbia emeritus professor and senior scientist at The Child and Family Research Institute in Vancouver, states, “A meta-analysis is only as good as the component studies. When the author does his sensitivity analysis, after excluding the old and lower-quality papers, there is no statistically significant difference in either perinatal or neonatal mortality by place of birth.”

Among the many flaws and troubling inaccuracies in this analysis are: Wax’s misrepresentation of the support of listed citations for his claims for increased neonatal mortality; referral to studies that are poorly designed and which mix low-risk and high-risk cases; failing to account for the quality of the trials included within the inclusion and exclusion criteria; the omission of several key, well-designed studies; and the flawed and completely unsubstantiated association of low-intervention maternity care with increased newborn death. His discussion includes findings from his own poorly designed review based on birth certificate data which is known to be unable to differentiate between planned and unplanned home birth and is therefore unreliable in studying neonatal outcomes. And by his selection criteria and careful crafting of his search strategy, the
author has managed to eliminate the only prospective study of planned home births in the United States. This study demonstrates excellent outcomes for both mothers and infants in the care of Certified Professional Midwives (CPM) (Johnson & Daviss, BMJ, 2005).

His flawed analysis of neonatal death rates downplay the fact that the very studies used in Wax’s review demonstrate that mothers choosing home birth have better outcomes in every single measure of maternal and neonatal well-being over mothers having hospital births. Wendy Gordon, CPM and Director of Research Education for the Midwives’ Alliance Division of Research, states: “When the authors removed the flawed data in their study, their own results show that there is actually no difference in the rates of deaths between home and hospital, a conclusion that has been supported over and over by high-quality research. In a stark move that can only be assumed to be politically-motivated the authors don’t even mention this lack of difference in the neonatal mortality rate in their final conclusion.”

Women and families deserve to know the truth, and the authors of this study are obscuring important information about the safety of home birth and neonatal outcomes. The mixing of poor-quality and high-quality studies from countries all over the world leads to defective research design, and the misleading conclusions about neonatal mortality do nothing to help U.S. women understand the true risks and benefits of home birth versus hospital birth.