

# Kofinas Perinatal

Providing Care to the Unborn ®

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The information below was obtained from NIH statistical databases and is representative of the general population of the United States of America. Fetal death is defined as the death of a fetus prior to birth and in most instances, after 20 weeks and / or after 24 weeks when viability is achieved. Unfortunately, deaths prior to 24 weeks are classified as abortions and do not make it in these statistics. Many of the fetal deaths between 12 weeks and 24 weeks gestation are potentially preventable and should be counted as potential lives to be protected. This kind of mindset is necessary in order to achieve excellent management at all gestational ages and not only after 24 weeks.

**TABLE 1. Fetal mortality rates,\* by race, marital status, and age of mother — United States, 1989**

	Race		
	All races <sup>†</sup>	White	Black
<b>Marital status<sup>§</sup></b>			
Total	7.6	6.4	13.3
Married	6.3	5.9	11.6
Unmarried	11.1	8.7	14.2
<b>Age (years)<sup>¶</sup></b>			
Total	7.5	6.4	13.1
<15	14.4	12.4	16.3
15–19	8.6	7.4	11.6
20–24	7.4	6.2	12.0
25–29	6.6	5.7	13.1
30–34	7.1	6.1	15.5
35–39	9.4	8.4	17.7
40–44	13.5	12.0	25.0
45–49	23.8	24.8	**

\* Per 1,000 live births and fetal deaths.

† Includes races other than white and black.

§ Rates by marital status are for 42 states and the District of Columbia.

¶ Rates by age are for all states and the District of Columbia.

\*\* Rate does not meet standards of reliability or precision (<20 fetal deaths).

Source: NCHS, 1994 (17).

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**TABLE 3. Progress toward meeting the year 2000 objective for low birth weight and very low birth weight (percentage of live birth)**

	1987 baseline	1990	2000 target
Low birth weight (all races)	6.9	7.0	5
Low birth weight (black)	13.0	13.3	9
Very low birth weight (all races)	1.2	1.3	1
Very low birth weight (black)	2.8	2.9	2

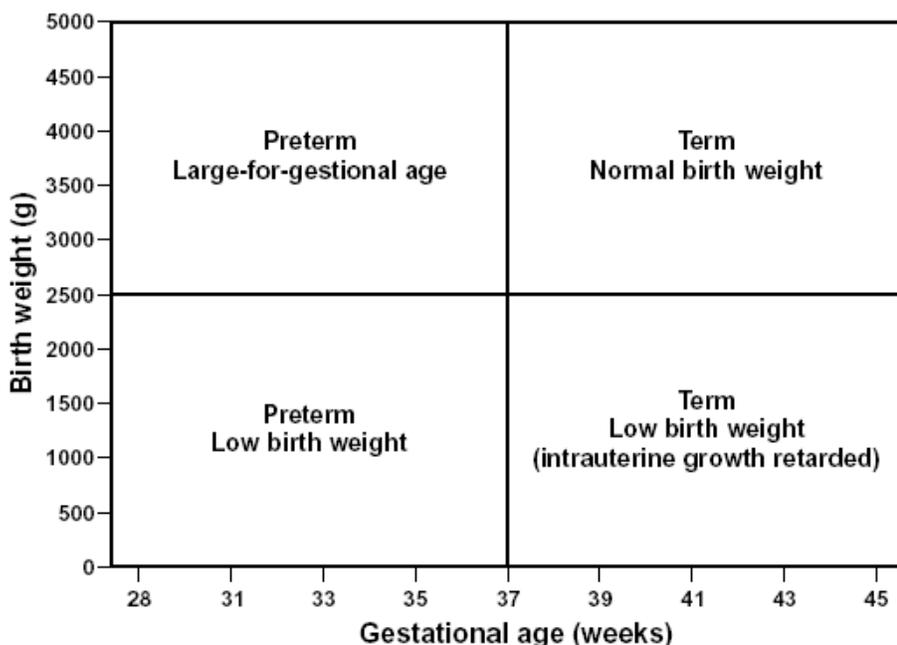
As noted above (Table 3), the goal was to reduce low birth weight to 5% by 2000. To our dismay, the number has been increasing and it stands at 9% by now. This has been happening despite the expenditure of hundreds of millions of dollars for preventive measures. Clearly, something is not right. At the same time, prematurity has reached a staggering 12% of all pregnancies. At KOFINAS PERINATAL prematurity has been reduced to <6% and most of the preterm births happen between 34 and 37 weeks gestation. At this gestational age, neonatal outcomes are as good as those at term and the only difference is the increased cost for additional neonatal care. Survival and quality of life after 34 weeks is as good as it gets with the exception of increased prophylactic hospitalization of the neonates until they are judged mature to go home.

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Neonates at birth may be preterm of appropriate weight for gestation, preterm with low birth weight for gestation, term with appropriate weight for gestation and term with low birth weight. In many publications, low birth weight and preterm have been used interchangeably and in a confusing way. The fact is that with the latest data from 2002, the prematurity (birth before 37 weeks gestation) has been increasing steadily and is now at 12%. Low birth weight at term represents approximately 10 % of all births since by definition, a growth deficient fetus is the one that falls below the 10<sup>th</sup>% for the corresponding gestational age. These two numbers are distinctly different and additive. However, in the group of premature fetuses, a significant number of them are premature and growth restricted (low birth weight for gestation) at the same time. This happens because the causes of prematurity often are the same as those of growth failure. Such causes are most of the times related to placental failure and include but are not limited to thrombophilia, pre-eclampsia, placental thrombosis, smoking, chronic hypertension and cardiovascular conditions.

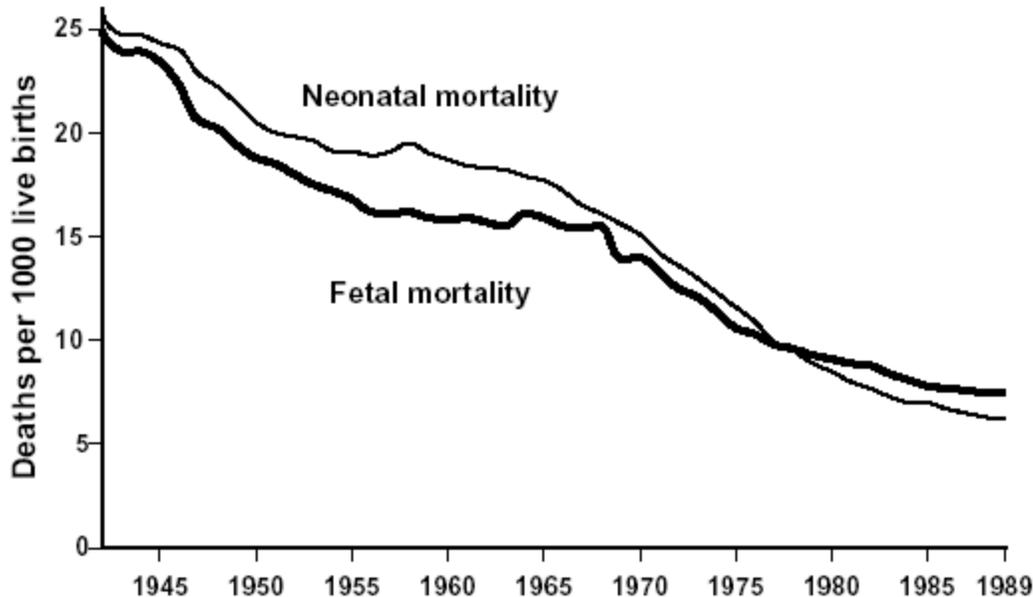
FIGURE 1. Suggested classification scheme for birth weight and gestational age — CDC, 1994



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FIGURE 2. Fetal and neonatal mortality rates\* — United States, 1942–1989



\* Fetal mortality rates are per 1,000 live birth and fetal deaths. Neonatal mortality rates are per 1,000 live births.

Source: NCHS, 1994 (17).

The above figure shows the decline in neonatal and fetal mortality over the last 60 years. Fetal mortality and neonatal mortality have not declined significantly since 1990. In fact, the increasing number of women who have their first child after the age of 35 is responsible for a significant number of fetal and neonatal deaths. An additional number of fetal deaths (death prior to birth) is happening after 39 weeks gestation to patients who are not delivered by that time. In fact, 1 in 500 fetuses die between 39 and 42 weeks gestation while waiting for the onset of spontaneous labor.

Many patients choose to wait for natural labor because they are not aware of the above risk. This is a significant and real risk that claims the life of approximately 6,500 fetuses annually. What may be even more painful is the fact that for each and every one of these dead fetuses, there is at least one fetus that does not die but suffers brain damage.

It should be every obstetrician's obligation to educate his patients about the risks of natural childbirth. Let us all accept the fact that natural childbirth is not synonymous with safety. Natural childbirth through the ages was good enough to get us here with a 50% or more maternal mortality and even more fetal and neonatal mortality. This is an acceptable risk-to-benefit ratio for the survival of the species. We are now in the third millennium AD and it is time we start making decisions based on risk-to-benefit ratios that are more suitable to today's life standards and expectations and not those of the past. If the risk-to-benefit ratio indicates that Mrs. Joan Doe should have natural childbirth, then so be it. If on the other hand the risk-to-benefit ratio indicates that Mrs. Joan Doe should have induced delivery with an increased risk for cesarean section, then so be it, too.

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Patients should be educated and then be allowed to make their own decisions that suit them best. Our role as physicians is not to dictate, but to elucidate and guide our patients to make the decision that suits them best.