

APPENDIX B

OBSTETRIC DATES AND INTERVALS AND WEIGHT GAIN RECOMMENDATIONS

MONTH PRENATAL CARE BEGAN

Since 1988, the Vermont Department of Health has used the National Center for Health Statistics method of calculating the month prenatal care began. This allows Vermont data to be more easily compared to national data, and eliminates any errors that could be introduced by hospitals using different reporting methods.

The calculation for month prenatal care began changed at the national level with the 2003 Revision of the U.S. Standard Certificate of Live Birth. Vermont implemented its' new birth certificate on July 1, 2005, based on the 2003 Revision of the U.S. Standard, so the Department of Health began using the new calculation in 2005. The new calculation converts to century dates the date of last menses and the date of the first prenatal visit, determines the difference in number of days between these dates, and then converts the days to months of pregnancy. For example, if the date of last menses was March 15, 2005 and the date of the first prenatal visit was June 30, 2005, then the difference is 107 days which means that prenatal care began in the fourth month.

Please note that this change in calculation affects the rate of entry into first trimester prenatal care. Analysis done by the Vermont Department of Health shows that this change in calculation reduces the rate of entry into first trimester prenatal care by about 7%, so rates for years 2005 and later should not be compared to rates for prior years.

GESTATIONAL AGE

Live Births and Fetal Deaths: The methodology used to determine gestational age matches that used by the National Center for Health Statistics.

Two measures of gestational age are available from the standard certificates. The standard certificates collect information on the first day of the mother's last menstrual period (LMP). The interval between the LMP and the date of birth is the *calculated* gestational age. The standard certificate also collects a *clinical estimate* of gestation.

The primary measure used by NCHS to determine the gestational age of the newborn is the *calculated* weeks of gestation. However this method is subject to error due to imperfect maternal recall and to misidentification of the LMP. Therefore an edit is run that checks whether the calculated weeks of gestation is consistent with the infant's plurality and birth weight. If the birth weight is within the bounds for the calculated weeks of gestation, then the *calculated* weeks of gestation becomes the assigned gestational age. If the birth weight is not within the bounds for the calculated weeks, but it is within the bounds for the clinical estimate of gestation, then the *clinical estimate* of gestation is assigned as the gestational age. If the birth weight does not fit within the bounds for either the calculated weeks of gestation or the clinical estimate of gestation, the gestational age is designated "unknown". If the month and year for LMP are given, but the day is missing, the gestational age is *imputed* using the gestational age of the preceding record that has complete data with the same computed month of gestation and the same 500-gram birth weight interval.

In 2007, 88.2 percent of the Vermont resident records used the *calculated* weeks, 11.8 percent used the *clinical estimate* of the weeks, and 2 records were designated "*unknown*" gestational ages.

Abortions: Gestational age is calculated from the date of last normal menses and date of abortion. The clinically estimated weeks is used if the date of last normal menses is unknown, or if the calculated weeks and the clinically estimated weeks are more than two weeks apart.

WEIGHT GAIN DURING PREGNANCY

The weight gain guidelines reflected in this report were taken from Nutrition During Pregnancy, Institute of Medicine, National Academy of Sciences, 1990. The recommendations are as follows:

PRE-PREGNANCY BMI	RECOMMENDED WEIGHT GAIN
< 19.8	28 - 40 lbs
19.8 - 26.0	25 - 35 lbs
26.1 - 29.0	15 - 25 lbs
> 29.0	15 - 25 lbs
Multiple births	35 - 45 lbs