

NAME: LOW BIRTH WEIGHT DATA
SIZE: 189 observations, 11 variables

NOTE:

These data come from Hosmer and Lemeshow (2000) Applied Logistic Regression: Second Edition. These data are copyrighted by John Wiley & Sons Inc. and must be acknowledged and used accordingly.

DESCRIPTIVE ABSTRACT:

The goal of this study was to identify risk factors associated with giving birth to a low birth weight baby (weighing less than 2500 grams). Data were collected on 189 women, 59 of which had low birth weight babies and 130 of which had normal birth weight babies. Four variables which were thought to be of importance were age, weight of the subject at her last menstrual period, race, and the number of physician visits during the first trimester of pregnancy.

SOURCE:

Data were collected at Baystate Medical Center, Springfield, Massachusetts, during 1986.

NOTE:

This data set consists of the complete data. A paired data set created from this low birth weight data may be found in lowbwtm11.dat and a 3 to 1 matched data set created from the low birth weight data may be found in mlowbwt.dat.

Table: Code Sheet for the Variables in the Low Birth Weight Data Set.

Columns Variable
Abbreviation

2-4	Identification Code	ID
10	Low Birth Weight (0 = Birth Weight \geq 2500g, 1 = Birth Weight $<$ 2500g)	LOW
17-18	Age of the Mother in Years	AGE
23-25	Weight in Pounds at the Last Menstrual Period	LWT
32	Race (1 = White, 2 = Black, 3 = Other)	RACE
40	Smoking Status During Pregnancy (1 = Yes, 0 = No)	SMOKE

48	History of Premature Labor (0 = None, 1 = One, etc.)	PTL
55	History of Hypertension (1 = Yes, 0 = No)	HT
61	Presence of Uterine Irritability (1 = Yes, 0 = No)	UI
67	Number of Physician Visits During the First Trimester (0 = None, 1 = One, 2 = Two, etc.)	FTV
73-76	Birth Weight in Grams	BWT

PEDAGOGICAL NOTES:

These data have been used as an example of fitting a multiple logistic regression model.

STORY BEHIND THE DATA:

Low birth weight is an outcome that has been of concern to physicians for years. This is due to the fact that infant mortality rates and birth defect rates are very high for low birth weight babies. A woman's behavior during pregnancy (including diet, smoking habits, and receiving prenatal care) can greatly alter the chances of carrying the baby to term and, consequently, of delivering a baby of normal birth weight.

The variables identified in the code sheet given in the table have been shown to be associated with low birth weight in the obstetrical literature. The goal of the current study was to ascertain if these variables were important in the population being served by the medical center where the data were collected.

References:

1. Hosmer and Lemeshow, Applied Logistic Regression, Wiley, (1989).