# Fetal Cardiotocography Data Dictionary

Original Source

The UCI, “Machine learning repository, cardiotocography data set,” <http://archive.ics.uci.edu/ml/datasets/Cardiotocography>

Other Sources

## <https://www.kaggle.com/datasets/akshat0007/fetalhr>

## Context:

The data was provided in September 2010 by the Biomedical Engineering Institute and the Faculty of Medicine at the University of Porto, Portugal. These datasets were obtained on a regular basis in 1980 and again between 1995 and 1998, resulting in an ever-growing collection. The dataset contains 2126 fetal cardiotocography (CTG) specimens, which include fetal heartbeat and uterine contractions during pregnancy and labor. Three professional obstetricians classified the CTGs, and a consensus risk of heart disease classification label was issued to each of them. There are 2 types of classification done in the dataset which are the morphologic pattern and the fetal state (Normal, Suspect, Pathologic).

## Attributes Information

The table below summarizes the name, description, and data type of the fields in the dataset.

| Name | Description | Data Type |
| --- | --- | --- |
| FileName | File name of CTG examination | chr |
| Date | Date of the examination | chr |
| SegFile | File of the examination | chr |
| b | Start instant | int |
| e | End instant | int |
| LBE | FHR (Fetal Heart Rate) baseline value (beats per minute) (Medical Expert) | int |
| LB | FHR baseline value (beats per minute) (Sisporto) | int |
| AC | # of accelerations per second (Sisporto) | int |
| FM | # of fetal movement per second (Sisporto) | int |
| UC | # of uterine contractions per second (Sisporto) | int |
| ASTV | Percentage of time with abnormal short-term variability (Sisporto) | int |
| MSTV | Mean value of short-term variability (Sisporto) | num |
| ALTV | Percentage of time with abnormal long-term variability (Sisporto) | int |
| MLTV | Mean value of long-term variability (sisporto) | num |
| DL | # of light decelerations per second | int |
| DS | # of severe decelerations per second | int |
| DP | # of prolonged decelerations per second | int |
| DR | # of repetitive decelerations per second | int |
| Width | Width of FHR histogram | int |
| Min | Minimum of FHR histogram | int |
| Max | Maximum of FHR histogram | int |
| Nmax | # of histogram peaks | int |
| Nzeros | # of histogram zeros | int |
| Mode | Histogram mode | int |
| Mean | Histogram mean | int |
| Median | Histogram median | int |
| Variance | Histogram variance | int |
| Tendency | Histogram tendency code  (-1=left asymmetric; 0=symmetric; 1=right asymmetric) | int |
| A | Calm sleep | int |
| B | Rem sleep | int |
| C | Calm vigilance | int |
| D | Active vigilance | int |
| SH | Shift pattern (A or Susp with shifts) | int |
| AD | Accelerative/decelerative pattern (stress situation) | int |
| DE | Decelerative pattern (vagal stimulation) | int |
| LD | Largely decelerative pattern | int |
| FS | Flat-sinusoidal pattern (pathological state) | int |
| SUSP | Suspect pattern | int |
| CLASS | FHR pattern class code (1 to 10) | int |
| NSP | Fetal heart health state class code  (Normal=1; Suspect=2; Pathologic=3) | int |