

## Birthwt

|     | low | age | lwt | race | smoke | ptl | ht | ui | ftv | bwt  |
|-----|-----|-----|-----|------|-------|-----|----|----|-----|------|
| 85  | 0   | 19  | 182 | 2    | 0     | 0   | 0  | 1  | 0   | 2523 |
| 86  | 0   | 33  | 155 | 3    | 0     | 0   | 0  | 0  | 3   | 2551 |
| 87  | 0   | 20  | 105 | 1    | 1     | 0   | 0  | 0  | 1   | 2557 |
| 88  | 0   | 21  | 108 | 1    | 1     | 0   | 0  | 1  | 2   | 2594 |
| 89  | 0   | 18  | 107 | 1    | 1     | 0   | 0  | 1  | 0   | 2600 |
| 91  | 0   | 21  | 124 | 3    | 0     | 0   | 0  | 0  | 0   | 2622 |
| 92  | 0   | 22  | 118 | 1    | 0     | 0   | 0  | 0  | 1   | 2637 |
| 93  | 0   | 17  | 103 | 3    | 0     | 0   | 0  | 0  | 1   | 2637 |
| 94  | 0   | 29  | 123 | 1    | 1     | 0   | 0  | 0  | 1   | 2663 |
| 95  | 0   | 26  | 113 | 1    | 1     | 0   | 0  | 0  | 0   | 2665 |
| 96  | 0   | 19  | 95  | 3    | 0     | 0   | 0  | 0  | 0   | 2722 |
| 97  | 0   | 19  | 150 | 3    | 0     | 0   | 0  | 0  | 1   | 2733 |
| 98  | 0   | 22  | 95  | 3    | 0     | 0   | 1  | 0  | 0   | 2751 |
| 99  | 0   | 30  | 107 | 3    | 0     | 1   | 0  | 1  | 2   | 2750 |
| 100 | 0   | 18  | 100 | 1    | 1     | 0   | 0  | 0  | 0   | 2769 |
| 101 | 0   | 18  | 100 | 1    | 1     | 0   | 0  | 0  | 0   | 2769 |
| 102 | 0   | 15  | 98  | 2    | 0     | 0   | 0  | 0  | 0   | 2778 |
| 103 | 0   | 25  | 118 | 1    | 1     | 0   | 0  | 0  | 3   | 2782 |
| 104 | 0   | 20  | 120 | 3    | 0     | 0   | 0  | 1  | 0   | 2807 |
| 105 | 0   | 28  | 120 | 1    | 1     | 0   | 0  | 0  | 1   | 2821 |
| 106 | 0   | 32  | 121 | 3    | 0     | 0   | 0  | 0  | 2   | 2835 |
| 107 | 0   | 31  | 100 | 1    | 0     | 0   | 0  | 1  | 3   | 2835 |
| 108 | 0   | 36  | 202 | 1    | 0     | 0   | 0  | 0  | 1   | 2836 |
| 109 | 0   | 28  | 120 | 3    | 0     | 0   | 0  | 0  | 0   | 2863 |
| 111 | 0   | 25  | 120 | 3    | 0     | 0   | 0  | 1  | 2   | 2877 |
| 112 | 0   | 28  | 167 | 1    | 0     | 0   | 0  | 0  | 0   | 2877 |
| 113 | 0   | 17  | 122 | 1    | 1     | 0   | 0  | 0  | 0   | 2906 |
| 114 | 0   | 29  | 150 | 1    | 0     | 0   | 0  | 0  | 2   | 2920 |
| 115 | 0   | 26  | 168 | 2    | 1     | 0   | 0  | 0  | 0   | 2920 |
| 116 | 0   | 17  | 113 | 2    | 0     | 0   | 0  | 0  | 1   | 2920 |
| 117 | 0   | 17  | 113 | 2    | 0     | 0   | 0  | 0  | 1   | 2920 |
| 118 | 0   | 24  | 90  | 1    | 1     | 1   | 0  | 0  | 1   | 2948 |
| 119 | 0   | 35  | 121 | 2    | 1     | 1   | 0  | 0  | 1   | 2948 |
| 120 | 0   | 25  | 155 | 1    | 0     | 0   | 0  | 0  | 1   | 2977 |
| 121 | 0   | 25  | 125 | 2    | 0     | 0   | 0  | 0  | 0   | 2977 |
| 123 | 0   | 29  | 140 | 1    | 1     | 0   | 0  | 0  | 2   | 2977 |
| 124 | 0   | 19  | 138 | 1    | 1     | 0   | 0  | 0  | 2   | 2977 |
| 125 | 0   | 27  | 124 | 1    | 1     | 0   | 0  | 0  | 0   | 2922 |
| 126 | 0   | 31  | 215 | 1    | 1     | 0   | 0  | 0  | 2   | 3005 |
| 127 | 0   | 33  | 109 | 1    | 1     | 0   | 0  | 0  | 1   | 3033 |
| 128 | 0   | 21  | 185 | 2    | 1     | 0   | 0  | 0  | 2   | 3042 |
| 129 | 0   | 19  | 189 | 1    | 0     | 0   | 0  | 0  | 2   | 3062 |
| 130 | 0   | 23  | 130 | 2    | 0     | 0   | 0  | 0  | 1   | 3062 |
| 131 | 0   | 21  | 160 | 1    | 0     | 0   | 0  | 0  | 0   | 3062 |
| 132 | 0   | 18  | 90  | 1    | 1     | 0   | 0  | 1  | 0   | 3062 |
| 133 | 0   | 18  | 90  | 1    | 1     | 0   | 0  | 1  | 0   | 3062 |
| 134 | 0   | 32  | 132 | 1    | 0     | 0   | 0  | 0  | 4   | 3080 |
| 135 | 0   | 19  | 132 | 3    | 0     | 0   | 0  | 0  | 0   | 3090 |
| 136 | 0   | 24  | 115 | 1    | 0     | 0   | 0  | 0  | 2   | 3090 |
| 137 | 0   | 22  | 85  | 3    | 1     | 0   | 0  | 0  | 0   | 3090 |
| 138 | 0   | 22  | 120 | 1    | 0     | 0   | 1  | 0  | 1   | 3100 |
| 139 | 0   | 23  | 128 | 3    | 0     | 0   | 0  | 0  | 0   | 3104 |
| 140 | 0   | 22  | 130 | 1    | 1     | 0   | 0  | 0  | 0   | 3132 |
| 141 | 0   | 30  | 95  | 1    | 1     | 0   | 0  | 0  | 2   | 3147 |

Birthwt

|     |   |    |     |   |   |   |   |   |   |      |
|-----|---|----|-----|---|---|---|---|---|---|------|
| 142 | 0 | 19 | 115 | 3 | 0 | 0 | 0 | 0 | 0 | 3175 |
| 143 | 0 | 16 | 110 | 3 | 0 | 0 | 0 | 0 | 0 | 3175 |
| 144 | 0 | 21 | 110 | 3 | 1 | 0 | 0 | 1 | 0 | 3203 |
| 145 | 0 | 30 | 153 | 3 | 0 | 0 | 0 | 0 | 0 | 3203 |
| 146 | 0 | 20 | 103 | 3 | 0 | 0 | 0 | 0 | 0 | 3203 |
| 147 | 0 | 17 | 119 | 3 | 0 | 0 | 0 | 0 | 0 | 3225 |
| 148 | 0 | 17 | 119 | 3 | 0 | 0 | 0 | 0 | 0 | 3225 |
| 149 | 0 | 23 | 119 | 3 | 0 | 0 | 0 | 0 | 2 | 3232 |
| 150 | 0 | 24 | 110 | 3 | 0 | 0 | 0 | 0 | 0 | 3232 |
| 151 | 0 | 28 | 140 | 1 | 0 | 0 | 0 | 0 | 0 | 3234 |
| 154 | 0 | 26 | 133 | 3 | 1 | 2 | 0 | 0 | 0 | 3260 |
| 155 | 0 | 20 | 169 | 3 | 0 | 1 | 0 | 1 | 1 | 3274 |
| 156 | 0 | 24 | 115 | 3 | 0 | 0 | 0 | 0 | 2 | 3274 |
| 159 | 0 | 28 | 250 | 3 | 1 | 0 | 0 | 0 | 6 | 3303 |
| 160 | 0 | 20 | 141 | 1 | 0 | 2 | 0 | 1 | 1 | 3317 |
| 161 | 0 | 22 | 158 | 2 | 0 | 1 | 0 | 0 | 2 | 3317 |
| 162 | 0 | 22 | 112 | 1 | 1 | 2 | 0 | 0 | 0 | 3317 |
| 163 | 0 | 31 | 150 | 3 | 1 | 0 | 0 | 0 | 2 | 3321 |
| 164 | 0 | 23 | 115 | 3 | 1 | 0 | 0 | 0 | 1 | 3331 |
| 166 | 0 | 16 | 112 | 2 | 0 | 0 | 0 | 0 | 0 | 3374 |
| 167 | 0 | 16 | 135 | 1 | 1 | 0 | 0 | 0 | 0 | 3374 |
| 168 | 0 | 18 | 229 | 2 | 0 | 0 | 0 | 0 | 0 | 3402 |
| 169 | 0 | 25 | 140 | 1 | 0 | 0 | 0 | 0 | 1 | 3416 |
| 170 | 0 | 32 | 134 | 1 | 1 | 1 | 0 | 0 | 4 | 3430 |
| 172 | 0 | 20 | 121 | 2 | 1 | 0 | 0 | 0 | 0 | 3444 |
| 173 | 0 | 23 | 190 | 1 | 0 | 0 | 0 | 0 | 0 | 3459 |
| 174 | 0 | 22 | 131 | 1 | 0 | 0 | 0 | 0 | 1 | 3460 |
| 175 | 0 | 32 | 170 | 1 | 0 | 0 | 0 | 0 | 0 | 3473 |
| 176 | 0 | 30 | 110 | 3 | 0 | 0 | 0 | 0 | 0 | 3544 |
| 177 | 0 | 20 | 127 | 3 | 0 | 0 | 0 | 0 | 0 | 3487 |
| 179 | 0 | 23 | 123 | 3 | 0 | 0 | 0 | 0 | 0 | 3544 |
| 180 | 0 | 17 | 120 | 3 | 1 | 0 | 0 | 0 | 0 | 3572 |
| 181 | 0 | 19 | 105 | 3 | 0 | 0 | 0 | 0 | 0 | 3572 |
| 182 | 0 | 23 | 130 | 1 | 0 | 0 | 0 | 0 | 0 | 3586 |
| 183 | 0 | 36 | 175 | 1 | 0 | 0 | 0 | 0 | 0 | 3600 |
| 184 | 0 | 22 | 125 | 1 | 0 | 0 | 0 | 0 | 1 | 3614 |
| 185 | 0 | 24 | 133 | 1 | 0 | 0 | 0 | 0 | 0 | 3614 |
| 186 | 0 | 21 | 134 | 3 | 0 | 0 | 0 | 0 | 2 | 3629 |
| 187 | 0 | 19 | 235 | 1 | 1 | 0 | 1 | 0 | 0 | 3629 |
| 188 | 0 | 25 | 95  | 1 | 1 | 3 | 0 | 1 | 0 | 3637 |
| 189 | 0 | 16 | 135 | 1 | 1 | 0 | 0 | 0 | 0 | 3643 |
| 190 | 0 | 29 | 135 | 1 | 0 | 0 | 0 | 0 | 1 | 3651 |
| 191 | 0 | 29 | 154 | 1 | 0 | 0 | 0 | 0 | 1 | 3651 |
| 192 | 0 | 19 | 147 | 1 | 1 | 0 | 0 | 0 | 0 | 3651 |
| 193 | 0 | 19 | 147 | 1 | 1 | 0 | 0 | 0 | 0 | 3651 |
| 195 | 0 | 30 | 137 | 1 | 0 | 0 | 0 | 0 | 1 | 3699 |
| 196 | 0 | 24 | 110 | 1 | 0 | 0 | 0 | 0 | 1 | 3728 |
| 197 | 0 | 19 | 184 | 1 | 1 | 0 | 1 | 0 | 0 | 3756 |
| 199 | 0 | 24 | 110 | 3 | 0 | 1 | 0 | 0 | 0 | 3770 |
| 200 | 0 | 23 | 110 | 1 | 0 | 0 | 0 | 0 | 1 | 3770 |
| 201 | 0 | 20 | 120 | 3 | 0 | 0 | 0 | 0 | 0 | 3770 |
| 202 | 0 | 25 | 241 | 2 | 0 | 0 | 1 | 0 | 0 | 3790 |
| 203 | 0 | 30 | 112 | 1 | 0 | 0 | 0 | 0 | 1 | 3799 |
| 204 | 0 | 22 | 169 | 1 | 0 | 0 | 0 | 0 | 0 | 3827 |
| 205 | 0 | 18 | 120 | 1 | 1 | 0 | 0 | 0 | 2 | 3856 |

Birthwt

|     |   |    |     |   |   |   |   |   |   |      |
|-----|---|----|-----|---|---|---|---|---|---|------|
| 206 | 0 | 16 | 170 | 2 | 0 | 0 | 0 | 0 | 4 | 3860 |
| 207 | 0 | 32 | 186 | 1 | 0 | 0 | 0 | 0 | 2 | 3860 |
| 208 | 0 | 18 | 120 | 3 | 0 | 0 | 0 | 0 | 1 | 3884 |
| 209 | 0 | 29 | 130 | 1 | 1 | 0 | 0 | 0 | 2 | 3884 |
| 210 | 0 | 33 | 117 | 1 | 0 | 0 | 0 | 1 | 1 | 3912 |
| 211 | 0 | 20 | 170 | 1 | 1 | 0 | 0 | 0 | 0 | 3940 |
| 212 | 0 | 28 | 134 | 3 | 0 | 0 | 0 | 0 | 1 | 3941 |
| 213 | 0 | 14 | 135 | 1 | 0 | 0 | 0 | 0 | 0 | 3941 |
| 214 | 0 | 28 | 130 | 3 | 0 | 0 | 0 | 0 | 0 | 3969 |
| 215 | 0 | 25 | 120 | 1 | 0 | 0 | 0 | 0 | 2 | 3983 |
| 216 | 0 | 16 | 95  | 3 | 0 | 0 | 0 | 0 | 1 | 3997 |
| 217 | 0 | 20 | 158 | 1 | 0 | 0 | 0 | 0 | 1 | 3997 |
| 218 | 0 | 26 | 160 | 3 | 0 | 0 | 0 | 0 | 0 | 4054 |
| 219 | 0 | 21 | 115 | 1 | 0 | 0 | 0 | 0 | 1 | 4054 |
| 220 | 0 | 22 | 129 | 1 | 0 | 0 | 0 | 0 | 0 | 4111 |
| 221 | 0 | 25 | 130 | 1 | 0 | 0 | 0 | 0 | 2 | 4153 |
| 222 | 0 | 31 | 120 | 1 | 0 | 0 | 0 | 0 | 2 | 4167 |
| 223 | 0 | 35 | 170 | 1 | 0 | 1 | 0 | 0 | 1 | 4174 |
| 224 | 0 | 19 | 120 | 1 | 1 | 0 | 0 | 0 | 0 | 4238 |
| 225 | 0 | 24 | 116 | 1 | 0 | 0 | 0 | 0 | 1 | 4593 |
| 226 | 0 | 45 | 123 | 1 | 0 | 0 | 0 | 0 | 1 | 4990 |
| 4   | 1 | 28 | 120 | 3 | 1 | 1 | 0 | 1 | 0 | 709  |
| 10  | 1 | 29 | 130 | 1 | 0 | 0 | 0 | 1 | 2 | 1021 |
| 11  | 1 | 34 | 187 | 2 | 1 | 0 | 1 | 0 | 0 | 1135 |
| 13  | 1 | 25 | 105 | 3 | 0 | 1 | 1 | 0 | 0 | 1330 |
| 15  | 1 | 25 | 85  | 3 | 0 | 0 | 0 | 1 | 0 | 1474 |
| 16  | 1 | 27 | 150 | 3 | 0 | 0 | 0 | 0 | 0 | 1588 |
| 17  | 1 | 23 | 97  | 3 | 0 | 0 | 0 | 1 | 1 | 1588 |
| 18  | 1 | 24 | 128 | 2 | 0 | 1 | 0 | 0 | 1 | 1701 |
| 19  | 1 | 24 | 132 | 3 | 0 | 0 | 1 | 0 | 0 | 1729 |
| 20  | 1 | 21 | 165 | 1 | 1 | 0 | 1 | 0 | 1 | 1790 |
| 22  | 1 | 32 | 105 | 1 | 1 | 0 | 0 | 0 | 0 | 1818 |
| 23  | 1 | 19 | 91  | 1 | 1 | 2 | 0 | 1 | 0 | 1885 |
| 24  | 1 | 25 | 115 | 3 | 0 | 0 | 0 | 0 | 0 | 1893 |
| 25  | 1 | 16 | 130 | 3 | 0 | 0 | 0 | 0 | 1 | 1899 |
| 26  | 1 | 25 | 92  | 1 | 1 | 0 | 0 | 0 | 0 | 1928 |
| 27  | 1 | 20 | 150 | 1 | 1 | 0 | 0 | 0 | 2 | 1928 |
| 28  | 1 | 21 | 200 | 2 | 0 | 0 | 0 | 1 | 2 | 1928 |
| 29  | 1 | 24 | 155 | 1 | 1 | 1 | 0 | 0 | 0 | 1936 |
| 30  | 1 | 21 | 103 | 3 | 0 | 0 | 0 | 0 | 0 | 1970 |
| 31  | 1 | 20 | 125 | 3 | 0 | 0 | 0 | 1 | 0 | 2055 |
| 32  | 1 | 25 | 89  | 3 | 0 | 2 | 0 | 0 | 1 | 2055 |
| 33  | 1 | 19 | 102 | 1 | 0 | 0 | 0 | 0 | 2 | 2082 |
| 34  | 1 | 19 | 112 | 1 | 1 | 0 | 0 | 1 | 0 | 2084 |
| 35  | 1 | 26 | 117 | 1 | 1 | 1 | 0 | 0 | 0 | 2084 |
| 36  | 1 | 24 | 138 | 1 | 0 | 0 | 0 | 0 | 0 | 2100 |
| 37  | 1 | 17 | 130 | 3 | 1 | 1 | 0 | 1 | 0 | 2125 |
| 40  | 1 | 20 | 120 | 2 | 1 | 0 | 0 | 0 | 3 | 2126 |
| 42  | 1 | 22 | 130 | 1 | 1 | 1 | 0 | 1 | 1 | 2187 |
| 43  | 1 | 27 | 130 | 2 | 0 | 0 | 0 | 1 | 0 | 2187 |
| 44  | 1 | 20 | 80  | 3 | 1 | 0 | 0 | 1 | 0 | 2211 |
| 45  | 1 | 17 | 110 | 1 | 1 | 0 | 0 | 0 | 0 | 2225 |
| 46  | 1 | 25 | 105 | 3 | 0 | 1 | 0 | 0 | 1 | 2240 |
| 47  | 1 | 20 | 109 | 3 | 0 | 0 | 0 | 0 | 0 | 2240 |
| 49  | 1 | 18 | 148 | 3 | 0 | 0 | 0 | 0 | 0 | 2282 |

### Birthwt

|    |   |    |     |   |   |   |   |   |   |      |
|----|---|----|-----|---|---|---|---|---|---|------|
| 50 | 1 | 18 | 110 | 2 | 1 | 1 | 0 | 0 | 0 | 2296 |
| 51 | 1 | 20 | 121 | 1 | 1 | 1 | 0 | 1 | 0 | 2296 |
| 52 | 1 | 21 | 100 | 3 | 0 | 1 | 0 | 0 | 4 | 2301 |
| 54 | 1 | 26 | 96  | 3 | 0 | 0 | 0 | 0 | 0 | 2325 |
| 56 | 1 | 31 | 102 | 1 | 1 | 1 | 0 | 0 | 1 | 2353 |
| 57 | 1 | 15 | 110 | 1 | 0 | 0 | 0 | 0 | 0 | 2353 |
| 59 | 1 | 23 | 187 | 2 | 1 | 0 | 0 | 0 | 1 | 2367 |
| 60 | 1 | 20 | 122 | 2 | 1 | 0 | 0 | 0 | 0 | 2381 |
| 61 | 1 | 24 | 105 | 2 | 1 | 0 | 0 | 0 | 0 | 2381 |
| 62 | 1 | 15 | 115 | 3 | 0 | 0 | 0 | 1 | 0 | 2381 |
| 63 | 1 | 23 | 120 | 3 | 0 | 0 | 0 | 0 | 0 | 2410 |
| 65 | 1 | 30 | 142 | 1 | 1 | 1 | 0 | 0 | 0 | 2410 |
| 67 | 1 | 22 | 130 | 1 | 1 | 0 | 0 | 0 | 1 | 2410 |
| 68 | 1 | 17 | 120 | 1 | 1 | 0 | 0 | 0 | 3 | 2414 |
| 69 | 1 | 23 | 110 | 1 | 1 | 1 | 0 | 0 | 0 | 2424 |
| 71 | 1 | 17 | 120 | 2 | 0 | 0 | 0 | 0 | 2 | 2438 |
| 75 | 1 | 26 | 154 | 3 | 0 | 1 | 1 | 0 | 1 | 2442 |
| 76 | 1 | 20 | 105 | 3 | 0 | 0 | 0 | 0 | 3 | 2450 |
| 77 | 1 | 26 | 190 | 1 | 1 | 0 | 0 | 0 | 0 | 2466 |
| 78 | 1 | 14 | 101 | 3 | 1 | 1 | 0 | 0 | 0 | 2466 |
| 79 | 1 | 28 | 95  | 1 | 1 | 0 | 0 | 0 | 2 | 2466 |
| 81 | 1 | 14 | 100 | 3 | 0 | 0 | 0 | 0 | 2 | 2495 |
| 82 | 1 | 23 | 94  | 3 | 1 | 0 | 0 | 0 | 0 | 2495 |
| 83 | 1 | 17 | 142 | 2 | 0 | 0 | 1 | 0 | 0 | 2495 |
| 84 | 1 | 21 | 130 | 1 | 1 | 0 | 1 | 0 | 3 | 2495 |

## Description

### Risk Factors Associated with Low Infant Birth Weight

#### Description

The birthwt data frame has 189 rows and 10 columns. The data were collected at Baystate Medical C

#### Usage

birthwt

#### Format

This data frame contains the following columns:

low

indicator of birth weight less than 2.5 kg.

age

mother's age in years.

lwt

mother's weight in pounds at last menstrual period.

race

mother's race (1 = white, 2 = black, 3 = other).

smoke

smoking status during pregnancy.

ptl

number of previous premature labours.

ht

history of hypertension.

ui

presence of uterine irritability.

ftv

number of physician visits during the first trimester.

bwt

birth weight in grams.

#### Source

Hosmer, D.W. and Lemeshow, S. (1989) Applied Logistic Regression. New York: Wiley

#### References

Venables, W. N. and Ripley, B. D. (2002) Modern Applied Statistics with S. Fourth edition. Springer.

## Description

enter, Springfield, Mass during 1986.