Table S2. Numbers, proportions, and ORs with $95 \%$ Cls between proximity to a health center and health outcomes for the births which were liveborn singleton births from January 2004 to July 2009 by the birth order ( $n=9443$ )

|  | Total n | Case <br> n | (\%) | Crude |  | Adjusted model $1^{\text {a }}$ |  | Adjusted model $2^{\text {b }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | OR | (95\% CI) | OR | (95\% CI) | OR | (95\% CI) |
| First birth order ( $n=2902$ ) |  |  |  |  |  |  |  |  |  |
| Neonatal mortality |  |  |  |  |  |  |  |  |  |
| $\leq 1.5 \mathrm{~km}$ | 846 | 27 | (3.2) | 0.75 | (0.43-1.30) | 0.80 | (0.44-1.44) | 0.63 | (0.26-1.55) |
| >1.5-3.0 km | 654 | 28 | (4.3) | 1 | (reference) | 1 | (reference) | 1 | (reference) |
| $>3.0-5.0 \mathrm{~km}$ | 595 | 21 | (3.5) | 0.83 | (0.46-1.48) | 0.76 | (0.42-1.37) | 0.95 | (0.42-2.16) |
| $>5.0-10.0 \mathrm{~km}$ | 525 | 16 | (3.0) | 0.71 | (0.38-1.33) | 0.66 | (0.34-1.25) | 0.87 | (0.36-2.08) |
| $>10 \mathrm{~km}$ | 282 | 6 | (2.1) | 0.49 | (0.20-1.20) | 0.48 | (0.19-1.23) | 0.54 | (0.14-2.03) |
| Infant mortality |  |  |  |  |  |  |  |  |  |
| $\leq 1.5 \mathrm{~km}$ | 846 | 43 | (5.1) | 0.81 | (0.52-1.26) | 0.87 | (0.54-1.40) | 0.80 | (0.41-1.57) |
| >1.5-3.0 km | 654 | 43 | (6.6) | 1 | (reference) | 1 | (reference) | 1 | (reference) |
| $>3.0-5.0 \mathrm{~km}$ | 595 | 32 | (5.4) | 0.83 | (0.52-1.34) | 0.77 | (0.48-1.25) | 0.95 | (0.49-1.82) |
| $>5.0-10.0 \mathrm{~km}$ | 525 | 23 | (4.4) | 0.66 | (0.39-1.12) | 0.59 | (0.34-1.00) | 0.77 | (0.38-1.55) |
| $>10 \mathrm{~km}$ | 282 | 10 | (3.5) | 0.53 | (0.26-1.09) | 0.49 | (0.24-1.03) | 0.49 | (0.18-1.38) |
| Second or third birth order ( $n=4229$ ) |  |  |  |  |  |  |  |  |  |
| Neonatal mortality |  |  |  |  |  |  |  |  |  |
| $\leq 1.5 \mathrm{~km}$ | 1192 | 11 | (0.9) | 0.91 | (0.38-2.19) | 1.12 | (0.45-2.83) | 0.72 | (0.20-2.63) |
| >1.5-3.0 km | 986 | 10 | (1.0) | 1 | (reference) | 1 | (reference) | 1 | (reference) |
| >3.0-5.0 km | 887 | 14 | (1.6) | 1.54 | (0.67-3.57) | 1.69 | (0.72-3.95) | 0.81 | (0.25-2.65) |
| $>5.0-10.0 \mathrm{~km}$ | 783 | 18 | (2.3) | 2.29 | (1.03-5.12) | 2.77 | (1.19-6.44) | 3.01 | (1.10-8.25) |
| $>10 \mathrm{~km}$ | 381 | 6 | (1.6) | 1.55 | (0.54-4.42) | 2.04 | (0.67-6.24) | 3.30 | (0.91-12.03) |
| Infant mortality |  |  |  |  |  |  |  |  |  |
| $\leq 1.5 \mathrm{~km}$ | 1192 | 21 | (1.8) | 0.69 | (0.38-1.25) | 0.93 | (0.50-1.73) | 1.03 | (0.41-2.57) |
| >1.5-3.0 km | 986 | 25 | (2.5) | 1 | (reference) | 1 | (reference) | 1 | (reference) |
| $>3.0-5.0 \mathrm{~km}$ | 887 | 29 | (3.3) | 1.30 | (0.75-2.25) | 1.24 | (0.72-2.16) | 1.44 | (0.66-3.13) |
| $>5.0-10.0 \mathrm{~km}$ | 783 | 44 | (5.6) | 2.30 | (1.39-3.83) | 2.21 | (1.30-3.74) | 2.91 | (1.37-6.17) |
| $>10 \mathrm{~km}$ | 381 | 14 | (3.7) | 1.47 | (0.75-2.89) | 1.37 | (0.67-2.77) | 2.20 | (0.84-5.75) |
| Fourth or more birth order ( $n=5212$ ) |  |  |  |  |  |  |  |  |  |
| Neonatal mortality |  |  |  |  |  |  |  |  |  |
| $\leq 1.5 \mathrm{~km}$ | 1000 | 20 | (2.0) | 1.15 | (0.62-2.16) | 0.92 | (0.49-1.74) | 0.99 | (0.40-2.44) |
| $>1.5-3.0 \mathrm{~km}$ | 1314 | 23 | (1.8) | 1 | (reference) | 1 | (reference) | 1 | (reference) |
| $>3.0-5.0 \mathrm{~km}$ | 1248 | 22 | (1.8) | 1.03 | (0.56-1.88) | 1.19 | (0.65-2.17) | 1.02 | (0.44-2.37) |
| $>5.0-10.0 \mathrm{~km}$ | 1127 | 25 | (2.2) | 1.32 | (0.73-2.38) | 1.73 | (0.94-3.19) | 1.33 | (0.56-3.12) |
| $>10 \mathrm{~km}$ | 523 | 12 | (2.3) | 1.37 | (0.66-2.84) | 1.98 | (0.92-4.26) | 2.17 | (0.75-6.24) |
| Infant mortality |  |  |  |  |  |  |  |  |  |
| $\leq 1.5 \mathrm{~km}$ | 1000 | 43 | (4.3) | 1.03 | (0.66-1.62) | 0.98 | (0.62-1.55) | 0.79 | (0.42-1.47) |
| >1.5-3.0 km | 1314 | 55 | (4.2) | 1 | (reference) | 1 | (reference) | 1 | (reference) |
| $>3.0-5.0 \mathrm{~km}$ | 1248 | 45 | (3.6) | 0.89 | (0.58-1.38) | 0.92 | (0.60-1.43) | 0.79 | (0.45-1.38) |
| $>5.0-10.0 \mathrm{~km}$ | 1127 | 66 | (5.9) | 1.55 | (1.03-2.32) | 1.69 | (1.11-2.57) | 1.25 | (0.72-2.19) |
| $>10 \mathrm{~km}$ | 523 | 25 | (4.8) | 1.23 | (0.72-2.09) | 1.54 | (0.88-2.72) | 1.73 | (0.83-3.60) |

OR, odds ratio; Cl, confidence interval.
${ }^{\text {a }}$ Adjusted for the birth order, the type of the nearest health center (CSB I vs. all other), existence of reference hospital within 30 km , wealth, maternal education, religion, maternal smoking, maternal age at birth, and birth spacing. ( $n=9436$ )
${ }^{\mathrm{b}}$ In addition to model 1, adjusted for maternal health status at time of interview including anemia, height, and maternal body mass index. ( $n=4569$ )

