

TABLE 4S: Covariates included for modeling causes of individual death estimates. GBD, 2019.

Maternal subcause	Country-level covariates Direction
Maternal haemorrhage	In-facility delivery (proportion) Skilled birth attendance (proportion) Age- and sex-specific SEV for unsafe sanitation Neonatal mortality ratio (log-transformed) Maternal education Healthcare Access and Quality Index
Maternal hypertensive disorders	Age- and sex-specific SEV for fasting plasma glucose (FPG) Age- and sex-specific SEV for high body-mass index (BMI) Age- and sex-specific SEV for high blood pressure (SBP) Neonatal mortality ratio (log-transformed) Hospital beds (per 1000 population) Antenatal care 1-visit coverage (proportion) Antenatal care 4-visits coverage (proportion) Healthcare Access and Quality Index
Obstructed labour and uterine rupture	In-facility delivery (proportion) Skilled birth attendance (proportion) Underweight women of reproductive age Neonatal mortality ratio (log-transformed) Hospital beds (per 1000 population) Age-standardised wasting (weight-for-height) SEV Age-standardised stunting (height-for-age) SEV
Abortion and miscarriage	Abortion legality Antenatal care 1-visit coverage (proportion) Antenatal care 4-visits coverage (proportion) Hospital beds (per 1,000 population) Maternal education Healthcare Access and Quality Index
Ectopic pregnancy	Abortion legality Pelvic inflammatory disease age-standardised prevalence Antenatal care 1-visit coverage (proportion) Antenatal care 4-visits coverage (proportion) Hospital beds (per 1,000 population) Maternal education Healthcare Access and Quality Index
Maternal sepsis and other maternal infections	In-facility delivery (proportion) Skilled birth attendance (proportion) Age- and sex-specific SEV for unsafe sanitation Age- and sex-specific SEV for fasting plasma glucose (FPG) Antenatal care 1-visit coverage (proportion) Antenatal care 4-visits coverage (proportion) LDI (log-transformed) Healthcare Access and Quality Index
Other maternal deaths	In-facility delivery (proportion) Skilled birth attendance (proportion) Antenatal care 1-visit coverage (proportion) Antenatal care 4-visits coverage (proportion) LDI (log-transformed) Age- and sex-specific SEV for high body-mass index (BMI) Maternal education Healthcare Access and Quality Index
Indirect maternal deaths	In-facility delivery (proportion) Skilled birth attendance (proportion) Antenatal care 1-visit coverage (proportion) Antenatal care 4-visits coverage (proportion) LDI (log-transformed) Age- and sex-specific SEV for high body-mass index (BMI) Maternal education Healthcare Access and Quality Index