Introduction High proportion of fetal autopsy is supposed to furnish information of better quality to death certificates.

Methods The completeness and underline cause of death was studied in a sample (212) death certificates from public system hospitals (559), 1st semester 2008, in São Paulo City, Brazil. This information was compared to hospital and coroner’s office records and interviews were carried out with these professionals.

Results Public System Hospitals respond for 57.5% of all deliveries; 78.3% of fetal deaths were sent to coroners’ office (CO) to be autopsied. The completeness of data of death certificates fulfilled by CO was worse than those emitted by hospitals. CO death certificates presented low completeness for mother’s age (39.2%); parity (29.9%); type of gestation (3.9%) and low concordance with hospital records. Gestational age (97.8%) and birthweight (99.3%) showed high completeness and were obtained from autopsy. Two causes of deaths respond up to 90% of CO death certificates: fetal death unspecified cause (65.8%) and intrauterine hypoxia (24.3%). The main causes from hospital certificates were: intrauterine hypoxia (41.7%); fetus affected by maternal complications of pregnancy (19.4%); fetal death unspecified cause (18.1%).

Conclusions Fetal deaths are mainly ante-partum and are understood as furnishing ill defined causes of deaths by obstetricians and were sent to autopsy. CO does not have access to hospital records, resulting in poor data quality. Instead of receiving social support to face fetal deaths, families were sent to police offices to get authorized file to transport fetus from hospitals to CO.

Conclusion Our results confirm that labour market status is an independent dimension of social inequalities related to smoke exposure. Despite being more pronounced among men, the social gradient was present in both genders. Future research should examine factors explaining this differences.