Table 2.25. Cohort studies of second-hand tobacco smoke and childhood brain & CNS cancers

Reference, location, name of study	Cohort description	Exposure assessment	Organ site (ICD code)	No. of cases/ deaths	Exposure categories	Relative risk (95% CI)*	Adjustment for potential confounders	Comments
Brooks *et al*. (2004) Sweden	Cohort of 1 441 942 included in analysis of 1 587644 live births during 1983-1997 linked to Swedish Medical Birth Register, National Cancer Register and the Cause of Death Register; mean follow-up was 7,4 years	Birth, Cancer, Death Registries; smoking information ascertained at first prenatal visit	Brain (ICD7 193.0)	480 brain tumors occurred during mean follow-up of 7.4 years; overall rate of 4.5 cases per 100 000 PY (4.8/100 000 PY for males, 4.2/100 000 PY for females)	*Maternal Smoking (cigarettes per day)* *All brain tumours* Yes 1-9 ≥10 *Age at diagnosis (2-4 yrs)* *Maternal smoking (Yes/No)* All brain cancer Malignant tumours Astrocytoma	HR 1.24 (1.01-1.53) 1.22 (0.96-1.56) 1.29 (0.96-1.73) 1.64 (1.15-2.33) 1.57 (1.08-2.30) 2.09 (1.27-3.43)	Age, education, birthplace, parity, birth year, child's sex Also adjusted for gestational age, and birth weight	Highest smoking-related risk by histologic subtype was for astrocytoma (HR=1.37; 95% CI 1.02-1.85) The rate of occurrence of brain tumors was elevated similarly for malignant (1.23, 95% CI: 0.98-1.55) and benign (HR = 1.25; 95% CI: 0.73-2.16).