男親のダイオキシン濃度と次世代の出生性比

* *1976年イタリアのセベソにおける事故で、2,3,7,8-TCDDに曝露した人々と彼らのこどもを対象とした疫学コホート調査*
* 出生比率が女児に偏っていたが、女親ではなく男親に含まれる2,3,7,8-TCDDとの間に有意な関係有り
* 曝露時に19歳未満の男親で、血液中TCDD濃度が*80 pg/g* 脂質（著者によると*20 ng/kg*の生体負荷量に相当）以上で、出生性比に影響有り

Sex ratio and exposure status of parents

Father's TCDD* (ppt)	Mother's TCDD* (ppt)	Children M	F	Sex ratio M / (M+F)
Unexp.†	Unexp.†	31	20	0.608
>15	>15	96	121	0.442 ‡
>15	Unexp.†	81	105	0.436 ‡
Unexp.†	>15	120	100	0.545
Total		328	346	0.487

‡ Different from expected sex ratio value of 0.514 at p= 0.03

Mocarelli et al., *Lancet* 2000; 355: 1858-63

Father's TCDD serum concentration in 1976 and sex ratio of offspring

Father's TCDD	Children M	F	Total children	Sex ratio M / (M+F)	(95 CI%)
Unexposed†	151	120	271	0.557	(0.49-0.61)
15.1-31.3	35	45	80	0.438	(0.33-0.55)
31.9-60.7	41	40	81	0.506	(0.40-0.61)
61.4-117	38	43	81	0.469	(0.36-0.58)
118-264	32	48	80	0.400 ‡	(0.29-0.51)
281-26400	31	50	81	0.383 §	(0.28-0.49)

† People living outside A, B, R zones on July 10,1976 and people living in these zones but with TCDD values less than or equal to 15 ppt. ‡ p=0.04 and §p=0.02 compared to the expected sex ratio of 0.514.

X^2 test for trend= 7.08, p=0.008

Mocarelli et al., *Lancet* 2000; 355: 1858-63