

Group	Obs/Expected	SMR (p-value)
Radial < 4km	6/ 4.84	1.23
Radial < 4-17km	198/ 169	1.17 (0.05)
Blackwater	62/ 44.9	1.44 (0.003)
Non-Blackwater	133/ 127	1.05
North Crouch	11/ 15.4	0.71

Breast cancer mortality in five groups near Bradwell power station 1995-1999. The bottom three relate to coastal ward dichotomy. The Crouch has no nuclear power station.

## **UNEQUIVOCAL EVIDENCE of FAILURE of ICRP RISK MODEL**

### **1. Chernobyl infants**

Finding of excess infant leukemia in infants who were in utero over period of internal contamination from Chernobyl fallout in Greece (Petridou et al.), Germany (Michaelis et al.), USA (Mangano), Belarus (Ivanov), Scotland (Gibson et al.) enabled calculation of error of 100-fold or more in predictions of ICRP et al. on basis of best estimates of exposure (Busby and Scott Cato). Overall p-value < 10<sup>-9</sup>

### **2. Minisatellite mutations in Chernobyl children and others.**

1. Dubrova et al found doubling on minisatellite mutation rate in children from contaminated territories at average dose of 2mSv. Suggests error of about 200-fold in ICRP risk estimate based on normal mutation rates at same loci. Controls from "uncontaminated areas"
2. Weinberg, using sibling controls found 7-fold increase in mutation rate. Error in ICRP risk estimate based on normal mutation rate 700-2000 fold.
3. Minisatellite/ microsatellite mutation associated with morphological change and health detriment. (Ellegren, Bridges)