

**ESTIMATED ORDER OF POTENTIAL POTENCIES OF SELECTED PAH
BASED ON MOUSE SKIN CARCINOGENESIS**

Compound	Relative Potency ^a		Reference
Benzo[a]pyrene	1.0	1.0	
Benz[a]anthracene	0.145	0.1	Bingham and Falk, 1969
Benzo[b]fluoranthene	0.167	0.1	Habs et al., 1980
Benzo[k]fluoranthene	0.020	0.01	Habs et al., 1980
Chrysene	0.0044	0.001	Wynder & Hoffman, 1959
Dibenz[a,h]anthracene	1.11	1.0	Wynder & Hoffman, 1959
Indeno[1,2,3-cd]pyrene	0.055 ^b	0.1	Habs et al., 1980; Hoffman & Wyner, 1966

Source: USEPA (1993), Table 8.

^aModel was $P(d) = 1 - \exp[-a(1+bd)^2]$ for all but indeno[1,2,3-cd]pyrene

^bSimple mean of relative potencies (0.021 and 0.089) the latter of which was derived using the one-hit model.

References:

USEPA 1993. Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons. EAP/600/R-93/089

Bingham and Falk. 1969. Environmental carcinogens - The modifying effects of cocarcinogens on the threshold response. Arch. Environ. Health 19: 779-783.

Habs et al., 1980. Local carcinogenicity of some environmentally relevant polycyclic aromatic hydrocarbons after lifelong topical application to mouse skin. Arch. Gerschwulstforsch. 50: 266-274.

Hoffman and Wyner. 1966. Beitrag zur carcinogenen Wirkung von Dibenzopyrenen. Z. Krebsforsch. 68: 137-149.

Wynder and Hoffman. 1959. A study of tobacco carcinogenesis. VII. The role of higher Polycyclic hydrocarbons. Cancer 12: 1079-1086.