m. G.Winninger-

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The following abstract appeared in Health Physics 49/1: 122, July 1985

GIES, R.A., CROSS, F.T. & DAGLE, G.E., Pacific Northwest Laboratories, Richland, Washington

"The protective role of cigarette smoking during exposure to pollutants."

"Hypotheses have emerged regarding the protective role of cigarette smoking during exposures to pollutants, viz, that clearance of pollutants is facilitated following smoking; mucus produced by cigarette smoke exposures provides a shield to underlying sensitive cells; and/or cigarette smoking produces a thickening of bronchial epithelium which also shields underlying sensitive cells. Data examining these hypotheses are derived from previous studies of dogs exposed to radon, uranium ore dust and cigarette smoke. In these studies it was noted that significantly fewer lung cancers occurred in the smoking group otherwise similarly exposed to radon and uranium ore dust. Similar carcinogenic data exist in certain miner populations. Histopathologic and morphometric data regarding mucus cell populations and epithelial thickness in the trachea and bronchi of these animals will be presented."