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PLAINTIFF'S EXHIBIT

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I should like to draw your readers attention to a serious flaw in the paper by Kanarek and his colleagues (1), which invalidates their conclusion that there may be a causal connection between asbestos fibers in drinking water and cancer. In reaching this conclusion, they apparently ignored the well known association between cancer and population density. Review of Kanarek's doctoral thesis (though not of the paper in the Am. J. Epid.), shows that high fiber concentrations were concentrated in two main areas: San Francisco County (or City) and San Mateo County. The highest concentrations were in San Mateo County. If digestive tract cancer death rates in San Francisco are compared with the State of California, it is apparent that the rates are, as expected, higher in San Francisco (Table 1). This cannot, however, be attributed to the asbestos fibers in the drinking water. If New York City is compared with New York State, similar differences are observed. Unlike San Francisco, New York City does not have high fiber counts in the drinking water (2). It is clear that the fiber/cancer association is confounded by the density of population factor. The importance of population density in assessing the relationship between asbestos fibers in drinking water and cancer has been well shown by Meigs and his colleagues (3, 4).

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Table 1

Comparison of Age Adjusted Rates for White Men and Women 1950 to 1969
for Various Digestive Tract Cancers in
San Francisco County (= City) and New York City With the
States of California and New York and the United States

	Esophagus		Stomach		Colon		Rectum		Biliary Passages and Liver		Pancreas	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
San Francisco County (= City)	7.5	1.8	20.3	9.8	18.9	16.7	10.6	6.6	5.5	4.9	11.0	7.0
California	4.0	1.2	14.4	7.2	14.6	14.2	7.2	4.7	4.4	4.4	9.8	6.0
New York City	6.2	1.7	21.8	11.9	24.3	21.1	13.0	7.6	6.5	6.4	11.5	7.0
New York State	5.4	1.4	18.5	9.8	21.7	19.6	11.5	6.8	5.5	5.6	10.6	6.0
U.S.	4.1	1.0	15.2	7.7	16.5	16.3	7.7	4.8	5.2	5.3	9.6	5.0

U.S. Cancer Mortality by County: 1950-1969.
U.S. Government Printing Office,
Washington, D.C. 1973.