Pergamon

PII: S0003-4878(98)00009-X

Ann. occup. Hyg., Vol. 42, No. 1, p. 63, 1998

Printed in Great Britain.
0003-4878/98 $19.00 + 0.00

Letter to the Editor

Health Effects of Diesel Emissions

A recent review on the health effects of diesel emissions by Morgan *et al.* (1997) concluded in the last paragraph of its abstract: "Although there have been a number of papers suggesting that diesel fumes may act as a carcinogen, the weight of evidence is against this hypothesis."

Such a provocative statement incites the reader to look for the arguments which support this assertion.

The first surprise is that the two comprehensive reviews on the subject (HEI, 1995; ICPS, 1996), with different conclusions, are simply ignored by the authors who confirm that their review is not exhaustive, because "the inclusion of results from other studies would not influence our conclusions" (quotation from p. 648).

The second surprise is the way each cited study is interpreted. There is obviously an a priori against any element which would tend to show that diesel soots are possibly carcinogenic. It is quite easy to stress the limitations of any epidemiological study, especially when smoking has not been taken into account. But even for those studies where this potential bias has been considered, the authors cast doubts on the way it has been done. The way this review has been carried out betrays the role of scientists who have to look in a neutral way for the limitations and possible biases of data. Being partial, this review is therefore not scientific.

Although the majority of the cited studies tend to show that there is a weak association between exposure to diesel soot and lung cancer, the authors draw opposite conclusions putting forward the reason that all these positive studies are not convincing enough. In fact, it is only if the majority of studies did not find any association that there would be a weight of evidence against it. In other respects the judgement against statements which do not fit their pre-determined objective is also striking: ". . . but their arguments are specious . . ." (quotation from p. 649). This gives to the paper an unpleasant colour of arrogance.

The major concern about this paper is that it may contribute to slow down the development of preventive measures to decrease the occupational exposure to diesel soot. It will give arguments to those who consider prevention as unnecessary costs. In other words this article is in full contradiction with the Code of Ethics adopted by the International Commission of Occupational Health (ICOH, 1994). Professionals have to apply appropriate scientific methods and to interpret findings with neutrality and in good faith. They have to communicate scientific knowledge for the benefit of working men and women, society and the profession. This has not been done here.

It is an unethical attitude to prefer to stress the weaknesses of the documentation on the potential hazard of a pollutant instead of stressing its potential health risk for the workers. When a real doubt does exist, like in this case, it must be interpreted in favour of workers' health protection.

Though it is true that there is no absolute certitude that diesel soot is carcinogenic to humans and that there are no quantitative data available to estimating human risk, yet it is unacceptable to assert that the weight of evidence is against this hypothesis.

The publication of papers with such a biased and tendentious interpretation of others' results and with spurious conclusions is to be deplored.

MICHEL P. GUILLEMIN
Institute of Occupational Health Sciences
University of Lausanne
Switzerland

REFERENCES

HEI (1995) *Diesel Exhaust: A Critical Analysis of Emissions, Exposure and Health Effects*. Health Effect Institute, Cambridge, MA.

ICOH (1996) *International Code of Ethics for Occupational Health Professionals*. International Commission on Occupational Health, Singapore.

International Programme on Chemical Safety (1996) *Diesel Fuel and Exhaust Emissions*. World Health Organization, Geneva. (Environmental Health Criteria; 171). ISBN 92 4 157171 3.

Morgan, W. K. C., Reger, R. B. and Tucker, D. M. (1997) Health effects of diesel emissions. *Annals of Occupational Hygiene* **41**, 643–658.