

Your ref. AU/SP/ee

25th September, 1958.

Dear Mr Austen,

Thanks for your letter of September 24th and for your appreciative remarks about my criticism of the much advertised official attitude which the Medical Research Council have seen fit to adopt.

The large factor which has been almost ignored in research is the great difference in cancer incidence according to urbanization. The London area shows approximately five times the incidence of what the Registrar General calls "truly rural areas". Most of the country is intermediate, with the big towns showing more than the small towns, and these more than villages. The same large differences are observable in the United States, where the consumption per head of cigarettes does not vary greatly and is, I believe, always more than in England, though the cancer is less.

I do not see that exhaust fumes particularly are implicated, though they happen to be associated with urbanization. It might easily be that more important factors are:

a) The greater ease of virus transmission in dense compared with sparse populations. I am not saying that anyone knows that a virus supplies the indispensable condition for the production of lung cancer, but I fancy nobody knows that this is not so.

b) Industrial soot, of which tons fall every year on every acre of our towns, and in England in large measure in the whole zone east of Birmingham and the Black Country, presumably contains

lead, zinc, selenium, and God knows what, and I suppose each particle as it approaches the ground is breathed and rebreathed by large numbers of people.

As the control of atmospheric pollution is for quite other reasons desirable, I should prefer the cancer agitation to be aimed at this apparent factor. If it does not affect the cancer it will, in any case, have been worth doing in giving people more cheerful skies and the opportunities to enjoy their gardens. I suppose the general question of atmospheric pollution might be aided by improvements in the exhausts of some vehicles, but I do not think, beyond a few gross offenders, exhaust fumes are the main cause of the trouble, though I am told they are so in Los Angeles where the smog hangs about perpetually.

Sincerely yours,

Pipe smokers, as we are, do not generally inhale, but the majority of cigarette smokers are said to. I believe the habit is consciously acquired though perhaps practised inadvertently. Doll and Hill lost a great opportunity in omitting the question of inhaling when registering the habits of the medical profession. I do not think they would have been in doubt about it. I am enclosing a popular lecture I gave in the States last year.