

We thank Dr M Jacobsen from the Institute of Occupational Medicine, Edinburgh, UK, Dr Mike Phillips, and Dr Xin Kai Lu, Centre for Advanced Studies, Australia for design and data processing. The cost was covered by a grant from the Ministry of Public Health of China.

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Accepted 13 May 1991

Inhalation Fever: A proposed unifying term for febrile reactions to inhalation of noxious substances

Over the past several years there have been many publications that consider respiratory illnesses of farmers.¹⁻³ Much of the interest has centred around the description of a febrile illness caused by exposure to organic dust that has been called several names including: grain fever, pulmonary mycotoxicosis, silo unloader's syndrome, and organic dust toxic syndrome (ODTS). There is now sufficient evidence to suggest that these febrile attacks are separate from allergic alveolitis. The physiological impact of the febrile illness on the lung is minimal whereas in allergic alveolitis one sees abnormal blood gases, chest radiographs, and pulmonary function tests.⁴

In the modern industrial era there has been extensive writing about febrile responses to the inhalation of metal fumes and dusts such as metal fume fever among welders and foundry workers.^{5,6} As plastics emerged papers appeared describing febrile illnesses in those who work with complex polymers.⁷

The clinical picture of these inhalation ailments is similar. All have a latent period of several hours between the exposure and the onset of fevers, chills, malaise, myalgias, and chest tightness. Patients often have a leucocytosis with a left shift.^{2,8,9,11} There are reports of chemical pneumonitis and pulmonary oedema in some metal and plastic exposures and a single report suggesting more severe lung involvement after exposure to organic dust in an agricultural setting, but most reports suggest that little lung damage occurs.¹²⁻¹⁵

We are struck by the described similarities and believe that a generic term is best for this family of respiratory ailments. In the absence of a single aetiological agent for these very different exposures we think that the fevers and symptoms represent a common pathway in which the lung reacts to noxious substances. We suggest that they all be called inhalation fever, a term originating from 1978.¹⁶ This avoids the colourful but confusing litany of names

currently in use. Henceforth we propose that organic dust toxic syndrome, all the fume fevers, spelter shakes, mill fever, Monday fever, card room fever, and brass founders ague etc, be called simply *Inhalation fever*.

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Br J Ind Med 1992 49: 40

doi: 10.1136/oem.49.1.40

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