

Abstracts from Current Literature

General

INDUSTRIAL HYGIENE CODES. JAMES H. STERNER, *Aiha Quart.* **11**:167 (Sept.) 1950.

The form and the use of industrial hygiene codes as differentiated from "standards" are discussed. The matter of "maximum allowable concentrations" is evaluated; the disagreement in values set by various groups and the arbitrary selection of many values are pointed out. The author favors codes which are flexible enough to meet changing industrial practice, yet are adequate to provide proper protection. The difference, advantages and disadvantages of the "definite" code, which gives engineering specifications in detail, and the "performance" code, which prescribes the end result of protection, are discussed. The need for accurate and reliable information is real, and this need can best be met by intelligent and positive cooperation.

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INDUSTRIAL HYGIENE. THEODORE F. HATCH, *Indust. & Engin. Chem.* **43**:85A (Feb.) 1951.

A fully efficient machine must not exceed limits imposed on it by the physical qualities of the materials from which it is made, by the environment in which it will operate, and by the anatomical, physiological and psychological limitations of the human operator. Human engineering has come to imply engineering practice which anticipates these human limitations and designs machines accordingly. Engineers must be given the laws of reaction of man to the various components of environment in measurable terms of the assessment if this factor is to be more than empirical.

Several examples are given of the need for human engineering and of its successful application. There was a 10 year lag between the designing of superchargers for high altitude airplanes and the provision of pressurized cabins for human needs. In contrast, the present safe handling of radioactive materials is largely the result of the evolution of the application of laws governing biological reaction to radioactivity.

In the past the emphasis has been placed on modifying existing machines to make them safe and workable rather than on incorporating hygienic principles in their design, with the certain knowledge that difficulties will arise unless it is done. To supply quantitative knowledge on the effects of the working environment is the aim of industrial hygiene.

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OCCUPATIONAL FACTORS IN THE AETIOLOGY OF GASTRIC AND DUODENAL ULCERS, WITH AN ESTIMATE OF THEIR INCIDENCE IN THE GENERAL POPULATION. RICHARD DOLL and F. A. JONES, with the assistance of M. M. BUCKATZSCH. Medical Research Council Special Report Series no. 276, London, His Majesty's Stationery Office, 1951.

Employees were interviewed by a social worker and classified according as they had major dyspepsia, minor dyspepsia or no dyspepsia. Of those in the latter two groups, 10 per cent were used as controls, and only two of the 474 were found to have peptic ulcers; hence this method of selecting cases for medical interview was reasonably reliable. Over 6,000 persons were included in the survey; 1,302 were referred for medical interview, and 1,284 were seen. Cases were diagnosed as proved cases of ulcers if a positive diagnosis had been made radiologically or at operation, or if hematemesis or gross melena had occurred.

Altogether, 334 peptic ulcers were diagnosed, of which 69 (21 per cent) were presumptive ulcers diagnosed on the history of pain alone. Three hundred and sixteen of the ulcers were