

2. What shall be done with the workers known to possess dusty lungs?

In late months many employers in dusty trades have procured routine x-ray examinations of all employees. Out of every hundred undischarged men, properly examined, a fair percentage is likely to present some degree of clear-cut pneumoconiosis. What is to be done with such men? Many are not disabled. Some are outstandingly hale and hearty. Shall they be told of their state? Many are likely to develop mental quirks and neuroses. Some will take an unfair advantage of the employer through claims. A small consensus of mature and fair-minded opinions as to appropriate action for this very time may be epitomized as follows:

Seek to eliminate further exposure to the dust hazard. Do not apprise any undischarged workman of his condition. Make repeated x-ray examinations at about six months intervals. If advancement of the condition appears, then take action suited to the individual case. Otherwise keep these men at some work.

3. Are negroes more susceptible to dusty lung diseases than whites?

I know of no large series of cases arising under identical conditions in this country among whites and negroes that prove the negro to be more readily involved by dusty lung diseases. The negro is more susceptible to tuberculosis than his white fellow workman. His housing is likely to be on a lower plane. His exposure to tuberculosis is prone to be greater than in the case of the average white man. On account of this background, the negro at this time is rated as a greater risk in the foundry than whites under conditions of equal exposure.

4. How necessary are dust counts in detecting hazardous work points in a plant?

The dust counter has established itself as the best available yardstick for the determination of different quantities of dust in the atmosphere. Like so many instruments in its class, the dust sampler and counter has been glorified far beyond its real merits. Opportunities for errors are legion. Legal standards based on present dust counting methods are utterly futile. Notwithstanding many pitfalls, however, the dust counter is a most valuable instrument. It finds its greatest usefulness in discriminating between much dust and little dust; improving the efficacy of preventive measures and devices; in the determination of the carriage of fine dust into non-dusty departments; in the detection of unsuspected dusty work points.

5. In litigation what medical defense may be involved?

Without presuming any qualifications in the domain of law, the plant physician, the safety engineer or the employment manager may be called upon to furnish attorneys all possible information in preparation for trials. Below I am listing a number of items that are in prospective use or have been used in various instances:

(a) Denial of the existence of dusty lung disease: Recently in the examination of a sample of 202 films of men exposed and unexposed to dust, one was singled out as exceptionally free of even usual amounts of fibrosis. This film was examined as an unknown, as were all others. Later it was pointed out that the workman from whom this film was made was a litigant demanding a large sum of money on account of an alleged silicosis. Similarly, about four out of every five litigants alleging dusty lung disease are in fact free of such diseases. The claims are spurious and may be proved so by appropriate examinations carried out by qualified investigators.

(b) The denial of disability or prospective disability: A large number of workmen whose lungs show some signs of dusty action are not incapacitated and no proof exists that real disability is an early prospect.

(c) The denial of neglect: Many of the true cases of dusty lung disease have been developing over long periods of years such as 15, 25 or 40. Since the medical pro-

fession has professed scant knowledge of these diseases during these periods, it is unreasonable to believe that the industrialists could have possessed more. Inevitably it follows that operators of dusty industries may not be presumed to have possessed earlier and greater information of these occupational diseases than physicians, industrial hygienists, state health departments, state factory inspectors, and other agencies devoted to health conservation. No industrialist may be charged with neglect for failure to supply protection against an insidious disease unknown or little known to the medical profession. Even at this time the average physician possesses the most meager information as to these conditions.

(d) The origin of the dusty lung disease in previous employment: Manifesting it is unjust that a few weeks of employment in some one foundry should be held responsible for a well established dusty lung disease when antedating this employment, there have been years of exposure to similar work in other plants.

(e) The origin of the dusty lung disease from causes other than industrial employment: In some localities over the country it seems probable that sufficient dust may arise from roads, farm work, etc., to induce characteristic involvement of the lungs.

(f) The actual quantity of dust present in an industry is below any reasonable threshold of probable production of damage: The mere fact that an industry or department is classified as a dusty operation is not in itself proof of the possibility of development of pneumoconiosis. The nature and extent of protective devices may fully exculpate the plant as a practical hazard. Dust count methods have certain undeniable limitations, but this form of testing along with tests of the efficacy of ventilating apparatus may be utilized on occasion wholly to eliminate any justification for contention that the air dustiness prevails.

(g) Diseases other than pneumoconiosis fully may account for abnormal state in the lungs, or other chest contents: At least ten other diseases may so stimulate pneumoconiosis as to permit confusion and error. Among others are fungus diseases, tuberculosis, especially disseminated tuberculosis, cancer, syphilis, pleurisy with calcifications, certain types of unresolved pneumonia. In addition, claims are known to have arisen alleging pneumoconiosis when in fact the pathology centered about such unrelated conditions as aneurysm, mediastinal tumor, anaphylactic asthma, valvular heart disease, etc.

(h) Silica is not a poison: In some states claims at law must be based upon acts applicable only to poisonous substances. What constitutes a poison is a matter of definition. At the present time, the best thought as to the action of silica within the lungs is unfavorable to acceptance of it as a poison. Primarily, silica action is physical rather than chemical.

(i) Pneumoconiosis does not constitute an accidental injury: In some instances it has been contended that dusty lung states are accidental injuries. Such specious arguments ordinarily are put forth in effort to obtain compensation in political states where no provisions are made for occupational diseases. To the contrary, every valid concept prompts a recognition of the pneumoconiosis and occupational diseases.

These several defense items are of course not set out as having any element of the panacea. However, on occasion some one or more may play a helpful part in defeating some of the cases now pending, richly deserving defeat.