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INDUSTRIAL ACCIDENTS AND HYGIENE SERIES

OCCUPATION HAZARDS
AND DIAGNOSTIC SIGNS

A GUIDE TO IMPAIRMENTS
TO BE LOOKED FOR IN
HAZARDOUS OCCUPATIONS

By LOUIS I. DUBLIN, Ph. D.
Statistician Metropolitan Life Insurance Co.
and PHILIP LEIBOFF



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C. Dampness.

Health hazard.	Symptom, condition, or disease to look for.	Occupations which offer such exposure.
Dampness.....	Diseases of the respiratory passages, neuralgic and rheumatic affections.	Acid dippers; alkali-salt makers; artificial-ice makers; artificial-silk makers; auto painters; baters (tannery); beam-house workers (tanners); beatermen (paper and pulp); bleachers; bleaching dryers; blockers (felt hats); boiler washers; brewers; brickmakers; cable splicers; caisson workers; calico printers; candy makers; canners; cartridge-cup washers; cartridge felt and wad makers; cartridge shot shell paraffin dippers; charcoal workers (sugar refining); clay and bisque makers (pottery); clay-plug makers (pottery); cloth preparers; concentrating-mill workers (lead and zinc); cotton-mill workers; creosoting-plant workers; digester-house workers (paper and pulp); doffers (textile); dresser tenders (textile); drivers; dye makers; dyers; electroplaters; enamellers; explosive workers; extractor operators (soap); felt extractors; felt-hat makers; fertilizer makers; filter-press workers; fishermen; flax spinners; flush tenders (aluminum); galvanizers; glass cutters; glass finishers; glass dippers (pottery); glove makers (leather preparers); gine workers; grinders (metals); gun-cotton washers; hair workers; ice-cream makers; lasters (shoes); laundry workers; lime pullers (tannery); linoleum makers; masons; match-factory workers; miners; mirror silverers; nickel platers; packing-house employees; paint makers; paper makers; petroleum refiners; phosphate-mill workers; phosphorus-evaporating-machine operators; picklers; plasterers; pottery workers; preparers (tannery); pressmen (oil refining); pullers-out (felt hats); pulp-mill employees; refrigerating-plant workers; roller coverers (cotton mills); sagger makers; salt preparers; screen tenders (pulp mill); sewer workers; shavers (felt hats, fur, tannery); slits (felt hats); slip makers (pottery); smoothers (glass); soap makers; soda makers; sodium-hydroxide makers; spongers; stamp-mill workers; starters (felt hats); stone cutters (wet process); sugar refiners; sulphite cooks (pulp mill); sumackers (tannery); table hands (tannery); tank men; tannery workers; telephone linemen (trench work); temperers; textile workers; thread glaziers; tile makers; tinner; tobacco moisteners; turpentine extractors; vatmen; velvet makers; vulcanizers (steam); wall-paper printers; washers; washers (rubber); wool scourers.

D. DUST.

Dusts have here been divided into two kinds, according to their chemical composition, namely, organic and inorganic. The difference in symptoms listed under each is based on the findings of recent investigators that organic dusts do not cause pulmonary lesions. Dr. H. R. M. Landis¹ has found that wherever fibrosis was present in the lungs of men exposed to organic dust, the latter was always mixed with some form of mineral or metallic dust. Tobacco workers exposed to organic dust for years showed no pulmonary changes other than those found in people living in the city. Mineral and metallic dusts, however, produce fibrosis of the lung tissue, the extent of which depends on the time of exposure and the particular dust inhaled. Of the inorganic dusts, silica is the most harmful, producing serious pulmonary damage in a comparatively short period of time, while the least harmful are those which produce slight changes and then only after long exposure, for example, lime, coal, etc. The relationship between occupational dust and tuberculosis is rather a doubtful one. Authorities disagree as to the effect of fibrosis on the resisting power to the tubercle bacillus. Dust, by acting as a carrier of the bacilli, may increase their number in the

¹ See article on "The Pathological and Clinical Manifestations Following the Inhalation of Dust," in The Journal of Industrial Hygiene, July, 1919, pp. 117-139.

lungs. In this way, men exposed to dust may be in greater danger of contracting tuberculosis than others. Dr. H. R. M. Landis claims, however, that in the trades exposed to inorganic dust, mistaken diagnosis of pneumoconiosis swells the mortality statistics for tuberculosis. As a means of avoiding incorrect diagnosis of pneumoconiosis, Roentgen ray examinations of the lungs and sputum analyses are invaluable.

There are four effective methods that may be used to prevent the inhalation of dust generated during industrial processes. No one of these can apply to all conditions, but the particular method to be used must be adapted to the peculiarities of the process.

- (1) The use of water to dampen the dust and thus prevent it from rising and filling the atmosphere.
- (2) The use of exhaust systems which remove the dust at the point of origin.
- (3) The use of enclosing chambers in which the dust-producing processes are confined, being regulated from the outside.
- (4) The use of respirators and helmets.

In many cases it may be necessary to combine several of these measures effectively to prevent the inhalation of dust by the worker.

D. Dust.

Health hazard.	Symptom, condition, or disease to look for.	Occupations which offer such exposure.
1. Inorganic dust....	Cough, dyspnea, pleuritic pains, hemoptysis, clubbed fingers, marked flatness of chest, deficient expansion (unilateral), dullness, diminished resonance, mucous rales, fibrosis, inflammatory condition of eyes, ears, nose and throat; colds, chronic catarrh of respiratory tract, chronic catarrh of digestive tract, pleurisy, tuberculosis.	Acetylene makers; asbestos workers; basic slag (artificial manure) workers; battery (dry) makers; bed rubbers (marble and stone); bench molders (foundry); bevelers; bisque-kiln workers; bone workers; brickmakers; bronzers; buffers; burrs (needles); burr filers; button makers; calenderers (rubber); carhide makers; carbon-brush makers; carborundum workers; card grinders (textiles); casting cleaners (foundry); cement workers; charcoal workers (sugar refining); chargers (smelting); chargers (zinc smelting); chasers (steel); chimney sweepers; chippers; clay and bisque makers (pottery); clay-plug makers (pottery); color makers; compositors; compounders (rubber); concentrating-mill workers (lead and zinc); core makers; crucible mixers; crushermen (clay and stone); cut-glass workers; cutlery makers; cyanamid makers; diamond cutters; electrotypers; emery-wheel makers; engravers; fertilizer makers; file cutters; filers; flint workers; floor molders (foundry); flue cleaners; foundry workers; glass blowers; glass cutters; glass finishers; glass mixers; glaze mixers (pottery); gold beaters; gold refiners; graphite workers; grinders (metals); gypsum workers; horn workers; jewelers; junk (metal) refiners; lapidaries; lead smelters; lime burners; lime-kiln chargers; lime workers; linoleum makers; lithographers; marble cutters; masons; match-factory workers; metal turners; mica strippers or splitters; mica workers; miners; mixers (rubber); mixing-room workers (miscellaneous); mold breakers (foundry); paint removers; paperhangers; phosphate-mill workers; pit molders (foundry); planer men (stone, metal); plasterers; plaster of Paris workers; pneumato-tool workers; polishers; pottery workers; pouncers (felt hats); pressmen (printers); printers; putty makers; putty polishers (glass); pyrites burners; quarrymen; rubber workers; sagger makers; salt preparers; sand blasters; sand cutters; sanders; sanding machine operators; sandpaperers (enameling and painting auto bodies, etc.); saw filers; scrapers (foundry); screen workers (lead and zinc smelting); silters; sintering-plant workers; slate workers; slip makers (pottery); smoothers (glass); spinners (asbestos); stamp-mill workers; stationary workers; stone cutters (dry); stone cutters (wet process); sugar refiners; sulphur burners; table turners (enameling); textile-comb makers; tile makers; tool makers; top fillers (foundry); tumbling-barrel workers; walghers.