

1921

OCCUPATION HAZARDS AND DIAGNOSTIC SIGNS

A GUIDE FOR MEDICAL EXAMINERS

**Regarding Impairments to be Looked for in
Hazardous Occupations**

(Revised and Enlarged)

METROPOLITAN LIFE INSURANCE COMPANY

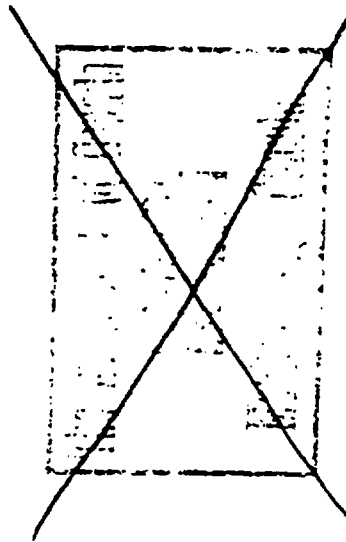
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VF Medical Examiner

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INTRODUCTION

Many occupations have injurious effects on the physical condition of those engaged in them. Those who work with poisons, such as lead, arsenic, mercury, picric acid, etc., or those who have been exposed for a long period to dust, heat or humidity may be impaired seriously as the result of their work. In many cases their condition is not manifest to the doctor. A more careful examination is required to determine whether the occupation has had the anticipated effect. The recognition of the more serious of these effects is important to the Medical Examiner when forming a judgment as to the insurability of the risk.

The Examiner should be careful to see if any of the usual diagnostic signs of poisoning, dust, heat or other hazards are in evidence. In the case of those exposed to lead—such as employees in storage battery plants, white lead workers, paint mixers, etc.—the blue line on the gum, the pale, sallow appearance and the trembling fingers are significant as indications of chronic lead poisoning. Physical symptoms and conditions which ordinarily may be passed by, become important when considered in this way in relation to the particular occupation.

Furthermore, it is often necessary to keep in mind not only the present occupation, but the former one as well. Foremen and supervisors applying for insurance may no longer be exposed to the hazards of their industry, but careful examination may reveal the presence of the effects of the previous occupation from which they have risen. It is hoped that the Examiners will give occupation findings their proper weight in the formation of judgments regarding physical condition.

In this pamphlet we have considered nine hazards of employment, namely: Extreme heat and sudden variations of temperature, compressed air, dampness, dust, extreme light, infections, poor illumination, shock, and the poisons. Long exposure to any of these will usually leave definite physical signs which the Examiner can discover if he will look for them. To aid the Examiner to discover the hazards

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and their effects on the worker, we have prepared two lists below. The first consists of the more common hazardous occupations (pages 4 to 11). The second consists of the hazards together with their effects or symptoms (pages 12 to 30). After each occupation in the first list, we have referred to the particular hazard in the second list. The capital letters after each occupation, A, B, C, etc., refer to the general hazard. The Arabic numerals signify the particular hazard, as D 1, Inorganic Dust; D 2, Organic Dust. The following are illustrations:

Guncotton wringers, J 37.

J refers to the general hazard, Poisons; 37 to the particular poison, Nitrous Gases, which cause the following symptoms that can be observed by you: Irritation of air passages, cough, labored respiration, inflammation of the eyes, corrosion of the teeth, erosion and perforation of nasal septum.

Patent leather makers, A 2, J 5, 16, 28, 30, 48, 52.

A and J refer to the general hazards, Abnormalities of Temperature and Poisons respectively; and the Arabic numerals refer to the particular hazard under each. Thus, A 2 refers to Sudden Variations of Temperature; J 5, Amyl Acetate; J 16, Carbon Monoxide; J 28, Lead and Its Compounds; J 30, Methyl Alcohol; J 48, Sulphuric Acid; J 52, Turpentine. The symptoms for each of these hazards are listed in the second column.

The following procedure is therefore recommended. The Medical Examiner, on obtaining the occupation of the applicant, should look for it in the Alphabetical List of Hazardous Occupations below. If found there, he should make special effort to discover the symptoms or signs referred to in the second list.

ALPHABETICAL LIST OF HAZARDOUS OCCUPATIONS

Acetylene makers, D 1, J 4, 16, 43.
 Acid dippers, C, J 10, 22, 26, 37, 48.
 Acid makers, see particular acid.
 Acid makers, see particular acid.
 Acid makers, J 28, 37, 48.
 Acid transporters, J 28, 37, 48.
 Airplane wing varnishers, see also varnishers, J 50.
 Alcohol distillery workers, J 5, 6.

Aldehyde pumpmen, J 1, 30.
 Alkali salt makers, C, J 14, 15, 26, 46, 47.
 Alkali workers, J 26.
 Ammonium salt makers, A 1, J 4, 15, 22, 26, 48.
 Anaphthalene sulphate makers, J 48.
 Aniline dye makers, see dye makers.
 Aniline makers, J 7, 10, 12, 26, 34, 37.
 Animal hair dressers, see hair workers.
 Animal handlers, F 1, 2.
 Anesthetics, A 1.
 Antimony extractors (refiners), A 1, J 8.
 Antimony fluoride extractors, J 27.
 Antipyrin makers, J 31, 49.
 Aqueous makers, A 1, J 9.
 Art glass workers, J 5, 11, 27, 28, 30, 52, 56, 57.
 Artificial flower makers, H, J 9, 21, 28, 29, 30.
 Artificial ice makers, A 2, C, J 4.
 Artificial leather makers, J 7, 9, 12, 37, 48.
 Artificial saws makers, see fertilizer makers.
 Artificial silk makers, C, J 4, 5, 15, 30, 47, 50.
 Asphalt workers, D 1.
 Asphalt loaders, J 16.
 Auto painters, see also painters, C.
 Babbitts, J 28.
 Baledie makers, J 39.
 Balers, A 2, D 2, J 16.
 Balloons (toy) fillers, J 10.
 Barbers, H.
 Bar mill workers (iron and steel), A 1.
 Batching (artificial masonry) workers, D 1.
 Batch makers (glass works), see glass makers.
 Batch makers (rubber works), see compounders (rubber).
 Batens (tannery), C, F 1.
 Batters (dry) makers, D 1, J 5, 10, 12, 21, 25, 28, 38, 48.
 Battery (storage) makers, see storage battery makers.
 Battery (vehicle), D 2.
 Beanoil workers (tannery), C, F 1.
 Beanoil workers (paper and pulp), C, J 16.
 Bed rubbers (marble and stone), D 1.
 Bench makers (furniture), D 1, J 12, 28.
 Bessemer stills, A 1, J 12.
 Bessemer converter workers (iron and steel), A 1.
 Brie still operators (beta naphthol), A 1, J 48.
 Brivellers, D 1.
 Brivellers, H.
 Brick kiln workers, A 1, D 1, J 16.
 Brickmakers, A 1, E, H, J 14, 16, 22, 28.
 Brass furnace workers, A 1, J 22, 48, 49.
 Brass makers, A 2, C, J 17, 18, 21, 27, 37, 46.
 Brassery (cloth), A 2, C.
 Brassery dryers, A 2, C.
 Bricks (felt hats), C, J 16.
 Bricks (tannery), J 28.
 Bromine makers, J 28.
 Bromine workers, C, J 16, 28, 47, 52.
 Cabana workers, A 2, H, C, J 14.
 Cabaretiers (rubber), A 2, J 1.
 Callon printers, A 2, C, J 7, 9, 10, 16, 31, 22, 26, 38, 50, 56, 57, 52.
 Camphor makers, J 26, 52.
 Candy (colored) makers, J 9, 21.
 Candy makers, A 2, C.
 Caspers, A 2, C, F 3, J 28.
 Cap loaders, J 20.
 Caspers (window glass), A 1.
 Carburic makers, A 1, H, J 10.
 Carburic acid makers, J 12, 26, 48, 48.
 Carbon brush makers, D 1.
 Carbon dioxide makers, J 14.
 Carbon dioxide makers, J 15.
 Carbonizers (shoddy), D 2, J 16, 26, 48.
 Carbons (textile), D 2.
 Card printers (textile), D 1, 2.
 Carpet makers, H.
 Carpet makers, D 2, F 1, J 9.
 Carriers (felt hats), J 9, 20, 37.
 Cartridge cup washers, C.
 Cartridge dippers, J 28, 37, 48.
 Cartridge felt and wool makers, C.

[illegible]

Enamel makers, A 1, C, H, J, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 21, 26, 28, 37, 52.
 Engineers, see also steel engravers, D 1, H.
 Fishers, J 37, 37, 39.
 Explosives workers, see also particular compounds, C, J 1, 3, 7, 12, 29, 30, 34, 35, 37, 44, 61.
 Extruder operators (lamp), A 2, C.
 Farmers, F 1, 2.
 Fiat makers, A 2, J 2.
 Feather curers, A 2, J 9.
 Felt makers, D 2, F 3, J 7, 9, 11, 12, 20, 30, 52.
 Felt structures, C.
 Felt hat makers, see also particular compounds, A 2, C, D 2, J 9, 10, 29, 37, 48.
 Ferro-silicon workers, J 9, 10, 13.
 Fertilizer makers, see also phosphate will employees, C, D 1, F 1, 3, J 10, 12, 14, 26, 37, 37, 44, 46, 47, 48.
 Fibre workers, D 2.
 Finishing makers (incandescent lamps), J 16, 20.
 Flat oilers, D 1, J 28.
 Flies, D 1, J 8, 26.
 Floor makers, see oilfield makers.
 Filter press workers, C.
 Fluid heaters (incandescent lamps), J 16.
 Fluidizers (batteries), D 2.
 Foundries (above), see also smiths.
 Foundry workers, see also explosives, J 6, 29, 42.
 Furriers, A 2, G.
 Fitters (above), J 20.
 Fitters (flat hats), A 2, J 10.
 Fitters (glass), A 1.
 Fitters (relays), J 47.
 Gas rollers, G 2, 3.
 Glass makers, G 2, 3.
 Hat workers, D 2.
 Heat molders (foundry), A 1, D 1, J 13, 28.
 Hair workers, D 2.
 Hair dressers, D 1, J 18, 46, 48.
 Heat tenders (aluminium), C.
 Engineers (left hats), D 2.
 Foundry workers, see also particular metal, A 1, D 1, J 16.
 Fuel workers, J 6.
 Fuel producers, J 46.
 Fitters (above), J 23, 29.
 Fur makers, D 2, F 1.
 Fur dressers, D 2, F 1.
 Fur handbags, F 1, J 29.
 Fur workers, A 1, J 2, J 14, 16.
 Furniture polishers, A 1, 5, 11, 25, 30, 38, 52.
 Fur preparers, D 2, F 1, J 9, 29, 37.
 Fur workers, D 2, F 1.
 Galvanizers, C, J 3, 4, 9, 10, 13, 26, 28, 27, 46, 48.
 Gauge workers, J 16, 25.

1. *ner* makers, A 1 D 1, J 13, 10.
 2. *ut* workers, D 2, C D 2.
 3. *ation* workers, D 2, J 1.
 4. *ation* (waxers), D 2, J 1.
 5. *ransom* (glass industry), A 1.
 6. *ransom* (iron and steel), A 1.
 7. *ransom* (plant workers), C.
 8. *ransom* (plant workers), D 1.
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Q

Wood workers, A 2, C
Wood workers, D 2, F 1
Wood workers, are also particular occupa-
tion, D 2, F 1
Wringers (guscon), J 37.
X-ray workers, E
Yeast makers, J 11.
Zinc chloride makers, J 10, 18, 26.
Zinc electrode makers, J 20.
Zinc miners, are also miners, J 9.
Zinc smelters, A 1, J 12, 16, 28, 46.

Wetenschmakers, G. H.
Water slidders, 129.
Waterproof cloth makers, J 25.
Waxers, D 2, H.
Weavers, D 1, 2.
Whippers, A 1, E, J 13, 28.
Whites lead workers, J 14, 28.
Wire drawers, J 9, 46.
Wire mesh (sacculent) makers, J 5.
Wood alcohol stills, J 30.
Wooden barrel makers, J 20.
Wooden barrel makers (shoes), I 2.
Wood preservers, J 9, 39, 49.
Wood shapers, J 21, 28.
Wood workers, I 2, J 26, 30.
Wood workers, I 2, F 1.

Silver molten, A 2, J 16.
 Silver refiners, J 22.
 Silvers (cloth), J 16.
 Sintering plant works, D 1.
 Silvers (felt hats), C, J 20.
 Silvers (glass), A 1.
 Silvers machine tenders (iron and steel), A 1.
 Silvers workers, D 1.
 Slip mallets (pottery), C, D 1, J 28.
 Slip mallets (porcelain enameling), J 28.
 Smelting, see particular metal.
 Smelters on powder makers, J 6, 12, 15, 31, 36, 41.
 Smelters (glass), C, D 1.
 Soap makers, C, F 2, J 2, 30, 34.
 Soda makers, C, J 4, 14, 16, 37, 47.
 Sodium hydride makers, C.
 Sodium sulphide makers, C.
 Soda (iron) (laundry), D 2.
 Soda makers, J 28, 29.
 Soda alcohols (distate machine), J 29.
 Soda alcohols (lubricant), D 1.
 Soda makers (textiles), D 2, H.
 Spongers, C.
 Sprayers (trees), J 9, 38.
 Sprayers (rubber works), A 2.
 Steamers, F 1.
 Steamers (sauce) J 28.
 Stamp mill workers, C, D 1.
 Starch makers, D 2, J 14, 47.
 Starchers (felt hats), C, J 29.
 Starch workers, J 1.
 Starch workers, see tire filters.
 Nickel acid makers, A 2, J 3.
 Steel engravers, see also engravers, C.
 Steel engravers, J 28, 29, 37.
 Stereotypes, A 2, J 9, 28.
 Surface refiners (felt hats), J 29, 30.
 Nail (coal-tar) cleaners, A 1, J 12, 49.
 Billman (carbolic acid), A 2, C, J 30.
 Sulphur cleaners, A 1.
 Sulphur operators, J 30.
 Sulphur makers, A 1, E, J 10.
 Stone cutters (dry) D 1, H.
 Stone cutters (wet process), C, D 1, H.
 Storage battery makers, J 28, 29, 46, 48.
 Straw hat makers, A 2, D.
 Sulphur (storage battery) workers, J 10.
 Sugar refiners, A 2, C, D 1, J 4, 14, 46, 47.
 Sulphuric acids (petit milk), A 2, C, J 46.
 Sulphur chlorides, A 1, D 1, J 9, 46.
 Sulphur chloride makers, J 16, 26.
 Sulphur (loops and nails), J 46.
 Sulphur extractors, J 15.
 Sulphuric acid workers, J 9, 10, 28, 37, 46, 48.
 Rumors (laundry), C, F 1.
 Surgical dressing makers, J 29.
 Table bands (laundry), C, F 1.
 Table operators (iron and steel), A 1.
 Table lavers (counselling), A 2, D 1, J 38.
 Tailors, H.
 Takers-down (glass), A 1.
 Tallow refiners, F 3, J 3, 15, 48.
 Tank men, C.
 Tannery workers, C, F 1, 2, J 7, 9, 11, 17, 21, 22, 28, 46, 47, 48.
 Tapers (aluminum), J 50.
 Tappers (milling), A 1.
 Tar workers, J 46.
 Taxis (auto), D 2, F 1, J 9, 20.
 Taxidermists (glass), A 1, J 16.
 Telegraphers, H.
 Telephone linemen (trench work), C.
 Temperers, A 1, C, J 16, 22, 28, 38, 48.
 Textile comb makers, D 1.
 Textile printers, see color printers.
 Textile workers, A 2, C, D 2.
 Thermometer makers, J 28.
 Thread spinners, A 2, C.
 Tire makers, A 2, C, D 1, J 28.
 Tire makers, A 1, C, J 2, 4, 9, 10, 24, 28.
 Tinsmiths, mill workers, see iron and steel workers.
 Tire builders, see rubber tire makers.
 Tobacco smokers, C.
 Tobacco rollers, D 2.
 Tobacco workers, D 2.
 Toncages (iron and steel), A 1.
 Tool makers, D 1.
 Top filers (foundry), A 1, D 1.
 Townerage (sulphuric acid), J 10, 37, 48, 49.
 Toy makers, J 5, 9, 28.
 Transfer workers (pottery), J 28, 52.
 Transporters of fluids and work, F 1.
 Treaders (rubber), J 12.
 Tree sprayers, see sprayers (trees).
 Treble deggers, F 1.
 Tubmakers (glass), A 1.
 Tubulators (incandescent lamps), J 16.
 Tumbling barrel workers, D 1.
 Tunnal workers, B, F 2, C.
 Turners-out (glass), A 1.
 Turpentine extractors, C, J 52.
 Type cleaners, J 11, 30.
 Type foundries, J 28.
 Typesetters, J 28.
 Typists, H.
 Upholsterers, D 2, J 30.
 Vapor ovens, see refiners.
 Varnish boilers, J 2.
 Varnish makers, A 2, J 2, 4, 11, 12, 36, 52.
 Vases, C.
 Velvet makers, C, J 9.
 Vetrinarians, F 1, J 2.
 Vinegar makers, J 28.
 Vintners, J 14.
 Vulcanizers, A 2, C, J 7, 8, 11, 12, 15, 21, 30, 46.
 Vulcanizers (elastic), A 2, C.
 Wallpaper printers, A 2, C, J 9, 21, 28.
 Warming house employees (gunstock), A 2.
 Washers, C.
 Washers (rubber), C.
 Washwomen, C, H.
 Watermen, C.

11

10

F. INFECTIONS—

Cont'd.

2. Hookworms (Ankylostomiasis)

Anemia, pallor of the face even when the blood count is not very low; a dull, heavy, listless expression; faintness, speech, and pain; increasing muscular weakness, occurrence of petechiae in stool. Victims often complain of gastro-intestinal pains and cramps. In congested areas there are edemas, scabies, progressive reactions, prethoracic abscesses and increasing stupor.

3. Septic Infections.

Skin infections such as boils, carbuncles, blood poisoning, localized lymphangitis or cellulitis.

Animal handlers, Butchers, Cannery, Feather workers, Fertilizer makers, Garbage workers, Glass makers, Hair workers, Propagators (nursery), Rag workers, Shavers (left side for, laundry), Shoddy makers, Silk workers, Soap makers, Tallow makers, Tannery workers, Veterinarians, Handlers of poultry or decomposing animal products.

G. POOR ILLUMINATION

Nystagmus, eyestrain, distant vision due to astigmatism or hyperopia, headache, giddiness. Eyestrain contributes to neurosthenia.

Butchers, Benders (iron and steel), Chiseler workers, Compositors, Embroidery workers, Jewelers, Metal polishers, Miners, Photographers, Steel engravers, Tinsmiths, Watchmakers, any factory worker.

H. REPEATED MOTION, PRESSURE, SHOCK, ETC.

Pain of muscle used, set up by a myositis, bruising, sprain, or other local changes of a chronic inflammatory nature; trembling, gradual emaciation and partial paralysis of parts, atrophy of muscles.

Artificial flower makers, Barbers, Bicyclists, Blacksmiths, Carpenters, Chauffeurs, Clocks, Cobblers, Compositors, Cotton twisters, Diamond cutters, Elevator runners, Enamellers, Engravers.

OCCUPATIONS EXPOSED TO H—Continued.

Gold beaters, Hammermen, Jewelers, Knitters, Lathe turners, Letter sorters, Lithographers, Locksmiths, Machinists, Masons, Microscopists, Millers, Miners, Musicians, Painters, Paper box makers, Pavers, Pressmen, Tool workers, Pottery, Pressmen, Riveters, Sailors, Sawyers, Seamstresses, Sewing machine operators, Spinners (textiles), Stone cutters (dry), Stone cutters (wet process), Tailors, Triptographers, Typists, Washwomen, Watchmakers, Weavers.

J. POISONS*

1. Acetabdehyde.

Irritation of the mucous membranes of the nose, throat, larynx, and eyes; excoriation of the heart's action, produce night sweats.

Aldehyde purifiers, Cellulose makers, Dye makers, Explosives workers, Mineral solvents, Varnish makers, Vinegar workers.

2. Acridine.

Irritation and inflammation of skin and mucous membranes, severe burning and itching of the skin, violent sneezing.

Dye makers.

3. Acrolein.

Itching in the throat; irritation of the eyes causing lachrymation; conjunctivitis, irritation of the air passages, bronchial catarrh.

Bone removers, Fat removers, Galvanizers, Lead makers, Linoleum makers, Linseed oil makers, Soap makers, Sulfuric acid makers, Tallow refiners, Tanners, Varnish makers.

4. Ammonia.

Acute inflammation of the respiratory organs, cough, redness of the face, chronic bronchial catarrh, redness of the eyes, increased retention of saliva, retention of the urine.

Acetylene makers, Ammonium salts makers, Artificial silk makers, Artificial nitrate makers, Bone-black makers, Broomers, Cuke oven workers, Dye makers, Dyers, Galvanizers, Gas (illuminating) workers, Gas purifiers, Glass workers, Mercantiles, Refrigerating plant workers, Salt extractors (sake area by-product), Sewer workers, Wholesalers, Wood finishers, Soda makers, Sugar refiners, Tinsmiths, Varnish makers.

5. Amyl Acetate.

Nervous symptoms, headache, fullness of the head, giddiness, numbness, nausea, disturbance of digestion, palpitation of the heart, inflammation of the respiratory organs, fatty degeneration of the liver.

Alcohol distillery workers, Art glass workers, Artificial silk makers, Battery (dry) makers, Broomers, Buffers (rubber), Cellulose makers, Cellulose workers, Explosives workers, Furniture polishers, Glycerine, Isocandace, Lamp makers, Jewelers, Lacquer makers, Linoleum makers, Mothers (leather), Patent leather makers, Polishers, Shellac makers, Shoe factory workers, Shoe finishers, Smokeless powder makers, Toy makers, Wires (insulated lamp).

*For the data presented under this heading, the revised and translated "List of Industries and Occupations Exposed to Poisonous and Noxious Substances" published by the International Association for Labor Legislation, London, 1913. The arrangement is similar. (See U. S. Bureau of Labor, Bulletin No. 100, May, 1913.)

HEALTH HAZARDS	Symptom, Condition or Disease to Which Due	Ocupational Work (Types Such as Exposure)
J. POISONS - Cont'd		
12. Heavy.	Irritation, vertigo, anemia, muscular tremor, scarlet like spots of extravasated blood in the skin, irritant cough, fatty degeneration of liver, kidneys and heart.	Aniline makers, Artificial leather makers, Battery (dry) makers, Benzal stills, Bronzers, Carbolic acid makers, Caul scrubbers, Cement makers (rubber alone), Cement mixers (rubber), Coal-tar workers, Coke oven workers, Color makers, Compounds (rubber), Decorators (pottery), Degreasers (fertilizer leathers), Dry cleaners, Dryers (rubber), Dry makers, Electroplaters, Explosives workers, Feather workers, Fertilizer makers, Gas illuminating workers, Gliders, Glass workers, Lacquer makers, Lithographers, Mixers (rubber), Moldsters, Painters, Paint makers, Photogravers, Photo-graphic workers, Pressroom workers (rubber), Reclaim-ers (rubber), Rubber tire builders, Rubber washers, Rubber workers, Shellac makers, Shoe factory work-ers, Shoe finishers, Buckle powder makers, Still (coal-tar) cleaners, Treaders (rubber), Varnish makers, Vulcanizers.
13. Brass (Zinc).	Irradiation, general malaise, throat irritation, cough, nausea, vomiting, constipa-tion, trembling, muscular paine, accelerated respira-tion, profuse sweating, deposit of green larlar on the teeth, metallic taste in the mouth, weakness, presen-ture old age, respiratory and degenerative diseases.	Bench molders (foundry), Blower-out (lime smelters), Brass founders, Brainers, Bronzers, Chargers (also smelting), Core makers, Floor molders (foundry), Galvanizers, Junk metal refiners, Latex (also smelt-ing), Furnace brass (welding), Welders, Zinc sealers.
14. Carbon Dioxide.	Anemia, cyanosis, head-ache, drowsiness, vertigo, faintness and general nerv-ousness.	All-kill milk makers, Black-smiths, Boiler room work-ers, Brass founders, Brew-ers, Brick burners, Calcium makers, Carbon dioxide makers, Charcoal burners, Drying room workers (alu-minum), Fertilizer mak-ers, Furnace workers, Lime burners, Lime kiln chargers, Miners, Pottery workers, Sewer workers, Silo workers, Soda makers, Steam mak-ers, Sugar refiners, Vintners, White lead makers, Yeast makers.
I. POISONS - Cont'd		
15. Carbon Disphiphide.	Headache, pain in the ex-tremities, irradiaing, deaf-ness, reduction of the re-breath's action, nausea, ul-cerative trouble, emaciation, disturbances of some of vi-sion, sedimentation violent tampon followed by dyspe-psia, hypotension of ar-tial tension, later in abnormal decline, chronic dematitit.	Ammonium salts makers, Artificial silk makers, An-plait makers, Carbon dis-phiphid makers, Celluloid makers, Canealers (rubber shoes), Cement miners (rub-ber), Dry cleaners, Dyers (rubber), Emacials, Oak-ers, Match factory workers, Nitro extension, Point mak-ers, Paraffin workers, Putty makers, Rockblasters (rub-ber), Rocketless powder makers, Sulphur esterifiers, Tallow rediers, Vulcanizers.
16. Carbon Monoxide.	Headache (usually frontal), distention, sense of fullness of the head, fatigue, nauy, general weakness, poly-cythemia.	Acetylene makers, Bakers, Blueing kiln workers, Black-smiths, Blockers (felt hats), Boiler room workers, Braze foundries, Cable makers, Calson printers, Carbolite makers, Celluloid makers, Chemical laborers, Choppers (lime smelting), Chimney sweepers, Leather workers, Linoleum makers, Lumber makers, Driv-ing room workers (insu-lation), Fuel meters, Felt hat makers, Flourent makers (mechanical lamp), Finishes (fireman-jacket), Fluors, Fluorescent lamps, Fluors (dent hals), Fly cleaners, Foundry workers, Furriers workers, Garage workers, Gas (illuminaing) workers, Head kiln workers, Inven-dent lamp makers, Kiln tenders, Laundry workers, Lead smelters, Lime bar-ers, Lime kiln chargers, Mercury sealers, Miners, Patent leather makers, Phonograph makers, Pottery workers, Pressers, Refractory makers, Refractory (metallic) Sealers, (it-a-radiaing lamps), Silver sealers, Singers (guth), Soda makers, Stokers, Toas-ten (glass), Temperers, Tubulators (mechanical lamp), Zinc sealers.
17. Chloride of Lime.	Irritating cough, inflama-tion of upper air passages, difficulty of breathing, bronchitis, asthma, nau-ausea, hemoptysis, emphy-sema, tachypnea, hyper-hidrosis, burning eruption on the skin.	Blacksmiths, Chloride of lime makers, Chloriform mak-ers, Deinfestant laundry dye makers, Laundry workers, Tannery workers,

[illegible]

J. POISONS—Cont'd

39. Head.

Exposure workers, Nitro-
styrene workers, Shell
fillers.

Severe headache, vertigo,
nausea, paralysis of the
muscles of the head and eyes
as well as of the lower ex-
tremities, cyanosis, reddening
of the conjunctivae,
burning in the throat and
stomach, disturbances of
digestion, trembling, neu-
ralgia, cold, retarded res-
piration and heart's action,
chills, shivers under nails
and on the finger tips, erup-
tions on the pharyngeal aspect
of the feet and interdigital
spaces, with extreme dry-
ness and formation of fis-
sures.

See Nitrobenzol.

40. Nitrosophthalates.

37. Nitrous Gases and
Nitric Acid.

Irritation of air passages,
cough, labored respiration,
inflammation of the eyes,
corrosion of the teeth, erup-
tion and perforation of
nasal septum.

Acid dippers, Acid mixers,
Acid recoverers, Acid treat-
ment, Acidine makers,
Artificial leather makers,
Blackburn, Cartridge (nitro-
cellulose) makers, Dyeing
cellulose makers, Dyes
(quaternary), Emulsion, Fi-
bers, Explosives workers,
Felt hat makers, Fertilizer
makers, Fireproofers, Gal-
vanizers, (the workers),
Glassblowing dippers, Gun-
powder makers, Insulation
material workers, Insecticides
makers, Javelin, Nitro-
graphers, Nitrate,
Nitric acid workers, Nitro-
glycerine workers, Photo-
engravers, Picklers, Floric
acid makers, Rubber (ac-
tual), Soda makers, Steel
engravers, Sulphuric acid
workers, Tonerless (nitro-
phosphoric acid), Wringers (ex-
posed).

38. Petroleum.

Inflammation of the skin,
sores, suppurating ulcers,
pyoderma, numbness and
prickling of the skin,
irritation of the Schneiderian
membrane, headache
and sensory disturbances,
affections of the respiratory
organs.

Browners (gas barrels),
Feather workers, Furniture
polishers, Lampblack mak-
ers, Oil distillation
workers, Oil well workers,
Paint workers, Petroleum
refiners, Temperers.

J. POISONS—Cont'd

39. Head.

Exposure workers, Nitro-
styrene workers, Shell
fillers.

Severe headache, vertigo,
nausea, paralysis of the
muscles of the head and eyes
as well as of the lower ex-
tremities, cyanosis, reddening
of the conjunctivae,
burning in the throat and
stomach, disturbances of
digestion, trembling, neu-
ralgia, cold, retarded res-
piration and heart's action,
chills, shivers under nails
and on the finger tips, erup-
tions on the pharyngeal aspect
of the feet and interdigital
spaces, with extreme dry-
ness and formation of fis-
sures.

See Nitrobenzol.

40. Nitrosophthalates.

37. Nitrous Gases and
Nitric Acid.

Irritation of air passages,
cough, labored respiration,
inflammation of the eyes,
corrosion of the teeth, erup-
tion and perforation of
nasal septum.

Acid dippers, Acid mixers,
Acid recoverers, Acid treat-
ment, Acidine makers,
Artificial leather makers,
Blackburn, Cartridge (nitro-
cellulose) makers, Dyeing
cellulose makers, Dyes
(quaternary), Emulsion, Fi-
bers, Explosives workers,
Felt hat makers, Fertilizer
makers, Fireproofers, Gal-
vanizers, (the workers),
Glassblowing dippers, Gun-
powder makers, Insulation
material workers, Insecticides
makers, Javelin, Nitro-
graphers, Nitrate,
Nitric acid workers, Nitro-
glycerine workers, Photo-
engravers, Picklers, Floric
acid makers, Rubber (ac-
tual), Soda makers, Steel
engravers, Sulphuric acid
workers, Tonerless (nitro-
phosphoric acid), Wringers (ex-
posed).

38. Petroleum.

Inflammation of the skin,
sores, suppurating ulcers,
pyoderma, numbness and
prickling of the skin,
irritation of the Schneiderian
membrane, headache
and sensory disturbances,
affections of the respiratory
organs.

Browners (gas barrels),
Feather workers, Furniture
polishers, Lampblack mak-
ers, Oil distillation
workers, Oil well workers,
Paint workers, Petroleum
refiners, Temperers.

Reddening of the skin, vesicles,
irritation of respiratory
organs, digestive distur-
bances, symptoms of ur-
aemia, symptoms of the blood,
regeneration, nephritis, gas-
tritis, icterus.

Blackdye makers, Calico
printers, (malt) workers,
Dye makers, Dyers, Ex-
tractors, Gas (illumina-
tion) workers, Gas purifiers,
Lampblack makers, Floric
acid makers, Rubber work-
ers, Shellac powder mak-
ers, Sulphuric acid, Sur-
gical dressing makers,
Wood preservers.

40. Phenyl Hydrazine.

Vascular eruptions on the
skin with itching and burn-
ing, diarrhea, loss of
appetite, greater blood
regeneration, formation of
methemoglobin, a sense
of general malaise.

Antipyrin makers, Dye
makers.

41. Phosgene.

Destruction of lung tissue,
emphysema and edema,
myocardial insufficiency due
to the emphysema, pleural
thickening and adhesions,
chronic bronchitis, mili-
ary diffuse bronchitis, nec-
rotic dyspnea, poly-
pnea.

Dye makers, Phosgene
makers.

42. Phosphorus.

Inflammation and sclerosis
of the bones and of the
periosteum, necrosis of the
bones of the jaw, swelling
and ulceration of the gums
and buccal membrane,
boiling and falling out of
the teeth, suppuration and
destruction of jawbone with
fistulous abscesses burrow-
ing through the cheek,
osteomyelitis, inflammation,
brittleness of bones, de-
structive disturbances, can-
cer.

Blackdye makers, Brass
founders, Fertilizer makers,
Fireworks makers, Insec-
ticide makers, Match fac-
tory workers, Phosphate
mill workers, Phosphor-
ous workers, Phos-
phorus compounds makers,
Phosphorus extractors.

43. Phosphorated Hydrogen.

Oppressed feeling in the
chest, headache, vertigo,
muscular aching, general
debility, loss of appetite,
great thirst.

Acetylene makers, Ferro-
silicon workers, Phos-
phorus extractors, Phos-
phorus (red) makers.

44. Floric Acid.

Itching, inflammation of
the skin, vesicular erup-
tions, yellow pigmentation
of epidermis and conjunc-
tive, inflammation of buc-
cal membrane, vesic-
ular degenerative distur-
bances, vesic-
ular, jaundice, nasal catarrh,
nephritis.

Dye makers, Dyers, Ex-
tractors, Floric acid mak-
ers, Floric acid makers,
Floric acid makers, Floric
acid makers, Floric acid
makers.

HEALTH HAZARDS

SYMPTOM, CONDITION OR DISEASE TO LOOK FOR

OCCUPATIONS WHERE OTHERS ARE EXPOSED

J. POISONS—Cont'd

52. Turpentine.

Irritation of the mucous membrane of the eyes, nose, and upper air passages; cough, bronchitis, inflammation; salivation; edema of the kidneys, irritation of the kidneys, odor of uric acid in urine, severe irritation of the skin, exsiccation and hardening of the epidermis.

Art glass workers, Cable splicers, Calico printers, Caulker makers, Cement-ers (rubber shoes), Decorators (soldier), Dry cleaners, Dye makers, Enamellers, Enamel makers, Feather workers, Furniture polish-ers, Japan makers, Lacquer makers, Linoleum makers, Lithographers, Painters, Paint-makers, Patent-leather makers, Printers, Rubber workers, Sealing wax mak-ers, Shale makers, Tins-fer makers (pottery), Turpentine extractors, Varnish makers.

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OCCUPATION HAZARDS AND DIAGNOSTIC SIGNS

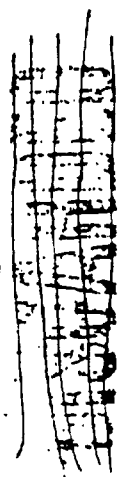
**A GUIDE FOR MEDICAL EXAMINERS
Regarding Impairments to be Looked for in
Hazardous Occupations**

(Revised and Enlarged)

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