

- Alloys, 409
 - Aluminum, 386
 - Brazing, 426
 - Ferro-chrome, 608
 - Magnesium, 386
 - Nonferrous, 428
 - Platinum, 386
- Alpha, antitripsin, 516, 576
- Alpha₂ macroglobulin, 512
- Alternaria, 481
- Alternaria Sp.* (moldy wood chips), 482, 747
- Altitude, high, 723
 - Effect on barometric pressure and ambient partial pressure of oxygen, 185
- Alumina, 46, 52, 249, 401, 402, 403, 404, 406, 407
- Alumino-silicate (Aluminum silicate), 15, 245-246, 268
- Aluminosis, 38, 742
- Aluminum, 4, 5, 15, 29, 401-410, 742
 - Alloys, 386, 403, 404
 - Grinding, 403, 404, 742
 - Cancer and, 640
 - Chronic respiratory disease and, 640
 - Dust, 407, 408
 - Filters, 403
 - Flaked, 402-403
 - Foamed, 404
 - Foil, 403, 404
 - Fumes, 407
 - Granules, 402, 404
 - Lung, 401, 406
 - Lung cancer, 638-640
 - Metallic, 407
 - Molders, 244
 - Oxide, 404, 678, 742
 - Oxide fume, 607
 - Powder, 404
 - Purification, 753
 - Purifiers, 581
 - Solder makers, 577
 - Smelting, 404, 742
 - Workers, 404, 574, 742, 751
- Aluminum sulfate synthesis, 756
- Alveolar to arterial oxygen gradient ((A-a)PO₂), 186
- Alveolar-capillary block syndrome, 165
- Alveolar-capillary membrane, 571
- Alveolitis, allergic, 722, 729
- Amalgam, dental, 427
- Amalgam makers, 587, 754
- Amine workers, 574, 751
- Amines, 47, 462
 - Aliphatic, 47
- Aminoethyl ethanolamine, 462, 464
- Aminophylline, 517
- Ammonia, 54, 57, 58, 59, 60, 433, 504, 505, 506, 511, 573-576, 751
 - Detection of, 59
- Ammonia production, 745
- Ammonia workers, 574, 751
- Ammonium beryllium fluoride, 743
- Ammonium salt makers, 574
- Ammunition makers, 403, 404, 742
- Amoeba,
 - as Causative agent in hypersensitivity pneumonitis, 482
- Amosite, 248, 287, 288, 296, 313, 630, 631, 672, 678, 743
 - Disease association, 36
 - Factory workers, 672
 - Mortality studies, 678, 680
- Amphiboles, 5, 6, 7, 9, 243, 248, 254, 287
 - Alkali, 9
 - Crystal chemistry of, 9
 - Empirical formula, 9
 - Monoclinic, 9
 - Orthorhombic, 9
- Amphotericin B, 699
- Ampicillin, 462, 464, 517
- Amprolium hydrochloride, 462
- Analysis,
 - Multivariate, 132-133
 - Stratification, 132
- Anaphylaxis, 468-469
- Andalusite, 14, 245-246
- Andersen sieve-type sampler, 86, 90, 93
- Andesite, 6, 8, 10, 13
- Anemia, 38, 39, 419, 578, 710
- Angiotensin, 396
- Anhydride,
 - Phthallic, 462, 465, 468, 482
 - Tetrachlorophthallic, 462, 465
 - Trimellitic, 462, 468, 482
- Anhydrides, 462, 483
- Anhydrite,
 - Disease associations, 36
- Aniline color makers, 574, 750
- Aniline vapors, 49
- Animal antigens, 462, 464
- Animal breeders, 463, 464
- Animal care workers,
 - Laboratory, 84
- Animal danders, 462, 464

Animal diseases,
 Human susceptibility, 84
 Animal fat, oil and products, 462
 Animal fat and oil processors, 584
 Refining, 743
 Animal handlers, 463, 464
 Animal manure removers, 584
 Animal products, 693-697
 Animal proteins, 482
 Animals, domestic,
 Brucellosis and, 703
 Annealers, 574, 751
 Anodes, 402
 Anorexia, 491, 588, 669, 705, 714
 Anorthite, 10, 280
 Anorthoclase, 10
 Anthophyllite, 9, 248, 271, 287, 288, 297,
 305-306, 631, 672, 743
 Disease associations, 36
 Anthracite, 35, 745
 Anthracite miners, 348, 512, 665, 721
 Anthracosilicosis, 338, 348
 Anthracosis, 35, 334
 Anthrax, 83, 85, 693, 747
 Cutaneous, 693, 695, 696
 Inhalation, 693-697
 Pulmonary, 693
 Antibiotics, 696
 Antibodies,
 IgA, 493
 IgE, 468
 IgG, 489
 IgM, 493
 Precipitating, 490, 493, 496
 Antigen,
 Animal, 462
 Boivin, 613
 Antigenic agents
 and Allergic alveolitis, 720, 729
 Antigorite, 254
 Antihistamines,
 and Byssinosis, 558
 and Hypersensitivity pneumonitis, 494
 Anti-microbial drugs, 711
 Antimony, 5, 29, 409, 410, 412, 742, 748,
 760
 Oxide fume, 607
 Pneumoconiosis, 413, 742
 Recommended concentrations, 413
 tetraoxide, 409
 Trifluoride, 413
 Trioxide, 409, 411
 Antinomycetes, thermophyllic, 481
 Anti-proteases, 512
 Apatite, 12, 14, 454
 Arc cutting, 746
 Arc welders, 591, 594, 756, 757
 Argenite, 426
 Argillaceous rocks, see Rocks, argillaceous
 Argillite, 11, 13, 15
 Argyria, 40, 426, 427, 742
 Argyrophil fibers, 281
 Arkoses, 10, 11, 12, 13, 14, 15, 16
 Aromatic compounds,
 Polynuclear, 402
 Aromatics,
 Detections of, 60
 Arsenic, 5, 29, 413, 506, 657, 665, 750
 Arsenic workers, 750
 Arsine, 52, 632-633
 Arterial blood gases, 155, 156, 185-186,
 187, 200
 Abnormalities, in, 192
 Arterial blood oxygen tension, 185-186,
 189, 192, 194
 Arteries,
 Pulmonary, 720, 723
 Arteriolar disease, 719
 Arterioles, 719
 Arthritis, rheumatoid, 370, 589
 and Complicated pneumonociosis, 564
 Arthus-type reactions, 489
 Artificial flavor makers, 584
 Artificial stone makers, 750
 Asbestiform actinolite, 287
 Asbestiform minerals, 248, 255, 522, 672
 Asbestiform tremolite, 287
 Asbestos, 3, 23, 25, 33, 36, 70, 198, 243,
 248, 256, 273, 278, 282, 402, 517,
 629-632, 671-672, 678, 680, 742
 "Bodies," 262, 263, 308, 309, 310,
 311, 314
 and Cor pulmonale, 721, 727
 Diseases, 3, 30
 Milling, 743
 Mining, 743
 Mixed fiber types, 290, 296, 299, 305,
 629-630
 U.S. consumption, 288
 Asbestos building product workers,
 Mortality studies of, 536
 Asbestos exposure,
 and Lung cancer, 630, 657
 and Mesothelioma, 671-675, 682, 683
 Mortality studies, 291-295
 in Primary manufacturing, 289

- Respiratory morbidity studies, 300-304
 - Asbestos friction material workers,
 - Mortality studies of, 536
 - Asbestos pleurisy, 284
 - Asbestos textile workers, 750
 - Mortality, studies of, 536
 - Asbestos workers, 289, 290, 629, 631, 665, 672-675
 - Mortality studies, 290, 296, 677, 679, 680, 683, 684
 - Smoking and, 631-632
 - Asbestosis, 36, 147, 152, 244, 287-327, 408, 629, 672, 726, 742
 - See also Fibrosis, interstitial pulmonary
 - Lung cancer and, 310-313
 - Lung function tests, 317-318
 - Symptoms and signs, 315-317
 - Ascorbic acid,
 - and Byssinosis, 558
 - Effects of smoking, 298
 - Aspergillosis, 84, 481, 490
 - Aspergillus, 481, 485
 - Aspergillus clavatus (moldy malt), 747
 - Asphalt storage workers, 584
 - Asphalt workers, 751
 - Asphyxia, 511
 - Aspirator vessels, 43
 - Asthma, 164, 165, 166, 408, 441, 489, 513, 516, 559, 591, 595, 749
 - Bronchial, 439, 481
 - Causative agents, 462
 - Definition, 461-462
 - Due to synthetic chemicals, 469
 - Grinders', 534
 - Intrinsic, 165
 - Occupational, 461-477
 - Occupations and population at risk, 463
 - Potters', 36
 - Strippers', 534
 - Treatment of, 472
 - Asthmatic bronchitis,
 - Social Security criteria for, 207
 - Asthma-like illness, 743
 - Atelectasis, 413
 - Focal, 456
 - Atherosclerosis, 720
 - Atomic reactors, 333
 - Atopy, 462, 463
 - Attapulgate clay (Fuller's earth), 267, 268, 758
 - Attributable risk, 110
 - Augite, 9, 14, 247
 - Auto mechanics, 577, 752
 - Automobile finish industry, 746
 - Automobile servicing industry, 288-289, 672, 673
 - Automotive industry, 608
 - Avian distributors, 713
 - Avian dropping, 482, 744
 - Avian proteins, 482, 744
 - Aviaries, breeding, 713
- B**
- B₂ adrenergic drugs, 517
 - Babbitt makers, 434, 435
 - Babbitt metal workers, 412, 750, 760
 - Babbit metals, 409, 411
 - Bacillus anthracis*, 747
 - Bacillus subtilis*, 466, 474, 482, 746
 - Back extrapolation method, 156
 - Bacteremia, 695, 705
 - Bacteria,
 - Anaerobic, 22
 - Bacterial agents,
 - in Hypersensitivity pneumoconiosis, 481
 - Bactericide makers, 427, 587, 633, 754
 - Baddalyte, 451
 - Badge system, monitoring, 49, 50
 - Bagassosis, 481, 482, 485, 492, 496, 613, 747
 - Bakers, 464, 518
 - Bakolite, 431
 - Bakolite pneumoconiosis, 431
 - BAL, 588
 - Barite, 33, 415-418, see also Barytes
 - Baritosis, 415, 416, 417, 418, 743
 - Barium, 5, 415-418
 - Ingestion of, 416
 - Barium carbonate makers, 584, 753
 - Barium chloride, 415
 - Barium oxide, 415
 - Barium slat makers, 584
 - Barium sulfate, 415, 743
 - Barium titanate, 416
 - Bark strippers, 481, 496, 747
 - Barley dust, 504
 - Barometer makers, 587
 - Barrel chest, 516
 - Baryta mining, 743
 - Barytes, 415-418
 - Basal rates, 287, 391
 - Basalt, 6, 12, 14, 18

- Basaltic magmas, 4, 6
- Bastnaesite, 454
- Batholiths, 8
- Battery makers or workers, 334, 412, 745, 748, 751, 752, 754, 756
 - Storage, 577
 - Mercury, 587
- Bauxite, 401, 403, 407
 - Disease associations, 36
- Bauxite mining, 401-402
- Bayer process, 402
- Beads, porous polymer, 46
- Bearings, machinery, 409
- Beauticians, 464, 465
- Beclamethazone, 558
- Beet sugar bleachers, 599, 755
- Bentonite, 243, 267-268, 759
 - Milling, 759
 - Mining, 759
- Benzene, 42, 46, 54, 517
 - Detection of, 59
- Benzene hexachloride makers, 581
- Benzo(a)pyrene, 601
- Bertrandite, 246
- Beryl, 243, 246
- Berylliosis, 385, 743
 - Acute, 246
 - Chronic, 246
- Beryllium, 5, 29, 385-400, 743
 - and Cor pulmonale, 642, 720-721, 728
 - Carbide, 743
 - Ceramic products, 386, 743
 - Copper alloys, 743
 - Disease, 385-400, 721, 728
 - Fluoride, 743
 - Histological classification of, 389
 - Hydroxide, 744
 - Nickel alloys, 285
 - Oxide, 744
 - Oxyfluoride, 744
 - Phosphors, 744
 - Sulfate, 744
 - Workers, 385-386, 665
- Beta attenuation direct reading, 78
- Bias, 124-132
 - Measurement, 126-129
 - in Questionnaire validity, 175
 - Selection, 125-126
- Bible printers' fever, 613
- Bioherms, 16
- Biopsy, lung, 369, 370, 495-496
- Biotite, 8, 10, 12, 14, 272, 273
 - Disease associations, 36
- Biphasic responses, 470
- Bipyramidal crystals, 467
- Bird breeders, 744
- Bird breeder's lung, 482, 744
- Bird breeder's lung disease, 714
- Bird droppings, 481, 483
- Bird fancier's lung, 487, 744
- Bird fancier's lung disease, 714
- Bird handlers' lung, 481
- Bird handling, 483
- Birds,
 - Diseases and, see Psittacosis
 - Pet, 714, 716
- Bis(Chloromethyl)ether (BCME), 633-635, 636, 637, 638, 750
- Bismuth, 5, 29
- Bisulfite ions, 600
- Bituminous, 745
 - Minerals, 35
 - Miners, 665, 721
- Black dioxide, 431
- "Black Infiltration", 334
 - Definition of, 329
- Black lung, 35, 329-330, 372
- Black lung benefit criteria, 206, 208-210
- Blast furnace workers, 584, 599, 639
- Blastoma, pulmonary, 659
- Blastomycosis, 84
- Bleachers, 581, 753, 755
 - Beet sugar, 599
 - Flour, 599
 - Food, 590, 599, 755
 - Fruit, 599
 - Gelatin, 599
 - Glue, 599
 - Grain, 599
 - Oil, 599
 - Paper, 581, 753
 - Straw, 599
 - Textile, 590, 599, 755
 - Wicker ware, 599
 - Wood, 599
- Bleaching powder makers, 581
- Blebs, 406, 408, 516
- Blood, arterial, 515
- Blood flow, 719
- Blood streaking, 513
- Blow room workers,
 - Byssinosis prevalence in, 539
- Blue bloaters, 165
- Boat builders, 751
- Boeck's sarcoidosis, 694
- Boiler cleaners, 602, 755, 757

Boiler makers, 587, 673, 754
 Boiler scalers, 220, 422, 429, 757, 760
 Boivin antigens, 613
 Bone marrow, 723
 Bonblack makers, 574
 Borate minerals, 32
 Borates, 16
 Boron, 17
 Borosilicate, 444
 Bottles, gas wash, 44, 45
 Bouhuy's classification, 538, 541
 Bowen's crystallization series, 12
 Bradykinin, 616
 Brake lining manufacture, 742, 745
 Branching (Airflow), 70
 Brass founders, 412, 435, 748, 760
 Brass founders' ague, 607
 Brass foundry workers, 607
 Brass makers, 750
 Braunitz, 431
 Braziers, 574, 577, 590, 607, 752, 755
 Brazing, 756
 Breathlessness, see Dyspnea
 Breccias, 11, 13, 15
 Breeders, animal, 463-464
 Brewery workers, 584, 599, 753, 755
 Brick dust, 504
 Brick manufacturing, 504, 743
 Brick masons, 759
 Brick workers, 751
 Bridge building, 759
 Briquette makers, 751
 Britannia metal workers, 412, 435, 760
 Bromelin, 462, 464
 Bromide, 16
 Bromide-brine workers, 584
 Bromine, 5
 Bromine makers, 581
 Bromobenzene, 511
 Bronchial carcinoma, 296, 672
 Bronchial challenge tests, 471
 Bronchial mucous glands,
 Hyperplasia of, 366, 521
 Hypertrophy of, 366
 Bronchial obstruction, 669
 Bronchial provocation tests, 471, 473
 Bronchial reactivity, testing of, 167
 Bronchiectasis, 419, 514, 521
 Bronchioles, terminal, 572, 595
 Bronchiolitis, 591, 724
 Bronchitis, 36, 207, 385, 409, 506, 507,
 724, 730
 Causative agents, 503-505
 Chronic, 164, 207, 366, 461, 503-529,
 559, 591, 721
 Cotton workers and, 534
 and Prevalence of byssinosis,
 542-543
 Ventilatory function tests and, 544,
 546
 Definition, 503
 Dust exposure and, 547-548
 Industrial, 229, 247, 263, 366, 368
 "malignant", 578
 Natural history of, 514
 Pathological features of, 510
 Smoking and, 549
 Social Security criteria, 207
 VA rating for, 211
 Bronchoconstriction, 469, 600, 601
 Bronchodilators,
 and byssinosis, 558
 and Hypersensitivity pneumonitis, 494
 Bronchography, 152
 Bronchopneumonia, 506, 507
 Bronchoscopy,
 Fiber optic, 682
 Bronchospasm, 168, 433, 470, 507, 571,
 591, 604
 Bronze, 434
 Bronze foundry workers, 435, 607
 Bronze makers, 750, 760
 Bronzers, 412, 574, 587, 752, 754
 Broom makers, 581
 Brownian motion, 12, 70
 Brucella sp., 748
 Brucellosis, 84, 85, 703-708, 748
 Brush makers, 751
 Bubbler, 51, 52, 93
 Bubblers, fritted, 44, 45, 46, 52
 Buccal lining, inflammation of, 588
 Building construction, 759
 Building stones, 19, 33, 35
 Building, contaminated,
 Workers, 699
 Bulbs,
 Aspirator, 43-44
 Bullae, 406, 429, 430, 516
 Burial vault builders, 759
 Burners,
 Shipyards workers, 673
 Burnishers, 412
 Burns,
 Caustic, 36
 Butonites, 35
 2-Butonone,

- Detection of, 59
 - Byssinosis, 507, 513-568, 613, 722, 730, 744
 - Age and, 549-550
 - and Air pollution, 550
 - Anatomic pathology of, 556-557
 - Causative agents, 533
 - Clinical signs, 557-558
 - and Chronic bronchitis, 542-543
 - Definition, 533
 - Diagnostic criteria, 559-560
 - Duration of cotton dust exposure and, 549-550
 - Dust exposure and, 547-548
 - Dyspnea and, 557
 - Experimental pathology and, 555-556
 - Expiratory flow response pattern, 550-552
 - Grading of, 536, 537, 545, 546
 - Histamine and, 554
 - Immunological mechanisms and, 554
 - Microorganisms etiology, 554-555
 - Mortality studies of, 536-537
 - Morbidity studies of, 537-538
 - Natural history of, 557-558
 - Pharmacologic mechanism and, 554
 - Prevalence by sex, age, race and ethnic group, 550
 - Prevalence in
 - Cotton industry, 538-542
 - Flax workers, 538, 540
 - Rope, jute, sisal manufacturing, 540, 542
 - Soft hemp workers, 540
 - Yarn processing, 541
 - and Prevalence of dyspnea, 543
 - Prevention of, 560-561
 - Prognosis, 559
 - Pulmonary fibrosis and, 553
 - Research needs, 561
 - Roentgenographic studies of, 553
 - Smoking and, 549
 - Symptoms of, 557-558
 - Treatment of, 558
 - Ventilatory function tests and, 554-546
 - "Byssinosis bodies," 557
 - "Bystander exposure," 673
 - Bytownite, 8, 10
- C** Cabinet maker, 431
- Cable and trolley wire makers, 577
 - Cable splicers, 412, 584
 - Cadmium, 5, 29, 572, 576-580, 748, 752
 - and Cor pulmonale, 722, 729
 - and Emphysema, 504, 720
 - Federal standards for, 576
 - Cadmium chloride, 576, 578, 753
 - Aerosol, 578
 - Cadmium-compound collecting-bag handlers, 577
 - Cadmium oxide, 506, 576, 753
 - and Emphysema, 509
 - Fume, 607
 - Cadmium platers, 577
 - Cadmium smelters, 506, 577
 - Cadmium sulfide, 753
 - Cadmium vapor lamp makers, 577
 - Cadmium workers, 577, 752
 - Caisson workers, 584, 753
 - Calcio-alumina silicate glass, 444
 - Calcite, 14, 36
 - Calcite-dolomite, 18
 - Calcium, 4, 14
 - Calcium carbide makers, 574
 - Calcium carbonate, (See also Limestone), 15
 - Calcium chloride makers, 581
 - Calcium compounds, 249
 - Calcium fluoride, 642
 - Calibration,
 - in instrument evaluation, 62
 - Calibration instrument makers, 587
 - Canadian red cedar dust, 505
 - Cancer, see also Carcinoma
 - Brain, 640
 - Bronchogenic, 631
 - Bronchus, 38, 639, 644
 - Digestive, 644, 645
 - Esophagus, 639, 640, 649
 - Gastrointestinal, 36, 647, 648
 - Genito-urinary organs, 639, 640
 - Intestinal, 639
 - Kidney, 639
 - Lung, 3, 36, 38, 39, 40, 329, 506, 629-656, 669, 672, 682
 - and Asbestosis, 290, 310-313
 - Clinical presentation,
 - Diagnosis, 669
 - Prognosis, 670
 - Signs, 669
 - Symptoms, 669
 - Therapy, 669
 - Epidemiologic studies, 644-650

- Hilar types, 657
- Histological type in males (%), 662-665
- Mortality studies and miners, 336-337
- Occupationally induced, 629-656
 - Epidemiologic studies, 629-632
- Pathology of, 657-668
- Peripheral types, 657
- Screening,
 - Chest roentgenogram, 689
 - Sputum cytology, 689
- Nasal, 641
- Nasopharynx, 39
- Pancreas, 639, 640
- Pleura, 639
- Prostate, 639, 649
- Rectum, 639
- Respiratory system, 639, 640
- Sinus, 3
- Skin, 290, 639
- Stomach, 337, 639, 649
- Candida albicans, 432
- Candy molding, 758
- Cap loaders, percussion, 587, 754
- Caplan's lesions, 357, 364
- Caplan's syndrome, 219, 221, 233, 235, 364, 370
- Carbochol, 591
- Carbon, 5, 402
- Carbon arc lamps, workers exposed to, 455
- Carbon black, 329, 332, 333, 334, 352-353, 745
 - Definition of, 331
 - Occupational exposure to, 314
- Carbon brush makers, 587
- Carbon dioxide, 44, 54, 611
- Carbon dioxide tension, 165, 193, 194
- Carbon disulfide, 583
- Carbon disulfide makers, 584
- Carbon disulfide solvent, 47
- Carbon dust exposure, 329, 384
- Carbon electrode workers, 334, 745
- Carbon monoxide, 44, 52, 54, 160, 402, 611, 639
- Carbon tetrachloride, 54
- Carbonate rocks, 8
- Carbonates, 15, 16
- Carbonic acid, 11
- Carbonyl fluoride, 438, 611
- Carburization workers, 334, 745
- Carcinoembryonic antigen, 314
- Carcinoma,
 - Adeno, 662-665
 - Adenosquamous, 658
 - Bronchial, 296, 672
 - Bronchus, 630
 - Bronchioloalveolar, 662-665
 - Bronchogenic, 631, 635, 636, 637, 641, 669-670
 - Epidermal, 637
 - Epidermoid, 632, 633, 641, 643
 - Intermediate, 659
 - Large cell, 657, 658, 660, 662-664
 - Oat cell, 637, 638, 657, 658, 659
 - Small cell, 633, 636, 637, 641, 643, 657-660, 661, 662-665, 669
- Carcinomas, squamous cell, 642, 657, 658, 659, 660, 661, 662-665, 670
- Carcinosarcoma, 659
- Card room fever, 558
- Carders, (Card room workers)
 - Byssinosis prevalence, 539, 540, 541
 - Dust exposure and, 547
 - Mortality studies of, 536
- Cardiac arrhythmias, 583
- Carding, 694
- Carnotite, 40
- Carpenters, 672, 673, 747, 749
- Carpet makers, 581, 693, 695, 744, 753
- Case-control study (epidemiology), 120-124
 - Definition, 107
- Case fatality rates, 109
- Case hardeners, 574
- Cassiterite, 40, 434
- Cast iron manufacturing, 333
- Casters, 429
- Caster's fever, 607
- Castor bean, 462, 464, 468
- Catalyst makers, 404, 742, 743, 751, 757
- Catheterization, cardiac, 732
- Cathode ray tube manufacturers, 744, 745
- Cathodes, 402
- Cation, 6, 14, 19
 - Divalent, 7, 254
 - Monovalent, 9
 - Trivalent, 249
- Caulkers,
 - Shipyard, 673
- Causality, inference criteria, 133-136
- Caustic soda makers, 587, 754
- Cedar,
 - Western red, 469
- Cellophane makers, 584, 753
- Cells,

- Mast, 594, 615
- Cellulose acetate plastizers, 746
- Cellulose workers, 756
- Celsian, 8, 10
- Cement dust, 504
- Cement (asbestos) production and application, 743, 759, 760
- Cement rock, 33
- Cement workers, 220, 334, 438, 505, 508, 745, 746, 759
- Cemented tungsten carbide, 438
- Central nervous system,
 - Diseases of, 39
- Centrifuge, zonal, 95
- Centrilobular emphysema (CLE), 512
- Cer-pneumoconiosis, 745
- Ceramic enamel makers, 750
- Ceramic manufacturing, 412, 508, 743, 749, 752
 - Use of talc in, 256
- Ceramic workers, 334, 452, 455, 587, 602, 742, 748, 749, 750, 751, 754, 759
 - Pottery makers, 577, 746
- Ceramics, 37, 220, 331, 333, 504, 742, 745, 757, 758
- Ceria (cerium oxide), 745
- Cerium, 454, 455
 - Milling, 757
 - Mining, 757
 - Transporting, 757
- Cesium, 5
- Cervantite, 409
- Chalcedony, 279
 - Disease associations, 36
- Chalk making, 758
- Challenge testing, 167-168, 467, 470
- Challenge testing, inhalation, 494
- Channel black, 331, 333
- Charcoal, 46-47, 48
- Charcoal tube-gas chromatographic, 47
- Charcot-Layden crystals, 467
- Cheese mold, 482
- Cheese workers, 482, 747
- Cheese washers' lung, 747
- Chelating agents, 588
- Chemical agents,
 - in Hypersensitivity pneumoconiosis, 481
- Chemical analysis (Air sampling), 70
- Chemical coatings, 48
- Chemical laboratory workers, 427, 574, 584, 635, 675, 693, 742, 748
 - Teachers, students, 584
- Chemical manufacturers, 331, 506, 507, 574, 744, 753, 756, 761
- Chemical precipitates, 8
- Chemical synthesizers, 581
- Chemical workers, 518, 752
- Chemically treated papers, 51, 52
- Chemicophysical principle (Direct reading instrumentation), 56-57
- Chemiluminescence, 56, 57, 58, 98
- Chemists, 748
- Chemotaxis, 615
- Chemotherapy, 670, 710
- Chert, 16, 415
 - Disease associations, 36
- Chest,
 - Barrel, 576
- Chest pain, 239, 284, 408, 514, 571, 583, 591, 681, 682, 710, 714
- Chimney sweeps, 638
- China clay, 246, 249-254
- Chippers,
 - Shipyard workers, 673
- Chlamydia psittaci, 713, 716
- Chlamydiosis, 713
- Chloride, 16
- Chlorinated chemicals, 506
- Chlorinated compound manufacturing, 756
- Chlorinated hydrocarbon insecticide makers, 581
- Chlorinated solvent makers, 581, 753
- Chlorine, 5, 17, 47, 48, 54, 415, 504, 505, 506, 511, 580-583, 753
 - Federal standard for, 580
- Chlorine gas, 402, 580-582
- Chlorine workers, 581, 587, 753, 754
- Chlorite, 14, 18, 249, 255
- Chloroform,
 - Detection of, 59
- Chloromethyl ether, 633
- Chloromethyl methyl ether, 504, 505
- Cholera vaccination, 707
- Chromate dust, 640
- Chromate-producing industries, 640-641, 644-648
- Chromatography, 44, 48
 - Electron capture gas, 47
 - Ion, 48
- Chrome, salts of, 465
- Chromite ore, 254, 506
- Chromium, 5, 29, 53, 504, 506, 517, 645, 650, 657, 751
 - Lung cancer and, 640-641

- Chromium compounds, 465, 506
- Chromium oxide fume, 607
- Chromium salts, 462, 748
- Chronic airways obstruction, 166
 - Physiological factors, 166
 - Prognosis, 559
 - Work status and, 166
- Chronic bronchitis, 207, 503-529
- Chronic nonspecific pulmonary disease, 519
- Chronic obstructive airways disease, 207, 503-529
 - Causative agents, 503-505
 - Definition, 503
- Chronic obstructive lung disease, 165, 514, 533
- Chronic obstructive pulmonary disease (COPD), 222, 514
- Chrysotile, 248, 254, 287, 288, 297-298, 305-306, 630-631, 672, 678, 680
 - Disease associations, 36
- Cigarette smoking, see Smoking
- Cirrhosis, liver, 723
- Cistern cleaners, 584
- Citrus root fumigators, 584, 753
- Clara cells, 510
- Clastics, 8, 12
- Claviceps purpurea, 618
- Clay, 11, 14, 15, 16, 18, 250
 - Settling, 12
 - Steatite, 246
- Clay minerals, 19, 33, 248
- Closing capacity (CC), 158
- Closing volume (CV), 158
- Clubbing, finger, 263, 287, 315, 514
- Clutch lining manufacture, 742
- Coal, 16, 19, 23, 33, 745
 - Bituminous, 638
 - Disease association, 35
 - Loading, 745
 - Milling, 220, 745, 760
 - Mining, 220, 508, 745, 760
 - Population at risk to exposure, 331
 - Production, 331
 - Reserves, U.S., 331
 - Transporting, 745
- Coal deposits, 31, 332
- Coal dust, 329, 331, 334, 355, 356, 745
- Coal gasification workers, 584
- Coal macule, description of, 329, 353, 357
- Coal mine dust, 352, 504, 505, 506
 - and Cor pulmonale, 720, 721
- Coal miners, 709
 - and Cigarette smoking, 509
 - Morbidity studies, 338, 345-353
 - Mortality studies, 336-338, 339-343, 344
- Coal mining health and safety legislation, 329-330
- Coal tar workers, 574, 751, 752
- Coal workers, 331, 508, 512, 517, 748
- Coal workers' pneumoconiosis, see Pneumoconiosis, Coal workers'
- Coal tar and pitch volatiles, 639, 750
- Cobalite, 419
- Cobalt, 5, 7, 29, 418-421, 504, 729, 743, 746
 - Radioactive, 419
- Coccidioides immitis*, 91
- Coccidioidomycosis*, 85
- Coesite, 11
- Coffee bean, 462, 464
- Coffee bean processors, 464, 746
- Coffee dust, 468, 481, 482, 746
- Coffee worker's lung, 482, 746
- Cohort studies (epidemiology),
 - Characteristics of, 111-117
 - Criteria for evaluating, 114-115
 - Definition, 107
- Coin production, 435, 742
- Coke makers, 574, 752
- Coke oven emissions, 504, 506
- Coke ovens,
 - Human cancer and, 638
- Coke oven workers, 584, 751, 753
- Coke plants,
 - Cancer and, 639
- Coke production, 506
- Cold storage food preservers, 594, 756
- Coliphages (sampling for), 96
- Collagen 357, 720
- Collagenase, 512
- Collier, see Coal miner
- Collimation, 138
- Colombium, 29
- Colophony resin, 464
- Color makers, 574, 581
- Colorimetric air-monitoring badge, 49-50
- Colorimetric indicator tubes, 52, 53
- Colorimetry, 48, 57, 58
- Columns, glass beaded, 44, 46-47
- Combers of sisal, 744
- Commutator brush manufacturing, 745
- Compost, moldy, 462, 481, 482, 747
- Compressed gas workers, 574, 752
- Concrete workers, 759

- Condensation (sampling), 49, 51
- Conductivity,
 - Electrical, 57, 59
 - Thermal, 57, 60, 61
- Confounding, 129-133
 - in Silicosis, 221-226
- Conglomerates, 11, 13, 15
- Conjunctiva injury, 36
- Conjunctivitis, 84, 385, 390, 589, 603
- Construction industry, 288-289
- Construction workers, 83, 84, 508, 672, 699, 747, 749
- Consumption,
 - Miners', 35
 - Potters', 36
- Containers, evacuated, 42, 44
- Contaminants,
 - Gaseous,
 - Sampling, 89
 - Particulate,
 - Sampling, 89
- Copper, 5, 23, 27, 28, 748
- Copper-Cadmium alloy makers, 577
- Copper deposits,
 - by States, 26
- Copper dust, 402, 608
- Copper mine workers, 665
- Copper ore sulfidizers, 584
- Copper oxide fume, 607
- Copper plate polishing, 608
- Copper refining, 412, 752
- Copper smelter workers, 632, 661, 665, 748, 750
- Copper sulfate synthesis, 756
- Copying machines, 594
- Cor pulmonale, 165, 719-737
 - Acute, 720, 730
 - Beryllium disease and, 392
 - Chronic, 720, 730-731
 - Clinical description, 730
 - Definition, 719
 - Diagnosis of, 731-732
 - Natural history, 731
 - Prevention of, 732-733
 - Progression, 731
 - Reversibility, 731
- Coral, 8
- Cordierite, 243, 246
- Cork workers, 483, 722, 747
- Corkwood, 517
- Corn growers, 574
- Cornea,
 - Injury, 36
- Corneal ulcers, 589
- Corticosteroids, 392, 441, 470, 472, 491, 493, 494, 513
- Corundum, 404, 422
- Cosmetics, 758
- Cosmetologists, 464
- Cotton, 533, 534
 - Consumption of, 533
 - Leaf, 533, 548
 - Production of, 533
 - Raw, 548
- Cotton bract, 533, 548
- Cotton classers, 608
- Cotton cleaning processes, 560
- Cotton cold, 558
- Cotton dust, 504, 505, 506, 744
 - Endotoxin in, 609
 - Exposure classification, 545
 - Workers exposed to, 534, 535
- Cotton fever, 558
- Cotton garnetting industry, 548, 744
- Cotton ginners, 608
- Cotton mills, 507
- Cotton processing, 744
- Cotton stem, 533
- Cotton textile workers, 334, 508, 608
 - Byssinosis prevalence, 538-542
 - Mill fever in, 609
 - Smoking and, 548-549
 - Ventilatory function tests and, 544-546
- Cotton trash (Cotton waste), 548
 - Reclaimers, 744
 - Utilization workers, 608
- Cotton waste, see cotton trash
- Cotton workers, 534, 720, 730
 - Age and byssinosis prevalence in, 549-550
 - Byssinosis prevalence in, 541
 - Chronic bronchitis and, 534
 - Classifiers, 744
 - Emphysema and, 534
 - Morbidity studies of, 537
 - Mortality studies of, 536
- Cottonseed, 464
- Cottonseed oil mills, 548, 744
 - Workers, 609
 - Workers exposed to cotton dust, 535
- Cotton seed oil operators, 608
- Cough, 408, 506, 513, 571, 583, 589, 591, 603, 669, 713
 - in Acute silicosis, 239
 - in Asbestosis, 287

Blood-tinged, 710
 Byssinosis and, 533
 Chronic, 263, 495, 510
 Dry, 390, 408, 491, 513, 695
 Nocturnal, 472
 Productive, 249, 252, 253, 438, 710, 715
 in Silicosis, 231
 Weaver's, 558, 607
 Wet, 513
 Coulometry, 57, 58
 Coxsackie virus, 96, 97
 Craftsman, 695
 Crane operators,
 Shipyard, 673
 Crayon manufacturing, 758
 Creola bodies, 467
 Creosoters, 751
 Crepitations, 315
 Cristobalite, 11, 72, 245
 Disease associations, 36, 220
 Crocidolite, 248, 287, 288, 296, 313, 630, 631, 672, 678, 743
 Disease associations, 36
 Crocus, 422
 Chromolyn, 495
 Cromolyn sodium 470, 472
 Chronic bronchitis, see Bronchitis, chronic
 Chronic obstructive disease, 559
 Cross-sectional studies (epidemiology), 118-120
 Definition, 107-108
 Crucible production, 745, 749
 Crucibles, 37, 333, 452
 Cryolite, 401, 402
 Cryptostroma corticale, 482, 496, 747
 Crysofile, 248
 Crystalline silica, 760
 Crystallization, 4-7, 8, 12
 Magmatic, 4, 7
 Cumingtonite-grunerite, 7, 9, 248
 Miners, 709
 Cumulative density ration (IDR)
 Cumulative incidence (CI), 109-110
 Cumulative incidence difference (CID), 110
 Cumulative indice ratio (CIR), 110
 Cumulative mortality, 109
 Cupric acetate, 52
 Curschmann's spirals, 467
 Cushing's syndrome, 669
 Cutter operator, 225, 349
 Cyanide, 402

Cyanide makers, 574
 Cyanogen chloride, 52
 Cyanosis, 231, 235, 263, 315, 514, 571, 576, 583, 695
 Cyclic adenosine 3', 5' monophosphate (cyclic AMP), 467
 Cyclone separator, 97, 98
 Cyclones (sampling technique), 73, 74, 76-77
 Cysteine, 419, 420
 Cysts, honeycomb, 308, 309

D Dacite, 13
 Dacron fiber production, 746
 Dairy farmers, 484, 485
 Dairy workers, 83
 Decoloring oil production, 759
 Decorators, 574
 Degree of Pulmonary Disability (DPD), 200, 205
 Demolition workers, 743
 Dental alloy makers, 385, 427, 742
 Dental amalgam makers, 577, 587, 752
 Dental caries, 39
 Dentists, 587, 590, 754, 755
 Deodorant, 453
 Deodorant manufacturing, 452, 749
 Depilatory makers, 584, 753
 Deposition, 12
 Pulmonary, 70-71
 Deposits, mineral
 Metallic, 23
 Nonmetallic, 23, 25
 Dermatitis, 36, 385, 389-390, 446
 Dermographism, 446
 Desorption,
 Solvent, 46
 Thermal, 46
 Detector tubes, long-term (LTT), 55-56
 Detector (Indicator) tubes, 51, 52-56
 Detergent enzymes, 462, 482
 Detergent industry, 463, 464, 466, 474
 Detergent makers, 746, 757
 Di-sodium chromoclycate, 558
 Diabase, 13
 Diaphoresis, 695, 714
 Diarrhea, 84, 576
 Diatomaceous earth, 16, 25, 33, 760
 Disease associations, 35, 37
 See Earth, diatomaceous
 Diatoms, 8

- Diazo Reproducing Machine Operators, 574
- Dichloro-dimethyl ether, 633
- Dichloro(2-chlorovinyl)arsine, 52
- Didymium, 455
- Die Casting Alloys
- Diesel emissions, in coal mines, 350
- Diesel engine operators, 599, 755
- Diesel engine repairment, 599, 755
- Diesel exhaust, 504, 505
- Diethyl amine,
 - Detection of, 59
- Diethyl sulfide,
 - Detection of, 59
- Diethyl triamine, 462, 465
- Diethylene Tetramine, 462, 465
- Diffuse Interstitial Pulmonary Fibrosis, 156
- Diffuse pleural mesothelioma, 36, 282-283, 671-687
- Diffusing Capacity of the Lung (D_{LCO}), 160, 184-185, 189
- Diffusion, 70
- Diffusion defects,
 - Gas, 731
- Diisocyanates, 462, 465, 482
- Dike, 8
- Dimethyl ethanolamine, 462, 465
- Dimethyl formamide,
 - Detection of, 59
- Diopside, 9
- Diorite, 13
- Dioxide, black, 431
- Diphenylmethane diisocyanates, 462, 465
- Direct current meter workers, 587
- Direct reading indicators, colorimetric, 51-56
- Direct reading instruments, 51-63, 70, 77-78
 - Beta attenuation, 78
 - Electronic, 56-63
 - Integrating nephelometers, 78
- Disability, 572
 - Claimants, 166, 190, 198
 - Definition, 181, 518
- Disability evaluation,
 - Laboratory assessment for, 181-216
 - Respiratory impairment, 181-216
- Disease frequency,
 - Indices of, 108-111
- Diseases,
 - Rock and minerals associated with, 30, 35
- Disinfectant makers, 581, 587, 599, 753, 755
- Disinfectors, 587, 599
- Disulfides,
 - Detection of, 61
- Dithrocarbonate, 588
- Divalent cations, 7, 254
- Dolerite, 35
- Dolomite, 15, 16
 - Disease associations, 36
- Dose-effect relationships,
 - Pulmonary function tests and, 155
- Dosimeters, passive, 48, 49
- Double chains, 5
- Drain tile makers, 759
- Drawers of sisal, 745
- Drillers, surface coal, 357
- Drilling muds, 759
- Drug makers, 427, 574, 587, 742, 743, 750, 751, 752, 754, 755, 756
- Dry cleaners, 574
- Drywall construction, 672
- Drygin, 402
- Dunite, 13
- Duraluminum, 405
- Durdenite, 40
- Dust,
 - Aluminum, 407
 - Asbestiform, 522
 - Barley, 504
 - Brick, 504
 - Canadian red cedar, 505
 - Cement, 504
 - Chromate, 640
 - Coffee, 468, 481, 482
 - Copper, 402, 608
 - Cork, moldy, 747
 - Grain, 462, 468
 - Granite, 225
 - Hair, 482
 - Metal smelting, 504
 - Mushroom, 462
 - Organic, 481, 607, 608
 - Paprika, 747
 - Redwood (moldy), 482, 747
 - Respirable, definition, 72
 - Silica, 522
 - Tobacco, 462
 - Tomb cutting, 504
 - Vegetable, 464
 - Wood, 462, 464, 749
- Dust chills, 558
- Dust fever, 558

- Dust samples, respirable, 71
 - Measurement criteria, 71-73
 - Standards and criteria for, 71-73
 - Dusting powder manufacturing, 758
 - Dusts, 69
 - Dust-year, 224
 - Definition of, 227
 - Dye intermediate makers, 574
 - Dye makers, 412, 435, 438, 574, 581, 584, 587, 590, 602, 750, 752, 753, 755, 756, 757, 760, 761
 - Dyers, 438, 748
 - Dyestuff factory workers, 636
 - Dysphagia, 669
 - Dysplasia, 657, 658
 - Dyspnea, 40, 166, 189, 193, 196, 197, 231, 249, 252, 253, 263, 268, 276, 284, 287, 315, 390, 408, 438, 491, 495, 506, 507, 510, 513, 514, 521, 591, 669, 695, 714
 - in Acute silicosis, 239
 - Clinical grading of, 190
 - in Mesothelioma, 682
 - and Occupational asthma and rhinitis, 461, 472
 - Physiological factors related to, 200
 - and Prevalence of byssinosis, 533, 543
 - Ventilatory function tests and, 544
 - Dyspnea Index (DI), 188-189, 191
 - Dysprosium, 455
- E**
- Earth moving equipment operators, 699
 - Earth, diatomaceous, 16, 720, 721
 - Earth's crust, 3, 243
 - Chemistry of, 4
 - Echocardiograph, 732
 - Edema,
 - Dependent, 731
 - Periorbital, 390
 - Peripheral, 600
 - Pulmonary, 506, 507, 509, 571, 576, 591, 609, 722, 723, 729, 730
 - Effect Modifiers (EM), 130
 - Efficiency (epidemiological studies),
 - Definition, 124
 - Eggshell calcification, 371, 430
 - Elastase, 512
 - Electrostatic air cleaners, 594
 - Electric apparatus makers, 587
 - Electric arc welders, 424
 - Electric equipment makers, 427
 - Electric instrument makers, 577
 - Electrical condenser makers, 577
 - Electrical conductivity, 57, 59
 - Electrical Direct Reading Instruments, 78
 - Electrical equipment manufacturing, 506, 742, 751
 - Electrical industry, 464, 759
 - Electricians, 672, 673, 675
 - Electrochemical method, 57, 60
 - Electrode making, 333, 745, 751
 - Electrodes, 37
 - Electrolytic cell, 402
 - Electronegativity, 5
 - Electron capture, 58, 61
 - Electron impact spectrometry, 58, 61
 - Electronic equipment manufacturing, 744
 - Electronics industry, 464, 608
 - Electroplaters, 412, 574, 577, 587, 607, 743, 748, 751, 752
 - Electrostatic rod collection, 98
 - Electrostatic precipitation, 74
 - Electrotypers, 333, 574, 752
 - Elutriators, 74, 75
 - Horizontal, 75, 76
 - Vertical, 75, 76
 - Embalmers, 587
 - Emboli, 723
 - Gas, 723
 - Emerald, oriental, 404
 - Emery, 422
 - Emmonsite, 40
 - Emphasematous scars, 429
 - Emphysema, 36, 38, 155, 164, 165, 249, 253, 503-529, 578, 559, 721, 724
 - Causative agents, 503-505
 - Centrilobular (CLE), 366, 512, 728
 - Coal workers' pneumoconiosis and, 366-367
 - Cotton workers and, 534
 - Definition, 503
 - Focal, 35, 353, 354, 356, 366, 368, 430, 728
 - Panacinar, 512
 - Pan-lobular (PLE), 512
 - Pathogenesis of, 512
 - Pathology of, 512-513
 - Pericatricial, 727, 728
 - Pulmonary, 207, 723
 - Scar, 357, 366
 - Social Security criteria, 207
 - Symptoms, signs and natural history of, 514
 - VA rating for, 211

- Emphasematous scars, 429
 - Enamel manufacturing, 452, 455, 745, 749
 - Enamelers, 220, 748, 750
 - Encephalitis, 84, 713
 - Endarteritis, 407
 - Endocarditis, 669, 705
 - Endothelial damage, 695
 - Endotoxins, 504, 607, 608, 609, 612-618
 - Engravers, 577, 752
 - Enstatite, 7, 9, 18
 - Enzyme workers' lung, 482, 746
 - Enzyme-linked immunoassay, 473
 - Enzymes,
 - Detergent, 482
 - Lyzosomal, 615
 - Macrophage lysosomal, 357
 - Proteolytic, 464
 - Eosinophilia, 408, 456, 470, 481, 516
 - Epidemiological indiccs, 108-111
 - Epidemiological principles and methods
 - for occupational health studies, 103-136
 - Epidemiological strategies, 106-108
 - Epidemiological studies,
 - Sources of error in, 124-133
 - Epidemiology,
 - Definition, 103
 - General notation, 105
 - Occupational definition, 104
 - Epidote, 14
 - Epinephrine, 517
 - Epithelial-mesenchymal interface relationship, 511
 - Epoxy manufacturing, 483
 - Epoxy resin, 465
 - Epoxy resin workers, 484, 746, 761
 - Epoxy resin workers' lung, 482, 746
 - Equilibration curves, 160
 - Erethism, 39, 587, 588
 - Erionite, 282-283, 672
 - Erosion, 11-12
 - Erysipelas, 85
 - Erythrosin manufacture, 746
 - Esophageal balloon, 160
 - Esters, 46
 - Ethane,
 - Detection of, 60
 - Ether,
 - Chloromethyl, 657, 661
 - Workers, 665
 - Ethyl benzene, 54
 - Ethylene diamine, 462, 465
 - Ethylene dichloride, 54
 - Ethylene glycol makers, 581
 - Ethylene oxide, 696
 - Detection of, 59
 - Ethylene oxide makers, 581
 - Euxenite, 454
 - Evaporites, 8, 10, 11, 15, 16, 25, 36
 - Deposits, 32
 - Excavators, 584
 - Exercise testing, 186-187, 190-193, 199-200, 456
 - Maximal capacity in health, 189
 - Physiologic response to, 187-188
 - Prediction of maximal tolerance, 193-194
 - Submaximal capacity in health, 190
 - Exhaust, diesel, 350, 504, 505
 - Exhaust, motor car, 517
 - Explosive manufacturing, 403, 412, 452, 506, 507, 574, 587, 745, 749, 752, 754, 755, 757
 - Extracts, pancreatic, 462
 - Eye-piece graticle, 512
- F**
- Fabric manufacturing,
 - Workers exposed to cotton dust, 535
 - Facies concept, 18-19
 - Facings, 37
 - Farm workers, 464, 699, 608, 609, 700, 703, 704, 722
 - Farmers, 85, 483, 497, 574, 587, 747, 748, 752, 753
 - Farmer's lung, 85, 481, 482, 483, 484, 485, 489, 491, 492, 493, 495, 613, 747
 - Farmers, livestock, 699, 700, 703, 704
 - Fat, 723
 - Fat renderers, 753
 - Fayalite, 7
 - Febrile illness, 608
 - Federal Coal Mine Health and Safety Act, 329-330
 - Feldspar, 243, 279, 280, 281
 - Crystal chemistry of, 8
 - Empirical formula, 8
 - Milling, 759
 - Mining, 759
 - Potash, 12
 - Feldspars, 5, 6, 7, 10, 12, 13, 14, 15, 16, 17, 18, 33, 279-285
 - Disease associations, 37
 - Feldspathoids, 279-280

- Felt makers, 584, 693, 753
- Felts, 693, 694
- Feret's diameter, 79
- Fergusonite, 454
- Fermentation process workers, 584, 753
- Ferric oxide, 422
- Ferrierite, 282
- Ferritin, 430
- Ferro-chrome alloys, 608
- Ferrochromium industry, 641, 649
- Ferromagnesian minerals, 6, 12
- Ferrosilite, 7, 9
- Ferro-silicon, 649
- Ferrotitanium, 432
- Ferrovanadium workers, 602, 757
- Ferruginous bodies, 309
- Fertilizer, 33, 244, 506, 573, 693
- Fertilizer workers, 574, 584, 590, 752, 754, 755
- Fettlers, 429
- Fever, 495
- Fiber optic bronchoscopy, 682
- Fiber, 70
 - Man-made mineral, 444-451
- Fibrosarcoma, 578
- Fibrosis, 35, 36, 37, 220
 - Diffuse interstitial pulmonary, 438, 721
 - Idiopathic diffuse interstitial, 166, 212-213
 - Interstitial, 451, 486, 722, 729
 - Intimal, 726
 - Mixed dust, 408, 428-431
 - Progressive massive (PMF), 231, 235, 240, 329-383, 728
 - Pulmonary, 35, 36, 212-213, 407, 408, 419, 421, 439, 491, 506, 721
- Fibrous filters, 73
- Fibrous glass, see Glass, fibrous
- Fibrous talc, 758
- Filament, continuous, 444
- Film-screen combination (Radiology), 140-141, 144
- Filters, 74, 220
 - Cellulose fiber, 73
 - Fibrous, 73, 74
 - Membrane, 73, 74
 - Millipore, 95, 96
 - Nucleopore, 74, 96
 - Mixed fiber, 73
 - Plastic fiber, 73
- Fingerprint detectors, 587
- Firefighters, 599, 755, 756
- Fireworks makers, 403, 404, 412, 587, 742, 750, 754
- Fish emulsions, 462
- Fish meal, 462
- Fish processing workers, 584, 754
- Fishing workers, 584
- Fitters,
 - Byssinosis prevalence in, 539
- Flame ionization, 59, 61
- Flame photometry, 57-58, 61, 457
- Flameproofers, 412, 438
- Flax, 533, 744
- Flax dust, 504, 533
 - Exposure to, 534, 547
- Flax seed, 462, 464
- Flax workers, 720, 730, 744
 - Age and byssinosis prevalence in, 549
 - Byssinosis prevalence in, 538, 540
 - Morbidity studies of, 537
 - Mortality studies of, 539
 - Smoking and, 548
 - Ventilatory function tests and, 544-546
- Flight attendants on commercial aircraft, 594
- Flint, 16, 220, 720, 760
 - Disease associations, 37
- Flints, lighter, 455
- Flour, 462
 - Insect and mite debris, 464
- Flour bleachers, 581, 599, 753
- Flow rates, 182
- Fluon, 749
- Fluorescent antibody staining, 98
- Fluorescent lamp workers, 386
- Fluoride, 402
- Fluoride dust, 402, 639
- Fluoride fumes, 639
- Fluorine, 5, 17
- Fluorite,
 - Disease associations, 37
- Fluorocarbon,
 - Cigarettes contaminated with, 611
- Fluorocarbon makers, 581
- Fluorocarbon polymer products, 608, 610
- Fluorocarbon polymers, 607, 608
- Fluorocarbon telomers, 607, 608, 609
- Fluorosis, 37
- Fluorspar, 33, 642
- Flux, industrial, 37
- Foam insulation workers, 750
- Fodder, moldy, 481
- Fog, 69

- Food, 331
 - Food additive production, 464
 - Food bleachers, 590, 599, 755
 - Food processing, 334, 745, 757
 - Food product equipment manufacturing, 427, 742
 - Foot and mouth disease virus, 93
 - Forced air systems, 481, 482
 - Forced Expiratory Volume—one second (FEV₁), 155, 156, 182, 183, 521, 571
 - Comparison of average decrements, 520
 - Correlation with MVV, 191
 - in Occupational asthma and rhinitis, 461, 471
 - Forced Vital Capacity (FVC), 155, 156, 182, 183, 521
 - in Occupational asthma and rhinitis, 461, 471
 - Formaldehyde, 48, 431, 462, 464, 504, 583, 696
 - Formalin, 465
 - Forsterite, 7
 - Fossil fuels, see Fuels
 - Foundries (ferrous and nonferrous), 505, 758, 760
 - Foundry dust, 504
 - Foundry industry, 465
 - Foundry sand, 244
 - Foundry workers, 3, 220, 243, 333, 403, 412, 438, 452, 508, 509, 517, 518, 599, 607, 742, 745, 748, 749, 755, 760
 - Free silica, see Silica, free
 - Freight company workers, 713
 - Freon, detection of, 61
 - Friction saw operators, 757
 - Fritted bubblers, see Bubblers, fritted
 - Fruit bleachers, 599
 - Fuels, fossil, 16, 22
 - Deposits, 31
 - Fuller's Earth, 243, 267, 268-271
 - Disease associations, 35
 - Fulgurite, 11
 - Fumes, 69
 - Fumicides, 633
 - Fumigant makers, 599, 755
 - Fumigators, 599
 - Functional impairment, 572
 - Fungal agents, 481
 - in Hypersensitivity pneumonitis, 481
 - Fungi, 482, 699
 - Saprophytic, 482
 - Fungicide makers, 435, 587, 754, 760
 - Fur dressers, 584
 - Fur dyers, 465
 - Fur preservers, 587, 754
 - Fur processors, 587, 754
 - Furnace and kiln lining, 220, 743
 - Furnace black, 331, 333
 - Furnace operators, 404, 599, 756
 - Furnace patching, 758
 - Furniture makers, 749
 - Furriers, 746
 - Furrier's lung, 482, 746
- G**
- Gabbro, 6, 8, 13, 14
 - Gadolinite, 454
 - Gallium, 5, 7
 - Galvanizers, 574, 607, 752
 - Gamma globulinemia, 438
 - Gangue mineral, 23, 25
 - Garage workers, 590, 755
 - Garden mulch, 485
 - Garnets, 13, 14, 19
 - Gas, 23
 - Definition, 41
 - Poisonous, 597
 - Sampling for, 41-68
 - Gas and electric arc welders, 590, 755
 - Gas chromatography, 49, 61
 - Gas detector tube units,
 - NIOSH certified, 54-55
 - Regulations for certification, 53
 - Requirements for, 53
 - Gas displacement collectors, 43, 44
 - Gas fields, natural, 23, 31
 - Gas house workers, 751
 - Gas mantle makers, 455, 744
 - Gas purifiers, 574
 - Gas sampling bags, 42, 43
 - Gas workers, 504, 638, 675
 - Illuminating, 574
 - Gases, combustible,
 - Detection of, 61
 - Gasoline additive workers, 581
 - Gasolinium, 455, 456
 - Gastrointestinal disorders, 39, 40
 - Gedrite, 9
 - Gelatin bleachers, 599, 756
 - Gelatin processors, 693
 - Gemstones, 33, 404
 - Genetic factors,

- in Hypersensitivity pneumonitis, 483
 - Geology, economic, 19, 21
 - Geothermal-power drilling and production workers, 584
 - Germanium, 7
 - Glanders, 84
 - Glass, 33
 - Fibrous, 444-451, 672, 678, 749
 - Federal standards for, 446
 - Volcanic, 35
 - Glass aspirator bulbs, 43
 - Glass beaded columns, see Columns, glass beaded
 - Glass blowers, 751
 - Glass cleaners, 574
 - Glass colorers, 743, 751
 - Glass fiber, 444
 - Glass fiber filter, 73, 74
 - Glass fiber makers, 749
 - Glass makers, 220, 412, 427, 452, 455, 506, 577, 599, 602, 742, 743, 745, 749, 752, 756, 757, 760
 - Glass wool, 444
 - Glaucophane, 9
 - Glue bleachers, 599
 - Glue makers, 574, 584, 693, 752, 757
 - Glues, natural, 462, 464
 - Gneiss, 35
 - Goat hair processing, 693-695
 - Pickers, 83
 - Sorters, 83
 - Goat hide handlers, 747
 - Goblet cells, 516
 - Goblet cell metaplasia, 366, 510, 511, 513, 724
 - Gold, 5, 23
 - Deposits, 28
 - Extractors, 581, 587, 753, 754
 - Gold mining,
 - and Chronic bronchitis, 509
 - Gold ore workers, 584
 - Gold refiners, 412, 750
 - Goldich's Stability Series, 14, 16
 - Goldschmidt's Classification, 16
 - Grab sampler, see Sampler, grab
 - Gradient (Radiographic film), 140
 - Grain bleachers, 599
 - Grain dust, 462, 468, 504, 505, 620
 - Insect debris, 464
 - Grain elevator workers, 465
 - Grain fever, 609, 613, 620
 - Grain handlers, 464, 608, 609
 - Grain inspectors, 608
 - Grain products, 462
 - Granite, 6, 13, 14, 18, 35, 225, 246, 279, 720, 760
 - Disease associations, 35
 - Granite workers, 225
 - Granodiorites, 8, 13, 18
 - Granulomas, 486
 - Pulmonary, 451
 - Subcutaneous, 385
 - Granulomata, miliary, 703
 - Graphic art workers, 745
 - Graphite, 33, 329, 331, 332, 745
 - and Cor pulmonale, 720, 722, 730
 - Crushing and milling, 333, 745
 - Disease associations, 37
 - Occupational exposures to, 333
 - Pyrolytic, 331
 - Synthetic, 331
 - Graphite pneumoconiosis, 352-353
 - Gravels, 13, 15, 451, 505
 - Gravimetric analysis (Air sampling), 70, 73
 - Gravity settling, 70
 - Graywackes, 11, 13, 15
 - Green coffee bean, 464
 - Greenockite, 38
 - Grid, 144, 512
 - Grid zone, 512
 - Grinders, 757
 - Byssinosis prevalence in, 539, 540
 - Grinder's asthma, 534
 - Gross image contrast, 141, 144
 - Grouting fluids, 759
 - Gum-acacia, 463
 - Gums, vegetable, 462, 464
 - Gypsum, 32, 33, 249
 - Disease associations, 36
- H**
- Haemangeoma, sclerosing, 659
 - Hair dust (animal proteins), 482, 746
 - Hair dye manufacturing, 427, 742
 - Hair handlers, 84, 693
 - Hair lacquer sprays, 432
 - Hair roots, mercury in, 586
 - Hairdressers, 432
 - Halides, 53, 61, 402, 757
 - Halite, 32, 33
 - Hamartoma, 659
 - Hamman-Rich Syndrome, 212-213
 - Hard metal disease, 38, 438-444, 746
 - Hard metal manufacturing, 746
 - Hard rock miners, 748

Hard solder makers, 427, 742
 Hatters shakes, 39
 Hauserite, 431
 Hausmannite, 431
 Hay (moldy), 747
 Headache, 576, 589
 Healthy Worker Effect, 112-114
 Heart, shaggy, 315
 Heart disease,
 and Exercise tolerance, 189
 Heart failure,
 Lung disease and, see Cor pulmonale
 Right-sided, 491
 Heat insulation makers, 759
 Heating systems, forced air, 481
 Heavy-metal precipitators, 584
 Heavy-water manufacturers, 584
 Heckling fever, 558
 Hedenbergite, 9
 Helium-oxygen test, 158, 159, 160
 Hematite, 422
 Miners, 430
 Pneumoconiosis, 421
 Hematite miner's lung, 423
 Hemoglobinuria, 38
 Hemoptysis, 231, 506
 Hemp, 720, 744
 Soft, 533, 534
 Hemp dust, 533
 Hemp workers, 722, 730, 744
 Age and byssinosis prevalence in, 549
 Byssinosis prevalence in, 540, 542
 Mortality studies of, 536
 Smoking and, 549
 Ventilatory function tests and,
 544-546
 Hepatitis, 84
 Hepatomegaly, 715
 Herbicide makers, 750
 Herbicides, 632
 Herth tanners, 435
 Heterozygosity, 516
 Hetroatomic gases, 59
 Hexachlorobenzene, 483
 Hexamethylene diisocyanate, 462, 465,
 484, 750
 Hide handlers, 84
 Hide preservers, 750
 Hilar adenopathy, 393
 Hirst spore trap-type sampler, 90, 92, 94
 Histamine, 469, 594, 595, 615
 Histamine challenge testing, 156, 167, 467
 Histology technicians, 587, 754, 755
 Histoplasma capsulatum, 748
 Histoplasmin skin test, 699
 Histoplasmosis, 84, 699-702, 748
 Hobbyists, metal, 577
 Hodgkins disease, 640
 Honeycomb cysts, 308, 309
 Honeycomb lung, 486, 487, 729
 Hornblende, 9, 14, 248
 "Horse-race effect" (lung function), 166
 Hospital patients, 84
 Hospital workers, 84, 91, 464, 465
 Hot springs, 8, 10
 Housewives, 386, 481, 485, 486, 517, 694,
 673, 675, 746
 Humidification systems, 481, 487, 608
 Humidifier fever, 613
 Humidifier lung, 482
 Humidifier water, 482, 496
 Hyaline plaques, 306
 Hyaluronic acid, 314, 682
 Hyaluronidase test, 314, 678
 Hydrides, 53
 Hydrocarbon, 25, 46, 53, 597
 Combustion of, 517
 Detection of, 59, 61
 Hydrocarbons, chlorinated, 597
 Hydrocarbons, halogenated, 511
 Hydrochloric acid purifiers, 584
 Hydrochloride acid, 580, 597
 Hydrofluoric acid, 597, 402
 Hydrogen, 5
 Hydrogen chloride, 54, 402
 Hydrogen cyanide, 52, 54
 Hydrogen fluoride, 611, 639
 Hydrogen iodide, 57
 Hydrogen ions, 600
 Hydrogen sulfide, 44, 47, 48, 52, 54,
 583-586, 753
 Federal standards for, 583
 Hydrogen sulfide production and sales
 workers, 584
 Hydrolsates, 15
 Hydromica, 14, 277
 Hydroquinone, 431
 Hydrothorax, 731
 Hydrous mica, 277
 Hydrox shells, 592
 Hydroxide, 16
 Hypercapnia, 165, 493, 514, 515, 571, 731
 Hyperemia, 390
 Hyperinflated chest, 235
 Hyperplasia,
 Cell, 714

- Mucous gland, 510, 724
- Reticuloendothelial, 703, 714
- Hypersecretion, 510, 513, 514, 521, 523
- Hypersensitivity pneumonitis, 481-500, 747
 - Acute, symptoms, 490
 - Chronic form, 491
 - Genetic factors in, 483
 - Signs, 491
 - Subacute, symptoms, 490-491
 - Symptoms, 491
 - Symptoms, 491
 - Toxic factors in, 483
- Hypersthene, 9
- Hypertension, 578
 - Pathophysiologic causes, 723-724
 - Pulmonary, 731
 - Pulmonary arterial, 719, 722, 723, 729, 731, 733
- Hypertrophy, 719
 - Arterial medial, 723, 724
 - Muscular, 723
 - Ventricular, 731
- Hyperventilation, hypocapnic, 583
- Hypochlorous acid, 580
- Hypothesis testing, 134-135
- Hypovascular, 521
- Hypoventilation, 515, 573
 - Alveolar, 724
- Hypoxemia, 165, 189, 231, 264, 490, 514, 552, 571, 591, 733
- Hypoxia, alveolar, 723, 727, 728, 729, 731, 733

I

- Ice cream makers, 574
- Ice makers, 574, 599, 756
- IgE antibody, 489
- IgE mediated reactivity, 471-472
- IgG precipitating antibodies, 489
- Igneous rocks, see Rocks
- Illites, 277
- Ilmentite, 13, 40
- ILO classification system, 147-150, 315-316
 - Obligatory symbols, 150
- Image detail and contrast (Radiology), 141-142
- Image formation (Radiology), 139
- Image quality (Radiology), 141, 143-144
- Immunoassay, 473
- Immunotherapy and hypersensitivity pneumonitis, 494

- Impactors, 74-75, 95
- Impairment,
 - Assessment, 183
 - Restrictive ventilatory, 182
- Impinger sampling, see Sampling, Impinger
- Impingers, 75, 90, 93, 95, 97
 - Liquid, 51
 - Midget, 44, 45, 48, 74, 75
- Impregnated solid sorbent tubes, 48
- Impregnated solid sorbents, 48
- Incandescent lamp makers, 438, 452, 455, 577, 749
- Incidence Density (ID), 109
- Incidence Density Difference (IDD), 108
- Indicator tubes, see Detector tubes
- Indicators, colorimetric, 52
- Indices, epidemiological, 108-111
- Indirect maximal breathing capacity (IMBC), 552
- Industrial metals, 23
- Industrial waste treaters, 594, 756
- Inert gas washout, 160
- Inertial impaction, 70, 74
- Infections,
 - Respiratory, 483
- Infectious disease, 747
- Infectivity, 94-95, 96
- Influenza, 96, 511
- Influenza-like symptoms, 495
- Infrared radiation, 59
- Inhaled toxic agents, 751
- Ink makers, 331, 334, 438, 455, 574, 581, 587, 602, 743, 745, 748, 750, 753
- Insect debris, 462, 464
- Insecticides, 462, 464
 - Arsenical, 632
- Insulating material, bulk, 34
- Insulation, 36, 37, 220, 444, 445
- Insulation workers, 3, 220, 465, 693-694, 675, 743, 749, 751, 759, 760
- Insulators,
 - Foam, 484
 - Wire, 412
- Integrated sample, 41, 44-51
- Interference,
 - in Instrument evaluation, 62
- Interstitial pneumonitis, 486
- Interviewer training, 176-177
 - Drift, 177
- Intradermal test, 473
- Investment casting workers, 587
- Iodine makers, 581

- Ion exchange, 282
 - Ion exchange resin makers, 282, 750
 - Ionization,
 - Flame, 47, 57, 59
 - Iron, 4, 7, 15, 16, 23, 421, 748, 757
 - Divalent, 7
 - Iron compounds, 249
 - Iron deposits by state, 26
 - Iron detinners, 581
 - Iron dezincers, 581
 - Iron ore, 760
 - Milling, 757
 - Mining, 661, 665, 757, 760
 - Transporting, 757
 - Iron oxides, 757, 760
 - Fume, 607
 - Iron workers, 333, 753, 760
 - Island structures, 244-246
 - Iso-flow, 159
 - Isocyanate disease, 484, 750
 - Isocyanate manufacturing, 756
 - Isocyanate resin workers, 750
 - Isocyanates, 483, 597
 - Isokinetic sampling, 93-94
 - Isoprenaline, 558
 - Isoproterenol, 470, 517
 - Itai-itai, 577
 - Ivory etching, 427, 742
- J**
- Jacksletter, 349
 - Jadeite, 9
 - Jamesonite, 409
 - Janitors, 639
 - Jewelry makers, 590
 - Jewelers, 577, 587, 754, 755, 757, 760
 - Jewelers' rouge, 426
 - Joiners, 747
 - Junk metal refiners, 607
 - Jute, 534
 - Dust, 533
 - Jute workers, roentgenographic studies, 744
- K**
- K-spar, 8
 - Kallikreinikinin, 615
 - Kaolin, 243, 249-254, 720, 721, 759
 - Bagging and loading, 759
 - Disease association, 37
 - Milling, 759
 - Mining, 759
 - Kaolinite, 248, 252, 254
 - Kaolinosis, 249, 251, 252, 253
 - Kerley B-lines, 417
 - Kermesite, 409
 - Ketones, 46
 - Kidney, 578
 - Kneblite, 431
 - Knit fabric mills,
 - Workers exposed to cotton dust, 535
 - Knitting mills, 693
 - Kveim test, 396
 - Kyanite, 243, 245-246
 - Disease associations, 37
- L**
- Laboratory equipment manufacturing, 608
 - Laboratory tests, criteria, 181
 - Laboratory ware makers, 245
 - Laboratory workers, 91, 92, 464, 589, 693, 707, 709, 713, 716, 750
 - Chemical, 587
 - Clinical and research 84
 - Laborers, 517
 - Outdoor, 508
 - Shipyard, 673
 - Labradorite, 10
 - Lacquer makers, 574, 750, 753
 - Lactate production, 188, 192, 195
 - Lamp black 746
 - Production and handling, 746
 - Lamp makers, 438
 - Fluorescent, 386, 587
 - Landfill workers, 584
 - Landscapers, 699
 - Lanthanum, 5, 454
 - Laryngitis, 409
 - Laryngospasm, 571
 - Latex workers, 574, 752
 - Latitude (Radiographic film), 140
 - Laundry workers, 581, 746, 749, 753
 - Lead, 5, 26, 28, 412, 517
 - Oxide fume, 607, 611
 - Lead acetate, 52
 - Lead ore sulfidizers, 584
 - Lead refining, 752
 - Lead removers, 584
 - Lead shot makers, 412, 750
 - Lead-zinc, 23
 - Deposits by state, 27
 - Leather mordanting, 742
 - Leather workers, 465, 757

- Lecithin, 591
 Legislation, coal mining health and safety
 Lepidolite, 10, 272-273
 Lesions,
 Caplan's, 357, 364
 Fibrotic, 429
 Lymphoproliferative, 659
 Macronodular, 357
 Mass, 514
 Micronodular, 357, 366
 Obliterative, 723-724
 Pigment, 357
 PMF, 361-362, 370
 Pulmonary, 38, 262
 Stellate-shaped, 429
 Leucite, 280
 Leukemia, 639
 Leukocytosis, 495, 615
 Neutrophil, 610
 Peripheral, 552-553, 611
 Polymorphonuclear, 513, 607
 Leukotricenes, 469
 Lewisite, 52
 Lighter flint makers, 455, 745
 Lignite, 745
 Lime, 517
 Limestone, 11-12, 15, 16, 18, 25
 Disease associations, 36
 Users of, 34, 35
 Limulus amoebocyte lysate test, 609
 Linemen, 751
 Linen textile workers, 508
 Linnalite, 419
 Linoleum, production, 743
 Linotypers, 412
 Lipopolysaccharide, 615
 Liquid displacement collectors, 43, 44
 Liquid impinger, 51
 Liquid reagent, 51-52
 Liquid-air explosive manufacture, 746
 Liquor agers, 594, 756
 Lithification, 13
 Lithium, 5, 247
 Lithographers, 577, 584, 754
 Lithopone, 415, 416
 Lithopone makers, 577, 584, 743
 Liver, cirrhosis of, 723
 Livestock farmers, 584, 699, 700, 703, 704
 Lizardite, 298
 Loader operator, 349
 Lodestone Loggers, 747, 749
 Long-term detector tubes (LTT), 41,
 44-51, 55-56
 Long-term detector tubes manufacturers,
 56
 Lubricant production, 333, 438, 745, 746,
 758
 Lumber industry, 464
 Lung,
 Honeycomb, 486, 487, 729
 Lung cancer, see Cancer, lung
 Lung disease, 38, 197, 519
 Chronic, 38
 and Heart failure, see Cor pulmonale
 Interstitial, 192-193, 481
 Obstructive, 164, 182, 189, 191, 192,
 197-198
 Restrictive, 165
 Trimellitic anhydride, 482, 761
 Lung function test, see Pulmonary
 function testing
 Lung isotope clearance studies
 Lung scarring, 36, 37, 38, 39, 40
 Lung tumors, histological classification of
 Lung volume (V_L) measurements, 160-161
 Lungs, cigarette smokers', 510
 LVS (Litton) sampler, 90, 95, 97
 Lymph gland enlargement, 35
 Lymphadenitis, 407
 Lymphadenopathy, bilateral hilar,
 392-393, 495
 Lymphocyte transformation, 489
 Lymphogranuloma venereum, 716
 Lymphoma, malignant, 639, 640, 659
 Lymphosarcoma, 642
 Lysin, 576
- M** *M. bovis*, 709
M. tuberculosis, 709, 710
 Machinists, 673
 Macrophage Migration Inhibition factor
 (MIF), 468
 Macrophages, 572
 Magmas, basaltic, 4, 6, 8
 Magnesite, 254
 Magnesium, 4, 7, 14, 15, 748
 Oxide fume, 607, 610, 611
 Silicates, 254
 Magnesium foundry workers, 244
 Magnet makers, 748
 Magnetite, 13, 254, 421
 Magnetopneumography, 425
 Mail carriers, 194

Maintenance workers (janitors), 574, 649, 672-673, 706
 Malaise, 470, 491, 695, 705, 710
 "Malignant" bronchitis, 518
 Malt house workers, 497, 747
 Malt workers' lung, 482, 484, 747
 Malt, moldy, 482, 747
 Managesestat, 431
 Manganese, 5, 15, 26, 29, 431-434, 748
 Fumes, 402
 Manganese oxide dust, 431, 432
 Manhole and trench workers, 584
 Man-made fibers,
 Byssinosis prevalence, 539
 Pulmonary reactions, 751
 Workers exposed to cotton dust, 535
 Manometer makers, 587
 Manure handlers, 574
 Maple bark, 483
 Moldy, 482, 747
 Maple bark strippers disease, 481, 482, 484, 496, 747
 Marble, 35, 517
 Disease associations, 36
 Martin's diameter, 78-79
 Mass spectrometry, 58-61
 Mass spectrometric analyses
 Masson bodies, 486, 487
 Mast cells, 615
 Mast ozone meter, 57
 Match production, 412, 746
 Matches, safety, 409
 Matching, 132
 Frequency, 132
 Individual, 132
 Mattress and bedspring manufacturing,
 Workers exposed to cotton dust, 535
 Mattress makers' fever, 554, 558, 613
 Maximum expiratory flow-volume curve (MEFV), 156, 157-160
 Maximum voluntary ventilation (MVV), 156, 160, 183, 193, 537
 Measles, 91
 Measurement bias, 126-132
 Meat packing plant workers, 84, 703, 704, 706, 748
 Meat preservers, 599, 703, 704, 706
 Meat wrappers, 466, 703, 704
 Mechanic, auto, 672, 675
 Mediastinitis, hemorrhagic, 693, 695
 Medical laboratory workers, 748
 Medical technicians, 590, 755
 Medicine,
 Occupational,
 Uses of epidemiology in, 104-105
 Medusa head, 429
 Meerschaum, 248, 271, 272
 Melanoma, malignant, 659
 Melanoptysis, 367
 Melanosis, 35, 333, 334
 Melts, 4, 5, 6, 19
 Basaltic, 4
 Magmatic, 4
 Mengovirus 37A (sampling for), 96
 Meningismus, 716
 Meningitis, 696
 Hemorrhagic, 696
 Tuberculous, 710
 Mercaptans, detection of, 60
 2-mercaptoethanol, 707
 Mercuric bromide, 52
 Mercury, 5, 29, 402, 586-589, 754
 Compounds, 754
 Poisoning, 39
 Mercury switch makers, 587
 Mercury vapor, 49
 Detection of, 61
 Mercury vapor meter, 56
 Mercury workers, 587, 754
 Mining, 754
 Refining, 754
 Mesothelioma, 629, 630, 671
 and Asbestosis, 290, 313-314
 Causative agents, 671-672
 Diagnostic criteria, 682-683
 Encephaloid, 676
 Laboratory investigations, 681
 Malignant, 284, 672
 Pathology of, 676
 Peritoneal, 36, 297-298, 671
 Pleural, 36, 282-283, 671-687
 Scirrhus, 676
 Treatment, 681-682
 Metal,
 Milling, 220, 760
 Mining, 220, 760
 Misch, 455
 Metal bronzers, 412
 Metal burners, 607
 Metal casters, 517
 Metal cleaners, 590, 755, 757
 Metal cutting, 607, 608, 746, 749
 Metal fabrication, 464
 Metal fume fever, 576, 607, 608, 610-611, 619, 748
 Metal fumes, 608

Tolerance, 610, 611
 Metal grinders, 742
 Metal molders, 517
 Metal platers, 465
 Metal polishers, 607
 Metal refining, 455, 745
 Metal sprayers, 607
 Metal workers, 438, 455, 757
 Extractors, 574, 752
 Powder processors, 574, 752
 Metalizers, 577, 752
 Metallic fumes, 607
 Metallic pigment makers, 607
 Metalloid, 409
 Metallothionein, 576
 Metallurgical operations, 744
 Metallurgists, 452, 584, 749, 756
 Metals,
 Common associations, 30
 Industrial, 23
 Precious, 23
 Metamorphic rocks, see Rocks,
 metamorphic
 Metamorphism, 17, 19
 Cataclastic, 17
 Contact, 17-19, 20
 Regional, 17-19
 Metaplasia,
 Cuboidal, 660
 Goblet cell, 521, 724
 Squamous, 521, 657
 Metasomatism, 17, 19
 Metastases, entrathoracic, 659
 Metastasis, 669
 Methacholine, 467, 469, 470
 Challenge testing, 156, 167, 471
 Methane, 44
 Methemoglobin, 585, 591
 Methemoglobinemia, 591
 Methyl bromide, 54
 Methyl chloride makers, 581
 Methyl ethyl ketone, 42
 Detection of, 59
 Methyl mercaptan.
 Detection of, 60
 Methylene chloride, 54
 Detection of, 59
 Mica, 5, 6, 7, 9, 12, 16, 33, 243, 272-279,
 281, 759
 Hydrous, 277
 Sheet, 248
 Microban air sampler, 86
 Microbes,
 Airborne, 89
 Characteristics of, 89
 Microbial aerosols,
 Samplers, 90-91
 Sampling, 83-87
 Microbiology, lab workers, 84
 Microcline, 10, 280, 281
 Microcoulomb redox, 57, 58, 61
 Micronodular lesions, 357, 366
 Microorganisms,
 Airborne sampling, 89-101
 Occupational diseases due to, 83-85
 Micropolyspora faeni, 482, 747
 Microprocessor technology
 Microscope, electron, 77, 80, 95, 96
 Migrant workers, 709
 Milk consumers (unpasteurized), 748
 Mill fever, 554, 558, 607, 609, 610, 613,
 619
 Millers, 3, 334, 464, 748
 Milling,
 Tungsten carbide with cobalt, 746
 Metal, 760
 Nonmetallic, 220, 760
 Mineral fibers, man-made, 444-451
 Mineral oil, 403, 405, 407
 Mineral wools, 444, 749
 Mineralizers, 18
 Mineralogy, 3-40
 Minerals,
 Agents of disease, 3, 19, 36-40
 Ferromagnesian, 6, 12
 Metamorphic, 20
 Survivor, 5
 Miners, 3, 584, 709, 748, 751, 754, 755
 Antimony, 412
 Bituminous
 Black lung disease
 Coal, 183, 196-197, 517, 518
 Mercury, 587, 754
 Tungsten, 438
 Mining, 220
 Bauxite
 Metal, 760
 Nonmetallic, 220, 760
 Mirror silverers, 427, 574, 742, 752
 Miscellaneous pneumoconioses, 751
 Pulmonary reactions, 751
 Misch metals, 455
 Missile technicians, 744
 Mists, 69
 Mite debris, 46
 Molders, brass, 244, 429

- Molders, bronze, 429
- Moldy compost, 462, 482, 747
- Moldy fodder, 481
- Moldy malt, 482
- Moldy maple bark, 482
- Moldy redwood dust, 482
- Moldy sugar cane, 481, 482, 747
- Moldy wood chips, 482
- Moldy work dust, 482
- Molecular iodine, 57
- Molecular sieve, 46
- Molybdenum, 5, 26, 29, 438
- Monazite, 454
- Monday chest tightness, 533, 534, 535, 537, 538, 540, 544, 546, 551, 552, 553, 554, 557, 558
- Monday cough,
 - Dust exposure and, 547
- Montanite, 40
- Montmorillonite, 35, 267, 268
- Mordenite, 672
- Mortality rates, 120
- Mortality ratios,
 - Proportional, 117
 - Standardized, 117-118
- Motormen, 357
- Mucociliary system, 572
- Mucor sp., 482, 747
- Mucous membranes, 571
- Mud, red, 402
- Mudstone, 13
- Mullite, 245-246
 - Disease associations, 37
- Muscovite, 10, 12, 14
 - Disease associations, 37
- Mushroom compost handlers, 483
- Mushroom dust, 462
- Mushroom workers, 722, 747
- Mushroom workers' disease, 484
- Mushroom workers' lung, 482, 747
- Mustard gas, 642
- Myalgia, 470, 607, 695, 713, 714
- Mycobacterial infections, 235, 240
- Mycobacterium tuberculosis, 370, 748
- Mycoplasma pulmonis, 575
- Mycotoxin inhalation, 618
- Mycotoxins, 607, 608, 610, 618
- Mylar plastic manufacture, 746
- Myocarditis, 713, 714
 - Detection of, 60
- Naphthalene,
 - Detection of, 60
- Nasal septum, perforation of, 39
- Nascent oxides, 607
- Nasopharyngeal neoplasms, 748
- Nasopharyngitis, acute, 385, 390
- National Ambient Air Quality Standard, 594
- Natural gas production and processing workers, 584, 754
- Necrosis, 659
 - Needle-grinders, 334
- Neodymium, 5, 455
- Neon light makers, 587
- Neoplasia,
 - Malignant, 642
- Neoplasms, 748
 - Malignant, 3, 630, 671
 - Nasopharyngeal, 748
 - Pulmonary, 650, 657
- Nepheline (Nephelite), 243, 279, 280, 281
 - Disease associations, 37
- Nepheline syenite, 281
- Nephelosis, 37
- Nephelometers, integrating direct reading instrument, 77, 78
- Nephritis, 39
- Nephrosis, 39, 588
- Neuraminidase, 511
- Neutrophil leukocytosis, 610
- Newcastle disease virus, 85, 93, 97
- Nickel, 5, 7, 29, 641-642, 657, 748
- Nickel ore millers and processors, 3, 749
- Nickel plating and grinding operations, 642
- Nickel salts, 462, 464, 749
- Nickel smelter workers, 3, 743, 749
- Nickel workers, 751
- Niobium, 5
- NIOSH National Coal Workers Surveillance Program, 332, 373-375
- NIOSH National Study of Coal Workers' Pneumoconiosis, 348
- Nisobium, 439
- Nitrate minerals, 32
- Nitric acid, 46
- Nitric acid makers, 574
- Nitric oxide, 54, 590-594, 755
 - Federal standards for, 590
- Nitrite, 25, 511, 585
- Nitrogen, 5, 44, 573
- Nitrogen, oxides of

N Naphtha

- Federal standards for, 590
 - Nitrogen dioxide, 47, 48, 49, 54, 572, 590-594, 722, 730, 755
 - Federal standards for, 590
 - Nitrogen mustard, 637
 - Nitroxy-Hemoglobin complexes, 591
 - Nocium tube, 455
 - Nodules,
 - Silicotic, 36, 230, 232
 - Noise,
 - In instrument evaluation, 62
 - Nonferrous foundry production, 744
 - Nonmetallic minerals, 33, 34
 - Common associations, 34
 - Complexity of, 34
 - Nuclear reactor workers, 455, 744, 746
 - Nurses, 91, 590, 709, 748, 755
- O**
- Obligatory symbols (ILO classification system), 150
 - Obsidian, 13
 - Obstructive ventilatory impairment, 165, 189, 200
 - Occupational agents, inhaled, 607-625
 - Occupational asthma and rhinitis, 749
 - Ocher, 422
 - Ocher mining, 422, 760
 - Odds ratio (OR), 110
 - Odor controllers, 594, 756
 - Office workers, 481, 485, 486
 - Oil, 23
 - Mineral, 403
 - Shale, 23
 - Oil bleachers, 594, 599, 756
 - Oil fields, 23, 31
 - Oil hydrogenators, 748
 - Oil processors, 599
 - Oil well builders, 759
 - Oligoclase, 10
 - Olivine, 6, 7, 14, 18, 243, 244-245, 254
 - Crystal chemistry of, 7
 - Disease associations, 37
 - Opacities, 145
 - Large, 149, 240, 681, 682
 - Small, 146, 148-149, 240
 - Opal, 11, 35, 37
 - Optical density, 141, 142, 144
 - Optical Direct reading instruments, 77
 - Optical lens production, 745
 - Orciprenaline, 558
 - Ore minerals, 22, 24
 - Disease association, 38-40
 - Ore smelter workers, 599, 754, 756
 - Ores, 4, 12, 19
 - Uranium bearing, 642
 - Organic chemical manufacturing, 427, 742
 - Organic chemical synthesizers, 412, 574, 590, 594, 602, 746, 750, 755, 756, 757
 - Organic dust fever, 608, 612-618
 - Organic dusts, 607, 608, 609, 610, 620
 - Endotoxin in, 609
 - Tolerance to, 610
 - Organic sulfides,
 - Detection of, 60
 - Organic sulfonate makers, 599
 - Organic vapor air-monitoring badge, 49-50
 - Organogenesis, 513
 - Organophosphorus insecticides, 462, 464
 - Organotin, 435
 - Ornithosis, 84, 85, 713
 - Orris root, 462, 464
 - Orthoclase, 10, 279, 280
 - Osmic acid, 589
 - Osmiridium refining, 589
 - Osmium, 511, 589
 - Osmium tetroxide, 504, 506, 589-590, 755
 - Federal standards for, 589
 - Osmium tetroxide production, 589-590, 755
 - Osteomalacia, 509, 578
 - Osteomyelitis, 705
 - Otitis, 84
 - Overseas personnel, 709
 - Oxidates, 15
 - Oxides,
 - Aluminum, 36
 - Metallic, 69, 607
 - Oxides of nitrogen, 44, 504, 506, 590-594, 755
 - and Cor pulmonale, 720, 722
 - Oxides of sulfur, 755
 - Oxyacetylene cutters, 429, 757
 - Oxygen, 3, 4, 5, 6, , 44
 - Nascent, 580
 - Ventilatory equivalent for (VE_{O_2}), 193
 - Oxygen therapy, 585
 - Oxyhemoglobin, 585
 - Oxyhemoglobin dissociation curve, 187, 189
 - Ozone, 47, 48, 57, 402, 572, 594-597, 756
 - Federal standard for, 594

- P** P, p diphenylmethane diisocyanate (MDI), 44
- Padding and upholstery filling makers,
Workers exposed to cotton dust, 535
- Pain, abdominal, 408
- Paint catalyst, 482, 750
- Paint dryer makers, 743, 751
- Paint makers, 220, 334, 404, 412, 438,
506, 577, 587, 742, 743, 745, 746,
748, 750, 752, 755, 757, 758, 759,
761
- Paint sprayers, 465, 483, 484, 517, 577,
750
- Painters, 412, 672, 673, 750, 751
Using polysulfide caulking
compounds, 584
- Paints, 37
- Palygorskite, 248, 268, 272
- Pancreatic extracts, 462
- Pan-lobular emphysema, 512
- Papain, 462, 512
- Paper bleachers, 581, 753
- Paper makers, 331, 334, 438, 538, 574,
584, 587, 599, 631, 743, 745, 752,
755, 756, 757, 758, 759
- Paper products manufacture, 464
Use of talc in, 256
- Paper pulp makers, 506, 754
- Papillomas, 658
- Paprika dust, 482, 747
- Paprika splitters, 747
- Paprika splitter's lung disease, 482, 747
- Paraffins, 47
- Paragonite, 10, 272
- Paralysis, 39
- Paraphenylene diamine, 462, 464, 465
- Paraquat, 504
- Parasites, 83
- Parenchyma, pulmonary, 240, 571
- Parkinsonism syndrome, 39
- Parrots, 713
- Particulate sampling train, 73
- Particulate sizing, 70, 78-80
- Particulates,
Air sampling for, 69-82
Airborne,
Collecting, 73
Sampling technique, 74
Collection methods, 73-78
Detection and measurement of, 51
Solid, 69
- Pavers, 751
- PCB, 511
- Pen point makers, 438, 748
- Pencil lead making, 333, 746
- d-Penicillamine, 588
- Penicillins, 462, 464
- Penicillium frequentans, 482, 747
- Penicillium caseii, 482, 747
- Perchloroethylene, 55, 402
- Percussion cap makers, 587
- Perfluoroisobutylene, 612
- Perfume makers, 412, 574, 752
- Pericarditis, 714
- Periclase, 18
- Peridotite, 12
- Perlite, 13
- Persulphates, 462, 464
- Pesticide makers, 574, 577, 752, 753
- Pesticide manufacturing, 506, 507
- Pesticide workers, 581, 587, 755
- Pesticides, 632
- Pet bird trade, 716
- Pet shop operator, 84, 713, 714, 716
- Petroleum, 16, 23
- Petroleum workers, 754
Production, 584
Refinery, 403, 404, 438, 574, 581,
599, 602, 742, 750, 752, 753, 754,
756, 757
- Pewter makers, 412, 435, 742, 761
- Pharmaceutical workers, 412, 464, 465,
577, 758, 759, 761
- Pharmaceuticals, 462, 464, 742
- Phenol manufacturing, 757
- Phenylglycine acid chloride, 462, 464
- Phlegm, 510, 513
- Phlogopite, 10, 272, 278
Disease associations, 37
- Phosgene, 52, 402, 504, 506, 597-599, 756
Federal standards for, 597
- Phosgene makers, 581, 756
- Phosphates, 33
- Phosphate purifiers, 584
- Phospholipid, 613
- Phosphor production, 412, 455, 744, 745
- Phosphorite deposits, 16
- Phosphorus, 5, 16
- Photochemical smog, 594, 595
- Photoelectric cell makers, 577
- Photoengravers, 574, 584, 590, 754
- Photographers, 587, 755
- Photographic chemical workers, 602, 757
- Photographic film makers, 574, 752
- Photographic workers, 427, 438, 581, 742
- Photography, 433

Photoionization, 56, 57, 59
 Photometers, 77, 78
 Photometry, 48
 Flame, 457
 IR, 57, 59
 UV, 58, 61
 Photons, 137
 Photophobia, 715
 Phthalein manufacture, 746
 Phthalic anhydride, 482, 746
 Phthalic anhydride lung disease, 484
 Phthisis, 334, 335, 534
 Tracheal, 534
 Physical principle, direct-reading instrument, 56
 Physicians, 91, 590, 709, 748, 755
 Physiotherapy, chest, 517
 Piezoelectric direct reading instrument, 78
 Pigeon breeders, 483, 484, 494, 497, 744,
 Disease, 483, 484, 485, 489, 492, 493,
 714
 Pigeon breeders' lung, 488, 744
 Pigeonite, 9
 Pigment lesions, 357
 Pigment makers, 412, 435, 438, 452, 577,
 746, 748, 749, 750, 752, 758, 761
 Pigment manufacturing, 506
 Pigment workers, 641
 Pink puffers, 165
 Pipe coverers, 673
 Pipefitters, 673
 Pipeline workers, 584
 Piperazine 462, 464, 465
 Pitchblende, 40
 Pitchstone, 13
 Plagioclase, 6, 7, 10
 Plague,
 Bubonic, 85
 Pneumonic, 85
 Plaques,
 Pleural, 150, 263, 271, 306-307, 316,
 630, 681
 Plaster cast bronzer, 412
 Plastic,
 Phenolic, 431
 Plastic cement mixers, 574
 Plastic products makers, 577
 Plastic makers, 220, 404, 506, 581, 743,
 745, 746, 753, 756, 759, 760, 761
 Plastic workers, 334, 403, 742
 Plastics industry, 465
 Use of talc in, 256
 Plastics manufacturing, 507
 Plastics processors, 331
 Plasticizer manufacturing workers, 484
 Platinum, 5, 23, 28
 Complex salts of, 462, 465, 468, 469
 Hardening, 755
 Plethysmographic studies, 552
 Plethysmography, body, 159, 161, 165,
 515
 Pleural calcification, 150, 282, 284, 299
 Pleural effusion, 284, 681, 682, 669, 695
 Pleural fibrosis, 682
 Pleural plaques, 150, 263, 271, 306-307,
 308, 315, 316, 630, 681
 Pleural thickening, 149-150, 152, 263, 282,
 284, 299, 315, 682
 Plumbago, 331
 Plumbing, 743
 Plumbism, 39
 Plywood and structural wood producers,
 749
 PMF, *see* Fibrosis, Progressive massive
 Pneumatolysis, 19, 20
 Pneumoconioses, mixed dust, 19, 30, 38,
 421, 429, 571
 Pneumoconiosis, 3, 19, 35, 37, 38, 39, 40,
 71, 208, 506, 510, 721
 Bakelite, 431
 Benign, 249, 259
 Carbon, 329, 352
 Chest radiographs in, 145-153
 Coal workers', 35, 147, 198, 329-384,
 727, 745
 Historical perspective, 332-336
 Complicated, 250, 251, 253, 564
 Cor pulmonale in, 728, 733
 Graphite, 352
 Hematite, 421
 Miscellaneous, 401, 751
 Silicate, 243-285
 Simple, 250, 251, 253
 Talc exposure, 37, 256
 Tin, 40, 437
 VA rating for, 211
 Pneumonia, 506, 514, 669, 713, 715
 Klebsiella, 660
 Lipoid, 413
 Lobar, 432
 Manganese, 432
 Pneumonitis, 38, 385, 409
 Acute, 490
 Acute chemical, 390
 Benign, 249
 Chronic, 491

Hypersensitivity, 481-500
 Diagnosis of, 481
 Differentiating from asthma, 471
 Interstitial, 486
 Subacute, 490-491
 Ventilation, 482
 Pneumothorax, 231
 Poliomyelitis, 96
 Polishers, 225, 757
 Peanuts, 758
 Rice, 758
 Pollen, 468
 Polychlorinated biphenyls, 504
 Polymer fume fever, 608, 609, 611-612, 619, 749
 Polymer makers, 750
 Polymers, fluorocarbon, 607
 Polymorphonuclear leukocytosis, 607
 Polysaccharide, 613
 Polystyrene tube assay, 473
 Polytetrafluoroethylene (PTFE), 607, 609, 610, 749
 Producers and handlers, 749
 Polyurethane, 465
 Polyurethane manufacture, 750
 Polyvinyl chloride, pyrolysis products of, 462
 Polyvinyl pyrrolidone, 432
 Polyvinylpyridine -N-Oxide (PVNO), 370
 Population at risk (PAR), 741-761
 Porcelain colorers, 743, 751
 Porcelain manufacturing, 220, 412, 760
 For electrical equipment, 758
 Porcelain refinishers' lung, 482, 750
 Portland cement, 759
 Postmen, 517
 Postural drainage, 517
 Pot-fume emissions, 402
 Potash, 25, 32
 Potassic feldspars, 5, 6
 Potassium, 4, 14, 15
 Potassium hydroxide, 57
 Potassium iodide, 57
 Potassium permanganate, 431, 432
 Potassium persulphates, 462, 464
 Pottery dust, 504
 Pottery industry, 220, 223, 404, 742, 760
 Pottery materials, 36
 Pottery workers, 412, 508
 Poultry processing industry 84, 713, 714
 Poultry production, 714
 Power station workers, 743
 Praseodymium 455
 Precious metals, 23, 28
 Precipitation,
 Electrostatic, 74, 76
 Thermal, 74, 76, 93
 Precipitins, 473, 489
 Precision,
 In instrument evaluation, 62
 Statistical, 124, 125
 Precordial oppression, 695
 Preservative makers, 599, 756
 Pressor response,
 Pulmonary function testing, 163
 Pressure gauge makers, 587
 Prevalence (epidemiology), 109
 Prevalence ratio (PrR), 110, 119
 Printers, 334, 412, 463, 464, 745, 757
 Printing ink workers, 517, 750
 Prison guards, 709
 Profusion, 148, 226
 Progressive massive fibrosis (PMF), see
 Fibrosis, progressive massive
 Projected area diameter, 79
 Promethium, 455
 Proportional Mortality Ratio (PMR), 109, 117
 Propranolol, 558
 Prostacyclins, 615, 616
 Prostaglandin, 723
 Prostaglandin E (PGE), 616
 Proteases, 464
 Protein makers, 756
 Food, 599
 Industrial, 599
 Proteins,
 Avian, 481, 482, 483
 Proteinuria, 577, 578, 588
 Proteolytic enzymes, 464
 Pseudotumor, inflammatory, 659
 Psittacosis, 84, 713-716
 Pullularia, 482, 747
 Pulmonary anthrax, see Anthrax,
 inhalation
 Pulmonary deposition, 70-71
 Pulmonary diffusing capacity, 160!161
 Pulmonary disease,
 Obstructive 205-206, 207, 214, 465
 Parenchymal, 721
 Restrictive impairment, 205-206, 215
 Total disability criteria, 205-206
 Pulmonary function, quartz effect, 226
 Pulmonary function abnormalities,
 166-167
 Pulmonary function test, 155-170, 181

- in Asbestosis, 317-318
- in Coal workers' pneumoconiosis, 350-352
- in Hypersensitivity pneumonitis, 492-494
- in Occupational asthma and rhinitis, 461, 471, 473
- Pulmonary neoplasms, 750
- Pulp bleachers, 581, 753
- Pulp makers, 506, 574, 754
- Pulp mills, 747
- Pumice, 13, 25, 52
 - Disease associations, 35
- Purulence, 513
- PVC, 466
- Pyramids, Egyptian, 12
- Pyrexia, 609, 610
- Pyrite burners, 584
- Pyro powders, 403, 405, 407
- Pyrogens, 612, 615
- Pyrolytic graphite, 331
- Pyrolusite, 431
- Pyrophyllite, 33, 255-256, 272
- Pyrotechnic industries, 412
- Pyroxene, 5, 6, 7, 9, 14, 19, 247, 254
 - Crystal chemistry of, 9
 - Empirical formula, 9
 - Monoclinic, 9
 - Orthorhombic, 9
- Pyrrhodiline, detection of, 60

Q

- Q-fever, 84, 85, 91
- Quarantine facilities workers, 713
- Quarry dust, 504
- Quarrymen, 3
- Quarrying, 220
- Quartz, 3, 6, 11, 12, 13, 14, 15, 16, 18, 19, 35, 36, 72, 243, 268-271, 275, 720, 727, 760
 - Disease associations, 37, 200
 - Effect on pulmonary function, 226
- Quartzite,
 - Disease associations, 35
 - Questioning, free, 171
- Questionnaires,
 - Example of, 172-173
 - Open and closed, 171-172
 - Respiratory, 171-179
 - Self-administered and postal, 177-178
 - Verification of, 173
 - Wording of, 172

R

- Rabbit fever, 84
- Rabbit pox virus, (sampling for), 96
- Rabies virus, 91, 97
- Radiation hazards, 137-138
- Radiation,
 - Infrared, 56, 59
 - Ionizing, 137-138, 661
 - Scattered, 143, 145
 - Ultraviolet, 56, 93
- Radicals, free, 591, 594
- Radioallergosorbent test (RAST), 468, 469, 471, 472, 473
- Radiograph, chest, 689
 - Criteria for technical quality, 144
 - Interpreting, 146
 - in Pneumoconiosis, 145-153
 - Relationship of impairment to, 198
- Radiographic images, formation of, 138-141
- Radiographs, postero-anterior, 138
- Radiography,
 - Chest, 137, 138, 140, 239, 689
 - Image quality, 141, 143-144
 - Optical density, 141, 142, 144
 - Technical aspects of, 138-145
 - Techniques, 144-156
 - Training of physicians and technologists, 151-152
 - Radiology, 137-153
- Radionuclide technology, 732
- Radiotherapy, 669, 670
- Radium, 29
- Radius, ionic, 5
- Radius ratio effect, 7
- Radon, 665
- Radon daughters, 234, 637, 642, 643, 751
- Railroad track workers, 751
- Rales, 234, 390, 408, 438, 491, 495, 514, 603, 695
 - Basal, 391
- Randomization, restricted, 132
 - Simple, 132
- Range, in instrument evaluation, 62
- Rare earths, 454-458
- RAST, see Radioallergosorbent test
- Rate, disease and death (epidemiology), 109
- Raw cotton,
 - Byssinosis prevalence, 539
- Rayon makers, 574, 581, 584, 642, 752, 753, 754
- Spinneret makers, 452, 749

- Receptors,
 - Beta adrenergic, 469
- Recorders, X-Y, 158
- Recording media (Radiology), 139-140
- Red mud, 402
- Reduzates, 16
- Redwood dust, moldy, 482, 747
- Redwood industry, 483
- Refiners,
 - Mercury, 587
 - Orc, 438
- Refractories, 25, 33, 34, 200, 244, 245, 404, 504, 742, 758, 760
- Refractory material makers, 333, 452, 744, 746, 749, 759
- Refrigerant makers, 581, 584
- Refrigeration workers, 574, 599, 749, 752, 753, 756
- Relative humidity (RH) and microbial aerosols, 91, 93, 96
- Relative Risk (RR), 110, 135
- Reliability,
 - in Instrument evaluation, 62
 - in Questionnaire validity, 174-175
- Renal disorders, 40
- Rendering plant worker (renderies), 84, 703, 747
- Resident nitrogen technique, 158
- Residual volume (RV), 158
- Residues, chemical, 15
- Resin makers, 574, 746, 752, 756, 761
- Resins,
 - Anion-exchange, 633, 634, 635
 - Epoxy, 465, 482, 484
 - Ion exchange, 282, 750
 - Natural, 462
- Resistates, 15
- Respiratory failure, 231
- Respiratory infections, 84
- Respiratory questionnaire, 560
- Response time, in Instrument evaluation, 62
- Rheumatoid arthritis, 370, 589
 - and Complicated pneumoconiosis, 364
- Rhinitis, 461-477, 749
 - Allergic, 461
 - Causative agents, 462
 - Occupational definition, 462
- Rhodomite, 431
- Rhonchi, 390, 408, 514, 571, 603, 695
- Rhyolite, 12
- Riebeckite, 7, 9
- Riggers (Shipyard), 673
- Right-sided heart failure, 491, 553
- Road construction workers, 699
- Road transport workers, 517
- Road workers, 220, 751, 760
- Rock crushing dust, 504
- Rock wool, 444
- Rock digging & crushing operators, 505
- Rock-forming silicates, chemistry of, 11
- Rocket fuel makers, 455, 574, 745
- Rocks,
 - Agents of disease, 19
 - Argillaceous, 20, 21
 - Contact metamorphism, examples of, 20
 - Carbonate, 20
 - Disease agents, 35-36
 - Erosion, 11-12
 - Igneous, 4-8, 17
 - Extrusive, 7, 13
 - Intrusive, 7, 13
 - Mineral content of, 12
 - Mafic, 7
 - Metamorphic, 4, 17-22
 - Common minerals in, 22
 - Metamorphism of, 21
 - Plutonic, 8 (See also Ricks igneous, intrusive)
 - Sedimentary, 4, 8-17, 23
 - Chemistry and mineralogy of, 14-16
- Rocky Mountain Spotted Fever, 85
- Rodenticide makers, 750
- Roentgenograms, chest, 471, 689
- Roofers, 751
- Roofing material manufacturing, 758
- Roofing tile production
 - and installation, 743
- Roof-bolters, 349, 357
- Rope manufacturing, 745
 - Byssinosis prevalence, 540, 542
- Rotorod collector, 98
- Rouge, 422, 423, 426, 455
- Rubber, red, 409
- Rubber cement mixers, 574
- Rubber colorers, 331, 743, 751
- Rubber industry, 220, 331, 742
 - Use of talc in, 256
- Rubber makers, 412, 581, 745, 753, 758, 760
- Rubber and plastics processors, 334, 584
- Rubber workers, 257, 334, 403, 574, 742, 750, 751, 752

Rubidium, 5, 7
Rubies, 404
Rutile, 14, 40

S Saddle pad manufacturing, 693-694
Salami dusting, 758
Salbutamol, 558
Salesmen, automobile, 673
Saline deposits, 8, 16
Salivation, 39
Saloon workers, 748
Salt extractors, coke oven by-products,
574
Saltzman's reagent, 52
Samarium 455
Samaraskite, 454
Sampler selection, 89, 90, 97-98
Sampler,
Aerosol, 85-86
"Microban", 865
"RCS" unit, 86
AGI impinger, 90, 95
Andersen sieve-type, 90, 96, 97
Cyclone, 97, 98
Direct impingement, 93
Electrostatic, 90, 97
Hirst spore trap-type, 90, 92, 94
Impingement, 93, 95, 97
LEAP, 90, 97
Liquid, 91
LVS (Litton), 90, 95, 97
Membrane filter, 90
Microbial aerosol (listing and
description), 90
Millipore filter, 95
Multiple slit (MSI), 90
Slit, 90, 96
Sampling,
Air, see Air sampling
Grab, 41-44
Impinger, 71, 74, 75
Isokinetic, 93-94
Long-term (integrated), 41, 44-51
Microbial aerosols, 91-95
Short-term (instantaneous), 41, 42
Viral aerosols, 95-97
Sand, 15, 275, 505, 760
Sand, beach, 451
Sandblasters, 225, 235, 239, 240, 760
Sandstone, 11, 12, 13, 14, 15, 16, 18, 35,
760

Disease associations, 35
Sanidine, 10
Sapphires, 404
Saprophytic fungi, 482
Sarcoid, 728, 729
Sarcoidosis, 212-213, 396
Sarcoma, carcino, 657
Sawmill workers, 747, 749
Scandium, 5
Scheelite, 438
Schilling's grading scheme, 559
Scrap metal recovery plant operators, 435
Screening (Radiology), 139
Sculptors,
Carver, 225
Metal, 577
Seacoal, 745
Sedimentary rocks, see Rocks sedimentary
Sedimentation, 70
Sediments,
Chemical classifications, 16
Detrital, 14
SEE, see standard error measurement
Seed handlers, 587
Seeding process, 402
Selection bias, 125-126
Selenium, 29, 578, 748
Oxide fume, 607
Semiconductor workers, 412, 750
Semimetal, 409, 410
Semliki Forest virus (sampling for), 96
Sensitivity,
in Instrument evaluation, 63
in Measurement bias, 127-129
in Questionnaire validity, 173-174
Sepiolite, 243, 248, 254, 271-272
Septic tank cleaners, 584
Septicemia, 693, 695, 696
Sequoiosis, 482, 483, 747
Sericite, 16, 18, 243, 272, 275, 758
Disease associations, 37
Serpentines, 6, 14, 243, 254
Serum precipitins, 489
Setters,
Byssinosis prevalence in, 539
Sewage plants, microbes from, 83, 91
Sewage treaters (treatment plant
operators), 92, 581, 584, 594, 753,
754, 756
Sewer workers, 574, 584, 752, 754
Shaggy heart, 315
Shale, 13, 15, 16, 18, 19
Shaver's disease, 407-408

- Sheep dip, 584, 632
- Sheet mica, 248, 273
- Sheet structure, 5
- Sheetmetal workers, 630, 673
- Shellac makers, 574
- Shells, hydrox, 592
- Shilling's classification, 536-537, 539
- Shingle makers, 751
- Ship burners, 750
- Shipbuilding industry, 672, 673, 675, 743
 - Occupational titles, 674
- Shipyard workers, 607, 608, 630, 673, 674, 749, 751
- Shock, 695
- Shoe finishers, 574
- Sick Societies, 537
- Siderite, 421, 422
- Siderosilicosis, 424
- Siderosis, 38, 413, 417, 421-426, 757
- Sieve, molecular, 46
- Silage gas poisoning, 591
- Silica, 11, 16, 23, 219, 220, 239, 243, 249, 255, 256, 273, 402, 409, 522, 710, 720
 - Free, 35, 229, 240, 249, 279, 280, 331, 373, 416, 665
 - Associated with disease, 36-37, 219-237 and Cor pulmonale, 720, 721
- Silica exposure studies, 710
- Silica flour,
 - Mill workers, 240
- Silica gel, 46, 47, 48, 52
- Silica minerals, 243, 279
- Silica polymorphs,
 - Rock-forming chemistry of, 11
- Silicate minerals, 12, 243
- Silicate pneumoconiosis, 243-285, 758
- Silicates, 243
 - Aluminum, 267, 672 and Cor pulmonale, 720, 721, 727
 - Ferromagnesium aluminum, 277
 - Rock forming, 7, 12, 243
 - Rock forming, chemistry of, 7
- Silicatosi, 37, 272
- Silico-anthraco, 35
- Silico-antimoniosis, 760
- Silico-proteinosis, 219, 239
- Silico-tuberculosis, 35, 36, 219
- Silicon, 3, 4, 5, 6, 15, 404
- Silicon dioxide, 220, 243, 720
- Silicosiderosis, 421, 760
 - Silicosis, 3, 8, 19, 30, 35, 36, 37, 40, 147, 219-237, 243, 264, 267, 416, 435, 711, 758, 760
- Acute, 219-220, 231, 239-241, 725
- Chronic manifestations, 219
- Chronic pulmonary, 725
- Clinical complications, 233-234
- Complicated, 219
- Conglomerate, 231, 240
- Definition, 219
- Diagnostic criteria, 234-235
- Findings on gross examination, 229-230
- Lung function, 232
- Microscopic findings, 230
- Nodular, 35, 240, 357, 430
- Pathogenesis, 230-231
- Pathology of, 229, 724
- Radiographic appearance, 232-233
- Roentgenographic changes, 226-229
- Smoking and, 222
- Treatment, 234
- Silk makers, 584, 754
- Silk manufacturing,
 - Workers exposed to cotton dust, 535
- Sill, 8
- Sillimanite, 245-246, 758
 - Disease associations, 37
 - Milling, 758
 - Mining, 758
- Silo fillers, 507, 590, 755
- Silo builders, 759
- Siloxane, 255
- Silt, 15
- Siltstone, 12, 13, 14, 15, 16
- Silver, 5, 23, 26, 27, 40, 426-428, 760
 - Sterling, 426
- Silver deposits, 28
- Silver extractors, 581, 587, 753
- Silver finishers, 758
- Silver nitrate dust, 427
- Silver oxide fume, 607
- Silver polishers, 760
- Silver polishers' lung, 760
- Silver refiners, 750
- Silver sulfantimonite, 409
- Silversmiths, 760
- Simian virus, 40, 96
- Single breath carbon monoxide method (Dsb), 160-161
- Sinus cancer, 3
- Sisal, 534, 744
 - Dust, 533
 - Factory workers, 745
- Sitophilus granarius, 482, 747
- Skin infection, 84

Skin patch test, 395
 Skin prick tests, 473
 Skin rash, 588
 Skin test, 710
 Histoplasmin, 699
 Skin testing,
 and Hypersensitivity pneumonitis, 493
 and Occupational asthma, 471
 Skin ulceration, 36, 390
 Skywriting, 433
 Slag wool, 444
 Slashers,
 Byssinosis prevalence, 541
 Slate, 720, 760
 Disease associations, 35
 Slaughterhouse workers 584, 703 748, 754
 Slit impinger, 86
 Small arms ammunition makers, 577
 Smallpox (sampling for), 96
 Smaltite, 419
 Smectites, 267
 Smelters, 608
 Smelting workers, 584, 754
 Smog, photochemical, 594, 595
 Smoke, 69, 432
 Tobacco, 483, 590
 Smoke bomb makers, 577
 Smoking, tobacco,
 and Byssinosis prognosis, 559
 and Chronic bronchitis, 508
 Cigarette, 184, 222, 352, 374, 505, 510,
 516, 519, 631, 637-638, 643, 657,
 660, 720, 733
 and Asbestosis, 298
 and Cadmium, 509, 577
 Former smoker, definition, 633
 and Polymer fume fever, 609
 Respiratory disease and, 548, 549
 Soap makers, 584, 743, 754, 760
 Soap filler additions, 758
 Soaps, abrasives, 760
 Soapstone, 33, 35
 Social Security Total Disability Standards,
 205-207, 208
 Restrictive (interstitial) impairment,
 212-213
 Social workers, 709
 Soda ash, 25
 Soda ash makers, 574
 Sodium, 4, 15
 Sodium hydroxide, 415, 504
 Sodium hydroxide makers, 581
 Sodium persulfates, 462, 464
 Sodium sulfite manufacturing, 756
 Soil, podzolic, 699
 Solder makers, 412, 435, 577, 761
 Solders, 426
 Solderers, 464, 608, 752
 Soldiers, mustard gas exposure and, 642
 Solvay process workers, 574
 Solvent desorption, 46
 Solvents, organic, 633
 Sorbents, solid, 48
 Sorting, 12
 Soybean, 462
 Spar, 280
 Spark plug makers, 245, 438, 748
 Specific image contrast, 141
 Specificity,
 in Instrument evaluation, 63
 in Measurement bias, 127-129, 135
 in Questionnaire validity, 173-174
 Spectrographic analysis, 457
 Spectrometry, 457
 Derivative, 57, 60
 Electron impact, 58, 61
 Mass, 61
 Spectrophotometry, 44
 Spelter shakes, 607
 Sphalerite, 40
 Sphene, 14, 40
 Spinning room workers,
 Byssinosis prevalence, 539, 541, 542
 Dust exposure and, 547
 Morbidity studies of, 537
 Mortality studies of, 537
 Spiramycin, 462, 464
 Spirogram, timed, 155-157
 Spirometer, 182
 Spirometric testing standards, 157, 182
 Spirometry, 182-184, 559
 Simple, 560
 Spleen, silicotic nodules in, 36
 Splenomegaly, 495, 705, 714
 Spodumene, 9, 243, 247
 Spondylitis, 705
 Spores,
 Bacterial, 94
 Fungal, 94
 Springs, hot, 11
 Sputum, blood tinged, 571
 Mucopurulent, 408, 491
 Sputum cytology, 634, 640, 682, 689
 Sputum production, 510, 513, 571
 Squamous cells, 516
 Stability,

- In instrument evaluation, 62
 - Stablemen, 574
 - Stainless steel workers, 748, 758
 - Standard Error Estimate (SEE), 162, 183
 - Standard Tube Agglutination test (STA), 707
 - Standardized Mortality Ratio (SMR), 117-118
 - Standardized risk ratio (SRR), 118
 - Stannosis, 413, 434, 435, 436, 437, 760
 - Stannous chloride, 435
 - Staurolite, 14
 - Stearin, 402, 403, 405, 406, 407
 - Steel, 421
 - Stainless, 748, 758
 - Steel foundrymen, 517, 758
 - Steel grinding, 422
 - Steel industry, 333, 507
 - Steel makers, 574, 746
 - Steel manufacturing, 333, 507
 - Steel workers, 438, 752
 - Cancer and, 639
 - Stellate scar, 512
 - Stephanite, 409
 - Sterling silver, 426
 - Steroids, 559
 - Stibiconite, 409
 - Stibnite, 409, 411, 412
 - Stishovite, 11
 - Stochastic models, 133
 - Stock (mineralogy), 8
 - Stock handler, 84
 - Stomach cancer, see Cancer, stomach
 - Stomatitis, 39
 - Stone cutters, 334, 760
 - Stone masons, 3, 760
 - Storage tank builders, 759
 - Stove polish manufacturing, 746
 - Straw bleachers, 599
 - Streptomycin, 705
 - Stridor, 693
 - Strippers' asthma, 534
 - Strippers,
 - Byssinosis prevalence, 539, 540
 - Strontium, 5, 7
 - Styrene, 42
 - Detection of, 59
 - Suberosis, 482, 483, 747
 - Submarine workers, 91, 581, 753
 - Sugar beet and cane processors, 484, 485, 584, 754
 - Sugar cane workers, 194, 483, 484, 747
 - Sugar cane, moldy, 481, 747
 - Sugar refiners, 574, 581, 599, 752, 753
 - Sulfate minerals, 32
 - Sulfate oxidase, 600
 - Sulfates, 16
 - Sulfathiazole, 462, 464
 - Sulfide deposits, 22
 - Sulfite ions, 600
 - Sulfite makers, 599
 - Sulfur, 5, 16, 33, 36
 - Sulfur chloride makers, 581
 - Sulfur compounds,
 - Detection of, 58
 - Sulfur dioxide, 47, 48, 49, 55, 402, 572, 599-602, 755
 - Federal standards for, 599
 - Sulfur dioxide workers, 599, 632,
 - Sulfur makers, 754
 - Sulfur oxides, 755
 - Sulfur products processors, 584
 - Sulfur spa workers, 584
 - Sulfur trioxide, 51, 755
 - Sulfuric acid, 433, 517, 572, 573, 756
 - Sulfuric acid makers, 574, 590, 599, 752, 755, 756,
 - Purifiers, 754
 - Sulfuryl chloride makers, 599
 - Sulphone chloramides, 462, 464
 - Surgical wound infection, 84
 - Swimming pool maintenance workers, 581
 - Switch makers, mercury, 587
 - Syenite, 13
 - Synfuels, 329
 - Synthesizers,
 - Organic chemical, 633
 - Synthetic ammonia manufacturing, 755
 - Synthetic fiber makers, 584, 754
 - Synthetic fiber workers, 574, 608
 - Byssinosis prevalence, 541
 - Dust exposure and, 547
 - Ventilatory function tests and, 546
 - Synthetic ink makers, 743, 751
 - Syringe, vacutainer, 42
- T**
- T coliphage (sampling for), 96
 - Tachypnea, 263, 315, 614
 - Taconite, 38
 - Talc, 6, 243, 255, 256-267, 272, 517, 720, 721, 727
 - Disease association, 37
 - Milling, 758
 - Mining, 758

- Iremolitic, 727
- Talc deposits, 33
- Talc pneumoconiosis, 37, 256, 257
- Talco-asbestosis, 256
- Talco-silicosis, 256
- Talcosis, 37, 256, 257, 727
- Talus, 15
- Tank gaggers, 584
- Tanners, 574, 748
- Tannery workers, 574, 584, 587, 599, 693, 752, 754, 755, 756
- Tantalum, 29, 439
- Tartrazine, 462, 464
- Taxidermists, 587, 750, 755
- Tebhrorite, 431
- Teflon, 749
- Tellurium, 29, 40
- Telomers, fluorocarbon, 607
- Terbutaline sulfate, 517
- Test,
 - Kveim, 396
 - Radioallergosorbent, 468, 469, 471, 472, 473
 - Intradermal, 473
 - Skin prick, 473
 - Specific IgE mediated skin reactivity, 471
- Testicular necrosis
- Tetanus, 84
- Tetrachloro phthalic anhydride, 462, 465
- Tetracycline, 517, 705, 715
- Tetradymite, 40
- Tetraethyl lead makers, 581
- Tetrahedral structures, 5
- Tetrahydroforan, detection of, 59
- Textile bleachers, 581, 594, 599, 756
- Textile dryers, 412, 438, 748
- Textile dye workers, 602, 757
- Textile industry, 742, 743, 745, 758, 761
- Textile printers, 412, 577, 584, 587, 753
- Textile vegetable dust, 533, 534
- Textile waste,
 - Workers exposed to cotton dust, 535
- Textile waterproofers, 452, 749
- Textile workers, 435, 455, 508, 544, 750
 - Byssinosis prevalence in, 538-542
 - Finishers (cotton), 574
 - Mortality studies of, 536
 - Respiratory disease and, 537
 - Roentgenographic studies of, 553
- Thermal black, 331, 333
- Thermal conductivity, 57, 60, 61
- Thermal desorption, 46
- Thermal precipitation, 74
- Thermoactinomyces candidus, 482
- Thermoactinomyces sacharii, 482, 747
- Thermoactinomyces viridis, 482, 747
- Thermoactinomyces vulgaris, 482, 747
- Thermometer makers, 587, 755
 - Vapor pressure, 599, 756
- Thermophilic actinomycetes, 481, 482, 483, 485, 489, 491, 493
- Thermophoresis, 74
- Thesauriosis, 432
- Thionyl chloride makers, 599
- Thiophene,
 - Detection of, 60
- Thiophene makers, 584
- Thoracotomy, 284
- Thorium, 5, 457
 - Metallic, 455
- Thorium oxide, 454
- Thorium ores, 40
- Thread mills, 535
- Thrombocytopenia, 615
- Thrombophlebitis, 669
- Thrombosis, capillary, 695
- Thymidine, 489
- Tile and clay production, 760
- Tile manufacturing, 743
- Till, 15
- Tillites, 13, 15
- Tin, 5, 29, 40, 434-438, 748, 760
- Tin millers, 761
- Tin miners, 435, 761
- Tin oxide, 435, 436, 760
- Tin oxide crystals, 436
- Tin oxide fume, 607
- Tin pneumoconiosis, see Stannosis
- Tin recovery workers, 435, 581, 753
- Tin refiners, 761
- Tin smelting, 761
- Titaniosis, 40
- Titanium, 5, 26, 29, 29, 40, 432-433
- Titanium oxide, 432
- Titanium tetrachloride, 433
- TMA disease, 482, 761
- TNT Production workers, 591
- Tobacco dust, 462
- Toluene, 55, 484
 - Detection of, 59
- Toluene diisocyanate, 462, 463, 468, 459, 482, 504, 505, 506, 515, 750
- 2, 4, Toluene diisocyanate (TDI), 44
- O-Toluidine, 52
- Tomography, 152

- Tonalite, 13
- Tool and dye manufacturing, 744
- Total lung capacity (TLC), 158, 515, 571
- Tourmaline, 14, 243
- Toxemia, 693, 695
- Toxic agents,
 - Respiratory effects of exposure to, 571-605
- Trace metals
 - Crystallization and, 7
- Trachitis, 385, 409
- Tracheobronchitis, 506, 604
 - Acute, 390
- Trachyte, 13
- Transfer rights and rate retention, 373
- Transmissometers, 77
- Transportation workers, 574, 752, 753
- Travertine, 35
- Tree clearing workers, 699
- Tree sprayers, 750
- Tremolite, 271, 305-306, 672, 743
- Tremolite-actinolite, 7, 9, 248
- Tremolitic talc, 727
- Trichloroethylene, 55
 - Detection of, 59
- Tridymite, 11, 72
 - Disease associations, 37, 220
- Trimellitic anhydride, 482, 761
- Trimellitic anhydride lung disease (TMA disease), 482, 484, 761
- Trimethoprim-sulfamethoazole, 517, 707
- Trivalent cations, 249
- Trypsin, 576
- Tryptase broth, 705
- Tube sampling, impregnated solid
- Tuberculosis, 35, 37, 85, 219, 234, 239, 240, 329, 521, 709-712, 748
 - Miliary, 413
 - Mycobacterium, 235, 709, 710, 748
 - Pulmonary, 249
- Tubes,
 - Short-term, 55
 - Solid sorbent, 48
- Tuffs, 13
- Tularemia, 84, 707
- Tumor,
 - Bronchial gland, 657, 658
 - Carcinoid, 657, 658
 - Epithelial, 658
 - Lung,
 - Histological classification of, 658-659
 - Mesothelial, 659
 - Soft tissue, 659
 - WHO histological classification of, 657
 - Sarcomatous, 314
 - Tubulopapillary, 314, 678
 - Tungsten, 5, 26, 29, 40, 138
 - Threshold limit value, 438
 - in X-ray tubes, 138
 - Tungsten carbide, 438-444, 504, 505
 - and Cor pulmonale, 720, 721, 729
 - Tungsten carbon, 746
 - Tungsten carbon pneumoconiosis, 746
 - Tungstite, 40
 - Tunnel workers, 3, 220, 584, 754, 759, 760
 - Turkey, see Poultry
 - Twine workers, 745
 - Twisters,
 - Byssinosis prevalence, 541
 - Type metal makers, 412, 435, 750, 761
 - Typesetting, 412, 742
 - "Typhoid Mary", 83
- U**
 - Ultraviolet (UV) irradiation,
 - and Microbial aerosols, 91, 93
 - Uraninite, 40
 - Uranium, 5, 40, 642, 657
 - Uranium millers, 602
 - Uranium mine dust,
 - and Cor pulmonale, 720, 722
 - Uranium miners, 643, 661, 665, 722, 751
 - Urea makers, 574
 - Urinary tract infection, 84
- V**
 - Vaccinia, 96
 - Vaccu-sampler, 43
 - Vacutainer, syringe system, 42, 43
 - Vacuum tube manufacturers, 452, 749
 - Valence, 5, 7
 - Valentinite, 409
 - Validity, 124-125
 - External, 125
 - Internal, 125
 - Vanadates, 757
 - Vanadium, 5, 29, 433, 504, 506, 572, 603-605, 757
 - Vanadium alloy makers, 602
 - Vanadium millers, 602
 - Vanadium miners, 602
 - Vanadium ores, 40

- Vanadium oxide fume, 607
 - Vanadium pentoxide, 603, 757
 - Dust, Federal standards for, 603
 - Fume, Federal standards for, 603
 - Vanadium salts, 757
 - Vanadium sulfates, 757
 - Vanadium workers, 602, 757
 - Vapor, 41 (definition)
 - Sampling for, 41, 63
 - Varnish makers, 574, 749
 - Vat dye makers, 746
 - VEE virus (sampling for), 96
 - Vegetable dust, 464, 537
 - Ventilation and, 544
 - Vegetable dust exposure,
 - Physiological response to, 552
 - Respiratory disease risk estimates, 546
 - Smoking and, 548
 - Vegetable gums, 462, 464
 - Vegetable oil production, 464
 - Ventilation pneumonitis, 482
 - Ventilation system, 483
 - Ventilation system repairmen, 84
 - Ventilation/perfusion ratios, 185, 724, 731
 - Ventilatory equivalent for oxygen, 193
 - Ventilatory function tests, 543-544
 - Cotton textile workers and, 544
 - Vermiculites, 243, 277-279
 - Verticle elutriator cotton dust sampler, 547
 - Vertigo, 39
 - Vesicular stomatitis (sampling for), 96
 - Vessels, aspirator, 43-44
 - Veterans Administration,
 - Pulmonary disease, total disability criteria, 205
 - Rating schedule for respiratory system, 211
 - Veterinarians, 464, 703, 713, 748
 - Vinyl chloride, 42, 55
 - Detection of, 60, 61
 - Vinyl chloride makers, 581
 - Vinyl chloride monomer, 504
 - Vinyl plasticizer manufacture, 746, 761
 - Vinylidene chloride makers, 581
 - Viruses, 85
 - Relative humidity and, 96
 - Sampling for, 85, 95-97
 - Vital capacity (VC), 158
 - Vitamin A, 524
 - Vitamin B₁₂, 419
 - Vitamin E, 595
 - V_{max}, 157, 158, 159
 - Voltammetric detection method
 - Vulcanizers, 412, 574
- W**
- Wallpaper manufacturing, 759
 - Waste cotton,
 - Byssinosis prevalence, 539
 - Water base paint workers, 574
 - Water pipe makers, 759
 - Water proofers, 438, 751
 - Water softener,
 - Addition, 759
 - Production, 759
 - Water treaters, 427, 574, 581, 594, 742, 752, 753, 756
 - Water weed controllers, 750
 - Water, altered humidifier, 482
 - Wax bleachers, 594, 756
 - Wax processors, 743
 - Weavers, 608
 - Byssinosis prevalence, 541
 - Cough, 558, 607, 613
 - Fever, 558
 - Weaving, 694
 - Weed sprayers, 750
 - Welders, 438, 608, 675, 748, 749, 753
 - Cadmium alloy, 506, 577
 - Cadmium-plated objects, 577
 - Shipyard, 608, 672, 673
 - Welding, 69, 422, 507, 596, 610, 611, 756, 757, 758, 760
 - and Torch cutting beryllium alloys, 744
 - Well diggers and cleaners, 584, 754
 - Western red cedar, 504
 - Wheat dust, 504
 - Wheat weevil, 747
 - Wheat weevil disease, 482, 747
 - Wheat, infested, 482, 747
 - White shoe cleaners, 758
 - Wicker ware bleachers, 599
 - Wight peak flow meter
 - Wind velocity, 93, 94
 - Winders,
 - Byssinosis prevalence, 539, 541, 542
 - Dust exposure and, 547
 - Wine makers, 599, 756
 - Wire coating workers, 750
 - Witherite, 415, 416
 - Wolframite, 40
 - Wollastonite, 7, 9, 247-248, 243, 759
 - Milling, 759
 - Mining, 759

Wood agers, 594, 756
Wood bleachers, 599, 756
Wood chips, moldy, 482
Wood dust, 462, 464, 504
Wood filler making, 760
Wood preservative workers, 587, 751
Wood pulp, 483
 Bleachers, 599
 Workers, 747
Woodworkers, 464, 749
Woodworkers' lung, 482, 747
Wool handlers, 748
Wool pullers, 584
Wool scourers, 574
Wool workers,
 Byssinosis prevalence, 541
Wools,
 Insulation, 444
 Mineral, 444
 Slag, 444
Woolsorters' disease, 693
Work capacity, 194-198
Work site hygiene
Workmen's compensation programs, 149

X Xanthines, 517
Xenotime, 454
X-radiation, 138
X-ray defraction analysis
X-ray production, 137-142
X-ray tubes, 138, 143, 144
X-rays, 138
 Chest, 138
 Hazards, 137

 Properties of, 137
X-Y recorders, 158
Xylene, detection of, 59

Y Yarn manufacturing,
 Byssinosis prevalence, 541
 Workers exposed to cotton dust, 535
Yttrium, 5, 454, 457

Z Zeolites, 19, 33, 243, 282-285, 672
Zero drift, 63
Zinc, 5, 26, 29, 40, 748
Zinc beryllium silicate, 744
Zinc chloride makers, 581
Zinc galvanizers, 748
Zinc mining workers, 577
Zinc oxide fume, 607, 610, 611
Zinc refining workers, 412, 577, 753
Zinc smelting workers, 577, 748, 753
Zircon, 14, 451, 453
Zirconia, 452
Zirconia foam, 452
Zirconium, 5, 29, 451-454, 749
Zirconium carbide, 452
Zirconium ceramics, 452
Zirconium compounds, 749
Zirconium dust, 453
Zirconium oxide, 452
Zirconium salts, 453
Zoisite, 14
Zoo employees, 709