state mandates for health education. **23**:5–7, **23**:13, **23**:15–16, **23**-18 state smoking laws, 21:27-28 **LEUKEMIA** (See also NEOPLASMS) benzene and, 14:51 **LEUKOCYTES** cell count in cigar and pipe smokers, cell count in ex-smokers, 12:81 cell count in smokers vs. nonsmokers, 12:79-82 chemotaxis in smokers vs. nonsmokers. 12:82 effect of inhalation and smoking levels on cell count, 79-82 granular, levels in smokers, 10:20 LEUKOPLAKIA (See also MOUTH NEOPLASMS) betel chewing and, 5:41 bidi smoking and, 5:41 snuff in etiology of, 13:40 tobacco chewing and, 5:41 tobacco chewing in etiology of, 13:40-41 LIFE EXPECTANCY (See also MORTALITY) definition, 2:11

effect of smoking levels in the United States, 2:12

LIFE SKILLS TRAINING

antismoking education component. 20:11

LIP NEOPLASMS

(See also MOUTH NEOPLASMS) alcohol consumption and smoking and, 5:41

pipe smoking and, 1:27 pipe smoking in etiology of, 13:21 relative risk in cigarette vs. cigar vs. pipe smokers, 13:22

LIPIDS

effect of smoking on metabolism, 12:65

LIVER

function, effect of aromatic hydrocarbons, 12:7-8

organ weight in smokers vs. nonsmokers, 12:9

LOBELINE

nicotine substitute, 19:16-17

LOCUS OF CONTROL

academic achievement and, 20:22

cessation of smoking and, 18:18 maintenance of smoking and, 18:9

Low-tar cigarettes

See CIGARETTES, LOW-TAR

Lung diseases

See BRONCHOPULMONARY DIS-EASES: BYSSINOSIS: CHRONIC OBSTRUCTIVE LUNG DISEASES: RESPIRATORY TRACT DIS-EASES

LUNG FUNCTION

(See also RESPIRATORY FUNC-TION TESTS)

effect of carbon monoxide exposure, 11:27-28

effect of cessation of smoking, 6:22-

effect of cigar smoking, 13:34-35, 13:38

effect of nicotine, 14:90

effect of passive smoking in asthmatic patients, 10:22

effect of pipe smoking, 13:34-35. 13:38

effect of smoking, 6:22, 14:90

effect of smoking, summary of findings, 1:18

effect of smoking levels, 6:22

sex ratio, 6:21-22

in smokers vs. nonsmokers, 6:21

in smokers vs. nonsmokers vs. exsmokers, 6:23

smoking in chlorine workers and, 7:10

smoking in coal miners and, 7:9 smoking in cotton workers and, 7:9 in white, black and oriental smoking and nonsmoking men and women, 6:21

LUNG NEOPLASMS

(See also BRONCHIAL NEO-PLASMS RESPIRATORY TRACT NEOPLASMS)

air pollution in etiology of, 5:25-27 animal models, 5:29-31

aryl hydrocarbon hydroxylase inducibility and, 5:57

asbestos and smoking in etiology of, 5:28

carcinoembryonic antigen test in diagnosis of, 12:61

chloromethyl ethers and smoking in etiology of, 5:29

in chloromethyl ether workers, 7:16 smoking in asbestos workers and, cigar and pipe smoking and, summa-7:11-13 ry of findings, 1:28 smoking in etiology of, historical percigar smoking in etiology of, 13:28 spective, 5:9 effect of age began smoking on smoking in uranium miners and, 7:14 mortality ratio, 13:14 in smoking vs. nonsmoking twins, effect of cessation of smoking on 5:23 risk and mortality ratios, 5:24-26 uranium and smoking in etiology of, effect of filtered vs. unfiltered ciga-5:28 rettes on risk, 5:16, 5:18-19 in urban vs. rural areas, 5:25-27 effect of inhalation on mortality ra-LUNGS tio. 5:14-15 (See also RESPIRATORY effect of low tar and nicotine ciga-SYSTEM) rettes on mortality ratio, 5:15-17 air pollution and pathology in smokeffect of smoking levels on mortality ers vs. nonsmokers, 6:36 ratio, 5:13 effect of cigar smoking, 13:35 effect of smoking levels on risk, effect of pipe smoking, 13:35 5:12-13, 5:16, 5:18-19 effect of smoke inhalation in dogs, effect of smoking on histologic type, 14:76 5:23-24 effect of smoke inhalation in moneffect of smoking on mortality rates, keys, 14:76 5:9-11effect of smoking, 6:18 heredity and, 5:23 effect of smoking, summary of findhistologic types, 5:23-24 ings, 1:18-19 induced by benzo(a)pyrene in hameffect of smoking levels on patholosters, 5:30 gy, 6:24-27 induced by nitrosamines in animals, effect of smoking on pathogenesis, 5:30 6:25-26 mortality in asbestos workers, 7:11enzyme induction of emphysema, 6:28 12 nicotine absorption, 14:85 mortality rates in cigar vs. pipe organ weight in smokers vs. nonsmokers, 5:23 smokers, 12:9 mortality rates in women, 5:16-18, LYMPHOCYTES 5:20-B and T, in smokers vs. nonsmokers, mortality ratio in cigar vs. cigarette vs. pipe smokers, 13:26 effect of smoking, 10:19 mortality rate trends in Great Briteffect of tobacco smoke in mice, ain and the United States, 5:10-11 effect of tobacco smoke on immune mortality ratio in smokers vs. nonfunction, 10:17 smokers, 5:11-12 nickel and smoking in etiology of, MACROPHAGES, ALVEOLAR 5:28 (See also PHAGOCYTOSIS) occupational exposures and smoking in bronchial fluid of smokers, 6:28 in etiology of, 5:27-29, 7:17 count in smokers vs. nonsmokers, relative risk in cigar vs. cigarette vs. pipe smokers, 13:29-30 6:29effect of cigarette smoke, 6:29-30 role of pulmonary alveolar macroeffect of cigarette smoke on phagophages, 5:31 smoking and, summary of findings, cytic activity, 10:17

effect of tobacco smoke, 10:15-16

effect of tobacco smoke on count

and ultrastructure, 10:16

1:16

smoking and occupational risk in

whites and nonwhites, 7:17

14:76 **MEPERIDINE** effect of smoke inhalation in monkeys, 14:76 smokers, 12:39 elastase release in smokers vs. non-**MEPROBAMATE** smokers, 6:30 cessation aid, 19:17 in lung neoplasm etiology, 5:31 protease activity in smokers vs. non-MERCURY (See also METALS) smokers, 6:29 in smokers vs. nonsmokers, 6:31 12:73 Mainstream smoke See SMOKE, CIGARETTE MAIN-7.7 STREAM: SMOKE STREAMS MESOTHELIOMA MALEIC HYDRAZIDE hydrazine levels and, 14:41 NEOPLASMS) structural formula, 14:62 tobacco curing and, 14:47 7:12 METABOLISM (See also SEX RATIO) smoking prevalence, A:11, A:12-13, LISM) A:17-18 **MARIJUANA** (See also CANNABIS; DRUG ABUSE) correlation with tobacco smoking, 18:14 effect on enzyme activity, 12:42-43 effect on pharmacokinetics, 12:42-43 effect on pregnant animals, 8:53 habit, 15:16 MATERNAL-FETAL EXCHANGE aromatic hydrocarbons in animals, benzo(a)pyrene in animals, 8:66 it, 15:17 **METALS** carbon monoxide in sheep, 8:59 carbon monoxide in sheep and dogs, 8:58 nicotine in animals, 8:54 Maternal smoking 14:59-60 See SMOKING, MATERNAL Maximum mid-expiratory flow rate smoke, 14:59 measurements See RESPIRATORY FUNCTION 12:73-74 TESTS **MECAMYLAMINE** nicotine antagonist, 16:8-9 MEDICAL STUDENTS antismoking education, 22:17-18 7:7 perceptions of physicians' smoking habits, 22:7 BONS) smoking habits, 18:8, 22:18 **MEDITATION** in modification of smoking behavior, 19:22

effect of smoke inhalation in dogs,

See MALES

total clearance in smokers vs. non-

levels in smokers vs. nonsmokers,

smoking and occupational exposure,

(See also CARCINOGENESIS;

smoking and asbestos exposure and,

(See also NICOTINE METABO-

carbon monoxide in maintenance of smoking habit, 15:17

effect of smoking on carbohydrates, lipids and proteins, 12:65

effect of tobacco smoke on food constituents and additives, 12:75-76

nicotine in maintenance of smoking

nicotine, in smokers vs. nonsmokers,

tar, in maintenance of smoking hab-

(See also CADMIUM; CALCIUM; LEAD: MERCURY; NICKEL)

cardiovascular diseases and, 4:62 in cigarette smoke as carcinogens,

levels in particulate phase cigarette

levels in smokers vs. nonsmokers,

in tobacco smoke, 14:58-59

METHYL PARATHION

smoking and occupational exposure,

METHYLCHOLANTHRENE

(See also AROMATIC HYDROCAR-

effect on aryl hydrocarbon hydroxylase activity in rats, 12:28-29 effect on enzyme activity, 12:21-22

effect on phenacetin pharmacokinetics in rats, 12:28-29

effect on RNA metabolism, 12:21-22 effect on theophylline metabolism in rats, 12:32

in oral neoplasm induction in hamsters. 5:42

METHYLENE CHLORIDE

occupational hazards, 7:8-9

MORBIDITY

(See also MORTALITY)

bed disability in smokers vs. nonsmokers, 3:12

bronchitis and emphysema in the United States, 6:20

coronary heart disease in ex-smokers, 4:38

effect of cessation of smoking, summary of findings, 1:12-13

effect of smoking, 3:5

effect of smoking, summary of findings, 1:12-13

effect of smoking on acute conditions, 3:6

effect of smoking on chronic conditions, 3:6-7

findings of NCHS National Health Interview Survey, 1:12-13

incidence of acute conditions in smokers vs. nonsmokers vs. exsmokers. 3:9

peptic ulcer in the United States, 9:17

prevalence rate of chronic conditons,

smoking and lung neoplasms and occupational risk, 7:17

work-days lost, 3:8-9

MORBIDITY RATIO

angina pectoris, effect of smoking levels, 4:48

coronary heart disease in ex-smokers, 4:28-31, 4:34-35

coronary heart disease in smokers vs. nonsmokers, 4:27-33, 4:36-37

MORTALITY

(See also EXCESS DEATHS; FE-TAL MORTALITY; INFANT MOR-TALITY; LIFE EXPECTANCY; MORBIDITY; PERINATAL MOR-TALITY)

annual probability of dying in smokers vs. nonsmokers vs. ex-smokers, 2:30-34

bronchitis in cigar vs. cigarette vs. pipe smokers. 13:34

chronic obstructive lung disease in smokers, 2:41, 6:9

chronic obstructive lung disease in smokers vs. nonsmokers vs. exsmokers, **6**:10

cigar and pipe smokers vs. ex-smokers, 13:8

cigar vs. cigarette vs. pipe smokers, 13:13-14

effect of age began smoking, 2:19

effect of cigar smoking, 2:30, 2:35-37

effect of environmental factors, 2:42

effect of heredity in smoking related disease, 2:41-42

effect of inhalation, 2:20

effect of inhalation in cigar and pipe smokers, 13:18

effect of nicotine and tar content, 2:22

effect of pipe smoking, 2:30, 2:35-37 effect of smoking in the United States, 2:9

effect of smoking in women, 2:25

effect of smoking levels in cigar and pipe smokers, 13:14-16

effect of social factors, 2:42

effect of years since quitting in exsmokers, 2:27-34, 2:35

emphysema in cigar vs. cigarette vs. pipe smokers, 13:34

epidemiological studies, 2:12-15

esophageal neoplasms in cigar vs. cigarette vs. pipe smokers, 13:24

ex-smokers, 2:26-30

methods of measuring, 2:10-11

peptic ulcer in cigar vs. cigarette vs. pipe smokers, 13:38

peptic ulcer in smokers, 2:41, 9:10

peptic ulcer in smokers vs. nonsmok-

respiratory tract infections in smokers, 2:41 risk from pregnancy and childbirth vs. oral contraceptive use, 12:52 smoking and lung neoplasms and asbestos exposure, 7:11

MORTALITY RATES

- age groups in the United States, 2:11
- cerebrovascular disease in male vs. female smokers, 4:51
- circulatory diseases, effect of oral contraceptives and smoking, 12:51 coronary heart disease in ex-smokers,
- 4:38
- definition, 2:10-11
- effect of cigar and pipe smoking, summary of findings, 1:27
- effect of less hazardous cigarettes, 2:25
- lung neoplasms and smoking, summary of findings, 1:16
- lung neoplasms, effect of smoking, 5:9-11
- lung neoplasms in cigar and pipe smokers, 5:23
- lung neoplasms in women, 5:16-18, 5:20
- lung neoplasms, trends in Great Britain and the United States, 5:10-11
- myocardial infarct in smokers vs. nonsmokers, 4:35-36
- smokers vs. nonsmokers, 2:15
- thrombosis in smokers vs. nonsmokers, 4:59

MORTALITY RATIO

- age groups in the United States, 2:11, 2:17-18
- age groups worldwide, 2:17-18 aortic aneurysm, effect of smoking
- levels, 4:55 bladder neoplasms in smokers, 5:45-
- cardiovascular diseases in cigar vs. cigarette vs. pipe smokers, 13:33-34
- cardiovascular diseases in smokers,
- cardiovascular diseases in smokers vs. nonsmokers in Japan, 4:21, 4:34-
- cause-specific, effect of smoking, 2:37-41

- cerebrovascular disease in cigar vs. cigarette vs. pipe smokers, 13:33 cerebrovascular disease in male vs. female smokers, 4:51
- chronic obstructive lung disease, 6:10 chronic obstructive lung disease in cigar vs. cigarette vs. pipe smokers, 13:35
- cigar vs. cigarette vs. pipe smokers, 2:30, 2:35-36
- cigarette vs. cigar vs. pipe vs. mixed smokers, 13:14
- coronary heart disease in cigar vs. cigarette vs. pipe smokers, 13:33-34
- coronary heart disease in smokers, 2:39
- coronary heart disease in ex-smokers, 4:34-35
- coronary heart disease in smokers vs. nonsmokers, 4:22-26, 4:36-37
- definition, 2:10 effect of age began smoking, 2:19-22
- effect of age began smoking, 2:19-2 effect of cigar and pipe smoking, 1:11-12
- effect of combined tobacco product use, 2:39
- effect of inhalation, 2:22-24
- effect of inhalation, smoking duration and smoking levels in women, 2:26-27
- effect of less hazardous cigarettes, 1:11, 2:23-25
- effect of reasons for quitting in exsmokers, 2:27-29
- effect of smoking, summary of findings, 1:10-12
- effect of smoking duration, 2:17-19 effect of smoking duration in cigar smokers, 2:37
- effect of smoking duration in exsmokers, 2:28-29
- effect of smoking duration in pipe smokers, 2:38
- effect of smoking levels, 2:15-18, 2:22
- effect of smoking levels in cigar smokers, 13:15-17, 2:36-37
- effect of smoking levels in ex-smokers. 2:28-29
- effect of smoking levels in pipe smokers, 2:36-38, 13:15-17

MOTIVATION esophageal neoplasms in cigar and (See also BEHAVIOR) pipe smokers, 5:43 esophageal neoplasms in cigar vs. cessation of smoking and, 18:19-20 cigarette vs. pipe smokers, 13:25 emotional influences in smoking beesophageal neoplasms in smokers, havior, 16:6 maintenance of smoking and, 18:10-5:42-43 13. 18:15-17 ex-smokers, 2:35 kidney neoplasms in smokers, 5:48-49 smoking habit in developing counlaryngeal neoplasms in cigar vs. cigtries and, 18:24 smoking habit in the Solomon arette vs. pipe smokers, 13:24 Islands and, 18:24 laryngeal neoplasms in smokers, 5:32-33 nicotine absorption, 14:85 lung neoplasms, effect of age began smoking, 5:13-14 MOUTH MUCOSA (See also LEUKOPLAKIA) lung neoplasms, effect of cessation effect of snuff in women, 13:39-40 of smoking, 5:24-26 MOUTH NEOPLASMS lung neoplasms, effect of inhalation, (See also LEUKOPLAKIA; LIP 5:14-15 NEOPLASMS; TONGUE NEOlung neoplasms, effect of low tar and nicotine cigarettes, 5:15-17 PLASMS) lung neoplasms, effect of smoking alcohol consumption and smoking and, 5:40-41 levels, 5:13 cigar and pipe smoking and, summalung neoplasms in cigar vs. cigarette ry of findings, 1:27 vs. pipe smokers, 13:26-28 lung neoplasms in smokers vs. non-MUCOCILIARY SYSTEM (See also CILIARY ACTIVITY; smokers, 5:11-12 lung neoplasms in smoking women, CILIATOXICITY) effect of cigarette smoke, 6:32-33, 5:20-22 10:15 neoplasms, effect of cigar and pipe MULTICOMPONENT TREATMENT smoking, 13:20 (See also CESSATION OF SMOKneoplasms in smokers, 2:38 oral neoplasms in cigar vs. cigarette vs. pipe smokers, 13:21-23 in cessation of smoking, 16:16-17, oral neoplasms in smokers, 5:39-40 16:19 pancreatic neoplasms in smokers, evaluation, 19:36 modification of smoking behavior, 5:50-52 19:27-28 pharyngeal neoplasms in cigar vs. cigarette vs. pipe smokers, 13:23 self-administered, 19:29 MULTIPLE RISK FACTOR INTERin smoking twins, 2:42 sudden cardiac death, effect of VENTION TRIAL smoking levels, 4:43 effect on cessation of smoking, 19:15 MUTAGENS MORTALITY RISK infant, and gestational age in smokin atherosclerosis etiology, 4:10 ing vs. nonsmoking mothers, MYOCARDIAL INFARCT (See also CORONARY HEART 8:43, 8:45 DISEASE) infant, effect of maternal smoking, animal models, 4:20 age, parity, and education, 8:33 infant, effect of maternal smoking, atherosclerosis in etiology of, 4:19-20 age, parity, and social class, 8:31 cessation of smoking after, 19:14 effect of oral contraceptives and infant, synergism of maternal smoksmoking on risk, 4:60 ing and other risk factors, 8:35 infants of smokers vs. nonsmokers, effect of smoke inhalation in dogs,

14:77

8:34

effect of smoking on risk of recurrence or death, 4:37-38 estrogens and smoking and, 12:52 ex-smokers, 4:21 ischemia and, 4:19-20, 4:39-40 morbidity ratios in ex-smokers, 4:34 morbidity ratios in smokers vs. nonsmokers, 4:27-33 oral contraceptives and smoking and, 4:35, 12:51-52 pathogenesis, 4:18-20 research needs, 4:40-41 risk factors, 4:20-21 smokers vs. nonsmokers, 4:35-36 smoking in etiology of, 4:21, 4:38-40 smoking vs. nonsmoking women. 12:52 sudden cardiac death and, 4:43

MYOCARDIUM

effect of hypoxia and ischemia, 4:19-

NAPHTHALENE

in cigarette smoke, 14:51 tobacco pyrolysis and, 14:49

NAPHTHYLAMINES

(See also AROMATIC AMINES) pancreatic neoplasms and, 5:51

NATIONAL ASSOCIATION OF SEC-ONDARY SCHOOL PRINCIPALS

statement on school smoking policies, 23:8, 23:11, 23:13

NATIONAL CANCER INSTITUTE

funding of "Know Your Body" Program, 21:20

NATIONAL CENTER FOR HEALTH STATISTICS, 3:5

findings of National Health Interview Survey, 1:12-13

Health and Nutrition Examination Survey, 3:11-12

Health Interview Survey, 3:8-18 NATIONAL CLEARINGHOUSE FOR SMOKING AND HEALTH

definition of smokers and nonsmokers. 23:24

establishment of San Diego Community Laboratory, 20:14

Health Consequences of Smoking reports, 1:9-10

smoking prevalence in adults by educational level, A:14-16

smoking prevalence in adults by family income, A:14-16 survey of adolescent smoking, 17:7-8 survey of adult tobacco use, 18:19,

survey of cigar and pipe smoking in the United States, 13:8-9

survey of smoking attitudes of health professionals, 22:7

survey of smoking habits of health professionals, 22:12-13

survey of tar and nicotine levels of cigarette brands, 3:11

survey of teenage smoking, A:14 training of health educators, 23:32

NATIONAL INSTITUTES OF HEALTH

respiratory disease study, 17:15

NATIONAL INTERAGENCY COUN-CIL ON SMOKING AND HEALTH

funding of youth antismoking projects, 20:24

research guidelines, 19:5-8, 21:16-17 NATIONAL PARENT-TEACHER AS-SOCIATION

health education programs, 21:21, 21:25

NEONATAL MORTALITY (See also INFANT MORTALITY: MORTALITY RISK; PERINATAL MORTALITY)

effect of maternal smoking and gestational age, 8:43

effect of maternal smoking and other factors, 8:41

etiology of perinatal death in smokers vs. nonsmokers, 8:37

maternal smoking and, research needs, 8:76

maternal smoking levels and, 8:39-40 **NEOPLASMS**

(See also CARCINOGENESIS: LEUKEMIA; MESOTHELIOMA)

aryl hydrocarbon hydroxylase inducibility and smoking and, 5:57 cigar and pipe smoking and, summa-

ry of findings, 1:27-28 effect of smoking on mortality ratio,

induced by polonium-210 in Syrian hamsters, 14:61

induced by tobacco smoke in animals, 1:17

mortality ratio in cigar and pipe smokers, 13:20 nitrosamines in etiology of, 12:74 in progeny after maternal exposure to benzo(a)pyrene in mice, 8:67 smoking and, summary of findings, 1:15-17 smoking and asbestos exposure and, 7:11-13 smoking in etiology of, historical perspective, 5:9 Neoplasms, bronchial See BRONCHIAL NEOPLASMS Neoplasms, esophageal See ESOPHAGEAL NEOPLASMS Neoplasms, laryngeal See LARYNGEAL NEOPLASMS Neoplasms, lip See LIP NEOPLASMS Neoplasms, lung See LUNG NEOPLASMS Neoplasms, mouth See MOUTH NEOPLASMS Neoplasms, pancreatic See PANCREATIC NEOPLASMS Neoplasms, pharyngeal See PHARYNGEAL NEOPLASMS Neoplasms, oral See ORAL NEOPLASMS Neoplasms, tongue See TONGUE NEOPLASMS NEUROTICISM (See also ANXIETY; STRESS) cessation of smoking and, 18:17-18 maintenance of smoking and, 18:7-9 smoking characteristics and, 18:13 NICKEL (See also METALS) levels in tobacco smoke, 14:59

and smoking in lung neoplasm etiolo-

(See also ALKALOIDS, TOBACCO)

absorption by involuntary smoking,

in amniotic fluid after maternal in-

jection in animals, 8:54 in atherosclerosis induction in ani-

cardiovascular diseases and, 14:79

gy, 5:28

11:24

addiction, 16:7-9, 18:12

mals, 4:16

in allergy induction, 10:22

NICOTINE

carotid blood levels after oral administration, 14:86 central nervous system receptor sites, 16-18_19 dependence and, 14:97 effect of cigar smoke inhalation on absorption, 13:16-17 effect of fetal injection in utero in animals, 8:55 effect of maternal injection on fetus in animals, 8:54-57 effect of maternal injection on nursing kittens, 8:49 effect of maternal injection on offspring in rats, 8:10-11 effect of maternal injection on psychomotor function in newborn animals, 8:57 effect of self-administration on smoking habit, 15:12 effect of smoking characteristics on absorption, 14:87 effect on angina pectoris, 4:39 effect on antidiuretic hormone secretion, 12:37, 12:54 effect on arousal, 15:11 effect on arteries in rabbits, 4:56 effect on behavior in monkeys, 15:12 effect on behavior in rats, 15:11, 15:18 effect on birth weight in animals, 8:53 effect on blood lipid levels in animals, 4:61 effect on blood pressure and heart rate, 4:58, 14:87, 14:91 effect on cardiovascular system, 12:52-54, 14:89 effect on cardiovascular system in animals, 8:55-56 effect on cardiovascular system in animals with myocardial infarct, 4:45 effect on catecholamines in rats, 14:88 effect on central nervous system, effect on cerebrovascular circulation, 4:50 effect on corticosteroid secretion, 12:40 effect on drug assays, 12:34

effect on enzyme activity, 12:27-28, effect on enzyme activity in rat intestines, 12:76 effect on exercise induced angina pectoris, 4:47 effect on fetal and newborn central nervous system, 8:57 effect on fetal and newborn central nervous system in animals, 8:56 effect on fetus, research needs, 8:79 effect on fetus and breastfed infants of smoking mothers, 8:51 effect on free fatty acids, 12:40, 14:90 effect on gastric secretion in cats, 9:12-13 effect on gastric secretion in man, 9:13-14 effect on heart function in animals with coronary heart disease, 4:40 effect on hormones in monkeys, 15:20 effect on immunoglobulins, 6:31 effect on ischemia, 4:39 effect on lactation in cats, 8:49 effect on lactation in cows, 8:49 effect on lactation in rats, 8:49 effect on lung function, 14:90 effect on lymphocytes in mice, 10:19 effect on nitrosamine biosynthesis, 12:75 effect on pancreatic secretion in dogs, 5:53, 9:14-15 effect on patellar reflex, 14:92 effect on pharmacokinetics, 12:27-28 effect on psychomotor performance, effect on pregnant rats, 8:10-11 effect on serum secretin levels, 9:14-15 effect on smoking habit, 15:7-8 effect on smoking habit, summary of findings, 1:30-32 effect on tolerance in rats, 15:16 effect on vitamin C levels in animals, 12:66 in establishing smoking habit, 15:5 excretion under stress, 16:8 induction of hyperglycemia in cats, 14:90 induction of peptic ulcer in cats, 9:12-13

induction of peptic ulcer in rats, 9:12 interactive effect with oxprenolol on blood pressure, 12:54 interactive effect with propranolol on cardiovascular system, 12:53 internal regulation in smokers, 16:13in maintenance of smoking habit, 15:14 maternal-fetal exchange in animals, 8:54 metabolism in maternal and fetal liver in animals, 8:55 metabolism in smokers vs. nonsmokers. 15:9 methods of absorption, 14:85 myocardial infarct and, 4:20 pancreatic neoplasms and, 5:53 pharmacology in cessation of smoking, 14:94, 14:97 protonation and, 14:108 as reinforcer, 16:12, 16:18 relative molar potency in cigarette smoke, 14:96 role as hapten, 10:11 role in alteration of drug metabolism, 12:40 sales weighted average delivery in American cigarettes, 14-111 smoke dosimetry and, 14:75 structural formula, 14:46 summary of physiological effects, 1:30-31 NICOTINE CONTENT (See also ALKALOID CONTENT) in blood, effect of smoking cigarettes vs. little cigars, 14:87 in blood after oral administration. 14:86 in cigar vs. cigarette smoke, 13:11 in cigarette smoke, 14:45 in cigarettes, health characteristics and, 3:11 in cigarettes vs. little cigars, 14:44-45 in cow's milk after intramuscular in-

jection, 8:49

decrease in modern cigarettes, A:19-

effect on mortality, 2:22 filters and, 14:104

in milk of lactating smoking vs. nonsmoking mothers, 8:50-51

as smoke inhalation indicator, 14:75 in urine and plasma of smokers vs. nonsmokers, 11:24 in urine as measure of tobacco usage, 15:29 in urine of smokers vs. nonsmokers, 15:29 NICOTINE CHEWING GUM in cessation of smoking, 19:16-17 in reduction of smoking, 16:8 NICOTINE-IN-SALIVA TEST correlation with self-reported smoking, 17:24 NICOTINE METABOLISM (See also METABOLISM) degree of protonation in relation to pH, 14:86 distribution and clearance in rats. 14:79 effect of urinary pH on excretion, 14:92-93 enzymes and, 14:87 pathway, 14:93 rate of absorption, 14:92 NICOTINE METABOLITES (See also COTININE; NORNICO-TINE) in cigarette smoke, 14:93-94 effect of urinary pH on excretion, 14:92 NICOTINE REDUCTION in cigarettes in the United States. 14:44 effect on lung neoplasm mortality ratio, 5:15-16 methods, 14:114 in particulate phase of cigarette smoke, 14:108 NICOTINE TOXICITY atherosclerosis and, 14:79 effect on heart, 14:78 effect on smoke inhalation dosimetry, 14:75 hypertension and, 14:79 NITRIC OXIDE in blood of smokers vs. nonsmokers, effect on enzyme activity in rats, 14:81

NITRILES

levels in cigarette smoke, 14:40

NITROGEN COMPOUNDS

in cigarette smoke, 14:41

in soil, effect on tobacco leaf quality, 14:15-16 NITROGEN DIOXIDE effect on antibody response to bacterial vaccines in mice, 12:59 effect on respiratory tract in rats, 14:81 NITROGEN OXIDES absorption, 14:99 cardiovascular diseases and, 4:62 content in mainstream cigarette smoke, 14:39 NITROSAMINE CONTENT in cigarette smoke, 14:39, 14:45 effect of curing and fermentation, 14:45 effect of homogenized leaf curing, effect of smoking in enclosed spaces, 11:25 reduction in gas phase cigarette smoke, 14:107 reduction in particulate phase cigarette smoke, 14:112 in tobacco and tobacco smoke, 12:74 NITROSAMINES (See also DIMETHYLNITROSA-MINE) agricultural practices and, 14:107 biosynthesis in smokers, 12:74-75 bladder neoplasms and, 5:47 in chewing tobacco, 14:45 effect of maternal injection on tracheal neoplasms in hamster offspring, 8:50 effect of nicotine on biosynthesis, in esophageal neoplasm induction in animals, 5:44 in lung neoplasm induction in hamsters, 5:30 in neoplasm etiology, 12:74 in pancreatic neoplasm induction in hamsters, 5:51-53 precursors, 14:41 quantification by thermal energy analyzer, 14:11 in respiratory tract neoplasm induction in animals, 5:30

structural formulae, 14:46

NONSMOKERS OCCUPATIONAL DISEASES (See also ASBESTOSIS; BYSSINO-(See also SMOKERS VS. NON-SIS: NEOPLASMS: POLYMER SMOKERS) **FUME FEVER)** absorption of tobacco smoke constituasbestosis, 7:11-13 ents, 11:6 byssinosis, 7:9 annoyance caused by tobacco smoke, "Monday morning fever", 7:9 11:25 annual probability of dying, 2:30-34 polymer fume fever, 7:5-6 OCCUPATIONAL EXPOSURE effect of involuntary smoking, 11:5, bfonchopulmonary diseases and, 1:19, 11:15, 11:28 6:36, 7:13 effect of involuntary smoking on interactive effect with smoking, sumcarboxyhemoglobin levels, 11:21, mary of findings, 1:19-20 11:23 smoking and bladder neoplasms and, effect of tobacco smoke, 11:25 5:47 median carboxyhemoglobin levels by smoking and pancreatic neoplasms location, 11:23 and, 5:47 nicotine absorption by involuntary and smoking in lung neoplasm etiolosmoking, 11:24 gy, 5:27-29 perception of health status, 3:14-15 smoking levels and health risk, 7:17 rights, 16:19-20, 21:14, 21:18 OCCUPATIONAL HAZARDS typology, 18:13 alpha irradiation from radon, 7:14 NORNICOTINE aromatic amines, 7:16 (See also NICOTINE METABOasbestos, 7:11-13 LITES) beta radiation, 7:10 relative molar potency in cigarette carbon monoxide, 7:8 smoke, 14:96 chlorine, 7:10 structural formula, 14:46 chloromethyl ether, 7:15-16 NORTRIPTYLINE dust, coal, 7:9 plasma concentrations in smokers vs. dust, cotton, 7:9 nonsmokers, 12:39 dust, gold, 7:15 NOSE IRRITATION effect of smoking and recommendaeffect of smoking in enclosed spaces, tions for research, 7:19 11:26 hydrogen cyanide, 7:7-8 NURSES rubber, 7:13 role in cessation decision, 21:12, OCCUPATIONS 21:14, 22:17 asbestos workers, 5:28, 7:11-13 smoking habits, 22:12-14 battery factory workers, 7:15 **NURSING HOMES** benzene workers, 14:51 smoking policies, 22:20 blast furnace workers, 7:8 blue- and white-collar workers, 7:17 OBESITY bronchitis in smokers vs. nonsmokers (See also BODY WEIGHT) and, 6:39 cessation of smoking and, 12:67 chemists, 5:51 **OBSTRUCTIVE AIRWAY DISEASES** chlorine workers, 7:10 (See also BRONCHITIS; BRONchloromethyl ether workers, 5:29, CHOPULMONARY DISEASES: 7:15-16 CHRONIC OBSTRUCTIVE LUNG coal gas workers, 7:16 DISEASE; EMPHYSEMA) coal miners, 13:35 smoking in cotton workers and, 7:9cotton workers, 7:9 10 electroplaters, 7:7 fire fighters, 7:10-11 smoking in fire fighters and, 7:10-11

gold miners, 7:15

smoking in miners and, 7:9

industrial workers, 22:16-17, 22:19	OXPRENOLOL
insulation workers, 7:11	interactive effect with nicotine on
methylene chloride workers, 7:8-9	blood pressure, 12:54
miners, 7:9	OXYGEN TENSION
nickel workers, 5:28	effect of maternal and fetal carbox-
rubber workers, 7:13	yhemoglobin levels, 8:64
smoking prevalence rates and, 18:16,	OXYGEN TRANSPORT
A:16	effect of carbon monoxide in mother
steelworkers, 7:8	and fetus, 8:61
telephone workers, 6:37	OXYHEMOGLOBIN SATURATION
tobacco workers, female, 8:9	CURVES
uranium miners, 5:28, 7:14, 12:90	maternal and fetal, effect of carbon
OFFICE ON SMOKING AND	monoxide levels in blood, 8:62-63,
HEALTH	8:72
information dissemination function,	
23 :27–28	PANCREATIC NEOPLASMS
Olefins	animal models, 5:51-53
See ALKENES	correlation with bladder neoplasms,
ONTARIO PERINATAL MORTALITY	5:47
STUDY , 8:33–35, 8:37, 8:39–42, 8:45	diet and, 5:51
ORAL NEOPLASMS, 5:39-42	effect of smoking levels on mortality
(See also LEUKOPLAKIA; LIP	and risk ratios, 5:50, 5:52
NEOPLASMS; MOUTH NEO-	effect of smoking and occupational
PLASMS; TONGUE NEOPLASMS)	exposure, 7:17
alcohol consumption and smoking	induced by nitrosamines in hamsters,
and, 5:40-41	5 :51–53
animal models, 5:41–42	mortality and risk ratios in male vs.
betel chewing in etiology of, 13:40-	female smokers, 5:50–52
41	naphthylamines and, 5:51
cigar and pipe smoking and, 5:39	nicotine and, 5:53
induced by benzo(a)pyrene in ham-	occupational exposure and, 5:51
sters, 5:42	smoking and, summary of findings, 1:17
induced by dimethyl benzanthracene	PANCREATIC SECRETION
in hamsters, 5:42 induced by methylcholanthrene in	effect of nicotine in animals and
hamsters, 5:42	man, 9:14-15
mortality ratio in cigarette vs. cigar	effect of nicotine in dogs, 5:53
vs. pipe smokers, 13:21-23	effect of smoking, 9:14-15
mortality ratio in smokers, 5:39-40	Paper, cigarette
smoking and, summary of findings,	See CIGARETTE PAPER
1:17	Parental smoking
smoking in etiology of, 5:39-42	See SMOKING, PARENTAL
snuff in etiology of, 13:39-40	PARKINSONISM
tobacco chewing and, 5:39-40	smoking and, 2:41
tobacco chewing in etiology of,	PARTICULATE PHASE, CIGARETTE
13:40-41	SMOKE
ORALITY	(See also TARS, TOBACCO; TO-
smoking habit and, 18:9	TAL PARTICULATE MATTER)
ORGANOTIN	aromatic hydrocarbons reduction,
smoking and occupational exposure,	14:109
7:7	component levels, 15:6
OSTEOPOROSIS	definition, 14:35, 14:38
smokers vs. nonsmokers, 12:67	determination of tar levels, 14:43

nicotine reduction, 14:108 nitrosamines reduction, 14:112 ratio of constituents in main- vs. sidestream smoke, 11:6 polonium-210 reduction, 14:113 tar reduction methods, 14:110 toxicity reduction, 14:108 toxicity reduction methods, 14:114 Passive smoking See INVOLUNTARY SMOKING Peak expiratory flow measurements See RESPIRATORY FUNCTION TESTS PEER GROUPS influence on cessation of smoking, 18:21 influence on drug abuse in adolescents, 18:14 influence on initiation of smoking. influence on smoking habit in adolescents, 17:10, 17:14, 21:13-14 youth-to-youth antismoking programs, **PENTAZOCINE** dosage requirements in smokers vs. nonsmokers, 12:36 Peptic ulcer See ULCER, PEPTIC PERINATAL MORTALITY (See also INFANT MORTALITY: MORTALITY RISK; NEONATAL MORTALITY) effect of maternal smoking, summary of findings, 1:22 gestational age and risk in smoking vs. nonsmoking mothers, 8:43 maternal smoking in etiology of, 12:67 maternal smoking levels and, 8:39-40 PERIPHERAL VASCULAR DISEASE animal models, 4:53 clinical and pathological features, 4:52 research needs, 4:54 risk factors, 4:52 smoking and, summary of findings, 1:14-15 smoking and, 4:53-54 smoking vs. nonsmoking diabetics, 4:53

levels of toxic compounds, 14:64-65

levels of metals, 14:59

PERSONALITY

(See also BEHAVIOR)

cessation of smoking and, 18:17-18, 18:21-22

effect on pharmacokinetics, 12:40-41 effect on success rates for cessation of smoking, 15:24 maintenance of smoking and, 18:5-10 maternal smoking and, 8:26

and recidivism, 19:31 and smoking habits in adolescents, 17:16

PESTICIDE RESIDUES

hydrazine formation, 14:41 reduction in tobacco, 14:61 structural formulae, 14:62 in tobacco leaf, 14:18 in tobacco smoke, 12:75 toxic effects in smokers, 12:75

pН

cigar vs. cigarette vs. pipe smoke, 13:15-16

PHAGOCYTOSIS

(See also MACROPHAGES, AL-VEOLAR)

effect of tobacco smoke, 6:30-31 role in lung neoplasm etiology, 5:31

PHARMACISTS

antismoking advice to customers, 22:17

as role models, 22:8-9 smoking habits, 22:12

PHARMACODYNAMICS

(See also DRUG METABOLISM; PHARMACOLOGY)

absence of smoking effect, 12:37-39 clinical importance of smoking history in drug monitoring, 12:41-42 dexamethasone, effect of smoking, 12:37

diazepam, effect of smoking, 12:38 effect of smoking, 12:27-44

effect of smoking, summary of findings, 1:25-26

furosemide, effect of smoking, 12:37 propranolol, effect of smoking, 12:37 research needs, 12:44

smokers vs. nonsmokers, 12:36-37

PHARMACOKINETICS

(See also DRUG METABOLISM; PHARMACOLOGY)

absence of smoking effect, 12:37-39

antipyrine, in smokers vs. nonsmokers, 12:29-31

caffeine, effect of aromatic hydrocarbons in rats, 12:32-33

clinical importance of smoking history in drug monitoring, 12:41-42 effect of behavior and personality,

12:40-41

effect of marijuana, 12:42-43

effect of smoking, 12:27-44

effect of smoking, summary of findings, 1:25-26

ethanol, in smokers vs. nonsmokers, 12:39

glutethimide, in smokers vs. nonsmokers, 12:33

imipramine, effect of smoking, 12:33 meperidine, in smokers vs. nonsmokers, 12:39

nortriptyline, in smokers vs. nonsmokers, 12:39

pentazocine, in smokers vs. nonsmokers, 12:36

phenacetin, effect of cigarette smoke in rats, 12:28-29

phenacetin, in smokers vs. nonsmokers, 12:28-29

phenytoin, in smokers vs. nonsmokers, 12:38

research needs, 12:44

theophylline, effect of methylcholanthrene in rats, 12:32

theophylline, in smokers vs. nonsmokers, 12:31-32

warfarin, effect of benzo(a)pyrene in rats, 12:38

warfarin, in smokers vs. nonsmokers, 12:38

PHARMACOLOGY

(See also PHARMACODYNAMICS; PHARMACOKINETICS)

carbon monoxide in establishing smoking habit, 15:7

cigarette smoke, 14:85, 14:94, 14:97-99

dependence and tolerance in maintenance of smoking habit, 15:14

nicotine in establishing smoking habit, 15:5, 15:7-8

tar in establishing smoking habit, 15:7

tobacco alkaloids, 14:94

PHARYNGEAL NEOPLASMS

(See also RESPIRATORY TRACT

NEOPLASMS)

alcohol consumption and smoking and, 5:40-41

mortality in cigar vs. cigarette vs. pipe smokers, 13:22-23

PHENACETIN

effect of cigarette smoke on pharmacokinetics in rats, 12:28-29

effect of methylcholanthrene on pharmacokinetics in rats, 12:28-29

pharmacokinetics in smokers vs. nonsmokers, 12:28-29

PHENOLS

in cigarette smoke condensate, 14:52 effect of filters, 14:54

effect on ciliary activity, 14:81

levels in cigar vs. cigarette smoke, 13:11-12

levels in smoke of filtered vs. nonfiltered cigarettes, 14:57

reduction of levels in gas phase cigarette smoke, 14:106

structural formulae, 14:56

PHENYLBUTAZONE

effect of smoking on pharmacokinetics, 12:33

PHENYTOIN

pharmacokinetics in smokers vs. nonsmokers, 12:38

PHYSICAL ACTIVITY

(See also EXERCISE)

effect on coronary heart disease incidence in smokers, 4:38

PHYSICAL DEVELOPMENT

effect of maternal smoking on children, 1:21

PHYSICIAN VISITS

smokers vs. nonsmokers vs. ex-smokers, 3:15, 3:17

PHYSICIANS

as health educators, 22:15-16 role in cessation decision, 19:12-14,

21:11-12, 21:14, 22:19, 22-22

as role models, 22:6-8

in school antismoking programs, 20:9-10

smoking habits, 21:12, 22:9-14

Pipe

See SMOKE, PIPE; SMOKERS, PIPE; SMOKING, PIPE; TOBAC-CO, PIPE

PLACENTA

aryl hydrocarbon hydroxylase activity after maternal exposure to benzo(a)pyrene in rats, 8-66 effect of maternal smoking, 8:69 effect of maternal smoking, research needs, 8:78

PLACENTA PREVIA

gestational age and risk in smoking vs. nonsmoking mothers, 8:44, 8:46

maternal smoking levels and, 8:39 maternal smoking levels and perinatal mortality, 8:40

PLACENTAL RATIO

effect of maternal smoking, 8:14-18 effect of oxygen availability, 8:17 in smokers vs. nonsmokers, 8:15-16, 8:18

POLONIUM-210

cardiovascular diseases and, 4:62 levels in cigarette smoke, 14:60 levels in smokers vs. nonsmokers, 12:74-75

neoplasm induction in Syrian hamsters, 14:61

reduction in particulate phase cigarette smoke, 14:113

in tissues of smokers vs. nonsmokers, 14:60-61

as tobacco contaminant, 14:20-21

POLYCYTHEMIA

smoking in etiology of, 12:83 POLYMER FUME FEVER

(See also OCCUPATIONAL DIS-EASES)

smoking and, 7:5-6

PREECLAMPSIA

maternal smoking and, research needs, 8:77

maternal smoking levels and, 8:42

PREGNANCY

(See also PRETERM DELIVERY)

accidental hemorrhage in smokers vs. nonsmokers, 8:39

cessation of smoking during, 22:16, 22:18, 22:23

complications, research needs, 8:76-77

smoking and abruptio placentae and placenta previa, 8:39

smoking and bleeding, 8:39

smoking and premature membrane rupture, 8:39

gestational age and premature membrane rupture in smokers vs. nonsmokers, 8:44, 8-46

smoking levels and abruptio placentae, bleeding, placenta previa and premature membrane rupture, 8-39-41

smoking levels and perinatal mortality, 8:40

PRETERM DELIVERY

effect of maternal smoking levels, 8:43

and infant mortality risk in smoking vs. nonsmoking mothers, 8:42 maternal smoking and, 1:22

in smoking vs. nonsmoking mothers, 8:42

PREVENTION OF SMOKING (See also ANTISMOKING CAMPAIGNS; CESSATION OF SMOKING)

communication models, 17:11-12 recommendations for the future, 17:22-25

summary of methodologies and programs, 1:33-34

Swedish 25-year program, 17:21-22 youth programs, 17:6, 17:17-22

PROPOXYPHENE

clinical effect in smokers vs. nonsmokers, 12:36-37

PROPRANOLOL

interactive effect with cigarette smoke on airways, 12:54

interactive effect with nicotine on cardiovascular system, 12:53

interactive effect with smoking on cardiovascular system, 12:37

PROSTAGLANDINS

effect of cigarette smoke on metabolism in lungs in rabbits, 12:39

PROTEINS

effect of smoking on metabolism, 12:65-66

synthesis, role in enzyme induction, 12:21-22

PROTONATION

nicotine in relation to pH, 14:86

Reconstituted tobacco sheet nicotine reduction and, 14:108 PSYCHOMOTOR PERFORMANCE See TOBACCO SHEET effect of carbon monoxide, 11:28, REFLEXES effect of nicotine, 14:92 11:34 Relative molar potency nicotine deficit and, 16:8 See MOLAR POTENCY PUBLIC HEALTH CIGARETTE RELIGION SMOKING ACT, A:7 church attendance and motivation for Pulmonary alveolar macrophages smoking, 18:11 See MACROPHAGES, ALVEOLAR Pulmonary clearance effects of beliefs on tobacco consumption, 18:24 See CILIARY ACTIVITY; LUNG RESPIRATORY FUNCTION TESTS **FUNCTION** (See also LUNG FUNCTION) **Pulmonary function** See LUNG FUNCTION in smokers vs. nonsmokers vs. ex-PYLORIC PRESSURE smokers, 6:14-16 effect of smoking, 9:16 RESPIRATORY SYMPTOMS in cigar and pipe smokers vs. nonsmokers, 13:34 RADIATION in childhood and adult respiratory alpha exposure from radon as occutract disease, 6:38-39 pational hazard, 7:14 in cigar vs. cigarette vs. pipe smokbeta exposure as occupational hazard, ers, 13:36-37 7.10 bladder neoplasms and smoking and, effect of air pollution in smokers vs. nonsmokers, 6:37 effect of smoking, 6:7 and cigarette tars in neoplasm induceffect of smoking in children, 6:11tion in mice, 7:10 larvngeal neoplasms and smoking rate of decline of FEV in smokers and, 12:90 vs. nonsmokers and, 6:22 and smoking in lung neoplasm etioloin smokers vs. nonsmokers, 6:20 gy, 5:28 smoking and, summary of findings, synergistic effect with smoking on 1:18-19 respiratory tract, 12:90 smoking and sex ratio, 6:20 RADIOELEMENTS levels in tobacco and tobacco smoke, smoking levels and, 6:20 in smoking vs. nonsmoking twins, 14:60 reduction in particulate phase ciga-6:35 RESPIRATORY SYSTEM rette smoke, 14:113 (See also LUNGS; TRACHEA) as tobacco contaminants, 14:20-21 effect of cessation of smoking, 15:21 RADIUM-226 effect of inhalation in cigar and pipe levels in cigarette smoke, 14:60 smokers, 13:15-16 as tobacco contaminant, 14:20-21 effect of nitrogen dioxide in rats, Rapid smoking See AVERSIVE THERAPY RECIDIVISM effect of rapid smoking, 19:26 carboxyhemoglobin levels as measure synergistic effect of uranium and smoking, 12:90 of, 15:29-30 RESPIRATORY TRACT DISEASES cognitive and physiological factors, (See also LUNG DISEASES) 16:18 post-treatment followup, 19:8 cessation of smoking in patients, prevention, 19:30-31, 19:35 12:18-19 effect of involuntary smoking in rates in cessation programs, 21:15-17

withdrawal state and, 16:18

children, 11:32

RNA

effect of parental smoking on incidence in children, 11:33-34 effect of smoking and history of childhood respiratory symptoms, mass media preventive campaign, 21:10 smoking and, 6:7 smoking history of young adults and, smoking in children and, 6:11-12 RESPIRATORY TRACT INFECTIONS allergic predisposition and smoking, 10:22 effect of parental smoking on incidence in children, 10:12, 11:32 effect of passive smoking in infants, effect of smoking on mortality, 2:41 in smokers vs. nonsmokers, 6:20 smoking levels and, 6:30 RESPIRATORY TRACT MUCOSA effect of smoking, 10:14 RESPIRATORY TRACT NEOPLASMS (See also LARYNGEAL NEO-PLASMS; LUNG NEOPLASMS; PHARYNGEAL NEOPLASMS; TRACHEAL NEOPLASMS) smoking in uranium miners and, 7:14 effect of methylcholanthrene on metabolism, 12:21-22 role in enzyme induction, 12:21-22 ROBERT WOOD JOHNSON FOUN-DATION Health Activities Project, 21:20 ROLE MODELS (See also PARENTAL SMOKING: PEER GROUPS; SIBLING SMOK-SALIVA

ING; TEACHERS; HEALTH PRO-FESSIONALS) in cessation of smoking, 18:21, 22:6-9 influence on smoking in adolescents, 17:11, 20:6, 21:11-14, 23:35 occupational hazards, 7:13

nicotine and thiocyanates in smokers vs. nonsmokers, 15:30

SAN DIEGO COMMUNITY LABORA-TORY

program description, 20:14-15, 21:25

SASKATOON SMOKING STUDY description 20-11-12, 23:25

SATURATED FATS

in atherosclerosis induction in animals. 4:9

SCHICK SMOKING CONTROL CEN-TERS

cessation program, 21:16

SCHOOL HEALTH CURRICULUM **PROJECT**

community agency involvement, 23:15 curriculum development approach. 23:19

description, 20:18-22 evaluation, 17:19-20, 20:25

parental involvement, 21:19 teacher training, 23:21-23, 23:32

SCHOOL HEALTH EDUCATION STUDY

antismoking education component, 23:18

SCHOOL PROGRAMS

(See also names of individual programs) antismoking education, 20:5-22 colleges, 21:9-11 curriculum theory, 23:16-22 effect on students' smoking habits,

evaluation, 17:18-21, 20:24-25, 23:23-

influence on parents, 21:19-21 recommendations for the future. 23:36-39

smoking policies, 23:8-15 state health education laws, 23:5-7 teaching methods, 23:25-27

SECRETIN RELEASE

effect of nicotine, 9:14-15 effect of smoking, 9:15-16

SELF-REPORTS

(See also VERBAL REPORT) carboxyhemoglobin levels as indicator of accuracy, 3:12 validity, 17:24, 19:6-7, 19:33, 21:23

SENSORY DEPRIVATION

cessation of smoking and, 19:18-19

SERUM IMMUNOGLOBULIN LEV-ELS

effect of smoking, 10:18

SERUM PRECIPITINS

in smokers vs. nonsmokers, 10:11

19:10, 21:15-16 SEX RATIO absenteeism and, 3:8, 3:13 adolescent smoking, 17:7, 17:13, 18:16, 21:25 bed disability in smokers vs. nonsmokers, 3:12 bladder neoplasms in smokers, 5:45cessation of smoking and, 3:18, 18:21 cessation of smoking and alcohol consumption, 18:20 cessation of smoking and personality, 18:17-18 chronic obstructive lung disease and, 6.7 consumption of cigarettes, cigars, snuff, pipe and chewing tobacco in the United States, 14-13 coronary heart disease morbidity ratios in smokers vs. nonsmokers vs. ex-smokers, 4:28-30 coronary heart disease mortality ratios in smokers vs. nonsmokers, 4.94 effect of less hazardous cigarettes on mortality, 2:24-25 heart conditions and, 3:19 high density lipoprotein levels in smokers vs. nonsmokers, 4:61-62 laryngeal neoplasm risk in smokers and ex-smokers, 5:33, 5:35-38 lung function, 6:21-22 lung function in ex-smokers, 6:23 lung neoplasm mortality ratio in low tar and nicotine cigarette smokers, 5:16-17 lung neoplasm mortality ratio in smokers, 5:11-12 lung neoplasm risk in filtered vs. unfiltered cigarette smokers, 5:16, 5:18-19 pancreatic neoplasm mortality and risk ratios in smokers, 5:50-52 prevalence of acute conditions in smokers vs. nonsmokers, 3:9 prevalence of chronic conditions in smokers vs. nonsmokers, 3:7 prevalence of chronic obstructive pulmonary disease, 6:20 recidivism and, 19:31

SEVENTH DAY ADVENTISTS
5-Day Plan (cessation program),

```
smoking and respiratory symptoms,
     6.20
 smoking and respiratory symptoms in
     children, 6:11-12
 smoking characteristics, 5:21, 5:23
 smoking habit and neuroticism, 18:8
 smoking habit and socioeconomic sta-
     tus. 18:16
 smoking habit in the United States,
     5:19-21
  smoking in blue- and white-collar
     workers, 7:17
  smoking levels and lung pathology,
     6:27
  snuff users in the United States,
     13:10
  Teenage Self Test scores, 20:22
  tobacco chewers in the United
      States, 13:10
SIBLING SMOKING
  adolescents, 17:14
  maintenance of smoking and, 18:15
Sidestream smoke
   See SMOKE, CIGARETTE SIDE-
   STREAM; SMOKE STREAMS
SLEEP
  deprived vs. nondeprived smokers,
      15:11
SMALL AIRWAYS FUNCTION
    (See also RESPIRATORY FUNC-
    TION TESTS)
  chronic obstructive lung disease and,
      6:11
  effect of smoking levels, 6:13-19
  pathological lesions of small airways
      and, 6:18-19
  screening methods for individuals at
      high risk for chronic obstructive
      lung disease, 6:12
  in smokers vs. nonsmokers, 6:13
  in smokers vs. nonsmokers vs. ex-
      smokers, 6:14-16
SMOKE, CIGAR
    (See also SMOKERS, CIGAR;
    SMOKING, CIGAR; TOBACCO, CI-
   ammonia content, 14:39
   aromatic hydrocarbon content, 13:11-
   carbon monoxide content, 13:12,
      14:38, 14:104
   chemical analysis, 13:11-13
   ciliatoxicity, 13:36-37
```

effect of inhalation on respiratory tract, 13:15-16 pH, 13:15-16 phenol content, 13:12 SMOKE, CIGARETTE (See also SMOKERS; SMOKING: TOBACCO, CIGARETTE) alcohol content, 14:42 alkene content, 14:48 aldehyde content, 14:42 amine content, 14:41 aromatic hydrocarbon content, 14:41-42 benzene compound content, 14:49 carcinogenic PAH activity, 14:54 chemical composition percent distribution, 14:35 constituents, and biological response, 14:26 constituents, research recommendations, 14:120 effect of cigarette manufacturing on constituents, 14:28-30 effect of constituents on enzyme activity, 12:7 effect of static burning temperature, effect on antibody response in mice, 12:59 effect on central nervous system, 15:11 effect on immunoglobulins, 6:31-32 effect on lung function, 14:90 effect on macrophages, 6:29-30 effect on mucociliary system, 6:32-33 effect on phagocytic activity of alveolar macrophages, 10:17 effect on phenacetin pharmacokinetics in rats, 12:28-29 effect on prostaglandin F-2a metabolism in lungs in rabbits, 12:39 effect on systemic humoral immunity in mice, 10:18 free fatty acid levels, 14:55 heterocyclic compounds, 14:52, 14,57 hydrazine levels, 14:41 ketone levels, 14:42 naphthalene levels, 14:51 nickel levels, 14:59 nicotine levels, effect on blood pressure, 14:87 nicotine metabolites, 14:93-94 nitrile levels, 14:40

nitrogen compound levels, 14:41 nitrosamine precursors, 14:41 nonvolatile nitrosamine levels, 14:45 pharmacology, 14:85, 15:5 phenol levels, 14:57 physical and chemical nature, 14:35 polynuclear aromatic hydrocarbon indicators, 14:111 polynuclear aromatic hydrocarbons, 14:51 radioelements, 14:60 reaction mechanisms, 14:9 reduction of toxicity, 14:104, 14:108 relative molar potency of alkaloids, 14:96 retention in buccal cavity and respiratory tract, 12:7 standard smoking conditions for analysis, 14:35 structural formulae of pesticide residues, 14:62 sulfur compounds levels, 14:40 summary of gas and particulate phase constitutents, 1:29-30 summary of toxic and carcinogenic constituents, 1:30 toxicity reduction methods, 14:114 weakly acidic heterocyclic compounds structural formulae, 14:56 SMOKE, CIGARETTE MAINSTREAM (See also SMOKE STREAMS) alkane content, 14:48 amine content, 14:47 ammonia content. 14:39 arsenic content, 14:59 cadmium content, 14:60 catechol content, 14:53 chemical composition, 14:35 ciliatoxicity and, 14:105 cyanide content, 14:39-40 humectant content, 14:63 nicotine content, 14:45 nitrogen oxide content, 14:39 phenol content, effect of filters,

14:106
tar content determination, 14:43
temperature profile, 14:36
SMOKE, CIGARETTE SIDESTREAM

(See also SMOKE STREAMS) alkane content, 14:48 amine content, 14:39, 14:41, 14:47 catechol content, 14:54 chemical composition, 14:38

tar content, 14:44 effect on lungs in monkeys, 14:76 temperature profile, 14:36 effect on mortality, 2:20-21 Smoke exposure effect on mortality in cigar and pipe See SMOKE INHALATION smokers, 13:18 SMOKE CONDENSATES effect on mortality ratio, 2:22-24 (See also SMOKE, TOBACCO; effect on mortality ratio in women, TARS, TOBACCO) benzo(a)pyrene content, 14:112 effect on myocardial infarct morbidicarcinogenicity, 13:30-32 ty and mortality, 4:35 carcinogenicity of experimental cigaeffect on nicotine absorption in cigar rettes in mice, 14:30 smokers, 13:16-17 cigar, alkaloid content, 13:11 effect on pregnant rats, 8:10-11 cigar, aromatic hydrocarbon content, effect on respiratory system in cigar 13:11-12 and pipe smokers, 13:15-16 cigar, nicotine content, 13:12 effect on tolerance in dogs, 15:16 cigar, phenol content, 13:11-12 exercise in dogs and, 14:78 effect of cigarette manufacturing on exposure methodology, 14:73-74 composition, 14:28-30 in laryngeal neoplasm induction in effect on antiprotease activity in vihamsters, 5:34 tro, 6:28 males vs. females, 5:21, 5:23 effect on elastase release from lungs maternal, effect on mother and fetus in rats. 6:29 in sheep, 8:53 effect on enzyme release from polymorphonuclear leukocytes, 6:28 maternal, effect on offspring in rats, 8:10-11 phenol content, 14:52 in myocardial infarct induction in role of cigarette manufacturers in dogs, 14:77 control of constituents, 14:9 SMOKE INHALATION patterns in cigar vs. cigarette vs. (See also SMOKING) pipe smokers in Great Britain, effect of cigar and pipe smoke pH, 13:18-19 13:15-16 patterns in the United States, 2:33 effect of switching tobacco products SMOKE, PIPE on patterns, 13:18-19 (See also SMOKERS, PIPE; effect on arterioles in dogs, 4:18 SMOKING, PIPE; TOBACCO, effect on blood pressure in cats, PIPE) 14:77 aromatic hydrocarbon content, 13:11effect on carboxyhemoglobin levels 12 in cigar and pipe smokers, 13:18 pH, 13:15-16 effect on cigarette smoke retention SMOKE STREAMS in buccal cavity, 12:7 (See also SMOKE, CIGARETTE effect on coronary heart disease MAINSTREAM; SMOKE, CIGAmortality ratios, 4:37 RETTE SIDESTREAM) effect on enzymes in dogs, 14:78 carbon monoxide content, 11:15 effect on exercise tolerance in rats, involuntary smoking and, 11:5 14:77 ratio of constituents in main- vs. effect on hemodynamics in dogs, sidestream smoke, 11:6 14:76 SMOKE WATCHERS effect on leukocyte count, 8:82 cessation program, 21:16 effect on lung neoplasm mortality **SMOKENDERS** ratio, 5:14-15 cessation program, 21:16 effect on lung neoplasm mortality followup evaluation, 19:11

nicotine content, 14:45

ratio in women, 5:21-22

effect on lungs in dogs, 14:76

SMOKE, TOBACCO

5:54-55

(See also SMOKE, CIGAR; SMOKE, CIGARETTE; SMOKE, PIPE; SMOKING)

absorption of constituents by nonsmokers, 11:6, 11:15 in allergy etiology, 10:23-24 amine and nitrosamine content, 12:74 amine content, 14:47 antigens, identification of, 10:11 carcinogens, ciliatoxic agents and tumor promoters in gas phase,

carcinogens, cocarcinogens and tumor promoters in particulate phase, 5:54-57

constituents, correlation with tobacco leaf characteristics, 14:24 effect of exposure in allergic children and adults, 10:14, 10:21 effect of leaf components, 14:11 effect on alveolar macrophages, 6:30-31, 10:15-16

effect on blood lipid levels in animals, 4:61

effect on cardiovascular system in animals with myocardial infarct, 4:45

effect on cellular and humoral immunity, 6:30-31

effect on ciliary function, 10:14-15 effect on enzyme activity, 12:27-28, 12:75-76

effect on enzyme systems, 10:16 effect on fetal weight and birth weight in animals, 8:52

effect on fetal weight and maternal food intake in rats, 8:52-53 effect on fetus, research needs, 8:79 effect on immune system, 10:5, 10:17

effect on lymphocytes in mice, 10:19 effect on metabolism of food constit-

uents and additives, 12:75-76 effect on nonsmokers, 11:25

effect on pre-existing allergies, 10:13

effect on pregnant animals, 8:52 effect on rat fetus, 8:53

effect on tracheobronchial clearance in dogs, 10:15

structural formulae, 14:55

eye irritation and, 10:21 heterocyclic compound carcinogens

measurement of constituents in enclosed spaces, 11:7-14 measurement of constituents under natural conditions, 11:16-20 metal levels, 14:58-59 in neoplasm induction in animals,

1:17 nickel levels, 14:59 pesticide residues, 12:75 radioelement levels, 14:60 skin test reactions, 10:13

SMOKERS

(See also SMOKERS, CIGAR; SMOKERS, PIPE)

B and T cell count and ratio, 10:19 granular leukocyte levels, 10:20 SMOKERS, CIGAR

(See also SMOKE, CIGAR; SMOK-ING, CIGAR; TOBACCO, CIGAR)

blood cholesterol levels, 4:61 bronchitis and emphysema mo

bronchitis and emphysema mortality, 13:34

cardiovascular disease mortality ratio, 13:33

chronic obstructive pulmonary disease mortality ratio, 13:35

coronary heart disease mortality ratio, 4:22-23

effect of inhalation on mortality, 13:18

esophageal neoplasm mortality, 13:24-25

esophageal neoplasm mortality ratio, 5:43

inhalation patterns in Great Britain, 13:18

leukocyte count, 12:81

lung neoplasm mortality rates, 5:23 lung neoplasm mortality ratio, 13:26-28

mortality, 13:13-14

myocardial infarct morbidity and mortality, 4:35

oral neoplasm mortality ratio, 13:21 relative risk ratio for lip neoplasms, 13:22

relative risk ratio for lung neoplasms, 13:29-30 respiratory symptoms, 13:34 thrombosis mortality rates, 4:59 in the United States, 13:9

```
(See also SMOKE, PIPE; SMOK-
                                             alveolar macrophage migration, 6:31
  ING. PIPE: TOBACCO, PIPE)
                                             angina pectoris morbidity ratios, 4:48
 blood cholesterol levels, 4:61
                                             annual probability of dying, 2:30-34
 bronchitis and emphysema mortality,
                                             antibody response to viral vaccines,
     13:34
 cardiovascular disease mortality ratio,
                                                 12:58-59
                                             antipyrine pharmacokinetics, 12:29-31
     13.33
                                             anxiety levels, 16:7-8
 chronic obstructive pulmonary disease
                                              Arthus skin test characteristics, 10:10
     mortality ratio, 13:35
 coronary heart disease mortality ra-
                                             asphyxia in infants of, 8:69
                                              atherosclerosis, 4:10-12, 4:14-16
     tio, 4:22-23
                                              B and T lymphocytes, 6:31
 effect of inhalation on mortality,
                                              bed disability, 3:12
                                              bicarbonate levels in infants of, 8:69
 effect of inhalation on respiratory
                                              bilirubin levels, 12:34
     tract, 13:15-16
                                              birth weight of infants of, 8:11,
 esophageal neoplasm mortality,
                                                  8:14-17, 8:20-21
     13:24-25
                                              bladder neoplasm mortality ratio,
  esophageal neoplasm mortality ratio,
                                                  5:45-46
     5.43
 inhalation patterns in Great Britain,
                                              blood calcium levels, 12:84
                                              blood cholesterol levels, 4:61-62
     13:18
                                              blood circulation, 15:12-13
  leukocyte count, 12:81
  lung neoplasm mortality rates, 5:23
                                              blood coagulation, 12:84-85
  lung neoplasm mortality ratio, 13:26-
                                              blood glucose levels, 12:84
                                              blood lipid levels, 12:83-84
                                              blood pressure, 4:57
  mortality, 13:13-14
                                              blood protein levels, 12:84
  myocardial infarct morbidity and
                                              breast feeding, 8:48
      mortality, 4:35
  oral neoplasm mortality ratio, 13:21
                                              bronchitis in gold miners, 7:15
                                              bronchitis prevalence by occupations,
  relative risk ratio for lip neoplasms,
      13:22
                                              carboxyhemoglobin levels and carbon
  relative risk ratio for lung neo-
                                                   monoxide occupational exposure,
      plasms, 13:29-30
  respiratory symptoms, 13:34
                                              carboxyhemoglobin levels in infants
  thrombosis mortality rates, 4:59
  in the United States, 13:9
                                                   of, 8:69
                                               carcinoembryonic antigen levels,
SMOKERS VS. NONSMOKERS
                                                   12:61-62, 12:86
   (See also NONSMOKERS)
                                               cardiovascular disease mortality ra-
  abruptio placentae, placenta previa,
                                                   tios in Japan, 4:21, 4:34-35
      and bleeding during pregnancy,
                                               cerebrovascular disease mortality
                                                   rates and ratios in males vs. fe-
  absenteeism, 3:8, 3:10, 3:13
  accidental hemorrhage in pregnancy,
                                                   males, 4:51
                                               chronic obstructive lung disease and
                                                   mortality, 6:9-10
  activity limitation, 3:13-14
                                               ciliary function, 10:15
  acute conditions, 3:6
  air pollution and chronic obstructive
                                               clinical effects of propoxyphene,
                                                   12:36-37
       lung disease, 6:36
                                               clinical effects of selected drugs,
   air pollution and lung pathology,
                                                   12:36-37
       6:36
                                               coronary heart disease morbidity ra-
   alcohol consumption and drug use,
                                                   tios, 4:27-33, 4:36-37
```

SMOKERS, PIPE

12:41

alpha-1-antitrypsin deficiency and

emphysema, 6:34

coronary heart disease mortality ratios, 4:22-26, 4:36-37 definition. 23:24 drug use patterns, 18:13-15 duration of gestation, 8:18 effect of behavior and personality on pharmacokinetics, 12:40-41 elastase release from macrophages, 6:30 emphysema, 6:25-26 emphysema and lung pathology, 6:23-24 erythrocyte parameters, 12:82-83 esophageal neoplasm mortality ratio, 5:42-43ethanol pharmacokinetics, 12:39 etiology of fetal and neonatal death, 8:38 etiology of perinatal death, 8:36 etiology of stillbirth, 8:37 fibrosis in asbestos workers, 7:12 gastric secretion in, 9:13 gestational age and infant mortality, 8:43, 8:45 gestational age and risk for abruptio placentae, placenta previa and premature membrane rupture, 8-44, 8:46 gestational age and risk for preterm delivery, 8:44 gestational age at birth of infants of, 8:43 glutethimide pharmacokinetics, 12:33 growth and development of children of, 8:21-23 heart conditions, 3:16-17, 3:19 head circumference in infants of, 8:20-21 hematocrit in infants of, 8:69 high density lipoprotein levels in males vs. females, 4:61-62 histologic changes in esophagus, 5:44 hospitalization, 3:14-16 hyaline thickening in small arteries and arterioles in myocardium, 4:16 hypertension, 4:57 immunoglobulin containing cell counts in lobar bronchi, 10:17 immunoglobulin levels, 6:31-32 infant mortality, 8:27, 8:34 infant mortality risk, 8:31

white mothers, 8:30 job accident rates, 7:15 kidney, liver, and lung weights, 12:9 kidney neoplasm mortality and risk ratios, 5:48-49 lactation, 8:48 laryngeal neoplasm mortality ratio. 5:32-33 learning, 15:19 leukocyte count, 2:79-82 level of well-being, 3:18 long-term study of children of, 8:22lung diseases in rubber workers, 7:13 lung function, 6:21 lung function after cadmium exposure, 7:15 lung function in black vs. white vs. oriental men and women, 6:21 lung function in chlorine workers. 7:10 lung function in cotton workers, 7:9 lung function in miners, 7:9 lung neoplasm mortality and asbestos exposure, 7:11 lung neoplasm mortality in twins, 5:23 lung neoplasm mortality ratio in males vs. females, 5:11-12 lung neoplasm mortality ratio in women, 5:20-22 lung neoplasm risk in asbestos factory workers, 7:11-12 lung neoplasm risk in insulation workers, 7:11 lung neoplasms in chloromethyl ether workers, 7:16 lung neoplasms in uranium miners, 7:14 lung pathology, 6:24-27 lung pathology in sudden death victims. 6:18 macrophage count and ultrastructure. 10:16 macrophages in bronchopulmonary lavage fluid, 6:29 maternal weight gain and fetal growth, 8:24-25 meperidine clearance, 12:39 mortality in twins, 2:42 mortality rates, 2:15 myocardial infarct in women, 12:52

infarct mortality risk in black vs.

myocardial infarct morbidity and mortality, 4:35-36 neonatal mortality, 8:40 nicotine and cotinine content in urine, 11:24 nicotine content in plasma, 11:24 nicotine content of breast milk in lactating mothers, 8:51 nicotine content of saliva, 15:30 nicotine levels in urine, 15:29 nicotine metabolism, 15:16, 15:9 nitric oxide levels, 14:80 nortriptyline pharmacokinetics, 12:39 obstructive airway diseases in miners, 7.9 oral neoplasm mortality ratio, 5:39-40 osteoporosis, 12:67 pancreatic neoplasm mortality and risk ratios, 5:50-52 pentazocine dosage requirements, 12:36 peptic ulcer healing, 9:9-10 peptic ulcer indicence, 9:5-6 peptic ulcer mortality rates, 9:11 peptic ulcer prevalence, 6:7-8 peptic ulcer prevalence ratios in six countries, 9:8 peptic ulcer size and recurrence, 9:9 perception of health status, 3:14-15 perinatal mortality, 8:35, 8:40 perinatal mortality and maternal age, parity, and education, 8:33 perinatal mortality risk for infants of. 8:32 peripheral vascular disease in diabetics, 4:53 personality, 18:5-10 phagocytic activity of alveolar macrophages, 10:17 phenacetin pharmacokinetics, 12:28-29 phenytoin pharmacokinetics, 12:38 physician visits, 3:14, 3:17 placental changes, 8:69 placental ratios, 8:18 polonium-210 levels in tissues, 10:60preeclampsia and toxemia in pregnancy, 8:42 pregnancy weight gain and fetal growth, 8:24 premature membrane rupture during pregnancy, 8:39

preterm delivery and infant mortality risk, 8:42 prevalence of acute conditions, 3:9 prevalence of chronic conditions. 3:7 prognosis following vascular grafting, 4:53 protease activity of macrophages, 6:29 proteinuria after cadmium exposure, rate of decline of FEV and respiratory symptoms, 6:22 respiratory symptoms in twins, 6:35 respiratory tract diseases in young adults, 6:12 respiratory tract infections, 6:20 respiratory tract neoplasms in uranium miners, 7:14 respiratory tract symptoms, 6:20 response to diagnostic tests, 12:79 risk of low birth weight in infants of, 8:13 serum albumin, uric acid, and creatinine concentration, 12:40, 12:84 serum precipitins in, 10:11 skin test reactions to tobacco leaf extracts, 10:13 small airways function, 6:13-16 socioeconomic status and chronic obstructive lung diseases, 6:38 spontaneous abortion, 8:30-32 stillbirth incidence, 8:36 sudden cardiac death, 4:43-44 sudden infant death syndrome in infants, 8:45 T cell counts, 10:19 theophylline pharmacokinetics, 12:31thiocyanate levels in saliva, 15:30 thiocyanates in plasma, 7:7 thiocyanates in urine, 7:7 thrombosis mortality rates, 4:59 tolerance to cigarette smoke, 15:16-17 trace metal levels, 12:73-74 tryptophan metabolism, 12:67 umbilical artery changes, 8:69 vitamin B₁₂ levels in pregnancy, 8:73 vitamin C levels in breast milk of lactating mothers, 8:52 vitamin C levels in pregnancy, 8:74 vitamin C levels in serum, 12:34

warfarin metabolism, 12:55