INDEX

accelerometer-based motion recording system, 41
accident prevention, 81–6
ACGIH. see American Conference of Governmental Industrial Hygienists (ACGIH)
Acinetobacter sp., 347–8
acoustic trauma, 226–8
acquired immunodeficiency syndrome. see AIDS
activity monitor, 41
critical chorioretinal injury, 204–5
critical mountain sickness (AMS), 135–6
ionizing radiation effects, 182–4
treatment, 188
acute skin injury, 206
administrative controls, 9–11, 27, 28, 98, 163–5, 193, 225, 229, 236, 264, 270, 341, 419, 528, 534, 536
age-related permanent threshold shift (ARPTS), 227
aflatoxin, 426–428
AIDS, 243, 265, 310, 311, 336, 340, 383, 411, 412, 414, 415, 421, 439, 440, 444, 472, 483, 497, 544
air diving, 112, 120
air velocity, 88, 89, 93
alertness-enhancing drugs, 161
allergens, 519–36
enzymes, 519–21
farm animals, 521–2
grain dust, 522–3
insects, 524–5
laboratory animals, 526–8
mites, 529–30
plants, 531–3
shellfish, 533–4
allergic bronchopulmonary aspergillosis (ABPA), 255, 426, 428, 429, 448
allergic contact dermatitis (ACD), 252, 529, 531, 532, 538–40, 563
allergic fungal sinusitis (AFS), 428, 429
allergic respiratory disease, 521
allergy
laboratory animals, 526, 527
testing, 255
upper and lower respiratory allergy, 252
alpha-2 adrenoreceptors, 66
Alternaria, 425–7
altitude, atmospheric pressure and oxygen levels, 133
altitude–pressure–temperature relationships, 131, 132
American Academy of Sleep Medicine (AASM), 161, 162
American College of Rheumatology, 22
American Conference of Governmental Industrial Hygienists (ACGIH), 8, 17–19, 54–9, 88, 90, 91, 103, 141, 198, 204, 210, 216, 218, 523, 565
American National Standards Institute (ANSI), 8, 58–9, 73, 194, 209, 210, 212, 213, 232
anaphylaxis, 136, 504, 506, 515, 517, 518, 520, 525, 526, 532, 538, 539
Anaplasma, 244, 457–9
Anaplasma phagocytophilum, 457–9, 464
animal workers, 257, 307, 527
Anopheles sp. mosquitoes, 488–90, 492
ANSI Z136.1 standard, 8, 209, 210, 212, 213
anterior spine, 34
anthozoa, 507
anthrax, 243, 246, 266, 270, 273, 348–51
antisepsis, 264
antivibration (A/V) gloves, 66, 67
antivibration (A/V) tools, 9, 66, 67
arboviruses, 275–80
Archimedes’ principle, 117
arenoviruses, 282–3
arthropod envenomation, 501–6
aseptic bone necrosis, 125
as low as reasonably achievable (ALARA), 181, 194
aspergillosis, 427–9
Aspergillus, 245, 426–9
Aspergillus fumigatus, 246, 426–9
Association of Diving Contractors, 126
and shift work, 158
wood dust, 564
audits, 83
automation, 9, 28, 45
aviation decompression illness, 132–3
Ayoub’s job severity index (JSI), 40
Bacillus sp., 348–51
barotrauma (trapped gases), 7, 121–5, 127, 132, 135
Basidiomycetes, 430–1
behavioral thermoregulation, 104


569
INDEX

biological agents, prevention, 261, 263–5, 350
biological exposure indices (BEIs), 54, 59, 91
biological safety cabinet (BSC), 263, 265, 389, 460, 549
biological warfare agents, 270–2
biomechanical models, 23, 36–8, 40, 41
biochemistry of diving, 119, 120
bioenergy
Bloodborne Pathogen Standard, 261–3, 300, 302, 305, 314, 544
blue light photoretinitis, 205
body part discomfort (BPD), 39
bone marrow transplantation (BMT), 188
bony support, 34
Borg scale, 17, 18
Borrelia sp., 352–5, 393–4
Borrelia burgdorferi, 353, 393–4, 457
botulism, 271, 273, 361, 362
Boyle's law, 116, 120, 121, 132
brain abscess, 251, 365, 433, 435, 449
breast cancer, in shift workers, 152–7, 162
breath cancer, in shift workers, 152–7, 162
bright light and melatonin, 161–2
brontochitis, 250, 347, 443, 448, 454, 558–60, 564
Brucella sp., 266, 356–8
brucellosis, 246, 247, 356–8
bubble‐related disease, 126
buckling of unstable system, 63
building‐related illness, 245, 258
Burkholderia, 390–2
business continuity planning, 270, 319
caffeine, 107, 108, 161
caissons, 111, 112, 114–15, 117, 122, 123, 126, 128
California Ergonomic Standard, 20
Campylobacter, 359–60
cancer, 185, 186
cells, 155, 543–4
in shift workers, 152–7
Candida, 256, 414, 434–5
carbon dioxide toxicity, in diving, 119, 120
carbon monoxide (CO)
poisoning, 104, 105
toxicity in diving, 119, 120
cardiopulmonary resuscitation (CPR), 106, 236, 238, 239
cardiopulmonary resuscitation (CPR), 106, 146–9, 164, 181, 185, 220, 378
and shift work, 147–9
carpal tunnel pressure (CTP), 23
carpal tunnel syndrome (CTS), 13, 15, 16, 23, 25, 26, 65, 66
ctaracts, 8, 120, 199, 200, 204–7, 211, 217, 234–6, 238, 501
ionizing radiation exposure, 185
catfish, 506–7
central nervous system infections, 251, 384
cerebral arterial gas emboli (CAGE), 123
Chikungunya, 270, 275–280
chlamydiae, 243, 244, 460
Chlamydia psittaci, 244, 459, 460
Chlamydia trachomatis, 244, 460
Chlamydia psittaci, 244, 459, 460
Chlamydiae, 243, 244, 460
cel due‐mediated immunity, 256
centers for Disease Control (CDC), 87, 144, 237, 247, 259, 262, 269, 279, 349, 366, 413, 451, 459, 461, 466, 473, 475, 551, 555
chronic blue light‐induced retinal injury, 205
cirrhosis, 140–2, 145–7, 157–61, 163, 164
Cladostrum botulinum, 361–2
Clostridium difficile, 363–4
Clostridium perfringens, 364–6
Clostridium tetani, 366–8
Coccidioides immitis, 266, 426, 436–8
Corynebacterium diphtheriae, 506–7
corneal damage from infrared region, 210–11
corneal damage from ultraviolet region, 211
corneal injury, 205
Corynebacterium diphtheriae, 368–9, 402
coronavirus, 283–6
coupling multiplier (CM), 42, 43
Coxiella burnetii, 244, 461–3
Creutzfeldt–Jakob disease (CJD), 549, 553–5
diagnosis, 554
exposure (route), 553
occupational setting, 553
prevention, 554–5
treatment, 554
crotalid, 514–15
Cryptococcus gattii, 439–40
Cryptococcus neoformans, 245, 426, 439–40
cryptosporidiosis, 471–4
Cryptosporidium parvum, 471–4
Cryptostroma corticale, 471–4
Cryptosporidium hominis, 471–3
Cryptosporidium parvum, 471–3
Cryptosporidium parvum, 471–3
Cryptosporidium parvum, 471–3
Cumulative trauma disorder (CTD), 14, 26
cutaneous irradiation injury stages of, 190
treatment of, 189
cutaneous leishmaniasis (CL), 478–84
cyclosporiasis, 474–7
cytomegalovirus (CMV), 283–6
cold‐induced Raynaud’s phenomenon, 65
cold‐induced vasodilation (CIVD), 104
cold injuries, 101, 102, 104–8
prevention, 107–8
cold stress, threshold limit values (TLVs) for, 102
cold urticaria, 104, 105
cold water, survival times, 105, 106
Colorado tick fever (CTF), 275, 277–79
Columbia, 513–14
composite lifting index (CLI), 43
ductive heat exchange, 93
dcontact dermatitis, 252, 256, 307, 430, 431, 520, 521, 529, 531, 532, 538, 563, 565
coral snake, 516–17
corneal damage
Cumulative trauma disorder (CTD), 14, 26
decompression illness (DCI), 119–24, 126, 132–3, 135
diagnosis, 126, 133
neurologic, 123
nomenclature, 123, 124
oxygen treatment of type II, 127
prevention, 133
sequelae, 125
treatment, 133
decorporation therapies, for internal radionuclide contamination, 191
deep sea diving equipment, 112–14
delayed hypersensitivity, 256, 482, 502, 506, 515, 517, 521
delayed-onset muscle soreness (DOMS), 20, 22
depression and shift work, 158–9
De Quervain’s tenosynovitis, 23
dermatitis, 206, 251, 316, 337, 340, 370, 512, 521, 522, 529, 531, 532, 537
dermatophytes, 452–3
disease clusters, 257–8
direct pressure injury, 121–5
diet, 93, 99, 160, 161, 198, 478
direct pressure injury, 121–5
depression and shift work, 158–9
delayed-onset muscle soreness (DOMS), 20, 22
diabetes mellitus and shift work, 147, 149, 157
dicentric chromosomes, cytogenetic assay for, 188
dielectric constant, 216
diet, 93, 99, 160, 161, 198, 478
direct pressure injury, 121–5
disease clusters, 257–8
disinfectants
antimicrobial properties, 264, 265
mycobacteridial, 264
tuberculocidal, 264, 265
types and uses, 264, 265
Divers Alert Network, 126
diving, 111–12
equipment, 112–14
gas effects, 118–20
hazards, 120–1
pregnancy, 124
sensorineural hearing loss, 125
DOMS. see delayed-onset muscle soreness (DOMS)
drug-induced photosensitivity, 206
drug therapy, 66, 415, 416, 422, 492
dry-bulb temperature, 88, 89, 102
dry heat sterilization, 265
duration of force exertion, 39
dust mites, 527, 529, 530
dysbaric osteonecrosis, 125
dysentery, 251, 372, 397
ear, noise exposure, 225–6
Ebola virus, 276, 288–93
eccentric contractions, 21, 22
Echinodermata, 510–11
Effective temperature index, 88
egg allergy, 280, 534–6
Ehrlichia, 244, 463–6
Elapidae, 516–17
effector, 518
Echinodermata, 510–11
eßzal, 512, 515, 517, 521
effective, 234–42
electric field, 5
electric hazards, 235
electrical, 81, 121, 231–9
electrocardiography, 60
electromagnetic fields, typical examples, 232
electrical safety standards, 232
electrocution injuries, 235
electrophysiology and health effects, 219
environmental heat, 87–90
environmental illness, 257, 259
environmental risk factors, 35, 554
environmental stresses, 81, 117
enzymes, allergens, 519–21
epicondylitis, 13, 15, 22, 25, 26
epilepsy and shift work, 157–8, 164
epineurium, 21
epitenon, 21
equivalent chill temperature, 101, 102, 107, 108
ergonomics, 13–28
assessment model, 40
assessment tools, 36
Erysipelothrix rhusiopathiae, 370–1
Escherichia coli, 254, 371–3, 548
Eustachian tube, 121, 122, 132, 226
EX Mod, 79
exposure challenge testing, 256
exposure monitors, 36, 41, 194
external heat, measures of, 88, 89
extremely low-frequency (ELF) radiation, 215, 218–21
biological effects, 219, 220
exposure guidelines, 218–19
measurement issues, 218
occupational setting, 218
pathophysiology and health effects, 219–21
prevention, 220–1
eye
acute UV effects, 198
chronic UV effects, 199
infrared radiation, 206
laser radiation, 210–11
farm animals, allergens, 521–2
farmer’s lung, 258, 426
INDEX

fascicles, 21
fast-twitch fibers, 20
Federal Aviation Administration (FAA), 131
Federal Ergonomic Standard, 20
Federal Laser Performance Standard, 209
Federal Needlestick Safety and Prevention Act, 262
fetal loss, 151–2
filoviruses, 246, 266, 373–5
gonorrhea, 254, 257, 386
arrested development, 17–19
hantaviruses, 243, 294–6
Hantavirus pulmonary syndrome (HPS), 295–6
hay fever, 252, 258, 530
Hazards; associated with hypersensitivity hazards; see also specific species associated with hypersensitivity diseases, 426
Toxicogenomics, 426
Galileo’s description, kinematics, 3, 4
gamma motor neurons, 22
Gastrointestinal (GI) disorders, 147, 164
gastroenteritis, 251, 325, 359, 360, 373, 406, 409
gastrointestinal (GI) disorders, 147, 164
gates, 84
general muscle pain, 22
gene therapy, 548, 551
globe temperature, 88, 89
gonadal effects, ionizing radiation exposure, 182
gonorrhea, 254, 257, 386
grain dust, 522–3, 534–6
Gram stain, 244, 253, 271, 365, 372, 377, 386, 390, 400, 402, 439
ground fault circuit interrupters (GFCIs), 237
Haemophilus ducreyi, 376
Haemophilus influenzae, 377
hand activity level (HAL), 17–19
hand–arm vibration (HAV), 53
treatment, 94–6
return to work/play guidelines, 97
human immunodeficiency virus. see HIV
INDEX

human T-cell lymphotrophic virus (HTLV), 316–17, 337
humidity, 35, 87, 89, 93–4, 107, 258, 431, 448, 478, 488, 495, 530
Hydrophidae, 517–18
hydrozoa, 508
hymenoptera, 501–2
hyperbaric chambers, 121, 125, 126, 133
hyperbaric recompression chamber, 126
hypersensitivity disorders, 252, 427, 453–4
clinical testing, 255–6
laboratory confirmation, 253–5
hyperthermia, 94, 98, 118
hypothermia, 95, 99, 380, 464
hypoxia, 119, 124, 131–5, 137, 238
acute, 133–5
in diving, 120
medical surveillance and education, 135
pathophysiology, 133–4
stages of, 134
beach, 316, 317, 340, 412, 429, 439, 549
impact as sudden and unexpected load, 62–4
incident investigation, 76, 83
industrial hazards, in underwater work environment, 121
inert gas narcosis, 118, 119
infection, 249–50. see also specific clinical diseases
vs. colonization, 249
diagnostic evaluation, 254–5
systemic vs. localized, 249–50
infectious diseases. see also specific clinical diseases
contracting from coworkers, 269
etiology, 243–5
general principles, 243–7
infective process, 246–7
laboratory confirmation, 253–5
required reporting, 270
transmissibility, 245–6
infectious organisms, surveillance, 265
inflammation process, 250
influenza, 243, 252, 256, 257, 263, 266, 267, 270, 279, 388, 460, 560
influenza virus, 270, 317–19
infrared radiation
bands, 203
definition, 203
exposure guidelines, 204
measurement issues, 203–4
medical surveillance, 207
near-infrared exposures and cataracts, 205–6
normal physiology, 204
occupational setting, 203
pathophysiology, 204–6
prevention, 207
threshold limit values, 204
treatment, 207
inhalation exposure of biologicals, 263, 264, 521, 522, 526, 529, 532, 535, 536, 538, 558
inherent properties, 24, 81
injury surveillance programs, 76–9
insects, allergens, 524–5
inspection, 24, 74, 76, 79, 85, 86, 111, 229, 237, 258, 355, 356, 358, 375, 448, 565
instructional training, 46–7
International Classification of Diseases, Tenth Revision (ICD-10), 24–6
International Commission on Non-Ionizing Radiation Protection (ICNIRP), 198, 204
International Commission on Radiological Protection (ICRP), 181
International Labor Organization (ILO), 162
International Standards Organization (ISO), 7, 56–9, 62, 67, 82, 227
international travel, 266, 268–70, 284, 359, 488
intradermal skin test, 256
in utero developmental effects, ionizing radiation, 181, 182
ionizing radiation, 177–94, 265
background radiation, 177
diagnosis, 186–93
emergency information, 194
expert advice, 194
exposure guidelines, 180–1
external exposure, 186–7
external whole-body exposure, 187–8
measurement issues, 178–80
medical exposures, 178
nuclear power plant incidents, 192–3
occupational exposures, 177–8
pathophysiology and health effects, 181–6
physics of, 178–80
prevention of exposure, 193–4
psychological aspects, 191–2
stochastic health effects, 185–6
treatment, 186–93
type important to radiologic health, 179
irid injury, 206
irritant contact dermatitis (ICD), 538–40
Japanese encephalitis, 275
jet lag, 142, 146, 147, 158–9, 161
job-related risk factors, 35
kinematics, Galileo’s description of, 3, 4
kinetic energy (KE), 3–6, 64
Koch’s postulates, 243–4
laboratory animals, 252, 266, 381, 393, 461, 549, 551
allergens, 526–8
Latrodectus spp., 503–4
laser radiation, 8
classification of laser power, 209–10
exposure guidelines, 210
measurement issues, 209–10
medical surveillance, 212
occupational setting, 209
pathophysiology, 210–12
prevention, 212–13
treatment, 212
latex hypersensitivity (LH), 537–41
lead, 316, 317, 340, 412, 429, 439, 549
light, see visible light
lightning injuries, 231, 236–9
diagnosis, 239
vs. high-voltage electrical injury, 238
medical surveillance, 239
neurological sequelae, 237
occupational setting, 237
pathophysiology, 237–8
prevention, 239
treatment, 239
limulus amebocyte lysate (LAL) method, 534, 559
lipo polysaccharide (LPS) complex, 557
Listeria monocytogenes, 383–4
lockout/tagout, 10, 74, 82, 232, 236–7
definitions for, 85
programs, 85
standard, 75
training and communication, 86
low back pain (LBP), 7, 16, 34, 36, 37, 45, 47, 59, 61, 63
diagnosis, 44
and WBV, 55–63
low birth weight (LBW), 150–1, 164, 320, 462, 491
lower respiratory allergy, 252
low-pressure environments, 7, 9, 131–5
lower respiratory allergy, 252
low birth weight (LBW), 150–1, 164, 320, 462, 491
machine guarding, 81, 83–4
Madurella, 445–6
magnetic fields, 4, 5, 8, 215–17, 218–21
exposure guidelines, 218–19
measurement issues, 218
occupational setting, 218
pathophysiology and health effects, 219–20
typical examples, 219
malaria, 243, 245, 246, 257, 267–9, 278, 279, 290, 487–93
malignant cells, 543–4
managing hazardous energy, 85
Mantoux test, 263, 414
manual handling, definition of, 33
manual materials handling (MMH), 7, 9, 33–49, 121
checklists, 37
diagnosis, 44
guidelines and standards, 41–4
integrated assessment model, 40
measurement issues, 36–41
medical surveillance, 45
occupational setting, 34–6
pathophysiology, 34–6
prevention, 45–8
treatment, 44–5
videotape assessment, 40, 41
worker-directed approaches, 46–7
workplace-directed approaches, 45–6
maple bark disease, 440–1, 564
Marburg virus, 288–93
marine envenomations, 506–7, 508–13
marine invertebrates, 533–4
maximum acceptable push force, 39
maximum isometric lifting strength (MILS), 48
measles virus, 319–22
mechanical aids, 9, 45–6
mechanical energy, 7, 9, 73–86
exposure guidelines, 75
hazard categories, 120
indicators of need for further assessment, 79, 81
injury surveillance programs, 76–9
injury types and causes, 73, 74
measurement issues, 73–4
mechanical hazards, measurement issues, 73, 74
occupational setting, 73
pathophysiology of injury, 75–6
pertinent equipment, operations, and procedures, identification of, 81, 82
prevention, 81, 83–6
regulated industry practices, 74
safety surveillance, 79, 81
treatment, 76
work-related injuries and illness, 76–8
mechanical fatigue due to vibration loading, 61–2
mechanical hazards, measurement issues, 73, 74
mechanics, 3–5, 38, 64, 73
mediastinal emphysema, 122
melatonin, 145, 147, 152, 155, 156, 161–2, 164, 219, 220
meningooccal meningitis, 251, 387–9
M. lacrymans, 426, 430–1
metabolic heat, 87, 88, 92, 93, 96, 98, 104
metabolic rate categories, 88, 89
metabolic syndrome and shift work, 147–8, 149, 160
microbial colonies, 253–4
microbiology, general principles, 243–7
microorganisms, classification of molds, 247
microscopic visualization, 253
microwave radiation, 8, 200, 215–18
exposure guidelines, 216–17
measurement issues, 215–16
medical surveillance, 218
occupational setting, 215
pathophysiology of injury, 217
prevention, 218
standards, 216
treatment, 217
middle-ear squeeze, 121
middle east respiratory syndrome coronavirus (MERS-CoV), 283–6
miliaria, 94
mites, allergens, 529–30
mixed-gas diving, 112, 113, 120
mollusca, 511
monitoring devices, 41
mucocutaneous leishmaniasis, 478–84
The Multimedia Video Task Analysis (MVTA™) program, 40
mumps virus, 254, 322–3
muscle fatigue, 22, 39, 61, 515
muscle fibers, type I, 20, 22
muscle fibers, type II, 20
muscle pain, 20, 22, 457, 464, 490, 517
musculoskeletal disorders (MSDs), 13–28, 33–7, 40, 41, 44, 45, 47, 48
mushrooms, 426, 427, 430–1, 532
mycetoma, 445–6
mycobacteria, 244, 253, 254, 264, 411–22
Mycobacterium avium intracellulare, 420–2
Mycobacterium bovis, 420–1
Mycobacterium fortuitum, 421
Mycobacterium leprae, 420–1
Mycobacterium marinum, 421
Mycobacterium scrofulaceum, 421
Mycobacterium tuberculosis, 254, 411–22
Mycobacterium ulcerans, 421
Mycoplasma pneumoniae, 384–5, 402
mycotoxin disease, 429
Nanophyetus, 485
Nanophyetus salmincola salmincola, 485
naps, 162
nasal cancer, wood dust, 564
National Council on Radiation Protection and Measurements (NCRP), 8, 180–1, 191, 194
National Health Interview Survey (NHIS), 15
National Institute for Occupational Safety and Health (NIOSH), 7, 8, 15, 26, 34, 37, 40, 42–4, 46, 47, 56, 59, 87, 88, 92, 96–8, 198, 228–9, 237, 259, 293, 350, 419, 540, 544, 565
electrocution, 231–2
guidelines, 90–2
lifting index, 42–3
recommended weight limit, 42
wood dust, 565
INDEX
INDEX

radiation exposure, unit, 179
radiation units, 180
radioallergosorbent test (RAST) testing, 255–6, 426, 520, 522, 523, 525, 527, 528, 530, 532, 534, 535, 559
radiofrequency radiation, 215–18
exposure guidelines, 216–17
measurement issues, 215–16
medical surveillance, 218
occupational setting, 215
pathophysiology of injury, 217
prevention, 218
standards, 216
treatment, 217
radiology procedures and dose estimates, 178, 179
radionuclide contamination, 186–7, 193
external contamination, 189, 191
internal contamination, 191
radon, 177, 181, 186, 187
rapid decompression, 133
rare (or severe) diseases, 258
RAST testing. see radioallergosorbent test (RAST) testing
rat-bite fever, 392–3
rating of perceived exertion (RPE), 17, 39
rattlesnake, 514–15
Raynaud’s phenomenon, 58, 64, 65
recombinant organisms, 547–51
exposure (route), 547
medical surveillance, 550–1
occupational setting, 547
pathobiology, 547–50
periodic surveillance, goals of, 550
prevention, 551
selected products, 548
recommended alert limits (RALs), 92
recommended exposure limits (RELs), 42, 92, 137, 228, 565
recompression chamber, 126, 133
red muscle fibers, 20
regional muscle pain, 22
relapsing fever, 279, 392–4
repetitive motion disorder (RMD), 26
repetitive movement, 41
repetitive strain injury (RSI), 26
reproductive health, 150–1, 194
respiratory compromise, 258
respiratory syncytial virus (RSV), 333–4
retinal damage, from visible and near-infrared region, 211
Rickettsiae, 244, 467
*Rickettsia rickettsii*, 457, 466–9
risk assessment screening, 47
heat disorders, 94
Rocky Mountain spotted fever (RMSF), 244–6, 249, 266, 275, 279, 400, 464, 466–9
rotator cuff tendinitis, 13, 26
rubella virus, 334–5
safety devices, 83–4, 314
SAFETY surveillance, 79, 81
Salmonella, 266, 394–7
sanitization, 264, 453
saturation diving, 112, 119, 124–5
Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR), 220
Scorpaenidae, 512–13
Scorpionida (scorpions), 505–6
Scorpaenidae, 512–13
Sea anemones, 507
Sea urchins, 510–11
Scyphozoa, 509
self-assessment, 17, 83
self-contained underwater breathing apparatus (SCUBA)
sympathetic nervous system, 520
skin damage, laser radiation, 211–12
skin disorders, 520, 529
skin prick testing, 255, 425, 431, 435, 453, 520, 521, 523, 525, 527–32, 534–6, 538–40
skin reactions, 252–3, 255, 415, 502, 522, 526, 527, 539
skin tests, 253, 256, 265, 266, 269, 412–16, 419, 421, 422, 437, 443, 448, 453, 483, 509, 520, 521, 523, 525, 532, 535, 536, 540
sleep debt considerations, 142
sleep deprivation, 142–4, 146, 155, 158–60, 162, 163, 223
sleep hygiene, 158, 160, 161
slow-twitch fibers, 20
smallpox, 243, 270, 273, 338–41
snake envenomations, 513–18
snow blindness, 104, 105
solar urticaria, 199, 206
sound, 3, 46, 125, 126, 163, 223–230, 234, 532, 550, see also noise
underwater, 117
sound intensity, 125, 224
sound pressure level (SPL), 224, 225
specific absorption rate (SAR), 215, 216, 218
spine, physiology, 34
*Spirillum minor*, 392–3
spontaneous abortion, 151, 235, 320, 335, 504
*Sporothrix schenckii*, 426, 449–50
sporotrichosis, 449–50
Stachybotrys chartarum, 426, 450–1
standard threshold shifts (STS), 125, 228, 229
Staphylococcus, 399–400
starfish, 510–11

rotator cuff tendinitis, 13, 26
rubella virus, 334–5
safety devices, 83–4, 314
SAFETY surveillance, 79, 81
*Salmonella*, 266, 394–7
sanitization, 264, 453
saturation diving, 112, 119, 124–5
Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR), 220
*Scorpaenidae*, 512–13
Scorpionida (scorpions), 505–6
Scorpaenidae, 512–13
Sea anemones, 507
Sea urchins, 510–11
Scyphozoa, 509
self-assessment, 17, 83
self-contained underwater breathing apparatus (SCUBA)
sympathetic nervous system, 520
skin damage, laser radiation, 211–12
skin disorders, 520, 529
skin prick testing, 255, 425, 431, 435, 453, 520, 521, 523, 525, 527–32, 534–6, 538–40
skin reactions, 252–3, 255, 415, 502, 522, 526, 527, 539
skin tests, 253, 256, 265, 266, 269, 412–16, 419, 421, 422, 437, 443, 448, 453, 483, 509, 520, 521, 523, 525, 532, 535, 536, 540
sleep debt considerations, 142
sleep deprivation, 142–4, 146, 155, 158–60, 162, 163, 223
sleep hygiene, 158, 160, 161
slow-twitch fibers, 20
smallpox, 243, 270, 273, 338–41
snake envenomations, 513–18
snow blindness, 104, 105
solar urticaria, 199, 206
sound, 3, 46, 125, 126, 163, 223–230, 234, 532, 550, see also noise
underwater, 117
sound intensity, 125, 224
sound pressure level (SPL), 224, 225
specific absorption rate (SAR), 215, 216, 218
spine, physiology, 34
*Spirillum minor*, 392–3
spontaneous abortion, 151, 235, 320, 335, 504
*Sporothrix schenckii*, 426, 449–50
sporotrichosis, 449–50
Stachybotrys chartarum, 426, 450–1
standard threshold shifts (STS), 125, 228, 229
Staphylococcus, 399–400
starfish, 510–11
INDEX

wiring code configurations (WCC), 219
wood dust, 425, 522, 563–6
  diagnosis, 565
  exposure (route), 563
  medical surveillance, 565
  occupational setting, 563
  pathobiology, 563–5
  prevention, 565–6
  treatment, 565
wood pulp workers’ disease, 425
worker protection, 6–11, 417, 419
workers’ compensation (WC) loss/claim data, 76
working level months (WLM), 181, 186
work, mathematical expressions of, 4, 5

Yellow fever, 266, 268, 270, 275-280
Yersinia enterocolitica, 402, 409–10

Yersinia pestis, 407–9
Yersinia pseudotuberculosis, 408–10
Zika virus, 267, 275, 277, 278-280
zoonotic infections, 246–7, 356, 363, 396, 550
Zostavax, 345
Zygomycetes, 453–4