

# Index



## A

- ABCD, of malaria protection, 71
- Abortion  
prohibitions in, 199-200  
spontaneous, 193, 340
- Abscess of the liver. *see* Amebic liver abscess (ALA)
- ABU. *see* Asymptomatic bacteriuria (ABU)
- Acanthocheilonema perstans*. *see* *Mansonella perstans*
- Accidental injury, 18-19
- Accidental poisoning, 180
- Acclimatization, to heat, 133
- Acetaminophen, with codeine, 12*t*-14*t*
- Acetazolamide (Diamox), 211-212  
for acute altitude illness, 144*t*  
in medical kits, 12*t*-14*t*
- Acid-fast bacilli, 262, 356  
smear and culture, 362
- ACIP. *see* Advisory Committee for Immunization Practices (ACIP); American Committee on Immunization Practices (ACIP)
- ACOG. *see* American College of Obstetricians and Gynecologists (ACOG)
- Acquired immunodeficiency syndrome (AIDS)  
in cryptosporidiosis, 440  
traveler's risks of, 15  
traveling by PHAs, 215-216  
and tuberculosis, 357
- Acrodermatitis chronica atrophicans, 348
- Actinomycetoma, 496-497, 497*f*
- Active tuberculosis, 230*t*, 256, 261, 356
- ACTs. *see* Artemisinin-based combination therapies (ACTs)
- Acupuncture, 128
- Acute atrophic glossitis, 494
- Acute liver failure, and viral hepatitis, 325
- Acute mountain sickness (AMS), 140-141, 142*t*  
in children, 180-181  
during pregnancy, 211-212
- Acute paronychia, 468
- Acute skin reactions, 460-475
- Acyclovir, 549*t*
- Adefovir, 332
- Adenolymphangitis (ADL), 576
- Adenopathy  
febrile illnesses with, 280*t*  
in filarial infections, 581  
hilar, 360  
inguinal, 545  
lymphadenopathy. *see* Lymphadenopathy  
mediastinal, 360  
nonsuppurative inguinal, 536
- Adhesive tape test, for *Enterobius*, 557
- Adjustment disorders, 247
- ADL. *see* Adenolymphangitis (ADL)
- Adolescent travelers, 180
- Adrenaline. *see* Epinephrine
- Advair, for asthma, 232-233
- Advanced deeper scuba diving, 153
- Adventure travel, 11
- Advisory Committee for Immunization Practices (ACIP), 262
- Aedes aegypti* mosquito, urban risks of, 18
- Aedes albopictus*, 31
- Aedes* mosquitoes, 6*t*-7*t*, 29, 31
- Aedes* spp., 288, 289*t*
- AEDs. *see* Automatic external defibrillators (AEDs)
- Aeromonas*, 114  
in returned traveler's diarrhea, 418*t*, 420, 426
- Aerosols, aircraft cabin microbial, 38
- African trypanosomiasis, 273*t*, 294, 382-390  
chance in, 383, 385*f*  
clinical manifestations of, 383-385  
epidemiology, 382  
pathogen/lifecycle, 383, 384*f*  
prevention of, 389  
routes of Trypanosome infection in, 385*t*  
testing and diagnosis of, 385-386, 386*f*

- African trypanosomiasis (*Continued*)  
 treatment of, 386-389, 387*t*  
*T.b. gambiense*, 387-388  
*T.b. rhodesiense*, 388-389
- Africa's population, 17
- Afterdrop, 131
- Agomelatine, 124
- AIDS. *see* Acquired immunodeficiency syndrome (AIDS)
- Air Carrier Access Act of 1986, 41, 229
- Air embolism, 153
- Air flow, in aircraft cabin, 38*f*
- Air pollution, 20-22, 232
- Air quality, in high altitude, 139
- Air travel  
 behavioral problems during, 44-45  
 with chronic medical conditions, 228  
 communicable disease transmission and, 39-40  
 contraindications to, 230*t*  
 deep venous thrombosis and, 41-42, 42*t*-43*t*  
 disability discrimination and, 229  
 supplemental oxygen during, 40-41
- Air-borne diseases, 32-33
- Air-borne infection, 290*t*
- Air-borne organisms, 218
- Aircraft  
 cabin air quality, 36-39, 37*t*  
 communicable diseases on, 39-40
- Air-hammer effect, 159
- Airline travel, with children, 166
- Airlines, pregnant women and, 203-204
- Airplane, motion sickness on, 126
- ALA. *see* Amebic liver abscess (ALA)
- Alanine aminotransferase (ALT), 322*f*-323*f*, 327, 328*f*, 332  
 in Ebola virus disease, 396
- Albendazole, 570-571, 604
- Albuterol, 232-233
- Alcohol  
 effects on diving, 156*t*  
 use among drivers, 19, 263*t*
- Alcohol abuse, 246
- Alcohol use  
 among students, 189  
 disorders, 244, 246-247  
 consequences of, 246-247
- Aleppo boil. *see* Old World cutaneous leishmaniasis (OWCL)
- "Alien", 261
- Allergic contact dermatitis, 462-463
- Allergic reactions, medical kit items for, 12*t*-14*t*
- Allergies, students traveling with, 187-188
- ALT. *see* Alanine aminotransferase (ALT)
- Altitude  
 boiling temperature and, 95*t*  
 decline in blood oxygen, 230-231, 231*t*  
 diabetes and, 237-240  
 gynecologic concerns at, 201  
 high  
 definition of, 138  
 environment at, 138-139
- Altitude (*Continued*)  
 environmental features of, underlying medical condition and, 147  
 medical conditions and, 148*t*-149*t*  
 normal responses to, 140, 140*t*  
 potentially at-risk traveler to, 146-149  
 return travel to, 149-150  
 returning traveler from, 143-146  
 travel to, 138-151  
 pregnancy and, 211
- Altitude illness, acute  
 in children, 180-181  
 clinical features and management of, 142*t*  
 prevention of, 141-143  
 nonpharmacologic measures in, 141-143  
 pharmacologic measures in, 143, 144*t*  
 recognition of, 140-141  
 risk categories for, 145*t*  
 risk factors for, 141  
 treatment of, 143
- Altitude-naïve traveler in, 140-143
- Amebiasis, 217*t*, 272*t*-273*t*, 294  
 extraintestinal, 430  
*see also* Amebic liver abscess (ALA)  
 intestinal, 429  
 during pregnancy, 201
- Amebic dysentery, 294, 600
- Amebic liver abscess (ALA), 273*t*, 275, 294, 326, 431
- Amebomas, 430
- American Academy of Pediatrics, 213
- American College of Obstetricians and Gynecologists (ACOG), 204
- American Committee on Immunization Practices (ACIP), 48, 50  
 in meningococcal serogroup B vaccine, 62-63  
 in meningococcal vaccine, 57
- American Diabetes Association, 235
- American Heart Association, 235
- American Society of Heating Refrigeration and Air Conditioning Engineers, 38-39
- American trypanosomiasis. *see* Chagas disease
- Americans with Disabilities Act, 41
- Aminoglycosides, tetracycline plus, 273*t*
- Amiodarone, 380
- Amnesic shellfish poisoning, 455
- Amodiaquine, 85
- Amoxicillin, 342-343, 351
- Amphotericin B, 496  
 deoxycholate, for leishmaniasis, 508*t*, 510-511
- Ampicillin, 273*t*, 342-343
- AMS. *see* Acute mountain sickness (AMS)
- Anaphylaxis, 461*t*
- Ancylostoma braziliense*, 479, 560
- Ancylostoma duodenale*, 555, 558*t*. *see also* Hookworm
- Anemia  
 air travel and, 230*t*  
 malaria and, 257-258, 304*t*, 305, 311-312  
 pregnant women and, 203  
 in trypanosomiasis, 385

- Angina  
 air pollution and, 20  
 air travel and, 230t, 234-235
- Angioedema, 461t, 465
- Angiostrongyliasis, cerebral, 600, 604  
*Angiostrongylus cantonensis*, 281t-282t, 604
- Angular cheilitis, 494
- Anicteric leptospirosis, 339-340
- Animal bites, 180
- Animal contact, diseases from, 276t-277t
- Animal-to-human transmission, 29
- Anisakiasis, 272t, 560-562  
*Anisakis simplex*, 558t, 560-561
- Anopheles* mosquitoes, 6t-7t, 71-72, 173-175
- Anthrax, 272t-273t, 296  
 cutaneous, 473
- Anti-HAV, 322f, 328
- Anti-HBs, 323f, 325, 328f-329f, 330
- Antibiotic-resistant bacteria, in returning travelers, 401-407
- Antibiotics  
 agricultural use of, 402  
 empiric antibiotic treatment for traveler's diarrhea, 118-119  
 for gastrointestinal illness, 446  
 injudicious use of, in human medicine, 402  
 interactions with oral contraceptives, 199  
 interactions with vaccines, 175t  
 in leprosy, 519  
 in leptospirosis, 342-343  
 macrolide, 351  
 ointment, in medical kits, 12t-14t  
 post-exposure prophylaxis in Lyme disease, 353  
 prophylaxis for traveler's diarrhea, 115-116  
 resistance, overview of, 401-402  
 in returned traveler's diarrhea, 415-416  
 suggestions for medical kits, 12t-14t  
 for traveler's diarrhea, 179  
 wise use of, 404
- Antibody testing, for African trypanosomiasis, 385-386
- Anticoagulants, 122  
 effects on diving, 156t  
 and point of care testing, 411
- Anticoagulation therapy, 11
- Anticonvulsants, for motion sickness, 128
- Antidepressants, effects on diving, 156t
- Antifungal treatments, in medical kits, 12t-14t
- "Antigenic drift", 50
- Anthelmintic drugs, 558t
- Antihistamine tablets, in medical kits, 12t-14t
- Antihistamines  
 effects on diving, 156t  
 for motion sickness, 127
- Antimalarial drugs, 73-75, 77t-78t, 307-309
- Antimalarials, effects on diving, 156t
- Antimicrobial resistance, 285
- Antimicrobial stewardship, 402  
 principles of, 403t
- Antimony, for leishmaniasis, 511
- Antimotility medications, 178
- Antiperistaltic medications, 117t, 118, 209
- Antiseptic solution, in medical kits, 12t-14t
- Antitrypanosomal agents, 379-380, 379t
- Antiviral therapies, in hepatitis, 332
- Antivirals  
 in genital herpes, 549  
 HIV and, 219-220  
 for NPEP starter kit, 201
- Arboviral diseases, 285-288, 286t-287t  
 dengue. *see* Dengue
- Arbovirus infections, 278t
- Arobacter*, returned traveler's diarrhea and, 426-427
- Argasidae, 482
- Argentine hemorrhagic fever (Junin), 273t, 279t, 286t-287t, 289t
- Armodafinil, 124, 124t
- Arrhythmias  
 air pollution and, 21  
 air travel contraindication, 230t  
 drug-induced, 220  
 in leptospirosis, 340
- Artemether, 591
- Artemether-lumefantrine (Coartem<sup>®</sup>, Riamet<sup>®</sup>), 77t-78t, 87, 307, 308t
- Artemisinin, 311  
 derivatives, 85
- Artemisinin-based combination therapies (ACTs), 307, 591
- Artemisinin-resistant *P. falciparum* malaria, 32
- Artery bypass surgery, 234-235
- Artesunate, 85
- Arthritis, 286t-287t  
 in cervicitis, 531  
 Lyme, 345, 348, 351  
 rheumatoid, 350
- Arthropod bites, 464-466
- Arthropod-borne diseases, 6t-7t
- Artificial hip joints, 241
- Ascariasis, 272t, 327, 555
- Ascaris*, intestinal obstruction due, 558
- Ascaris lumbricoides*, 210t, 278-279, 554, 556t, 558t
- Ascaris suum* ("pig roundworm"), 555, 556t
- Ascorbic acid, 105
- Aspartate aminotransferase (AST), 327  
 in Ebola virus disease, 396
- AST. *see* Aspartate aminotransferase (AST)
- Asthma  
 air pollution and, 21, 232  
 and high-altitude travel, 148t-149t  
 medical kit items for, 12t-14t  
 travel advice for patients with, 229-233
- Asymptomatic bacteriuria (ABU), 405-406
- Athlete's foot. *see* *Tinea pedis*
- Atovaquone, 81  
 plus azithromycin, 351
- Atovaquone-proguanil (Malarone<sup>®</sup>), 77t-78t, 80-82, 87  
 contraindication of, 82  
 controlled trials of, 81-82  
 for expatriate and volunteers, 255

- Atovaquone-proguanil (Malarone<sup>®</sup>) (Continued)  
 HIV-infected persons and, 225  
 for infants and children, 176, 176t-177t  
 for malaria, 307  
 during pregnancy, 209
- Atrioventricular block, and Lyme disease, 349
- Atropine sulfate, 118
- Attapulgit, 118
- Automatic external defibrillators (AEDs), 44, 234
- Automobile travel, pregnant women and, 204
- Avian flu H5N1 virus, 40
- Avian influenza H7N9 virus, 40
- Aviation Medical Assistance Act of 1998, 43-44
- Azithromycin, 116, 117t, 118-119, 351, 533t  
 atovaquone plus, 351  
 in chancroid, 551, 551t  
 in chlamydia, 533  
 in gonococcal and chlamydial genital infections, 532-533  
 in granuloma inguinale, 553  
 in medical kits, 12t-14t  
 for pediatric traveler's diarrhea, 179  
 during pregnancy, 209  
 in syphilis, 541  
 for traveler's diarrhea, 186-187
- B**
- Babesiosis, 351
- Bacillus anthracis*, 296, 473. *see also* Anthrax
- Bacillus Calmette-Guérin* (BCG). *see* BCG  
 (*Bacillus Calmette-Guérin*)
- Bacillus cereus*, in food poisoning, 445t, 446
- Backpack traveler, 185
- Bacteremia, 216-217, 559  
 HIV and, 223
- Bacteria, enteric, 91-92
- Bacterial dysentery, 278t
- Bacterial infections, 460-475  
 bacteremia. *see* Bacteremia  
 causing meningitis and encephalitis, 281t-282t  
 causing organomegaly and/or lymphadenopathy, 280t  
 enteric bacteria, 559  
 with eosinophilia, 607  
 with fever, 283t, 295-296  
 potentially fatal febrile tropical infections and treatments, 273t  
 with severe malaria infections, 305  
 skin, 466
- Bacterial pathogens  
 emerging, 426-427  
 notable, 425-426
- Bacterial spores, heat inactivation of, 94, 94t
- Bacterial vaginosis, 195t-196t, 198
- Bacteriuria, asymptomatic, 405-406
- Bacteroides*, returned traveler's diarrhea and, 427
- Baermann funnel gauze method, 557
- Balantidiasis, 441
- Balantidium coli*, 441
- Ball-valve effect, 158-159
- Bancroftian filariasis*, 276t-277t, 575, 605
- Bandages, in medical kits, 12t-14t
- Barbeiros*, 373
- Barometric pressure, in high altitude, 138-139
- Barotrauma, 158-162, 166
- Barrier cream, 180
- Bartonellosis, 273t, 296  
 urban risks of, 18
- BCG (*Bacillus Calmette-Guérin*)  
 HIV-infected persons and, 218, 222t  
 vaccination, 68-69, 173, 359-360, 366, 369
- Beef tapeworm. *see* *Taenia saginata* (beef tapeworm)
- Behavioral problems, during air travel, 44-45
- Benadryl (diphenhydramine), in medical kits, 12t-14t
- Bends. *see* Decompression sickness (DSC)
- Bends prone individual, 154-155
- Benzathine penicillin, 542t, 543
- Benznidazole, 294, 379, 379t
- Beta-blockers, effects on diving, 156t
- Bicudos*, 373
- Bilharzia. *see* Schistosomiasis
- Biliary carcinoma, primary, 593
- Biliary obstruction, acute, 592
- Biliary tract disease, 327
- Biopsy, in tropical dermatology, 458
- Biotoxins, marine, 451, 455
- Bismuth subsalicylate (BSS), 115, 115t, 117, 117t  
 for children, 178  
 during pregnancy, 209  
 Reye syndrome risk from, 115
- Bites, animal, 180
- Black flies, diseases from, 6t-7t
- Black piedra, 478, 495
- Black widow spider, 466
- Blastocystis hominis*, 442
- Bleeding, spontaneous, 275-278, 279t
- Blister pads, in medical kits, 12t-14t
- Blood glucose, testing of, 236-238
- Blood oxygen tension, 230-231, 231t
- Blood tests, in amebiasis, 432
- Blood transfusion  
 and Chagas disease, 374  
 emergency, 11
- Boarding, denial of, 41
- Body lice, 477-479
- Body lice-borne diseases, 6t-7t
- Boeing 787 Dreamliner, 36-37
- Boiling temperature, and altitude, 95t
- Bolivian hemorrhagic fever (Machupo), 273t
- Bone mass, lack of, 228-229
- Booster doses  
 of hepatitis A vaccine, delayed, 59  
 of rabies vaccines, 64  
 of yellow fever vaccine, 51
- Borderline tuberculoid, 514f
- Borderline/dimorphous leprosy (BB), 518f
- Borrelia burgdorferi*, 345
- Borreliosis, Lyme, 32
- Botfly myiasis, 480
- Botulinum toxin E, 454

- Botulism, 444, 447-448  
   antitoxin, 448  
   clinical presentation of, 447  
   diagnosis of, 447-448  
   etiology of, 447  
   infant, 444, 449  
   outbreak management of, 448  
   prevention of, 448  
   treatment of, 448  
 Boyle's law, 152, 158  
 BRAT diet, 179-180  
 Brazilian purpuric fever, 273*t*  
 Breast cancer, 213  
 Breast feeding, travel issues and, 212-213  
 Breathing, periodic, 140  
 Bright light exposure, for jet lag, 125, 125*t*  
 Brincidofovir, for Ebola virus disease, 398  
 Bronchospasm/asthma, medical kit items for, 12*t*-14*t*  
 Brown recluse spider, 466  
   bites, 464  
 Brucellosis, 273*t*, 295  
*Brugia malayi*, 574-575, 577*f*, 605  
*Brugia timoni*, 574-575, 577*f*  
 BSS. *see* Bismuth subsalicylate (BSS)  
 Buboes, 550-551  
 Bugs, triatomine, 371-373, 372*f*  
   popular regional names for, 373*t*  
 Bullae, of primary lesions, 458*b*  
 Bullous impetigo, 467  
 "Bum bags", 23  
 Bureau of Consular Affairs, 23-24  
*Burkholderia pseudomallei*, 473-474  
 Buruli ulcer, 470-471  
 Bush meat, 29  
 Butyrophenones, 135
- C**
- Cabin air quality, 36-39, 37*t*  
   contamination, 38-39  
   humidity, 39  
   pressurization, 36-37  
   temperature, 39  
   ventilation, 37-38, 38*f*  
 Cabin conditions  
   humidity of, 230  
   pressurization of, 229-230  
 Calabar swellings, 584-585, 604  
 Calcium gluconate, 487  
 Calcium hypochlorite, 103*t*-104*t*  
*Campylobacter*, 216-217, 217*t*  
   *C. jejuni*, 114  
   in returned traveler's diarrhea, 415-416, 420, 422, 424  
   and traveler's diarrhea, 113-114, 118  
   water-borne outbreaks of, 91  
*Campylobacter jejuni*, in returned traveler's diarrhea, 418*t*, 424  
 Campylobacteriosis  
   diagnosis of, 424  
   risk of infection in developing countries, 272*t*
- Cancer  
   air pollution and, 21-22  
   skin, 181  
   travel and, 252  
*Candida albicans*, 198, 493  
 Candidal balanitis, 494  
 Candidal intertrigo, 494  
 Candidal vulvovaginitis, 494  
 Candidiasis, cutaneous, 493-495  
 Capreomycin, 362-364  
 Carbon dioxide, in aircraft cabin, 38-39  
 Carbon monoxide, 20  
 Carboxyhemoglobin (COHB), 20  
 Carcinoma  
   of the bladder, 590  
   of colon, 600  
   hepatocellular, 325, 332  
   primary biliary, 593  
 Card agglutination test for *T.b. gambiense* (CATT), 385-386  
 Cardiac defibrillators  
   automated external defibrillators, 234  
   implantable, 235  
 Cardiac events, 233  
 Cardiac pacemakers, 235  
 Cardiac system, hypobaric hypoxia and, 139*t*  
 Cardiomyopathy, in Chagas disease, 376  
 Cardiovascular disease  
   heat illness and, 22  
   travel advice for patients with, 233-235  
 Cardiovascular problems, expatriate and volunteers and, 257  
 Cardiovascular system, immersion and, 158  
 Caribbean ciguatoxin (C-CTX-1), 452-453  
*Carukia bamesi*, 485*t*  
 Case, waterproof, for travelers, 12*t*-14*t*  
 Catecholamines, 132  
 CATT. *see* Card agglutination test for *T.b. gambiense* (CATT)  
 C-CTX-1. *see* Caribbean ciguatoxin (C-CTX-1)  
 CDC. *see* Centers for Disease Control and Prevention (CDC)  
 Cefixime, 533*t*  
 Cefotaxime, 342-343  
 Cefotetan, 532*t*  
 Cefoxitin, 532*t*  
 Ceftazidime, 273*t*  
 Ceftriaxone, 342-343, 532-533, 532*t*-533*t*  
   in chancroid, 551, 551*t*  
   in syphilis, 541  
 Cefuroxime axetil, 351  
 Cell-mediated responses, in amebiasis, 430  
 Cellular dust, 154-155  
 Cellular immunity, in *Giardia lamblia*, 435  
 Cellulitis, 468  
 Centers for Disease Control and Prevention (CDC)  
   Chagas disease consultation, 378  
   chancroid treatment recommendations, 551  
   immunizations, 48  
   information on malaria, 301

- Centers for Disease Control and Prevention (CDC) (*Continued*)
- Lyme disease surveillance, 347
  - in malaria, 5
  - person under investigation for Ebola, 397
  - schistosomiasis testing, 591
  - website travel and disease information, 2, 301
- Central nervous system disease with schistosomiasis, 590-591
- Central nervous system dysfunction, 279
- Central nervous system syphilis, diagnosis of, 540-541
- Cephalexin, 213
- Cercariae, 483-484
- Cercarial dermatitis, 483-484
- Cerebral angiostrongyliasis, 604
- Cerebral edema, high-altitude, 140-141, 142*t*
- Cerebral malaria, 304
- Cerebrospinal fluid (CSF), 600
  - and African trypanosomiasis, 383-385
  - testing of, 386
  - evaluation, in neurosyphilis, 537
  - in leptospirosis, 342
- Cervicitis, 531
- Cestode infections, 564-573, 605-606
- Cestodes, effects on reproduction, 210*t*
- Chagas disease, 272*t*, 294, 371-381
  - blood cultures for, 378
  - clinical features of, 375-377, 377*t*
  - diagnosis of, 378
  - distribution of, 372*f*
  - epidemiology of, 371-374
  - evaluation, 378
  - and HIV, 376-377
  - in immunosuppressed patients, 376-377
  - parasite detection methods for, 378
  - polymerase chain reaction for, 378
  - prevention of, 380-381
    - for persons living in endemic areas, 380
    - for persons traveling to endemic areas, 380-381
  - prognosis of, 380
  - reservoir hosts, 373
  - serologic detection methods for, 378
  - symptomatic chronic, 376
  - transmission of
    - by breast feeding, 374-375
    - congenital, 374-375
    - related to transfusions and organ transplants, 374
    - by vector, 373-374
  - treatment for, 378-380
    - antitrypanosomal agents in, 379-380, 379*t*
    - symptomatic, 380
    - urban risks of, 18
    - vectors of, 372-373, 372*f*
- Chancere
  - of primary syphilis, 536, 536*f*
  - trypanosomal, 383, 385*f*
- Chancroid, 261, 263*t*, 272*t*, 546*t*, 550-551, 551*t*
- Chaperone, role of, 187
- Charcot-Leyden crystals, 600
- Chemicals, for water disinfection, 97-106
- Chemoprophylaxis
  - for leptospirosis, 343
  - for malaria, 4-5
    - prevention, in children, 175-177, 176*t*
    - for traveler's diarrhea, 115, 115*t*, 224-225
- Chemotherapeutic agents, for tuberculosis, 362-364, 363*t*, 366
- Chemotherapy, fever after, 292*t*
- Chickenpox, 3-4, 48, 540*t*
- Chiclero ulcer, 505
- Chikungunya virus, 29-31, 173, 272*t*, 281*t*-282*t*, 286*t*-287*t*, 287
- Child restraint systems, 166
- Children
  - Giardia lamblia* in, treatment of, 439
  - traveling with. *see* Pediatric travelers tuberculosis in, 359-360
- Chimeric vaccine (CV) (Imojev™), for expatriate and volunteers, 254
- Chironex fleckeri*, 485*t*, 486
- Chlamydia, 272*t*
  - treatment of, 532-533, 533*t*
- Chlamydia trachomatis*, 529
- Chlamydial genital infections, 529-534
- Chloramphenicol, 273*t*
- Chlorination, for water disinfection, 103*t*-104*t*
- Chlorine, for water disinfection, 102*t*-104*t*, 105
- Chlorine dioxide, 97, 104, 106, 109*t*
- Chloroquine, 75, 255
  - for children, 175-176
  - for malaria, 307
  - for malaria prophylaxis, 244
  - mefloquine-resistant zones and, 84
  - phosphate, 77*t*-78*t*, 176*t*
  - plus proguanil, 85
  - in pregnancy, 311
- Chloroquine base, for *Entamoeba histolytica* infections, 433*t*
- Chloroquine phosphate, during pregnancy, 209
- Chloroquine-resistant *Plasmodium falciparum* (CRPF), 74-75, 300-301
  - malaria, 5
  - treatment in pregnancy, 311
- Chloroquine-resistant zones, 80-84
- Cholangiocarcinoma, 593
- Cholangitis, recurrent pyogenic, 592-593
- Cholera, 425
  - enteric infection risks, 217*t*
  - heat inactivation of *Vibrio cholerae*, 94*t*
  - minimal infectious dose of *Vibrio cholerae*, 92*t*
  - risk areas, 4
  - risk of infection in developing countries, 272*t*
  - survival in water of *Vibrio cholerae*, 92*t*
  - water-borne outbreaks of, 91
- Cholera vaccine, 4, 51, 58, 62
  - HIV-infected persons and, 224
  - killed whole-cell B subunit oral, 62
  - killed whole-cell bivalent (O1 and O139 Serogroups) oral, 62

- Cholera vaccine (*Continued*)  
oral, 113-114  
CVD103-HgR, 174t  
during pregnancy, 206
- Chorioretinitis, 209, 339-340, 582
- Chromoblastomycosis, 495-496
- Chronic diseases, malaria with, 312
- Chronic gastrointestinal symptoms, in giardiasis, 440
- Chronic illness, students traveling with, 187-188
- Chronic medical conditions, travel with, 228-242
- Chronic obstructive pulmonary disease (COPD)  
air pollution and, 22  
and high-altitude travel, 148t-149t  
travel advice for patients with, 229-233
- Chronic strongyloides infections, 559
- Chrysaora*, 485t
- Chrysonyia bezziana*, 481
- CIESM Jellywatch Program, 155-156
- Ciguatera fish poisoning, 452-453
- Ciguatoxin, 452-453
- Ciprofloxacin, 187, 295, 405  
in chancroid, 551, 551t  
in granuloma inguinale, 553  
HIV-infected persons and, 224-225  
in medical kits, 12t-14t  
for pediatric diarrhea, 179  
during pregnancy, 209  
prevention of traveler's diarrhea, 224-225  
for traveler's diarrhea, 115t, 117t, 118  
in treatment of typhoid fever, 273t
- Circadian rhythms, 121  
resetting with bright light, 125t
- Circulating parasite antigen, detection of, 578
- Cisapride, 220
- Citrus, for water disinfection, 107
- Clarification, of water, 97
- Clarithromycin, 351, 519
- Classic heat stroke, 135
- Clindamycin  
plus gentamicin, 532t  
plus quinine, 351
- Clinical Laboratory Improvement Amendments of 1988 (CLIA 88), 409-410
- Clofazimine, 519, 521-522
- Clonorchiasis, 272t
- Clonorchis sinensis*, 210t, 327, 589t, 593t, 607
- Clostridium botulinum*, 454  
in food poisoning, 444, 445t, 447-448
- Clostridium difficile*, 415-416, 418t, 420, 426
- Clostridium perfringens*, in food poisoning, 444, 445t, 446-447
- Clostridium* spores, 94
- Clotrimazole, 490, 493
- CMV. *see* Cytomegalovirus (CMV)
- Cnidarian envenomation, 484-487, 485t, 486f
- Coartemether, 87
- Coccidioidomycosis, 218, 297
- Cochliomyia hominivorax*, 481
- Codeine, acetaminophen with, 12t-14t
- COHB. *see* Carboxyhemoglobin (COHB)
- Cold exposure, 129-132
- Cold water, halogens and, 101
- Colitis, ulcerative, 600
- Colonization, silent, 404-405
- Colonoscopy, in intestinal amebiasis, 431
- Commission Internationale pour l'Exploration Scientifique de la Mer Méditerranée, 155-156
- Communicable diseases, on aircraft, 39-40
- Compazine (prochlorperazine), in medical kits, 12t-14t
- Complaint Resolution Official (CRO), 41
- Compromised immune systems, students traveling with, 188
- Condoms, 200-201, 526  
female, 200-201, 527  
latex, 526  
in medical kits, 12t-14t
- Confusion, heat injury and, 134
- Congestive heart failure, 135, 340  
air travel contraindication, 234-235  
in Chagas disease, 376, 380  
and high-altitude travel, 148t-149t
- Conjunctival suffusion, 336, 339
- Contact dermatitis, 462-463
- Contamination, 38-39
- Contraception, 195t-196t  
altitude and, 201  
emergency, 199-200, 200t  
oral contraceptive considerations, 198-199  
pre-travel advice for, 198-200
- COPD. *see* Chronic obstructive pulmonary disease (COPD)
- Coronary artery bypass surgery, 234-235
- Coronary artery disease, and high-altitude travel, 148t-149t
- Corticosteroids, 293
- Cough suppressant, in medical kits, 12t-14t
- Coxsackievirus, 326
- Cramps, heat, 134
- Creatinine kinase, in Ebola virus disease, 396
- Crime, in urban cities, 23-24
- Crimean-Congo hemorrhagic fever, 272t-273t
- "Criteria pollutants", 20
- CRO. *see* Complaint Resolution Official (CRO)
- Crohn disease, returned traveler's diarrhea and, 416-417
- Crotamiton cream, for scabies, 477
- CRPF. *see* Chloroquine-resistant *Plasmodium falciparum* (CRPF)
- Cruise ship lines, emergency medical care in, 10
- Crusted scabies, 477
- Cryotherapy, for leishmaniasis, 508t
- Cryptosporidiosis, 216-217, 217t, 272t, 440-441
- Cryptosporidium*, 429, 440-441  
chlorine dioxide inactivation of, 106  
electrolysis inactivation of, 106  
filtration susceptibility of, 96t  
halogens for, 101t  
heat inactivation of, 94t

- Cryptosporidium* (Continued)  
 minimal infectious dose of, 92t  
 returned traveler's diarrhea and, 416, 421  
 survival in water, 92t  
 and traveler's diarrhea, 114  
 water-borne outbreaks of, 91
- CSF. *see* Cerebrospinal fluid (CSF)
- Culex fatigans*, 575
- Culex* mosquitoes, 6t-7t, 254
- Culicoides furens*, 585-586
- Culicoides* midges, 6t-7t
- "Culture shock", 247
- Cutaneous anthrax, 473
- Cutaneous candidiasis, 493-495
- Cutaneous diphtheria, 472
- Cutaneous larva migrans, 479, 480f
- Cutaneous leishmaniasis, 219, 501-509  
 diagnosis of, 505-506  
 distribution of, 501-503, 502f  
 New World, 503-505, 504t, 505f, 507-509  
 Old World, 503, 504f, 507  
 treatment of, 506-509, 507t-508t  
 zoonotic, urban risks of, 18
- Cutaneous melioidosis, 473-474
- Cutaneous tularemia, 472-473
- CVD103-HgR, 174t
- Cyanea*, 485t
- Cyclizine, 127, 127t
- Cycloserine, 362-364
- Cydospora*, 217t  
 filtration susceptibility of, 96t  
 returned traveler's diarrhea and, 416  
 treatment for, 117t
- Cydospora cayetanensis*, 441-442  
 and traveler's diarrhea, 114
- Cyclosporiasis, 272t
- Cysticercosis, 564-573, 601t  
 neurocysticercosis, 569  
 racemose, 570
- Cysticercus cellulosae*, 568
- Cystoisospora belli*, 441
- Cytomegalovirus (CMV), 326, 332  
 infections, 297
- D**
- Dane particle, 318
- Dapsone, 466, 519, 519t  
 pyrimethamine plus, 86
- Death penalty, illicit drug use and, 25
- Deaths  
 caused by air pollution, 20  
 heat-related, 22  
 of international travelers, 18
- DEC. *see* Diethylcarbamazine (DEC)
- Dechlorination, for water disinfection, 105
- Decompression sickness (DSC), 154-157
- Decongestant tablets, in medical kits, 12t-14t
- Decongestants, effects on diving, 156t, 161-162
- Deep venous thrombosis, and air travel, 41-42, 42t-43t
- Deer, arthropod-borne diseases and, 6t-7t
- DEET, in mosquito repellents, 175
- Dehydration, 22, 116, 133  
 early signs of, 178
- Dehydroemetine  
 for *Entamoeba histolytica* infections, 433t, 434  
 side effects of, 434t
- Dengue, 173, 255, 272t, 285-287  
 hemorrhagic fever, 285  
 HIV and, 219  
 incubation period of, 275
- Dengue virus, 31
- Dental problems, expatriate and volunteers and, 257
- Department of Health and Human Services, 261
- Dermal myiasis, 480-481
- Dermatitis, 462-463  
 cercarial, 483-484
- Dermatology, tropical, 457-459
- Dermatophyte infections, 488-490
- Dexamethasone, 211-212  
 for acute altitude illness, 144t
- Dextroamphetamine, 127t, 128
- DGI. *see* Disseminated gonococcal infection (DGI)
- Diabetes mellitus  
 altitude and, 237-240  
 and high-altitude travel, 148t-149t  
 travel advice for patients with, 235-241, 236t
- Diaper dermatitis, 180
- Diarrhea  
 approach to, in returned travelers, 415-428  
 clinical presentation of, 416-417  
 diagnostic studies of, 417-422, 417t-418t  
 evaluation of, 416-417  
 exposure history of, 415-416  
 risk factors for, 415-416  
 associate with fever, 278  
 bloody, 178, 209-210, 590  
 in children, 177-180  
 infectious, 422  
 inflammatory, 417t  
 non-inflammatory, 417t  
 persistent, 417t  
 traveler's, 5-8  
 medical kit items for, 12t-14t  
 treatment, medical kit items for, 12t-14t
- Diarrheal syndrome, in food poisoning, 445t
- Diarrhetic shellfish poisoning, 455
- Diazepam, 136, 487
- Dientamoeba fragilis*, 442, 607  
 and traveler's diarrhea, 114
- Diet  
 BRAT, 179-180  
 jet lag, 125
- Diethylcarbamazine (DEC), 579, 600, 605
- Difluoromethylornithine, 273t, 294
- Diloxanide furoate  
 for *Entamoeba histolytica* infections, 433-434, 433t  
 side effects of, 434t
- Dimenhydrinate, 127, 127t, 167t



- Diphenhydramine, 167*t*  
 in medical kits, 12*t*-14*t*
- Diphenoxylate, during pregnancy, 209
- Diphenoxylate HCl, 118
- Diphtheria, 272*t*  
 cutaneous, 472
- Diphtheria immunization, 3-4  
 tetanus, diphtheria, and acellular pertussis (Tdap), 222*t*  
 tetanus and diphtheria (Td), 222*t*
- Diphtheria vaccine  
 pertussis/tetanus (Tdap), 167-168, 169*f*-172*f*  
 during pregnancy, 207-208  
 tetanus/diphtheria/acellular pertussis (Tdap), 48, 49*t*
- Diphyllobothrium latum* (fish tapeworm), 564, 565*t*-566*t*, 571*t*, 605-606
- Diploid cell culture, 207
- Dipylidium caninum*, 565*t*-566*t*, 571*t*
- Directly observed therapy (DOT), 366
- Disabilities, air travel and, 229
- Disequilibrium, 121-137
- Disinfection  
 definition of, 93  
 of water. *see* Water disinfection
- Disseminated gonococcal infection (DGI), 531
- Diuretics, 133, 135  
 traveler's diarrhea and, 119
- Dive accident insurance, 156
- Dive medicine, 152-164  
 after the trip, 162  
 barotrauma in, 158-162  
 decompression sickness in, 154-157  
 preparation for dive travel, 152-154  
 prevention of otitis externa in, 157  
 recreational diving in, 157-158
- Dive travel, preparation for, 152-154
- Divers Alert Network, 152-153
- Dizzy Gillespie sign, 160-161
- Doctors, in foreign country, 9
- Dog bites, 180
- Domoic acid, 455
- DOT. *see* Directly observed therapy (DOT)
- Doxycycline, 82  
 for children, 176, 176*t*  
 contraindicated in pregnancy, 209, 311  
 for expatriate and volunteers, 255  
 in filarial infection, 580  
 in gonococcal and chlamydial genital infections, 532*t*  
 in granuloma inguinale, 553  
 HIV-infected persons and, 225  
 in leptospirosis, 342-343, 351, 353  
 in lymphogranuloma venereum, 552  
 in pelvic inflammatory disease, 532*t*  
 for prevention of traveler's diarrhea, 115-116  
 quinidine plus, 273*t*  
 in syphilis, 542*t*
- Draconian penalties, 25
- Driving, 19, 256  
 alcohol and, 19, 263*t*
- Drowning, 189
- Drug eruptions, 464  
 patterns of, 461*t*
- Drugs  
 effects on diving, 156*t*  
 eosinophilia reactions, 608  
 heat illness and, 22  
 heat stroke and, 135  
 illicit, use of, 24-25  
 interactions between travel and HIV medications, 216*t*, 220  
 interactions with oral contraceptives, 199  
 pregnancy categories of, 204
- DSC. *see* Decompression sickness (DSC)
- Dwarf tapeworm (*Hymenolepis nana*), 565*t*-566*t*, 605-606
- Dysentery  
 amebic, 294, 600  
 bacterial, 278*t*
- Dysfunctional thermoregulatory mechanisms, 22
- Dyspnea, air pollution and, 20
- E
- EAEC. *see* Enterotoaggregative *Escherichia coli* (EAEC)
- Ear fear, 160-161
- Ear plugs, in medical kits, 12*t*-14*t*
- Ear-clearing techniques, 160*t*
- Eastward travel, formula for, 239*f*
- Ebola, Emergency Use Assessment and Listing Procedures for, 413
- Ebola/Marburg hemorrhagic fever, 272*t*
- Ebola Prediction Score, 397
- Ebola virus disease (EVD), 40, 273*t*, 391-400  
 clinical manifestations of, 395-397  
 deaths from, 396  
 diagnosis of, 397  
 discharge criteria for, 396  
 epidemiology and outbreaks of, 394-395  
 overview and transmission of, 394  
 and pregnancy, 399  
 public health measures for, 398-399  
 risk factors for mortality of, 396  
 treatment for, 397-398  
 triage categories for, 398  
 vaccines, 399-400
- EBV. *see* Epstein-Barr virus (EBV)
- Echinococcosis (hydatid cyst), 272*t*, 294, 564-573, 606-607
- Echinococcus granulosus*, 565*t*-566*t*, 571*t*
- Echinococcus multilocularis*, 565*t*-566*t*, 571*t*
- Echinococcus* spp., 210*t*, 564
- Echinococcus vogeli*, 565*t*-566*t*
- Echinostoma* spp., 589*t*, 593*t*, 596
- Ecofix™, alcohol-based, 417-420
- Econazole, 490, 493
- Economy class syndrome, 203
- Ecthyma, 468
- Ectoparasites, 476-479  
 lice, 477  
 scabies, 476-477

- Edema  
 heat, 133  
 lymphedema, 579-580  
 pulmonary, 304-305
- Edwardsiella lineata*, 485*t*
- Eflornithine, 387-388
- Eicosanoids, 154-155
- Electrolysis, for water disinfection, 106
- ELISA (enzyme-linked immunosorbent assay)  
 testing, 342, 378, 569  
 in African trypanosomiasis, 386  
 in eosinophilia, 601*t*, 602  
 in hepatitis, 330, 332  
 in roundworms, 557
- Emergencies, medical  
 in-flight, 43-44  
 information needed, 9-10  
 during travel, 9-11
- Emergency contraception, 199-200, 200*t*
- Emergency medical help, for pregnancy-related illness, 212
- Emergency Use Assessment and Listing procedure, 412
- Emerging infectious disease  
 in 21st century, 28*t*  
 air-borne, 32-33  
 definition of, 27  
 food-and-water-borne, 33  
 information resources for, 34, 34*t*  
 international travelers and, 27-35  
 vector-borne, 29-32  
 zoonoses, 29
- Emerging Infectious Diseases*, 34
- Emetic syndrome, in food poisoning, 445*t*
- Emotional health, expatriate and volunteers and, 256
- Encephalitis, 173  
 heat stroke and, 135  
 important tropical infections causing, 281*t*-282*t*  
 Japanese, urban risks of, 18  
 meningoencephalitis, 219, 286*t*-287*t*, 348-349, 374  
 in African trypanosomiasis, 385
- Encephalopathy  
 hepatic, 325  
 leukoencephalopathy, 348-349  
 in loiasis, 584  
 subacute, 175, 348-349
- Endomyocardial fibrosis, 608
- Enhanced inactivated parenteral polio vaccine, 223
- ENL. *see* Erythema nodosum leprosum (ENL)
- Entamoeba histolytica*, 210*t*, 429-435  
 clinical features of, 430-431  
 diagnosis of, 431-432  
 epidemiology of, 430  
 filtration susceptibility of, 96*t*  
 heat inactivation of, 94*t*  
 pathogenesis of, 429-430  
 prevention of, 435
- Entamoeba histolytica* (Continued)  
 and traveler's diarrhea, 114  
 returned, 416  
 treatment of, 432-435, 433*t*-434*t*
- Entecavir, 332
- Enteric bacteria, 91-92, 559  
 filtration susceptibility of, 96*t*
- Enteric fevers, 284-285
- Enteric infections, 216-217, 217*t*
- Enteric viruses, 91  
 halogens for, 101*t*  
 heat inactivation of, 94*t*  
 minimal infectious dose of, 92*t*  
 survival in water, 92*t*
- Enteroggregative *Escherichia coli* (EAEC), 415, 426
- Enterobiasis, 272*t*
- Enterobius vermicularis* (pinworm), 210*t*, 555, 556*t*, 558*t*
- Enteropathogens, in traveler's diarrhea, 112
- Enterotoxigenic *Bacteroides fragilis* (ETBF), 427
- Enterotoxigenic strains of *Escherichia coli* (EPEC), 415-416, 418*t*, 420
- Environmental heat illness, 133-136
- Enzyme immunoassay (EIA), in intestinal amebiasis, 432
- Eosinophilia  
 clinical features, 598  
 diagnosis of, 599-600  
 eosinophilic gastroenteritis, 599*t*  
 expatriate and, 257-258  
 filarial infection and, 585-586, 600  
 filariasis and, 293  
 helminthic infections with, 598-609  
 laboratory studies in, 600-601, 601*t*  
 less common causes of, 599*t*  
 schistosomiasis and, 257-258, 606-607  
 suspected parasitic infection and, 598-609  
 tropical eosinophilia syndrome, 580-581
- Eosinophilic myeloencephalitis, 604
- Eosinophilic pneumonitis, 590
- Ephedrine, 128
- Ephedrine sulfate, 127*t*
- Epinephrine  
 auto-injectors, in arthropod bites and stings, 466  
 emergency injection of, 12*t*-14*t*
- EpiPen, emergency injection of epinephrine, 12*t*-14*t*
- Epstein-Barr virus (EBV), 272*t*, 297, 326, 332
- Erosions, of primary lesions, 458*b*
- Ertapenem, 405
- Erysipelas, 468
- Erythema migrans, 348, 351
- Erythema necroticans, 521
- Erythema nodosum leprosum (ENL), 514*f*, 519-520
- Erythromycin, 342-343, 351, 532-533  
 in chancroid, 551*t*  
 in granuloma inguinale, 553  
 syphilis and, 542

- Escherichia coli*, 224-225  
 diarrhea, 217*t*  
 enterotoxigenic, 405  
   traveler's diarrhea from, 113-114  
 halogens for, 101*t*  
 heat inactivation of, 94*t*  
 in returned traveler's diarrhea, 420  
 risk of infection in developing countries, 272*t*  
 traveler's diarrhea from, 112  
 in urinary tract infections, 406-407  
 water-borne outbreaks of, 91
- Espundia, 505
- Eszopiclone, 122-123, 124*t*
- ETBF. *see* Enterotoxigenic *Bacteroides fragilis* (ETBF)
- ETEC. *see* Enterotoxigenic strains of *Escherichia coli* (ETEC)
- Ethambutol, 273*t*, 363*t*, 364  
 precautions for, 365
- Ethionamide, 362-364
- Eumycetoma, 496-497
- European quarantine practices, development of, 260
- Eustachian tube awareness, 160
- Evacuation home, emergency, 10
- Evacuation insurance, 20, 181-182  
 emergency, 10  
 for students, 186
- EVD. *see* Ebola virus disease (EVD)
- Exanthematous eruptions, 461*t*, 464
- Excessive effort sign, 160-161
- Exercise  
 at high altitude, 140  
 during pregnancy, 211-212  
 testing, 378
- Exertional heat stroke, 135
- Exhaustion, heat, 134
- Expanded Program on Immunizations, 47
- Expatriate and volunteers  
 definitions of, 250  
 fitness assessment for, 252  
 medical care abroad and, 257  
 post-travel care for, 257-258, 257*t*-258*t*  
 pre-departure assessment of, 252*f*  
 pre-travel assessment and advice for, 250-259  
 pre-travel care in, 251-252  
 safety and security of, 256  
 type of, 250  
 vaccine-preventable diseases for, 252-255, 252*f*
- Extraintestinal amebiasis  
 clinical features of, 431  
 diagnosis of, 432  
 pathogenesis of, 430  
 treatment of, 434-435
- Extrapulmonary tuberculosis, 359, 362
- Eyeglasses, in medical kits, 12*t*-14*t*
- Eyes, onchocerciasis and, 582
- F**
- FAA. *see* Federal Aviation Administration (FAA)  
 "FAA final rule", 41
- Falciparum malaria*, 275
- Famciclovir, 549*t*
- "Fanny packs", 23
- FAR 121.803, 43-44
- Fasciola hepatica*, 327, 589*t*, 593*t*, 594, 607
- Fascioliasis, 601*t*
- Fasciolopsis buski*, 589*t*, 593*t*, 596
- Favipiravir, for Ebola virus disease, 398
- Febrile illnesses, 271, 278*t*, 280*t*, 296-297
- Fecal leukocytes, in returned traveler's diarrhea, 420, 423
- Federal Airline Regulations, 229-230
- Federal Aviation Administration (FAA), 38-39  
 aircraft AEDs, 234  
 child restraint system recommendations of, 166  
 in supplemental oxygen, 40
- Federation of American Scientists' Program for Monitoring Emerging Diseases (ProMED), 34
- Female condom, 527
- Female traveler's, 14
- Fever  
 approach to traveler with, 282-284  
 clinical characteristics of, 275-282  
 early diagnosis and treatment of, 74  
 epidemiology of, 271-274  
 exposures to, 274-275, 276*t*-277*t*  
 incubation period of, 275, 278*t*  
 infections with  
   African trypanosomiasis, 382-390  
   Chagas disease, 371-381  
   Ebola virus, 391-400  
   leptospirosis, 336-344  
   Lyme disease, 345-355  
   tuberculosis in travelers and immigrants, 356-370  
   viral hepatitis in travelers and immigrants, 315-335  
 infectious diseases in traveler with, 284-297  
 medical history of, 274-282  
 patterns of, 275  
 specific symptoms of, 275-282, 279*t*-283*t*  
 with spontaneous bleeding, 275-278  
 travel-acquired illnesses associated with, 271-299  
 vaccination and prophylaxis of, 274
- Filaria* species, 210*t*
- Filarial diseases/infections, 173, 574-587  
 adenolymphangitis (ADL), 579  
 Bancroftian filariasis, 575, 605  
 diagnosis of, 577-579  
 differential diagnosis, 579  
 eosinophilia and, 600  
 general life cycle of, 575*t*  
 in humans, 575*t*  
*Loa loa* (loiasis), 604  
 lymphatic filariasis, 574-580  
*Mansonella ozzardi*, 577*f*, 585-586

- Filarial diseases/infections (*Continued*)  
 in new arrivals to endemic areas, 576-577  
 onchocerciasis, 581-584  
 perstans filariasis, 585  
 prevention and control, 580  
 streptocerciasis, 584  
 in those native to endemic region, 576  
 treatment of, 579  
   options and dosage, 580
- Filariasis, 272*t*, 278*t*, 293  
 with eosinophilia, 293, 601*t*, 604-605  
 lymphatic, 293
- Filtration, of water, 95-97, 96*t*, 109*t*  
 portable field water filters for, 99*t*-100*t*
- Fire ant stings, 465
- First-aid kit  
 in aircraft, 10  
 for divers, 157  
 supplies, 181*t*-182*t*
- Fish poisoning, 451-456  
 ciguatera, 452-453  
 puffer, 453-454  
 scombroid, 451-452
- Fish tapeworm, 564, 565*t*-566*t*, 571*t*, 605-606
- Fite stain, 518
- Fitness to dive, 154
- Flea-borne diseases, 6*t*-7*t*
- Fleas, 276*t*-277*t*
- Fluconazole, 198, 218, 490-491, 493, 496, 507  
 for leishmaniasis, 508*t*
- Flukes (trematodes), 327, 588-597  
 hepatobiliary, 592-594  
 intestinal, 596  
 liver, 607  
 lung, 594-596
- Fluorescent antibody testing, 306
- Fluoroquinolones, 342-343, 405, 532-533  
 during pregnancy, 209  
 for traveler's diarrhea, 115-116, 115*t*, 118
- Folliculitis, 467-468
- Food, 255-256  
 infection risks, 276*t*-277*t*
- Food-and-water-borne diseases, 33
- Food poisoning, 444-450  
 botulism, 447-448  
 infant, 449  
 as gastrointestinal illness, 444-446  
 pathogens causing, 444, 445*t*  
 pigbel, 446-447  
 travelers in, 449  
 websites in, for food safety and outbreak information, 444, 445*t*
- Food sensitivities, students traveling with, 187-188
- Food-borne illnesses, in travelers, 449
- Foreign-born individuals, 260
- Fosfomycin, 405-406
- Freezing injuries, 130-131
- Frenzel maneuver, 161
- Frostbite, 130-131
- Frostnip, 130-131
- Fungal infections  
 causing meningitis and encephalitis, 281*t*-282*t*  
 with eosinophilia, 607  
 with fever, 297
- Fungal skin infections, 488-500  
 subcutaneous mycoses, 495-499  
   chromoblastomycosis, 495-496  
   lobomycosis, 498-499  
   mycetoma, 496-498, 497*f*  
   sporotrichosis, 498  
 superficial cutaneous mycoses, 488-495  
 dermatophyte infections, 488-490, 489*f*  
*Malassezia*, conditions caused by, 491-495, 492*f*  
 tinea nigra, 491
- Furazolidone  
 for giardiasis, 439, 439*t*  
 side effects of, 434*t*
- Furuncular myiasis, 480-481
- Furunculosis, 468
- G**
- Gabapentin, 453
- GAC. *see* Granular activated charcoal (GAC)
- Gambierdisus toxicus*, 452
- Gambiertoxin. *see* Ciguatoxin
- Gas phase, 154-155
- Gastric anisakiasis, 561
- Gastrointestinal illness, food poisoning as, 444-446  
 diagnosis of, 446  
 etiology of, 444-446  
 treatment of, 446
- Gastrointestinal (GI) infections, 255-256  
 and MDROs, 405  
 returned traveler's diarrhea and, 415
- Gastrointestinal symptoms, chronic, in giardiasis, 440
- GBS. *see* Guillain-Barré syndrome (GBS)
- Gender  
 gender-based medicine, 192  
 tropical disease and, 192-193
- Gender and Tropical Disease Task Force, 192
- Genital herpes, 526, 545, 547
- Genital schistosomiasis, 193
- Genital ulcers, 282, 550  
 chancroid and, 550-551  
 granuloma inguinale and, 546*t*, 552-553  
 GUD (genital ulcer disease), 525, 536, 545-553, 547*t*  
 herpes simplex virus (HSV), 546*t*, 547-550  
 lymphogranuloma venereum and, 546*t*, 551-552  
 in primary syphilis, 536
- Gentamicin, 273*t*, 532*t*
- Geographic translocations, travel medicine and, 1
- Geohelminth infections, 275
- GeoSentinel Site, 5
- Giant cell pneumonitis, 223-224

- Giardia*  
 filtration susceptibility of, 96t  
 halogens for, 101t  
 heat inactivation of, 94t  
 minimal infectious dose of, 92t  
 in returned traveler's diarrhea, 416, 421  
 water-borne outbreaks of, 91
- Giardia* cysts, methods for killing, 9t
- Giardia duodenalis*. *see Giardia lamblia*
- Giardia intestinalis*. *see Giardia lamblia*
- Giardia lamblia*, 210t, 429, 435-440  
 clinical features of, 436  
 diagnosis of, 436-437, 437f-438f  
 epidemiology of, 435-436  
 pathogenesis of, 435  
 prevention of, 440  
 survival in water, 92t  
 and traveler's diarrhea, 114  
 treatment of, 437-439, 439t  
 considerations for, 439-440
- Giardiasis, 217t, 272t  
 clinical features of, 436  
 diagnosis of, 436-437  
 epidemiology of, 435-436
- Gilbert syndrome, 327
- Ginger, 128
- Glargine, 239-240
- Glucagon, 240
- Glucose 6-phosphate dehydrogenase, 176-177
- Glucose 6-phosphate dehydrogenase (G6PD)  
 deficiency, 307, 309t  
 chloroquine and, 75  
 primaquine and, 84
- Gnathostomiasis, 272t, 601t, 603-604
- Goiter, 105
- Gonococcal pelvic inflammatory disease, 529-534  
 cervicitis, 531  
 urethritis, 530-531
- Gonococcal urethritis, 530
- Gonorrhea, 261, 263t, 272t, 529  
 treatment of, 532-533, 533t
- Gonyaulax*, 454
- "Good ozone", 20
- "Good Samaritan" provision, 43-44
- Gram stain, in *Pityrosporum folliculitis*, 493
- Granisetron, 127t, 128
- Granular activated charcoal (GAC), 97
- Granuloma inguinale (donovanosis), 261, 263t,  
 546t, 552-553
- Griseofulvin, 490
- Guillain-Barré syndrome (GBS), 424
- Guinea, Ebola virus outbreak in, 395
- Gynecological concerns, at altitude, 201
- H**
- H5N1 virus, 40
- H7N9 virus, 40
- HAART. *see* Highly active antiretroviral therapy (HAART)
- HACE. *see* High-altitude cerebral edema (HACE)
- Haemophilus ducreyi*, 550
- Haemophilus influenzae* b vaccine, 3-4, 169f-172f,  
 222t
- Halofantrine (Halfan®), 85  
 for malaria, 309
- Halogens, for water disinfection, 97-101, 102t,  
 109t  
 choice of, 102-105  
 commercial products, 103t-104t  
 concentration of, 101, 101t
- Hand sanitizer, in medical kits, 12t-14t
- Hanging groin, 582
- HAPE. *see* High-altitude pulmonary edema (HAPE)
- HAV. *see* Hepatitis A virus (HAV)
- "Haze disaster", 21
- HBIG. *see* Hepatitis B immune globulin (HBIG)
- HBsAg. *see* Hepatitis B surface antigen (HBsAg)
- HBV. *see* Hepatitis B virus (HBV)
- HCV. *see* Hepatitis C virus (HCV)
- HDV. *see* Hepatitis D virus (HDV)
- Head lice, 477-478
- Health Information for International Travel*, 4, 301
- Health insurance, for pregnant travelers, 201,  
 212
- Health risk  
 assessment for travel, 2  
 disease risk areas, 4  
 for international traveler, 1
- Health science students, traveling abroad,  
 185-186
- Health screening  
 antenatal screening and, 265-266  
 in immigrants, refugees, and international  
 adoptees, 260-270  
 mandatory immigration screening in United  
 States, 260-265, 263t  
 new arrivals in United States, 265-269,  
 267t-268t
- Heart disease, diving and, 157-158
- Heart failure, congestive, 135, 340
- Heat, for water disinfection, 93-95, 109t
- Heat illness, 22-23, 132-136
- Heat inactivation, of microorganisms, 94,  
 94t
- Heat stroke, 135
- Heat syncope, 133
- Helminthic infections, 601-606  
 ascariasis, 601-602  
 causing meningitis and encephalitis,  
 281t-282t  
 eosinophilia and, 598-609  
 fever and, 293-294  
 flukes (trematodes), 588-597  
 schistosomiasis, 293  
 tapeworm infection, 564-573  
 and traveler's diarrhea, 114
- Helminthic infestations, 327  
 ascariasis, 327  
 flukes, 327  
 schistosomiasis, 327

- Helminths, 91  
 flukes, 327, 588-597  
 heat inactivation of, 94t  
 tapeworm, 564-573
- Hematologic system, hypobaric hypoxia and, 139t
- Hemoglobinopathies, 230t
- Hemoptysis, 359, 569
- Hemorrhage, and leptospirosis, 340
- Hemorrhagic fever, 272t-273t, 391-400  
 clinical manifestations of, 391-394  
 diagnosis of, 391  
 epidemiology and clinical characteristics of, 289t  
 overview and transmission of, 391, 393t  
 treatment of, 391-394
- Hemorrhagic syndromes, 288
- Henry's law, 152
- Hepatic amebiasis, 279
- Hepatic tenderness, in returned traveler's diarrhea, 416
- Hepatitis, viral, in travelers and immigrants, 315-335, 316t  
 chronic, 325  
 clinical syndromes of, 324-326  
   convalescent phase, 325  
   icteric phase, 324  
   prodrome, 324  
 co-infections, 325-326  
 diagnosis of, 318t, 327-332  
 differential diagnosis, 326-327  
 epidemiology and etiology of, 316-324  
 outcome of, 315  
 prevention of, 333-334  
 toxic, 327  
 treatment for, 332
- Hepatitis A  
 as cause of fever, 297  
 in children, 168-173  
 risk of infection in developing countries, 272t
- Hepatitis A vaccine, 3-4, 58, 333  
 in children, 168-173, 169f-172f, 174t  
 in compromised hosts, 333  
 concurrent administration of, with immune globulin, 59  
 delayed booster dose of, 59  
 efficacy of, 274  
 HIV-infected persons and, 223  
 interactions, 48t  
 interchangeability of, 59  
 during pregnancy, 206  
 as routine immunization, 48
- Hepatitis A virus (HAV), 315-318  
 clinical, serologic, and biochemical course of, 322f  
 clinical syndromes, 324-326  
 diagnosis of, 328  
 heat inactivation of, 94t  
 prevalence of, geographic distribution of, 317f  
 survival in water, 92t
- Hepatitis A/B combination vaccine, 60, 206  
 accelerated schedule for, 60
- Hepatitis B immune globulin (HBIG), 320
- Hepatitis B surface antigen (HBsAg), 223, 267t-268t, 321, 323f, 325, 328f, 330  
 in pregnancy, 318-320
- Hepatitis B vaccine, 3-4, 59-60  
 accelerated schedules of, 60  
 for children, 169f-172f  
 in compromised hosts, 334  
 efficacy of, 274  
 for expatriate and volunteers, 253-254  
 HIV-infected persons and, 222t, 223  
 low-responders or nonresponders to, 60  
 during pregnancy, 206  
 as routine immunizations, 50  
 for students in health science fields, 186
- Hepatitis B virus (HBV), 297, 315, 318-320, 527  
 carrier state, 324  
 clinical, serologic, and biochemical course of, 323f, 328f-329f  
 clinical syndromes, 324-326  
 diagnosis of, 328-330  
 geographic distribution of, 319f  
 infection in pregnancy, 320  
 prevention of, 333-334  
 risk of infection in developing countries, 272t  
 serologic tests for, interpretation of, 331t  
 serology of, 267t-268t  
 treatment of, 332
- Hepatitis C virus (HCV), 297, 315, 320-321  
 carrier state, 324  
 clinical syndromes, 324-326  
 diagnosis of, 330  
 prevention of, 334
- Hepatitis D virus (HDV), 315, 321  
 clinical syndromes, 324-326  
 diagnosis of, 330-332  
 immunity to, 334
- Hepatitis E virus (HEV), 91, 297, 321-324  
 clinical syndromes, 324-326  
 diagnosis of, 332  
 heat inactivation of, 94t  
 during pregnancy, 201, 210-211  
 prevention of, 334
- Hepatobiliary flukes, 592-594
- Hepatomegaly, 280t, 294, 324, 326-327, 340
- Hepatosplenic disease, 590
- Hepatosplenomegaly, 279, 294-295, 297  
 in Chagas disease, 294  
 in helminthic infections, 293, 327  
 in rickettsial diseases, 288
- Hemias, 582
- Herpes simplex, 272t
- Herpes simplex virus (HSV), 326, 530, 546t, 547-550  
 clinical manifestations and diagnosis of, 548-549  
 epidemiology of, 547-548  
 genital infection with, 525  
 pathogenesis of, 548  
 treatment and prevention of, 549-550, 549t

- Herpes simplex virus type 2 (HSV-2), genital ulcer disease and, 545
- Heterophyes heterophyes*, 589*t*, 593*t*, 596
- HEV. *see* Hepatitis E virus (HEV)
- HGA. *see* Human granulocytic anaplasmosis (HGA)
- High-altitude
- definition of, 138
  - environment at, 138-139
  - environmental features of, underlying medical condition and, 147
  - medical conditions and, 148*t*-149*t*
  - normal responses to, 140, 140*t*
  - potentially at-risk traveler to, 146-149
    - evaluation of, 147-149
    - framework for assessing risk of, 146-147
    - risk mitigation strategies for, 149
  - return travel to, 149-150
  - returning traveler from, 143-146
    - determining what happened to, 144-145
    - evaluation of, 145-146
    - risk mitigation for future trips of, 146
  - travel to, 138-151
- High-altitude cerebral edema (HACE), 140-141, 142*t*
- High-altitude illness, medical kit items for, 12*t*-14*t*
- High-altitude pulmonary edema (HAPE), 140-141, 142*t*
- High-efficiency particulate air (HEPA) filter, 38
- Highly active antiretroviral therapy (HAART), 215
- Highly pathogenic avian influenza (HPAI), 406-407
- High-potency steroids, 459, 459*t*
- Hilar adenopathy, 360
- Hip joints, artificial, 241
- Histamine, in fish poisoning, 452
- Histoplasmosis, 218, 297
- HIV. *see* Human immunodeficiency virus (HIV)
- HIV pre-exposure prophylaxis, 527
- HIV rapid test, 412
- Homicide rates, 23-24, 24*t*
- Hookworm, 210*t*, 556*t*, 558*t*, 560
  - diarrhea and, 278
  - with eosinophilia, 602
  - microscopy of, 257-258
  - prevention of ingestion of, 177-178
- Horseflies, diseases from, 6*t*-7*t*
- Host factors, in returned traveler's diarrhea, 416
- Host immune system, in *Giardia lamblia*, 435
- Hotel safes, 23
- HPAI. *see* Highly pathogenic avian influenza (HPAI)
- HSV. *see* Herpes simplex virus (HSV)
- Humalog (lispro) insulin, 236*t*, 237-238
- Human granulocytic anaplasmosis (HGA), 351
- Human immunodeficiency virus (HIV), 200-201, 215
  - antimalarial prophylaxis and, 225
  - and Chagas disease, 376-377
- Human immunodeficiency virus (HIV) (Continued)
- and chemoprophylaxis for traveler's diarrhea, 224-225
  - in cryptosporidiosis, 440
  - Emergency Use Assessment and Listing Procedures for, 412
  - fever with, 297
  - genital infections and, 529-530
  - genital ulcer disease and, 545
  - immunoprophylaxis for, 221
  - infection, 261
  - international spread of, 525-526
  - malaria and, 218-219
  - mode of transmission, 15
  - point of care testing for, in resource-limited settings, 410
  - post-exposure prophylaxis, 185
  - preparation of immunocompromised traveler, 219-225, 219*t*
  - prevention of, 526-527
  - risk for infected traveler, 215-219
  - risk of infection in developing countries, 272*t*, 525
  - sexual tourism and, 525
  - syphilis and, 535
  - during travel, 526
  - travelers with, 14
  - in tuberculosis, 360, 364-365
  - tuberculosis and, 218
- Human papilloma virus (HPV) vaccine, 3-4, 167-168, 169*f*-172*f*
  - during pregnancy, 206
- Humanitarian organizations, mental health support for, 248, 248*b*
- Humidity, in aircraft cabin, 39
- Humoral immune system, in *Giardia lamblia*, 435
- Hydration, 23
- Hydrocortisone, 180, 198
  - cream, in medical kits, 12*t*-14*t*
- Hydrogen peroxide, for water disinfection, 106
- Hydroxychloroquine, for children, 175-176, 176*t*
- Hymenolepis diminuta*, 565*t*-566*t*, 568, 571*t*
- Hymenolepis nana* (dwarf tapeworm), 565*t*-566*t*, 571*t*, 605-606
- Hymenoptera, 464-466
- Hyperglycemia, 238-240
- Hypertension, and high-altitude travel, 148*t*-149*t*
- Hyperthermia, 135
- Hypnotic drugs, for jet lag, 122-123, 124*t*
- Hypobaric hypoxia
  - physiologic responses to, 139-140, 139*t*
  - pulmonary vascular responses to, at high altitude, 147
- Hypoglycemia
  - heat stroke and, 136
  - in pregnancy, 311
  - prevention of, 237-241
  - with severe malaria infection, 305, 310
- Hypothermia, 131-132
- Hypoxemia, at high altitude, 146

- Hypoxia  
 hypobaric  
   physiologic responses to, 139-140  
   pulmonary vascular responses to, at high altitude, 147  
 impaired ventilatory responses to, at high altitude, 146-147  
 Hypoxia altitude simulation test, 147-149
- I**
- IATA. *see* International Air Transport Association (IATA)
- ICDs. *see* Implantable cardiac defibrillators (ICDs)
- Ichthyosarcotoxism, 451
- Icteric leptospirosis, 340
- IG. *see* Immune globulin (IG)
- IGRA. *see* Interferon gamma-releasing assay (IGRA)
- IHR. *see* International Health Regulations (IHR)
- IIV. *see* Inactivated influenza vaccine (IIV)
- Illicit drug use, 24-25
- Immersion, 158
- Immigrants  
 evaluation of TB in, 368  
 health screening in, 260-270
- Immigration and Nationality Act (INA), 261
- Immigration medical screening, 260  
 mandatory, in United States, 260-265, 263*t*  
 new arrivals in United States, 265-269, 267*t*-268*t*
- Immune globulin (IG)  
 in children's vaccination, 174*t*  
 for hepatitis, 333  
 hepatitis A protection, 59  
 interactions with, 175*t*  
 rabies, 64
- Immune systems, compromised, students  
 traveling with, 188
- Immune-compromising illnesses, students  
 traveling with, 188
- Immunity, *Entamoeba histolytica* in, 430
- Immunizations  
 for HIV-infected travelers, 222-223, 222*t*  
 for immigrants, 264  
 for infants and children, 167-168  
 during pregnancy, 205  
 and prevention of MDRO infection, 403  
 routine, 223  
 for travel, 3-4  
 for travelers, 47-70  
   children, 48, 49*t*  
   dosage schedule for, 49*t*, 54*t*-55*t*  
   missed doses, 48  
   recommended travel vaccines, 58-69  
   required travel immunizations, 48  
   routine, 47-50  
   vaccine interactions, 48*t*  
 for traveler's diarrhea, 114-115
- Immunochromatographic strip assays, 306
- Immunocompromised traveler, 215-219  
 malaria prevention for, 88-89
- Immunosuppressive medications, students  
 traveling with, 188
- Impetigo, 175, 467, 467*f*
- Implantable cardiac defibrillators (ICDs), 235
- INA. *see* Immigration and Nationality Act (INA)
- Inactivated influenza vaccine (IIV), 49*t*, 50
- Indeterminate leprosy, 515
- Infancy, malaria in, 311-312
- Infants  
 antiparasitic drugs in, 559  
 botulism in, 444, 449  
 traveler, malaria prevention for, 88  
 traveling with. *see* Pediatric travelers
- Infection control, ineffective, 402
- Infections, during pregnancy, 210-211
- Infectious disease  
 causing meningitis and encephalitis, 281*t*-282*t*  
 emerging  
   in 21st century, 28*t*  
   air-borne, 32-33  
   definition of, 27  
   food-and-water-borne, 33  
   information resources for, 34, 34*t*  
   international travelers and, 27-35  
   vector-borne, 29-32  
   zoonoses, 29  
 exposures suggesting specific, 276*t*-277*t*  
 relative infection risks in developing countries, 272*t*  
 risks to people with HIV/AIDS, 215-219  
 urban risks of, 18
- Infectious mononucleosis, 297
- Inflammatory bowel disease (IBD), returned  
 traveler's diarrhea and, 416
- Inflammatory *Tinea capitis*, 488-489
- In-flight medical emergencies, 43-44
- Influenza  
 air travel and, 39-40  
 during pregnancy, 201
- Influenza vaccine, 50  
 for children, 167-168, 169*f*-172*f*  
*Haemophilus influenzae* b, 3-4, 222*t*  
 HIV-infected persons, 222-223, 222*t*
- Inguinal adenopathy, 545  
 nonsuppurative, 536
- Injection, infection risks, 276*t*-277*t*
- Injury  
 accidental, 18-19  
 turbulence-related, 42-43
- Inner ear barotrauma, 160
- Insect repellents, 6*t*, 175  
 in medical kits, 12*t*-14*t*
- Insecticides, 6*t*
- Insomnia, 195*t*-196*t*
- Insulin, 235  
 management when traveling across time  
 zones, 237-239



- Insurance  
 emergency evacuation, 10  
 evacuation, 20, 181-182
- Integrins, and antibiotic resistance, 401
- Interferon  $\alpha$ -2b, 332
- Interferon- $\gamma$  release assays, 361
- Interferon gamma-releasing assay (IGRA), 262  
 blood tests, for students in health science fields, 186
- International adoptees, health screening in, 260-270
- International Air Transport Association (IATA), 39
- International Association for Medical Assistance to Travellers, 9
- "International Certificate of Vaccination or Prophylaxis", 4, 51
- International Civil Aviation Organization, 39
- International Health Regulations (IHR), 50-51
- International travelers  
 approach to, 27-29  
 emerging infectious disease and, 27-35  
*see also* Emerging infectious disease
- Intestinal amebiasis  
 clinical features of, 430  
 diagnosis of, 431-432  
 pathogenesis of, 429  
 treatment of, 433-434
- Intestinal anisakiasis, 561
- Intestinal flukes, 596
- Intestinal tapeworm, 564-568
- Iodine, for water disinfection, 102-105, 102*t*-104*t*  
 resins, 105-106
- Iodoquinol  
 for *Entamoeba histolytica* infections, 433*t*  
 side effects of, 434*t*
- Irritable bowel syndrome (IBS), returned traveler's diarrhea and, 416-417
- Irritant contact dermatitis, 462-463
- Irukandji, 162
- Isoniazid, 273*t*, 362-364, 363*t*, 366  
 in fish poisoning, 452  
 hepatotoxicity of, 366-367
- Isospora belli*, 600  
 and traveler's diarrhea, 114
- Isosporiasis, 217*t*
- Itraconazole, 218, 490-491, 496, 498
- Ivermectin, 583-584, 602  
 for scabies, 477
- Ixodes ricinus*, 66, 68*f*
- Ixodes* ticks, 345, 346*f*  
 life cycle of, 346
- Ixodidae, 482
- J**
- Japanese B encephalitis vaccine, for children, 174*t*
- Japanese encephalitis  
 geographic distribution of, 65*f*  
 purified inactivated virus vaccine (JE-PIV), 66
- Japanese encephalitis (*Continued*)  
 urban risks of, 18  
 virus vaccine, 64-66
- Japanese encephalitis vaccine  
 for expatriate and volunteers, 254  
 HIV-infected persons and, 222*t*  
 during pregnancy, 206-207  
 for students, 186
- Japanese encephalitis (JE) virus, 206-207
- Jaundice, 283*t*, 304, 304*t*, 592  
 and leptospirosis, 338-340  
 neonatal, 211-212  
 and viral hepatitis, 322*f*, 324, 326-327, 328*f*
- JE-CV vaccine, for expatriate and volunteers, 254
- JE-MB vaccine, for expatriate and volunteers, 254
- JE SA-14-14-2 vaccine, for expatriate and volunteers, 254
- JE-VC vaccine, for expatriate and volunteers, 254
- Jellyfish stings, 162
- Jet health, 36-46. *see also* Air travel  
 Air Carrier Access Act of 1986, 41  
 cabin air quality and, 36-39, 37*t*  
 communicable diseases on aircraft, 39-40  
 in-flight medical emergencies and, 43-44  
 turbulence-related injuries and, 42-43
- Jet lag, 121-125, 246  
 diet, 125  
 medical kit items for, 12*t*-14*t*  
 pregnant women and, 204
- Jock itch. *see* *Tinea cruris*
- Jones, Edley, 157
- Junin (Argentine hemorrhagic fever), 273*t*, 279*t*, 286*t*-287*t*, 289*t*
- K**
- Kala-azar. *see* Visceral leishmaniasis
- Kaolin, 118, 179
- Katayama fever, 274, 279, 283*t*, 293, 589-590
- Keloidal blastomycosis. *see* Lobomycosis
- Ketoconazole, 490, 493, 496  
 for leishmaniasis, 508*t*
- Ketone-detecting urine test strips, 236*t*
- Kidnapping, 24
- Killed whole-cell B subunit oral cholera vaccine (WC/rBS OCV), 62
- Killed whole-cell bivalent (O1 and O139 Serogroups) oral cholera vaccine (BivWC OCV), 62
- Klebsiella granulomatis*, 552
- Knott's concentration technique, 578
- KOH examination  
 in cutaneous candidiasis, 494  
 in dermatophyte infection, 490  
 in tinea versicolor, 492
- L**
- Labyrinthine fistula, 160
- Lactobacillus crispatus*, 406-407

- Lactobacillus iners*, 406-407  
*Lactobacillus rhamnosus*, 406-407  
 Lactose intolerance, 179-180  
 Lamivudine, 332  
 Larva currens, 283*t*, 559  
 Larva migrans, cutaneous, 479, 480*f*  
 Lassa fever, 272*t*-273*t*, 288, 391  
 Latent syphilis, 537  
 Latent TB infection (LTBI), 356-357  
   risk of reactivation of, factors increasing, 357*t*  
 Latex condoms, 526  
 Laxative, in medical kits, 12*t*-14*t*  
 Legionellosis, 272*t*  
*Leishmania aethiopica*, 503  
*Leishmania infantum*, 503  
*Leishmania major*, 503, 504*f*, 507  
*Leishmania* species, 210*t*  
*Leishmania tropica*, 503, 507  
 Leishmaniasis, 173, 501-512  
   clinical manifestations of, 501  
   cutaneous, 219, 501-509, 502*f*, 507*t*-508*t*  
     New World, 503-505, 504*t*, 505*f*  
     Old World, 503, 504*f*  
   HIV infection and, 219  
   prevention of, 511  
   visceral, 219, 273*t*, 294-295, 509-511, 509*f*  
   zoonotic cutaneous, urban risks of, 18  
 Leishmanin skin test, 506  
 Lepromatous leprosy, 513, 514*f*, 515, 517*f*  
 Leprosy (Hansen's disease), 261, 263*t*, 513-523  
   bacteriological and histological examination of, 518  
   clinical features of, 514-515, 516*t*  
   diagnosis of, 515-518  
   epidemiology of, 513-514  
   etiology of, 513  
   management of, 521-522  
     complicated cases, 522  
     ENL reactions, 520-521  
     type 1 reactions, 520  
   neural involvement in, 515  
   reactional states, 515  
   reactions, 519-521  
   serological tests and polymerase chain reaction in, 518  
   therapy of contacts, 522  
   treatment of, 519, 519*t*  
   type 1 and 2, 520*t*  
 Leptospirosis, 272*t*-273*t*, 295, 327, 336-344  
   anicteric, 339-340  
   clinical course of, 339*f*  
   clinical features of, 338-340  
   cycle of transmission of, 336-338, 337*f*  
   diagnosis, 340-342  
     cultures for, 340-342  
     immunodiagnosis in, 342  
   differential diagnosis, 340, 341*b*  
   epidemiology, 336-338  
   etiology of, 336  
   and heavy rainfall and flooding, 338  
   killed whole-cell vaccine for, 343  
 Leptospirosis (*Continued*)  
   laboratory and radiologic findings in, 342  
   prevention of, 343  
   pulmonary, 340  
   severe (icteric) (Weil disease), 340  
   treatment of, 342-343  
 Leukemias, air pollution and, 21-22  
 Leukoencephalopathy, 348-349  
 Leukopenia, and Ebola virus disease, 396  
 Levofloxacin, 405  
   in medical kits, 12*t*-14*t*  
   for traveler's diarrhea, 115*t*, 117*t*, 118  
 LGV. *see* Lymphogranuloma venereum (LGV)  
 Lice, 477-479  
 Lice exposure, diseases from, 276*t*-277*t*  
 Lindane, for scabies, 477  
*Linuche unguiculata*, 485*t*  
 Lionfish, 162  
 Liposomal amphotericin B, for leishmaniasis, 508*t*, 510-511  
 Live attenuated influenza vaccine (LAIV), 49*t*, 50  
 Liver, extraintestinal amebiasis in, 430-431  
 Liver flukes, 607  
*Loa loa*, 574, 575*t*, 577*f*, 585  
 Lobomycosis, 498-499  
 Local therapy, for leishmaniasis, 508*t*  
 Loiasis, 584-585  
 Loneliness, traveler, 185  
 Long-term travelers, 14  
   malaria prevention for, 89  
 Loperamide, 117*t*, 118  
   children and, 178  
   during pregnancy, 209  
   rifaximin with, 119  
 Lower respiratory tract illnesses, air pollution and, 21  
 Low-potency steroids, 459, 459*t*  
 LTBI. *see* Latent TB infection (LTBI)  
 Lucio phenomenon, 521  
 Lung disease, with schistosomiasis, 590  
 Lung flukes, 594-596, 607  
 Lyme borreliosis, 32  
 Lyme disease, 272*t*, 345-355  
   and *Borrelia burgdorferi*, 345  
   causative organism of, 345  
   clinical manifestations of, 348-349  
   diagnosis of, 349-351, 350*f*  
   epidemiology, 347-348, 347*f*  
   and *Ixodes* ticks, 345, 346*f*  
   overdiagnosis of, 350  
   prevention of, 353  
   therapy for, 351-352, 352*t*  
   transmission of, 346  
 Lyme disease vaccine, 353  
 Lymph nodes, onchocerciasis and, 582  
 Lymphadenitis, and African trypanosomiasis, 383  
 Lymphadenopathy  
   fever and, 279, 287, 293-294  
   in filarial infections, 582  
   HIV and, 297

- Lymphadenopathy (*Continued*)
  - in sexually transmitted diseases, 536
  - in *T.b. gambiense* form, 383
- Lymphatic filariasis, 293, 574-580
  - acute manifestations of, 579
  - chronic manifestations of, 579-580
- Lymphatic obstruction, 576
- Lymphatic tuberculosis, 359, 362
- Lymphedema, 579-580
- Lymphogranuloma venereum (LGV), 261, 263*t*, 272*t*, 546*t*, 551-552

## M

- Macaque bites, 180
- Macules, of primary lesions, 458*b*
- Madura foot. *see* Mycetoma
- Malabsorption, in giardiasis, 436
- Malaria, 272*t*-273*t*, 300-314, 326
  - antimalarial drugs for, 307-309
  - artemisinin resistance *P. falciparum*, 32
  - assessing individual risk for, 72
  - checklist for travelers, 73*t*
  - chemoprophylactic drugs for
    - appropriate use of, 73-74
    - clinical utility score of, 81*t*
    - current regimens of, 74-85, 75*t*
    - summary in, 85
  - chemoprophylaxis, 4-5
  - clinical features of, 304-305, 304*t*
  - diagnosis errors in, 312-313
  - distribution of, 4-5
  - Emergency Use Assessment and Listing
    - Procedures for, 412-413
  - epidemiology of, 300-301, 301*f*
  - etiology of, 300
  - fever and, 282, 284
  - general considerations of, 300
  - HIV and, 218-219
  - immunity to, 303-304
  - in infancy and childhood, 311-312
  - laboratory diagnosis of, 305-306
  - life cycle of, 80*f*
  - management errors in, 313
  - microscopy for, 412-413
  - natural life cycle of, 301-303, 302*f*
  - pathogenesis of, 301-304
  - pathophysiology of, 303
  - in patients with chronic diseases, 312
  - pills, in medical kits, 12*t*-14*t*
  - Plasmodium knowlesi*, 31-32
  - during pregnancy, 193, 201, 311
  - presentation of, 300-301
  - prevention, 71-90, 173-177, 176*t*-177*t*, 310-311
    - approach to, 71-74
    - contrasts in prophylaxis recommendations
      - among health organizations in, 84
      - country-specific malaria risk, 71, 72*t*
      - drug-resistance zones in, 73-74, 74*f*, 76*f*
      - frequent short-term travel to high-risk areas, 84

- Malaria (*Continued*)
  - reporting of, 312
  - self-treatment regimens for, 87*t*
  - severe, 304, 304*t*, 309-310, 309*t*
  - special therapeutic considerations for, 87-89
    - immunocompromised traveler, 88-89
    - infant traveler, 88
    - long-term travelers, 89
    - pregnant traveler, 87-88
    - traveler without spleen, 89
  - therapeutic dilemmas of, 313-314
  - treatment of, 306-311, 308*t*-309*t*
  - urban, 18
- Malaria antigen detection assay, 410
- Malaria chemoprophylaxis
  - for expatriate and volunteers, 255
  - in pregnancy, 209
- Malarone, 80
- Malassezia, 491-495
- Malassezia *furfur*, 491
- Malassezia *globosa*, 491
- Malnutrition, 556*t*
- Mannitol, 453
- Mansonella *ozzardi* infection, 577*f*, 585-586
- Mansonella *perstans*, 577*f*, 585
- Mansonella *streptocerca*, 577*f*, 584, 605
- Mansonia mosquitoes, 61-71
- Marburg virus disease, 273*t*
- Marijuana, effects on diving, 156*t*
- Marine biotoxins, 451
- Martini's law, 152
- Mass drug administration, roundworm and, 560
- MAT. *see* Microscopic agglutination test (MAT)
- Maternal-fetal transmission, of hepatitis B virus, 320
- MDIs. *see* Multidose inhalers (MDIs)
- MDR-TB. *see* Multidrug-resistant tuberculosis (MDR-TB)
- MDROs. *see* Multidrug-resistant organisms (MDROs)
- Measles, 297
- Measles immunizations, 3-4
  - HIV-infected persons and, 222*t*, 223-224
- Measles/mumps/rubella (MMR) vaccine, 167-168, 169*f*-172*f*
  - HIV-infected persons and, 222*t*
  - interactions, 48*t*
- Mebendazole, 571-572, 603
- Mecizine, 127, 127*t*, 167*t*
- Medevac statistics, 243
- Mediastinal adenopathy, 360
- Medical care en route, emergencies, 10
- Medical emergencies, during travel, 9-11
- Medical history
  - of expatriates, 251
  - in fever diagnosis, 274-282
  - traveler's health history, 3*t*, 9-10
- Medical kit
  - for children, 181*t*-182*t*
  - enhanced, contents of, 44*t*
- Medical tourism, avoidance of, 403-404

- Medications  
 for asthma, 232-233  
 for traveling students, 186-187
- Medicine kit, for women travelers, 193, 195t-196t
- Medicine kit, traveler's, 11, 12t-14t
- Mediterranean Science Commission, 155-156
- Medium-potency steroids, 459, 459t
- Medrol Dosepak (methylprednisolone), in medical kits, 12t-14t
- Mefloquine, 77t-78t, 83-84  
 for children, 176, 176t  
 contraindications to, 83  
 HIV-infected persons and, 225  
 for malaria, 307  
 for malaria prophylaxis, 244  
 during pregnancy, 209
- Mefloquine-resistant zones, chloroquine and, 84
- "Megacities", 17
- Megacolon, 376
- Megaesophagus, 376
- Meglumine antimoniate, for leishmaniasis, 508t
- Melanoma, 181
- Melarsoprol, 273t, 387  
 for *T.b rhodesiense*, 388-389
- Melatonin, 122, 123t-124t  
 during pregnancy, 204
- Melioidosis, 272t-273t, 296  
 cutaneous, 473-474
- Meningitis  
 heat stroke and, 135  
 important tropical infections causing, 281t-282t  
 meningococcal, 56f, 295  
 urban risks of, 18  
 TB, 173
- Meningococcal infection, 273t, 295
- Meningococcal meningitis conjugate vaccine, for children, 167-168, 169f-172f, 174t
- Meningococcal vaccine, 4  
 ACWY vaccines, 55-57, 56f  
 ACWY-CRM conjugate (MenACWY-CRM) vaccine, 57  
 ACWY-diphtheria toxin protein conjugate (MenACWY-D) vaccine, 57  
 B-4C, 63  
 B-FHbp, 63  
 HIV-infected persons and, 222t  
 polysaccharide A/C/Y/W-135 vaccine (MPSV4), 57  
 during pregnancy, 207  
 required for travel, 50-51  
 serogroup B, 62-63  
 for students in health science fields, 186
- Meningoencephalitis, 219, 286t-287t, 348-349, 374  
 in African trypanosomiasis, 385
- Menstruation, 193-194
- Mental health  
 expatriate and volunteers and, 256  
 for humanitarian and other overseas, 248, 248b
- Mental health (Continued)  
 organizing support for, 248  
 pre-travel evaluation of resilience and, 244-245, 245b  
 risk factors in, 243-244, 245b  
 of students traveling abroad, 188  
 travel and, 243-249  
 travelers problems in, 246-247
- MERS-CoV. *see* Middle Eastern respiratory syndrome coronavirus (MERS-CoV)
- Metabolic derangement, and Ebola virus disease, 396
- Metagonimus yokogawai*, 589t, 593t, 596
- Methylprednisolone, in medical kits, 12t-14t
- Metronidazole, 198, 273t, 294  
 for *Entamoeba histolytica* infections, 433-434, 433t  
 for giardiasis, 437-439, 439t  
 in pelvic inflammatory disease, 532t  
 side effects of, 434t
- Miconazole, 490, 493
- Microfilaremia  
 asymptomatic, 576  
 characteristics of microfilariae in humans, 577t
- Microfilaria-negative antigen-positive individuals, lymphatic filariasis and, 579
- Microfilaria-positive individuals, lymphatic filariasis and, 579
- Microfiltration, 96t
- Microorganism, in aircraft cabin, 38
- Microparticles (MPs), 154-155
- Microscopic agglutination test (MAT), 342
- Microscopy, for malaria, as point of care test, 412-413
- Microsporidiosis, 216-217, 217t
- Middle-ear barotrauma, 158
- Middle-ear pressurization, 159
- Middle-ear squeeze, 158
- Middle East respiratory corona virus, 406-407
- Middle Eastern respiratory syndrome coronavirus (MERS-CoV), 32-33
- Mifepristone, 199-200
- Migraine, motion sickness and, 126
- Migration-associated health screening, 260
- Mild sunburn, treatment of, 462
- Military appearance, low-income nations and, 24
- Milk ingestion, risk, 276t-277t
- Millepora*, 485t
- Miltefosine, for leishmaniasis, 508t, 511
- Minocycline, 519
- Miscarriage, spontaneous abortion, 340
- Mite-borne diseases, 6t-7t
- Mites, 276t-277t
- Molecular diagnosis, onchocerciasis and, 583
- Molecular diagnostics, 578
- Moleskin, in medical kits, 12t-14t
- Monkey bites, 180
- Mononucleosis, infectious, 297
- Monospot test, 332
- Montenegro test. *see* Leishmanin skin test
- Morbidity and Mortality Weekly Report*, 5

- Morbilloform rash, 283*t*, 289*t*
- Mosquito bites  
precautions, 5*t*  
prevention of, 72
- Mosquito repellents, 175
- Mosquitoes, 276*t*-277*t*  
*Aedes*, 285, 289*t*  
*Culex*, 254
- Motion sickness, 126-129  
medical kit items for, 12*t*-14*t*  
in pediatric travelers, 167, 167*t*
- Motion-sickness drugs, effects on diving, 156*t*
- Motor vehicle crashes, 18-19  
among students, 189
- Motorcycles, travel by, 19-20
- Mouse, white-footed, 346
- Mucocutaneous leishmaniasis, 505
- Multibacillary leprosy, 519*t*
- Multidose inhalers (MDIs), 233
- Multidrug-resistant (MDR) bacterial pathogens, 421
- Multidrug-resistant organisms (MDROs), 401  
prevention of infection by  
and public health, 402  
and the traveling patient, 402-404  
recognition and management suggestions for, 404-407
- Multidrug-resistant tuberculosis (MDR-TB), 364
- Mumps immunization, 3-4
- Mumps vaccine, during pregnancy, 206
- Mupirocin, in medical kits, 12*t*-14*t*
- "Mustard scam", 23
- Mycetoma, 496-498, 497*f*  
*Mycobacterium bovis*, 358  
*Mycobacterium lepromatosis*, 521  
*Mycobacterium tuberculosis*, 356  
air travel and, 39  
*Mycoplasma genitalium*, 530
- Mycoses  
subcutaneous, 495-499  
superficial cutaneous, 488-495
- Myelitis, acute transverse, 590
- Myeloencephalitis, eosinophilic, 604
- Myiasis, 480-481  
cutaneous, 173
- Myocarditis, and Chagas disease, 375-376
- N**
- NAATs. *see* Nucleic acid amplified assays (NAATs)
- Nalidixic acid, 179
- NANBH. *see* Non-A non-B hepatitis (NANBH)
- Nanofiltration, 96*t*
- Nanoparticles, for water disinfection, 108
- Narcosis, while diving, 152
- Narcotics, effects on diving, 156*t*
- NAT. *see* Nucleic acid testing (NAT)
- National Malaria Surveillance System, 312
- Nausea  
motion sickness and, 126  
and vomiting, medical kit items for, 12*t*-14*t*
- NBRAs. *see* Nonbenzodiazepine benzodiazepine-receptor agonists (NBRAs)
- Necator americanus*, 555, 556*t*, 558*t*
- Neisseria gonorrhoeae*, 529
- Nematocysts, 484, 486-487
- Nematodes  
cysts, heat inactivation of, 94*t*  
effects on reproduction, 210*t*  
eggs, filtration susceptibility of, 96*t*  
extraintestinal, 210*t*  
intestinal, 210*t*, 554, 560*t*
- Neurocysticercosis, 569
- Neurosyphilis, 537
- Neurotoxic shellfish poisoning, 455
- New World Cutaneous Leishmaniasis (NWCL), 503-505, 504*t*, 505*f*, 507-509
- New World screwworm, 481
- Niclosamide, 570-571
- Nifedipine, 128  
for acute altitude illness, 144*t*
- Nifurtimox, 294, 379, 379*t*  
for *T.b gambiense* trypanosomiasis, 388
- Nifurtimox/Eflornithine Combination Therapy (NECT), for *T.b gambiense* trypanosomiasis, 388
- Nitazoxanide  
for cryptosporidiosis, 441  
for *Entamoeba histolytica*, 433-434  
for giardiasis, 439, 439*t*  
side effects of, 434*t*
- Nitric oxide, for decompression sickness, 155
- Nitrox, 153
- Nodules, of primary lesions, 458*b*
- Non-A non-B hepatitis (NANBH), 320
- Nonbenzodiazepine benzodiazepine-receptor agonists (NBRAs), 122-123
- Nonfreezing cold injuries, 130
- Non-occupational post-exposure prophylaxis (NPEP), 200-201
- Nonparalytic shellfish poisoning. *see* Neurotoxic shellfish poisoning
- Nonpurulent skin infections, treatment of, 468
- Nontuberculous mycobacterial infection, 358
- Norfloxacin, 224-225  
for traveler's diarrhea, 115*t*, 117*t*, 118
- Norovirus, 91  
halogens for, 101*t*  
in returned traveler's diarrhea, 418*t*, 427  
survival in water, 92*t*  
and traveler's diarrhea, 114
- NovoLog (insulin aspart) insulin, 237-238
- NPEP. *see* Non-occupational post-exposure prophylaxis (NPEP)
- Nucleic acid amplification testing, 362
- Nucleic acid amplified assays (NAATs), 530
- Nucleic acid testing (NAT), 420
- Nuclepore™ filtration, 578
- NWCL. *see* New World Cutaneous Leishmaniasis (NWCL)

## O

- Obstipation, 590
- Obstructive sleep apnea, and high-altitude travel, 148t-149t
- Occam's razor, 406-407
- Ofloxacin, 519, 532-533  
for traveler's diarrhea, 115t, 118
- Old World cutaneous leishmaniasis (OWCL), 503, 504f, 507
- Old World screwworm, 481
- Ondocerca volvulus*, 574, 575t, 577f, 581, 605
- Onchocerciasis, 283t, 293, 581-584
- Ondansetron, 127t, 128
- Onychomycosis*, 490
- Opisthorchis*, 327, 592-594
- Opisthorchis felineus*, 589t
- Opisthorchis viverrini*, 589t, 607
- Oral contraceptives, 198-199
- Oral rehydration, 178  
solution, 178  
solution, in medical kits, 12t-14t  
for traveler's diarrhea, 116
- Oral therapy, for leishmaniasis, 508t
- Organ transplants, Chagas disease transmission related to, 374
- Organic contaminants, in water, halogens and, 101
- Organomegaly, febrile illnesses and, 280t
- Orthopedic hardware, 241
- Osteopenia, 228-229
- Otitis externa, 157
- Otitis media, 166, 230t
- Overseas workers, mental health support for, 248b
- OWCL. *see* Old World Cutaneous Leishmaniasis (OWCL)
- Oxamniquinone, 591
- Oxazepam, 124t
- Oxygen  
in aircraft, 10  
decline in blood oxygen at altitude, 230-231, 231t  
delivery, impaired tissue, at high altitude, 146  
dissociation curve, 36, 37f  
in-flight, 230-231  
portable, for pulmonary patients, 11  
supplemental, 231-232  
supplemental, during air travel, 40-41
- Ozone, air pollution and, 21

## P

- Pacemakers, 235
- Pacific ciguatoxin (P-CTX-1), 452-453
- Pain relief, medical kit items for, 12t-14t
- Pancreatitis, acute, 592
- Panstrongylus megistus*, 373
- Papules, of primary lesions, 458b
- Paragonimiasis, 272t, 278t, 281t-282t, 293-294, 357, 601, 601t  
diagnosis of, 595  
endemic zones, 595
- Paragonimiasis (*Continued*)  
extrapulmonary, 595  
pulmonary, 267t-268t, 595
- Paragonimus heterotremus*, 589t
- Paragonimus skrjabini*, 589t
- Paragonimus* spp., 588, 593t  
*westermani*, 589t, 593t, 594
- Paragonimus szecuanensis*, 589t
- Paragonimus westermani*, 210t
- Paralytic polio, risk areas, 3-4
- Paralytic shellfish poisoning, 454-455
- Parasite extract, serodiagnosis using, 578
- Parasitic diseases, during pregnancy, 210, 210t
- Parasitic infections  
causing organomegaly and/or lymphadenopathy, 280t  
cestode, 564-573, 605-606  
fever associations and cutaneous signs, 283t  
potentially fatal febrile tropical infections and treatments, 273t
- Paratyphoid fever, 284-285
- Parenteral therapy, for leishmaniasis, 508t, 511
- Paromomycin  
for *Entamoeba histolytica* infections, 433-434, 433t  
for leishmaniasis, 508t, 511  
side effects of, 434t
- Paronychia, acute, 468
- Passenger notifications, 40
- Pasteurization  
definition of, 93  
in heat disinfection, 94  
of water, 95
- Patches, of primary lesions, 458b
- Pathogens, bacterial diarrhea syndromes caused by, 422
- Paucibacillary leprosy, 519, 519t
- Payment for services, 10
- PCR. *see* Polymerase chain reaction (PCR)
- Peak flow meter (PRM), 233
- Pediatric travelers  
advice for, 165-183  
airline travel with, 166  
altitude illness in, 180-181  
developmental aspects and travel in, 165  
diarrhea and, 177-180  
general safety for, 180  
malaria prevention for, 173-177  
medical kit for, 181t-182t  
miscellaneous issues for, 181-182  
motion sickness in, 167, 167t  
vaccines for, 167-173, 168t, 169f-172f, 174t-175t
- Peginterferon  $\alpha$ -2a, 332
- Pelvic inflammatory disease (PID), 200, 531, 532t
- Penicillin, 273t, 342-343  
in syphilis, 542
- Penicillinase-producing *N. gonorrhoeae* (PPNG), 532-533
- Penicillium marneffei*, 218

- Pentamidine, 273*t*  
 for leishmaniasis, 508*t*  
 for *T. b gambiense* trypanosomiasis, 387
- Peptic ulcer, 11, 115
- Periodic breathing, 140
- Peri-urban slums, 17-18
- Permethrin  
 clothing application, 8*f*  
 for scabies, 477
- Pernio, 130
- Peromyscus leucopus*, 346
- Person-to-person transmission, of hepatitis A virus, 316
- Personal safety  
 of students, 189-190  
 traveler's health and, 1
- Perstans filariasis, 585
- Pertussis, tetanus/diphtheria/acellular pertussis (Tdap), 48
- Pertussis vaccine, 3-4  
 tetanus, diphtheria, and acellular pertussis (Tdap), 222*t*  
 tetanus/diphtheria vaccine (Tdap), 167-168, 169*f*-172*f*  
 during pregnancy, 207-208
- Petrolatum, 180
- pH, of water, halogens and, 101
- Pharmacologic prophylaxis, for acute altitude illness, 143
- Phenytoin, 127*t*, 128
- Phoneutria nigriventer*, 464
- Photocontact dermatitis, 463
- Photographing sensitive subjects, 24
- Photosensitive eruption, 461*t*
- Physalia physalis*, 485*t*
- Physalia utriculus*, 485*t*
- Physician, in foreign country, 9
- Phytophotodermatitis, 463
- PID. *see* Pelvic inflammatory disease (PID)
- Piedra, 495
- "Pig roundworm", 555, 556*t*
- Pigbel, 444, 446-447
- Pinta, 272*t*
- Pinworms, 210*t*, 556*t*, 559-560, 603
- Pityrosporum folliculitis, 493
- Plague, 272*t*-273*t*, 296
- Plague vaccine, 174*t*
- Plant dermatitis (phyto dermatitis), 463
- Plaques  
 in leprosy, 518*f*  
 of primary lesions, 458*b*
- Plasmids, and antibiotic resistance, 401
- Plasmodium falciparum* infections, 71, 303, 306-307  
 chloroquine-resistant, 74-75  
 HRP-2 test, 306  
 PfHRP-2 test, 313  
 severe malaria and, 303, 309-310
- Plasmodium knowlesi* malaria, 31-32
- Plasmodium ovale*, 284, 301-303  
 pregnancy and, 311  
 primaquine and, 310
- Plasmodium ovale* (Continued)  
 primaquine phosphate for, 176-177  
 radical cure of, 310
- Plasmodium* species, 210*t*
- Plasmodium vivax*, 275, 300-303  
 infections with, 303, 305-307  
 primaquine phosphate for, 176-177  
 primaquine-resistant or tolerant, 89-90  
 radical cure of, 310
- Plesiomonas*, in returned traveler's diarrhea, 420
- Plesiomonas shigelloides*, 114  
 in returned traveler's diarrhea, 418*t*, 426
- Pneumococcal conjugate vaccine, 167-168, 169*f*-172*f*  
 HIV-infected persons and, 222*t*, 223
- Pneumococcal infections, 223  
 screening of, 263*t*
- Pneumococcal vaccine, 3-4, 50  
 immigrants and, 264
- Pneumocystis carinii*, 210*t*
- Pneumonia  
 air travel contraindication, 230*t*  
 necrotizing, 296
- Pneumonitis, 289*t*, 297, 556*t*  
 eosinophilic, 590  
 giant cell, 223-224
- POCs. *see* Portable oxygen concentrators (POCs)
- Point-of-care testing, in travel medicine, 408-414  
 alternative settings and emergency use of, 411-413  
 to address new or emerging disease outbreaks, 412-413  
 definition of, 408-411  
 FDA classification of, 409*t*  
 future of, 413  
 good laboratory practices for, 411  
 for monitoring, 408  
 traveler using, 411  
 use and regulation of  
 in resource-limited settings, 410-411  
 in the United States, 409-410
- Poisoning, accidental, 180
- Polio  
 during pregnancy, 201  
 risk of infection in developing countries, 272*t*
- Polio immunization, 3-4  
 HIV-infected persons and, 222*t*
- Polio vaccine, 57-58, 167-168, 169*f*-172*f*  
 efficacy of, 274  
 interactions, 48*t*  
 during pregnancy, 207
- Poliomyelitis, 49*t*, 207, 223, 281*t*-282*t*
- Poliovirus, halogens for, 101*t*
- Polymerase chain reaction (PCR)  
 in Chagas disease, 378  
 in leishmaniasis, 506  
 of leprosy, 518  
 in leptospirosis, 342  
 in Lyme disease, 350  
 in malaria, 306

- Polymerase chain reaction (PCR) (*Continued*)  
 real-time reverse transcription, for Ebola virus, 397  
 in urethritis, 530
- Pork tapeworm. *see Taenia solium* (pork tapeworm)
- Portable oxygen concentrators (POCs), 41
- Posaconazole, 496
- Post-exposure prophylaxis (PEP), for human immunodeficiency virus, 185
- Potassium hydroxide (KOH) examination, in tropical dermatology, 458
- Potassium permanganate, for water disinfection, 106
- Pott disease, 359
- PPD. *see* Purified protein derivative (PPD)
- PPNG. *see* Penicillinase-producing *N. gonorrhoeae* (PPNG)
- Praziquantel, 273*t*, 293, 570-571  
 eosinophilia and, 607
- Pre-admission vaccination, for refugees, 264
- Prednisone, 361*t*
- Pre-exposure rabies vaccines, 63
- Pregnancy  
 altitude and, 211  
 availability of medical service during, 212  
 contraindications for travel during, 203*t*  
 diving during, 212  
 drug categories and, 204  
 and Ebola virus disease, 399  
 emergency help during, 212  
 exercise during, 211-212  
*Giardia lamblia* in, treatment of, 440  
 health insurance and, 212  
 and high-altitude travel, 148*t*-149*t*  
 infections during, 210-211  
 and lactating women, 558-559  
 malaria chemoprophylaxis in, 209  
 malaria during, 311  
 parasitic diseases during, 210, 210*t*  
 transportation risks during, 203-204  
 travel during, 201-212  
 traveler's diarrhea prevention during, 209-210  
 vaccination during, 205-208  
 vector-borne diseases during, 208
- Pregnant women/travelers, 201  
 counseling for, 201-203  
 HBV infection in, 320  
 hepatitis in, 327  
 hepatocellular injury, in pregnancy, 327  
 malaria prevention for, 87-88  
 pre-travel evaluation for, 202*t*  
 schistosomiasis in pregnancy, 591  
 treatment for gonococcal and chlamydial genital infections, 533*t*
- Premenstrual syndrome, 195*t*-196*t*
- Pre-moistened towelettes, in medical kits, 12*t*-14*t*
- Prescription medications, carrying in hand luggage, 11
- Pressure-volume relationship, 158
- Pressurization, 36-37
- Pre-travel providers, on travel issues, 20
- Pre-travel recommendation, 2, 3*t*
- Pre-university student, 185
- Primaquine, 77*t*-78*t*, 84, 306-307, 309*t*  
 contraindicated in pregnancy, 311  
 for expatriate and volunteers, 255  
 during pregnancy, 209  
 for relapse prevention, 89-90
- Primaquine phosphate, for children, 176-177, 176*t*
- Primary lesions, types of, 457, 458*b*
- PRM. *see* Peak flow meter (PRM)
- Probiotics  
 for diarrhea, 179  
 and prevention of MDRO infection, 404  
 for traveler's diarrhea, 116
- Procaine penicillin, 542*t*
- Prochlorperazine, 128-129  
 in medical kits, 12*t*-14*t*
- Proctocolitis, 552
- Proguanil, 81  
 chloroquine plus, 85
- Promethazine, 127*t*, 128  
 for children, 167*t*
- Prophylaxis, HIV pre-exposure, 527
- Prothrombin time, 332  
 in leptospirosis, 342
- Protozoa, 371, 440-441  
 causing meningitis and encephalitis, 281*t*-282*t*  
 effects on reproduction, 210*t*  
 infections with eosinophilia, 607  
 infections with fever, 294-295  
 nonpathogenic, 442  
 pathogens, 441-442  
 and traveler's diarrhea, 114
- Protozoan cysts, 94
- Pseudoephedrine, 127*t*, 128
- Pseudoternanovia decipiens*, 560-561
- Psittacosis, 272*t*
- Psychiatric disorders, during travel, 244
- Psychiatric problems, 246
- Psychosis, 247
- Psychosocial stressors, 244
- Psychotic disorder, advice for travelers at risk for, 245*b*
- Pubic lice, 477-479
- Public health, prevention of MDRO infection and, 402
- Puffer fish poisoning, 453-454
- Pulmonary barotrauma, 153
- Pulmonary edema, 304-305  
 high-altitude, 140-141, 142*t*
- Pulmonary hypertension, and high-altitude travel, 148*t*-149*t*
- Pulmonary overpressure injury, 153
- Pulmonary paragonimiasis, 267*t*-268*t*, 595
- Pulmonary patients  
 oxygen in aircraft, 10  
 portable oxygen for, 11
- Pulmonary syndrome, 286*t*-287*t*



- Pulmonary system, hypobaric hypoxia and, 139*t*  
 Pulmonary tuberculosis, 359  
 Purification, definition of, 93  
 Purified protein derivative (PPD), 360  
 Purulent skin infections, treatment of, 468-470  
 Pustules, 546*t*  
   of primary lesions, 458*b*  
 Pyoderma, 466-470  
   clinical features of, 467-468, 467*f*  
   diagnosis of, 468  
   etiology of, 466  
   treatment of, 468-470, 469*f*  
 Pyogenic cholangitis, recurrent, 592-593  
 Pyomyositis, 470-472  
 Pyrantel pamoate, 603  
 Pyrazinamide, 362-364, 363*t*  
   ethambutol plus, 273*t*  
 Pymethamine  
   plus dapsone, 86  
   plus sulfadoxine (Fansidar), 86
- Q**  
 Q fever, 272*t*, 326  
 QuantiFERON-Gold assay, 361  
 Quarantinable diseases, 262  
 Quinacrine  
   for giardiasis, 439, 439*t*  
   side effects of, 434*t*  
 Quinidine, 273*t*  
 Quinine, 771-78*t*, 86, 273*t*  
   clindamycin plus, 351  
   plus doxycycline, 273*t*  
 Quinolones, 179, 224-225
- R**  
 Rabies, 180, 272*t*  
 Rabies immune globulin (RIG), 64  
 Rabies pre-exposure prophylaxis, for students, 186  
 Rabies vaccine, 63  
   booster doses, 64  
   for children, 173, 174*t*  
   for expatriate and volunteers, 254  
   HIV-infected persons and, 222*t*, 224  
   pre-exposure, 63  
   during pregnancy, 207  
   rabies immune globulin (RIG) and, 64  
   for students, 186  
 Racemose cysticercosis, 570  
 Radiographic studies  
   in extraintestinal amebiasis, 432  
   in intestinal amebiasis, 432  
 Ramelteon, 123-124, 124*t*  
 Rapid diagnostic test (RDT), 306, 313, 410  
 Rapid plasma reagin (RPR) tests, 538  
 Rash, in Ebola virus disease, 395-396  
 Rat lungworm, 604  
 RDT. *see* Rapid diagnostic test (RDT)  
 Real-time reverse transcription PCR (RT-PCR), for Ebola virus, 397  
 Recommended travel vaccines, 58-69  
 Recreational diving, 153, 157-158  
 Red tides, 454-455  
 Refugees, health screening in, 260-270  
 Relapsing fever, 272*t*, 296  
 Renal failure, 304  
 Renal system, hypobaric hypoxia and, 139*t*  
 Reportable disease, 347  
 Resilience, pre-travel evaluation of, 244-245, 245*b*  
 "Resilience factors", 243-244, 245*b*  
 Respiratory conditions, air travel and, 229-233  
 Respiratory infections, 217-218  
   and MDROs, 406-407  
 Reverse block, 158-159  
 Reverse osmosis, 96*t*  
 Reye syndrome  
   risk from bismuth subsalicylate, 115  
   risk from salicylates, 175*t*  
 Rheumatoid arthritis, 350  
*Rhodnius prolixus*, 373  
 Ribavirin, 273*t*  
 Ribavirin, for Ebola virus disease, 398  
 Rickettsial diseases, 288-293  
 Rickettsial spotted fevers, 272*t*-273*t*  
 Ridley-Jopling Classification, in leprosy, 514*f*  
 Rifampin, 273*t*, 295, 362-365, 363*t*  
   in leprosy, 519  
 Rifaximin, 209, 224-225  
   for traveler's diarrhea, 115*t*, 116, 117*t*, 119, 186-187  
 RIG. *see* Rabies immune globulin (RIG)  
 River blindness (onchocerciasis), 293, 581  
 Rizatriptan, 128  
 Road crash fatalities, 19  
 Romaña sign, 375, 375*f*  
 Rotavirus  
   in returned traveler's diarrhea, 418*t*, 427  
   and traveler's diarrhea, 114  
 Rotavirus vaccine, for children, 169*f*-172*f*  
 Round window rupture, 160  
 Roundworms  
   common intestinal, 554-563  
   visceral larva migrans, 603  
 Routine immunizations, 47-50  
   dosage schedule for, 49*t*  
   hepatitis A vaccine as, 48  
   hepatitis B vaccine as, 50  
 Rubella, 272*t*-273*t*  
 Rubella immunization, 3-4  
 Rubella vaccine, during pregnancy, 206  
 Rubeola, 272*t*, 297
- S**  
 "Saddleback" fever pattern, 287  
 Safe sex, practice of, and prevention of MDRO infection, 404  
 Safety  
   of expatriate and volunteers, 256  
   issues for women, 214  
   of students, 189-190  
 Safety pins, in medical kits, 12*t*-14*t*

- Salbutamol, 232-233
- Salicylates, Reye syndrome risk from, 175*t*
- Salmeterol, for acute altitude illness, 144*t*
- Salmonella*, 216-217, 217*t*
- heat inactivation of, 94*t*
  - minimal infectious dose of, 92*t*
  - in returned traveler's diarrhea, 416, 420, 422-423
  - survival in water, 92*t*
  - and traveler's diarrhea, 114
- Salmonella enterica*, 405
- Salmonella enteritidis*, in returned traveler's diarrhea, 418*t*
- Salmonella enterocolitis*, 422-423
- Salmonella typhosa*, water-borne outbreaks of, 91
- Salmonellosis, 272*t*
- Salt-depletion, 134
- Sand flies, 296
- diseases from, 6*t-7t*
  - of leishmaniasis, 501, 502*f*, 503, 511
- Sanitary supplies, 194
- in medical kits, 12*t-14t*
- Sanitation systems, 92
- Sarcocystis nesbitii*, 33
- Sarcocystosis, 33
- SARS. *see* Severe acute respiratory syndrome (SARS)
- SARS-CoV. *see* Severe acute respiratory syndrome coronavirus (SARS-CoV)
- Saurine, 452
- Saxitoxin, 454
- SBET. *see* Standby emergency malaria therapy (SBET)
- Scabies, 476-477
- Scale, of primary lesions, 458*b*
- Schistosoma haematobium*, 33, 593*t*, 600
- Schistosoma japonicum*, 293, 327, 589*t*
- Schistosoma mansoni*, 327, 589*t*, 593*t*, 606
- Schistosoma mekongi*, 589*t*, 606-607
- Schistosoma* species, 210*t*
- Schistosomiasis, 272*t-273t*, 278*t*, 279, 293, 327, 588-592, 601*t*
- clinical features, 589-591
  - eosinophilia and, 257-258, 606-607
  - genital, 193
  - in immigrants, 274
  - Katayama fever, 274, 279, 283*t*, 293, 589-590
  - laboratory studies, 591
  - in pregnancy, 591
  - prevention of, 592
  - risk from water, 257-258, 275
  - screening of, 267*t-268t*
  - transmission of, 588-589
  - treatment of, 273*t*, 591-592
- Scissors, in medical kits, 12*t-14t*
- Scombroid fish poisoning, 451-452
- Scombrototoxic fish, 452
- Scopolamine, for children, 167*t*
- Scopolamine hydrobromide, 127*t*
- Scopolamine patch, for motion sickness, 127-128, 127*t*
- Scorpion stings, 465-466
- Screwworm, in wound myiasis, 481
- Scuba diving, 153-154, 157-158
- during pregnancy, 212
- Sea travel, pregnant women and, 204
- Seat belts, 19-20, 256
- Security
- in urban cities, 23-24
  - of women travelers, 214
- Sedation
- with motion sickness medication, 167*t*
  - with thalidomide, 521
- Selegiline, 128
- Self-defense, 214
- Self-pregnancy tests, 193
- Sensory function, of leprosy, 515
- Septicemia, 296, 310
- Seretide, for asthma, 232-233
- Serodiagnosis, onchocerciasis and, 583
- Serologic tests
- in intestinal amebiasis, 432
  - of leprosy, 518
- Serology, in malaria, 306
- Severe acute respiratory syndrome (SARS), 40, 262, 273*t*
- Severe acute respiratory syndrome coronavirus (SARS-CoV), 32
- Severe leptospirosis, 340
- Severe malaria, 304, 309-310, 309*t*
- Severe sunburn, treatment of, 462
- Sexual activity
- casual sex, 524-525
  - management of sex partners in syphilis, 543
  - sexual tourism and, 525
- Sexual contact, 276*t-277t*
- Sexual practices, among students, 189
- Sexual precautions, in HIV-infected persons and, 225
- Sexually transmitted diseases/infections (STDs/STIs), 195*t-196t*, 200-201, 256, 524-528
- advice to travelers and, 527-528
  - casual sexual activity and travel, 524-525
  - chlamydial genital infections, 529-534
  - defined, 524
  - with fever, 296
  - genital ulcers and, 550
  - gonococcal pelvic inflammatory disease, 529-534
  - international spread of HIV, 525-526
  - international travelers and, 15
  - pelvic inflammatory disease and, 200, 531, 532*t*
  - prevention of, 526-527
  - barrier protection, 526-527
  - HIV pre-exposure prophylaxis, 527
  - vaccines, 527
  - risks for acquisition of, 526
  - sexual tourism and, 525
  - ulcerative, in syphilis, 543

- Shellfish poisoning, 451-456  
 amnesic, 455  
 diarrhetic, 455  
 neurotoxic, 455  
 paralytic, 454-455
- Shiga toxin-producing *Escherichia coli* (STEC), 415-416, 418t, 420
- Shigella*  
 heat inactivation of, 94t  
 in returned traveler's diarrhea, 416, 418t, 420, 422-424  
 survival in water, 92t  
 and traveler's diarrhea, 112, 114  
 water-borne outbreaks of, 91
- Shigellosis, 217t, 272t, 423
- Sickle cell diseases, and high-altitude travel, 148t-149t
- Sildenafil, for acute altitude illness, 144t
- Silent colonization, 404-405
- Silver, for water disinfection, 103t-104t, 107
- Simian herpes virus, 180
- Simulium amazonicum*, 585-586
- Sinus barotrauma, 161-162
- Ski sickness, 126
- Skin  
 onchocerciasis and, 582  
 and soft tissue infections, and MDROs, 406
- Skin cancers, 181
- Skin disease, with schistosomiasis, 590
- Skin glue, in medical kits, 12t-14t
- Skin infections/lesions  
 bacterial, 466  
 fungal, 488-500  
 leprosy (Hansen's disease), 513-523  
 tropical dermatology in, 457
- Skin snip, onchocerciasis and, 583, 583f
- Skin ulcers, 470-472
- Slash and grab technique, 23
- Sleep abnormalities, 246
- Sleep deprivation, 246
- Sleep disruption, 246
- Sleep problems, 246
- Sleep schedule, adjustment of, 124-125
- 'Slim disease', 360
- Small-bowel biopsy, in giardiasis, 437
- Smallpox vaccine, 4, 50-51, 58
- Smoking, quitting, and prevention of MDRO infection, 404
- Social issues, of students traveling abroad, 189
- Sodium stibogluconate, 273t  
 for leishmaniasis, 508t
- Sodium thiosulfate, 105
- Solar irradiation (SODIS), for water disinfection, 107-108
- Solar photocatalytic disinfection, for water disinfection, 108
- Solenopsis invicta*, 465
- Sparganosis, 569
- Splenomegaly, 280t
- Spore form, for *Clostridium botulinum*, 447
- Sporotrichosis, 498
- Spring break vacations, 185
- Sprue, tropical, 272t
- Standard 161P, 38-39
- Standby emergency malaria therapy (SBET), 86-87
- Staphylococcus aureus*, 406  
 in food poisoning, 445t, 446
- STEC. *see* Shiga toxin-producing *Escherichia coli* (STEC)
- Sterilization, of water, 93
- Stevens-Johnson syndrome, 558-559
- Stillbirth, 193, 535
- Stings, 464-466
- Stool  
 bacterial pathogens, isolating, advantage of, 421  
 examination of, in intestinal amebiasis, 431  
 specimen, examining, for traveler's diarrhea, 417-420
- Street crime, 23
- Streptocerciasis, 584
- Streptomycin, 273t, 365  
 contraindications to, 365
- Stressor-related disorders, 247
- String test  
 eosinophilia, 600  
 in giardiasis, 437, 437f-438f  
*Strongyloides*, 557
- Stroke, heat, 135
- Strongyloides*, 267t-268t
- "*Strongyloides* hyperinfection syndrome", 559
- Strongyloides stercoralis*, 210t, 278-279, 554-555, 556t, 558t  
 infection with, 15
- Strongyloidiasis, 257-258, 272t, 278t, 281t-283t, 293, 601t  
 disseminated, 559  
 with eosinophilia, 602
- Students, traveling abroad, 184-191  
 with chronic illness, 187-188  
 contingency planning for emergencies for, 190  
 health science, 185-186  
 medications for, 186-187  
 mental health of, 188  
 personal safety of, 189-190  
 pre-university, 185  
 role of chaperone in, 187  
 social issues of, 189  
 university, 185  
 vaccines for, 186
- Subcutaneous mycoses, 495-499  
 chromoblastomycosis, 495-496  
 lobomycosis, 498-499  
 mycetoma, 496-498, 497f  
 sporotrichosis, 498
- Sulfadoxine-pyrimethamine (SP; Fansidar®), 86  
 for malaria, 307
- Sulfur ointment, for scabies, 477
- Sun protection, 181
- Sunblocks, 181

- Sunburn, 460-462, 461*t*  
 etiology of, 460  
 prevention of, 460-461, 462*f*  
 treatment of, 461-462
- Sunglasses, in medical kits, 12*t*-14*t*
- Sunscreen, 181  
 in medical kits, 12*t*-14*t*
- Superchlorination, for water disinfection, 105
- Superficial cutaneous mycoses, 488-495  
 dermatophyte infections, 488-490, 489*f*  
*Malassezia*, conditions caused by, 491-495, 492*f*  
 tinea nigra, 491
- Superficial infections, treatment of, 468
- Supplemental oxygen, 231-232  
 during air travel, 40-41
- Suramin, 273*t*, 387  
 for *T.b. rhodesiense*, 388
- Swallowing, for pressurization, 159
- Sweat, 132
- Swimmer's ear, 157
- Swiss army knife, in medical kits, 12*t*-14*t*
- Sympathomimetics  
 effects on diving, 156*t*  
 heat stroke and, 135  
 for motion sickness, 128
- Syncope, heat, 133
- Syphilis, 261, 272*t*, 535-544  
 causes of biologically false-positive tests for, 540*t*  
 of central nervous system, 540-541  
 clinical presentation of, 535-537  
 diagnosis of, 537-541  
 epidemiology of, 535  
 HIV and, 543  
 interpretation of testing results, 539*t*  
 latent and tertiary, 537  
 point-of-care tests for, 540  
 primary, 536, 536*f*  
 screening of, 263*t*  
 secondary, 326, 536, 537*f*  
 clinical manifestations of, 536  
 serologic tests for, 538*t*, 541*t*  
 and sex partner management, 543  
 therapeutic response, assessing, 543  
 treatment of, 541-542, 542*t*
- Systemic therapy, for dermatophyte infection, 490-491
- T**
- Tachyphylaxis, 161-162
- Tadalafil, for acute altitude illness, 144*t*
- Taenia saginata* (beef tapeworm), 564, 565*t*-566*t*, 571*t*  
 eosinophilia and, 605-606
- Taenia solium* (pork tapeworm), 267*t*-268*t*, 564, 565*t*-566*t*, 571*t*  
 disseminated, 570  
 eosinophilia and, 605-606
- Taenia* species, 210*t*
- Tape, duct, in medical kits, 12*t*-14*t*
- Tapeworm, 267*t*-268*t*
- Tapeworm infection, 564-573, 605-606  
 clinical management of, 570-572  
 clinical presentation of, 569  
 diagnosis of, 569-570  
 distribution and usual clinical significance of, 565*t*-566*t*  
 infection demographics in developed nations, 564-572  
 intestinal, 564-568  
 parasitologic testing of, 569-570  
 pathology of, 570  
 prognosis of, 572  
 public health and the role of screening of, 572  
 radiology of, 570  
 tissue, 568-569  
 treatment of, 570-572  
 for human, 571*t*
- TD. *see* Traveler's diarrhea (TD)
- Technical diving, 154
- Telbivudine, 332
- Temperature  
 in aircraft cabin, 39  
 control, during pregnancy, 211  
 homeostasis, 129  
 and reagents for point of care tests, 411  
 of water, halogens and, 101
- Tenofovir, 332
- Teratology Society, 205
- Terbinafine, 490-491, 493, 496, 498
- Tetanus immunization, 3-4  
 tetanus, diphtheria (Td) vaccine, 222*t*  
 during pregnancy, 207-208  
 tetanus/diphtheria/acellular pertussis (Tdap), 48, 49*t*, 167-168, 169*f*-172*f*, 222*t*  
 during pregnancy, 207-208
- Tetany, heat, 134
- Tetracycline, 273*t*  
 for *Entamoeba histolytica* infections, 433-434  
 plus aminoglycoside, 273*t*  
 in syphilis, 542*t*
- Tetracycline-resistant *N. gonorrhoeae* (TRNG), 532-533
- Tetrazole vaginal cream, 198
- Tetrodotoxin poisoning. *see* Puffer fish poisoning
- Thalassemia, 266
- Thalidomide, 521
- "The Yellow Book", 4
- Thermometer, oral, in medical kits, 12*t*-14*t*
- Thermoregulation, 136
- Thermotherapy, for leishmaniasis, 508*t*
- "3 Rs", 47
- Throat lozenges, in medical kits, 12*t*-14*t*
- Throat piston, 161
- Thrombophlebitis, 203, 579
- Thrombosis, 201
- Tick bite granuloma, 483
- Tick bite prevention, 353
- Tick-borne encephalitis vaccine, 66  
 endemic regions for, 66, 67*f*  
 FSME-immuno, 66
- Tick fever, 483

- Tick paralysis, 483
- Tick pliers, in medical kits, 12*t*-14*t*, 14*f*
- Tick-borne diseases, 6*t*-7*t*
- Ticks, 276*t*-277*t*, 482-483
- Tinea capitis, 488
- Tinea corporis, 489, 489*f*
- Tinea cruris, 490
- Tinea favosa, 489
- Tinea imbricata, 489
- Tinea nigra, 491
- Tinea pedis, 490
- Tinea versicolor, 491-493, 492*f*
- Tinidazole  
   for *Entamoeba histolytica* infections, 433-434, 433*t*  
   for giardiasis, 437-439, 439*t*  
   side effects of, 434*t*
- Tissue oxygen delivery, impaired, at high altitude, 146
- Tissue tapeworms, 568-569
- Titanium dioxide, 181
- TKM-Ebola, for Ebola virus disease, 398
- TMA. *see* Transcription mediated assay (TMA)
- Toilet paper, in medical kits, 12*t*-14*t*
- Topical steroids, 459, 459*t*
- Topical therapy, for dermatophyte infection, 490
- Tourists, tuberculosis in, 358-359, 359*t*
- Toxic hepatitis, 327
- Toxocara cati*, visceral larva migrans, 603
- Toxocariasis, 272*t*, 601*t*
- Toxoid vaccines, during pregnancy, 205-208
- Toxoplasma gondii*, 210*t*, 211, 295
- Toxoplasmosis, 295, 327
- TPE. *see* Tropical pulmonary eosinophilia (TPE)
- Traffic, expatriate and volunteers and, 256
- Tranquilizers, effects on diving, 156*t*
- Transaminases, 297
- Transcription mediated assay (TMA), 530
- Transfusion, infection risks, 276*t*-277*t*
- Transmission patterns, 29
- Trauma, 18-20  
   expatriate and volunteers and, 256
- Trauma-related disorders, 247
- Traumatic events, psychological sequelae of  
   exposure to, 247
- “Travel and Transport Risk Assessment: Interim Guidance for Public Health Authorities and the Transport Sector”, 40
- Travel clinics, waived tests in, 410
- Travel health insurance, for students, 186, 190
- Travel insurance, 156
- Travel medicine approaches, 1-16  
   emergency information needed in, 9-10  
   immunizations and, 3-4  
   in malaria chemoprophylaxis, 4-5  
   to medical emergencies, 9-11  
   in traveler’s diarrhea, 5-8  
   traveler’s medicine kit and, 11  
   to wilderness and adventure travel, 11
- “Travel medicine triad”, 2, 2*f*
- Travel problems, 246
- “Traveler Public Health Declaration Form”, 40
- Travelers  
   blood type, knowledge of, 11  
   in food poisoning, 449  
   health history, 3*t*, 9-10  
   heat stroke in, 135  
   medicine kit, 11, 12*t*-14*t*
- Traveler’s diarrhea (TD), 5-8, 112-120, 186-187  
   antibiotic prophylaxis for, 115-116  
   bismuth subsalicylate for, 115  
   chemoprophylaxis for, 115, 115*t*, 224-225  
   clinical presentation of, 416-417  
   dietary precautions for, 114-115  
   empiric antibiotic treatment for, 118-119  
   empiric self-treatment for, 116-119, 117*t*  
   etiologic agents of, 418*t*  
   etiology of, 113-114  
   evaluation of, 416-417  
   host factors in, 416  
   immunizations for, 114-115  
   medical kit items for, 12*t*-14*t*  
   oral rehydration for, 116, 178  
   pediatric, 178  
   prevention of, 114-116, 115*t*  
     during pregnancy, 209-210  
   probiotics for, 116  
   returned, approach to, 415-428  
   risks for, 113*f*, 113*t*  
   safe food and water selection tips, 114*t*  
   special considerations for, 119  
   symptomatic treatment for, 117-118
- Trees, heat illness, 22
- Trematodes, effects on reproduction, 210*t*
- Trench foot, 130
- Treponema pallidum*, 535, 537-538
- Triatoma infestans*, 372*f*, 373
- Triatomine/reduviid bugs, 6*t*-7*t*
- Triazolam, 122-123
- Trichinella spiralis*, 210*t*
- Trichinosis, 272*t*, 293, 601*t*, 603
- Trichomonas vaginalis*, 530
- Trichomoniasis, 195*t*-196*t*
- Trichophyton rubrum*, 488
- Trichostrongyliasis, 603
- Trichuriasis, 272*t*
- Trichuris trichiura* (whipworm), 210*t*, 554-555, 556*t*, 558*t*
- Tricyclics, 135
- Trimethobenzamide, 128-129
- Trimethoprim/sulfamethoxazole (TMP/SMX), 12*t*-14*t*, 273*t*  
   in granuloma inguinale, 553  
   for prevention of traveler’s diarrhea, 115-116, 117*t*
- Triptan serotonin agonists, 128
- TRNG. *see* Tetracycline-resistant *N. gonorrhoeae* (TRNG)
- Tropical dermatology, 457-459  
   clinical approach in, 457-458, 458*b*  
   general dermatologic treatments in, 458-459, 459*t*

- Tropical eosinophilia syndrome, 580-581
- Tropical pulmonary eosinophilia (TPE), 580, 605
- Tropical sprue, 272t
- Tropical ulcer, 471-472
- Trypanosoma brucei gambiense*, 383
- Trypanosoma brucei rhodesiense*, 383
- Trypanosoma cruzi*, 371
- Trypanosoma* species, 210t
- Trypanosomiasis, 173
- HIV and, 219
- risk of infection in developing countries, 272t
- Tsetse flies, 382
- diseases from, 6t-7t
- TST. *see* Tuberculin skin test (TST)
- Tuberculin skin test (TST), 48t, 175t, 218, 262, 360, 361t
- Tuberculous leprosy, 514-515, 514f, 517f
- Tuberculosis (TB), 256, 262, 273t, 295, 356-370
- active, 230t, 256, 261, 356
- in children, 359-360
- clinical features of, 359-360
- conditions mimicking, 358
- diagnosis of, 360-362
- drug-resistant, 364-365
- endemic countries of, evaluation of travelers who visit, 368-369
- post-travel, 369
- pre-travel, 368-369, 368t
- epidemiology of, 357
- evaluation of immigrants for, 368
- extrapulmonary, 359, 362
- HIV and, 218, 360, 364-365
- incidence rates of, 358t
- latent TB infection (LTBI), 356-357, 357t
- lymphatic, 359, 362
- meningeal, 360
- miliary, 359
- prevention of, 366-367
- radiographic findings in, 360
- risk assessment for, 367, 367f
- risk of infection in developing countries, 272t
- screening of, 263t
- skin test, 173
- in tourists, 358-359, 359t
- transmission and pathogenesis of, 356-357
- treatment of, 362-366
- adherence to, 365-366
- precautions for, 365
- XDR TB, 364
- Tuberculosis (BCG) vaccine, 68
- Tularemia, 272t-273t, 276t-278t, 279, 283t
- cutaneous, 472-473
- Tumbu fly, in furuncular myiasis, 480-481
- Tunga penetrans*, 481-482
- Tungiasis, 481-482
- Turbinate hypertrophy, 161-162
- Turbulence-related injuries, 42-43
- 2014 World Malaria Report, 71
- Ty21A vaccine, 174t
- during pregnancy, 208
- Tylenol #3, in medical kits, 12t-14t
- Tympanic membrane rupture, 166
- Typhoid fever, 217t, 284-285, 326
- heat stroke and, 135
- during pregnancy, 201
- risk of infection in developing countries, 272t
- treatment of, 273t
- Typhoid vaccine, 61
- for children, 173, 174t
- concomitant drugs and, 61
- for expatriate and volunteers, 253
- HIV-infected persons and, 222t
- interactions with, 175t
- oral, 48t
- other vaccines and, 61
- during pregnancy, 208
- Ty21A oral, 61
- vi capsular polysaccharide (ViCPS), 61-62
- combined with hepatitis A vaccine, 62
- Typhoid Vi polysaccharide vaccine, 173, 174t
- Typhus, 272t-273t, 276t-278t, 280t, 282, 283t, 288, 290t
- clinical features of, 292t
- epidemiology of, 290t
- murine, 276t-277t, 290t, 292t
- Tzanck test, 548-549
- U
- Uganda, Ebola virus outbreak in, 394-395
- Ulcer
- peptic, 11, 115
- of primary lesions, 458b
- Ulcerative colitis, returned traveler's diarrhea and, 416-417
- Ulcerative sexually transmitted infections, in syphilis, 543
- Ulipristal acetate, 199
- Ultrafiltration, 96t
- Ultraviolet (UV) light
- reactions, 460-462, 461t
- etiology of, 460
- prevention of, 460-461, 462f
- treatment of, 462-463
- for water disinfection, 107, 109t
- Undercurrent, 152-153
- University students, 185
- Upper respiratory infection, 272t
- Urban growth, 17
- "Urban heat island effect", 22
- Urban medicine, 17-26
- air pollution and, 20-22
- crime and security, 23-24
- heat illness and, 22-23
- illicit drug use, 24-25
- infectious diseases and, 18
- trauma and, 18-20
- Urethritis, 530-531
- Urinary deflector, in medical kits, 12t-14t
- Urinary tract infection, 194-198, 195t-196t
- E. coli* in, 406-407
- and MDROs, 405-406
- with schistosomiasis, 590

- Urticaria, 461*t*, 464
- US Environmental Protection Agency, 20
- US State Department, 23-24
- US Transportation Security Administration (TSA), 228
- US Vaccine Adverse Events Reporting System, 51-52

## V

- Vaccinations, for HIV, 221-224
- Vaccine-preventable diseases (VPD)
  - for expatriate and volunteers, 252-255, 252*f*
  - recommended, 253
- Vaccines
  - for infants and children, 167-173, 168*t*, 169*f*-172*f*, 174*t*
  - interactions of, 175*t*
  - during pregnancy, 205-208
  - routine, 168, 168*t*
  - for students, 186
  - for women travelers, 205
- Vaccinia virus vaccine, 58
- Vaginal moisturizers, 196
- Vaginitis, 195*t*-196*t*, 198
- Vaginosis, bacterial, 195*t*-196*t*, 198
- Valacyclovir, 549*t*
- Valsalva maneuver, 159
- Varicella, 273*t*
- Varicella vaccine, 3-4, 48, 49*t*, 167-168, 169*f*-172*f*
  - interactions, 48*t*, 175*t*
  - during pregnancy, 206, 208
- Varicose veins, 204
- VariZIG, 208
- Vector-borne diseases, 29-32
  - artemisinin resistance *P. falciparum* malaria, 32
  - chikungunya virus, 29-31
  - dengue virus, 31
  - HIV and, 218-219
  - Lyme borreliosis, 32
  - Plasmodium knowlesi* malaria, 31-32
  - during pregnancy, 208
  - West Nile virus, 29, 30*f*
  - Zika virus, 31
- Veneral Disease Research Laboratory (VDRL) tests, 538
- Venous thromboembolism (VTE), 41-42
- Ventilation, 37-38, 38*f*
- Ventilatory responses, impaired, at high altitude, 146-147
- Vero cell (VC) vaccine (Ixiaro™), for expatriate and volunteers, 254
- Vertigo, 126
- Vesicles, 458*b*, 546*t*, 548
  - of primary lesions, 458*b*
- Vi capsular polysaccharide (ViCPS) typhoid vaccine, 61-62, 253
  - combined with hepatitis A vaccine, 62
  - during pregnancy, 208

## Vibrio

- parahaemolyticus*, 276*t*-277*t*
    - in returned traveler's diarrhea, 416, 420, 425
  - vulnificus*, 276*t*-277*t*, 279*t*
  - Vibrio cholerae*
    - heat inactivation of, 94*t*
    - minimal infectious dose of, 92*t*
    - in returned traveler's diarrhea, 418*t*, 425
    - survival in water, 92*t*
    - and traveler's diarrhea, 114
  - Vibrio parahaemolyticus*, 217*t*
    - in returned traveler's diarrhea, 418*t*, 425
    - and traveler's diarrhea, 114
  - Vibrio* species, 217*t*
  - Vibrio vulnificus*
    - in returned traveler's diarrhea, 418*t*, 425
    - and traveler's diarrhea, 114
  - Viral agents, 427
  - Viral gastroenteritis, 272*t*, 276*t*-277*t*
  - Viral hemorrhagic fevers, 256
  - Viral infections
    - causing meningitis and encephalitis, 281*t*-282*t*
    - causing organomegaly and/or lymphadenopathy, 280*t*
    - with fever, 283*t*, 296-297
    - viral hepatitis in travelers and immigrants, 315-335
  - Virus vaccines, interactions with, 175*t*
  - Viruses, filtration susceptibility of, 96*t*
  - Visceral leishmaniasis, 219, 273*t*, 294-295, 509-511
    - clinical features of, 509-510
    - diagnosis of, 510
    - distribution of, 509*f*
    - treatment of, 510-511
  - Voluntary tubal opening, 161
  - Vomiting, medical kit items for, 12*t*-14*t*
  - VPD. *see* Vaccine-preventable diseases (VPD)
  - VSV-EBOV Merck vaccine, for Ebola virus, 399-400
  - VTE. *see* Venous thromboembolism (VTE)
- ## W
- Waived tests, 409-410
    - in travel clinics, 410
  - Warfarin, 122, 251
  - Water, risk, 276*t*-277*t*
  - Water disinfection, 91-111
    - chemicals for, 97-106
      - other, 106-108
    - clarification in, 97
    - field techniques for, 92-97, 93*t*
    - filtration in, 95-97, 109*t*
    - granular activated charcoal for, 97
    - heat in, 93-95, 109*t*
    - mixed species disinfection (electrolysis) in, 106
    - portable field water filters and devices for, 99*t*-100*t*
    - preferred techniques for, 108-110, 108*t*-109*t*
    - risk of water-borne infection, 91-92

- Water purification, 5  
 methods for, 9*t*
- Water safety, among students, 189-190
- Water-borne pathogens, 91
- Water-depletion, 134
- Weil disease, 340
- West Nile virus, 29, 30*f*
- Whipworm (*Trichuris trichiura*), 210*t*, 554, 556*t*, 558*t*  
 with eosinophilia, 602
- White blood cells (WBC), determination of, in returned traveler's diarrhea, 420
- White piedra, 478, 495
- White-footed mouse, 346
- WHO. *see* World Health Organization (WHO)
- Wild polio virus (WPV), 51
- Wilderness Medical Society, 11
- Wilderness travel, 11
- "Wind tunnel effect", 37-38
- Winterbottom sign, and African trypanosomiasis, 383
- Women travelers  
 advice for, 192-214  
 breast feeding, 212-213  
 contraception for, 198-200  
 emergency contraception for, 199-200, 200*t*  
 and gender-based medicine, 192  
 general health issues of, 193-201  
 internet resources for, 197*t*  
 medicine kit for, 193, 195*t*-196*t*  
 menstruation and, 193-194  
 older, 213  
 personal security and safety of, 214  
 pre-travel history for, 194*t*  
 sexually transmitted infections in, 200-201  
 travel during pregnancy, 201-212  
 tropical disease and, 192-193  
 urinary tract infections in, 194-198  
 vaccines for, 205  
 vaginitis in, 198
- Women travelers, antiparasitic drugs in lactating women, 558
- World Health Organization (WHO)  
 2013 index on pollution, 20  
 air travel and, 39  
 in childhood immunization programs, 47  
 suspect case of Ebola as, 397  
 website travel and disease information, 2
- World Tourism Organization (WTO), in international travel, 1
- Wound myiasis, 480-481
- WPV. *see* Wild polio virus (WPV)
- Wuchereria bancrofti*, 574-575, 577*f*  
 Bancroftian filariasis, 575  
 eosinophilia and, 600, 605
- X**
- XDR TB, 364
- Y**
- Yaws, 272*t*
- "Yellow Book" ("Health Information for International Travel"), 301
- Yellow fever, 288, 326  
 endemic zones, 4  
 during pregnancy, 201  
 risk of infection in developing countries, 272*t*  
 urban risks of, 18
- Yellow fever vaccine, 4, 48*t*, 51  
 booster doses, 51  
 breast feeding and, 212-213  
 for children, 174*t*  
 contraindications in, 51-52, 173  
 endemic zones of, 51, 52*f*-53*f*  
 for expatriate and volunteers, 254  
 HIV-infected persons and, 222*t*, 224  
 interactions with, 175*t*  
 letter of waiver for, 55, 173  
 precautions in, 51-52  
 during pregnancy, 206, 208  
 required for travel, 50-51  
 vaccine-associated viscerotropic disease (YEL-AVD), 53-55
- Yersinia*, in returned traveler's diarrhea, 420
- Yersinia enterocolitica*  
 in returned traveler's diarrhea, 418*t*, 425-426  
 and traveler's diarrhea, 114
- Z**
- Zaleplon, 124*t*  
 for jet lag, 246
- Zika virus, 31
- Zinc oxide, 180
- ZMapp, for Ebola virus disease, 398
- Zolpidem, 122-123, 124*t*  
 for jet lag, 246
- Zoonoses, emerging and reemerging, 29
- Zoonotic cutaneous leishmaniasis, urban risks of, 18
- Zoonotic pathogens, 27
- Zopiclone, 122-123, 124*t*