Acid-fast bacilli smears
Centers for Disease Control and Prevention tuberculosis-classified immigrants, 231
in children, 37
in contact evaluation, 155, 156, 158, 159, 160, 202
conversion, 102, 154
at end of intensive phase of treatment, 102, 103
in examination of the placenta, 38
for infection control, 121, 122, 124, 130
in initial evaluation, 27, 29
in multidrug-resistant tuberculosis, 201, 202
pertaining to regulatory interventions, 103, 147
in pregnant women, 130
quantitation scale, 30
reporting requirements, 229, 230
with rifapentine use, 12, 46, 47
during and after treatment, 101, 103, 115, 116
at end of treatment, 102, 103
Acquired rifamycin resistance (ARR), 53
with intermittent regimens, 53
relapse due to, 117
with rifapentine, 13, 48, 49, 53
Adherence
  to active tuberculosis treatment, 142
  ensuring, 142
  to HAART regimens, 49
  incentives for, 63, 142, 203
  to latent tuberculosis infection treatment, 195, 201, 203
  monitoring, 105, 116, 127, 139
  prioritization for locating non-adherent patients, 144
  referral for detention, 145
  standards, 236, 237
Adverse events — see Adverse reactions
Adverse reactions, 101, 105, 203, 208, 210
  audiotoxicity — see Audiovestibular manifestations
  audiovestibular manifestations, 105, 112
  blood sugar abnormalities — see Hypoglycemia/hyperglycemia
  cardiotoxicity, 92, 93
  in children, 60
  in clinically confirmed patients, 202
dermatitis, 105, 106, 208, 210
drug desensitization, 113
gastritis, 105, 110, 208, 210
grades of toxicity, 114
hematologic manifestations, 94, 105, 111, 208, 210
hepatitis, 92, 104, 105, 107, 208, 210
in HIV–infected patients, 49, 56
hypoglycemia/hyperglycemia, 13, 91, 93, 105, 210
hypothyroidism, 104, 105, 210
joint manifestations, 105, 111, 208, 210
lactic acidosis, 94
in latent tuberculosis infection patients, 195
management of adverse reactions, 106
in multidrug-resistant tuberculosis patients, 84, 92
medication orders, 104
neurologic manifestations, 105, 210
with non-nucleoside reverse transcriptase inhibitors, 50, 51
with nucleoside/nucleotide reverse transcriptase inhibitors, 51
paradoxical reactions, 56, 113
peripheral neuropathy, 62, 94, 105, 110, 196, 208, 217, 220
photosensitivity/phototoxicity, 92, 106, 210
psychiatric manifestations, 105, 210
in pregnant women, 193
with primary tuberculosis medications, 208
rifapentine, 48
with protease inhibitors, 50
renal manifestations, 105, 111, 208, 210
reporting of, 114
with reserve tuberculosis medications, 83, 210
fluoroquinolones, 85, 92, 93
serotonin syndrome, 95
tendinopathy/tendonitis, 92, 105, 210
visual manifestations, 94, 105, 112, 208

AFB smears – see Acid-fast bacilli smears

Airborne infection isolation (AII), 37, 114, 122
admission to, 121, 123
discharge from, 102, 124
influence of nucleic acid amplification results on, 125
transfer to non-airborne infection isolation rooms, 124

Airline exposure, 167, 168

Alternative regimens for latent tuberculosis infection treatment, 195 – see Latent tuberculosis infection treatment

Amikacin – see Aminoglycosides, Injectable anti-tuberculosis medications
adverse reactions to, 105, 111, 210
breast feeding and, 211
central nervous system penetration of, 74, 211
cross-resistance to kanamycin, 83, 91
dose and frequency of, 61, 85, 210
drug interactions, 216
indications for, 83, 85, 86
in liver disease, 62, 211
with *Mycobacterium avium intracellulare*, 67
monitoring, 84, 210
in neonates, 38
in pregnancy, 58, 211
in renal failure, 61, 211
use in ‘W’ strain, 91

**Aminoglycosides** – see Injectable anti-TB medications, Amikacin, Kanamycin, Streptomycin

**Amplicor®** – see Nucleic acid amplification tests

**Anergy**, 176, 182, 184, 192

**Anergy testing**, 182

**Antiretroviral drugs** – see HIV infection, Protease inhibitors, Non-Nucleoside reverse transcriptase inhibitors, Nucleoside/Nucleotide reverse transcriptase inhibitors

**Antituberculosis drugs and meals**, 62

**Associate investigation**, 153, 162, 167, 169

**Audiometry**, 105, 208, 210

**Audiovestibular manifestations**, 105, 112, 208, 210

**Bactericidal anti-tuberculosis medications**, 84, 85, 208, 210

**Bacteriostatic anti-tuberculosis medications**, 208, 210

**Bacille Calmette-Guerin (BCG) vaccine**, 227
booster phenomenon, 182,
disease due to intravesicular use, 78
evaluation and follow up, 228
indications for use, 38, 164, 174, 227
for infants, 164, 228
tuberculin skin testing and, 179, 181

**Biweekly therapy** – see Twice weekly therapy, Intermittent therapy

**Blood-based tests for tuberculosis infection**, – see QuantiFERON® TB Gold

**Blood sugar abnormalities** – see Hypoglycemia/Hyperglycemia

**Booster phenomenon**, 182

**Breastfeeding and anti-tuberculosis medications**, 48, 58, 62, 196, 200, 209, 211

**Capreomycin** – see Injectable anti-tuberculosis medications
adverse reactions to, 105, 111, 210
breast feeding and, 211
central nervous system penetration of, 74, 211
dose and frequency of, 85, 210
drug interactions, 216
indications for, 83, 85, 86
in liver disease, 62, 211
monitoring, 84, 210, 215
in pregnancy, 58, 211
in renal failure, 61, 211

**Cardiotoxicity**, 92, 93, 217

**Case closing**, 115

**Case management**, 12, 139, 140
flow chart, 140
initial interview topics, 141
for treatment of contacts with latent tuberculosis infection, 169, 202

**Cavitary tuberculosis disease**
- airborne infection isolation and, 122
- in children, 37
- in contact investigation, 155, 156, 158, 160, 161
- increased risk of relapse and, 44, 46
- infectiousness of, 122 155, 160, 161, 198
- upon initial evaluation, 13, 25, 36
- late complications of treatment and, 212
- length of treatment, 13, 43, 103
- in multidrug-resistant tuberculosis patients, 83, 88, 90
- and rifapentine, 46, 47
- surveillance and, 103, 234
- treatment completion and, 64

**Central nervous system tuberculosis**, 38, 56, 71, 73, 79, 113, 121, 123, 211, 227 – see *Meningeal tuberculosis, Tuberculoma*

**Cerebrospinal fluid**, 74
- medication levels in, 211
- in meningeal tuberculosis, 74
- specimen collection, 27, 29

**Chemistry panel**, 36, 103, 104, 190, 208, 210

**Chest pain**, 73, 114, 190, 212

**Chest X-ray**
- Centers for Disease Control and Infection tuberculosis-classified immigrants, 231
- changes after treatment, 213
- for children, 37, 164, 165
- for Class IV, 115, 200
- for evaluation of contacts, 162, 163, 164, 165
- for evaluation of tuberculosis disease, 25, 35, 36, 72, 73, 75, 76, 78
- for infection control, 122, 130
- interrupted or incomplete treatment, 65
- after latent tuberculosis infection treatment, 205
- before latent tuberculosis infection treatment, 174, 179, 189, 192
- lateral chest X-ray, 37
- lead shield, 27, 190, 194
- after multidrug-resistant tuberculosis treatment, 115, 116
- for neonates, 38
- for patients with previous positive tests for tuberculosis infection, 163
- post-treatment evaluation, 101, 103, 115, 116
- for pregnant women, 27, 130, 190, 194
- reporting requirements, 230
- for source case investigations, 167
- during tuberculosis treatment, 13, 43, 67, 101, 103
- at end of tuberculosis treatment, 14, 115

**Children with tuberculosis**
- congenital and neonatal tuberculosis, 38
- diagnosis of, 28, 37, 38
- drug resistance and, 28, 38, 84
evaluation of, 26, 37
extrapulmonary disease, 37, 60, 71, 73, 75, 227
gastric aspirates in, 28
intermittent regimens, 59
source case investigations for, 167
treatment, 59, 60
   adverse reactions and, 60
dosages of tuberculosis drugs, 210
   with ethambutol, 14, 59, 84, 208
   with fluoroquinolones, 84, 85, 92, 210
   length regardless of culture results, 60
   of meningitis, 74
   with rifapentine, 47, 48
   steroids for, 74, 79
   visual manifestations in, 14, 59
Chronic renal failure - see Renal failure
Ciprofloxacin — see Fluoroquinolones
Class IV (old, healed tuberculosis), 36, 63, 101, 115, 190, 200, 201, 202, 234, inside back cover
   evaluation for, 173, 174, 200
   treatment of, 13, 200
Class V (High) versus (Low), 36, 56, 63, 101, 114, 115, 127, 162, 190, 200, 232, 234, inside back cover
Classification of tuberculosis, 36, 114, 162, 163, 164, inside back cover
Clinical examination – see Medical evaluation
Clinically confirmed tuberculosis - see Culture–negative tuberculosis
Clofazimine, 58, 86, 91, 95
Clubbed fingers, 213
Cohort review, 140, 143, 169
Commissioner’s Orders - see Regulatory interventions
Complete blood count, 36, 48, 94, 103, 104, 112, 190, 196, 199, 209
Completion of treatment
   for latent tuberculosis infection, 195, 196, 202, 205
   for tuberculosis, 43, 45, 48, 57, 60, 64
      in children, 60
      for culture negative pulmonary tuberculosis, 44,
      for culture-positive pulmonary tuberculosis, 43, 45
      for extrapulmonary tuberculosis, 72, 73, 76, 77, 78, 79
      for multdrug resistant tuberculosis, 86, 87, 88, 89, 90, 91
      for pregnant women, 57
      with rifapentine, 47, 48
Confidentiality, 16, 20, 155, 238
Concentric circle, 153, 155, 157, 165
Congenital tuberculosis, 38, 122, 130, 190
Contact evaluation, 153 – see Contacts, Contact investigation
   airline exposure, 167, 168
   assessing risk of transmission, 161
   calculating the infectious period, 161
   and case management, 140, 141
chest x-ray for, 162, 163, 164
concentric circle, 155, 157, 167
confidentiality, 18, 19, 155
for culture-negative non-cavitary pulmonary tuberculosis 157, 159
decision to conduct or continue, 156
epidemiologic assessment of transmission, 155
expanding, 165, 166
for extrapulmonary tuberculosis, 157
infant and child contacts, 28, 37, 71, 164, 177, 227
medical evaluation, 163
for patients whose cultures convert back to positive, 164
for patients with negative Amplicor® or MTD®, 156
priorities and prioritization of, 155, 158, 159, 160
for smear-negative, culture-pending cases, 165
source case investigation, 167
tests for tuberculosis infection in, 162, 163, 164, 165, 167
window period, 155, 162, 163, 164, 165, 166, 176
window period treatment (prophylaxis), 38, 155, 193

**Contact investigation** – see *Contact evaluation*

**Contacts** – see also *Contact evaluation*
to AFB smear-negative patients, 159
to AFB smear-positive patients, 158
blood-based test for tuberculosis infection for, 184
case management of, 169
chest X-ray for, 162, 163, 164
classification of, 163
close, 153, 154, 157, 160
determination of positive skin test reaction for, 180
directly observed therapy (DOT) for latent tuberculosis infection, 203
high-priority contacts, 154, 155, 158, 159, 160
HIV screening and testing of, 162
infants and children who are, 28, 37, 71, 164, 177, 227
initial test for tuberculosis infection in, 162, 164
latent tuberculosis infection treatment for, 169, 189, 192, 193, 195
management of, 161
medical evaluation for, 163
other-than-close, 153, 154, 157
of patients with multidrug-resistant tuberculosis, 127, 198, 199, 200, 201, 205, 227
who are pregnant, 194, 200
with prior positive test for tuberculosis infection, 162, 163, 202
repeat test for tuberculosis infection, 163, 165, 174
reporting requirements for, 229, 230
symptom review, 161
test for tuberculosis infection of, 162, 163, 164, 173, 174, 176, 184, 227

**Continuation phase of tuberculosis treatment**, 43, 45, 48, 52, 58, 60, 86, 103, 236
for culture-negative pulmonary tuberculosis, 44, 58
for culture-positive pulmonary tuberculosis, 43, 45
extension of treatment in, 13, 43, 46, 47
for extrapulmonary tuberculosis, 71, 74
intermittent therapy during, 44, 45, 53
interrupted treatment during, 65, 66
for multidrug-resistant tuberculosis, 86
with rifapentine, 12, 47, 48, 209

**Conversion of skin test result**, 154, 163, 166, 192, 193, 198, 200, 202, 205, 228

**Converters** – see **Conversion of skin test result**

**Corticosteroids**, 79
for congenital tuberculosis, 38
for disease due to intravesical Bacille Calmette-Guérin, 78
for disseminated tuberculosis, 76, 79
dosages, 56, 73, 74
with fluoroquinolones, 93, 217
for immune reconstitution inflammatory syndrome, 56
for meningeal tuberculosis, 74, 75, 79
for neonates, 38
for paradoxical reactions, non-HIV related, 113
for pericardial tuberculosis, 73, 79
for pleural tuberculosis, 73
for respiratory failure, 76, 79
with rifampin, 222
risk of developing tuberculosis due to, 160, 173, 174, 176, 192
for tuberculoma, 75, 79

**CSF** – see **Cerebrospinal fluid**

**CT scans for tuberculosis diagnosis** - 72, 96, 212

**Culture**
conversion, 12, 101, 102, 125, 127, 129, 130, 161, 214
in drug-resistant tuberculosis, 83, 85, 86, 96
false-positive, 35
frequency of collection of, 101, 103
mycobacterial, 31
reversion, 96, 154

**Culture-negative tuberculosis**
in children, 60
classification of, 114
post-treatment evaluation for, 115
in pregnant women, 58
treatment of, 13, 44, 58, 103

**Culture-positive, pulmonary tuberculosis**
for children, 59
post-treatment evaluation for, 115
in pregnant women, 57
treatment of, 43,

**Culture-positive relapse**, 46

**Cutaneous tuberculosis**, 77

**Cycloserine**
adverse reactions to, 105, 111, 210
breast feeding and, 211
central nervous system penetration of, 211
dose and frequency of, 210
drug interactions, 217, 220
eosinophilia with, 111
indications for, 83, 86, 201
in liver disease, 211
monitoring, 210, 214
in pregnancy, 211
pyridoxine with, 62, 210
in renal failure, 61, 211
CYP3A, 49, 50, 52

**Dermatitis**, 105, 106, 208, 210

**Detention** — see *Regulatory interventions*

**Diagnosis**

of tuberculosis disease — see *Evaluation for tuberculosis disease*
of tuberculosis infection — see *Blood-based tests for tuberculosis infection, Tuberculin skin test*

**Dialysis and tuberculosis medications**, 60, 211

**Directly observed therapy (DOT)**, 12, 63, 101

- agreement for clinic DOT, 242
- agreement for field DOT, 240
- and intermittent therapy for latent tuberculosis infection, 196
- and intermittent therapy for tuberculosis, 44, 45, 104, 208
- for latent tuberculosis infection, 195, 203
- mandatory, 146, 147
- missed visits, 143
- protocol for, 63
- prioritization of patients for, 64
- rifapentine and, 46, 47
- for tuberculosis treatment, 12, 63, 101

**Discharge**

- from airborne infection isolation, 123, 124, 125, 126
- from the hospital, 14, 102, 125, 128
  - of an acid fast bacilli smear-negative patient, 126
  - of a patient with suspected/confirmed multidrug-resistant tuberculosis, 126
  - while still potentially infectious, 124, 128, 244

**Disease due to intravesical Bacille Calmette-Guérin for bladder cancer**, 78

**Disseminated tuberculosis**, 29, 37, 56, 72, 75, 79, 106, 107, 113, 121 — see *Miliary tuberculosis*

**DOPT** (directly observed preventive therapy) — see *Directly observed therapy for latent tuberculosis infection*

**Dosages for treatment**

- for latent tuberculosis infection, 196
- for tuberculosis, 45, 208, 210

**DOT** — see *directly observed therapy*

**Drug concentrations** — see *drug susceptibility testing*

**Drug desensitization**, 113
Drug interactions
  with antiretroviral medications, 49, 208
  with anti-tuberculosis medications, 216
  with rifapentine, 16, 48, 55

Drug susceptibility testing, 32
  drug concentrations for, 33
  interpretation of, 32
  methods of, 32

Drug-resistant tuberculosis – see Multidrug-resistant tuberculosis, Isoniazid-resistant tuberculosis, Rifampin-resistant tuberculosis
  risk factors for, 26
  treatment of, 83, 86

Duration of treatment – see Length of treatment

Dyspnea, 73, 213

Electrolytes, 36, 111, 208, 210

Electronic cap monitoring, 142

Electronic Clinical Laboratory Reporting System (ECLRS), 230

Electronic Disease Notification (EDN), 231

Eosinophilia, 105, 111, 210 – see Capreomycin, adverse reaction to

Epidemiology, 16, 35, 155

Ethambutol
  adverse reactions to, 105, 208
  breast feeding and, 211
  central nervous system penetration of, 211
  in children, 14, 59, 208
  discontinuation of, 43, 44, 57, 59, 103
  dose and frequency of, 45, 196, 208
  drug levels for, 61, 214
  indications for, 45, 86, 201
  in liver disease, 61, 211
  monitoring, 61, 208
  monitoring vision, 27, 59, 103, 208
  in pregnancy, 14, 57, 211
  in renal failure, 60, 211
  resistance, 86, 87, 89,
  for treatment of Class IV, 200
  for treatment of multidrug-resistant tuberculosis, 84, 85, 86, 89, 90, 91
  for treatment of multidrug-resistant tuberculosis contacts, 201

Ethionamide
  adverse reactions to, 105, 210
  breast feeding and, 211
  central nervous system penetration of, 74, 211
  dose and frequency of, 210
  drug interaction, 210, 217, 220
  indications for, 84, 86, 89, 90, 91
  in liver disease, 61, 104, 211
  monitoring, 104, 210
in pregnancy, 58, 211
in renal failure, 60, 211
resistance, 86, 90
and thyroid function testing, 104, 210
for treatment of multidrug-resistant tuberculosis contacts, 201

Evaluation for tuberculosis disease, 25
bacteriology, 27
in children, 37
Class V (high) versus (low), 36
for culture-negative tuberculosis, 44
drug susceptibility testing, 32
extrapulmonary tuberculosis, 71, 72
genotyping, 34
HIV testing, 26, 36
laboratory tests, 36
microbiologic, 27
nucleic acid amplification, 30
physical examination, 26
radiographic, 27
tests for tuberculosis infection, 26

Extrapulmonary tuberculosis, 71 – see Individual sites
chest X-ray and, 27
in children, 37, 60
congenital tuberculosis, 38
corticosteroids for, 38, 73, 74, 75, 76, 79
evaluation by specific site, 72
  central nervous system tuberculosis, 73
cutaneous tuberculosis, 77, 78
disease due to intravesical BCG for bladder cancer, 78
disseminated tuberculosis, 75
gastrointestinal tuberculosis, 77
genitourinary tuberculosis, 76
lymphatic tuberculosis, 72
pericardial tuberculosis, 73
peritoneal tuberculosis, 77
pleural tuberculosis, 72
skeletal tuberculosis, 76
length of treatment, 71, 79
nucleic acid amplification tests for, 30, 31
paradoxical reactions, non-HIV related, 113
treatment of, 71 – see Individual sites

Expanding contact investigation, 165, 166
Extreme drug-resistance, 86

Failure – see Treatment failure
False-positive results, 35, 36, 181
due to BCG, 175, 181, 182
investigations, 35
in tuberculin skin testing, 173

**False-negative results**, 176, 179, 181, 193

**Fluoroquinolones** — see also *Gatifloxacin, Levofloxacin, Moxifloxacin*
- adverse reactions to, 85, 92, 105, 210
- breastfeeding and, 211
- central nervous system penetration of, 211
- in children, 84, 85, 92, 210
- dose and frequency of, 210
- drug interactions, 217
- indications for, 13, 85, 86, 91
- in liver disease, 13, 62, 211
- with *Mycobacterium avium intracellulare*, 67
- monitoring, 93, 210
- in pregnancy, 85, 211
- in renal insufficiency, 61, 211
- for treatment of drug-resistant tuberculosis, 85, 86, 87
- for treatment of multidrug-resistant tuberculosis, 86, 87, 88, 89, 90, 91
- for treatment of multidrug-resistant tuberculosis contacts, 92, 201

**Follow-up** — see *Monitoring*

**Gastric aspiration**, 28

**Gastritis**, 95, 105, 110, 208, 210

**Gastrointestinal tuberculosis**, 77

**Gatifloxacin**, 91, 93, 218 — see also *Fluoroquinolones*

**Genitourinary tuberculosis**, 71, 76, 79

**Genotyping**, 34

**Gen-Probe** — see *Nucleic acid amplification tests*

**Gout** — see *Joint manifestations*

**Guidelines**
- Bureau of Tuberculosis Control vs. American Thoracic Society, Centers for Disease Control and Infection, Infectious Disease Society of America, 13
- Hospitalization and discharge, 14, 121

**Health Code tuberculosis related sections**, 16, 63, 145, 155, 177, 229

**Health Systems Examination**, 234

**Hearing loss** — see *Audiovestibular manifestations*

**Hematologic manifestations**, 94, 105, 111, 208, 210

**Hemodialysis**, 60, 211

**Hemoptysis**, 96, 121, 212

**Hepatitis**, 48, 92, 104, 105, 107, 208, 210, 211
- liver sparing regimen, 61
- latent tuberculosis infection treatment, 189, 190, 191, 195, 196, 198, 199, 200, 203, 204, 208, 219
- management of drug-induced, 109
- non-drug related, 110
- due to rifampin and pyrazinamide, 15, 198
- screening, 36, 60, 103, 109
- viral, 36, 61, 104, 107, 109
High efficiency particulate air (HEPA) filter, 28, 129, 134
High tuberculosis-incidence areas of the world, 175
Highly Active Antiretroviral Therapy (HAART) – see HIV-infection, Protease inhibitors, Non-nucleoside reverse transcriptase inhibitors, and Nucleoside/nucleotide reverse transcriptase inhibitors
HIPAA (Health Insurance Portability and Accountability Act of 1966) – see Confidentiality
HIV infection
anti retroviral drugs and rifabutin, 14, 49, 54, 55, 195, 197
anti retroviral drugs and rifampin, 14, 49, 54, 55, 195, 196
Bacille Calmette Guérin vaccination, 227
classification of tuberculin skin test, 180
HIV-infected contacts, 157, 158, 159, 160, 163, 174, 176, 190, 191
treatment in, 163, 164, 189, 195, 197, 203
latent tuberculosis infection and,
  anergy testing, 182
  classification of tuberculin skin test, 180
  treatment in, 163, 164, 189, 195, 197, 203
tuberculosis and, 49
diagnosis, 26
DOT, 13, 63
drug interactions, 14, 49, 54, 55
drug-resistant tuberculosis, 83, 84
extrapulmonary disease, 71
general considerations, 52
immune reconstitution inflammatory syndrome (IRIS), 56
interrupted or incomplete treatment, 65, 66
length of treatment, 53
monitoring, 103, 104
post-tuberculosis treatment evaluation, 117
HIV-infected contacts, 157, 158, 159, 160, 163, 174, 176, 190, 191
treatment in, 163, 164, 189, 195, 197, 203
in pregnant women, 53, 57, 194
pyridoxine and, 62
rifapentine in, 13, 44, 46, 47
treatment options, 52, 54
women of childbearing age, 53
tuberculosis and, 49
diagnosis, 26
DOT, 13, 63
drug interactions, 14, 49, 54, 55
drug-resistant tuberculosis, 83, 84
extrapulmonary disease, 71
general considerations, 52
immune reconstitution inflammatory syndrome (IRIS), 56
interrupted or incomplete treatment, 65, 66
length of treatment, 53
monitoring, 103, 104
post-tuberculosis treatment evaluation, 117
in pregnant women, 53, 57, 194
pyridoxine and, 62
rifapentine in, 13, 44, 46, 47
treatment options, 52, 54
women of childbearing age, 53
testing for cases and contacts, 26, 36, 162, 189
Holding regimen, 67, 84
Home isolation, 124, 126, 127, 129
agreement, 129, 246
Homeless patients, 64, 142, 156, 165, 174, 180
Hospitalization for tuberculosis, 14, 121, 122, 123
Host immune response, 25
Hypoglycemia/hyperglycemia, 13, 93, 210
Hypothyroidism, 104, 105, 210
Immigrants, 15, 20, 173, 174, 176, 231, 234
Immune reconstitution inflammatory syndrome (IRIS), 52, 56, 75
Incentives for patients, 63, 142, 203
Incomplete treatment – see Interrupted treatment
Index case, 154, 157
Infants – see Pediatric tuberculosis
Infection control, 121
airborne infection isolation, 102, 114, 121, 122, 123, 124, 125
in chest centers, 131
temporary isolation, 131
triage, 131
home isolation, 129
hospital admission, 121
hospital discharge, 125, 128
masks, 131
for multidrug-resistant tuberculosis patients, 126, 129
outpatient management, 122, 128
in pregnancy and post-partum, 130
respirators, 131, 133
returning to work, school or other congregate settings, 127, 129
sputum induction, 132
Infection rate, 154
Infectious period, 154, 155, 161 – see also Contact evaluation
Information for people living with tuberculosis patients, 245
Injectable anti-tuberculosis medications – see also Amikacin, Capreomycin, Kanamycin, and Streptomycin
adverse reactions to, 105, 111, 208, 210
breast feeding and, 211
central nervous system penetration of, 74, 211
dose and frequency of, 61, 85, 208, 210
drug interactions, 216
indications for, 83, 85, 86
in liver disease, 62, 211
monitoring, 209, 210, 215
in pregnancy, 57, 58, 211
in renal failure, 61, 211
Instructions for patients with potentially infectious tuberculosis, 244
Intensive phase of tuberculosis treatment, 43, 45, 58, 103
antiretroviral therapy during, 52
in children, 59, 60
daily treatment during, 13, 52, 53, 56
getting sputum culture at the end of, 12, 102, 103
interrupted therapy during, 44, 45
interrupted treatment during, 65, 66
using rifapentine at the end of, 12, 46, 47
Interferon-gamma for tuberculosis treatment, 91
Intermittent therapy and regimens, 44, 45
adherence, 101, 142, 143
adverse reactions, 111
directly observed therapy (DOT) and, 44, 104, 195
for HIV-infected patients, 13, 53
for isoniazid intolerant patients with tuberculosis disease, 87
with rifamycins, 53, 54
with rifapentine, 12, 46, 47
in treatment of isoniazid (non-multi-drug resistant) tuberculosis, 87
in treatment of latent tuberculosis infection, 195, 196
in treatment of multidrug-resistant tuberculosis, 83, 87
in treatment of tuberculosis disease, 44, 45, 53, 208, 210

International Classification of tuberculosis, 115, inside back cover
International Standards for tuberculosis Care, 235
Interrupted treatment, 65, 66
Isolation — see Airborne infection isolation, Infection control
Isolation of infectious non-adherent patients, 148 — see also Regulatory Interventions

Isoniazid
adverse reactions to, 105, 110, 196, 208
with Bacille Calmette-Guérin, 38
breast feeding and, 58, 211
central nervous system penetration of, 74, 211
in children, 59, 196, 198
dose and frequency of, 45, 196, 208
drug interactions, 208, 217, 219, 223
high-dose intermittent treatment, 91
indications for, 45, 52, 53, 545, 186, 195, 196
intermittent treatment, 44, 45, 196
in liver disease, 61, 107, 191, 204, 211
for latent tuberculosis infection treatment, 191, 195, 196
retreatment candidates, 202
monitoring, 208, 214
in neonates, 38
in pregnancy, 57, 104, 194, 200, 211
in renal failure, 60, 211
resistance (non-multi-drug resistant), 87
in Bacille Calmette-Guérin strains, 78
contacts to, 195, 196
fluoroquinolones for, 86
post-treatment evaluation, 95, 115, 116
pregnancy, 14, 86, 87
treatment of, 53, 86, 87
with rifapentine, 12, 46
treatment interruptions, 203
for treatment of Class IV, 201, 202
after treatment of tuberculosis disease, 117

Itching — see Dermatitis

Jaundice — see Hepatitis

Joint manifestations, 105, 111, 208, 210

Kanamycin — see Aminoglycosides, Injectable anti-tuberculosis medications
adverse reactions to, 105, 111, 112, 210
breast feeding and, 211
central nervous system penetration of, 74, 211
cross resistance to amikacin, 83, 91
dose and frequency of, 61, 85, 210
drug interactions, 216
indications for, 83, 85, 86
in liver disease, 62, 109, 211
monitoring, 84, 208, 210, 215
in neonates, 38
in pregnancy, 58, 211
in renal failure, 61, 211
resistance, 90

Laboratory tests, 36, 103, 104, 190, 208, 210
Lactic acidosis, 94
Late complications of treated pulmonary tuberculosis, 212
Latent tuberculosis infection
  chest X-ray to rule out tuberculosis disease, 189, 190
  progression to active disease, 20, 192
testing, 173
  blood based tests, 183 see QuantiFERON® TB Gold
candidates for, 173, 174
targeted, 15
tuberculin skin test, 173, 182, 183
treatment, 189
  and Bacille Calmette-Guérin vaccination, 38, 227
candidates for, 192
  in the case management flow chart, 140
case management of, 202
  for children and infants, 122, 164, 193, 196, 197
  for Class IV (old, healed tuberculosis), 13, 200
  completion of, 205
  for contacts, 153, 161, 162, 164, 169
    infant and children, 164
    return to supervision, 169, 193
    with prior positive test for tuberculosis infection, 202
contraindications to isoniazid, 195
contraindications to rifampin, 198
directly observed therapy (DOT) for, 195, 203
dosages for, 196, 197
duration of, 196, 197
ensuring adherence, 203
follow-up after completion, 205
fluoroquinolones in, 92
hepatotoxicity and, 190, 191, 196, 197, 204
for HIV-infected patients, 162, 195, 196, 197
for immigrants, 232
laboratory tests for patients considered for treatment, 190, 191
liver function tests, 190, 191, 196, 197, 203, 204
managing interruptions, 203
medical history and physical examination for, 189, 194
monthly monitoring, 196, 197, 202, 204
with *Mycobacterium avium intracellulare*, 67
for neonates, 38
for persons exposed to multidrug-resistant tuberculosis, 92, 198, 199, 200, 201
for pregnant women, 130, 176, 193, 194, 196, 200
pretreatment evaluation and counseling, 191
protease inhibitors and, 195, 196, 197
pyridoxine (vitamin B6) and, 62, 196, 200
repeat course of treatment, 189, 193, 202, 205
regimens
  alternative, 195
  isoniazid, 195, 196
  rifabutin, 195, 197
  rifampin, 195, 196
  rifampin and pyrazinamide, 15, 198
  short course, 195
  standard, 195
  window period treatment, 38, 123, 155, 193

**Lead shields**, 27, 130, 190, 193

**Length of treatment**

  for children, regardless of culture results, 60
  for culture negative, pulmonary patients, 57, 58
  for culture positive, pulmonary patients, 43, 45, 57
  for extrapulmonary tuberculosis, 71, 72, 79
  for HIV-infected patients, 52, 53, 54
  for latent tuberculosis infection regimens, 195, 196, 197
  for multidrug-resistant tuberculosis infected contacts, 200
  for multidrug-resistant tuberculosis regimens, 86
  for pregnant women, 57, 58
  with rifapentine, 48
  for smear-negative, culture-negative patients, 13

**Levofloxacin** – see also *Fluoroquinolones*

  adverse reactions to, 13, 85, 92, 105, 210
  breast feeding and, 211
  central nervous system penetration of, 211
  in children, 85, 92, 210
  dose and frequency of, 86, 210
  drug interactions, 217
  indications for, 13, 85, 86, 91
  in liver disease, 62, 211
  monitoring, 93, 210
  in pregnancy, 85, 211
  in renal disease, 61, 211
  for treatment of drug-resistant tuberculosis, 85, 86, 91
for treatment of multidrug-resistant tuberculosis contacts, 201

**Linezolid**, 94
- adverse reactions, 94, 105, 111, 112
- drug interactions, 220, 221
- indications for, 86, 94
- monitoring, 94
- pyridoxine for, 94

**Liver disease** – see *Hepatitis*

**Liver function tests**
- before starting latent tuberculosis infection treatment, 190, 191, 194, 196, 197, 199
- before starting tuberculosis treatment, 36, 48, 103, 104
- during latent tuberculosis infection treatment, 196, 197, 203, 204
- during tuberculosis treatment, 103, 104, 107, 109, 194
- patterns of elevation, 108

**Living with patients with tuberculosis**, 245

**Liver sparing regimens**, 61 – see also *Hepatitis*

**LTBI** – see Latent tuberculosis infection

**Lymphatic tuberculosis**, 72

**MAC** – see *Mycobacterium avium-intracellulare*

**Magnesium**, 62, 111, 208, 210

**Magnetic resonance imaging (MRI) for tuberculosis diagnosis**, 72, 75

**MAI** – see *Mycobacterium avium-intracellulare*

**Mantoux test**, 15, 173, 178, 192 – see *Tuberculin skin test*

**Masks**, 131, 132

**MDRTB** – see Multi-drug-resistant tuberculosis

**Meals and anti-tuberculosis medications**, 62

**Measles, Mumps, and Rubella (MMR) vaccination**, 179

**Medical evaluation**
- before latent tuberculosis infection treatment, 162, 163, 189, 191, 194
- before tuberculosis treatment, 26
- on the case management flow chart, 140
- for children, 37
- for extrapulmonary tuberculosis, 72
- monthly examination during latent tuberculosis infection treatment, 196, 197, 202, 204
- monthly examination during tuberculosis treatment, 101, 103, 208, 210

**Medical risk factors for the development of tuberculosis**, 173, 174
- in children, 177

**MEMS cap monitoring** – see *Electronic cap monitoring*

**Meningeal tuberculosis** – see *Central nervous system tuberculosis*

**Meningitis, tuberculosis** – see *Central nervous system tuberculosis*

**Methadone**
- adverse reactions for patients on, 196, 197, 208
- directly observed therapy (DOT) programs and, 145
- drug interactions, 218, 224

**Microbiologic evaluation**, 27

**Miliary tuberculosis** – see *Disseminated tuberculosis*
- in children, 37, 60, 71, 75, 227
pattern on chest x-ray, 72, 75, 122

MIRU — see Mycobacterial interspersed repetitive units

Mission Statement of the Bureau of Tuberculosis Control, 20

Molecular genotyping — see Genotyping

Monitoring
for HIV-infected patients, 51, 53, 56, 103, 104, 203
for liver disease, 61
monthly nurse assessment, 103, 105
monthly physician assessment, 101, 103
with rifapentine, 48
therapeutic drug monitoring, 214
after treatment completion, 115, 116
during treatment of drug-resistant tuberculosis, 84, 95, 101, 103, 208, 210
during treatment of latent tuberculosis infection, 189, 196, 197, 202
during treatment of tuberculosis disease, 101, 103, 208, 210

Moxifloxacin — see also Fluoroquinolones
adverse reactions to, 13, 85, 92, 105, 210
breast feeding and, 211
central nervous system penetration of, 211
in children, 85, 92, 210
dose and frequency of, 210
drug interactions, 217, 224
indications for, 13, 85, 86, 91, 92, 210
in liver disease, 61, 211
monitoring, 93, 210
in pregnancy, 85, 211
in renal failure, 61, 211
for treatment of drug-resistant tuberculosis, 85, 86, 91
for treatment of multidrug-resistant tuberculosis contacts, 201

MTD® Test — see Nucleic acid amplification tests

Multidrug-resistant tuberculosis (MDRTB), 83
adherence to treatment, 144
in the central nervous system, 75
contacts of patients with, 198, 199, 200, 201, 205
definition, 83
discharge from the hospital for patients with, 121, 126, 129
epidemiology, 16
gastric aspirates in children with, 28
home isolation for patients with, 129
monitoring, 84, 95, 102, 208, 210
post-treatment evaluation for patients with, 14, 95, 115, 116
regimens, 58, 85, 86
return to work or school for patients with, 129
risk factors for, 26
surgery for, 88, 89, 90, 91, 95
treatment failure, 83
treatment, 85, 86 — see Individual drugs used
for children, 38, 84, 85, 86, 208, 210
with clofazimine, 95
with directly observed therapy, 64, 83
extension of, 83, 88, 89, 90, 91
with fluoroquinolones, 83, 85, 91
with linezolid, 94
for pregnant women, 58, 84
principles, 83, 85

**Mycobacterial interspersed repetitive units (MIRU)**, 34

*Mycobacterium avium complex* – see *Mycobacterium avium-intracellulare*

*Mycobacterium avium-intracellulare*
- treatment of coexistent tuberculosis and, 67

*Mycobacterium bovis*, 32, 78, 84, 227, 229

*Mycobacterium other than tuberculosis (MOTT)* – see *Nontuberculous mycobacteria*

**National Jewish Medical and Research Center**, 33, 215

**Negative tuberculin skin test reaction** – see *Tuberculin skin test*
- anergy, 182
- boosting, 182
- classification of, 179, 180
- in contact investigations, 162, 163, 164
- false-negative, 181
- follow-up for (among contacts), 162

**Neonatal tuberculosis** – see *Congenital tuberculosis*

**Neurologic and psychiatric manifestations**, 105, 210

**NNRTIs** – see *Non-nucleoside reverse transcriptase inhibitors*

**NRTIs** – see *Nucleoside/Nucleotide reverse transcriptase inhibitors*

**Non-adherence** – see *Adherence*

**Non-counted case**, 78, 154

**Non-tuberculous mycobacteria**, 95, 181, 183

**Non-nucleoside reverse transcriptase inhibitors**, 14, 50, 51, 54, 55
- with ethionamide, 217
- with rifabutin, 49, 50, 51, 54, 55, 195, 197, 208, 221
- with rifampin, 49, 50, 54, 55, 195, 196, 208, 221
- with rifapentine, 48

**Nucleic acid amplification tests**, 30
- airborne infection isolation and, 125
- contact investigation, 155, 156
- for extrapulmonary specimens, 31
- in meningeal tuberculosis, 74
- reporting, 229

**Nucleoside/Nucleotide reverse transcriptase inhibitors**, 50, 51

**Number of doses for completing tuberculosis treatment**, 45, 54 – see also *Dosages for tuberculosis treatment*

**Numbness** – see *Peripheral neuropathy*

**Ofloxacin** – see *Fluoroquinolones*
Old, healed tuberculosis – see Class IV
Optic neuropathy – see Visual manifestations
Oxazolidinones – see Linezolid

Para-aminosalicylic acid
  adverse reactions to, 104, 105, 110, 210
  breast feeding and, 211
  central nervous system penetration of, 211
  dose and frequency of, 210
  drug interactions, 219, 221
  indications for, 89, 90, 91
  in liver disease, 110, 211
  monitoring, 210
  in pregnancy, 211
  in renal failure, 60, 211
  therapeutic drug monitoring for, 215
  thyroid function testing and, 104, 210
  for the treatment of drug-resistant tuberculosis, 89, 90

Paradoxical reactions
  HIV-related – see Immune reconstitution inflammatory syndrome (IRIS)
  Non-HIV-related, 113

Particulate respirators – see Respirators
PAS – see Para-aminosalicylic acid
Pathogenesis of tuberculosis, 25
Patients’ Charter for Tuberculosis Care, 237, 238
  Patients’ Rights, 238
  Patients’ Responsibilities, 239

PCR (polymerase chain reaction) test – see Nucleic acid amplification tests, Mycobacterial interspersed repetitive units (MIRU), Spoligotyping

Pediatric tuberculosis – see Children with tuberculosis
Pericardial tuberculosis, 72, 73, 79, 121, 123
Peripheral neuropathy, 62, 94, 105, 110, 196, 208, 217, 220
Peritoneal tuberculosis, 72, 77, 79
Photosensitivity/Phototoxicity, 92, 106, 210
Physical examination – see Medical evaluation

Pleural tuberculosis, 27, 29, 71, 72, 79, 158
Polymerase chain reaction (PCR) – see Nucleic acid amplification tests, Mycobacterial interspersed repetitive units, Spoligotyping

Positive tuberculin skin test reaction, 154 – see Tuberculin skin test
  classification of, 179, 180

Post-treatment evaluation after tuberculosis treatment, 115
  frequency of, 116
PPD test – see Tuberculin skin test
Pregnancy
  adherence to tuberculosis treatment, 142
  Bacille Calmette-Guérin vaccination and, 228
  chest X-ray, 27, 190 – see Lead shields
  congenital and neonatal tuberculosis and, 38, 39
infection control, 130
latent tuberculosis infection treatment, 193, 194, 195, 196, 198, 200
evaluation of tuberculosis risk, 191, 194
monitoring, 203, 204
nevirapine and, 51
pyrazinamide use in, 13, 86, 87
pyridoxine (vitamin B6) and, 62, 209
safety of tuberculosis drugs, 211
treatment of tuberculosis disease, 13, 14, 56, 86, 87
for isoniazid resistant or intolerant patients, 13, 86, 87
for HIV-infected women, 51, 53
for multidrug-resistant tuberculosis, 58, 84, 86
tests for tuberculosis infection, 130, 176
Prophylaxis – see also Latent tuberculosis infection treatment
after tuberculosis treatment, 117
window period, 38, 122, 123, 126, 128, 164
with cotrimoxazole, 236
for cutaneous tuberculosis, 78
with isoniazid, 78
for Mycobacterium avium intracellulare, 67
Protease inhibitors, 14, 48, 49
use with ethionamide, 217
use with rifabutin, 50, 54, 55, 195, 197, 208, 221
use with rifampin, 50, 54, 55, 195, 196, 208, 221
use with rifapentine, 48
Psychiatric manifestations, 105, 210
Public Health Laboratories, 33, 214
Pyrazinamide
adverse reactions to, 101, 105, 106, 107, 110, 208
breast feeding and, 211
central nervous system penetration of, 74, 211
in children, 59, 74
discontinuation of, 43, 44, 45, 103
dose and frequency of, 208
drug interactions, 219, 221, 225
drug susceptibility testing for, 32, 83
indications for, 43, 44, 45, 86, 87, 88, 89, 91
length of tuberculosis treatment and treatment completion, 43, 44, 45, 64
in liver disease, 61, 107, 108, 109, 211
for latent tuberculosis infection treatment, 15, 198
for Class IV, 201
for multidrug-resistant tuberculosis contacts, 201
with rifampin, 198
Mycobacterium bovis and, 78, 84
monitoring, 103, 209
in neonates, 38
in pregnancy, 13, 57, 58, 211
in renal failure, 61, 111, 211
resistance, 89, 90
restarting tuberculosis meds with, 109

**Pyridoxine (vitamin B6),** 57, 62, 91, 94, 103, 110, 196, 201, 209, 210, 221
with cycloserine, 62, 201, 210
drug interactions, 221
with linezolid, 94
for treatment of multidrug-resistant tuberculosis contacts, 201

**QT interval prolongation,** 92, 93, 210, 217

**QuantiFERON® TB Gold,** 183, 184 — see *Blood-based tests for tuberculosis infection*
advantages of, 183
in Bacille Calmette-Guérin-vaccinated persons, 183, 184
classification of the reaction, 184
compared to TST, 184
costs and benefits of, 184
eligibility for, 184
indications for health care workers, 184
interpretation of, 184
limitations, 184
two-step testing, 183, 184

**Quinolones** — see *Fluoroquinolones*

**Rapid diagnostic tests** — see *Nucleic acid amplification tests*

**Rash** — see *Dermatitis*

**Rates of**
death in tuberculosis meningitis, 75
relapse in extrapulmonary tuberculosis, 71
relapse in culture positive pulmonary tuberculosis, 46
sputum culture sensitivity and specificity, 31
tuberculosis in New York City, 16

**Reclassification of tuberculosis suspects,** 114

**Re-exposure to tuberculosis,** 117, 163, 164, 193

**Refugees** — see *Immigrants*

**Regimens for latent tuberculosis infection treatment,** 195, 196, 197 — see *Latent tuberculosis infection*

**Regimens for tuberculosis treatment,** 43, 45
for children, 59, 60
for drug-resistant patients, 86
for HIV-infected patients on antiretrovirals, 52, 54
intermittent, 44, 45
for patients with chronic renal failure, 60
for patients with liver disease, 61
for pregnant women, 56
with rifapentine, 46, 47

**Regulatory interventions,** 145
Commissioner’s Orders, 145, 147
Health Code sections for, 147
infectious or potentially infectious patients who want to leave hospital, 148
referral for, 145

Relapse, 27, 35, 43, 44, 46, 52, 53, 56, 64, 71, 87, 102, 115, 154, 164, 214

Renal failure, 60, 83, 92, 160, 180, 181, 196, 211

Renal manifestations, 105, 111, 208, 210

Renal tuberculosis, 71, 76 — see Genitourinary tuberculosis

Repeat course of treatment for latent tuberculosis infection, 189, 193, 202, 205

Reporting requirements, 16, 229

Respirators, 131, 133

Restricted fragment length polymorphism (RFLP) — see Genotyping

Restarting anti-tuberculosis medications
  after audiovestibular manifestations, 113
  after dermatitis, 106
  after gastritis, 110
  after hematologic abnormalities, 112
  after hepatitis, 107, 109
  after interruptions, 65, 66, 203
  for women who become pregnant while on latent tuberculosis infection treatment, 200

Return to supervision (RTS)
  for latent tuberculosis infection, 169
  for tuberculosis, 143

Return to work, school or congregate setting, 127, 129
  for multidrug-resistant tuberculosis patients, 126, 129
  for sputum acid-fast bacilli smear-negative patients, 127
  for sputum acid-fast bacilli smear-positive patients, 127

Reversion of acid-fast bacilli smear or culture, 154

Rifabutin
  adverse reactions to, 50, 56, 105, 111, 112, 208, 210
  with antiretrovirals, 49, 52, 54, 55, 195, 197
  breast feeding and, 211
  central nervous system penetration of, 211
  dose and frequency of, 53, 54, 55, 197, 208
  drug interactions, 49, 54, 55, 221
  for HIV-infected persons, 14, 49, 54, 55, 195, 197
  indications for, 14, 45, 54, 86, 195, 197
  intermittent treatment, 53, 54
  in liver disease, 61, 108, 109, 211
  for latent tuberculosis infection treatment, 195, 197
  with MAI, 67
  monitoring, 209
  in pregnancy, 211
  in renal failure, 211
  resistance, 90, 91
  with rifampin resistance, 85, 88, 89, 90

Rifamate®, 43, 57, 201, 208

Rifater®, 208

Rifampin
  adverse reactions to, 105, 106, 107, 110, 111, 112, 196, 208, 210
  and antiretrovirals, 49, 50, 51, 54, 55
breast feeding and, 211
central nervous system penetration of, 74, 75, 211
in children, 59, 195, 196, 208
dose and frequency of, 43, 45, 103, 195, 196, 208

drug desensitization, 113
drug interactions, 49, 50, 51, 54, 55, 208, 220, 221
indications for, 14, 45, 86, 195, 196
intermittent treatment, 44, 45, 53, 196
in liver disease, 61, 107, 109, 211
for latent tuberculosis infection treatment, 164, 195, 196
  contraindications of treating with rifampin, 196
  with pyrazinamide, 15, 198
with Mycobacterium avium intracellulare, 67
monitoring, 196, 209, 214
in neonates, 38
in pregnancy, 57, 130, 211
in renal failure, 60, 111, 211
resistance
  acquired, 46, 53, 117
  contacts to patients with, 198
  development of, 117
  HIV-infection and, 53, 87, 117
  monitoring, 102
  post-treatment evaluation, 95, 115, 116
  risk factors for, 46, 53
  treatment of, 83, 86, 87, 88, 89, 90
restarting, 106, 108, 109, 110
rifabutin susceptibility and, 85
for treatment of Class IV, 200
for treatment of drug-resistant tuberculosis, 86
Rifamycins – see Rifabutin, Rifampin and Rifapentine
Rifapentine
adverse reactions to, 48, 105, 111, 208
breast feeding, 48, 211
central nervous system penetration of, 211
in children, 47, 48, 60
directly observed therapy (DOT) and, 44, 46, 63
dose and frequency of, 44, 45, 47, 48
drug interactions, 48, 49, 209, 221
in HIV-infected patients, 13, 46, 47
indications for, 12, 13, 44, 45, 46, 47
length of treatment, 13, 45, 47, 48, 60, 103
in liver failure, 211
monitoring, 48, 101, 103, 209
in pregnancy, 13, 46, 47, 48, 211
in renal failure, 211

Risk assessment of tuberculosis in children, 176, 177
Risk factors for developing tuberculosis disease, 15, 155, 174, 180, 198
Screening for tuberculosis – see Tuberculin skin testing, Blood-based tests for tuberculosis infection
Selective serotonin reuptake inhibitors (SSRIs), 95
Separation of mother and child, 38, 57, 130
Serotonin syndrome, 95
Short-course latent tuberculosis infection treatment, 195, 200
Short-term treatment for Class IV, 13, 201
Skeletal tuberculosis, 76, 79
Skin test – see Tuberculin skin test
Source case, 154
Source case investigation, 26, 153, 154, 157, 162, 163, 167
Spoligotyping, 34, 35, 36
Sputum induction, 28, 102, 132, 198
clearance times for chest center booths/rooms, 134
description of procedure, 132
Sputum smears – see Acid-fast bacilli smears
Strain W, 83, 86, 90
Streptomycin – see Aminoglycosides, Injectable anti-tuberculosis medications
adverse reactions to, 105, 111, 112, 208
breast feeding and, 211
central nervous system penetration of, 74, 211
in children, 59, 84
with tuberculosis meningitis, 59, 74
dose and frequency of, 61, 85, 208
drug interactions, 216, 217
indications for, 58, 83, 85, 86, 87, 88, 89, 90
in liver disease, 62, 211
monitoring, 84, 209, 215
in pregnancy, 57, 58, 211
pyrazinamide and, 57
in renal failure, 61, 211
resistance, 83, 86, 87, 88, 89, 90, 91
rifapentine use and, 47
Surgery for tuberculosis
genitourinary, 76
pulmonary, 88, 89, 90, 91, 95, 96
Surveillance, 15
of false-positive cultures, 35
Surveillance for tuberculosis by Health Systems Examination, 234
Susceptibility testing – see Drug susceptibility testing
Suspected tuberculosis, 20, 36, 229 – see Class V (High) versus (Low)
Targeted testing, 15, 20, 173, 176, 177
Tendinopathy/tendonitis, 92, 105, 210
Tests for tuberculosis infection (TTBI), 173, 183
blood-based tests – see QuantiFERON® TB Gold
Mantoux test – see Tuberculin skin test
skin test — see Tuberculin skin test

**Therapeutic drug monitoring**, 61, 214

**Three times a week therapy**, 43 — see *Intermittent therapy*

- for children, 59
- on directly observed therapy, 63
- for HIV-infected persons, 13, 50, 51, 53, 54, 55, 56
- for injectable anti-tuberculosis medications, 61, 85, 87, 88
- renal failure and, 60, 61
- for treatment of tuberculosis, 13, 44, 45, 87, 208

**Thyroid function tests**, 104, 105, 210

**Tinnitus** — see Audiovestibular manifestations

**Torsades de pointes**, 217 — see *Cardiotoxicity, Ventricular tachyarrhythmia, QT prolongation*

**Transmission**, 25

- assessing risk of, 161
- contact evaluation and, 153, 165
- determination of, 154
- epidemiological assessment of, 155
- outpatient treatment and, 14, 121

**Treatment failure**, 27, 67, 75, 96, 102, 154, 236

- in multidrug-resistant tuberculosis patients, 83, 84

**Treatment** — see *Dosages, Drug-resistant tuberculosis, Extrapulmonary tuberculosis, Latent tuberculosis Infection, Length of Treatment, Multidrug Resistant tuberculosis, Medical Evaluation, and Monitoring*

**Treatment of tuberculosis disease**

- antiretroviral therapy and, 49, 54, 55
- antituberculosis drugs and meals, 62
- chest x-ray in initial evaluation for, 27, 103
- in children, 59
- completion of, 64
- continuation phase, 43
  - prolonging treatment during, 12, 13, 43, 45, 47, 48
- directly observed therapy (DOT), 12, 44, 45, 47, 63, 83
- dosages for, 43, 47, 208, 210
- in extrapulmonary tuberculosis — see individual sites
- failure of, 67, 83, 84
- in HIV-infected patients, 49, 52, 54, 55 — see *HIV-infection*
- intensive phase, 43
- intermittent regimens for, 44, 45, 47
- interrupted, 65, 66
- length of treatment, 43, 48, 53, 57, 60, 66
- length of treatment for drug-resistant tuberculosis, 86, 87, 88, 89, 90, 91 — see multidrug-resistant tuberculosis
- liver function tests, 36, 103, 104, 209
- with *Mycobacterium avium intracellulare*, 67
- medical evaluation (initial) for, 26, 36, 103, 209
- monthly monitoring, 85, 101, 103, 208, 210
- number of doses needed for treatment, 45, 64
- in patients with liver disease, 61, 211
in patients with negative nucleic acid amplification tests, 30
in patients with renal failure, 60, 211
post-treatment evaluation for, 115, 116
in pregnant women, 56
pyridoxine (vitamin B6) and, 62, 209 – see Pyridoxine
rifapentine for, 12, 45, 46, 47, 208
sputum specimens during, 27, 101, 103
standard regimens for, 43

**Tuberculin skin test (TST)**, 15, 173, 178, 192
administration of, 178
anergy and, 182
in Bacille Calmette-Guérin-vaccinated persons, 174, 179, 182
booster phenomenon and, 182
candidates for testing, 173, 174, 176, 177
classification of the reaction, 180, 191
conversion of, 154
determination of positive, 180
false-negative results of, 181
false-positive results of, 181
interpretation of, 179
Mantoux vs. Tine, 178
measles, mumps, rubella (MMR) vaccine and, 179
in pregnant women, 130, 176
QuantiFERON® TB Gold and, 183
reading the reaction of, 179
two-step testing, 182, 183

**Tuberculoma**, 75

**Tumor necrosis factor alpha (TNF- ) blockers/antagonists**, 122, 173, 174, 176, 180, 192

**Twice weekly therapy** – see Two times a week therapy, Biweekly therapy

**Two times a week therapy** – see also Intermittent therapy, Biweekly therapy, Twice weekly therapy

continuation of lapsed treatment, 65
on directly observed therapy (DOT), 63
for HIV-infected persons, 13, 51, 53, 54, 55, 56
for injectable anti-tuberculosis medications, 85, 88
for pyridoxine, 62
renal failure and, 61
for treatment of latent tuberculosis infection, 195, 196, 197
for treatment of tuberculosis, 44, 45, 208

**Two-step tuberculin skin testing**, 182, 192

**Unexposed**, 155

**Universal reporting form (URF)**, 16, 123, 128, 230

**Ventricular tachyarrhythmia**, 92

**Vertigo**, 105, 113 – see Audiovestibular manifestations

**Vision loss** – see Visual manifestations

**Visual acuity**, 27, 59, 61, 103, 105, 208, 209
Visual manifestations  61, 94, 105, 112, 208, 209
   in children, 14, 27, 59
Vitamin B6  – see Pyridoxine
Vomiting. 48, 92, 94, 95, 105, 107, 110, 196, 197, 203, 204, 208, 210, 220

W strain  – see Strain W
Window period, 162, 163, 164, 166, 176
Window period treatment (prophylaxis), 38, 122, 123, 126, 128, 155, 193
World Health Organization (WHO), 57, 168, 211

XDRtb  – see Extreme drug-resistant tuberculosis
Section II, Initial Evaluation of Suspected Tuberculosis
Page 33, Table II-2, replace superscript c in MGIT column with 3

Section IV, Evaluation and Treatment of Extrapulmonary Tuberculosis
Page 72, addition in left column, end of first full paragraph. In several forms of TB, corticosteroids have been shown to be useful (see Table IV-2).

Page 73, replace (Meningeal), Tuberculoma with Central Nervous System Tuberculosis

Section VII, Infection Control
Page 127, left column, paragraph 9, replace smear with culture

Page 129, left column, third bullet point, replace Hospitals with Patient care areas

Section IX, Contact Evaluation and Public Health Management
Page 156, Table IX-1, upper half of table, under second column (Nucleic Acid Amplification Result move Or/Not done ” from under “Negative for M.tb” to under “Positive for M.tb”

Table IX-1, upper half of table, under last column entitled “complete,” in the first box, add if verified so that the cell reads, Yes, if verified.

Page 167, left column, under Airline Exposures, second paragraph, change BTBC to CDC/DGM in sixth and eighth lines.

Section XI, Latent TB Infection (LTBI): Evaluation, Treatment, Monitoring and Follow-up
Page. 192, right column, after the first three bullets add, For guidelines on when to give a repeat course of treatment for LTBI in contacts that have already completed such treatment, see pages 163 and 193.

Page 199, right column, first bullet, second line, change older to younger

Replace fluoroquinolones with fluoroquinolones on:

Page 92, left column, third paragraph
Page 210 in the second footnote (twice)

Replace para-aminosalicylic with para-aminosalicylic on:
Page 210 (2 times)
Page 211