

## INDEX

*Note: Entries followed by “f” indicate figures; “t” tables.*

- AAP (American Academy of Pediatrics) guidelines, 50t, 196-197, 197  
Abbot Labs (Signify) rapid tests, 41-43. *See also* RADTs (rapid antigen detection tests).  
Abdominal pain, 30t, 186  
Acceava (BioStar) rapid test, 41-43. *See also* RADTs (rapid antigen detection tests).  
Accuracy, diagnoses, 61-62, 62t. *See also* Diagnoses.  
Acute rheumatic fever. *See* ARF (acute rheumatic fever).  
ADD (attention deficit disorder), 206t-207t  
Adenopathy, 29-30, 31t, 205-208  
ADHD (attention deficit hyperactivity disorder), 204-207, 206t-207t  
Adherence factors, 63-65, 64t  
adherence and compliance, 63-65, 64t  
adherence inhibition, 216-217  
Age-inappropriate separation anxiety, 204-205, 206t-207t  
AHA (American Heart Association) guidelines, 50t, 82t-83t  
Allergic reactions, 65-75, 66t-68t, 73t-74t, 82t-83t, 91, 95-98, 96t-97t  
cross allergic reactions, 65-75, 66t-68t, 73t-74t  
penicillin allergies, 82t-83t, 91, 95-98, 96t-97t. *See also* Penicillin and amoxicillin.  
*α*-Hemolytic streptococci, 94, 180-181  
American Academy of Family Physicians guidelines, 50t  
American Academy of Pediatrics. *See* AAP (American Academy of Pediatrics) guidelines.  
American Heart Association. *See* AHA (American Heart Association) guidelines.  
Aminoglycosides, 22t  
Amoxicillin and penicillin, 81-90. *See also* Antibiotic therapies.  
AHA guidelines for, 82t-83t  
amoxicillin, 21-24, 22t, 85-91, 88t, 100t-102t  
amoxicillin-clavulanate, 64t, 76t-77t, 89-91, 100t-102t, 183-186  
vs ampicillin, 85-89, 88t  
vs cephalosporins, 119-128, 120t-125t, 126f-127f, 130t, 132t-133t, 135f-136f. *See also* Cephalosporins.  
chemical structure of, 73t  
clinical trials and research studies of, 81-89, 82t-84t, 86t-88t  
vs cloxacillin, 89  
complications and, 201-202  
cost-related factors of, 89  
vs dicloxacillin, 89  
failure rates of, 84t, 201-202  
fundamentals of, 66t-68t, 81-84, 82t-84t  
vs nafcillin, 89  
penicillin, 21-24, 22t, 49, 76t-77t, 81-98, 82t-83t, 86t-87t, 96t-97t, 119-128, 184, 193-195, 194t  
allergies, 82t-83t, 91, 95-98, 96t-97t  
benzathine penicillin G, 82t-83t, 84-85, 86t-87t, 184  
benzathine penicillin plus rifampin, 194-195, 194t  
penicillin G, 49, 184

- Amoxicillin and penicillin, penicillin (*continued*)  
 penicillin G, oral, 84-85, 86t-87t, 89  
 penicillin plus rifampin, 193-195, 194t  
 penicillin V, 82t-83t, 84-85, 86t-87t, 184-186  
 penicillin VK, 76t-77t  
 procaine penicillin, 84-85  
 recurrent infections and, 178-185. *See also* Recurrent infections.  
 reference resources for, 89-90  
 strengths and limitations of, 62t
- Ampicillin, 73t, 85-89, 88t
- Analyses, 128-135, 130t, 132t-133t, 135f-136f  
 sensitivity, 132t-133t  
 stratified, 128-135, 130t, 132t-133t, 135f-136f
- Anspor, 120t. *See also* Cephradine.
- Anti-DNase B (antideoxyribonuclease B), 202, 208
- Antibiotic therapies, 49-176. *See also under individual drug names and classes.*  
 aminoglycosides, 22t  
 bacterial resistance and, 91-95, 92t  
 β-lactams, 22-24, 22t, 91-92, 202  
 carriage and, 193-195, 194t-195t. *See also* Carriage.  
 cephalosporins, 22-24, 22t, 91, 119-144, 122t-125t, 130t, 135f-136f, 160t-163t, 166t, 183-185, 195-196, 195t, 198, 204-205  
 analyses, sensitivity, 132t-133t  
 analyses, stratified, 128-135, 130t, 132t-133t, 135f-136f  
 cefaclor, 22-24, 22t, 100t-102t, 122t-125t, 128-137, 130t  
 cefadroxil, 22-24, 22t, 120t, 122t-125t, 128-137, 130t, 160t-161t  
 cefaztrezine, 122t-124t  
 cefdinir, 22-24, 22t, 120t, 125t, 128-137, 130t, 135f-136f, 160t-161t  
 cefditoren, 120t  
 cefetamet/cefetamet pivoxil, 124t, 128-137, 130t  
 cefixime, 120t, 125t, 128-137, 130t, 160t-161t, 194-195, 194t  
 cefotiam, 160t-161t  
 cefpodoxime/cefpodoxime proxetil, 22-24, 22t, 120t, 122t-125t, 128-137, 130t, 160t-161t  
 cefprozil, 22-24, 22t, 120t, 124t-125t, 128-137, 130t, 193-195, 194t  
 cefibutene, 22-24, 22t, 120t, 124t-125t, 128-137, 130t  
 ceftriaxone, 22-24, 22t  
 cefuroxime/cefuroxime axetil, 22-24, 22t, 120t, 124t-125t, 128-137, 130t, 160t-161t  
 cephalexin, 22-24, 22t, 120t, 122t-125t, 128-137, 130t  
 cephaloglycin, 122t-125t, 128-137  
 cephradine, 120t  
 vs ciprofloxacin, 22-24, 22t  
 clinical trials and research studies of, 119-137, 120t-125t, 126f-127f, 130t, 132t-133t, 135f-136f  
 duration criteria for, 160t-163t, 166t, 168f-171f  
 first-generation, 120t, 125t, 128-135, 130t, 132t-133t, 135f-136f  
 fundamentals of, 66t-68t, 119-128, 120t-125t, 126f-127f, 134-137  
 loracarbef, 120t, 124t-125t, 128-137, 130t  
 vs penicillin, 119-128, 120t-125t, 126f-127f, 130t, 132t-133t, 135f-136f  
 reference resources for, 137-143  
 second-generation, 120t, 125t, 128-135, 130t, 132t-133t, 135f-136f  
 strengths vs limitations of, 62t  
 third-generation, 120t, 125t, 128-135, 130t, 132t-133t, 135f-136f
- Antibiotic therapies (*continued*)  
 clindamycin, 22-24, 22t, 185, 193-196, 194t-195t, 198, 201-202  
 clinical management and, 59-80  
 complications and, 201-208  
 contagion impacts and, 14  
 differential diagnoses and, 16-18, 18t  
 disease manifestations and, 11  
 duration criteria for, 157-176, 173f  
 for amoxicillin, 160t  
 for azalides and azithromycin, 161t-162t  
 bacteriologic eradication and, 157-165, 159t-163t  
 for cephalosporins, 160t-163t, 166t, 168f-171f  
 clinical trials and research studies of, 157-173  
 compliance and, 157-158, 173f  
 fundamentals of, 157-158  
 for penicillin, 157-158, 159t-163t, 166t  
 reference resources for, 167, 174-176  
 sensitivity analyses and, 166t  
 failure parameters, 84t, 145-196, 195t, 201-202  
 carriage and, 153-154, 195-196, 195t  
 clinical trials and research studies of, 145-154  
 coaggregation, 150-153, 152f  
 compliance, 146-147, 147t  
 copathogens, 150, 151f  
 early treatment, 148-149, 149t  
 exposures, repeated, 148  
 failure rates, 84t, 178-183, 201-202  
 formulation deficiencies, 145  
 fundamentals of, 145, 146t  
 immunity suppression, 148-149, 149t  
 microbial ecology alterations, 153  
 reference resources for, 154-156  
 strain differences, 154  
 guidelines for, 41-53, 82t-83t, 98-99, 196, 197t  
 AAP, 196, 197t  
 AHA, 82t-83t  
 IDSA, 41-53, 98-99, 196, 197t  
 ideal characteristics of, 61  
 impacts of, 193-195, 194t  
 lincomycin, 22-24, 22t, 185, 194-195, 194t  
 macrolides, 22-24, 22t, 91-118, 195-196, 195t  
 azalides and azithromycin, 22-24, 22t, 91-93, 92t, 98-110, 100t-102t, 104f-109f, 184  
 bacterial resistance and, 91-95, 92t  
 clarithromycin, 22-24, 22t, 92t, 93-94, 98, 100t-102t  
 clinical trials and research studies of, 91-95, 92t, 96t-97t, 100t-102t, 104f-109f  
 cure rates of, 104f-109f  
 erythromycin, 22-24, 22t, 82t-83t, 92t, 93-98, 96t-97t, 100t-102t, 184  
 extended-spectrum, 184  
 fundamentals of, 66t-68t, 91, 110  
 IDSA guidelines for, 98-99  
 ketolides and telithromycin, 92t, 94-95  
 penicillin allergies and, 91, 95-98, 96t-97t

## Antibiotic therapies, macrolides (*continued*)

reference resources for, 111-112  
strengths vs limitations of, 62t  
option overviews, 59-80  
adherence and compliance, 63-65, 64t  
appropriate selection, 61-62, 62t  
clinical trials and research studies of, 59-77  
cost-related factors, 76t-77t  
cross allergic reactions, 65-75, 66t-68t, 73t-74t  
diagnosis accuracy and, 61-62, 62t  
efficacy factors, 76t-77t  
fundamentals of, 59-61, 60t, 72, 76t-77t  
reference resources for, 75, 78-79  
tolerability factors, 76t-77t  
outcomes, 49-58  
ARF primary prevention, 49-53, 50t-51t  
bacteriologic eradication, 49-53, 50f, 50t-51t, 54t-55t  
clinical trials and research studies of, 49-55  
FDA and, 49  
fundamentals of, 49-50, 50f, 50t-51t  
guidelines for, 50t  
reference resources for, 57-58  
penicillin and amoxicillin, 21-24, 22t, 81-90, 119-128, 193-195, 194t-195t, 201-202  
AHA guidelines for, 82t-83t  
amoxicillin, 21-24, 22t, 85-91, 88t, 100t-102t  
amoxicillin-clavulanate, 89-91, 91, 100t-102t, 183-186  
ampicillin, 85-89, 88t  
benzathine penicillin G, 82t-83t, 84-85, 86t-87t, 184  
benzathine penicillin plus rifampin, 194-195, 194t  
vs cephalosporins, 119-128, 120t-125t, 126f-127f, 130t, 132t-133t, 135f-136f  
clinical trials and research studies of, 81-89, 82t-84t, 86t-88t  
vs cloxacillin, 89  
complications and, 201-202  
cost-related factors of, 89  
vs dicloxacillin, 89  
vs erythromycin, 82t-83t  
failure rates of, 84t, 201-202  
fundamentals of, 66t-68t, 81-84, 82t-84t  
vs nafcillin, 89  
penicillin, 21-24, 22t, 81-90, 119-128  
penicillin allergies, 82t-83t, 91, 95-98, 96t-97t  
penicillin G, 184  
penicillin G, oral, 84-85, 86t-87t, 89  
penicillin plus rifampin, 193-195, 194t  
penicillin V, 82t-83t, 84-85, 86t-87t, 184-186  
penicillin VK, 76t-77t  
procaine penicillin, 84-85  
recurrent infections and, 178-185  
reference resources for, 89-90  
strengths and limitations of, 62t  
recurrent infections and, 178-183  
rifampin, 194-195, 194t

## Antibiotic therapies (*continued*)

roxithromycin, 102t  
sulfadiazine, 21-22  
sulfonamides, 22t  
susceptibility, 21-28  
telithromycin, 22-24, 22t  
tetracyclines, 22t  
Antibody production, 202  
Antideoxyribonuclease B. *See* Anti-DNase B (antideoxyribonuclease B).  
Antigen detection tests, rapid, 14, 39-43, 40t-41t, 42f, 44t  
Antimicrobials. *See* Antibiotic therapies.  
Antistreptolysin O. *See* ASO (antistreptolysin O).  
*Arcanobacterium haemolyticum*, 15-16, 16t, 18t  
ARF (acute rheumatic fever), 49-53, 50t-51t, 144, 193-197, 197t. *See also* Rheumatic fever.  
Arthritis, 201-202, 215-217  
ASO (antistreptolysin O), 202, 214  
Assays, *in vitro* vs *in vivo*, 216-217  
Asymptomatic carriage, 179, 193-195. *See also* Carriage.  
Attention deficit hyperactivity disorder. *See* ADHD (attention deficit hyperactivity disorder).  
Axetil. *See* Cefuroxime/cefoxime axetil.  
Azalides and azithromycin, 22-24, 22t, 64t, 76t-77t, 91-100, 92t, 100t-102t, 104f-109f, 184. *See also* Macrolides.  
Bacteremia, 201-202  
Bacterial protein synthesis inhibition, 201-202  
Bacterial resistance, 91-95, 92t  
Bacteriocins, 178t  
Bacteriologic eradication, 49-53, 50f, 50t-51t, 54t-55t, 157-165, 159t-163t  
*Bacteroides* spp, 179-180  
Basic concepts. *See* Fundamental concepts.  
BDQ (Becton Dickinson) rapid test, 41-43. *See also* RADTs (rapid antigen detection tests).  
Benzathine penicillin, 53, 54t-55t, 76t-77t, 82t-83t, 84-85, 86t-87t, 184, 194-195, 194t. *See also* Penicillin and amoxicillin.  
G, 53, 54t-55t, 76t-77t, 82t-83t, 84-85, 86t-87t, 184  
plus rifampin, 194-195, 194t  
β-Hemolytic streptococci, 37  
β-Lactams, 22-24, 22t, 91-92, 179-180, 202  
Bioinformatics analyses, 216-217  
BioStar (Acccea) rapid tests, 41-43. *See also* RADTs (rapid antigen detection tests).  
Brain disease, 215-217  
Breese nine-factor probability estimator, 29-32, 32t-33t. *See also* Clinical diagnoses.  
C-5a peptidase, 216-217  
C-repeats (C-repeat peptides of M proteins), 214-215  
Carditis, 215-217  
Carriage, 193-200  
antibiotic therapies and, 193-195, 194t-195t. *See also* Antibiotic therapies.  
AAP guidelines, 196, 197t  
benzathine penicillin plus rifampin, 194-195, 194t

- Carriage, antibiotic therapies and (*continued*)
- cefixime, 194-195, 194t
  - cefpodoxime, 193-195, 194t
  - cephalosporins, 195-196, 195t, 198
  - clindamycin, 193-196, 194t-195t, 198
  - failure parameters, 195-196, 195t
  - IDSA guidelines for, 196, 197t
  - impacts of, 193-195, 194t
  - lincomycin, 194-195, 194t
  - macrolides, 195-196, 195t
  - penicillin, 193-195, 194t-195t
  - penicillin plus rifampin, 193-195, 194t
  - rifampin, 194-195, 194t
  - asymptomatic, 193-195
  - chronic, 182-183. *See also* Recurrent infections.
  - clinical trials and research studies of, 196-198, 196t
  - contagion and, 196-198, 197t. *See also* Contagion.
  - definite vs possible, 197t
  - epidemiology and etiology of, 193-195, 194t
  - failure parameters and, 153-154, 195-196, 195t. *See also* Failure parameters.
  - fundamentals of, 193-195
  - post-treatment rates, 195-196, 195t
  - reference resources for, 198-200
  - Cavernous sinus thrombosis, 11
  - CDC (Centers for Disease Control and Prevention), 37
  - Cedax, 120t. *See also* Cefibutene.
  - Cefaclor, 22-24, 22t, 66t-68t, 73t-74t, 76t-77t, 100t-102t, 122t-125t, 128-137, 130t
  - Cefadroxil, 22-24, 22t, 66t-68t, 73t-74t, 76t-77t, 120t, 122t-125t, 128-137, 130t, 160t-161t
  - Cefamandole, 74t
  - Cefatrizine, 122t-124t
  - Cefazolin, 73t, 74t
  - Cefdinir, 22-24, 22t, 64t, 65, 68t, 72, 73t-74t, 76t-77t, 120t, 125t, 128-137, 130t, 135f-136f, 147t, 158, 160t-161t
  - Cefditoren, 120t
  - Cefepime, 73t, 74t
  - Cefetamet/cefetamet pivoxil, 124t, 128-137, 130t
  - Cefixime, 68t, 73t, 76t-77t, 120t, 125t, 128-137, 130t, 160t-161t, 194-195, 194t
  - Cefmetazole, 74t
  - Cefonicid, 73t-74t
  - Cefoperazone, 73t-74t
  - Cefotaxime, 73t-74t
  - Cefotetan, 73t-74t
  - Cefotiam, 160t-161t
  - Cefoxitin, 74t
  - Cefpodoxime/cefpodoxime proxetil, 22-24, 22t, 120t, 122t-125t, 128-137, 130t, 160t-161t
  - Cefprozil, 22-24, 22t, 66t-68t, 73t, 76t-77t, 120t, 124t-125t, 128-137, 130t, 193-195, 194t
  - Cefsulodin, 74t
  - Ceftazidime, 74t
  - Cefibutene, 22-24, 22t, 73t-74t, 76t-77t, 120t, 124t-125t, 128-137, 130t
  - Ceftin, 120t. *See also* Cefuroxime/cefuroxime axetil.
  - Ceftriaxone, 22-24, 22t, 74t
  - Cefuroxime/cefuroxime axetil, 22-24, 22t, 64t, 66t-68t, 73t-74t, 76t-77t, 120t, 124t-125t, 128-137, 130t, 160t-161t
  - Cefzil, 120t. *See also* Cefprozil.
  - Cell invasiveness, 94-95
  - Cellulitis, 201-202
  - Centers for Disease Control and Prevention. *See* CDC (Centers for Disease Control and Prevention).
  - Cephalexin, 22-24, 22t, 66t-68t, 74t, 76t-77t, 120t, 122t-125t, 128-137, 130t
  - Cephaloglycin, 122t-125t, 128-137
  - Cephalosporins, 22-24, 22t, 91, 119-144, 122t-125t, 130t, 135f-136f, 195-196, 198, 204-205. *See also under individual drug names.*
  - carriage and, 195-196, 195t, 198. *See also* Carriage.
  - Cefaclor, 22-24, 22t, 100t-102t, 122t-125t, 128-137, 130t
  - Cefadroxil, 22-24, 22t, 120t, 122t-125t, 128-137, 130t, 160t-161t
  - Cefatrizine, 122t-124t
  - Cefdinir, 22-24, 22t, 64t, 65, 68t, 72, 73t-74t, 76t-77t, 120t, 125t, 128-137, 130t, 135f-136f, 147t, 158, 160t-161t
  - Cefditoren, 120t
  - Cefetamet/cefetamet pivoxil, 124t, 128-137, 130t
  - Cefixime, 120t, 125t, 128-137, 130t, 160t-161t, 194-195, 194t
  - Cefotiam, 160t-161t
  - Cefpodoxime/cefpodoxime proxetil, 22-24, 22t, 120t, 122t-125t, 128-137, 130t, 160t-161t
  - Cefprozil, 22-24, 22t, 120t, 124t-125t, 128-137, 130t, 193-195, 194t
  - Ceftibuten, 22-24, 22t, 120t, 124t-125t, 128-137, 130t
  - Ceftriaxone, 22-24, 22t
  - Cefuroxime, 160t-161t
  - Cefuroxime/cefuroxime axetil, 22-24, 22t, 120t, 124t-125t, 128-137, 130t
  - Cephalexin, 22-24, 22t, 120t, 122t-125t, 128-137, 130t
  - Cephaloglycin, 122t-125t, 128-137
  - Cephadrine, 120t
  - chemical structure of, 73t
  - vs ciprofloxacin, 22-24, 22t
  - clinical trials and research studies of, 119-137, 120t-125t, 126f-127f, 130t, 132t-133t, 135f-136f
  - complications and, 204-205
  - duration criteria for, 160t-163t, 166t. *See also* Duration criteria.
  - first-generation, 120t, 125t, 128-135, 130t, 132t-133t, 135f-136f
  - fundamentals of, 66t-68t, 119-128, 120t-125t, 126f-127f, 134-137
  - loracarbef, 120t, 124t-125t, 128-137, 130t
  - vs macrolides, 91. *See also* Macrolides.
  - vs penicillin, 119-128, 120t-125t, 126f-127f, 130t, 132t-133t, 135f-136f. *See also* Penicillin and amoxicillin.
  - recurrent infections and, 183-185
  - reference resources for, 137-143
  - second-generation, 91, 120t, 125t, 128-135, 130t, 132t-133t, 135f-136f
  - sensitivity analyses of, 132t-133t
  - stratified analyses of, 128-135, 130t, 132t-133t, 135f-136f
  - strengths and limitations of, 62t
  - third-generation, 91, 120t, 125t, 128-135, 130t, 132t-133t, 135f-136f
  - Cephalothin, 74t
  - Cephapirin, 73t-74t

Cephradine, 73t-74t, 120t  
 Cervical adenitis, 201-202  
 Cervical lymphadenitis, 31  
*Chlamydia pneumoniae*, 15-16, 16t, 18t  
 Chorea, 215-217  
 Choreiform finger movements, 204  
 Chronic streptococcal carriage, 182-183  
 Ciprofloxacin, 22-24, 22t  
*Clarithromycin*, 22-24, 22t, 64t, 76t-77t, 92t, 93-94, 98, 100t-102t. *See also Macrolides.*  
 Clavulanate. *See Amoxicillin and penicillin.*  
 CLIA regulations, 39  
*Clindamycin*, 22-24, 22t, 185, 193-196, 194t-195t, 198, 201-202  
 Clinical diagnoses, 29-36. *See also Diagnoses.*  
     Breese nine-factor probability estimator, 29-32, 32t-33t  
     clinical and epidemiological findings, 29-30, 31t  
     fundamentals of, 29  
     McIsaac scores, 31, 34t  
     reference resources for, 35-36  
     Wald scores, 29-31, 34t  
 Clinical management-related concepts (streptococcal pharyngitis). *See also under individual topics.*  
     antibiotic therapies, 49-176  
     cephalosporins, 119-144  
     duration criteria, 157-176  
     failure parameters, 145-156  
     macrolides, 91-118  
     option overviews, 59-80  
     outcomes, 49-58  
     penicillin and amoxicillin, 81-90  
     susceptibility, 21-28  
     carriage, 193-200  
     complications, 201-212  
     contagion, 13-14  
     diagnoses, 15-20, 29-48  
         clinical, 29-36  
         differential, 15-20  
         laboratory, 37-48  
     disease manifestations, 11-12  
     fundamentals. *See Fundamental concepts.*  
     prevention, 213-218  
     recurrent infections, 177-192  
     reference resources. *See Reference resources.*  
 Clinical trials and research studies. *See also under individual topics.*  
     of antibiotic therapies, 49-55, 59-77, 81-89, 82t-84t, 86t-88t, 91-95, 92t, 96t-97t, 100t-102t, 104f-109f, 119-137, 120t-125t, 126f-127f, 130t, 132t-133t, 135f-136f  
     cephalosporins, 119-137, 120t-125t, 126f-127f, 130t, 132t-133t, 135f-136f  
     duration criteria, 157-173  
     failure parameters, 145-154  
     macrolides, 91-95, 92t, 96t-97t, 100t-102t, 104f-109f  
     option overviews, 59-77  
     outcomes, 49-55  
     penicillin and amoxicillin, 81-89, 82t-84t, 86t-88t

Clinical trials and research studies (*continued*)  
     of carriage, 196-198, 196t  
     of diagnoses, 16-17, 29-34, 38-46, 40t-41t  
         clinical, 29-34  
         differential, 16-17  
         laboratory, 38-46, 40t-41t  
         of recurrent infections, 177-186  
         of susceptibility, 21-24  
     Cloxacillin, 89  
     Coaggregation, 150-153, 152f, 178t  
     Colitis, pseudomembranous, 194-195  
     Compliance, 146-147, 147t, 157-158, 173f  
         duration criteria and, 157-158, 173f  
         failure parameters and, 146-147, 147t  
     Compliance and adherence, 63-65, 64t  
     Complications, 201-212  
         antibiotic therapy responses and, 208  
         case study for, 204-205  
         fundamentals of, 209  
         nonsuppurative, 202  
         OCD, 203-208, 206t-207t  
         PANDAS, 203-209, 205t-206t  
         reference resources for, 209-211  
         suppurative, 201-202  
     Compulsive daytime urinary urgency, 204-205  
     Compulsive handwashing, 204, 206t-207t  
     Conjunctivitis, 30t  
     Contagion, 13-14, 14f  
         antibiotic treatment impacts, 14  
         carriage and, 196-198, 197t. *See also Carriage.*  
         in day care centers and schools, 13  
         direct contact, 13  
         false-negative test results, 14  
         in families, 13-14, 14f  
         fundamentals of, 14  
         GAS, 13-14, 14f  
         GAS tonsillopharyngitis, 14  
         person-to-person, 13-14  
         rapid GAS antigen detection tests, 14  
     Copathogens, 150-151f, 151f, 178t, 194-195. *See also Pathogens.*  
     *Corynebacterium diphtheriae*, 15, 16t  
     Coryza, 30t  
     Cost-related factors, 76t-77t, 89  
     Cough, absence of, 29-30, 31t  
     Cross allergic reactions, 65-75, 66t-68t, 73t-74t  
     Cross-reactive antibodies, 73t, 214-215  
     Cultures, throat. *See Throat cultures.*  
     Cure rates, macrolides, 104f-109f  
     Cytokine profiles, 216-217  
  
     Day care center contagion issues, 13. *See also Contagion.*  
     Daytime urinary urgency, compulsive, 204-205  
     De novo stimulation, human T lymphocytes, 214-215  
     Definite vs possible carriage, 197t. *See also Carriage.*

Detection tests, rapid, 14, 39-43, 40t-41t, 42f, 44t  
Diagnoses, 15-20, 29-48. *See also under individual topics.*  
accuracy of, 61-62, 62t  
clinical, 29-36  
Breese nine-factor probability estimator, 29-32, 32t-33t  
clinical trials and research studies of, 29-34  
findings, clinical and epidemiological, 29-30, 31t  
fundamentals of, 29  
McIsaac scores, 31, 34t  
reference resources for, 35-36  
Wald scores, 29-31, 34t  
differential, 15-20  
antibiotic therapies and, 16-18, 18t  
causative factors and agents, 15-16, 16t, 17f  
clinical trials and research studies of, 16-17  
epidemiology and etiology, 15-16, 16t, 17f  
fundamentals of, 15  
pathogens and, 15-20, 16t, 17f  
reference resources for, 18-19  
laboratory, 37-48  
Abbot Labs (Signify), 41-43  
Becton Dickinson (BDQ), 41-43  
BioStar (Acceava), 41-43  
CDC and, 37  
CLIA regulations and, 39  
clinical trials and research studies of, 38-46, 40t-41t  
fundamentals of, 37, 44t  
IDSA guidelines and, 41-53  
longitudinal care and, 43-45  
RADTs, 39-43, 40t-41t, 42f, 44t  
throat cultures, 37-39, 44t  
Diarrhea, 30t  
Dicloxacillin, 89  
Differential diagnoses, 15-20. *See also Diagnoses.*  
antibiotic therapies and, 16-18, 18t  
causative factors and agents, 15-16, 16t, 17f  
epidemiology and etiology, 15-16, 16t, 17f  
fundamentals of, 15  
pathogens and, 15-20, 16t, 17f. *See also Pathogens.*  
*Arcanobacterium haemolyticum*, 15-16, 16t, 18t  
*Chlamydia pneumoniae*, 15-16, 16t, 18t  
*Corynebacterium diphtheriae*, 15, 16t  
*Haemophilus influenzae*, 15, 16t  
*Haemophilus parainfluenzae*, 18t  
*Mycoplasma pneumoniae*, 15-16, 16t, 18t  
*Neisseria gonorrhoeae*, 15, 16t  
*Staphylococcus aureus*, 15, 16t, 18t  
*Streptococcus* (GAS), 15-20, 16t, 18t  
*Streptococcus* (groups C, G, and F), 15-20, 16t, 18t  
treat vs do not treat, 18t  
reference resources for, 18-19  
Disease manifestations, 11-12, 12f  
antibiotic treatment impacts, 11  
fundamentals of, 11-12, 12f

Disease manifestations (*continued*)  
infection transfer parameters, 11  
PANDAS, 11-12, 12f  
pathologic changes, 11  
Dogs as carriers, 177-178, 178t  
Drug consumption, 94-95  
Duration criteria, 157-176, 173f  
for amoxicillin, 160t  
for azalides and azithromycin, 161t-162t  
bacteriologic eradication and, 157-165, 159t-163t  
for cephalosporins, 160t-163t, 166t, 168f-171f  
cefadroxil, 160t-161t  
cefdinir, 160t-161t  
cefixime, 160t-161t  
cefotiam, 160t-161t  
cefpodoxime, 160t-161t  
cefuroxime, 160t-161t  
clinical trials and research studies of, 157-173  
compliance and, 157-158, 173f  
fundamentals of, 157-158  
for penicillin, 157-158, 159t-163t, 166t  
reference resources for, 167, 174-176  
sensitivity analyses and, 166t  
Duricef, 120t. *See also Cefadroxil.*  
Dysuria, 204-205  
Eagle effect, 23-24, 201-202  
Early treatment as failure parameter, 148-149, 149t  
Ecology alterations, microbial, 153  
Edema, 11  
Efficacy factors, 76t-77t  
Elevated WBC (white blood cell) counts, 29-30, 31t  
End-organ damage, 202  
Enterobacteriaceae, 94  
Enzyme-linked immunosorbent assay antibodies, 214-215  
Epidemics, 23-24  
Epidemiology and etiology, 15-16, 16t, 17f, 193-195, 194t  
Epitopes, 215-217  
Eradication, bacteriologic, 49-53, 50f, 50t-51t, 54t-55t, 157-165, 159t-163t  
*Erms* genes, 93-94  
Erysipelas, 11  
Erythema, 11  
Erythromycin, 22-24, 22t, 66t-68t, 76t-77t, 82t-83t, 92t, 93-98, 96t-97t, 100t-102t, 184. *See also Macrolides.*  
Estimators and scores. *See Clinical diagnoses.*  
Etiology and epidemiology, 15-16, 16t, 17f  
Exposures, repeated, 148, 179  
Extended-release (XL) clarithromycin filmtabs, 98  
Extended-spectrum macrolides, 184. *See also Macrolides.*  
Failure parameters, 84t, 145-196, 195t, 201-202  
carriage and, 153-154, 195-196, 195t. *See also Carriage.*  
clinical trials and research studies of, 145-154  
coaggregation, 150-153, 152f

Failure parameters (*continued*)  
 compliance, 146-147, 147t. *See also* Compliance.  
 copathogens, 150, 151f  
 early treatment, 148-149, 149t  
 exposures, repeated, 148  
 failure rates, 84t, 178-183, 201-202  
 formulation deficiencies, 145  
 fundamentals of, 145, 146t  
 immunity suppression, 148-149, 149t  
 microbial ecology alterations, 153  
 recurrent infections and, 178-183  
 reference resources for, 154-156  
 strain differences, 154  
 False-negative vs false-positive cultures, 14, 37-39. *See also* Throat cultures.  
 Family contagion issues, 13-14, 14f. *See also* Contagion.  
 Family pets as carriers, 177-178, 178t  
 Fasciitis, 201-202  
 FDA (Food and Drug Administration), 49, 81  
 Fever, 29-30, 31t  
 Fibronectin-binding proteins, 216-217  
 Fidgeting, 204  
 Findings, clinical and epidemiological, 29-30, 31t. *See also* Clinical diagnoses.  
 First-generation cephalosporins, 66t-68t, 120t, 125t, 128-135, 130t, 132t-133t, 135f-136f. *See also* Cephalosporins.  
 First-generation rapid antigen detection tests, 39-43, 40t-41t, 42f. *See also* RADTs (rapid antigen detection tests).  
 Food and Drug Administration. *See* FDA (Food and Drug Administration).  
 Formulation deficiencies, 145  
 Fundamental concepts. *See also under individual topics.*  
 for antibiotic therapies, 49-50, 50f, 50t-51t, 81-84, 82t-84t, 91, 110, 119-128, 120t-125t, 126f-127f, 134-137, 157-158  
 cephalosporins, 119-128, 120t-125t, 126f-127f, 134-137  
 duration criteria, 157-158  
 failure parameters, 145, 146t  
 macrolides, 91, 110  
 outcomes, 49-50, 50f, 50t-51t  
 penicillin and amoxicillin, 81-84, 82t-84t  
 for carriage, 193-195  
 for complications, 209  
 for contagion, 14  
 for diagnoses, 15, 29, 37, 44t  
   clinical, 29  
   differential, 15  
   laboratory, 37, 44t  
 for disease manifestations, 11  
 for prevention, 213  
 for recurrent infections, 177  
 for susceptibility, 21  
*Fusobacterium* spp, 179-180

GAS (group A streptococcal) infection concepts. *See also under individual topics.*  
 antibiotic therapies, 49-176  
 cephalosporins, 119-144  
 duration criteria, 157-176  
 failure parameters, 145-156  
 macrolides, 91-118  
 option overviews, 59-80  
 outcomes, 49-58  
 penicillin and amoxicillin, 81-90  
 susceptibility, 21-28  
 carriage, 193-200  
 complications, 201-212  
 contagion, 13-14  
 diagnoses, 15-20, 29-48  
   clinical, 29-36  
   differential, 15-20  
   laboratory, 37-48  
 disease manifestations, 11-12  
 fundamentals. *See* Fundamental concepts.  
 prevention, 213-218  
 recurrent infections, 177-192  
 reference resources. *See* Reference resources.  
 GAS-mediated necrotizing fasciitis, 198, 201-202  
 GAS toxic shock syndrome, 23-24, 198, 201-202  
 Germ hoarding, 206t-207t  
 Glomerulonephritis, post-streptococcal, 12f  
 Group A streptococcal infection concepts. *See* GAS (group A streptococcal) infection concepts.  
 Guidelines, 41-53, 50t, 82t-83t, 107t, 196  
   AAP, 50t, 196, 197t  
   AHA, 50t, 82t-83t  
   American Academy of Family Physicians, 50t  
   IDSA, 41-53, 50t, 196, 197t

*Haemophilus influenzae*, 15, 16t, 179-180  
*Haemophilus parainfluenzae*, 18t, 179-180  
 Handwashing, compulsive, 204, 206t-207t  
 Handwriting deterioration, 204  
 Hemolytic streptococci,  $\alpha$ - vs  $\beta$ -, 37, 94, 180-181  
 Historical perspectives, 37, 213-214  
   of throat cultures, 37  
   of vaccination, 213-214  
 Human T lymphocytes, de novo stimulation, 214-215  
 Hyperactivity, 204-207, 206t-207t

IDSA (Infectious Disease Society of America) guidelines, 41-53, 50t, 98-99, 196, 197t  
 IgA (immunoglobulin A), 216-217  
 IgE (immunoglobulin E), 72  
 Immunity, antibiotic suppression of, 148-149, 149t, 180-181  
 Immunoglobulin, 72, 216-217  
   IgA, 216-217  
   IgE, 72

- In vitro* vs *in vivo* assays, 216-217  
 Infection transfers, 11  
 Infectious Disease Society of America. *See* IDSA (Infectious Disease Society of America) guidelines.  
 Inflammatory processes, 11-12, 12f  
 Inhibition, adherence, 216-217  
 Intercurrent viral pharyngitis, 195-196  
 Interferon  $\gamma$ , 216-217  
 Interleukin-4, 216-217  
 Intestinal enterococci, 94  
 Introductory concepts. *See* Fundamental concepts.  
 Invasiveness, cell, 94-95  
 Joint disease, 215-217  
 Keflex, 120t. *See also* Cephalexin.  
 Ketolides and telithromycin, 92t, 94-95  
 Laboratory diagnoses, 37-48. *See also* Diagnoses.  
     CDC and, 37  
     CLIA regulations and, 39  
     clinical trials and research studies of, 38-46, 40t-41t  
     fundamentals of, 37, 44t  
     IDSA guidelines and, 41-53  
     longitudinal care and, 43-45  
     RADTs, 39-43, 40t-41t, 42f, 44t  
         Abbot Labs (Signify), 41-43  
         Becton Dickinson (BDQ), 41-43  
         BioStar (Acceava), 41-43  
     throat cultures, 37-39  
         false-negative, 38-39  
         false-positive, 37  
         historical perspectives of, 37  
 Leukocyte migration exudates, 11-12, 12f  
 Lincomycin, 22-24, 22t, 185, 194-195, 194t  
 Lipoprotein candidate antigens, 216-217  
 Longitudinal care, 43-45  
 Lorabid, 120t. *See also* Loracarbef.  
 Loracarbef, 76t-77t, 120t, 124t-125t, 128-137, 130t  
 M proteins, C-repeat peptides, 214-215  
 M-type vaccination, 213-217. *See also* Vaccination.  
 Macrolides, 66t-68t, 91-118, 92t, 93-98, 96t-97t, 100t-102t, 195-196, 195t  
     azalides and azithromycin, 22-24, 22t, 91-93, 92t, 98-110, 100t-102t,  
         104f-109f, 184  
     bacterial resistance and, 91-95, 92t  
     amoxicillin-clavulanate and, 91, 100t-102t  
      $\beta$ -lactams and, 91-92  
     cefaclor and, 100t-102t  
     cell invasiveness and, 94-95  
     drug consumption and, 94-95  
     *erm* genes and, 93-94  
     *mef* genes and, 93-94  
     MLS<sub>B</sub> resistance phenotype, 93-94  
 Macrolides, bacterial resistance and (*continued*)  
     penicillin and, 100t-102t  
     penicillin V and, 95, 98, 100t-102t  
     roxithromycin and, 102t  
     *Streptococcus pyogenes*, 91-95  
     target-site modification, 93-94  
     vs cephalosporins, 91. *See also* Cephalosporins.  
     clarithromycin, 22-24, 22t, 92t, 93-94, 98, 100t-102t  
     clinical trials and research studies of, 91-95, 92t, 96t-97t, 100t-102t,  
         104f-109f  
     cure rates of, 104f-109f  
     erythromycin, 22-24, 22t, 82t-83t, 92t, 93-98, 96t-97t, 100t-102t, 184  
     extended-spectrum, 184  
     fundamentals of, 66t-68t, 91, 110  
     IDSA guidelines for, 98-99  
     ketolides and telithromycin, 22-24, 22t, 92t, 94-95  
     lincomycin and, 22-24, 22t  
     penicillin allergies and, 91, 95-98, 96t-97t  
     reference resources for, 111-112  
     strengths and limitations of, 62t  
 Management-related concepts (streptococcal pharyngitis). *See also under individual topics.*  
     antibiotic therapies, 49-176  
     cephalosporins, 119-144  
     duration criteria, 157-176  
     failure parameters, 145-156  
     macrolides, 91-118  
     option overviews, 59-80  
     outcomes, 49-58  
     penicillin and amoxicillin, 81-90  
     susceptibility, 21-28  
     carriage, 193-200  
     complications, 201-212  
     contagion, 13-14  
     diagnoses, 15-20, 29-48  
         clinical, 29-36  
         differential, 15-20  
         laboratory, 37-48  
     disease manifestations, 11-12  
     fundamentals. *See* Fundamental concepts.  
     prevention, 213-218  
     recurrent infections, 177-192  
     reference resources. *See* Reference resources.  
 Manifestations of disease, 11-12  
 Mastoiditis, 11  
 MBCs (minimum bacterial concentrations), 23-24  
 McIsaac scores, 31, 34t. *See also* Clinical diagnoses.  
 Memory impairments, 204  
 Meningitis, 11, 201-202  
 Microbial ecology alterations, 153  
 MICs (minimum inhibitory concentrations), 21-22, 22t  
 Migration exudates, leukocyte, 11-12, 12f  
 Minimally symptomatic carriage, 179

- Minimum bacterial concentrations. *See* MBCs (minimum bacterial concentrations).
- Minimum inhibitory concentrations. *See* MICs (minimum inhibitory concentrations).
- MLS<sub>B</sub> (macrolide-lincosamide-streptogramin<sub>B</sub>) resistance phenotype, 93-94. *See also* Macrolides.
- Moraxella catarrhalis*, 178t, 179-180
- Moxalactam, 73t
- Mycoplasma pneumoniae*, 15-16, 16t, 18t
- Myositis, 198
- Nafcillin, 89
- Nausea, 30t, 186
- Necrotizing fascitis, GAS-mediated, 198, 201-202
- Neisseria gonorrhoeae*, 15, 16t
- Nephritis, 202, 215-217
- Neuropsychiatric symptoms, 204
- Nine-factor probability estimator, 29-32, 32t-33t
- Nonsuppurative complications, 202. *See also* Complications.
- OCD (obsessive-compulsive disorder), 203-208, 206t-207t. *See also* Complications.
- Omnicef, 120t. *See also* Cefdinir.
- Opacity factors, serum, 216-217
- Opsonic antibodies, 216-217
- Option overviews, 59-80. *See also* Antibiotic therapies.
- adherence and compliance, 63-65, 64t
  - appropriate antibiotic selection, 61-62, 62t
  - clinical trials and research studies of, 59-77
  - cost-related factors, 76t-77t
  - cross allergic reactions, 65-75, 66t-68t, 73t-74t
  - diagnosis accuracy and, 61-62, 62t
  - efficacy factors, 76t-77t
  - fundamentals of, 59-61, 60t, 72, 76t-77t
  - reference resources for, 75, 78-79
  - tolerability factors, 76t-77t
- Oral cephalosporins. *See* Cephalosporins.
- Oral penicillin G, 84-85, 86t-87t, 89. *See also* Penicillin and amoxicillin.
- Orthodontic appliance contamination, 178t
- Osteomyelitis, 11, 201-202
- Otitis media, 85
- Outcomes, 49-58. *See also* Antibiotic therapies.
- ARF primary prevention, 49-53, 50t-51t
  - bacteriologic eradication, 49-53, 50f, 50t-51t, 54t-55t
  - clinical trials and research studies of, 49-55
  - FDA and, 49
  - fundamentals of, 49-50, 50f, 50t-51t
  - guidelines for, 50t. *See also* Guidelines.
  - reference resources for, 57-58
- Overviews and summaries. *See* Fundamental concepts.
- PANDAS (pediatric autoimmune neuropsychiatric disorder associated with streptococci), 11-12, 12f, 203-209, 205t-206t, 215-217. *See also* Complications.
- Pathogens, 15-20, 16t, 17f, 150, 150f-151f, 154, 178t, 194-195. *See also under individual pathogens.*
- Arcanobacterium haemolyticum*, 15-16, 16t, 18t
  - Chlamydia pneumoniae*, 15-16, 16t, 18t
  - copathogens, 150, 150f-151f, 178t, 194-195
  - Corynebacterium diphtheriae*, 15, 16t
  - Fusobacterium* spp, 179-180
  - Haemophilus influenzae*, 15, 16t, 179-180
  - Haemophilus parainfluenzae*, 18t, 179-180
  - laboratory diagnoses and, 37-48. *See also* Laboratory diagnoses.
  - Moraxella catarrhalis*, 178t, 179-180
  - Mycoplasma pneumoniae*, 15-16, 16t, 18t
  - Neisseria gonorrhoeae*, 15, 16t
  - Staphylococcus aureus*, 15, 16t, 18t, 23-24, 37, 179-180
  - strain differences, 154
  - Streptococcus* spp, 15-20, 91-95
    - Streptococcus* (GAS), 15-20, 16t, 18t
    - Streptococcus* (groups C, G, and F), 15-20, 16t, 18t
    - Streptococcus pyogenes*, 91-95
- Pathologic changes, 11
- Patient compliance and adherence, 63-65, 64t, 146-147, 147t, 157-158, 173f
- adherence factors, 63-65, 64t
  - duration criteria and, 157-158, 173f
  - failure parameters and, 146-147, 147t
- Pediatric autoimmune neuropsychiatric disorder associated with streptococci. *See* PANDAS (pediatric autoimmune neuropsychiatric disorder associated with streptococci).
- Penicillin and amoxicillin, 21-24, 22t, 66t-68t, 76t-77t, 81-90, 119-128, 193-195, 194t-195t, 201-202. *See also* Antibiotic therapies.
- AHA guidelines for, 82t-83t
  - amoxicillin, 21-24, 22t, 85-91, 88t, 100t-102t
  - amoxicillin-clavulanate, 64t, 76t-77t, 89-91, 100t-102t, 183-186
  - vs ampicillin, 85-89, 88t
  - vs cephalosporins, 119-128, 120t-125t, 126f-127f, 130t, 132t-133t, 135f-136f. *See also* Cephalosporins.
  - chemical structure of, 73t
  - clinical trials and research studies of, 81-89, 82t-84t, 86t-88t
  - vs cloxacillin, 89
  - complications and, 201-202
  - cost-related factors of, 89
  - vs dicloxacillin, 89
  - failure rates of, 84t, 201-202
  - fundamentals of, 66t-68t, 81-84, 82t-84t
  - vs nafcillin, 89
  - nonsuppurative complications and, 202
  - penicillin, 21-24, 22t, 49, 76t-77t, 81-98, 82t-83t, 86t-87t, 96t-97t, 119-128, 184, 193-195, 194t
    - allergies, 82t-83t, 91, 95-98, 96t-97t
    - benzathine penicillin G, 82t-83t, 84-85, 86t-87t, 184
    - benzathine penicillin plus rifampin, 194-195, 194t
    - penicillin G, oral, 84-85, 86t-87t, 89
    - penicillin plus rifampin, 193-195, 194t
    - penicillin V, 82t-83t, 84-85, 86t-87t, 184-186

- Penicillin and amoxicillin, penicillin (*continued*)  
 penicillin VK, 76t-77t  
 procaine penicillin, 84-85  
 recurrent infections and, 178-185. *See also* Recurrent infections.  
 reference resources for, 89-90  
 strengths and limitations of, 62t  
 Peptides, C-repeats, 214-215  
 Peritonitis, 201-202  
 Peritonsillar abscess, 15, 201-202  
 Person-to-person contagion, 13-14. *See also* Contagion.  
 Pets as carriers, 177-178, 178t  
 Pharyngeal microflora, protective, 180  
 Pharyngitis (streptococcal) clinical management concepts. *See also under individual topics.*  
 antibiotic therapies, 49-176  
 cephalosporins, 119-144  
 duration criteria, 157-176  
 failure parameters, 145-156  
 macrolides, 91-118  
 option overviews, 59-80  
 outcomes, 49-58  
 penicillin and amoxicillin, 81-90  
 susceptibility, 21-28  
 carriage, 193-200  
 complications, 201-212  
 contagion, 13-14  
 diagnoses, 15-20, 29-48  
 clinical, 29-36  
 differential, 15-20  
 laboratory, 37-48  
 disease manifestations, 11-12  
 fundamentals. *See* Fundamental concepts.  
 prevention, 213-218  
 recurrent infections, 177-192  
 reference resources. *See* Reference resources.  
**Phenoxymethyl penicillin (penicillin V), 82t-83t, 84-85, 86t-87t. *See also* Penicillin and amoxicillin.**  
 Ping-pong spread, 197t  
**Pivoxil. *See* Cefetamet/cefetamet pivoxil.**  
 Pneumonia, 201-202  
 Possible vs definite carriage, 197t. *See also* Carriage.  
 Post-streptococcal glomerulonephritis, 12f, 202, 214-215  
 Post-treatment rates, carriage, 195-196, 195t. *See also* Carriage.  
 Prevention, 213-218  
 fundamentals of, 213  
 reference resources for, 217-218  
 surgical intervention (tonsillectomy), 213  
 vaccination, 213-217  
 ASO titers, 214  
 C-repeats, 214-215  
 historical perspectives of, 213-214  
 lipoprotein candidate antigens, 216-217  
 M-types, 213-217  
 regulatory challenges for, 217  
 Prevention, vaccination (*continued*)  
 safety assessments of, 217  
 screening and, 215  
*in vitro* vs *in vivo* assays, 216-217  
 Primary prevention, ARF (acute rheumatic fever), 49-53, 50t-51t  
 Probability estimators and scores. *See* Clinical diagnoses.  
 Procaine penicillin, 54t-55t, 84-85  
 Protective pharyngeal microflora, eradication of, 180  
 Protein synthesis inhibition, bacterial, 201-202  
 Proxetil. *See* Cefpodoxime/cefpodoxime proxetil.  
 Pseudomembranous colitis, 185, 194-195  
 Pyoderma, 11  
 RADTs (rapid antigen detection tests), 14, 39-43, 40t-41t, 42f, 44t  
 Recurrent infections, 177-192  
 antibiotic therapies for, 183-186. *See also* Antibiotic therapies.  
 amoxicillin-clavulanate, 183-186  
 azithromycin, 184  
 benzathine penicillin G, 184  
 cephalosporins, 183-185  
 clindamycin, 185  
 erythromycin, 184  
 lincomycin, 185  
 macrolides, 184  
 penicillin, 178-185  
 penicillin allergies and, 185  
 penicillin G, 184  
 penicillin V, 184-186  
 clinical trials and research studies for, 177-186  
 failure parameters, 178-183  
 antibiotic failures, 178-183, 178t  
 carriage and, 178  
 compliance, lack of, 178-179  
 definitions of, 177  
 exposures, repeated, 179  
 immunity, antibiotic suppression of, 180-181  
 penicillin tolerance, 181-182  
 protective pharyngeal microflora, eradication of, 180  
 streptococcal carriage, chronic, 182-183  
 fundamentals of, 177  
 reference resources for, 187-191  
 Recurrent tics, 204, 206t-207t  
 Reference resources. *See also under individual topics.*  
 for antibiotic therapies, 57-58, 89-90, 111-112, 137-143, 154-156, 167,  
 174-176  
 cephalosporins, 137-143  
 duration criteria, 167, 174-176  
 failure parameters, 154-156  
 macrolides, 111-112  
 outcomes, 57-58  
 penicillin and amoxicillin, 89-90  
 for carriage, 198-200  
 for complications, 209-211

Reference resources (*continued*)

- for diagnoses, 18-19, 35-36
  - clinical, 35-36
  - differential, 18-19
- for prevention, 217-218
- for recurrent infections, 187-191
  - for susceptibility, 24-28
- Regulatory challenges, vaccination, 217
- Relapses. *See* Recurrent infections.
- Renal disease, 215-217
- Repeated exposures, 148, 179
- Research studies. *See* Clinical trials and research studies.
- Retropharyngeal abscesses, 15
- Rheumatic fever, 16, 21-22, 82t-83t, 177, 202, 213-217. *See also* ARF (acute rheumatic fever).
- Rheumatic heart disease, 215-217
- Rhinorrhea, absence of, 29-30, 31t
- Rifampin, 193-195, 194t
  - benzathine penicillin plus rifampin, 194-195, 194t
  - penicillin plus rifampin, 193-195, 194t
- Roxithromycin, 102t
- Safety assessments, vaccination, 217
- Scarlatinia rash, 16
- School contagion issues, 13. *See also* Contagion.
- Scores and probability estimators. *See* Clinical diagnoses.
- Screening, 215
  - Second-generation cephalosporins, 66t-68t, 120t, 125t, 128-135, 130t, 132t-133t, 135f-136f. *See also* Cephalosporins.
  - Second-generation RADTs (rapid antigen detection tests), 39-43, 40t-41t, 42f. *See also* RADTs (rapid antigen detection tests).
- Sensitivity analyses, 132t-133t, 166t
- Sentinel episodes, OCD, 208
- Separation anxiety, age-inappropriate, 204-205, 206t-207t
- Serum antibody production, 202
- Serum opacity factors, 216-217
- Signify (Abbot Labs), 41-43
- Sinus thrombosis, cavernous, 11
- Spectracef, 120t. *See also* Cefditoren.
- Staphylococcus aureus*, 15, 16t, 18t, 23-24, 37, 179-180, 194-195
- Stationary phase, 201-202
- Strain differences, 154
- Stratified analyses, 128-135, 130t, 132t-133t, 135f-136f
- Streptococcal pharyngitis (clinical management) concepts. *See also under individual topics.*
  - antibiotic treatments, 49-176
  - cephalosporins, 119-144
  - duration criteria, 157-176
  - failure parameters, 145-156
  - macrolides, 91-118
  - option overviews, 59-80
  - outcomes, 49-58
  - penicillin and amoxicillin, 81-90
  - susceptibility, 21-28

Streptococcal pharyngitis (clinical management) concepts (*continued*)

- carriage, 193-200
- complications, 201-212
- contagion, 13-14
- diagnoses, 15-20, 29-48
  - clinical, 29-36
  - differential, 15-20
  - laboratory, 37-48
- disease manifestations, 11-12
- fundamentals. *See* Fundamental concepts.
- prevention, 213-218
  - recurrent infections, 177-192
- reference resources. *See* Reference resources.
- Streptococcus* spp, 15-20, 91-95
  - Streptococcus* group A, 15-20. *See also* GAS (group A streptococcal) infection concepts.
  - Streptococcus* groups C, G, and F, 15-20, 16t, 18t
  - Streptococcus pyogenes*, 91-95
- Studies. *See* Clinical trials and research studies.
- Summaries. *See* Fundamental concepts.
- Super antigens, 216-217
  - Suppressed immunity, 148-149, 149t, 180-181
  - Suppurative complications, 201-202. *See also* Complications.
  - Supraglottitis, 201-202
  - Suprax, 120t. *See also* Cefixime.
  - Surgical interventions, 213
  - Susceptibility, 21-28
    - to azithromycin, 21-24, 22t
    - to clarithromycin, 21-24, 22t
    - to clindamycin, 21-24, 22t
    - clinical trials and research studies of, 21-24
    - eagle effect and, 23-24
    - to erythromycin, 21-24, 22t
    - fundamentals of, 21
    - to lincomycin, 21-24
    - MBCs and, 23-24
    - MICs and, 21-22, 22t
    - reference resources for, 24-28
    - resistance and, 21-24, 22t
  - Sydenham chorea, 202-204
- T lymphocytes (human), de novo stimulation, 214-215
- Target-site modification, 93-94
- Telithromycin and ketolides, 22-24, 22t, 92t, 94-95. *See also* Macrolides.
- Tetracyclines, 22t
- Therapies, antibiotic. *See* Antibiotic therapies.
- Third-generation cephalosporins, 68t, 120t, 125t, 128-135, 130t, 132t-133t, 135f-136f. *See also* Cephalosporins.
- Throat cultures, 37-39. *See also* Laboratory diagnoses.
  - false-negative, 38-39
  - false-positive, 37
- historical perspectives of, 37
- Thrombosis, sinus, 11
- Thyroiditis, 201-202

Tics, recurrent, 204, 206t-207

Tolerability factors, 76t-77t

Tonsillectomy, 213

Toothbrush contamination, 178t

Toxic shock syndrome, GAS, 23-24, 198, 201-202

Transfer parameters, 11

Treatments, antibiotic. *See* Antibiotic therapies.

Trials. *See* Clinical trials and research studies.

US CDC (Centers for Disease Control and Prevention), 37

US FDA (Food and Drug Administration), 49, 81

Vaccination, 213-217. *See also* Prevention.

ASO titers, 214

C-repeats, 214-215

historical perspectives of, 213-214

lipoprotein candidate antigens, 216-217

M-types, 213-217

regulatory challenges for, 217

safety assessments of, 217

screening and, 215

*in vitro* vs *in vivo* assays, 216-217

Vantin, 120t. *See also* Cefpodoxime/cefpodoxime proxetil.

Velosef, 120t. *See also* Cephradine.

Wald scores, 29-31, 34t. *See also* Clinical diagnoses.

WBC (white blood cell) counts, elevated, 29-30, 31t

XL (extended-release) clarithromycin filmtabs, 98. *See also* Clarithromycin.

Z Pak azithromycin, 110. *See also* Azalides and azithromycin.