

Index

A

- Abortus, 4
- Absolute neutrophil count, 146
- Absorption, 17
 - extravascular, 18
 - gastrointestinal, 18
 - intramuscular, 18
 - percutaneous, 19
 - rectal, 19
- Academy of Breastfeeding Medicine, 49, 61
- Acetaminophen, 21, 119, 126
 - PDA and, 103-104
 - vaccination response and, 191-192
- Acid ionization constant, breast milk and, 47
- Acid-base balance, 32
- Activity, 5
- Acute lung injury, 84-85
- Acyclovir, 46
 - parenteral, 147-148
- Addiction, maternal, 61
- Adverse drug events, methylxanthine toxicity, 71
- Adverse effects, neonatal abstinence treatment, 60
- Airway patency maintenance, 68
- Albuterol, 87, 161
- Alcohol, 48
- Alginate, 181
- Alpha agonists, 115-116
- Aluminum toxicity, 36-37
- American Academy of Pediatrics, 45
 - acyclovir shortage recommendations, 147
 - alcohol and, 48
 - on apnea of prematurity, 65
 - on bronchiolitis, 161
 - on neonatal abstinence syndrome, 56, 58
 - on respiratory syncytial virus, 158, 160
 - on sedation management, 112
 - on systemic corticosteroids, 88
 - on vaccinations, 187
 - on Vitamin K IM, 10-11
- American College of Chest Physicians, 159
- American College of Emergency Physicians, 159
- American College of Obstetrics and Gynecology, 61
- American Congress of Obstetricians and Gynecologists, 145
- American Society for Parenteral and Enteral Nutrition, 30, 34
- American Society of Health-System Pharmacists (ASHP), 34
- American Thoracic Society, 159
- Amino acids, 30, 34-35
- Aminoglycoside(s), 19, 134, 172
- Aminophylline, 69
- Aminosyn, 30
- Amoxicillin-sulbactam, 172
- Amphotericin B, 137
- Ampicillin, 6, 134, 172
- Ampicillin-sulbactam, 172
- Anaerobic antibiotic therapy, 172
- Analgesia
 - common agents for, 127-129
 - pharmacologic agents for, 118-119
 - principles of, 116-117
- Analgesics, 123
 - reversal of, 121
- Angiotensin-converting enzyme inhibitors (ACEI), 105
- Antacids, 181
- Antenatal corticosteroids, 80, 101, 175

Antibiotic(s), 2, 6, 105, 134-135, 137
 administration risks of, 173-174
 empiric regimens for, 172
 meningitis duration and, 135
 scheduling of, 8
 sepsis duration and, 135

Antiepileptic drugs, 211-212, 213

Antifungal agent, 137

Anti-infectives, 222-223

Antiretroviral dosing, neonatal, 152

Antithrombin III infusions, 219

Apgar, Dr. Virginia, 5

APGAR score, 5, 200

Apnea, 75, 192-193

Apnea of prematurity (AOP), readings, 75
 causes of, 67
 diagnosis of, 67-68
 duration of treatment for, 71
 epidemiology of, 65-66
 lab monitoring of, 67
 methylxanthines in, 69
 non-pharmacologic treatments for, 68-69
 pathophysiology of, 66
 pharmacologic monitoring for, 70-71
 pharmacologic treatments for, 69-71
 physical assessment of, 67
 presentation of, 66-67
 therapeutic goals for, 68

Appearance, 5

Appropriate for gestational age (AGA), 3

Arachidonic acid pathway, 104

Arginine, 30

Atelectasis, 78-79

Atracurium, 114, 129

B

Ballard, Dr. Jeanne, 5

Ballard scoring, 5

Barbiturates, 113

Barium enemas, 183

Barotrauma, 79

Bartlett, Dr. Robert, 215

Bell Stage I, suspected NEC, 169, 170

Bell Stage II, definite NEC, 169, 170, 174, 175

Bell Stage III, advanced NEC, 169, 170-171, 174, 175

Bell staging modification, 170-171

Beneprotein, 45

Benzathine penicillin, IM, 149

Benzodiazepine(s), 20, 21, 56, 113, 121, 212-213, 223

Beractant, 82

Beta antagonists, 21

Beta-agonists, 87

Betamethasone, 4, 80

Bethanechol, 181

Bevacizumab (intravitreal), 11

Biomarkers, 132-133, 175

Blood culture(s), 132, 134-135

Blood flow, 94, 95

Blood volume, 7

Body positioning, 180

Bosentan, 206

Brainstem maturity, 66

Breastfeeding, 43
 alcohol and, 48
 constipation and, 182, 183
 initiation of, 6
 length of, 44
 neonatal abstinence syndrome and, 61
 nicotine and, 48
 pain management and, 118
 substance abuse and, 48-49

Briggs, 51

Bronchiolitis management, 161

Bronchodilators, 86-87

Bronchopulmonary dysplasia, 83-84, 89-90, 96, 101
 clinical presentation of, 85
 diagnosis of, 83-84
 epidemiology, risk factors of, 84
 incidence of, 84
 management of, 85
 outcomes for, 89
 pathophysiology of, 84-85
 pharmacologic management of, 85-87
 prevention strategies for, 87-89
 readings on, 92

Buffering agents, 181

Bumetanide, 213

Buprenorphine, 48, 57, 60

C

Caffeine, 6, 21, 69, 174-175
 adverse drug events for, 71-72
 IV, PO formulations for, 70
 loading dose for, 70
 maintenance dosing for, 70
 monitoring of, 70

Calcium carbonate, 181

Calcium chloride, 37

Calcium gluconate, 32, 37

Calcium management, 220

Calcium solubility, 36

Calfactant, 82

Caloric requirements, 28

Canadian Paediatric Society, 88

Candida, 136

Candida spp., 36

Carbamazepine, 213

Carbapenem, 172

Carbohydrates, 29

Cardiac support drips, 105

- Carnitine, 34
 Cefotaxime, 134, 222
 Cefoxitin, 172
 Ceftriaxone, 9-10, 20
 Centers for Disease Control and Prevention (CDC),
 144, 145
 immunization recommendations of, 189
 on hepatitis B infection, 188
 on respiratory syncytial virus, 156
 on vaccinations, 187
 Central apnea, 66
 Central line access, 38, 136
 Central line-associated blood stream infections
 (CLABSIs), 36
 Central nervous system changes, 219
 Cephalosporin(s), 134, 172
 Cerebral spinal fluid cultures, 132
 Cesarean section birth, 4
 Chest radiography, 200
 Chickenpox, 143-144
 Chloramphenicol, 21
 Chlorothiazide, 86
 Chorioamnionitis, 135
 Chorioretinitis, 142
 Chromium, 33
 Chronic lung injury, 85
 Cimetidine, 46
 Cisatracurium, 115, 129
 Clindamycin, 172
 Clinical sepsis, 135
 Clonic seizures, 211
 Clonidine, 60, 182
 Cluster care, 117-118
 CNS symptoms, NAS, 58
 Coagulase-negative staphylococci (CoNS), 136
 Cocaine, 56
 ingestion, 48
Cochrane Review, 161
 Cocooning, 193
 Code of Federal Regulations, 49
 Codeine, 57
 Colostrum, 44
 Congenital heart disease, 174
 Congenital syndromes, 95
 Congenital varicella syndrome (CVS), 143-144
 Conjugate vaccines, 189
 Constipation, 179
 epidemiology of, 181-182
 nonpharmacologic treatment for, 182-183
 pharmacologic treatments for, 183
 presentation of, 182
 Continuous positive airway pressure (CPAP), 68-69
 Copper, 33
 Corrected gestational age (CGA), 3
 Corticosteroids, 143, 188
 antenatal, 80, 175
 maternal, 4
 systemic, 88
 C-reactive protein, 132
 CRIES scoring tool, 117
 Critically ill neonate, pharmacokinetic changes in,
 121-123
 Curosurf, 82
 Cyclopentolate, 11
 Cysteine, 34
 Cytochromes, 20-21
 Cytomegalovirus (CMV), 144-145
 prevention of, 145
 treatment for, 146
 Cytomegalovirus hyperimmune globulin, 145
- ## D
- DART, 88
 Dexamethasone, 4, 8, 80, 88-89
 Dexmedetomidine, 115-116, 128
 Dextromethorphan, 21
 Dextrose, 29
 Dialysis, 221
 Diazepam, 21, 212-213
 Diphtheria, tetanus and pertussis (DTaP), 189, 190,
 193
 Distribution, 17, 19-20
 Diuretics, 85-86, 87, 104
 Domperidone, 50
 Donor milk, 45
 Dopamine, 7, 8, 105
 Dosing, 2
 Dosing error, 8
 Drug dosing references, 14
 Drug transfer into milk, 46
 acid ionization constant for, 47
 bioavailability of, 46
 labeling for, 51
 milk-to-plasma ratio for, 47
 milk, molecular weight for, 46
 peak serum concentration of, 47
 relative infant dose for, 47
 risk-benefit statement for, 51
 volume of distribution and, 46-47
 Drugs in lactation references, 14
Drugs in Pregnancy and Lactation, 51
 Ductus arteriole, 188
 Ductus arteriosus, 94-96
- ## E
- Early-onset infections, 132
 common pathogens of, 133-134
 pharmacologic treatment for, 133-134
 presentation, laboratory evaluation of, 132-133
 Early-onset sepsis, 132
 Echocardiogram, 200-201
 Electrolyte(s), 31-32
 management of, 219

support for, 220
 Elimination, 17, 22
 Emergency Nurses Association, 159
 Empiric antibiotics, 172
 Endothelin receptor antagonists, 206
 Enoxaparin, 46
 Enteral feeding(s)/nutrition, 221
 bowel movements and, 182, 183
 gastroesophageal reflux and, 180-181
 NSAID therapy and, 106-107
Enterobacteriaceae, 136
 Enterococci, 36
 Epinephrine, 105
 Erythromycin, 181
 Erythromycin ophthalmic ointment, 6
Escherichia coli, 134
 Ethanol locks, 36
 Eutectic mixture of lidocaine and prilocaine (EMLA), 192
 Expiration dates, times, 9
 Extracorporeal Life Support Organization, 216
 Extracorporeal membrane oxygenation (ECMO), 122, 202, 203, 205, 207, 215-216
 anti-infectives and, 222-223
 central nervous system changes in, 219
 gastrointestinal, fluid, electrolytes, nutrition support in, 220
 hematologic system changes in, 220
 immune system changes in, 220-221
 inclusion criteria, indications for, 217-218
 opioids and, 223-224
 organ system changes in, 218
 pharmacokinetic changes in, 221
 pharmacologic challenges of, 221-224
 pulmonary system changes in, 218
 readings on, 227
 renal system changes in, 219-220
 sedatives and, 223
 veno-arterial, 216-217, 218, 219
 veno-venous, 216-217, 218
 Extravasation, 7
 Extremely low birth weight (ELBW), 3
 Extremely preterm (EPT), 3

F

Failure of optimal medical management, 217-218
 Famotidine, 34
 Fat emulsions, 31, 37
 Fatty acid deficiency syndrome, 31
 Fentanyl, 116, 126, 128, 129, 223-224
 Fenton growth charts, 29
 Fenugreek, 49-50
 Fetal circulation, 198
 Fick's law, 216
 Fluconazole, 222

Fluid(s)
 goal for, 28
 management, IV, 28
 nutrition and, 28
 support, 222
 Flumazenil, 121, 122
 Fluoroquinolones, 9
 Food and Drug Administration (FDA), 143
 ceftriaxone warning by, 10
 on aluminum exposure, 36
 on drug passage into milk, 50-51
 sildenafil labeling requirements of, 204
 Foramen ovale, 198
 Formulary, 2
 Fosphenytoin, 212
 Furosemide, 86, 104

G

GABA (gamma-aminobutyric acid) modulators, 113-114
 GABA/benzodiazepine receptor antagonist, 121
 Galactogogues, 48-50
 Ganciclovir, 146
 Gastroesophageal reflux, 179
 epidemiology of, 180
 nonpharmacologic treatment for, 180-181
 pharmacologic treatments for, 181
 presentation of, 180
 Gastrointestinal contrast, 46
 Gastrointestinal disorders, readings on, 186
 Gastrointestinal support, 220
 Gentamicin, 6, 19-20, 134, 222
 Gestational age (GA), 2
 GI symptoms, NAS, 58
 Glomerular filtration, 22
 Glucocorticoids, 100
 indomethacin and, 12
 Glucose infusion rates (GIR), 29-30
 Glucuronidation, 21
 Glutathione, 34
 Glycerin, 183
 Gravida, 3
 Gravida/para (GP), 4
 Gray-baby syndrome, 21
 Grimace, 5
 Group B *Streptococcus*, 199
 Growth charts, 29

H

H₂-receptor antagonists, 34, 181
Haemophilus influenzae, 189, 190
 Hale, Thomas, 51, 52
 Hand washing, 145
Handbook on Injectable Drugs, 38

Handbooks, 14-15
 Healthy People 2020 Goals, 44, 45
 Hematologic system changes, 219
 Heparin, 8, 34
 Heparinization, systemic, 217
 Heparinized fluids, 7
 Hepatic clearance, 123
 Hepatitis B immune globulin, 188
 Hepatitis B vaccine, 6, 188-189, 190
 Heroin, 57
 Herpes simplex, 146-147
 treatment for, 147-149
 Herpes zoster, 144
 Hoffman elimination, 114-115
 Human immunodeficiency virus, 149-153
 neonatal antiretroviral dosing for, 152
 Human milk, 175
 fortifier, 45
 Hyaluronidase, 7, 32
 Hydrocodone, 56
 Hypercarbia, 79
 Hyperglycemia, 29
 Hyperoxia test, 200
 Hypoglycemia, 30
 Hypothermia
 induction, 122
 rewarming, 122-123
 Hypoxemia, 66, 68, 79, 200, 201

I

iatrogenic opioid dependence, 120-121
 Ibuprofen, 102, 103
 contraindications for, 100
 drug interactions with, 100
 PDA closure dosing for, 98-99
 vaccination response and, 191-192
 Ibuprofen lysine, 97-98
 IFALD, 35
 Iloprost, 206
 Inactivated polio virus, 189, 190
 Indomethacin, 5, 88, 96-97, 98, 102-103, 107
 antenatal, 174
 contraindications for, 100
 drug interactions with, 100
 glucocorticoids and, 12
 PDA closure dosing for, 98-99
 side effects of, 99
 Indomethacin IV, 6
 Infant assessment, 5
 Infasurf, 82
 Infection risk, PN, 36
 Infectious disease references, 14
 Infectious Diseases Society of America, 36
 Influenza vaccine, 193
 Inhaled bronchodilators, 86-87
 Inhaled corticosteroids, 87

Inhaled nitric oxide, 202-203, 204 206, 207
 Institute of Medicine, 145
 Insulin, 46
 Intestinal failure-associated liver disease, 31
 Intrauterine growth restriction (IUGR), 3
 Intravenous admixtures, 8
 Intravenous dextrose, 2
 Intravenous fat emulsion (IVFE), 31, 220
 Intravenous fluid management, 28
 Intraventricular hemorrhage (IVH), 12, 96-97, 99
 Iodine, 46
 Ion trapping, 47
 Ipratropium MDI, 87
 Iron supplementation, 45, 182
 Isoenzymes, 20

J

Jitteriness, 210

K

Kangaroo care, 49
 pain management and, 118
 Kangaroo mother care (KMC), 6
 Kernicterus, 10, 20
 Ketamine, 116, 128
King Guide to Parenteral Admixtures, 38

L

Lactated Ringer's solution, 10
 Lactation, 43
 medications and, 53
 readings on, 54
 risk categories for, 52
 Lactic acidosis, 79
 LactMed, 51
Lactobacillus probiotics, 175
 Lamotrigine, 213
 Lansoprazole, 181
 Laparotomy, 173
 Large for gestational age (LGA), 3
 Late-onset infections, 132
 common pathogens for, 136
 pharmacologic treatment for, 136-137
 presentation, laboratory evaluation of, 136
 Late-onset sepsis, 132
 Levetiracetam, 213
 Lidocaine, 119, 213
 Lidocaine 4% cream, 192
 Lidocaine-prilocaine, 119
 Line flushes, 8
 Lipsitz tool, 58
 Local anesthetics, 119
 Loop diuretics, 86, 102

Lorazepam, 113, 128, 212-213, 223
 Low birth weight (LBW), 3
 Lucinactant, 82
 Luer lock oral syringes, 9

M

Macrolides, 149
 Macronutrients, 29-30
 Magnesium sulfate, 5
 Maladaptation, 199
 Maldevelopment, 199
 Manganese, 33
 Manual stimulation, 68
 Marijuana, 56
 Maternal antibodies, 187-189
 Maternal history, 133
 Maturity rating, 5
 Mechanical ventilation injury, 84
 Meconium, 57, 182
 Medical induction of labor, 4
 Medication safety, 8
 Medication standardization, 8
 Medication storage, 8-9
Medications & Mothers' Milk, 51
 Medications, to avoid in neonates, 9-10
 Medium chain triglycerides oil, 45
 Meningitis, 131, 136

- antibiotic therapy duration for, 135
- cefotaxime and, 134
- CSF study values in bacterial, 136
- readings on, 139

 Meropenem, 222-223
 Metabolism, 17, 20-22
 Metered dose inhaler, 87
 Methadone, 48, 56-58, 61, 120, 126
 Methemoglobinemia, 202-203
 Methylxanthine(s), 21

- mechanism of action for, 69
- toxicity of, 71-72

 Metoclopramide, 49, 50, 181
 Metronidazole, 172
 Micronutrients, 31-32
 Midazolam, 8, 20, 113, 128, 212, 213, 223
 Milk-to-plasma ratio, 47
 Milrinone, 204-205
 Mixed apnea, 66
 Moderate-to-late preterm (LPT), 3
 Modified Finnegan tool, 58, 59
 Molybdenum, 33
 Morphine, 21, 57-58, 116, 119-120, 127, 224
 Mother's milk

- additives to, 45
- benefits of, 44
- breastfeeding length for, 44
- complications of, 45
- composition of, 44

donor milk and, 45
 Moxifloxacin, 172
 Multivitamins, 34
 Muscarinic agents, 87
 Myoclonic seizures, 211

- focal, 211
- generalized, 211
- multi-focal, 211

N

Naloxone, 121
 National Association of Neonatal Nurse Practitioners, 159
 National Association of Neonatal Nurses, 159
 National Institute of Child Health and Human Development, 83-84, 200
 National Institutes of Health, 51
 National Respiratory and Enteric Virus Surveillance System, 156
 Nebulized saline, 161
 Necrotizing enterocolitis (NEC), 44, 96, 99, 101, 181, 183

- anaerobic antibiotics for, 172-173
- antibiotic therapy duration for, 173
- Bell staging of, 169-171
- congenital heart disease and, 174
- diagnosis of, 169, 172
- empiric antibiotics for, 172
- epidemiology of, 167-168
- medical treatment for, 172
- medications and, 174-175
- pathophysiology for, 168
- presentation of, 169-170
- prevention of, 175
- readings on, 177-179
- red blood cell transfusions for, 174
- surgical treatment of, 173
- treatment risks for, 173-174

 Neofax, 8, 147
 Neonatal Abstinence Scoring System, 59
 Neonatal abstinence syndrome (NAS), 55, 121

- breastfeeding and, 61
- family considerations in, 61
- readings on, 63
- screening and scoring of, 57-58, 59
- symptoms of, 58
- treatment for, 58, 60

 Neonatal birth history, 133
 Neonatal Research Network, 200
 Neonatal seizures, 209

- evaluation, diagnosis of, 211
- pathophysiology of, 210
- presentation of, 210-211
- readings on, 214
- treatment for, 211-213

 Neonatal sepsis, 139

Neonatal Withdrawal Inventory, 58
 Neonates, 2
 NEOPAIN study, 119
 Neotrace, 33
 Neuromuscular blocking agents, 112, 114-115
 Neutropenia, 146, 148
 Nevirapine, 152
 Newborn management, 6
 Nicardipine, 5
 Nicotine inhaler, 48
 Nicotine patch, gum, 28
 Nifedipine, 5
 NIPS scoring tool, 117
 Nitric oxide, 202, 204
 Nitrofurantoin, 9
 NMDA (*N*-methyl-D-aspartate) antagonists, 116
 Nonopioids, 118-19
 Nonsteroidal anti-inflammatory drugs (NSAIDs), 199
 contraindications for, 100
 drug interactions with, 100
 oral options for, 100
 PDA closure and, 97-99
 PDA treatment and, 103-105, 106
 side effects of, 99
 Nosocomial infections
 common pathogens of, 136
 pharmacologic treatment for, 136-137
 presentation, laboratory evaluation of, 136
 N-PASS scale, 112
 Nutrition
 fluids and, 28
 management, 28-29
 support, 222

O

Oat cereal, 45
 Obstructive apnea, 66
 Omegaven, 31, 35
 Omeprazole isomers, 181
 Opiate maintenance therapy, 57
 Opiate replacement treatment, 60
 Opiate therapy, 58
 Opiate withdrawal, 55-56
 Opioids, 116, 119, 182, 183
 iatrogenic dependence on, 120-121
 Organ systems changes, 218
 Oseltamivir, 223
 Oxidation, 38
 Oxycodone, 56, 57
 Oxygen concentration of supplemental oxygen, 201, 202
 Oxygen damage, 79
 Oxygenation index, 201

P

Pain, 111
 analgesia principles for, 116-117
 assessment of, 117
 minimizing vaccination, 192
 nonpharmacologic interventions for, 117-118
 pharmacologic agents for, 118-120
 readings on, 125
 Palivizumab, 158-159, 162
 usage guidelines, 159-161
 Palo Alto Medical Foundation Toxoplasma Serology Laboratory, 142, 143
 Pantoprazole, 181
 Para, 3
 Paracetamol, 104
 Parenteral nutrition, 7, 39, 136, 172, 220
 3-in-1 vs. 2-in-1, 37
 -associated liver disease, 31, 35
 complications of, 35-37
 dextrose concentrations and, 29
 light exposure on, 38
 medication administration and, 38
 medication compatibility and, 38
 neonates and, 27-28
 preparations of, 37
 readings on, 42
 with calcium, 10
 Patent ductus arteriosus, 93-94
 acetaminophen and, 103-104
 importance of, 96-97
 incidence of, 94-95
 nonpharmacologic management for, 105-106
 NSAID therapy and, 97-100, 106-107
 Pathophysiology of, 95-96
 pharmacologic medical management for, 104
 pre-symptomatic treatment for, 101, 102
 prophylactic management for, 101, 102-103
 symptomatic management for, 101
 readings on, 110
 treatment timing for, 100-101
 trials and, 103
 Peak serum concentration, drug transfer into milk, 47
 Pediarix, 189, 193
Pediatric & Neonatal Dosage Handbook, 8
Pediatric Injectable Drugs: The Teddy Bear Book, 8
 Peditrace, 33
 Penicillin, 149
 Penicillin G, IV, 149
 Pentacel, 189
 Peripheral airway obstruction, 85
 Peripheral line access, 38
 Peripherally inserted central catheter, 7
 Peritoneal drainage, 173
 Peroxides, 38
 Persistent pulmonary hypertension of newborn
 clinical manifestations of, 200

- diagnosis of, 200-201
 endothelin receptor antagonists and, 206
 extracorporeal membrane oxygenation and, 202, 203, 205, 207
 management of, 201
 nitric oxide and, 202-203
 outcomes for, 206-207
 pathogenesis, causes of, 188-189
 phosphodiesterase type 3 inhibitors and, 204-205
 phosphodiesterase type 5 inhibitors and, 203-204
 prostaglandin analogs and, 206
 readings on, 208
 risk factors for, 199
 severity determination for, 201
 surfactant therapy for, 205-206
 transition from intrauterine to extrauterine circulation in, 198
- Pertussis, 193
- Pharmacodynamics, 17
 readings on, 25
- Pharmacokinetic(s), 17
 changes in, 121-123
 extracorporeal membrane oxygenation and, 221
 readings on, 25
- Phase I metabolism, 20
 Phase II metabolism, 20, 21
- Phenobarbital, 35, 60, 70, 113, 128, 212
- Phentolamine, 7
- Phenytoin, 20, 21, 212
- Phosphodiesterase type 3 inhibitors, 204
- Phosphodiesterase type 5 inhibitors, 203-204
- Phosphorus solubility, 36
- Phototherapy, 38
- Physical dependence, 55-56
- Phytonadione, 10
- Piperacillin-tazobactam, 172
- PIPP scoring tool, 117
- Platelet dysfunction, 99
- Platelets, low, 96
- Pneumococcal conjugate, 189, 190
- Polysaccharide vaccines, 189
- Poractant alfa, 82
- Post-immunization apnea, 192-193
- Post-menstrual age (PMA), 3
- Postnatal age (PNA), 2
- Potassium, 38
- Premasol, 30
- Prematurity
 causes of birth in, 4
 risks of, 1-2
- Pressor agents, 106
- Pre-symptomatic treatment, 101, 102
- Preterm, 3
- Preterm formula, 175
- Preterm labor
 management, 5
 prevention, 4-5
- Probiotics, 175
- Procaine penicillin, IM, 149
- Procalcitonin concentrations, 132
- Prokinetic agents, 181
- Proparacaine, 11
- Prophylactic management, 101, 102-103
- Propofol, 113-114, 128
- Propranolol, 21
- Prostacyclin I₂, 206
- Prostaglandin analogs, 206
- Prostaglandin infusions, 174
- Protein, 30
 binding, 20
 supplement, 45
- Proton pump inhibitors, 21, 181
- Pulmonary surfactant deficiency, 78
- Pulmonary system changes, 218
- Pulmonary vascular resistance, 114, 197, 198, 199
- Pulmonary vasoconstriction, 79
- Pyrimethamine, sulfadiazine and folic acid, 142-143

R

- Ranitidine, 34
- Rapid plasminogen reagent (RPR) screening, 148, 150-151
- Rectal stimulation, 182, 183
- Red blood cell transfusions, 68, 174
- RedBook* (2015), 143
- Relative infant dose, 47
- Renal system changes, 219-220
- Respiratory distress syndrome (RDS), 4, 77-78, 94, 95
 antenatal corticosteroids and, 80
 clinical presentation of, 79
 epidemiology, risk factors for, 78
 long-term complications of, 81
 management of, 79-80
 pathophysiology of, 78-79
 readings on, 92
 surfactant replacement therapy for, 80-83
- Respiratory syncytial virus, 155
 epidemiology of, 156
 etiology, pathogenesis of, 156, 157, 158
 neonatal, 158
 prevention of, 158-159, 162
 readings on, 165
 season duration of, 157
- Respiratory systems, NAS, 58
- Respiratory ventilation support, 68-69
- Retinopathy of prematurity, 11-12, 68
- Rice cereal, 45
- Rocuronium, 114, 129
- Rotarix, 190-191
- RotaTeq, 190-191
- Rotavirus vaccine, 189-191
- Rubella, 143

S

Salbutamol, 161
 Sedation, 123
 alpha agonists and, 115-116
 assessment of, 112
 common agents for, 126-127
 GABA modulators and, 113-114
 neuromuscular blocking agents and, 114-115
 NMDA antagonists and, 116
 nonpharmacologic modalities for, 114
 principles of, 111-112
 readings on, 125
 reversal of, 121
 Seizures, 209
 Selenium, 33
 Sepsis, 131, 135
 Sepsis syndrome, 96
 Serotonin discontinuation syndrome, 57
 Serotonin reuptake inhibitors (SSRIs), 57
 17-alpha-hydroxyprogesterone caproate IM
 (maternal), 5
 Shingles, 144
 Sildenafil, 203-204
 Simultaneous pre-, postductal arterial blood gases,
 200
 Small for gestational age (SGA), 3
 Society of Hospital Medicine, 159
 Sodium bicarbonate buffer, 119
 Sodium phosphate, 37
 Spasms, 211
 Spiramycin, 142-143
 Spontaneous preterm labor, 3
Staphylococcus aureus, 36
 Steroids, 30
 Stooling frequency, 181-182
Streptococcus agalactiae, 133-134
 Substance abuse, maternal
 breastfeeding and, 48
 screening and scoring of, 57-58
 Substances of abuse, 56-57
 Subtle neonatal seizures, 211
 Sucralfate, 181
 Sucrose, 118-119, 127, 192
 Sulfation, 21
 Sulfonamides, 9-10, 20
 Supplemental oxygen, 68
 Suppressive therapy, 147-148
 Surfactant(s), 82, 95, 101
 deficiency, 78
 therapy, 80-83, 205-206
 Surfaxin, 82
 Surgical ligation, PDA, 104
 Survanta, 82
 Symptomatic management, 99
 Synagis, 158-159
 Syphilis, 148
 evaluation, treatment algorithm for, 150-51

 prevention of, 149
 treatment for, 149
 Syringes differentiation, 9
 Systemic corticosteroids, 88
 Systemic vascular resistance, 198

T

Taurine, 30, 34
 Terbutaline, 5
 Term neonates, morphine metabolism by, 21
 Tetanus diphtheria and pertussis (TDaP), 189, 190,
 193
 Tetracyclines, 9, 149
 Text book references, 14
 Theophylline, 21, 69
 adverse drug events for, 71
 drug interactions for, 70
 immediate release enteral solution, 69
 IV premixed solutions, 69
 loading dose for, 69
 maintenance dosing for, 69
 monitoring of, 70-71
 Thiazide diuretics, 86
 Thiazides with or without spironolactone, 102
 Thickening feeds, 180-181
 TIPP trial, 102-103
 Tissue binding, 20
 Tocolytics (maternal), 5
 Tonic neonatal seizures
 focal, 211
 generalized, 211
 Topical medication, 19
 Topical nitroglycerin paste, 7
 Topiramate, 213
 TORCH (Toxoplasmosis, Rubella, Cytomegalovirus,
 Herpes Simplex) infections, 153, 154
Toxoplasmosis gondii, 142
 prevention of, 142-143
 treatment for, 143
 Trace elements, 32-34
 Train-of-four, 112
 Tramadol, 21
Treponema pallidum, 148
 TrophAmine, 30, 37
 Trophic feeding, 175
 Tubular excretion, 22
 Tubular reabsorption, 22
 Tyrosine, 30

U

Umbilical artery catheter, 7
 Umbilical venous catheter, 7
 Underdevelopment abnormalities, 198-199
 Unfractionated heparin, 219
 Ursodiol, 35

V

Vaccination(s), 187-188, 193-194
administration of, 191
adverse outcomes for, 192-193
pain minimization of, 192
readings on, 195

Vaccination response
acetaminophen and, 191-192
ibuprofen and, 191-192

Valganciclovir, 146

Valproate, 213

Vancomycin, 172, 222

Vancomycin plus aminoglycoside, 136

Vanilla PNs, 37

Varicella zoster, 143-144

Varicella zoster immune globulin (VariZIG), 144

Vascular access, 6-7

Vecuronium, 114, 115, 129

Veno-arterial ECMO, 216-217, 218, 219

Veno-venous ECMO, 216-217, 218

Ventilator strategies, 106

Very low birth weight (VLBW), 3

Very preterm (VPT), 3

Vigabatrin, 215

Vitamin A, 89

Vitamin D, 45

Vitamin K IM, 6, 10

Vitamin K1, 11

Vitamin K2, 11

Vitamin K3, 11

VKDB classifications, 10-11

Volume of distribution (Vd), 19-20, 46-47, 221, 224

Volutrauma, 79

W

Warfarin, 50

Website references, 15

Weight gain goals, 28-29

Wet nurses, 45

Withdrawal Assessment Tool-1, 121

World Health Organization growth charts, 29

Z

Zidovudine, 152, 153

Zinc, 33

Zoledronic acid, 47

Zometa, 47

Zonisamide, 213