Subject Index to Volume 51 (2006)

1-96 JAN 321-448 APR 689-800 JUL 1089-1200 OCT
97-208 FEB 449-560 MAY 801-944 AUG 1201-1376 NOV
209-320 MAR 561-688 JUN 945-1088 SEP 1377-1520 DEC

Abstracts
Open Forum–2006, 1271

Acute respiratory distress syndrome (ARDS)
apparatus dead space effects on \( P_{aCO_2} \) in lung-protective
ventilation, 1140
open vs closed suctioning impact on gas exchange and
hemodynamics, 497
PEEP level for oxygenation maintenance after lung re-
cruitment, 1132

Adolescents
asthma in, learning needs and Internet use, 1441
book review
Asthma information for teens: health tips about manag-
ing asthma and related concerns (Bellenir K), 431

Aerosols and aerosol administration
continuous administration methods for methacholine
challenge testing, 46
COPD problems, 158
dry powder inhalers, 164
metered-dose inhalers, 161
small-volume nebulizers, 168
dead space of face masks with holding chambers, 140
heliox delivery
albuterol nebulization for asthma exacerbations, 613
in children, 625
in mechanical ventilation, 634
high impact aerosol technology (editorial), 1228
infant aerosol holding chamber face masks (editorial),
123
jet nebulizer delivery in ventilated newborns, 1244
levalbuterol delivery, nonelectrostatic vs nonconducting
valved holding chamber, 511
nebulized bronchodilator delivery, pediatric lung model,
56
nonelectrostatic materials in holding chambers, 503

Airflow obstruction
curvilinearity index, 40

Air pollution
book review
Air pollutants and the respiratory tract, 2nd ed (Fos-
ter WM, Costa DL), 544

Airway care and management
in amyotrophic lateral sclerosis, 878
book review
Imaging of the airways: functional and radiologic
correlations (Naidich DP et al), 190
in lung transplantation, 396
in neuromuscular disease, 913
in pediatric neuromuscular disease, 886

Airway obstruction
chest physiotherapy with positive airway pressure, 1145
forced expiratory time and spirometric performance, 246
heliox use in children, 622

Albuterol
heliox-driven nebulization for asthma exacerbations, 613
hydrofluoroalkane, nonelectrostatic materials in holding
chambers, 503
levalbuterol delivery, nonelectrostatic vs. nonconduct-
ing valved holding chamber, 511

Allergies
book reviews
Allergy and asthma in modern society: a scientific
approach (Cameri R), 1268
Prevention of allergy and allergic asthma: World Al-
lergy Organization project report and guidelines
(Johansson SGO, Haahetla T), 430

Alpha-1 antitrypsin deficiency
Alpha-1 Foundation and, 526

Alpha-1 Foundation
formation, impact, and success factors, 526
American Association for Respiratory Care

**OPEN FORUM abstracts–2006, 1271**

**Amyotrophic lateral sclerosis**
respiratory effects, 871, 1067

**Anemia**
in renal failure, 418

**Anesthesia and anesthetics**
transcutaneous and end-title capnometer evaluations, 1162

**Anoxia**
heliox use and risk of, 657

**Anthracosilicosis**
charcoal aspiration and (case report), 1251

**Appointments and schedules**
reminder calls and outpatient absenteeism, 36

**Arterial blood gases**
apparatus dead space effects on $P_{aCO_2}$ in lung-protective ventilation, 1140
blood-gas tensions with positive expiratory pressure in cystic fibrosis, 1154
pH in exhaled breath concentrates, monitoring in mechanical ventilation, 1125

**Asbestos**
rounded atelectasis with atypical computed tomography findings (case report), 761

**Aspiration**
charcoal (case report), 1251

**Asthma**
in adolescents, learning needs, 1441
book reviews
  *ABC of asthma*, 5th ed (Rees J, Kanabar D), 1266
  *Allergy and asthma in modern society: a scientific approach* (Cameri R), 1268
  *Asthma information for teens: health tips about managing asthma and related concerns* (Bellenir K), 431
  *Asthma in the workplace*, 3rd ed (Bernstein IL et al), 1269
  *Pharmacotherapy of asthma* (Li), 1267
  *Prevention of allergy and allergic asthma: World Allergy Organization project report and guidelines* (Johansson SGO, Haahntela T), 430
educational seminar for Medicaid providers, 49
heliox-driven albuterol nebulization for exacerbations, 613
heliox use in children, 620
physician compliance with documentation of management protocols, 1432

**Atelectasis**
rounded atelectasis with atypical computed tomography findings (case report), 761

---

**B**

**Benchmarking**
normalizing data for, 145

**Billing systems**
normalizing benchmarking data, 145

**Bioterrorism**
book review
  *Bioterrorism: a guide for hospital preparedness* (Masci JR, Bass E), 300

**Blood gas analysis**
oscillating vs non-oscillating positive expiratory pressure in cystic fibrosis, 1154
specimen handling (editorial), 717
syringe material, storage time, and temperature effects on, 732
transcutaneous and end-title capnometer evaluations, 1162

**Blood gas monitoring**
forehead reflectance pulse oximetry vs digit sensor, 726

**Blood pressure**
management in acute brain injury, 361

**Body mass index**
noninvasive positive-pressure ventilation and (editorial), 121
noninvasive positive-pressure ventilation and weight gain in COPD, 126

**Body ventilators**
in neuromuscular disease, 897

**Body weight**
in cachectic COPD patients receiving NPPV, 126
respiratory failure and (editorial), 121

**Book reviews**
  *ABC of asthma*, 5th ed (Rees J, Kanabar D), 1266
  *Acute and chronic cough* (Redington AE, Morice AH), 926
  *Air pollutants and the respiratory tract*, 2nd ed (Foster WM, Costa DL), 544
  *Allergy and asthma in modern society: a scientific approach* (Cameri R), 1268
  *Asthma information for teens: health tips about managing asthma and related concerns* (Bellenir K), 431
  *Asthma in the workplace*, 3rd ed (Bernstein IL et al), 1269
  *Atlas of sleep medicine* (Chokroverty S et al), 1476
  *Bioterrorism: a guide for hospital preparedness* (Masci JR, Bass E), 300
  *Cardiopulmonary resuscitation* (Ornato JP, Peberdy MA), 76
  *Chest medicine: essentials of pulmonary and critical care medicine*, 5th ed (George RB et al), 665
  *Chronic obstructive pulmonary disease: cellular and molecular mechanisms* (Barnes PJ), 545
Write it down: guidance for preparing effective and compliant documentation, 2nd ed (Gough J), 771

Brain
depthology, 358
Brain injury, acute
respiratory care, 357
Breathing. See Respiration
Breathing, glossopharyngeal
in noninvasive positive-pressure ventilation, 907
Breath tests
exhaled breath concentrates in mechanical ventilation, 1118, 1125
Bronchiolitis
heliox use in children, 623
Bronchiolitis obliterans
in lung transplantation, 397
Bronchodilators, bronchodilatation and bronchodilator administration
COPD clinical practice guidelines, 281
corticosteroids for COPD, 289
nebulized bronchodilator delivery, pediatric, 56
Bronchopulmonary sequestration
teaching case, 661
Bullectomy
for chronic obstructive pulmonary disease, 174

C

Cachexia. See Malnutrition
Calibration
long-term stability of portable spirometers in COPD, 1167
Capnography and capnometry
noninvasive pulse CO-oximeter for carboxyhemoglobin, 758
tрансcutaneous and end-titel capnometer evaluations, 1162
Carbon dioxide
apparatus dead space effects \( P_{aCO_2} \) in lung-protective ventilation, 1140
tрансcutaneous and end-tidal capnometer evaluations, 1162
Carboxyhemoglobin
noninvasive pulse CO-oximeter for, 758
Cardiopulmonary resuscitation (CPR). See Resuscitation
Case reports
A 45-year-old man with a lung mass and history of charcoal aspiration, 1251
hemothorax in beta-thalassemia, from rupture of extramedullary hematopoietic mass, 272
inhaled nitric oxide for acute right-ventricular dysfunction after pneumonectomy, 1172
progressive pulmonary infiltrates in ovarian cancer, 515
rounded atelectasis with atypical computed tomography findings, 761
Celiac disease
Cystic fibrosis and celiac disease in a family: adding a fourth reminder (letter), 768
Central nervous system
respiratory physiology, 830
Cerebral blood flow
physiology, 358
Charcoal
A 45-year-old man with a lung mass and history of charcoal aspiration (case report), 1251
Chest imaging
book reviews
Functional imaging of the chest (Kauczor HU), 190
Imaging of the airways: functional and radiologic correlations (Naidich DP et al), 190
Interpreting chest X-rays: illustrated with 100 cases (Eng P, Cheah FK), 188
Q&A color review of thoracic imaging (Copley SJ et al), 189
Teaching atlas of chest imaging, (Parker MS et al), 1076
Chest pain
bronchopulmonary sequestration, teaching case, 661
Chest physical therapy
blood-gas tensions with positive expiratory pressure in cystic fibrosis, 1154
with positive airway pressure, 1145
Cheyne-Stokes respiration
in congestive heart failure, 408
Children
dead space of face masks with holding chambers for, 140
forehead reflectance pulse oximetry vs digit sensor, 726
heliox use in, 619
nebulized bronchodilator delivery, 56
with neuromuscular disease, airway clearance, 886
respiratory-technology-dependent, hospital discharge of, 744
Chronic obstructive pulmonary disease (COPD)
aerosol therapy problems in, 158
dry power inhalers, 164
metered-dose inhalers, 161
small-volume nebulizers, 168
ambulatory oximetry in patients with hypoxemia, 1416
book reviews
Chronic obstructive pulmonary disease: cellular and molecular mechanisms (Barnes PJ), 545
Clinicians’ guide to chronic obstructive pulmonary disease (Howes TQ), 1072
100 questions & answers about chronic obstructive pulmonary disease (Quinn CE), 1073
bullous emphysema in, 532

cachexia and chronic respiratory failure (editorial), 121

clinical practice guidelines, 277

confirmatory spirometry and diagnostic discrepancy, 1120

corticosteroid therapy, 289

forced expiratory time and spirometric performance, 246

heliox and NPPV in exacerbations, 640

heliox for, 633

long-term oxygen therapy, patient adherence monitor, 266

long-term stability of portable spirometers, 1167

muscle dysfunction and, 840, 1068

spirometry diagnosis (editorial), 1116

spirometry interpretation standards (editorial), 719

surgical options, 173

thixotropy conditioning of inspiratory muscles and chest wall volume, 750

weight gain and NPPV in cachetic patients, 126

Circulation

pulmonary, normal physiology, 369

Communication

book review

Communicating in the health and social sciences (Higgs J et al), 427

Composite physiologic index

idiopathic pulmonary fibrosis with emphysema, 257

Computed tomography. See Tomography, emission computed

Condensimetry

exhaled blood concentrate pH monitoring in mechanical ventilation, 1125

Conference proceedings

neuromuscular diseases, 828, 984

acute respiratory failure from, 1016

airway clearance management, 913

amyotrophic lateral sclerosis, 871

in children, 885

foreword, 828

ICU-acquired muscle weakness, 1042

muscle dysfunction and COPD, 840

noninvasive ventilation, 896

noninvasive ventilation, full-time, 1005

physiology and pathophysiology, 829

spinal cord injury, 853

summary, 1065

traceostomy care, chronic, 984

ventilator-induced diaphragmatic dysfunction, 1054

weakness in ICU patients, 1024

non-respiratory conditions, respiratory care (New Horizons symposium)

acute brain injury, 357

congestive heart failure, 403

foreword, 355

kidney failure, 413

lung transplantation, 392

pulmonary arterial hypertension, 368

pulmonary fibrosis, idiopathic, 382

Confidentiality

Internet and privacy of medical information, 183

Connective tissue disorders

pulmonary hypertension and, 373

Consumer health information

adolescents with asthma, 1441

Consumer rights

Internet and privacy of medical information, 183

Continuous positive airway pressure (CPAP)

chest physiotherapy with, 1145

for congestive heart failure, 409

Corticosteroids. See Steroids

Cost-effectiveness and cost issues

oxygen protocol evaluation in long-term care, 1424

Cough

airway clearance in neuromuscular disease, 913

augmentation therapy for, 917

book review

Acute and chronic cough (Redington AE, Morice AH), 926

chest physiotherapy with positive airway pressure, 1145

neuromuscular impairment of, 915

physiology and mechanics, 914

support in NPPV, 1008

Critical care. See Intensive care

Croup. See Laryngeal diseases and disorders

Customer satisfaction

hospital discharge of respiratory-technology-dependent children, discharge coordinator role and, 744

Cystic fibrosis

blood-gas tensions with positive expiratory pressure, 1154

book review

Cystic fibrosis in the 21st century (Bush A et al), 930

cHEST physiotherapy with positive airway pressure, 1145

Cystic fibrosis and celiac disease in a family: adding a fourth reminder (letter), 768

D

Data collection

normalizing procedure for benchmarking, 145

Dead space, ventilatory. See Respiratory dead space

Dexmedetomidine

for ICU sedation and ventilator weaning, 489, 492

Diaphragm

ventilator-induced dysfunction of, 1054, 1070

Diastolic dysfunction

in congestive heart failure, 404
Disaster preparedness
book review
Bioterrorism: a guide for hospital preparedness
(Masci JR, Bass E), 300

Disease management
respiratory therapist role (editorial), 1400

Documentation
physician compliance with asthma management protocols documentation, 1432

Drug delivery systems
dead space of face masks with holding chambers, 140

Drugs and drug therapy
book review
Pharmacotherapy of asthma (Li), 1267

Dry powder inhalers
usage problems in COPD, 158

Dyspnea
book reviews
Dyspnea: mechanisms, measurement, and management, 2nd ed (Mahler DA, O’Donnell DE), 299
Dyspnoea in advanced disease: a guide to clinical management (Booth S, Dudgeon D), 1264
in spinal cord injury, 857

Echocardiography
confirmatory use for congestive heart failure diagnosis, 1120

Editorials
Cachexia and chronic respiratory failure: lessons from ventilatory support, 121
Continuous exhaled breath condensate measurements in ventilated patients, 1118
Disease management as an evolving role for respiratory therapists, 1400
High impact aerosol technology offers higher efficiency, but is not ready for prime time, 1228
Infant aerosol holding chamber face masks: not all are born equal! 123
Interpretation of spirometry: we can do better than the GOLD standard, 719
Novel oxygen-concentrator-based equipment: take a test drive! 25
NPPV in acute respiratory failure: is it time to reconsider where it may be applied? 1226
Of time and temperature, plastic and glass: specimen handling in the blood-gas laboratory, 717
On the power and risks of the percent of predicted, 722
Problems with forehead reflectance pulse oximetry, 715
Respiratory symptoms: a reason to obtain spirometry, 1116
Sedation in the intensive care unit: a call for evidence, 489

Toward solving the critical care manpower crisis, 1224

Education, continuing
asthma educational seminar for Medicaid providers, 49
CRCE through the Journal—2006, 778; answer key, 1192

Electromyography
for clinical assessment in ICU, 1030

Emphysema
bullous, vs bullous lung disease, 532
idiopathic pulmonary fibrosis with, 257
nocturnal oxygenation, pulsed-dose oxygen-conserving device vs continuous flow, 252

Endocarditis
tricuspid, with pulmonary emboli, 1471

Eosinophilia
chronic eosinophilic pneumonia, symptoms and radiographic findings, 764

Equipment and supplies
continuous pH condensimetry system, 1125
Heliox therapy and devices cleared by FDA (letter), 1261
long-term oxygen therapy, patient adherence monitor, 266
NPPV in neuromuscular disease, 896

Equipment design
More on novel oxygen-concentrator-based equipment (part 1) (letter), 535
More on novel oxygen-concentrator-based equipment (part 2) (letter), 537

Evaluation studies
oxygen protocol evaluation in long-term care, 1424

Examination and quizzes
book reviews
Entry level respiratory therapist exam guide, 4th ed (Sills JR), 770
Respiratory care exam review: review for the entry level and advance exams, 2nd ed (Persing G), 770

Exercise
muscle dysfunction and exercise tolerance in COPD, 842

Exhaled breath condensates. See Breath tests

Extubation
dexmedetomidine and, 489, 492
minute ventilation recovery time and, 133
tracheostomy in neuromuscular disease, 998

FDA. See U.S. Food and Drug Administration (FDA)

Feedback
respiratory control and, 832
Fever
in acute brain injury, 362

Flow-volume curve
airflow obstruction curvilinearity index, 40

Fluids and secretions
airway clearance
in amyotrophic lateral sclerosis, 878
management in neuromuscular disease, 913, 1068
in pediatric neuromuscular disease, 886
secretion-extraction maneuvers in children, 887

Forced expiratory time
changes in pulmonary function testing, 246

Forced expiratory volume
airflow obstruction curvilinearity index, 40
spirometry interpretation, fixed percentage method vs lower confidence limits defining normality limits, 737
spirometry interpretation standards (editorial), 719

Forced vital capacity
spirometric performance changes in obstructive lung disease, 246

G

Gas exchange
open vs closed suctioning impact, in ARDS, 497

Gastrointestinal tract
selective decontamination and ventilator-associated pneumonia (letters and response), 67, 72

Genetic disorders
book review
Respiratory genetics (Silverman EK et al), 1478

Goodpasture’s syndrome
respiratory complications of, 416

Graft rejection
in lung transplantation, 395

Guidelines, recommendations, and statements
for chronic obstructive pulmonary disease, 277
long-term oxygen therapy recommendations, 6th consensus conference, 519
respiratory symbols and terminology, nomenclature maintenance, 1458
standards for interpretation of spirometry (editorial), 719

Guillain-Barré syndrome
acute respiratory failure in, 1016
mechanical ventilation in, 1403

H

Health Information Portability and Accountability Act (HIPAA)
Internet and privacy of medical information, 183

Heart defects, congenital
pulmonary hypertension and, 372

Heart failure, congestive
confirmatory echocardiography and diagnostic discrepancy, 1120
pathophysiology of, 404
pulmonary complications of, 408
respiratory care for, 403

Helium
therapeutic use, history and physics, 608

Helium-oxygen gas mixture
albuterol nebulization for asthma exacerbations, 613
delivery systems in children, 627
devices used with, 652
Heliox should be available in every community hospital (letter), 1261
Heliox therapy and devices cleared by FDA (letter and response), 1261
heliox therapy symposium, foreword, 607
history and physics of, 608
in mechanical ventilation, 632
noninvasive positive-pressure ventilation in COPD and, 640
opportunities and risks in clinical practice, 651
respiratory care applications, 609
risks of using, 657
use in children, 619
ventilator performance with, 635

Hematopoiesis
extramedullary, hemothorax in beta-thalassemia from (case report), 272

Hemodialysis
hypoxemia in, 419

Hemodynamics, pulmonary
open vs closed suctioning impact on, in ARDS, 497

Hemothorax
in beta-thalassemia, from extramedullary hematopoietic rupture (case report), 272

High-frequency oscillation
heliox in mechanical ventilation, 634

History of medicine
heliox therapy, 608

HIV infections
pulmonary hypertension and, 372

Home care
discharge coordinator role for respiratory-technology-dependent children, 744
nocturnal oxygenation, pulsed-dose oxygen-conserving device vs continuous flow, 252

Hospital discharge
of respiratory-technology-dependent children, discharge coordinator role, 744

Hospital medicine
book review
Hospital medicine, 2nd ed (Wachter RM et al), 1480

Hypertension, pulmonary
in heart failure, congestive, 372

Internet and privacy of medical information
Health Information Portability and Accountability Act (HIPAA), 183
Hospitals
Heliox should be available in every community hospital (letter), 1261

Humidifiers and humidification
for noninvasive positive-pressure ventilation, 906

Hydrofluoroalkane propellants
levalbuterol delivery with nonelectrostatic vs nonconducting valved holding chamber, 511
nonelectrostatic materials in holding chambers and albuterol delivery, 503

Hyperbaric oxygenation
book review
The ECHM collection, volume 1: European Committee for Hyperbaric Medicine. Consensus conferences and workshops, 1994–1999 (Marroni A et al), 81

Hypercapnia and hypercarbia
apparatus dead space effects on $P_{aCO_2}$, 1140

Hyperventilation
in acute brain injury, 361

Hypothermia
in acute brain injury, 362
heliox use and risk of, 659

Hypoxemia and hypoxia
ambulatory oximetry in COPD, 1416
hemodialysis-related, 419

Intensive care units (ICU)
dexmedetomidine and ventilator weaning in, 492
ICU-acquired muscle weakness, 1042, 1069
neuromuscular weakness, 1024, 1069
time to wean after tracheotomy, 1408
tracheotomy management in, models for, 1230

Internet
adolescents with asthma, 1441
privacy and medical information, 183
Web site review
Zap asthma online simulation, 305

Interstitial lung disease
book review
Interstitial lung diseases: a state-of-the-art series (Oliveri D), 1265

Kidney failure
lung function in, 414
respiratory considerations, 413

Laryngeal diseases and disorders
heliox use for croup, 623

Letters to the editor
Cystic fibrosis and celiac disease in a family: adding a fourth reminder, 768
Heliox should be available in every community hospital, 1261
Heliox therapy and devices cleared by the FDA, 1261
Maintaining an “oral tradition”: specific equipment requirements for mouthpiece ventilation instead of tracheostomy for neuromuscular disease, 297
More on novel oxygen-concentrator-based equipment, 535, 537
Qualitative studies to explore barriers to spirometry use: a breath of fresh air? 768
Selective decontamination of the digestive tract and ventilator-associated pneumonia, 67, 72

Liability, legal
book review
The respiratory therapist’s legal answer book (DeWitt AL), 772

Liver diseases and disorders
pulmonary hypertension and, 372

Long-term care
oxygen protocol evaluation in long-term care, 1424

Lung diseases and disorders
book reviews
Chest medicine: essentials of pulmonary and critical care medicine, 5th ed (George RB et al), 665
**Color atlas and text of pulmonary pathology** (Cagle PT), 79

**Functional lung imaging** (Lipson DA, van Beek EJR), 1077

**Lung cancer: principles and practice**, 3rd ed (Pass HI et al), 774

**Manual of clinical problems in pulmonary medicine**, 6th ed (Bordow RA et al), 668

**New perspectives in monitoring lung inflammation: analysis of exhaled breath condensate** (Montuschi P), 302

**Practical pulmonary pathology: a diagnostic approach** (Leslie KO, Wick MR), 541

**Pulmonary pathophysiology**, 2nd ed (Ali J et al), 541

**Thurlbeck’s pathology of the lung**, 3rd ed (Churg AM et al), 543

bullous lung disease vs bullous emphysema, 532

A 45-year-old man with a lung mass and history of charcoal aspiration (case report), 1251

kidney function in, 414

**Lung injury**

book review

*Lung injury: mechanisms, pathophysiology, and therapy* (Notter RH et al), 1183

PEEP level for oxygenation maintenance after lung recruitment, 1132

radiation pneumonitis, 1255

**Lung surfactant**

book review

*Lung surfactant function and disorder* (Nag K), 930

**Lung transplantation**

for COPD, 178

postoperative complications, 395

respiratory care in, 392

for COPD, 175

thixotropy conditioning of inspiratory muscles in COPD, 750

**Lupus erythematosus, systemic**

respiratory complications, 416

---

**Malnutrition**

cachexia and chronic respiratory failure (editorial), 121

weight gain and NPPV in COPD, 126

**Measurement methods**

book review


**Mechanical ventilation**

for amyotrophic lateral sclerosis, 877

apparatus dead space effects on $P_{aCO_2}$, 1140

---

**Mechanical ventilation** (Slutsky AS, Brochard L), 672

in children with neuromuscular diseases, 888

diaphragmatic dysfunction, 1054, 1070

exhaled breath concentrates, 1118, 1125

in Guillain-Barré syndrome, 1403

heliox and NPPV in COPD exacerbations, 640

heliox during, 632

high impact aerosol technology (editorial), 1228

hospital discharge of children, discharge coordinator role, 744

jet nebulizer delivery of aerosols in ventilated newborns, 1244

kidney damage from, 419

lung-protective

in acute brain injury, 363

open vs closed suctioning in ARDS, 497

minute ventilation recovery time measurement, 133

NPPV in acute respiratory failure (editorial), 1226

PEEP level for oxygenation maintenance after lung recruitment, 1132

predictors of need, 1018

in spinal cord injury, 864

tracheostomy in neuromuscular disease, 984

tracheotomy management in ICU, 1230

**Medicaid**

asthma educational seminar for providers, 49

**Medical instrumentation**

transcutaneous and end-title capnometer evaluations, 1162

**Medical terminology**

book reviews

*Medical terminology simplified: a programmed learning approach by body systems*, 3rd ed (Gylys BA, Masters RM), 192

*Medical terminology systems: a body systems approach*, 5th ed (Gylys BA, Wedding ME), 192

pressure gradient symbols and equations in breathing mechanics, comparison of, 1450

respiratory symbols and terminology, nomenclature maintenance, 1458

**Metered dose inhalers**

dead space of face masks with holding chambers, 140

infant aerosol holding chamber face masks (editorial), 123

levalbuterol delivery with nonelectrostatic vs nonconducting valved holding chamber, 511

usage problems in COPD, 158

**Methacholine**

challenge tests, conflicting results in, 62

continuous aerosol administration methods and technician exposure to, 46

**Minute ventilation recovery time**

measurement methods, 133
Models
pediatric lung, for nebulized bronchodilator delivery, 56
respiratory symbols and terminology, 1458

Monitoring, ambulatory
oximetry in COPD patients with hypoxemia, 1416
pulse oximeters, postoperative, 29

Mucociliary clearance
chest physiotherapy with positive airway pressure, 1145

Mucus
mobilization devices, 888

Muscles, skeletal
chronic obstructive pulmonary disease and, 840
Muscular atrophy
mechanical ventilation and, 1055
Myasthenia gravis
acute respiratory failure in, 1016

N
Nebulizers and vaporizers
bronchodilator delivery, pediatric lung model, 56
heliox delivery in mechanical ventilation, 634
heliox-driven albuterol nebulization for asthma exacerbations, 613
jet nebulizer delivery of aerosols in ventilated newborns, 1244
small-volume, usage problems in COPD, 168

Needs assessment
adolescents with asthma, learning needs, 1441

Neonatal diseases and disorders
High impact aerosol technology (editorial), 1228
jet nebulizer delivery of aerosols in ventilated newborns, 1244

Neoplasm metastasis
ovarian, organizing pneumonia in (case report), 515

Neuromuscular disorders
acute respiratory failure caused by, 1016, 1069
affecting respiratory system, 833
airway clearance management, 913, 1068
chronic obstructive pulmonary disease and, 840, 1068
chronic tracheostomy care, 984, 1069
clinical assessment in ICU, 1026
conference proceedings, 828, 984
equipment requirements for mouthpiece ventilation (letter), 297
ICU-acquired muscle weakness, 1042, 1069
neuropathic weakness from, 1033
noninvasive ventilation for, 896, 1005, 1068
pathophysiology, 829, 1066
respiratory issues in children, 885, 1067
transmission disorders, 1036
ventilator-induced diaphragmatic dysfunction, 1054, 1070
weakness in ICU patients, 1024, 1069

New Horizons Symposium. See Conference proceedings

Nitric oxide
inhaled, for acute right-ventricular dysfunction after extrapleural pneumonectomy (case report), 1172

Nomenclature. See Medical terminology

Noninvasive positive-pressure ventilation (NPPV)
for acute respiratory failure, 1019, 1226, 1237
for amyotrophic lateral sclerosis, 875, 1067
body mass index and, 121
chest physiotherapy with positive airway pressure, 1145
for congestive heart failure, 409
equipment requirements for mouthpiece ventilation (letter), 297
heliox and, 633, 640
interfaces for, 898
in neuromuscular disorders continuous, 1005, 1068
equipment and applications, 896
ventilators, 903
weight gain in cachectic COPD patients, 126
in young children, 889

Nosocomial diseases
ICU-acquired muscle weakness, 1042

Nurse practitioners
tracheotomy management in ICU, 1230

Nursing homes
oxygen protocol evaluation in long-term care, 1424

O

Occupational exposure
book review
Asthma in the workplace, 3rd ed (Bernstein IL et al), 1269
rounded atelectasis with atypical computed tomography (case report), 761
of technicians in methacholine challenge test, 46

Open Forum
abstracts–2006, 1271

Outcome assessment
mechanical ventilation in Guillain-Barré syndrome, 1403

Outpatients and outpatient care
ambulatory oximetry in COPD patients with hypoxemia, 1416
appointment-reminder calls and patient absenteeism, 36

Ovarian cancer
organizing pneumonia in (case report), 515

Oximeters and oximetry
forehead reflectance pulse oximetry, problems with (editorial), 715
forehead reflectance pulse oximetry vs digit sensor in pediatric patients, 726
in long-term oxygen therapy, 266
noninvasive pulse CO-oximeter for carboxyhemoglobin, 758
pulse oximeters for postoperative ambulation, 29
**Oxygen administration and therapy**
COPD clinical practice guidelines, 282
heliox therapy and devices cleared by FDA (letter), 1261
long-term
consensus conference recommendations, 519
patient adherence monitor, 266
nocturnal, pulsed-dose oxygen-conserving device vs continuous flow, 252
novel oxygen-concentrator-based equipment (letter), 535, 537
oxygen-concentrator-based equipment, 25
oxygen protocol evaluation in long-term care, 1424
PEEP level for oxygenation maintenance after lung recruitment, 1132
**Oxygen transport, physiologic**
in brain, 359

**P**

**Palliative care**
book review
*Oxford handbook of palliative care* (Watson M et al), 429

**Particle size**
nonelectrostatic materials in holding chambers, 503

**Pathology and pathophysiology**
book review
*Color atlas and text of pulmonary pathology* (Cagle PT), 79

**Patient advocacy**
Alpha-1 Foundation, review of, 526

**Patient assessment**
book review
*Clinical assessment in respiratory care*, 5th ed (Wilkins RL et al), 426
in congestive heart failure, 406

**Patient compliance**
appointment-reminder calls and outpatient absenteeism, 36
long-term oxygen therapy adherence monitor, 266

**Patient education**
adolescents with asthma, 1441
asthma educational seminar for Medicaid providers, 49

**Peak expiratory flow**
physician compliance with asthma management protocols documentation, 1432

**Pericardial effusion**
in renal failure, 416

**Peripheral nervous system**
respiratory physiology and, 831

**Personnel**
Toward solving the critical care manpower crisis (editorial), 1224

**PFT Corner**
Conflicting methacholine challenge tests, 62

**pH. See Arterial blood gases**

**Physicians**
compliance with asthma management protocols documentation, 1432

**Plastics**
blood-gas laboratory specimen handling (editorial), 717
syringe material, storage time, and temperature effects on blood-gas analysis, 732

**Plethysmography**
thioxotropy conditioning of inspiratory muscles and chest wall volume in COPD, 750

**Pleuritis**
fibrinous, in kidney failure, 417

**Pneumonecctomy**
extrapleural, inhaled nitric oxide for acute right-ventricular dysfunction following (case report), 1172

**Pneumonia**
book review
Severe pneumonia (Niederman MS), 927
chronic eosinophilic, symptoms and radiographic findings, 764
in lung transplantation, 398
organizing, in ovarian cancer metastasis (case report), 515
radiation pneumonitis, 1255
ventilator-associated mechanical ventilation in Guillain-Barré syndrome, 1403
selective decontamination of digestive tract and ventilator-associated pneumonia (letters and response), 67, 72

**Polyneuropathies**
critical illness, 1069
differential diagnosis, 1033
ICU-acquired, 1042
neuromuscular weakness in ICU patients, 1024

**Positive end-expiratory pressure (PEEP)**
in acute brain injury, 363
oxygenation maintenance after lung recruitment, 1132

**Positive expiratory pressure**
chest physiotherapy with positive airway pressure, 1145
oscillating vs non-oscillating, blood-gas tensions in cystic fibrosis and, 1154

**Postoperative care**
in lung transplantation, 394
pulse oximeters for postoperative ambulation, 29
Subj ect Index to Volume 51 (2006)

Postoperative complications
   acute right-ventricular dysfunction following extrapleural pneumonectomy (case report), 1172
   in lung transplantation, 395

Pressure
   published gradient symbols and equations in breathing mechanics, comparison of, 1450

Privacy
   Internet policies and medical information, 183

Protocols
   oxygen protocol evaluation in long-term care, 1424
   physician compliance with asthma management protocols documentation, 1432

Pulmonary circulation
   normal physiology, 369

Pulmonary edema
   in renal failure, 416

Pulmonary embolism
   travel as risk factor, 1177
   tricuspid endocarditis with, 1471

Pulmonary fibrosis
   idiopathic
      diagnosis and management of, 382
      emphysema complicating, 257
      epidemiology of, 383
      nocturnal oxygenation, pulsed-dose oxygen-conserving device vs continuous flow, 252

Pulmonary function testing
   in amyotrophic lateral sclerosis, 872
   appointment-reminder calls and outpatient absenteeism, 36
   book review
      Pediatric pulmonary function testing (Hammer J, Eber E), 77
   bulbous lung disease vs. bulbous emphysema, 532
   confirmatory use for COPD diagnosis, 1120
   forced expiratory time and spirometric performance changes, 246
   for idiopathic pulmonary fibrosis, 257, 386
   long-term stability of portable spirometers in COPD, 1167
   methacholine challenge tests, conflicting results in, 62 percent of predicted values (editorial), 722
   spirometry and COPD diagnosis (editorial), 1116
   spirometry interpretation, fixed percentage method vs lower confidence limits, 737

Pulmonary hypertension
   clinical presentation and symptoms, 373
   diagnosis and management of, 368

Pulmonary infections
   in lung transplantation, 398

Pulmonary rehabilitation. See Rehabilitation, pulmonary

Pulse oximeters. See Oximeters and oximetry

Quality of life
   tracheostomy in neuromuscular disease, 992

Radiation injuries
   pneumonitis, 1255

Radiographic interpretation
   book reviews
      Functional lung imaging (Lipson DA, van Beek EJR), 1077
      Teaching atlas of chest imaging, (Parker MS et al), 1076
   chronic eosinophilic pneumonia, atypical findings, 764

Rehabilitation, pulmonary
   book review
      Pulmonary rehabilitation (Donner CF et al), 1479
   chronic obstructive pulmonary disease clinical practice guidelines, 282

Reminder systems
   appointment-reminder calls and outpatient absenteeism, 36

Renal failure. See Kidney failure

Research methods
   book review
      Qualitative research methods, 2nd ed (Liamputtong P, Ezzy D), 773

Respiration
   book review
      Pharmacology and pathophysiology of the control of breathing (Ward DS et al), 925
   pressure gradient symbols and equations in breathing mechanics, comparison of, 1450
   respiratory symbols and terminology, nomenclature maintenance, 1458

Respiratory care
   in acute brain injury, 357
   in lung transplantation, 392
   for non-respiratory conditions, conference proceedings, 355

Respiratory care, pediatric
   adolescents with asthma, learning needs and Internet use, 1441
   book review
      Pediatric pulmonary function testing (Hammer J, Eber E), 77
   forehead reflectance pulse oximetry vs digit sensor, 726
   heliox use, 619
   hospital discharge of respiratory-technology-dependent children, 744
   jet nebulizer delivery of aerosols in ventilated newborns, 1244
nebulized bronchodilator delivery, pediatric lung model, 56
neuromuscular disease, 885, 1067
transition to adult care, 891

Respiratory dead space
 effects on PaCO2 in lung-protective ventilation, 1140
in face masks with holding chambers, 140
infant aerosol holding chamber face masks (editorial), 123

Respiratory diseases and disorders
book reviews
  *Physiologic basis of respiratory disease* (Hamid Q et al), 540
  *Q&A color review of respiratory medicine, 2nd ed* (Sapiro SG et al), 669
  *Synopsis of diseases of the chest, 3rd ed* (Fraser RS et al), 667
software review
  *UpToDate in pulmonary and critical care medicine, version 13.3* (King TE Jr, et al), 776

Respiratory failure
 acute
  clinical assessment of, 1017
  mechanical ventilation predictors, 1018
neuromuscular disease causing, 1016, 1069
noninvasive positive-pressure ventilation in, 1019, 1226, 1237
chronic
cachexia and (editorial), 121
weight gain in cachectic COPD patients receiving NPPV, 126

Respiratory muscles
COPD and, 840, 1068
pacing in spinal cord injury, 861
physiology, 832
thixotropy conditioning and chest wall volume in COPD, 750
training in spinal cord injury, 858

Respiratory system
book reviews
  *Respiratory physiology: a clinical approach* (Schwartzstein RM, Parker MJ), 1182
  *Respiratory physiology: the essentials, 7th ed* (West JB), 1181
neuromuscular
  functional anatomy, 830
  physiology, 829
spinal cord injury and, 854

Respiratory therapists
dedicated respiratory care discharge coordinator for respiratory-technology-dependent children, 744
disease management as role for (editorial), 1400
oxygen protocol evaluation in long-term care, 1424

Respiratory tract infections
book review
  *The microbe-host interface in respiratory tract infections* (Kimpen JLL, Ramilo O), 302

Resuscitation
book review
  *Cardiopulmonary resuscitation* (Ornato JP, Peberdy MA), 76

Retrospective studies
mechanical ventilation in Guillain-Barré syndrome, 1403

Risk factors
heliox usage, 657
travel and venous thrombosis, 1177

S

Secondhand smoke
noninvasive pulse CO-oximeter for measurement of carboxyhemoglobin, 758

Sedation
ICU, dexmedetomidine for, 492
in intensive care unit (editorial), 489

Severe acute respiratory syndrome (SARS)
book reviews
  *SARS: a case study in emerging infections* (McLean AR et al), 300
  *Severe acute respiratory syndrome* (Peiris M et al), 775

Sickle cell disease
pulmonary hypertension and, 372

Sleep apnea
book review
  *Surgical management of sleep apnea and snoring* (Terris DJ, Goode RL), 1477
in renal failure, 418

Sleep apnea, obstructive
in congestive heart failure, 408

Sleep disorders
book reviews
  *Atlas of sleep medicine* (Chokroverty S et al), 1476
  *Principles and practice of sleep medicine, 4th ed* (Kryer MH et al), 1475
  *Sleep medicine: a guide to sleep and its disorders, 2nd ed* (Shneerson JM), 929

Smoking and smoking cessation
book review
  *Smoking cessation, 2nd ed* (West R, Shiffman S), 432
chronic obstructive pulmonary disease clinical practice guidelines, 281
idiopathic pulmonary fibrosis with emphysema, 257

Software review
  *UpToDate in pulmonary and critical care medicine, version 13.3* (King TE Jr, et al), 776
Specimen handling
blood-gas analysis and (editorial), 717
syringe material, storage time, and temperature effects on blood-gas analysis, 732

Speech
ventilator-assisted, in spinal cord injury, 859

Spinal cord injury
mortality in, 856
respiratory dysfunction and management, 853
respiratory system pathophysiology, 854

Spirometry
changes in pulmonary function testing, 246
COPD clinical practice guidelines, 277
for COPD diagnosis, 1116, 1120
fixed percentage method vs lower confidence limits defining normality limits, 737
interpretation standards (editorial), 719
portable spirometers, long-term stability in COPD, 1167
Qualitative studies to explore barriers to spirometry use: a breath of fresh air? (letter), 768

Sputum
chest physiotherapy with positive airway pressure, 1145

Standards
percent of predicted values in pulmonary function testing (editorial), 722

Statistics
resampling for normalizing benchmarking data, 145

Steroids
for COPD, 289
COPD clinical practice guidelines, 277

Suction and suctioning devices
closed catheter, and work of breathing, 423
open vs closed, in lung-protective ventilation, 497
tracheostomy in neuromuscular disease, 997

Surgery, thoracic
book review
General thoracic surgery, 6th ed (Shields TW et al), 79

Symbols
published pressure gradient symbols and equations in breathing mechanics, comparison of, 1450
respiratory symbols and terminology, nomenclature maintenance, 1458

Syringes
plastic syringes and blood gas analysis (editorial), 717
syringe material, storage time, and temperature effects on blood-gas analysis, 732

Systolic dysfunction
in congestive heart failure, 404

Teaching Case of the Month
abnormally increased power of breathing from closed suction catheter, 423
bronchopulmonary sequestration, 661
bullous lung disease vs bullous emphysema, 532
chronic eosinophilic pneumonia, 764
radiation pneumonitis, 1255
traveling as venous thrombosis risk factor, 1177
tricuspid endocarditis with pulmonary emboli, 1471

Team care
tracheotomy management in ICU, models for, 1230

Temperature
syringe material, storage time, and temperature effects on blood-gas analysis, 732

Tests and testing

Thalassemia
beta, extramedullary hematopoietic mass rupture and hemothorax in (case report), 272

Thixotropy
conditioning of inspiratory muscles and chest wall volume in COPD, 750

Thoracic imaging. See Chest imaging

Time factors
forehead reflectance pulse oximetry (editorial), 715
syringe material, storage time, and temperature effects on blood-gas analysis, 732
time to wean after tracheotomy, 1408

Tobacco smoke pollution
noninvasive pulse CO-oximeter for carboxyhemoglobin, 758

Tomography, emission computed
chronic eosinophilic pneumonia, atypical findings, 764
rounded atelectasis with atypical computed tomography findings (case report), 761

Tracheotomy and tracheostomy
mechanical ventilation in Guillain-Barré syndrome, 1403
time to wean after tracheotomy, 1408
tracheostomy in neuromuscular disease, 984, 1069
complications, 990
decannulation, 998
timing of, 985
tubes, types of, 994
tracheostomy ventilation, problems with, 1006
tracheostomy management in ICU, models for, 1230

Travel
as venous thrombosis risk factor, 1177
Treatment outcome
NPPV use on regular hospital ward, 1237

Tubes, endotracheal
closed catheter system increasing power of breathing, 423

U
Urinothorax
pathophysiology of, 418

U.S. Food and Drug Administration (FDA)
Heliox therapy and devices cleared by FDA (letter), 1261

V
Vascular diseases
pulmonary arterial hypertension, 368
Venous thrombosis
travel as risk factor, 1177
Ventilation, negative-pressure
in neuromuscular disorders, 897, 1005
Ventilation, nocturnal
in neuromuscular disorders, 1009
Ventricular disorders
inhaled nitric oxide for, after extrapleural pneumonectomy (case report), 1172
Vital capacity
spirometry interpretation, fixed percentage method vs lower confidence limits, 737
spirometry interpretation standards (editorial), 719

W
Weaning from ventilatory support
in acute brain injury, 363
dexmedetomidine in, 489, 492
diaphragmatic dysfunction, 1057
heliox and, 638
minute ventilation recovery time, 133
in neuromuscular disease, 1020
time to wean after tracheotomy, 1408
tracheotomy management in ICU, models for, 1230

Web site reviews
Zap asthma online simulation, 305

Wegener’s granulomatosis
respiratory complications, 415

Work of breathing
closed suction catheter and, 423
pressure gradient symbols and equations in breathing mechanics, comparison of, 1450

Writing
book review
Write it down: guidance for preparing effective and compliant documentation, 2nd ed (Gough J), 771

X
X-rays. See Radiographic interpretation