



CRCE Through the Journal—2009

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CRCE through the Journal, a program for American Association for Respiratory Care (AARC) members to gain credit for continuing education, is now in its seventeenth year. By reading *RESPIRATORY CARE*—the science journal for respiratory care professionals—and completing this examination, AARC members may earn credit for continuing education.*

This 50-item, true or false examination is based on papers published from June 2008 through May 2009 in *RESPIRATORY CARE*. The issue and page numbers of the paper on which a question is based are shown in brackets following the question. You may consult the cited paper; however, we encourage you to read the paper in its entirety before answering the question. Choose the single most-correct answer, and mark the answer sheet, which is located on the back of this page.

Your answer sheet is the worksheet you will use to record your answers in the AARC’s web-based testing module. After registering for the test, paying the \$15 fee by credit card, and entering your answers, your test will be instantly scored. If you correctly answer 35 or more of the 50 items, you will be able to print a signed Certificate of Completion to present to your state board as evidence that you have earned 6 CRCE contact hours. Your CRCE contact hours will also be instantly added to your web-based AARC transcript. You will have two attempts to achieve a passing score. To register and pay for the test go to <http://www.rcjournal.com/> and click on *CRCE Through the Journal—2009*. The online test will be available from **August 1st to October 1st, 2009**. The test answers will be published in the October 2009 issue of the Journal.

We are indebted to Timothy B Op’t Holt EdD RRT AE-C FAARC, William Pruitt MBA RRT RPFT AE-C, William V Wojciechowski MSc RRT, and David W Chang EdD RRT, faculty members in the Department of Cardiorespiratory Care at the University of South Alabama, Mobile, Alabama.

*The acceptance of these credits for the fulfillment of license-mandated continuing education is dictated solely by the licensure law of each individual state.

CRCE through the Journal — Answer Sheet

	True	False
1	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>
5	<input type="radio"/>	<input type="radio"/>
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20	<input type="radio"/>	<input type="radio"/>
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24	<input type="radio"/>	<input type="radio"/>
25	<input type="radio"/>	<input type="radio"/>

	True	False
26	<input type="radio"/>	<input type="radio"/>
27	<input type="radio"/>	<input type="radio"/>
28	<input type="radio"/>	<input type="radio"/>
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30	<input type="radio"/>	<input type="radio"/>
31	<input type="radio"/>	<input type="radio"/>
32	<input type="radio"/>	<input type="radio"/>
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45	<input type="radio"/>	<input type="radio"/>
46	<input type="radio"/>	<input type="radio"/>
47	<input type="radio"/>	<input type="radio"/>
48	<input type="radio"/>	<input type="radio"/>
49	<input type="radio"/>	<input type="radio"/>
50	<input type="radio"/>	<input type="radio"/>

QUESTIONS: *Please follow the instructions on Page 1125 and use the worksheet we have provided on Page 1126 to mark your answers. You will have two attempts to achieve a passing score. To register and pay for the test go to <http://www.RCJournal.com/> and click on CRCE Through the Journal—2009. The online test will be available from August 1st to October 1st, 2009. The test answers will be published in the October 2009 issue of the Journal.*

- | | |
|--|--|
| <p>1. Twice daily dosing of high dose ciclesonide facilitates oral corticosteroid tapering. [Colice, June 2008;53(6):688-696]
<i>True</i> <i>False</i></p> | <p>7. Change-avid respiratory therapy departments often include cost-cutting threats from management and the importance of compliance with internal policy and procedure to define the need for change. [Stoller, July 2008;53(7):871-884]
<i>True</i> <i>False</i></p> |
| <p>2. The blow-by technique is effective for the delivery of aerosols to infants. [Hess, June 2008;53(6):699-723]
<i>True</i> <i>False</i></p> | <p>8. An improvement in slow vital capacity correlates with improvements in the perception of dyspnea among patients with an exacerbation of chronic obstructive pulmonary disease. [Camargo, July 2008;53(7):892-896]
<i>True</i> <i>False</i></p> |
| <p>3. Noninvasive ventilation in life-threatening asthma is as good as invasive ventilation in an exacerbation of COPD. [Lugogo, June 2008;53(6):726-735]
<i>True</i> <i>False</i></p> | <p>9. Pressure support ventilation is more comfortable for patients than volume-controlled continuous mandatory ventilation. [Betensley et al, July 2008;53(7):897-902]
<i>True</i> <i>False</i></p> |
| <p>4. Because the metered-dose inhaler is simple to use, further return demonstration is unnecessary once the patient understands how it is used. [Kallstrom, June 2008;53(6):770-776]
<i>True</i> <i>False</i></p> | <p>10. The hypercapnia test is not useful in predicting extubation success. [Raurich, August 2008;53(8):1012-1018]
<i>True</i> <i>False</i></p> |
| <p>5. The written action plan is the single most important strategy for asthma education. [Jones, June 2008;53(6):778-784]
<i>True</i> <i>False</i></p> | <p>11. Consistency of the calibration program across geographic locations maintains the quality of spirometry. [Perez-Padilla, (August 2008;53(8):1019-1026)
<i>True</i> <i>False</i></p> |
| <p>6. In a porcine model of cardiopulmonary resuscitation, a reduced ventilation rate resulted in a potentially harmful effect on carotid blood flow, brain tissue O₂, and cardiac output. [Lurie, July 2008;53(7):862-870]
<i>True</i> <i>False</i></p> | |

24. Time-cycled, pressure-limited, constant-flow ventilators have partially open exhalation valves during inspiration that cause less delay in the breath to cycle into exhalation. [DiBlasi et al, November 2008; 53(11):1450-1460]
True *False*
25. The diagnosis of nemaline myopathy is confirmed by muscle biopsy. [Kelly, November 2008; 53(11):1490-1494]
True *False*
26. Noninvasive ventilation is the standard of care for chronic obstructive pulmonary disease exacerbation. [Pierson, January 2009;54(1):40-50]
True *False*
27. The 2 main variables around which equipment selection for noninvasive ventilation revolves are the ventilator used and the patient interface. [Davies, January 2009;54(1):53-59]
True *False*
28. Noninvasive ventilation must occur in an ICU. [Hill, January 2009;54(1):62-69]
True *False*
29. A vomiting patient is a relative contraindication for using an oronasal mask with NIV. [Nava, January 2009;54(1):71-82]
True *False*
30. Noninvasive CPAP reduces the intubation rate in patients with acute cardiogenic pulmonary edema, compared to conventional therapy. [Mehta, February 2009;54(1):186-195]
True *False*
31. Noninvasive ventilation does not enhance airway clearance when cough strength is poor. [Epstein, February 2009;54(2):198-208]
True *False*
32. Noninvasive ventilation is associated with low utilization because of a lack of patient education. [Hess, February 2009;54(2):232-243]
True *False*
33. Skin rashes that develop from the masks used for the delivery of NIV generally respond favorably to gels or other facial moisturizing creams. [Gay, February 2009;54(2): 246-257]
True *False*
34. The majority of studies on the physiologic effects of noninvasive ventilation were conducted with pressure support ventilation or proportional-assist ventilation. [Kallet, February 2009;54(2):259-263]
True *False*
35. Tidal volumes associated with mid-frequency ventilation were higher than those reported in the literature for ventilating patients with ARDS. [Mireles-Cabodevila, December 2008;53(12):1669-1677]
True *False*
36. Tiotropium can be safely and effectively added to the treatment regimen of patients experiencing a COPD exacerbation. [Drescher, December 2008;53(12):1678-1684]
True *False*
37. Levalbuterol is physically and chemically incompatible with tiotropium for 30 min at room temperature. [Bonasia, December 2008;53(12):1716-1722]
True *False*

38. Hypertonic saline inhalation is effective in patients with COPD. [Valderramas, March 2009; 54(3): 327-333]
True *False*
39. In mildly to moderately obese subjects, the resting lung volume is increased when the body position is changed from a supine to a 30° Fowler's position. [Benedik, March 2009; 54(3): 334-339]
True *False*
40. In clinically stable patients with neuromuscular diseases, manually assisted cough and breath-stacking are two techniques that are effective in cough augmentation. [Toussaint, March 2009; 54(3): 359-366]
True *False*
41. Pulmonary embolism is an acute condition that can be treated successfully by surgical method. [Le, March 2009; 54(3): 390-392]
True *False*
42. In patients who are symptomatic, peak inspiratory flow and flow-volume loops can be used to detect presence of vocal cord dysfunction. [Watson, April 2009; 54(4): 467-473]
True *False*
43. Maintaining a temperature close to 37 °C at the Y-piece of the inspiratory circuit ensures adequate water-vapor delivery to the patient during volume controlled ventilation. [Solomita, April 2009; 54(4): 480-486]
True *False*
44. The respiratory care workload remains unchanged when fast (3 min) nebulizers are used to perform small-volume nebulizer treatments. [Hoisington, April 2009; 54(4): 495-499]
True *False*
45. Coagulase-negative staphylococci are the most common bacteria found on the respiratory therapists' pens in the intensive care unit. [Wolfe, April 2009; 54(4): 500-503]
True *False*
46. Cystic fibrosis is an autosomal dominant genetic disorder that affects endocrine gland function. [Volsko, May 2009; 54(5): 587-594]
True *False*
47. Sputum production and retention, airway infection, and inflammation are the major pulmonary problems of patients with cystic fibrosis. [Ratjen, May 2009; 54(5): 595-605]
True *False*
48. Forced expiratory volume in the first second (FEV₁) should be used to monitor the lung functions of patients with advanced cystic fibrosis. [Davies, May 2009; 54(5): 606-617].
True *False*
49. Cystic fibrosis is a condition that affects as many as 7 body organs. [Flume, May 2009; 54(5): 618-627]
True *False*
50. Cohorting is a technique of grouping patients based on their ages and pulmonary function results. [O'Malley, May 2009; 54(5): 641-653]
True *False*

Enter the answers to the questions online at <http://www.rcjournal.com/> and click on CRCE Through the Journal—2009. The online test will be available from **August 1st to October 1st, 2009.**