

## Sharps Safety Tool Kit

## Resources

1. Enforcement procedures for the occupational exposure to bloodborne pathogens. Occupational Safety and Health Administration. [https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=DIRECTIVES&p\\_id=2570](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=2570). Published November 27, 2001. Accessed February 15, 2014.
2. Eye of the needle: surgeons reluctant to trade suture sharps for 'blunt' safety: will calls for change, new designs finally get point across? *Hosp Employee Health*. 2007;26(10):109-112.
3. New sharps policy points to importance of blunt-tip suture needles. *Inside the Joint Commission*. 2010;15(8):1,3-6.
4. OSHA illness and injury record-keeping standard [risk analysis]. *Healthcare Risk Control*. 2002;July:1-10.
5. OSHA's bloodborne pathogens [risk analysis]. *Healthcare Risk Control*. 2008;4:1-20.
6. OSHA. The use of safety-engineered devices and work practice controls in operating rooms; hospital responsibility to protect independent practitioners under BBP standard. 2007.  
[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=INTERPRETATIONS&p\\_id=25620](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=25620). Accessed February 15, 2014.
7. Occupational exposure to bloodborne pathogens; needlestick and other sharps injuries; final rule. Occupational Safety and Health Administration (OSHA), Department of Labor. Final rule; request for comment on the Information Collection (Paperwork) Requirements. *Fed Regist*. 2001;66(12):5318-5325.
8. Needlestick Safety and Prevention Act of 2000, HR 5178, HR Rep No. 106-430 (2000).  
<http://www.gpo.gov/fdsys/pkg/PLAW-106publ430/html/PLAW-106publ430.htm>. Accessed February 15, 2014.
9. NIOSH Alert: Preventing Needlestick Injuries in Health Care Settings. NIOSH publication no. 2000-108. Cincinnati, OH: National Institute for Occupational Safety and Health; 1999. <http://www.cdc.gov/niosh/docs/2000-108/>. Accessed February 15, 2014.
10. Recommended practices for environmental cleaning in the perioperative setting. In: *Perioperative Standards and Recommended Practices*. Denver, CO: AORN, Inc; 2014:255-276.

11. Recommended practices for medication safety. In: *Perioperative Standards and Recommended Practices*. Denver, CO: AORN; 2014:277-320.
12. Recommended practices for sterile technique. In: *Perioperative Standards and Recommended Practices*. Denver, CO: AORN, Inc; 2014:89-118.
13. Recommended practices for prevention of retained surgical items. In: *Perioperative Standards and Recommended Practices*. Denver, CO: AORN, Inc; 2014:333-350.
14. Recommended practices for prevention of transmissible infections in the perioperative practice setting. In: *Perioperative Standards and Recommended Practices*. Denver, CO: AORN, Inc; 2014:385-420.
15. Recommended practices for sharps safety. In: *Perioperative Standards and Recommended Practices*. Denver CO: AORN, Inc; 2014:351-374.
16. Regulations (Standards—29 CFR) Recording criteria for needlestick and sharps injuries—1904.8. Occupational Safety and Health Administration.  
[http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=STANDARDS&p\\_id=9639](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9639). Accessed January 26, 2012.
17. Regulations (Standards—29 CFR) Bloodborne pathogens.—1910.1030. Occupational Safety and Health Administration.  
[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_id=10051&p\\_table=STANDARDS](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=10051&p_table=STANDARDS). Accessed February 15, 2014.
18. Self-assessment bloodborne questionnaire: bloodborne pathogens policies and procedures. *Oper Room Risk Manage*. 2010;1-28.
19. Safer medical device implementation in health care facilities: sharing lessons learned. National Institute for Occupational Safety and Health. <http://www.cdc.gov/niosh/topics/bbp/safer/>. Accessed February 15, 2014.
20. Safer needle devices, part 2. *RN*. 2000;63(2):59-60.
21. Selecting, Evaluating, and Using Sharps Disposal Containers. *NIOSH publication no. 97-111*. Cincinnati, OH: National Institute for Occupational Safety and Health; 1998. <http://www.cdc.gov/niosh/pdfs/97-111.pdf>. Accessed February 15, 2014.
22. Sharps injuries in the operating room—a new focus for OSHA. *Healthc Hazard Manage Monit*. 2004;18(2):1-5.
23. Sharps injury prevention programs [risk analysis]. *Oper Room Risk Manage*. 2002;Nov (1A: Infection control 12).

24. Sharps safety: five steps for maintaining an effective program. *Health Devices*. 2006;35(9):348-353.
25. Sharps safety: a practical guide for establishing and evaluating a sharps injury prevention program. *Health Devices*. 2002;31(3):81-107.
26. Top ten health technology hazards for 2011. *Health Devices*. 2010;39(11).
27. Adams D, Elliott TS. Needlestick injuries: is it time for a new approach? *Br J Nurs*. 2007;16(6):334.
28. Al-Benna S. Needlestick and sharps injuries among theatre care professionals. *J Perioper Pract*. 2010;20(12):440-445.
29. Ali SO, Vogel PS. Surgical pearl: simple method for controlling surgical sharps. *J Am Acad Dermatol*. 2006;54(5):878-879.
30. Statement on sharps safety. American College of Surgeons. [http://www.facs.org/fellows\\_info/statements/st-58.html](http://www.facs.org/fellows_info/statements/st-58.html). Accessed February 15, 2014.
31. Guideline statement for the implementation of the neutral zone in the perioperative environment. Association of Surgical Technologists. [https://www.ast.org/pdf/Standards\\_of\\_Practice/Guideline\\_Neutral\\_Zone.pdf](https://www.ast.org/pdf/Standards_of_Practice/Guideline_Neutral_Zone.pdf). Accessed February 15, 2014.
32. Au E, Gossage JA, Bailey SR. The reporting of needlestick injuries sustained in theatre by surgeons: are we under-reporting? *J Hosp Infect*. 2008;70(1):66-70.
33. Bali R, Sharma P, Garg A. Incidence and patterns of needlestick injuries during intermaxillary fixation. *Br J Oral Maxillofac Surg*. 2011;49(3):221-224.
34. Berguer R. Key strategies for eliminating sharps injuries during surgery. *AORN J*. 2011;94(1):91-96.
35. Berguer R. Sharps safety in the operating room. *AORN J*. 2011;94(1):4-6.
36. Berguer R, Heller PJ. Preventing sharps injuries in the operating room. *J Am Coll Surg*. 2004;199(3):462-467.
37. Blouin AS, McDonagh KJ. A framework for patient safety, part 2: resilience, the next frontier. *J Nurs Adm*. 2011;41(11):450-452.
38. Blouin AS, McDonagh KJ. Framework for patient safety, part 1: culture as an imperative. *J Nurs Adm*. 2011;41(10):397-400.
39. Brasel KJ, Mol C, Kolker A, Weigelt JA. Needlesticks and surgical residents: who is most at risk? *J Surg Educ*. 2007;64(6):395-398.
40. Burnette M. In focus: addressing sharps safety. *AORN J*. 2011;93(3)C5.

41. Canini SR, Moraes SA, Gir E, Freitas IC. Percutaneous injuries correlate in the nursing team of a Brazilian tertiary-care university hospital. *Rev Lat Am Enfermagem*. 2008;16(5):818-823.
42. Catanzarite V, Byrd K, McNamara M, Bombard A. Preventing needlestick injuries in obstetrics and gynecology: how can we improve the use of blunt tip needles in practice? *Obstet Gynecol*. 2007;110(6):1399-1403.
43. Centers for Disease Control (CDC). Update: universal precautions for prevention of transmission of human immunodeficiency virus, hepatitis B virus, and other bloodborne pathogens in health-care settings. *MMWR Morb Mortal Wkly Rep*. 1988;37(24):377-382,387-388.
44. Workbook for designing, implementing, and evaluating a sharps injury prevention program. Centers for Disease Control and Prevention. [http://www.cdc.gov/sharpsafety/pdf/sharpsworkbook\\_2008.pdf](http://www.cdc.gov/sharpsafety/pdf/sharpsworkbook_2008.pdf). Accessed February 15, 2014.
45. Centers for Disease Control and Prevention (CDC). HIV surveillance United States, 1981-2008. *MMWR Morb Mortal Wkly Rep*. 2011;60(21):689-693.
46. Championing sharps safety in the OR. *AORN J*. 2012;95(5):C5-C6.
47. Childs T. Use of double gloving to reduce surgical personnel's risk of exposure to bloodborne pathogens: an integrative review. *AORN J*. 2013;98(6):586-596.
48. Chen LF, Sexton DJ, Kaye KS, Anderson DJ. Patient-days: a better measure of incidence of occupational bloodborne exposures. *Am J Infect Control*. 2009;37(7):534-540.
49. Chin RL. Postexposure prophylaxis for HIV. *Emerg Med Clin North Am*. 2010;28(2):421-429.
50. Chin RL, Tabas JA, Neighbor ML, Francisco S. A teaching module to prevent needle sticks and exposures to body fluid. *Acad Med*. 2001;76(5):529-530.
51. Cicconi L, Claypool M, Stevens W. Prevention of transmissible infections in the perioperative setting. *AORN J*. 2010;92(5):519-527.
52. Cunningham TR, Austin J. Using goal setting, task clarification, and feedback to increase the use of the hands-free technique by hospital operating room staff. *J Appl Behav Anal*. 2007;40(4):673-677.
53. Cutter J, Jordan S. Uptake of guidelines to avoid and report exposure to blood and body fluids. *J Adv Nurs*. 2004;46(4):441-452.

54. Davanzo E, Frasson C, Morandin M, Trevisan A. Occupational blood and body fluid exposure of university health care workers. *Am J Infect Control*. 2008;36(10):753-756.
55. Deuffic-Burban S, Delarocque-Astagneau E, Abiteboul D, Bouvet E, Yazdanpanah Y. Blood-borne viruses in health care workers: prevention and management. *J Clin Virol*. 2011;52(1):4-10.
56. Doebbeling BN, Vaughn TE, McCoy KD, et al. Percutaneous injury, blood exposure, and adherence to standard precautions: are hospital-based health care providers still at risk? *Clin Infect Dis*. 2003;37(8):1006-1013.
57. ECRI. Hazard report: still getting stuck—protective devices alone won't always prevent needlestick injuries. *Health Devices*. 2009;38(9):306-307.
58. ECRI. *Sharps Safety and Needlestick Prevention*. 2nd ed. Plymouth Meeting, PA: ECRI;2003.
59. Edlich RF, Long WB, 3rd, Gubler K, et al. Reducing accidental injuries during surgery. *J Environ Pathol Toxicol Oncol*. 2010;29(4):317-326.
60. Feng T, Yohannan J, Gupta A, Hyndman ME, Allaf M. Microperforations of surgical gloves in urology: minimally invasive versus open surgeries. *Can J Urol*. 2011;18(2):5615-5618.
61. Ford DA Implementing AORN recommended practices for sharps safety. *AORN J*. 2014;99(1):106-120.
62. Fry DE, Harris WE, Kohnke EN, Twomey CL. Influence of double-gloving on manual dexterity and tactile sensation of surgeons. *J Am Coll Surg*. 2010;210(3):325-330.
63. Fuentes H, Collier J, Sinnott M, Whitby M. "Scalpel safety": modeling the effectiveness of different safety devices' ability to reduce scalpel blade injuries. *Int J Risk Saf Med*. 2008;20:83-89.
64. Galligan C, Chalupka S, Laramie A, Davis L. Prepackaged procedure trays and sharps safety standards. *Nurs Manage*. 2011;42(3):50-52.
65. Gershon RR, Pearse L, Grimes M, Flanagan PA, Vlahov D. The impact of multifocused interventions on sharps injury rates at an acute-care hospital. *Infect Control Hosp Epidemiol*. 1999;20(12):806-811.
66. Ghauri AJ, Amissah-Arthur KN, Rashid A, Mushtaq B, Nessim M, Elsherbiny S. Sharps injuries in ophthalmic practice. *Eye*. 2011;25(4):443-448.
67. Guglielmi CL, Spratt DG, Berguer R, Alexander S, Barnes S, Groah L. A call to arms to prevent sharps injuries in our ORs. *AORN J*. 2010;92(4):387-392.

68. Hagstrom AM. Perceived barriers to implementation of a successful sharps safety program. *AORN J.* 2006;83(2):391-397.
69. Hänecke K, Tiedemann S, Nachreiner F, Grzech-Sukalo H. Accident risk as a function of hour at work and time of day as determined from accident data and exposure models for the German working population. *Scand J Work Environ Health.* 1998;24(Suppl 3):43-48.
70. Harnoss JC, Partecke LI, Heidecke CD, Hübner NO, Kramer A, Assadian O. Concentration of bacteria passing through puncture holes in surgical gloves. *Am J Infect Control.* 2010;38(2):154-158.
71. Hart PD Bloodborne pathogen violations: compliance is key to prevention. *AORN J.* 2011;94(5): 480-487.
72. Henderson DK. Management of needlestick injuries: a house officer who has a needlestick. *JAMA.* 2012;307(1):75-84.
73. Holodnick CL, Barkauskas V. Reducing percutaneous injuries in the OR by educational methods. *AORN J.* 2000;72(3):461-476.
74. International Healthcare Worker Safety Center at the University of Virginia. Moving the sharps safety agenda forward in the United States: consensus statement and call to action.  
<http://www.healthsystem.virginia.edu/pub/epinet/ConsensusStatementOnSharpsInjuryPrevention.pdf>.  
Accessed February 15, 2014.
75. Jagger J, Balon M. Suture needle and scalpel blade injuries: frequent but underreported. *Adv Expos Prevent.* 1995;1(3):1,6-8.
76. Jagger J, Bentley M, Tereskerz P. A study of patterns and prevention of blood exposures in OR personnel. *AORN J.* 1998;67(5):979-987.
77. Jagger J, Berguer R, Phillips EK, Parker G, Gomaa AE. Increase in sharps injuries in surgical settings versus nonsurgical settings after passage of national needlestick legislation. *AORN J.* 2011;93(3):322-330.
78. Jagger J, Berguer R, Phillips EK, Parker G, Gomaa AE. Increase in sharps injuries in surgical settings versus nonsurgical settings after passage of national needlestick legislation. *J Am Coll Surg.* 2010;210(4):496-502.
79. Jagger J, Perry J, Gomaa A, Phillips EK. The impact of U.S. policies to protect healthcare workers from bloodborne pathogens: the critical role of safety-engineered devices. *J Infect Public Health.* 2008;1(2):62-71.
80. Jeffe DB, Mutha S, L'Ecuyer PB, et al. Healthcare workers' attitudes and compliance with universal precautions: gender, occupation, and specialty differences. *Infect Control Hosp Epidemiol.* 1997;18(10):710-712.

81. The Joint Commission. Preventing needlestick and sharps injuries. Sentinel Event Alert. August 1, 2001;22:1-3.  
[http://www.jointcommission.org/assets/1/18/SEA\\_22.pdf](http://www.jointcommission.org/assets/1/18/SEA_22.pdf). Updated September 28, 2001. Accessed February 15, 2014.
82. Kerr HL, Stewart N, Pace A, Elsayed S. Sharps injury reporting amongst surgeons. *Ann R Coll Surg Engl*. 2009;91(5):430-432.
83. Kinlin LM, Mittleman MA, Harris AD, Rubin MA, Fisman DN. Use of gloves and reduction of risk of injury caused by needles or sharp medical devices in healthcare workers: results from a case-crossover study. *Infect Control Hosp Epidemiol*. 2010;31(9):908-917.
84. Kirchner B. Safety in ambulatory surgery centers: occupational safety and health administration surveys. *AORN J*. 2012;96(5):540-545.
85. Korniewicz D, El-Masri M. Exploring the benefits of double gloving during surgery. *AORN J* 2012;95(3):328-336.
86. Kovach T. Controlling infection potentials when passing surgical instruments. *Today's OR Nurse*. 1993;15(6):35-38.
87. Laramie AK, Pun VC, Fang SC, Kriebel D, Davis L. Sharps injuries among employees of acute care hospitals in Massachusetts, 2002-2007. *Infect Control Hosp Epidemiol*. 2011;32(6):538-544.
88. Lefebvre DR, Strande LF, Hewitt CW. An enzyme-mediated assay to quantify inoculation volume delivered by suture needlestick injury: two gloves are better than one. *J Am Coll Surg*. 2008;206(1):113-122.
89. Leigh JP, Wiatrowski WJ, Gillen M, Steenland NK. Characteristics of persons and jobs with needlestick injuries in a national data set. *Am J Infect Control*. 2008;36(6):414-420.
90. MacCannell T, Laramie AK, Gomaa A, Perz JF. Occupational exposure of health care personnel to hepatitis B and hepatitis C: prevention and surveillance strategies. *Clin Liver Dis*. 2010;14(1):23-36, vii.
91. Makary MA, Al-Attar A, Holzmueller CG, et al. Needlestick injuries among surgeons in training. *N Engl J Med*. 2007;356(26):2693-2699.
92. Makary MA, Pronovost PJ, Weiss ES, et al. Sharpless surgery: a prospective study of the feasibility of performing operations using non-sharp techniques in an urban, university-based surgical practice. *World J Surg*. 2006;30(7):1224-1229.

93. Marini MA, Giangregorio M, Kraskinski JC. Complying with the Occupational Safety and Health Administration's Bloodborne Pathogens Standard: implementing needleless systems and intravenous safety devices. *Pediatr Emerg Care*. 2004;20(3):209-214.
94. Misteli H, Weber WP, Reck S, et al. Surgical glove perforation and the risk of surgical site infection. *Arch Surg*. 2009;144(6):553-558.
95. Moorjani GR, Bedrick EJ, Michael AA, Peisajovich A, Sibbitt WL Jr, Bankhurst AD. Integration of safety technologies into rheumatology and orthopedics practices: a randomized, controlled trial. *Arthritis Rheum*. 2008;58(7):1907-1914.
96. Myers DJ, Epling C, Dement J, Hunt D. Risk of sharp device-related blood and body fluid exposure in operating rooms. *Infect Control Hosp Epidemiol*. 2008;29(12):1139-1148.
97. Naghavi SH, Sanati KA. Accidental blood and body fluid exposure among doctors. *Occup Med (Lond)*. 2009;59(2):101-106.
98. National Surveillance System for Health Care Workers. Summary report for data collected from June 1995 through July 1999. *Worker Health Chartbook, 2000*. Centers for Disease Control and Prevention;{2002}:37-43.
99. Nevin RL, Carbonell I, Thurmond V. Device-specific rates of needlestick injury at a large military teaching hospital. *Am J Infect Control*. 2008;36(10):750-752.
100. New recommended practices for sharps safety released. *AORN J*. 2013;98(1):C5-C6.
101. O'Connor MB. The psychological impact of needlestick injuries. *Ir J Med Sci*. 2011;1.
102. Ogg MJ, Clinical Issues—January 2014. *AORN J*. 2014;99(1):166-175.
103. Ogg MJ, Clinical Issues—September 2012. *AORN J*. 2012;96(3):333-339.
104. O'Malley EM, Scott RD 2nd, Gayle J, et al. Costs of management of occupational exposures to blood and body fluids. *Infect Control Hosp Epidemiol*. 2007;28(7):774-782.
105. Panlilio AL, Cardo DM, Grohskopf LA, Heneine W, Ross CS, U.S. Public Health Service. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HIV and recommendations for postexposure prophylaxis. *MMWR Recomm Rep*. 2005;54(RR-9):1-17.
106. Parantainen A, Verbeek JH, Lavoie MC, Pahwa M. Blunt versus sharp suture needles for preventing percutaneous exposure incidents in surgical staff. *Cochrane Database Syst Rev*. 2011;11:CD009170.



107. Parini S. 12 work practices that could save your life: follow these pointers to safeguard against bloodborne pathogens. *Nursing*. 2001;31(6):32hn1-2.
108. Pashley HS. Improving sharps safety and other workplace safety concerns. *AORN J*. 2012 95(2):C1.
109. Patrician PA, Pryor E, Fridman M, Loan L. Needlestick injuries among nursing staff: association with shift-level staffing. *Am J Infect Control*. 2011;39(6):477-482.
110. Pennington C, DeRienzo NR. An effective process for making decisions about major operating room purchases. *AORN J*. 2010;91(3):341-349.
111. Perry J, Jagger J, Parker G, Phillips EK, Gomaa A. Disposal of sharps medical waste in the United States: impact of recommendations and regulations, 1987-2007. *Am J Infect Control*. 2012;40(4):354-358.
112. Perry J, Parker G, Jagger JJ. EPINet report: 2003 percutaneous injury rates. *Adv Expos Prevent*. 2005;7(4):42-45.
113. Perry J, Robinson ES, Jagger J. Nursing 2004 needle-stick and sharps-safety survey: getting to the point about preventable injuries. *Nursing*. 2004;34(4):43-47.
114. Perry JL, Pearson RD, Jagger J. Infected health care workers and patient safety: a double standard. *Am J Infect Control*. 2006;34(5):313-319.
115. Polit DF, Beck CT. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2008.
116. Sibbitt RR, Palmer DJ, Sibbitt WL, Jr, Bankhurst AD. Image-directed fine-needle aspiration biopsy of the thyroid with safety-engineered devices. *Cardiovasc Intervent Radiol*. 2011;34(5):1006-1013.
117. Silverman R. New guide to safer sharps for the OR. *OR Manager*. 2004;20(5):22-23.
118. Sinnott M, Wall D. "Scalpel safety": how safe (or dangerous) are safety scalpels? *Int J Surg*. 2008;6(2):176-177.
119. Smith DR, Muto T, Sairenchi T, et al. Hospital safety climate, psychosocial risk factors and needlestick injuries in Japan. *Ind Health*. 2010;48(1):85-95.
120. Sohn S, Eagan J, Sepkowitz KA, Zuccotti G. Effect of implementing safety-engineered devices on percutaneous injury epidemiology. *Infect Control Hosp Epidemiol*. 2004;25(7):536-542.
121. Spratt D, Cowles CE, Berguer R, Dennis V, Waters TR, Rodriguez M, Spry C, Groah L. Workplace safety equals patient safety. *AORN J*. 2012;96(3):235-244.
122. Stanton C. Preventing sharps injuries. *AORN J*. 2010;92(6):S78-S80.

123. Stanton C. Seeking solutions to increase sharps safety. *AORN J.* 2011;94(6):C1.
124. Stringer B. Hands-free technique and sharps injuries in surgical settings. *J Am Coll Surg.* 2010;211(2):295-296.
125. Stringer B, Haines T, Goldsmith CH, et al. Hands-free technique in the operating room: reduction in body fluid exposure and the value of a training video. *Public Health Rep.* 2009;124(Suppl 1):169-179.
126. Stringer B, Haines AT, Goldsmith CH, Berguer R, Blythe J. Is use of the hands-free technique during surgery, a safe work practice, associated with safety climate? *Am J Infect Control.* 2009;37(9):766-772.
127. Stringer B, Haines T. Ongoing use of conventional devices and safety device activation rates in hospitals in Ontario, Canada. *J Occup Environ Hyg.* 2011;8(3):154-160.
128. Stringer B, Haines T. The hands-free technique: an effective and easily implemented work practice. *Perioper Nurs Clin.* 2010;5(1):45-58.
129. Stringer B, Haines T. Hands-free technique: preventing occupational exposure during surgery. *J Perioper Pract.* 2006;16(10):495-500.
130. Stringer B, Haines T, Goldsmith CH, Blythe J, Harris KA. Perioperative use of the hands-free technique: a semistructured interview study. *AORN J.* 2006;84(2):233-235,238-248.
131. Stringer B, Infante-Rivard C, Hanley JA. Effectiveness of the hands-free technique in reducing operating theatre injuries. *Occup Environ Med.* 2002;59(10):703-707.
132. Sullivan S, Williamson B, Wilson LK, Korte JE, Soper D. Blunt needles for the reduction of needlestick injuries during cesarean delivery: a randomized controlled trial. *Obstet Gynecol.* 2009;114(2 Pt 1):211-216.
133. Tanner J, Parkinson H. Double gloving to reduce surgical cross-infection. *Cochrane Database Syst Rev.* 2009;3:CD003087.
134. Tanner J. Surgical gloves: perforation and protection. *J Periop Pract.* 2006;16(3):148-152.
135. Taylor JA, Dominici F, Agnew J, Gerwin D, Morlock L, Miller MR. Do nurse and patient injuries share common antecedents? An analysis of associations with safety climate and working conditions. *BMJ Qual Saf.* 2012;21(2):101-111.
136. Thomas WJ, Murray JR. The incidence and reporting rates of needle-stick injury amongst UK surgeons. *Ann R Coll Surg Engl.* 2009;91(1):12-17.
137. Thomas-Copeland J. Do surgical personnel really need to double-glove? *AORN J.* 2009;89(2):322-332.

138. Tosini W, Ciotti C, Goyer F, et al. Needlestick injury rates according to different types of safety-engineered devices: results of a French multicenter study. *Infect Control Hosp Epidemiol*. 2010;31(4):402-407.
139. Treacle AM, Schultz M, Giannakos GP, Joyce PC, Gordin FM. Evaluating a decade of exposures to blood and body fluids in an inner-city teaching hospital. *Infect Control Hosp Epidemiol*. 2011;32(9):903-907.
140. Tuma S, Sepkowitz KA. Efficacy of safety-engineered device implementation in the prevention of percutaneous injuries: a review of published studies. *Clin Infect Dis*. 2006;42(8):1159-1170.
141. Turley WA, DeChesser L. Formulating an effective exposure control plan to deal with needlestick injuries in a free-standing surgical centre. *Ambul Surg*. 1995;3(1):23-26.
142. Twomey C. Infection control today - does double gloving double the protection?  
<http://www.infectioncontrolday.com/articles/2000/05/infection-control-today-does-double-gloving-doubl.aspx>.  
Published May 1, 2000. Accessed February 27, 2014.
143. U.S. Public Health Service. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis. *MMWR Recomm Rep*. 2001;50(RR-11):1-52.
144. Vaughn TE, McCoy KD, Beekmann SE, Woolson RE, Torner JC, Doebbeling BN. Factors promoting consistent adherence to safe needle precautions among hospital workers. *Infect Control Hosp Epidemiol*. 2004;25(7):548-555.
145. Vose JG, McAdara-Berkowitz J. Reducing scalpel injuries in the operating room. *AORN J*. 2009;90(6):867-872.
146. Watt AM, Patkin M, Sinnott MJ, Black RJ, Maddern GJ. Scalpel safety in the operative setting: a systematic review. *Surgery*. 2010;147(1):98-106.
147. Weiss ES, Makary MA, Wang T, et al. Prevalence of blood-borne pathogens in an urban, university-based general surgical practice. *Ann Surg*. 2005;241(5):803-809.
148. Whitby M, McLaws M, Slater K. Needlestick injuries in a major teaching hospital: the worthwhile effect of hospital-wide replacement of conventional hollow-bore needles. *Am J Infect Control*. 2008;36(3):180-186.
149. Wittmann A, Kralj N, Köver J, Gasthaus K, Hofmann F. Study of blood contact in simulated surgical needlestick injuries with single or double latex gloving. *Infect Control Hosp Epidemiol*. 2009;30(1):53-56.
150. Wittmann A, Kralj N, Köver J, Gasthaus K, Lerch H, Hofmann F. Comparison of 4 different types of surgical gloves used for preventing blood contact. *Infect Control Hosp Epidemiol*. 2010;31(5):498-502.

151. Yang L, Mullan B. Reducing needle stick injuries in healthcare occupations: an integrative review of the literature. *ISRN Nurs.* 2011;315432.
152. Zehnder NG. What should I do if I get a needlestick? *The Hospitalist*. [http://www.the-hospitalist.org/details/article/853609/What\\_Should\\_I\\_Do\\_If\\_I\\_Get\\_a\\_Needlestick.html](http://www.the-hospitalist.org/details/article/853609/What_Should_I_Do_If_I_Get_a_Needlestick.html). Published October, 2010. Accessed February 15, 2014.