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Evidence Table

Reference #	Citation	Conclusion (s)	Consensus Score	Evidence Type	Population	Comparison	Sample size (n)	Outcome Measure	REC #
1	Noble WC, Habbema JD, van Furth R, Smith I, de Raay C. Quantitative studies on the dispersal of skin bacteria into the air. J Med Microbiol. 1976;9(1):53-61.	The study determined that microorganisms are dispersed in significant amounts that may possibly be a hazard to patients. Men were more heavily colonized with microorganisms and dispersed more than women.	IIIB	Non-experimental	Male and female nurses	Males and females	38 males and 34 females	Bacterial colonies	1
2	Guideline for sterile technique. In: Guidelines for Perioperative Practice. Denver, CO: AORN, Inc; 2015:67-96.	N/A	IVA	Guideline	N/A	N/A	N/A	N/A	1
3	Guideline for prevention of transmissible infections. In: Guidelines for Perioperative Practice. Denver, CO: AORN, Inc; 2015:419-451.	N/A	IVA	Guideline	N/A	N/A	N/A	N/A	1
4	Guideline for sharps safety. In: Guidelines for Perioperative Practice. Denver, CO: AORN, Inc; 2015:365-388.	N/A	IVA	Guideline	N/A	N/A	N/A	N/A	1
5	Guideline for hand hygiene. In: Guidelines for Perioperative Practice. Denver, CO: AORN, Inc; 2015:31-42.	N/A	IVA	Guideline	N/A	N/A	N/A	N/A	1
6	Tammelin A, Domicel P, Hambraeus A, Stahle E. Dispersal of methicillin-resistant Staphylococcus epidermidis by staff in an operating suite for thoracic and cardiovascular surgery: relation to skin carriage and clothing.J Hosp Infect. 2000;44(2):119-126.	25% of women and 43% of men dispersed MRSE that was shed into the air in the OR and the authors recommend wearing of tightly woven scrub attire to decrease the risk of airborne bacterial transmission	IIC	quasi-experimental	OR staff	N/A	151	Number of CFUs shed in the air	1
7	Andersen BM, Solheim N. Occlusive scrub suits in operating theaters during cataract surgery: effect on airborne contamination. Infect Control Hosp Epidemiol. 2002;23(4):218-220.	The wearing of the tightly woven scrubs reduced the bacterial load in the air by more than 50% compared to regular cotton scrubs.	IIIC	Prospective intervention study	OR personnel	reg cotton scrubs	12	Airborne CFUS	1
8	Tammelin A, Hambraeus A, Stahle E. Source and route of methicillin-resistant Staphylococcus epidermidis transmitted to the surgical wound during cardiothoracic surgery. Possibility of preventing wound contamination by use of special scrub suits. J Hosp Infect. 2001;47(4):266-276.	Wearing of the special scrub attire did not reduce the number of MRSE air samples when compared to conventional attire, demonstrating that a tighter woven scrub was not superior to conventional scrub attire (tightly woven) at decreasing air contamination.	IIIC	quasi-experimental	Cardio-thoracic patients and surgical staff	N/A	65 patients 65 staff	Bacteria present on wound, skin, hands and in the air	1
9	Tammelin A, Ljungqvist B, Reinmüller B. Comparison of three distinct surgical clothing systems for protection from air-borne bacteria: a prospective observational study. Patient Saf Surg. 2012;6(1):23.	Both clothing systems made of polyester reduced the amount of CFU/m3 significantly compared to the clothing material made from mixed material.	IIIC	Quasi-experimental	OR staff wore the scrubs and 21 rooms were sampled	3 different scrub types	21	CFUs in the air	1
10	Tammelin A, Ljungqvist B, Reinmuller B. Single-use surgical clothing system for reduction of airborne bacteria in the operating room. J Hosp Infect. 2013;84(3):245-247.	There is a different protective capacity among scrub types.	IIIC	Experimental, comparison	9 staff, 10 procedures	compared reusable scrubs and single use scrubs	19	CFU counts	1
11	Lidwell OM, Lowbury EJL, Whyte W, Blowers R, Stanley SJ, Lowe D. Airborne contamination of wounds in joint replacement operations: the relationship to sepsis rates. J Hosp Infect. 1983;4(2):111-131.	There was a good correlation between mean colony forming units in air and the number of bacteria recovered from the operative field.	IIA	Quasi-experimental	hospitals	N/A	19	airborne bacterial counts	1
12	Edmiston CE Jr, Sinski S, Seabrook GR, Simons D, Goheen MP. Airborne particulates in the OR environment. AORN J. 1999;69(6):1169-1179.	Several potential nosocomial pathogens (eg, Stuphylococcus uufeus, Stuphylococcus epidefmidis) and other drug -resists n t isolates frequently were recovered from an area adjacent to the surgical field.	IIB	Quasi-experimental	vascular surgical procedures	N/A	28	presence of particulates	1

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13	Bauer J, Kowal K, Tofail SAM, Podbielska H. MRSAresistant textiles. In: Tofail SAM, ed. Biological Interactions with Surface Charge in Biomaterials. Cambridge, England: RSC Publishing;2012:193-207.	Reviews the application of nanomaterials in the textile industry.	VB	Book chapter	N/A	N/A	N/A	N/A	1
14	Sun G, Qian L, Xu X. Antimicrobial and medicaluse textiles. Textile Asia. 2001;32(9):33-35.	The use of DMDMH for the antibacterial finishing of fabrics demonstrated effective biocidal functions to a wide array of microorganisms	IIIB	Non-experimental	fabrics	N/A	9	log reduction of bacteria	1
15	Rajendran R, Radhai R, Kotresh TM, Csiszar E. Development of antimicrobial cotton fabrics using herb loaded nanoparticles. Carbohydr Polym. 2013;91(2):613-617.	The herb encapsulated nanoparticle could act as a biocontrol agent against bacteria	IIIB	Non-experimental	fabrics	N/A	not determined	bacteria present	1
16	Kasuga E, Kawakami Y, Matsumoto T, et al. Bactericidal activities of woven cotton and nonwoven polypropylene fabrics coated with hydroxyapatite-binding silver/titanium dioxide ceramic nanocomposite “Earth-plus.” Int J Nanomed. 2011;6:1937-1943.	Woven cotton and nonwoven polypropylene fabrics were shown to have excellent antibacterial potential. The woven fabric was more bactericidal than the nonwoven fabric.	IIB	Quasi-experimental	Woven cotton fabric and nonwoven polypropylene fabric	N/A	8	Bactericidal activity	1
17	Mariscal A, Lopez-Gigosos RM, Carnero-Varo M, Fernandez-Crehuet J. Antimicrobial effect of medical textiles containing bioactive fibres. Eur J Clin Microbiol Infect Dis. 2011;30(2):227-232.	Bioactive fibres significantly reduce the microorganisms on fabric compared with control	IIB	Quasi-experimental	Fabrics	treated and non-treated fabrics	11	Survival of microorganisms	1
18	Chen-Yu JH, Eberhardt DM, Kincade DH. Antibacterial and laundering properties of AMS and PHMB as finishing agents on fabric for health care workers’ uniforms. Clothing Text Res J. 2007;25(3):258-272.	An antibacterial finish can be an effective way to combat bacterial contamination	IIA	quasi-experimental	fabrics	No treatment (control) with 2 antimicrobial agents	25	reduction in staph levels	1
19	Bearman GM, Rosato A, Elam K, et al. A crossover trial of antimicrobial scrubs to reduce methicillin-resistant Staphylococcus aureus burden on healthcare worker apparel. Infect Control Hosp Epidemiol. 2012;33(3):268-275.	No differences in CFU counts of VRE or gram negative rods by scrub type was found. No difference was observed in the number and and percent of HCWs with positive hand cultures by either scrub type	IA	RCT	HCWs	antimicrobial scrubs compared to traditional scrubs	30	CFU counts	1
20	Noble WC. Dispersal of skin microorganisms. Br J Dermatol. 1975;93(4):477-485.	The most satisfactory way to shield the patient from shedding skin squames is to wear closely woven fabrics	VA	Lit Review	N/A	N/A	N/A	N/A	1
21	Benediktsdottir E, Hambraeus A. Dispersal of nonsporeforming anaerobic bacteria from the skin. J Hyg (Lond). 1982;88(3):487-500.	The highest density of bacteria were found on the the face and upper trunk and the highest yield of dispersal came from the lower trunk.	IIA	quasi-experimental	men and women	dressed and naked	19	bacterial counts	1
22	Wiener-Well Y, Galuty M, Rudensky B, Schlesinger Y, Attias D, Yinnon AM. Nursing and physician attire as possible source of nosocomial infections. Am J Infect Control. 2011;39(7):555-559.	Sixty three percent of the uniforms had at least one pathogenic organism present and 20% of those were antibiotic resistant	IIIA	Non-experimental	hospital staff uniforms	N/A	238	presence of pathogenic organisms	1
23	Krueger CA, Murray CK, Mende K, Guymon CH, Gerlinger TL. The bacterial contamination of surgical scrubs. Am J Orthoped. 2012;41(5):e69-e73.	Concluded that post-call personnel should change into clean scrubs before surgical cases.	IIIA	Observational	scrubs worn by surgical residents	worn and unworn scrubs	300	bacterial species present	1
24	Ibrahimi OA, Sharon V, Eisen DB. Surgical-site infections and routes of bacterial transfer: Which ones are most plausible? Dermatol Surg. 2011;37(12):1709-1720.	One of the potential routes was from skin cells that can be dispersed by the bellows action of clothing with movement and skin cells exit from the openings of the clothing which can contribute to the contamination of the air in the OR.	VA	Lit review	N/A	N/A	N/A	N/A	1
25	May RK, Pomeroy NP, Hers JFP, Winkler KC. Bacterial dispersion from the body surface. In: Hers JFP, Winkler KC, eds. Airborne Transmission and Airborne Infection. Utrecht, The Netherlands: Oosthoek Publishing Company; 1973:426-432.	There are viable particles shed from the body surface	IIIB	Non-experimental	males and females	males vs females	28	rate of bacterial shedding	1

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26	Guideline for preoperative patient skin antisepsis. In: Guidelines for Perioperative Practice. Denver, CO: AORN, Inc; 2015:43-66.	N/A	IVA	Guideline	N/A	N/A	N/A	N/A	1
27	Sivanandan I, Bowker KE, Bannister GC, Soar J. Reducing the risk of surgical site infection: a case controlled study of contamination of theatre clothing. J Periop Pract. 2011;21(2):69-72.	There was no increased bacterial contamination of surgical attire while remaining in the facility and no benefit of covering scrub attire while in other areas of the facility but did not look at the outside environment.	IIIB	case control study	physicians	inside and outside the OR	20	bacterial counts	1
28	Neely AN, Maley MP. Survival of enterococci and staphylococci on hospital fabrics and plastic. J Clin Microbiol. 2000;38(2):724-726.	All microorganisms survived for at least one day and up to 90 days.	IIB	Non-experimental	swatches of materials	N/A	12	Survival times	1
29	Neely AN, Orloff MM. Survival of some medically important fungi on hospital fabrics and plastics. J Clin Microbiol. 2001;39(9):3360-3361.	All microorganisms survived for at least one day and up to 90 days and some up to weeks.	IIIB	Non-experimental	Swatches of materials	N/A	6	survival time	1
30	Treakle AM, Thom KA, Furuno JP, Strauss SM, Harris AD, Perencevich EN. Bacterial contamination of health care workers' white coats. Am J Infect Control. 2009;37(2):101-105.	Cover apparel in inpatient and outpatient areas, intensive care units, administration areas, and the OR was contaminated with Staphylococcus aureus, which included susceptible and resistant isolates. Health care personnel with colonization were more likely to have home-laundered their cover apparel.	IIIB	non-experimental, cross-sectional	Attendees of medical grand rounds who were wearing white coats		149	contaminated with staph or MRSA	1
31	Munoz-Price LS, Arheart KL, Lubarsky DA, Birnbach DJ. Differential laundering practices of white coats and scrubs among health care professionals. Am J Infect Control. 2013;41(6):565-567.	90% of respondents laundered their white coat once a month and 4 people washed their white coat once every 90 days to 12 months	IIIA	survey	physicians	N/A	160	laundering practices	1
32	Munoz-Price LS, Arheart KL, Mills JP, et al. Associations between bacterial contamination of health care workers' hands and contamination of white coats and scrubs. Am J Infect Control. 2012;40(9):e245-e248.	Contamination of provider's hands with pathogens or Acinetobacter baumanniiwas associated	IIIA	quasi-experimental	HCWs in 5 ICUs	N/A	119	bacterial cultures	1
33	Butler DL, Major Y, Bearman G, Edmond MB. Transmission of nosocomial pathogens by white coats: an invitro model. J Hosp Infect. 2010;75(2):137-138.	Data showed that the potential for contaminated white coats to spread MRSA, VRE, and PRA in the healthcare setting does exist. While the inocula that consistently transferred from cloth to skin were large, it nonetheless represents a potential risk to patients and adds support to the UK ban on white coats.	IIIC	Non-experimental	Lab coat swatches	N/A	3	Presence of VRE/MRSA/PRA	1
34	Henderson J. The endangered white coat. Clin Infect Dis. 2010;50(7):1073-1074.	The AMA took the appropriate position in recommending more research before implementing resolutions or guidelines on the removal of white coats or implementing a bare below the elbows policy in the United States.	VB	letter to the editor	N/A	N/A	N/A	N/A	1
35	Kaplan C, Mendiola R, Ndjatou V, Chapnick E, Minkoff H. The role of covering gowns in reducing rates of bacterial contamination of scrub suits. Am J Obstet Gynecol. 2003;188(5):1154-1155.	Wearing cover apparel over scrubs did not reduce rates of contamination.	IIC	quasi-experimental	clinicians	wore cover, did not wear a cover inside and outside	75	bacterial contamination rates	1
36	Loh W, Ng VV, Holton J. Bacterial flora on the white coats of medical students. J Hosp Infect. 2000;45(1):65-68.	Staphylococcus aureus was isolated from 25 of the cover coats. The cuffs and pockets of the coats were the most contaminated.	IIB	quasi-experimental	medical students	N/A	100	CFUs	1
37	Banu A, Anand M, Nagi N. White coats as a vehicle for bacterial dissemination. J Clin Diag Res. 2012;6(8):1381-1384.	Contamination was found on their dominant hand sleeve cuffs and the backs of the cover apparel 10 cm down from the collar.	IIIA	cross-sectional survey and experimental	medical students	N/A	100	organisms isolated	1
38	Amirfeyz R, Tasker A, Ali S, Bowker K, Blom A. Theatre shoes—a link in the common pathway of postoperative wound infection? Ann R Coll Surg Engl. 2007;89(6):605-608.	Demonstrated that 98% of the outdoor shoes were contaminated with coagulase-negative staphylococci, coliform, and bacillus species compared to 56% of the shoes worn only in the surgical suite.	IIB	quasi-experimental	Shoes	indoor and outdoor	120	bacterial species present	1

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39	29 CFR §1910.136: Personal protective equipment: Occupational foot protection. Occupational Safety and Health Administration. https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=9786. Accessed September 19, 2014.	N/A	Reg	Guideline	N/A	N/A	N/A	N/A	1
40	Barr J, Siegel D. Dangers of dermatologic surgery: protect your feet. Dermatol Surg. 2004;30(12 Pt 1):1495-1497.	Sixty percent of the shoes sustained scalpel penetration through the shoe into a simulated foot. Only six materials prevented complete penetration	IIB	quasi-experimental	shoes	compared different types of fabrics/shoes	15	scalpel blade penetration	1
41	Occupational Safety and Health Administration. Toxic and Hazardous Substances: Bloodborne Pathogens, 29 CFR §1910.1030 (2012). Occupational Safety and Health Administration. http://www.osha.gov/pls/oshawewb/owadisp.show_document?p_table=STANDARDS&p_id=10051. Accessed September 19, 2014.	N/A	IVA	Guideline	N/A	N/A	N/A	N/A	1
42	Siegel JD, Rhinehart E, Jackson M, Chiarello L; the Healthcare Infection Control Practices Advisory Committee. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. 2007. http://www.cdc.gov/ncidod/dhqp/pdf/isolation2007.pdf. Accessed September 19, 2014.	N/A	IVA	Guideline	N/A	N/A	N/A	N/A	1
43	White MC, Lynch P. Blood contact and exposures among operating room personnel: a multicenter study. Am J Infect Control. 1993;21(5):243-248.	Blood contact occurred during 864 cases (10.2% case-contact rate) in 1054 health care workers (12.4% person-contact rate). The parenteral exposure (punctures or cuts, mucous membranes, nonintact skin) rate was 2.2% and the cutaneous exposure (intact skin) rate was 10.2%.	IIIA	Non-experimental	seven community and two university hospitals	N/A	1054	blood contact	1
44	Barbosa MH, Graziano KU. Influence of wearing time on efficacy of disposable surgical masks as microbial barrier. Braz J Microbiol. 2006;37(3):216-217.	This study was able to show that disposable surgical masks with 95% BFE are efficient microbial barriers up to wearing time and, therefore, they are indicated for every critical invasive procedure.	IIB	quasi-experimental	surgical masks	no masks vs wearing a mask	8	CFUs	1
45	Kotsanas D, Scott C, Gillespie EE, Korman TM, Stuart RL. What's hanging around your neck? Pathogenic bacteria on identity badges and lanyards. Med J Aust. 2008;188(1):5-8.	Concluded that lanyards should be changed frequently or not be worn. Badges should be clipped on and regularly disinfected.	IIA	cross-sectional study	HCWs	N/A	27 lanyards and 18 badges	presence of bacteria	1
46	Saxena S, Singh T, Agarwal H, Mehta G, Dutta R. Bacterial colonization of rings and cell phones carried by health-care providers: are these mobile bacterial zoos in the hospital? Trop Doct. 2011;41(2):116-118.	Forty-two percent of mobile phones carried by HCWs and 18% carried by the general publicwere found to carry one or more organisms; 82%of the rings worn by HCWs and 36%of those worn by the general publicwere found to be positive for the presence of at least one type ofmicrobe.	IIB	Quasi-experimental	HCWs and general population	Rings and watches of HCWs and general pop	200	Bacterial colonization	1
47	Bartlett GE, Pollard TC, Bowker KE, Bannister GC. Effect of jewelry on surface bacterial counts of operating theatres. J Hosp Infect. 2002;52(1):68-70.	Finger rings, nose and ear piercings increased	IIB	quasi-experimental	HCW jewelry	with and without jewelry	60	CFUs	1
48	Field EA, McGowan P, Pearce PK, Martin MV. Rings and watches: should they be removed prior to operative dental procedures? J Dent. 1996;24(1-2):65-69.	Significantly greater number of bacteria isolated from under rings and watches compared to control groups	IIB	Quasi-experimental	HCW jewelry	with and without jewelry	20	CFUs	1
49	Kelsall NKR, Griggs RKL, Bowker KE, Bannister GC. Should finger rings be removed prior to scrubbing for theatre? J Hosp Infect. 2006;62(4):450-452.	Finger rings increase skin surface bacterial counts. Although hand washing reduces these counts, there are more bacteria under rings than on the adjacent skin or the opposite hand.	IIB	quasi-experimental	surgeons and nurses	ring vs no ring	28	bacterial colony counts	1

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50	Jeans AR, Moore J, Nicol C, Bates C, Read RC. Wristwatch use and hospital-acquired infection. J Hosp Infect. 2010;74(1):16-21.	Staphylococcus aureus was found on the hands of 25% of wristwatch wearers and 22.9% of non-wristwatch wearers in the first study. In the second study, removal of the watch prior to sampling resulted in increased ounts of bacteria on both hands as well as on the watch wrist compared with non-watch wearers	IIIA	Non-experimental	HCWs	Wrist watch wearers and non wrist watch wearers	255	Colony count	1
51	Salisbury DM, Hutfilz P, Treen LM, Bollin GE, Gautam S. The effect of rings on microbial load of health care workers' hands. Am J Infect Control. 1997;25(1):24-27.	A standardized, timed handwashing procedure was effective in decreasing the bioload of HCWs' hands. The effect of rings on the bioload was significant in this study.	IIIB	Non-experimental	HCWs with and without rings	HCWs with and without ring	100	bacterial colony counts	1
52	Khodavaisy S, Nabili M, Davari B, Vahedi M. Evaluation of bacterial and fungal contamination in the health care workers' hands and rings in the intensive care unit. J Prev Med Hyg. 2011;52(4):215-218.	HCWs' hands and their rings were contaminated with various types of microorganisms. Medical and hospital personals must follow careful hand-washing techniques to minimize transmission of disease and should remove rings, watches, and bracelets before washing their hands and entering the ICU.	IIIB	non-research	men and women HCWs in the ICU	N/A	40	contamination of rings and hands	1
53	Arrowsmith VA, Taylor R. Removal of nail polish and finger rings to prevent surgical infection. Cochrane Database Syst Rev. 2012;5:003325.	No RCTs that compared wearing of rings with the removal of rings; and no trials of nail polish versus no nail polish that measured surgical infection rates.	IA	Systematic Review	N/A	N/A	N/A	N/A	1
54	Trick WE, Vernon MO, Hayes RA, et al. Impact of ring wearing on hand contamination and comparison of hand hygiene agents in a hospital. Clin Infect Dis. 2003;36(11):1383-1390.	Ring wearing was associated with a 10 fold higher median skin organism count.	IIA	quasi-experimental	Nurses	compared 3 hand washing methods	66 nurses/282 hand cultures	organisms present	1
55	Stein DT, Pankovich-Wargula AL. The dilemma of the wedding band. Orthopedics. 2009;32(2):86.	The SSI rates were 19 infections out of 987 surgeries in the no ring group and 6 infections out of 1140 surgeries in the ring group	IIIC	Non-experimental	orthopedice surgical cases	ring vs no-ring	2127	SSI rates	1
56	Wood MW, Lund RC, Stevenson KB. Bacterial contamination of stethoscopes with antimicrobial diaphragm covers. Am J Infect Control. 2007;35(4):263-266.	Surface colony counts were significantly lower for uncovered stethoscope diaphragms (mean, 71.4 colonies) compared with covers used #1 week (mean, 246.5 colonies) and those .1 week old (mean, 335.6 colonies). After controlling for type of clinician, frequency of stethoscope cleaning, and method of stethoscope cleaning, only the presence of a stethoscope cover was associated with higher colony counts	IIB	quasi-experimental	clinicians	cover vs no-cover	74	bacterial colony counts	1
57	Bernard L, Kereveur A, Durand D, et al. Bacterial contamination of hospital physicians' stethoscopes. Infect Control Hosp Epidemiol. 1999;20(9):626-628.	Stethoscopes are an infection control problem because they are used for prolonged periods, are infrequently cleaned	IIB	quasi-experimental	med students, physicians, interns	N/A	355	CFUs	1
58	Russell A, Secrest J, Schreeder C. Stethoscopes as a source of hospital-acquired methicillin-resistant Staphylococcus aureus. J PeriAnesth Nurs. 2012;27(2):82-87.	Suggest that current disinfection guidelines are effective in preventing MRSA colonization on stethoscopes in this setting.	IIA	quasi-experimental, pre-test/post-test	hospital clinicians' stethoscopes	Before and after cleaning	141	MRSA	1
59	Mehta AK, Halvosa JS, Gould CV, Steinberg JP. Efficacy of alcohol-based hand rubs in the disinfection of stethoscopes. Infect Control Hosp Epidemiol. 2010;31(8):870-872.	Confirmed that stethoscope contamination with bacterial pathogens, including S. aureus, is common. A single cleaning of stethoscopes with alcohol-based hand rub reduced bacterial contamination of stethoscopes by approximately 90% and was 54% successful in eradicating S. aureus.	IIB	quasi-experimental	med students, residents, physicians stethoscopes	before and after cleaning	84	CFUs	1
60	Denholm JT, Levine A, Kerridge IH, Ashhurst-Smith C, Ferguson J, D'Este C. A microbiological survey of stethoscopes in Australian teaching hospitals: potential for nosocomial infection? Aust Infect Control. 2005;10(3):79.	This study suggests that even regular cleaning of stethoscopes may be insufficient to prevent colonisation with potentially pathogenic organisms, and that patients at high-risk for nosocomial infection should only be examined with stethoscopes that are restricted to single-patient use.	IIA	quasi-experimental	doctors and med students stethoscopes	personal and ward based	155	CFU count and organism	1

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61	Waghorn DJ, Wan WY, Greaves C, Whittome N, Bosley HC, Cantrill S. Stethoscopes: a study of contamination and the effectiveness of disinfection procedures. Br J Infect Control. 2005;6(1):15-17.	Disinfect stethoscopes before each use	IIB	quasi-experimental	stethoscopes of medical staff	N/A	4	CFU	1
62	Gopinath KG, Stanley S, Mathai E, Chandy GM. Pagers and stethoscopes as vehicles of potential nosocomial pathogens in a tertiary care hospital in a developing country. Trop Doct. 2011;41(1):43-45.	Findings confirm the need for protocols to prevent transmission of infection through inanimate objects	IIIB	prospective	physician pagers and stethoscopes	N/A	100	types of pathogens	1
63	Muniz J, Sethi RK, Zaghi J, Ziniel SI, Sandora TJ. Predictors of stethoscope disinfection among pediatric health care providers. Am J Infect Control. 2012;40(10):922-925.	Only a minority of pediatric health care providers reported disinfecting their stethoscopes after every use. Increasing access to disinfection materials and visual reminders in health care facilities may improve stethoscope disinfection practices.	IIIA	Non-experimental	nurses, NPs and Physicians	N/A	1400	Stethoscope disinfection practices (survey)	1
64	Hyder O. Cross-sectional study of frequency and factors associated with stethoscope cleaning among medical practitioners in Pakistan. East Mediterr Health J. 2012;18(7):707-711.	Future research for improving stethoscope cleaning practices should explore educational interventions aimed at health care professionals.	IIIA	Non-experimental	physicians and med students	N/A	408	frequency and methods of cleaning stethoscope	1
65	Uneke CJ, Ogbonna A, Oyibo PG, Onu CM. Bacterial contamination of stethoscopes used by health workers: public health implications. J Infect Develop Countries. 2010;4(7):436-441.	Strict adherence to stethoscope disinfection practices by health workers can minimize cross-contamination and ensure improved patient safety in hospital environments.	IIIA	Non-experimental	HCW stethoscopes	N/A	107	bacteria present	1
66	Uneke CJ, Ogbonna A, Oyibo PG, Ekuma U. Bacteriological assessment of stethoscopes used by medical students in Nigeria: implications for nosocomial infection control. World Health Popul. 2008;10(4):53-61.	Strict adherence to stethoscope disinfection practices by health workers can minimize cross-contamination and ensure improved patient safety in hospital environments.	IIIB	Non-experimental	HCWs	N/A	107	bacterial contamination	1
67	Bhatta DR, Gokhale S, Ansari MT, et al. Stethoscopes: a possible mode for transmission of nosocomial pathogens. J Clin Diag Res. 2012;5(6):1173-1176.	Confirmed that, majority of the stethoscopes used by health care workers are contaminated with pathogenic as well as non-pathogenic bacterial agents and they may transmit nosocomial pathogens.	IIIB	Non-experimental	HCWs	N/A	58	bacterial cultures	1
68	Campos-Murguia A, Leon-Lara X, Munoz JM, Macias AE, Alvarez JA. Stethoscopes as potential intrahospital carriers of pathogenic microorganisms. Am J Infect Control. 2013;42(1):82-83.	Emphasized that stethoscopes could definitely be significant contributors to MRSA infections and facilities should insist that stethoscopes be routinely cleaned with antiseptics such as 70% alcohol, chlorohexidine or triclosan before and after they are used on each patient.	IIIB	cross-sectional	stethoscopes	N/A	112	microbial growth and organism	1
69	Worster AP, Srigley JA, Main CL. Examination of staphylococcal stethoscope contamination in the emergency department (pilot) study (EXSSCITED pilot study). Can J Emerg Med. 2011;13(4):239-244.	This study indicates that although stethoscope contamination rates in these EDs are high, the prevalence of S. aureus or MRSA on stethoscopes is low.	IIIB		ED staff	N/A	100	Staph and MRSA presence	2
69	Worster AP, Srigley JA, Main CL. Examination of staphylococcal stethoscope contamination in the emergency department (pilot) study (EXSSCITED pilot study). Can J Emerg Med. 2011;13(4):239-244.	This study indicates that although stethoscope contamination rates in these EDs are high, the prevalence of S. aureus or MRSA on stethoscopes is low.	IIIB	Non-experimental	ED staff members' stethoscopes	N/A	100	Presence of staph aureus or MRSA	1
70	Williams C, Davis DL. Methicillin-resistant Staphylococcus aureus fomite survival. Clin Lab Sci. 2009;22(1):34-38.	Previous studies showed fomite survival of MRSA for about two weeks using contact plate sampling and MRSA on 7.4% of stethoscopes. We showed longer MRSA survival times by wet swab sampling and a higher stethoscope contamination rate. As expected, higher organism loads survived longer.	IIIB	Non-experimental	Nursing and resp therapist's stethoscopes	N/A	33	MRSA survival rates	1
71	Mitchell A, Dealwis N, Collins J, et al. Stethoscope or "staphoscope"? Infection by auscultation. J Hosp Infect. 2010;76(3):278-279.	Remind clinicians of the evidence that stethoscopes, an indispensable diagnostic tool, may also act as a vector for disease transmission. Stethoscopes should therefore be cleaned, along with hands, after each patient contact.	IIIB	Non-experimental	HCW stethoscopes	N/A	50	Bacteria	1

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Reference #	Citation	Conclusion (s)	Consensus Score	Evidence Type	Population	Comparison	Sample size (n)	Outcome Measure	REC #
72	Milam MW, Hall M, Pringle T, Buchanan K. Bacterial contamination of fabric stethoscope covers: the velveteen rabbit of health care? Infect Control Hosp Epidemiol. 2001;22(10):653-655.	Fabric stethoscope covers represent a potential infection	IIIC	Non-experimental	HCWs	N/A	203 surveys and 22 stethoscope covers	Bacteria presence	1
73	Guideline for environmental cleaning. In: Guidelines for Perioperative Practice. Denver, CO: AORN, Inc; 2015:9-30.	N/A	IVA	Guideline	N/A	N/A	N/A	N/A	1
74	Feldman J, Feldman J, Feldman M. Women doctors' purses as an unrecognized fomite. Del Med J. 2012;84(9):277-280.	There is a potential for doctor's purses to be vectors for microorganisms	IIA	case-control	doctor's and non-doctor's purses	doctor vs non-doctor purses	27	bacterial colonization	1
75	Lankford MG, Collins S, Youngberg L, Rooney DM, Warren JR, Noskin GA. Assessment of materials commonly utilized in health care: implications for bacterial survival and transmission. Am J Infect Control. 2006;34(5):258-263.	Bacteria commonly encountered in hospitals are capable of prolonged survival and may promote cross transmission. Selection of surfaces for health care environments should include product application and complexity of manufacturers' recommendations for disinfection. Recovery of organisms on surfaces and hands emphasizes importance of hand hygiene compliance prior to patient contact.	IIIB	Non-experimental	hospital surfaces	N/A	14	VRE and PSRE presence	1
76	Koca O, Altoparlak U, Ayyildiz A, Kaynar H. Persistence of nosocomial pathogens on various fabrics. Eurasian J Med. 2012;44(1):28-31.	Found bacteria and fungi survived for days to months on commonly used hospital fabrics.	IIIA	Non-experimental	material swatches	N/A	720	Bacterial and fungal survival rates	1
77	Huang R, Mehta S, Weed D, Price CS. Methicillinresistant Staphylococcus aureus survival on hospital fomites. Infect Control Hosp Epidemiol. 2006;27(11):1267-1269.	MRSA survived for 11 days on a plastic patient chart, more than 12 days on a laminated tabletop, and 9 days on a cloth curtain.	IIIC	Non-experimental	3 types of surfaces	N/A	3	MRSA/MSSA survival	1
78	Malik YS, Allwood PB, Hedberg CW, Goyal SM. Disinfection of fabrics and carpets artificially contaminated with calicivirus: relevance in institutional and healthcare centres. J Hosp Infect. 2006;63(2):205-210.	Metricide, an activated dialdehyde-based product, was found to be the most effective disinfectant on all types of fabric and carpet, inactivating more than 99.99% of the virus in 1e10 min.	IIIB	Non-experimental	fabrics	N/A	5	virus reduction	1
79	McNeil E. Dissemination of microorganisms by fabrics and leather. Dev Ind Microbiol. 1964;5:30-35.	Concluded that survival of microorganisms of fabrics and leather has been demonstrated, more research is needed	VB	Lit review	N/A	N/A	N/A	N/A	1
80	Datta P, Rani H, Chander J, Gupta V. Bacterial contamination of mobile phones of health care workers. Indian J Med Microbiol. 2009;27(3):279-281.	Concluded that simple measures such as regular cleaning of cell phones and other hand held electronic devices with alcohol and increasing hand hygiene can help to decrease the risk of HAIs.	IB	RCT	HCW cell phones	N/A	200	Organisms present	1
81	Kilic IH, Ozaslan M, Karagoz ID, Zer Y, Davutoglu V. The microbial colonisation of mobile phone used by healthcare staffs. Pak J Biol Sci. 2009;12(11):882-884.	Bacteria were colonized on mobile phones and mobile phones can become a reservoir for microoranisms that contribute to nosocomial infections	IIA	Quasi-experimental	HCW stethoscopes	N/A	106	bacterial growth	1
82	Albrecht UV, von Jan U, Sedlacek L, Groos S, Suerbaum S, Vonberg RP. Standardized, app-based disinfection of iPads in a clinical and nonclinical setting: comparative analysis. J Med Internet Res. 2013;15(8):e176.	Standardized surface disinfection with isopropanol wipes as guided by the application significantly reduces this microbial load. When performed regularly, the disinfection process helps with maintaining a low germ count during use.	IIA	quasi-experimental	nursing staff ipads	N/A	10	microorganisms present	1
83	Al-Abdalall AH. Isolation and identification of microbes associated with mobile phones in Dammam in eastern Saudi Arabia. J Family Community Med. 2010;17(1):11-14.	Showed that all mobile phones under consideration were infected by several microbes, most of which belonged to the natural flora of the human body as well as airborne fungi and soil.	IIIA	Non-experimental	cell phones	N/A	202	Bacteria types isolated	1
84	Brady RR, Chitnis S, Stewart RW, Graham C, Yalamarthi S, Morris K. NHS connecting for health: healthcare professionals, mobile technology, and infection control. Telemed J E-Health. 2012;18(4):289-291.	Simple cleaning interventions can reduce surface bioburden of mobile phones	IIIB	Non-experimental	HCWs	N/A	87	Presence of gram positive cocci and staph aureus	1

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Reference #	Citation	Conclusion (s)	Consensus Score	Evidence Type	Population	Comparison	Sample size (n)	Outcome Measure	REC #
85	Tekerekoglu MS, Duman Y, Serindag A, et al. Do mobile phones of patients, companions and visitors carry multidrug-resistant hospital pathogens? Am J Infect Control. 2011;39(5):379-381.	Findings suggest that mobile phones of patients, patients' companions, and visitors represent higher risk for nosocomial pathogen colonization than those of HCWs.	IIIA	cross-sectional, non-research	patients, patients' companions, visitors, and HCW cell phones	compared groups	200	type and resistance of bacteria present	1
86	Sadat-Ali M, Al-Omran AK, Azam Q, et al. Bacterial flora on cell phones of health care providers in a teaching institution. Am J Infect Control. 2010;38(5):404-405.	One hundred nine (43.6%) HCPcarried infective organisms on their cell phones.It is recommended that cell phones be cleaned regularly.	IIIA	Cross-sectional, non-research	HCP stethoscopes	N/A	288	infectious organisms	1
87	Akinyemi KO, Atapu AD, Adetona OO, Coker AO. The potential role of mobile phones in the spread of bacterial infections. J Infect Dev Countries. 2009;3(8):628-632.	Mobile phones may serve as vehicles of transmission of both hospital and community-acquired bacterial diseases. Strict adherence to infection control, such as hand washing, is advocated.	IIIB	Non-experimental	HCW stethoscopes	N/A	400	bacterial growth	1
88	Basol R, Beckel J, Gilsdorf-Gracie J, et al. You missed a spot! Disinfecting shared mobile phones. Nurs Manage. 2013;44(7):16-18.	It was determined that the cleaning of mobile phones by healthcare workers is an effective way to eliminate bacteria.	IIIC	Non-experimental	RN stethoscopes in acute care units	N/A	66	bacterial cultures	1
89	White S, Topping A, Humphreys P, Rout S, Williamson H. The cross-contamination potential of mobile telephones. J Res Nurs. 2012;17(6):582-595.	Concluded that cleaning mobile phones with 70% isopropyl alcohol in combination with strict hand washing and other infection control measures is needed for the prevention of infection with mobile phone use.	IIIB	Non-experimental	mobile phones or OR students	N/A	16	Bacteria presence	1
90	Ustun C, Cihangiroglu M. Health care workers' mobile phones: a potential cause of microbial cross-contamination between hospitals and community. J Occup Environ Hyg. 2012;9(9):538-542.	Cell phones are vectors for microorganisms which could contribute to HAIs	IIIB	Non-experimental	HCW mobile phones	N/A	183	Bacteria present	1
91	Singh A, Purohit B. Mobile phones in hospital settings: a serious threat to infection. Occup Health Saf. 2012;81(3):42-44.	Recommend that patients and doctors be educated by clear guidelines and advised on inpatient mobile phone etiquette, regular cleaning of phones, hand hygiene, and advised not to share phones or related equipment with other inpatients in order to prevent transmission of bacteria.	VA	Lit review	N/A	N/A	N/A	N/A	1
92	Gerba CP, Kennedy D. Enteric virus survival during household laundering and impact of disinfection with sodium hypochlorite. Appl Environ Microbiol. 2007;73(14):4425-4428.	Concluded that common laundering practices did not eliminate enteric and respiratory viruses from clothing.	IIA	quasi-experimental	cotton swatches laundered in a household laundry	N/A	4	virus concentration after washing	2
93	Lis DO, Pacha JZ, Idzik D. Methicillin resistance of airborne coagulase-negative staphylococci in homes of persons having contact with a hospital environment. Am J Infect Control. 2009;37(3):177-182.	There is a great difference in airborne MRSA strains in the homes of inhabitants who had contact with a hospital environment.	IIIB	Non-experimental	homes in which inhabitants have had contact with the hospital environment.	compared to a home without contact with the hospital environment	13	Presence of airborne bacteria	2
94	Twomey CL, Beitz H Johnson BJ. Bacterial contamination of surgical scrubs and laundering mechanisms: infection control implications. Infection Control Today. http://www.arta1.com/cms/uploads/Bacterial%20Contamination%20of%20Surgical%20Scrubs%20and%20Laundering%20Mechanisms_%20Infection%20Control%20Implications.pdf. Posted October 19, 2009. Accessed on September 23, 2014.	Home laundering is not as effective as facility or 3rd party for decontaminating scrub attire	IIIB	Non-experimental	Surgical scrubs	Compared Single use, reusable, facility laundered, 3rd party laundered, and home laundered	20	CFUs	2
95	Wright SN, Gerry JS, Busowski MT, et al. Gordonia bronchialis sternal wound infection in 3 patients following open heart surgery: intraoperative transmission from a healthcare worker. Infect Control Hosp Epidemiol. 2012;33(12):1238-1241.	Concluded that the washing machine was the likely reservoir. Home laundering may not reliably kill all pathogens as pathogens may survive in the form of biofilms	VA	case study/non-research	CABG patients	N/A	3	Microbiological sampling	2

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Reference #	Citation	Conclusion (s)	Consensus Score	Evidence Type	Population	Comparison	Sample size (n)	Outcome Measure	REC #
96	Fijan S, Turk SS. Hospital textiles, are they a possible vehicle for healthcare-associated infections? Int J Environ Res Public Health. 2012;9(9):3330-3343.	More research should be conducted in the area of the adherence of microorganisms onto textiles and the likelihood of shedding from the textiles during use thus making them airborne.	VA	Lit Review	N/A	N/A	N/A	N/A	2
97	Halliwell C. Nurses' uniforms: off the radar. A review of guidelines and laundering practices. Healthc Infect. 2012;17(1):18-24.	Concluded that nurses' uniforms could be considered "biological hazards" and perhaps legislation should address a requirement for employers to provide uniforms and launder the uniforms for HCWs.	VA	Literature Review	N/A	N/A	N/A	N/A	2
98	Nguyen DB, Gupta N, Abou-Daoud A, et al. A polymicrobial outbreak of surgical site infections following cardiac surgery at a community hospital in Florida, 2011-2012. Am J Infect Control. 2014;42(4):432-435.	Showed the importance of adhering to personal and environmental control standards.	VB	Case report	community hospital	N/A	22	SSI	2
99	Orr KE, Holliday MG, Jones AL, Robson I, Perry JD. Survival of enterococci during hospital laundry processing. J Hosp Infect. 2002;50(2):133-139.	The organism was successfully reduced with a water temperature at 150° for 10 mins and at 150° for 3 mins	IIA	Quasi experimental	Laundry facilities	Compared different laundries using different controls	10	CFUs	2
100	Sasahara T, Hayashi S, Morisawa Y, Sakihama T, Yoshimura A, Hirai Y. Bacillus cereus bacteremia outbreak due to contaminated hospital linens. Eur J Clin Microbiol Infect Dis. 2011;30(2):219-226.	Found that the hospital laundry and washing machine were highly contaminated. The b. cereus organism is resistant to heat and alcohol and laundry must be washed at 176°F. for over 10 minutes and health care workers should wash hands with soap after handling the laundry.	VB	Non-research	Hospital laundry	N/A	Patients with Bacillus bacteremia		2
101	Al-Benna S. Laundering of theatre scrubs at home. J Periop Pract. 2010;20(11):392-396.	There was little scientific evidence that facility laundering was better than home laundering but guidelines for home laundering should be established and followed.	VA	literature review	N/A	N/A	N/A	N/A	2
102	Belkin NL. Masks, barriers, laundering, and gloving: where is the evidence? AORN J. 2006;84(4):655-657.	Those facilities that have permitted their OR personnel to launder their apparel at home would have ceased doing so long ago had they found any evidence that the practice was detrimental to either the patients' welfare or the home environment of their staff members.	VB	expert opinion	N/A	N/A	N/A	N/A	2
103	Belkin NL. Laundry day: processing linens, textiles and uniforms. Health Facil Manage. 2010;23(3):36-38.	Preventing HAIs among staff and patients is a top priority at all hospitals. Proper cleaning and handling of laundry is easily as important as the more widely discussed methods of HAI control.	VC	clinical experience	N/A	N/A	N/A	N/A	3
104	Heinzel M, Kyas A, Weide M, Breves R, Bockmühl DP. Evaluation of the virucidal performance of domestic laundry procedures. Int J Hyg Environ Health. 2010;213(5):334-337.	Showed that conventional household washing detergents have a full virucidal efficiency at 40 ◦C also against non-enveloped surrogate viruses.	IIIB	Non-experimental	pre-washed terry towels	N/A	30	virus load	2
105	Lakdawala N, Pham J, Shah M, Holton J. Effectiveness of low-temperature domestic laundry on the decontamination of healthcare workers' uniforms. Infect Control Hosp Epidemiol. 2011;32(11):1103-1108.	Concluded that at 140°F wash for 10 mins was sufficient to decontaminate hospital uniforms and reduce the bacterial load by at least a 7-log reduction	IIIA	Non-experimental	Hospital nurses uniforms	N/A	10	presence of viable organisms	2
106	Nordstrom JM, Reynolds KA, Gerba CP. Comparison of bacteria on new, disposable, laundered, and unlaundered hospital scrubs. Am J Infect Control. 2012;40(6):539-543.	Home laundered scrubs had a significantly higher total bacterial count than facility laundered and found no significant difference in bacterial counts between hospital laundered, unused, or new disposable scrubs.	IIIA	Non-experimental	Scrubs	Compared unwashed, hospital laundered, new cloth, and new disposable scrubs	29	number and identity of bacteria present	2
107	Patel SN, Murray-Leonard J, Wilson AP. Laundering of hospital staff uniforms at home. J Hosp Infect. 2006;62(1):89-93.	Concluded that even though a 104°F washing cycle did not remove S. aureus; adding sequential tumble drying or ironing did reduce the bacteria to an undetectable rate. Washing at 140°F produced a greater reduction in total viable organism count compared to the140°F wash	IIA	Quasi-experimental	hospital laundered swatches from scrubs	2 laundry temperatures and uninoculated swatches	10	Total viable bacterial count	2

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108	Wilson JA, Loveday HP, Hoffman PN, Pratt RJ. Uniform: an evidence review of the microbiological significance of uniforms and uniform policy in the prevention and control of healthcare-associated infections. Report to the Department of Health (England). J Hosp Infect. 2007;66(4):301-307.	Concluded that there was no strong evidence that home laundering of uniforms is inferior to industrial laundry processes.	VA	Evidence review	N/A	N/A	N/A	N/A	2
109	Perry C, Marshall R, Jones E. Bacterial contamination of uniforms. J Hosp Infect. 2001;48(3):238-241.	Uniforms became progressively more contaminated the longer they were worn	IIIB	Non-experimental	Nurses' uniforms	N/A	57	Presence of VRE, C-Diff and MRSA	2
110	Accreditation Standards for Processing Reusable Textiles for Use in Healthcare Facilities. 2011 ed. Frankfort, IL: Healthcare Laundry Accreditation Council; 2011.	N/A	IVC		N/A	N/A	N/A	N/A	2
111	Protecting Workers' Families—DHHS(NIOSH) Pub No. 2002-113. National Institutes for Occupational Safety and Health. http://www.cdc.gov/niosh/docs/2002-113/2002-113.html. Accessed September 19, 2014.	N/A	VB	Whitepaper, expert opinion	N/A	N/A	N/A	N/A	
112	ANSI/AAMI. ST65 2008/(R) 2013: Processing of Reusable Surgical textiles for Use in Health Care Facilities. 2013. Arlington, VA: Association for the Advancement of Medical Instrumentation; 2013.	N/A	IVC	Guideline	N/A	N/A	N/A	N/A	2
113	Callaghan I. Bacterial contamination of nurses' uniforms: a study. Nurs Stand. 1998;13(1):37-42.	End of a shift the uniforms were highly contaminated with potentially pathogenic microorganisms.	IIIB	Non-experimental	Nurses	N/A	88	level of bacterial contamination	2
114	29 CFR §1910.132: General requirements. Occupational Safety and Health Administration. https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9777&p_table=STANDARDS. Accessed September 19, 2014.	N/A	Reg	Guideline	N/A	N/A	N/A	N/A	2
115	Summers MM, Lynch PF, Black T. Hair as a reservoir of staphylococci. J Clin Path. 1965;18(13):13-15.	In hospital staff and in-patients, the staphylococci were highly resistant to antibiotics, and phage types usually classified as 'hospital staphylococci' predominated. There were more staphylococcal post-operative wound infections in hair carriers than in non-carriers, and in three cases the Staph. aureus was of the same phage type as that isolated pre-operatively from the hair.	IIB	quasi-experimental	patients and staff	N/A	686	presence of staph aureus	3
116	Dineen P, Drusin L. Epidemics of postoperative wound infections associated with hair carriers. Lancet. 1973;2(7839):1157-1159.	important to reduce the amount of shedding from the hair and scalp in the operating-theatre, and this is best achieved by covering the hair (preferably with a hood) so that the hair and scalp are not exposed during the operation.	VA	case report	hospital patients	N/A	2 outbreaks	organisms present on hair	3
117	Mastro TD, Farley TA, Elliott JA, et al. An outbreak of surgical-wound infections due to group A streptococcus carried on the scalp. N Engl J Med. 1990;323(14):968-972.	all OR personnel should be evaluated for staph aureus carriage	IIIB	case report and quasi-experimental	18 OR rooms and 109 team members	N/A	127	bacterial strains	3
118	McHugh SM, Corrigan MA, Hill AD, Humphreys H. Surgical attire, practices and their perception in the prevention of surgical site infection. Surgeon. 2014;12(1):47-52.	Further consideration and better trials are required to determine the impact of different theatre clothing on SSI rates.	VA	lit review	N/A	N/A	N/A	N/A	3
119	Eisen DB. Surgeon's garb and infection control: what's the evidence? J Am Acad Dermatol. 2011; 64(5):960.e1-960.e20.	Although much has been written on this topic, definitive evidence to support the use of most surgical garb appears to be lacking and its efficacy in the outpatient dermatology operatory, speculative.	VA	lit review	N/A	N/A	N/A	N/A	3
120	Mase K, Hasegawa T, Horii T, et al. Firm adherence of Staphylococcus aureus and Staphylococcus epidermidis to human hair and effect of detergent treatment. Microbiol Immunol. 2000;44(8):653-656.	Results suggested that hair could be a source of bacterial contamination and indicated the importance of decontamination of hair.	IIB	quasi-experimental	human hair	N/A	5	Adherence of staph	3

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121	McLure HA, Mannam M, Talboys CA, Azadian BS, Yentis SM. The effect of facial hair and sex on the dispersal of bacteria below a masked subject. Anaesthesia. 2000;55(2):173-176.	Wiggling of the face mask significantly increased bacterial shedding.	IIIC	Quasi-experimental	Male and female subjects	males vs females	20	Bacteria levels	3
122	Owers KL, James E, Bannister GC. Source of bacterial shedding in laminar flow theatres. J Hosp Infect.2004;58(3):230-232.	Swabs were cultured and the growths were compared statistically. Significantly more colonies were cultured from swabs taken fromthe theatre staff's ears (PZ0.047, Freidman's test) compared with the other two facial areas studied. These data support the use of exhaust helmets in arthroplasty surgery, or at least mandatory coverage of the ears with theatre hats for scrub staff.	IIIC	Non-experimental	Or staff	N/A	20	Number of bacterial colonies present	3
123	Occupational exposure to bloodborne pathogens. OSHA Final rule. Fed Regist. 1991;56(235):64004-64182.	N/A	Reg	Guideline	N/A	N/A	N/A	N/A	2