Please find below the results of your literature search request.

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**Literature search results**

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**Search details**

Cleaning theatre footwear. Is there any research on who should be doing the cleaning?

**Resources searched**

NHS Evidence; TRIP Database; Cochrane Library; AMED; BNI; CINAHL; EMBASE; HMIC; MEDLINE; PsychINFO; Google Scholar

*Database search terms*: footwear; shoe*; clog*; boot*; overshoe*; slipper*; SHOES; PROTECTIVE CLOTHING; theatre; theatre; OPERATING ROOMS; “operating room”; “operating department”; clean*; wash*; disinfect*; scrub*; steril*; STERILIZATION AND DISINFECTION; INFECTION CONTROL; asepsis; aseptic; ASEPSIS

*Google search string*: (footwear OR shoes OR boots OR clogs OR overshoes) (health OR hospital) (clean OR cleaning OR disinfection OR washing OR sterilisation OR sterilization) (theatre OR theater OR theaters OR theatres OR "operating department" OR "operating room")

**Summary**

There is some guidance and quite a lot of research about theatre footwear or maintaining a sterile operating theatre; however although it says that footwear ought to be cleaned or disposed of, it doesn’t really specify who should do the actual cleaning. However I have run a search in Google Advanced Search, and these results include policies from other Trusts and organisations which may outline cleaning responsibilities.

**Guidelines**

**Association of Anaesthetists of GB and Ireland**

Infection control in anaesthesia 2008

Special footwear should be worn in the operating department and cleaned if contaminated or after every use. Trusts should ensure that a system for cleaning theatre footwear is in
place in each theatre suite. Plastic overshoes may increase bacterial contamination of floors [13] and, in addition, hands become contaminated when overshoes are put on or removed. Their use is not recommended.

Hospital Infection Society
Behaviours and rituals in the operating theatre 2004
All footwear should be cleaned after every use, and procedures should be in place to ensure that this is undertaken at the end of every session.

Royal College of Nursing
Guidance on uniforms and work wear 2009

Evidence-based reviews
None found.

Published research
- 1. Surgeon's garb and infection control: What's the evidence?
  Author(s): Eisen D.B.
  Citation: Journal of the American Academy of Dermatology, May 2011, vol./is. 64/5(960.e1-960.e20), 0190-9622 (May 2011)
  Publication Date: May 2011
  Abstract: Surgical site infections are an important complication resulting from surgery. Before the 20th century a significant number of surgeries resulted in death from sepsis. One of the rituals resulting from efforts to reduce infection is the donning of surgical garb. A large body of literature has developed on the efficacy of these specialized garments. The available evidence for the efficacy of each individual garb at reducing surgical site infections will be explored. The relevance of this evidence to the outpatient dermatologic surgery setting will also be discussed. 2010 by the American Academy of Dermatology, Inc.
  Source: EMBASE

- 2. Theatre etiquette, sterile technique and surgical site preparation
  Author(s): Manley K., McNamara I.
  Citation: Surgery, February 2011, vol./is. 29/2(55-58), 0263-9319 (February 2011)
  Publication Date: February 2011
  Abstract: Human error and surgical site infections (SSIs) pose a considerable threat to the surgical patient. Much research has been directed at decreasing the incidence of both staff error and SSIs within the operating theatre to reduce patient morbidity and mortality. This article examines the techniques recommended for the creation of a safe operating environment, and the evidence behind the strategies for reducing the risk of SSI by thorough patient preparation, the use of good sterile technique and surgical site preparation. 2010 Elsevier Ltd. All rights reserved.
  Source: EMBASE
  Full Text: Available in fulltext at Elsevier; Note: Click link. At ScienceDirect webpage for journal, click Login, then Athens Login and enter your NHS Athens username/password to access full-text articles.

- 3. Infection control in theatre
  Author(s): Hold A.
  Citation: Southern African Journal of Anaesthesia and Analgesia, January 2011, vol./is. 17/1(56-64), 1027-9148 (January-February 2011)
  Publication Date: January 2011
  Abstract: Our primary role as anaesthesiologists is to give effective and safe anaesthetics.
The anaesthetic mortality rates have decreased from approximately seven per 100 anaesthetics administered in the early part of the last century, to two deaths per 10 000 in the 1980s, to about one death per 200 000-300 000 today. A single anaesthetist would have to give anaesthetics for a very long time to make a difference either way.

Source: EMBASE

4. **Cleanliness in the operating room**

**Author(s):** Suzuki T.

**Citation:** Japanese Journal of Anesthesiology, May 2010, vol./is. 59/5(556-563), 0021-4892 (May 2010)

**Publication Date:** May 2010

**Abstract:** With regard to recent findings in the cleanliness of the operating room, concerning handwashing and performing operations, the traditional method of excessive scrubbing using a brush is not effective, and handwashing using only an alcohol-containing antiseptic hand rub (rubbing method) has become common practice. Use of a brush has already been abolished in some medical institutions. In addition, sterilized water used for handwashing when performing operations has no scientific basis and use of tap water is considered sufficient. Furthermore, the concept of operating room zoning has also undergone a dramatic change. It was discovered that a layout focusing on work efficiency is more desirable than the one that follows an excessively rigid zoning pattern. One-footwear System not requiring change of shoes also has various advantages in improving the efficiency of the operation room, and this is thought to become commonplace in the future.

Source: EMBASE

5. **[Cleanliness in the operating room]**

**Author(s):** Suzuki T

**Citation:** Masui - Japanese Journal of Anesthesiology, May 2010, vol./is. 59/5(556-63), 0021-4892;0021-4892 (2010 May)

**Publication Date:** May 2010

**Abstract:** With regard to recent findings in the cleanliness of the operating room, concerning handwashing and performing operations, the traditional method of excessive scrubbing using a brush is not effective, and handwashing using only an alcohol-containing antiseptic hand rub (rubbing method) has become common practice. Use of a brush has already been abolished in some medical institutions. In addition, sterilized water used for handwashing when performing operations has no scientific basis and use of tap water is considered sufficient. Furthermore, the concept of operating room zoning has also undergone a dramatic change. It was discovered that a layout focusing on work efficiency is more desirable than the one that follows an excessively rigid zoning pattern. One-footwear System not requiring change of shoes also has various advantages in improving the efficiency of the operation room, and this is thought to become commonplace in the future.

Source: MEDLINE

6. **Should clothing and shoes be a priority in surgery's battle against infections?**

**Citation:** Same-Day Surgery, 01 December 2008, vol./is. 32/12(125-127), 01905066

**Publication Date:** 01 December 2008

**Abstract:** Recent infection control changes at European hospital have raised questions about whether infection control procedures in the United States are sufficient. -Use shoe covers, or have dedicated shoes, when there is opportunity for shoes to be contaminated by blood. -Focus on areas proven to reduce infections, such as flu shots and hand hygiene.

Source: CINAHL

**Full Text:**
Available in fulltext at EBSCO Host

7. **Microbial load and decontamination in the theatre suite**

**Author(s):** Cairns S.A., Hegarty E.T.

**Citation:** Annals of the Royal College of Surgeons of England, November 2008, vol./is.
8. Infection control and prevention in perioperative practice

Author(s): Williams M.

Citation: Journal of perioperative practice, July 2008, vol./is. 18/7(274-278), 1750-4589 (Jul 2008)

Publication Date: July 2008

Abstract: The personal and financial consequences of avoidable infection are enormous in personal and global terms (DH 2003, Stone, Larson & Kawar 2002). Patients expect to be treated and cared for in clean conditions, and not be exposed to the risks of acquiring an infection by poor practice on the part of healthcare workers (DH 2005, Health Care Commission 2005). Infection control and prevention in perioperative settings assumes an even greater significance because of the vulnerability of patients who are already ill or injured, and because surgery, anaesthesia and immediate postoperative recovery may expose them to invasive procedures, allowing more portals of entry for infection. There is ample evidence, widely available, to support best practice in all healthcare settings. The methods are cheap, easy to apply and very effective (Wright 2004, Pratt et al 2007). This article will examine a range of evidence applicable to perioperative infection control and prevention, including an assessment of current practice and how it may be improved, with a particular emphasis on surgical site infection associated with Meticillin Resistant Staphylococcus Aureus (MRSA) and Clostridium Difficile (C.diff).

Source: EMBASE

Full Text: Available in fulltext at National Library of Medicine
Available in print at Lincoln County Hospital Professional Library

9. Protection provided by clothing and textiles against potential hazards in the operating theatre

Author(s): Laing R.M.

Citation: International journal of occupational safety and ergonomics : JOSE, 2008, vol./is. 14/1(107-115), 1080-3548 (2008)

Publication Date: 2008

Abstract: The typical hospital and operating theatre present multiple potential hazards to both workers and patients, and protection against some of these is provided through use of various forms of clothing and textiles. While many standards exist for determining the performance of fabrics, most tests are conducted under laboratory conditions and against a single hazard. This paper provides an overview of selected developments in the principal properties of fabrics and garments for use in these workplaces, identifies the key standards, and suggests topics for further investigation.

Source: EMBASE

10. Theatre shoes - A link in the common pathway of postoperative wound infection?

Author(s): Amirfeyz R., Tasker A., Ali S., Bowker K., Blom A.

Citation: Annals of the Royal College of Surgeons of England, September 2007, vol./is. 89/6(605-608), 0035-8843 (Sep 2007)

Publication Date: September 2007

Abstract: Operating department staff are usually required to wear dedicated theatre shoes whilst in the theatre area but there is little evidence to support the beneficial use of theatre shoes. We performed a study to assess the level of bacterial contamination of theatre shoes at the beginning and end of a working day, and compared the results with outdoor footwear. We found the presence of pathogenic bacterial species responsible for
postoperative wound infection on all shoe groups, with outdoor shoes being the most heavily contaminated. Samples taken from theatre shoes at the end of duty were less contaminated than those taken at the beginning of the day with the greatest reduction being in the number of coagulase-negative staphylococcal species grown. Studies have demonstrated that floor bacteria may contribute up to 15% of airborne bacterial colony forming units in operating rooms. The pathogenic bacteria we isolated have also been demonstrated as contaminants in water droplets spilt onto sterile gloves after surgical scrubbing. Theatre shoes and floors present a potential source for postoperative infection. A combination of dedicated theatre shoe use and a good floor washing protocol controls the level of shoe contamination by coagulase-negative staphylococci in particular. This finding is significant given the importance of staphylococcal species in postoperative wound infection.

Source: EMBASE
Full Text:
Available in fulltext at National Library of Medicine
Available in print at Lincoln County Hospital Professional Library

11. Effects of chlorine solutions on footwear
Author(s): Wakeford-Brown R., Croft K.
Citation: Journal of perioperative practice, July 2006, vol./is. 16/7(333-336, 338-340), 1750-4589 (Jul 2006)
Publication Date: July 2006
Abstract: Operating theatre personnel need to disinfect floors, other surfaces and sometimes their footwear with chlorine solutions in order to comply with Department of Health (DH) guidance on the safe method of dealing with blood spills. This study was designed to determine the effect of repeated applications of chlorine solutions to a new theatre clog manufactured from high density polyurethane.

Source: EMBASE
Full Text:
Available in print at Grantham Hospital Staff Library
Available in print at Lincoln County Hospital Professional Library
Available in fulltext at EBSCO Host

Author(s): Wakeford-Brown R, Croft K
Citation: Journal of Perioperative Practice, 01 July 2006, vol./is. 16/7(333-339), 17504589
Publication Date: 01 July 2006
Source: CINAHL
Full Text:
Available in print at Grantham Hospital Staff Library
Available in print at Lincoln County Hospital Professional Library
Available in fulltext at EBSCO Host

13. Asepsis, antisepsis and skin preparation for surgery
Author(s): Humes D., Lobo D.N.
Citation: Foundation Years, February 2006, vol./is. 2/1(13-14), 1744-1889 (Feb 2006)
Publication Date: February 2006
Source: EMBASE

Author(s): van Tiel FH, Elenbaas TWO, Voskuilen BMA, Herczeg J, Verheggen FW, Mochtar B, Stobberingh EE
Citation: Journal of Hospital Infection, 01 January 2006, vol./is. 62/1(64-70), 01956701
Publication Date: 01 January 2006
Abstract: The aim of this study was to determine whether compliance with infection control
measures for the care of patients during and after cardiothoracic surgery could be improved by using 'plan-do-study-act' (PDSA) improvement cycles in a 715-bed university hospital. The endpoints of these cycles were indices of correct procedure based on infection control standards. The intervention consisted of instruction and training of nursing and medical staff on the use of PDSA cycles, feedback of the baseline measurements, and the use of posters in the proximity of the operating room (OR). At follow-up, overall compliance only improved in the room used by the perfusionists and the OR. After the follow-up period, monitoring revealed a drop in compliance in the OR, but improved compliance during vascular catheter care of patients with prolonged stay in the intensive care unit (ICU), and during wound care of patients on the nursing ward. The last series of monitoring showed that compliance with general infection control measures in the OR had improved again, and that compliance had remained satisfactory on the ward and in the ICU, with the exception of patients recently transferred to the ICU from the OR. The results show that by using PDSA cycles, compliance with infection control measures can improve significantly. However, repeated monitoring is necessary to ensure continued compliance. Copyright CO 2006 The Hospital Infection Society

Source: CINAHL
Full Text: Available in print at Lincoln County Hospital Professional Library

15. A cover up? Potential risks of wearing theatre clothing outside theatre
Author(s): Roxburgh M., Gall P., Lee K.
Citation: Journal of perioperative practice, January 2006, vol./is. 16/1(30-33, 35-3341), 1750-4589 (Jan 2006)
Publication Date: January 2006
Abstract: A report from the Hospital Infection Society Working Group (2002) examined ritualistic practices in theatre and evidence was sought to establish which practices could be supported with clear scientific evidence. The report stated that there is little or no research to show that wearing theatre attire outside the theatre and returning without changing into clean theatre attire increases wound infection rates. It is difficult to implement infection control practices on a scientific basis as there is often a lack of evidence to support the practice. Moreover, many practices are grounded in ‘this is the way things are done around here’ (Ward 2000).
Source: EMBASE
Full Text: Available in print at Grantham Hospital Staff Library
Available in print at Lincoln County Hospital Professional Library
Available in fulltext at EBSCO Host

16. Infection prevention in the perioperative unit -- a novel collaboration.
Author(s): Ramsay V
Citation: ACORN: the Journal of Perioperative Nursing in Australia, 01 December 2005, vol./is. 18/4(26-29), 14487535
Publication Date: 01 December 2005
Source: CINAHL

17. Greens could be bad for you: A study of the inappropriate use of theater greens [2]
Author(s): O'Neill J.K., Rust P., Knight D., Ricketts D.M.
Citation: Southern Medical Journal, October 2005, vol./is. 98/10(1053-1054), 0038-4348 (Oct 2005)
Publication Date: October 2005
Source: EMBASE
Full Text: Available in fulltext at EBSCO Host

18. Evidence of control and prevention of surgical site infection by shoe covers
and private shoes -- a systematic literature review [Portuguese].

Author(s): Santos AML, Lacerda RA, Graziano KU

Citation: Revista Latino-Americana de Enfermagem (RLAE), 01 January 2005, vol./is. 13/1(86-92), 01041169

Publication Date: 01 January 2005

Abstract: The study is about shoe cover and private shoe usage and aimed to find scientific evidence on their direct relation in the control of surgical site contamination and/or infection transmitted by floor microorganisms. A systematic review of basic research on shoe covers and private shoes usage was carried out, covering the period from 1950 to 2003, by means of a search in electronic sources, bibliographies of relevant studies and proceedings of scientific events. The analysis was supported by two researchers, both of whom were experienced in this theme and one of them in research methodology. The research methods revealed a diverse range and various problems. Only 4 studies obtained a dispersion of floor microorganisms to the air environment, although not significant, and none of them was directly related to surgical site contamination and/or infection. Results do not suggest direct evidence on their efficacy but there is evidence, nonetheless, that barrier and microorganisms transfer from one specific area to another depend on the type of shoe cover, with lower transfer rates when private shoes and shoe covers are employed. Occupational contamination risk during shoe cover attire and removal is also evident and the decision about continuity of their usage needs to be technically and administratively controlled.

Source: CINAHL

19. Open forum. Answers supplied... recommendations or guidance for the appropriate use of footwear worn within the theatre department.

Author(s): Beesley J

Citation: British Journal of Perioperative Nursing, 01 December 2004, vol./is. 14/12(524-525), 14671026

Publication Date: 01 December 2004

Source: CINAHL

Full Text:
Available in fulltext at EBSCO Host
Available in print at Grantham Hospital Staff Library
Available in print at Lincoln County Hospital Professional Library

20. Perspectives on barrier material standards for operating rooms.

Author(s): Koch F

Citation: American Journal of Infection Control, 01 April 2004, vol./is. 32/2(114-116), 01966553

Publication Date: 01 April 2004

Source: CINAHL

21. Surgeons - Take care of pre and par-surgical rituals

Author(s): Gill G.P.S., Singh D., Verma S.K.

Citation: Indian Journal of Otolaryngology and Head and Neck Surgery, April 2004, vol./is. 56/2(168-170), 0019-5421 (Apr 2004)

Publication Date: April 2004

Abstract: Surgeons must become convinced regarding the strict adherence to a meticulous operating room ritual and an equally careful aseptic technique for the pre and post operative care. Surgeons have lived with the risk of contracting potentially fatal viral diseases for the last three decades. The author reviews here, the hazards of blood exposure and the measures that ought to be taken.

Source: EMBASE

22. Practical measures to ensure health and safety in theatres.

Author(s): Saunders S

Citation: Nursing Times, 16 March 2004, vol./is. 100/11(32-35), 09547762
Publication Date: 16 March 2004

Abstract: It is essential for nurses to be aware of their legal and professional obligations regarding health and safety issues in the operating theatre. There should be strict policies and procedures in place to ensure a safe environment and to maintain the sterile field for the benefit of patients, staff and visitors.

Source: CINAHL

Full Text:
Available in print at Lincoln County Hospital Professional Library
Available in fulltext at the ULHT Library and Knowledge Services' eJournal collection
Available in print at Louth County Hospital Medical Library
Available in print at Pilgrim Hospital Staff Library

23. The preparation of the surgical team: significant aspect in the control of environmental contamination [Portuguese].

Author(s): Cataneo C, Silveira CA, Sampionato E, Camargo FC, Queiroz FA, Cagnin MC

Citation: Revista Latino-Americana de Enfermagem (RLAE), 01 March 2004, vol./is. 12/2(283-286), 01041169

Publication Date: 01 March 2004

Abstract: The control of environmental contamination has been considered a rational measure for preventing surgical site infection. This study aims to present the current recommendations related to the preparation of the surgical team and to discuss the role of nurses in controlling environmental contamination. On the basis of current literature, we treat issues related to surgical garment and hand brushing. Studies indicate that the preparation of the surgical team constitutes an important protection barrier for preventing surgical site infection; nevertheless, the need is highlighted for health professionals to realize procedures adequately.

Source: CINAHL

24. Dress 'sense' is essential in delivering quality care... 'Through the keyhole' (NT features, 27 May, p38).

Author(s): Robertson P

Citation: Nursing Times, 10 June 2003, vol./is. 99/23(14-14), 09547762

Publication Date: 10 June 2003

Source: CINAHL

Full Text:
Available in print at Lincoln County Hospital Professional Library
Available in fulltext at the ULHT Library and Knowledge Services' eJournal collection
Available in print at Louth County Hospital Medical Library
Available in print at Pilgrim Hospital Staff Library

25. Hygienic procedures in operation theatres - Guidelines and reality. Data obtained on hygiene control measures by the public health service at Frankfurt am Main [German] Anforderungen der hygiene beim operieren - Richtlinie und realitat: Ergebnisse der intensivierten uberwachung der operationseinheiten in krankenhaeusern in Frankfurt am Main durch das gesundheitsamt

Author(s): Heudorf U., Hentschel W., Kutzke G., Pfetzing H., Voigt K.

Citation: Gesundheitswesen, May 2003, vol./is. 65/5(312-320), 0941-3790 (01 May 2003)

Publication Date: May 2003

Abstract: Problem: Good hygienic practice in hospitals and other medical institutions is mandatory to avoid or to minimise nosocomial infections. In Germany, official recommendations of the commission for hospital hygiene and infection control have been published as guidelines for hygiene management in hospitals as well as guidelines for control measures of the public health services who are obliged by law to control the hygienic situation in hospitals. In this paper the degree of implementation of these guidelines in the hospitals is studied in respect of the hygiene management in the operation theatre. Material and method: The constructive and functional situation and the personal hygienic management were documented in 22 community and private hospitals in Frankfurt...
am Main, including 40 operation suites with 111 operation theatres. Data of the layout of the rooms were obtained by questionnaire and the hygienic management was observed by means of standardised checklists. Results: Layout of rooms was not compatible with the recommendations of the Guidelines of 1990 and 2000 in many cases especially with regard to the demand that doors to the operating theatres be closed. Automatic door closers were often either not available or defective. In some theatre areas correct hand disinfection while entering the suite was not possible for lack of disinfectant distributors at appropriate sites. Recommendations regarding surgical drapes and gowns were correctly observed in most cases, with the exception of changing gowns after having gone to the toilet room. Quite often, omission of hand disinfection after glove removal was observed. A discrepancy in hygienic procedures of nursing service and physicians was seen. In 40% of the operation suites, powdered gloves were still in use. Though in all but one suite air conditioning systems were available, they were not correctly serviced in many cases. Cleaning and disinfection after single operations and at the end of the operating day were carried out correctly in most cases - except in operation theatres for ophthalmologic operations. Here too, manual preparation and disinfection/sterilisation of surgical instruments was common, and inappropriate use of sterilisers as well as the use of so-called "quick"-sterilisers.

Conclusions: The recommendations of the commission for hospital hygiene and infection prevention are generally accepted as guidelines, although the degree of translation into practice was often unsatisfactory.

Source: EMBASE

26. Contaminated operating room boots.

Author(s): Belkin NL

Citation: American Journal of Infection Control, February 2003, vol./is. 31/1(61-2), 0196-6553:0196-6553 (2003 Feb)

Publication Date: February 2003

Source: MEDLINE

27. Whats a-foot in the community theatre?

Author(s): Bettle P

Citation: N2N: Nurse2Nurse, 01 October 2002, vol./is. 2/12(48-49), 14732114

Publication Date: 01 October 2002

Source: CINAHL

Full Text:
Available in print at Lincoln County Hospital Professional Library

28. Behaviours and rituals in the operating theatre: A report from the hospital infection society working party on infection control in operating theatres

Author(s): Woodhead K., Taylor E.W., Bannister G., Chesworth T., Hoffman P., Humphreys H.

Citation: Journal of Hospital Infection, August 2002, vol./is. 51/4(241-255), 0195-6701 (Aug 2002)

Publication Date: August 2002

Source: EMBASE

Full Text:
Available in print at Lincoln County Hospital Professional Library

29. Contaminated operating room boots: the potential for infection.

Author(s): Agarwal M, Hamilton-Stewart P, Dixon RA

Citation: American Journal of Infection Control, 01 May 2002, vol./is. 30/3(179-183), 01966553

Publication Date: 01 May 2002

Abstract: BACKGROUND: Dirty operating room boots, often contaminated with blood and other infected material, are not only a source of discontent among surgeons and other surgical personnel, but they also pose a potential risk of transmission of viral or bacterial diseases to the wearer and cleaner of the boots. METHOD: Operating room boots were examined for the presence of blood by visual inspection; the presence or absence of blood
was confirmed by a specific biochemical test. Bacterial isolation and quantification from boots were performed with conventional methodology. RESULTS: In this study, a spot check revealed that 44% of all operating room boots tested were contaminated with blood and that the majority were contaminated with bacteria. Sixty-three percent of surgeons using the facility had blood-contaminated boots, and a significant number of boots belonging to other surgical personnel were also contaminated with blood and bacteria normally associated with skin microbiota or the environment. Comfort shoes with perforations on their upper surface and plastic boots commonly found in operating rooms were most heavily contaminated, whereas Wellington boots and clogs had less contamination. CONCLUSION: The present practice of manual cleaning of boots is unsatisfactory, and it is recommended that boots be washed in automatic washing machines.

Source: CINAHL

30. **Clinical issues. Specialty surgical attire; sharps safety program; surgical attire -- OR visitors; OR medication administration.**

**Author(s):** Petersen C  
**Citation:** AORN Journal, 01 March 2002, vol./is. 75/3(615-617), 00012092  
**Publication Date:** 01 March 2002  
**Source:** CINAHL  
**Full Text:** Available in print at Pilgrim Hospital Staff Library

31. **A reason for ritual.**

**Author(s):** Robinson R  
**Citation:** N2N: Nurse2Nurse, 01 February 2002, vol./is. 2/5(41-42), 14732114  
**Publication Date:** 01 February 2002  
**Source:** CINAHL  
**Full Text:** Available in print at Lincoln County Hospital Professional Library

32. **Recommended practices for maintaining a sterile field.**

**Author(s):** Association of Perioperative Registered Nurses.  
**Citation:** AORN Journal, February 2001, vol./is. 73/2(477-80, 482, 485), 0001-2092;0001-2092 (2001 Feb)  
**Publication Date:** February 2001  
**Source:** MEDLINE  
**Full Text:** Available in print at Lincoln County Hospital Professional Library  
Available in print at Pilgrim Hospital Staff Library

33. **Use of cover gowns, shoe covers falls to new low... survey of sacred cows.**

**Author(s):** Mathias JM  
**Citation:** OR Manager, 01 September 2000, vol./is. 16/9(1-), 87568047  
**Publication Date:** 01 September 2000  
**Source:** CINAHL

34. **Clinical issues. High-level disinfection; sponge counts; explanted hardware; scrub counts; OR clogs; double gloving; endoscope disinfection.**

**Author(s):** Fogg DM  
**Citation:** AORN Journal, 01 February 2000, vol./is. 71/2(398-401), 00012092  
**Publication Date:** 01 February 2000  
**Source:** CINAHL  
**Full Text:** Available in print at Pilgrim Hospital Staff Library
35. Rituals versus risks in the contemporary operating theatre environment
Author(s): Parker L.
Citation: The British journal of theatre nursing : NATNews : the official journal of the National Association of Theatre Nurses, August 1999, vol./is. 9/8(341-345), 1353-0224 (Aug 1999)
Publication Date: August 1999
Source: EMBASE

36. Infection in the operating room
Author(s): Hughes S.P.F., Anderson F.M.
Citation: Journal of Bone and Joint Surgery - Series B, 1999, vol./is. 81/5(754-755), 0301-620X (1999)
Publication Date: 1999
Source: EMBASE

37. Recommended practices for surgical attire. Association of Operating Room Nurses
Citation: AORN journal, December 1998, vol./is. 68/6(1048-1052), 0001-2092 (Dec 1998)
Publication Date: December 1998
Source: EMBASE

38. Draft guideline for the prevention of surgical site infection, 1998--CDC. Notice
Citation: Federal register, June 1998, vol./is. 63/116(33168-33192), 0097-6326 (17 Jun 1998)
Publication Date: June 1998
Abstract: This notice is a request for review of and comment on the Draft Guideline for the Prevention of Surgical Site Infection, 1998. The guideline consists of two parts: Part 1. "Surgical Site Infection, an Overview" and Part 2. "Recommendations for the Prevention of Surgical Site Infections", and was prepared by the Hospital Infection Control Practices Advisory Committee (HICPAC), the Hospital Infection Program (HIP), the National Center for Infectious Diseases (NCID), CDC.
Source: EMBASE

39. Recommended practices for maintaining a sterile field.
Citation: AORN Journal, 01 November 1996, vol./is. 64/5(817-821), 00012092
Publication Date: 01 November 1996
Source: CINAHL
Full Text: Available in print at Lincoln County Hospital Professional Library
Available in print at Pilgrim Hospital Staff Library

40. Sacred cow survey. Sacred cows head to pasture, though some are still grazing.
Citation: OR Manager, 01 September 1996, vol./is. 12/9(1-5), 87568047
Publication Date: 01 September 1996
Source: CINAHL

41. Proposed recommended practices for establishing and maintaining a sterile field.
Citation: AORN Journal, 01 January 1996, vol./is. 63/1(211-217), 00012092
Publication Date: 01 January 1996
Source: CINAHL

42. Rituals in the operating room: Are they necessary?
Author(s): Quebbeman E.J.
43. Sacred cows still grazing in the OR, survey shows.

Author(s): Mathias JM
Citation: OR Manager, 01 November 1994, vol./is. 10/11(1-6), 87568047
Publication Date: 01 November 1994
Source: CINAHL

44. Protective over-shoes are unnecessary in a day surgery unit.

Author(s): Weightman NC, Banfield KR
Citation: Journal of Hospital Infection, 01 September 1994, vol./is. 28/1(1-3), 01956701
Publication Date: 01 September 1994
Abstract: The lack of agreement on the use of over-shoes tends to perpetuate the ritual of their use in general operating theatres. However, the limited evidence which supports their use in such settings is not applicable in a Day Surgery Unit where their use is not recommended. In order to reduce overt contamination in the unit theatre, a local protocol should be drawn up specifying the use of designated day unit footwear for those that remain within the unit and for all persons entering the operating theatre.
Source: CINAHL

45. Theatre footwear: a health hazard?

Author(s): Thomas JA, Fligelstone LJ, Jerwood TE, Rees RWM
Citation: British Journal of Theatre Nursing, 01 October 1993, vol./is. 3/7(5-7), 13530224
Publication Date: 01 October 1993
Abstract: Theatre footwear frequently appears to be contaminated with blood. We assessed objectively the nature and degree of contamination of theatre shoes after cleaning. Two hundred pairs of theatre shoes were randomly selected from three hospitals in South East Wales. Hospital 1 (H1), 100 pairs of shoes, Hospital 2 (H2), 40, Hospital 3 (H3), 60. They were examined for general appearance, the presence of bacterial pathogens and blood, using a leuchomalachite green assay. The majority of shoes were dirty, 63% in H1, 80% in H2, and 95% in H3. Six per cent of shoes in H1, 2.5% in H2 and 0% in H3 were contaminated with staphylococcus aureus. No shoes were contaminated with psuedomonas aeruginosa. Thirty six per cent of shoes in H1, 40% in H2 and 57% in H3 were contaminated with blood. In H1 it was possible to determine the grade of staff to whom the shoes belonged. Fifty eight per cent of consultant surgeons’ shoes tested positive for blood, 50% of junior surgeons, 16% of operating department assistants and none of nurses' theatre shoes. The high level of blood contamination following cleaning may pose a potential HIV or hepatitis B risk to patients, manual shoe cleaner and surgeons. We have demonstrated that current shoe cleaning practices are ineffective. We propose methods that should eliminate this risk. Procedures will need to be defined.
Source: CINAHL

46. Blood-saturated operating-room shoe covers.

Author(s): Summers PR, Biswas MK, Portera SG, Moore L
Citation: Western Journal of Medicine, August 1992, vol./is. 157/2(184-5), 0093-0415;0093-0415 (1992 Aug)
Publication Date: August 1992
Source: MEDLINE
Full Text: Available in fulltext at National Library of Medicine

47. Theatre over-shoes do not reduce operating theatre floor bacterial counts

Author(s): Humphreys H., Marshall R.J., Ricketts V.E., Russell A.J., Reeves D.S.
Citation: Journal of Hospital Infection, 1991, vol./is. 17/2(117-123), 0195-6701 (1991)
48. The exogenous sources and controls of microorganisms in the operating room.

Author(s): Ritter MA, Marmion P

Citation: Orthopaedic Nursing, 01 July 1988, vol./is. 7/4(23-28), 07446020

Abstract: Infections following surgeries that are considered clean are very difficult to understand. This study evaluated the principles of aseptic techniques as well as the problem of latent infections. Variables included the environment, people, surgical mask, head covers, scrub clothes and gowns, shoe covers surfaces, equipment, instruments, preps and scrubs, gloves, drapes, and wound cultures. While some of these factors affect the conventional operating room, others do not.

Source: CINAHL

49. Footwear practices and operating room contamination.

Author(s): Copp G, Slezak L, Dudley N, Mailhot CB

Citation: Nursing Research, 01 November 1987, vol./is. 36/6(366-369), 00296562

Abstract: The extent of bacterial transfer into the clean confines of the operating room (OR) was studied by comparing the use of protective footwear (i.e., polypropylene shoe covers and OR restricted shoes) with unprotected street shoes over a 5-week period. The study was divided into two experimental times: (a) early morning (disinfected floor) and (b) midmorning (dirty floor). Data obtained from the early morning experiment showed that OR restricted shoes and shoe covers transferred fewer bacteria onto the disinfected study area than unprotected street shoes; similar findings were obtained from the midmorning experiment for shoe covers, but not for OR restricted shoes. A comparison of changes in bacterial counts obtained from OR restricted shoes and shoe covers worn from the changing room through a common corridor to the disinfected study area did not differ significantly from OR restricted shoes and shoe covers that were put on immediately before walking through the study area at both experimental times. Overall results indicated that protective footwear may act to reduce bacterial contamination on OR floors.

Source: CINAHL

50. Caps, masks and boots

Author(s): Fraleigh D.M.

Citation: The Canadian nurse, April 1986, vol./is. 82/4(28-30), 0008-4581 (Apr 1986)

Publication Date: April 1986

Source: EMBASE

51. Aseptic rituals unmasked.

Author(s): Selwyn S

Citation: British Medical Journal Clinical Research Ed., December 1984, vol./is. 289/6459(1642-3), 0267-0623;0267-0623 (1984 Dec 15)

Publication Date: December 1984

Source: MEDLINE

Full Text: Available in fulltext at National Library of Medicine

52. The influence of different footwear on floor contamination

Author(s): Hambraeus A., Malmberg A.S.

Citation: Scandinavian Journal of Infectious Diseases, 1979, vol./is. 11/3(243-246), 0036-5548 (1979)

Publication Date: 1979

Abstract: The importance of walking as a source of floor contamination and the influence of different footwear routines on floor contamination was evaluated. The contamination of a
floor due to walking was about 16 times higher than contamination of the floor due to sedimentation only, measured with impression plates. No significant difference in floor contamination could be seen with different footwear (ordinary shoes, clean shoes, shoe covers). In all experiments the amount of bacteria was low in the morning and increased in the middle of the day when a steady state seemed to be reached. The number of Staphylococcus aureus continued to increase. A footwear regimen is only recommended in areas where floors are cleaned frequently during the day as in operating wards.

Source: EMBASE
Ensure OR dress/attire is clean. • Ensure footwear is clean (overshoes are not acceptable). • Perform a general hand wash prior to entry. ... At all times during scrubbing hands must be held above elbows to prevent scrub solutions/water revisiting the clean region.

Prevention of surgical site infections
H O’Grady... - Surgery (Oxford), 2011 - Elsevier
... These include changing into designated clothing and footwear before entering the theatre suite, wearing protective caps and masks and minimizing staff transit through theatre whilst ... Laminar flow or ultra-clean ventilation is frequently used in orthopaedic theatre suites ...

Basic Surgical Principles
MA Pogrel... - Oral and Maxillofacial Surgery, 2010 - books.google.com
... sterile gloves and a sterile gown, and a mask, head covering, and shoe covers or separate footwear that is ... wear caps, masks, and gloves, but in most cases they will continue to wear their out-side shoes. ... Theatre over-shoes do not reduce operating theatre floor bacterial counts ...

Contaminated operating room boots: The potential for infection
M Agarwal, P Hamilton-Stewart... - American journal of infection ... - 2002 - Elsevier
... Comfort shoes with perforations on their upper surface and plastic boots commonly found in operating rooms were most heavily contaminated, whereas Wellington boots and clogs had less ... cleaning of boots is unsatisfactory, and it is recommended that boots be washed in ...

Infection control in operating theatres
KM WOODHEAD - ... and emergency medicine: proceedings of the ..., 2004 - books.google.com
... they were admitted to the operating theatre fully clothed, even with their ordinary outdoor shoes. ... All footwear should be cleaned after every use, and procedures should be in place to ... There is no evidence to support this practice, and overshoes have been shown to positively ...

Soundings: Who cleans the clogs?
... In the changing rooms are bloodstained clogs. ... My first job in hospital, as a student clerk in 1968, was cleaning the surgeons' boots. ... Clean boots symbolised a well run army and we were proud that our surgeons could expect the same when they entered our theatre. ...
ROLES AND RESPONSIBILITIES FOR INFECTION CONTROL

Overshoes will not be available. Note Theatre staff are responsible for keeping their footwear clean. Some rare diseases are thought to require ...
Thoroughly wash and clean at and around the incision.... other fluids. **Footwear:** A change of footwear while in the operating theatre is recommended. ...

**Practical measures to ensure health and safety in theatres | Practice**
www.nursingtimes.net/nursing...health...theatres/204462.article
16 Mar 2004 – A meticulous theatre-cleaning regime is fundamental to preventing infection. ... The hospital should supply non-slip, anti-static theatre clogs or...

**Theatre Attire Procedure**
File Format: PDF/Adobe Acrobat - Quick View
**Health Board (WCDHB) Grey Base Hospital Operating Theatre suite. .... 6.01 Footwear**
worn in the Operating Theatre shall be clean, comply with WCDHB ...

**Theatre Infection Control Policy**
www.iow.nhs.uk/.../Theatre%20Infection%20Control%20Policy%20...
File Format: PDF/Adobe Acrobat - Quick View
**operating theatre where the surgeon’s hands are clean ... advice from Occupational Health**
and Safety. .... All footwear should be cleaned after every use, and ...

**Operating Room Orientation Manual**
www.utmb.edu/surgery/clerks/ormanual.htm
**Shoes** should be dedicated to the OR and shoe covers are not required. ... **Wash** hands and arms with solution to 2 inches above the elbow. .... Call Employee Health Center at (409) 772-5582 for information regarding blood and/or body fluid ...

**Infection Control Practice In The Operating Department**
www.newcastle-hospitals.org.uk/downloads/.../ICOOperating200902.p...
File Format: PDF/Adobe Acrobat - Quick View
**wearing theatre attire correctly, reporting health problems, monitoring visitors and**
maintaining a ... This is always in addition to and not instead of handwashing. Gloves ...
**shoes** should be of a ‘closed toe’ type to protect against sharps injury. ...