This Current Awareness Bulletin is produced by the Healthcare Library to provide staff working in Infection Control with a range of resources to support practice. It includes recently published guidelines and research articles, news, and details of new library resources.

**OpenAthens**
To access journal articles that are available in full text you will need to have a username and password for OpenAthens. To register for an OpenAthens account click [here](#).

For further information or support please contact the Healthcare Library, SDH Central, Salisbury District Hospital, Salisbury, Wiltshire SP2 8BJ. 01722 429054 or 01722 336262 ext 4430, Library.office@salisbury.nhs.uk, or visit the library website at [www.library.salisbury.nhs.uk](http://www.library.salisbury.nhs.uk)

---

### Guidance and Guidelines

#### Public Health England

**Guidance**

**Needlestick injuries in healthcare settings: raising awareness**
First published: 17 February 2015
A visual report of discussion groups held at the fifth POINTERS conference, Cardiff City Hall, 11 December 2014.

**Guidance**

**Ebola virus disease: identifying and managing patients for assessment in acute trusts**
Last updated: 13 February 2015
This document is for clinical staff undertaking direct patient care in acute trusts.

**Guidance**

**Ebola in pregnancy: information for healthcare workers**
Last updated: 13 February 2015
This guidance is aimed at clinical staff undertaking direct care of pregnant patients.

**Guidance**

**Ebola: advice for allied health professionals in secondary care**
Last updated: 13 February 2015
Part of: Ebola virus disease: clinical management and guidance
Guidance and advice for allied health professionals in secondary healthcare settings who encounter patients with Ebola virus disease (EVD).

**Guidance**

**Influenza: treatment and prophylaxis using anti-viral agents**
Last updated: 2 February 2015
Part of: Pandemic flu: public health response and Seasonal influenza: guidance, data and analysis
Guidance on how to manage influenza (flu) using anti-viral agents.
Cochrane Systematic Reviews

Issue 12, December 2014
New Reviews

Antibiotic regimens for management of intra-amniotic infection

Timing of intravenous prophylactic antibiotics for preventing postpartum infectious morbidity in women undergoing cesarean delivery

Updated Reviews

Vaginal chlorhexidine during labour to prevent early-onset neonatal group B streptococcal infection

Issue 1, January 2015
New Reviews

Antibiotic prophylaxis for preventing infectious complications in orthognathic surgery

Issue 2, February 2015
Updated Reviews

Antibiotic regimens for postpartum endometritis

Interventions for the eradication of meticillin-resistant Staphylococcus aureus (MRSA) in people with cystic fibrosis

Preoperative bathing or showering with skin antiseptics to prevent surgical site infection

Skin preparation with alcohol versus alcohol followed by any antiseptic for preventing bacteraemia or contamination of blood for transfusion

Journal Articles

Please click on the blue links (where available) to access full text.
You may need an OpenAthens username and password. To register for an OpenAthens account click here.
If you have any difficulty accessing the full text articles, or if you would like us to obtain any of the articles for you, please contact the Healthcare Library.

Table of Contents

1. A quality improvement initiative to reduce needlestick injuries
2. Antimicrobial stewardship - Can we afford to do without it?
3. Antimicrobial stewardship in outpatient settings: A systematic review
4. Association between students' personality traits and hand hygiene compliance during objective standardized clinical examinations.
5. Beyond Best Practice: Implementing a Unit-Based CLABSI Project
6. Chlorhexidine bathing and health care-associated infections: A randomized clinical trial
7. Colonization Versus Carriage of Clostridium difficile
8. Comorbidities, exposure to medications, and the risk of community-acquired clostridium difficile infection: A systematic review and meta-analysis
9. Comparison of different hand-drying methods: the potential for airborne microbe dispersal and contamination.
10. Control of hospital acquired infections in the ICU: A service perspective
11. Controlling antibiotic resistance in intensive care units
12. Current and future approaches to the prevention and treatment of staphylococcal medical device-related infections
13. Diagnosis and Management of Clostridium difficile Infection
14. Diagnosis and treatment of clostridium difficile in adults: A systematic review
15. Diagnostic Pitfalls in Clostridium difficile Infection
16. Environmental interventions to control clostridium difficile
17. Fecal Microbiota Transplantation for the Management of Clostridium difficile Infection
18. Guidelines for the diagnosis, prevention and management of implantable cardiac electronic device infection. Report of a joint Working Party project on behalf of the British Society for Antimicrobial Chemotherapy (BSAC, host organization), British Heart Rhythm Society (BHRS), British Cardiovascular Society (BCS), British Heart Valve Society (BHVS) and British Society for Echocardiography (BSE)
19. Gut check: Clostridium difficile testing and treatment in the molecular testing era
20. Hospital organisation, management, and structure for prevention of health-care-associated infection: A systematic review and expert consensus
21. Implications and emerging control strategies for ventilator-associated infections
22. Influence of staff behavior on infectious risk in operating rooms: What is the evidence?
24. Limited retention of micro-organisms using commercialized needle filters
25. Linezolid versus vancomycin for the treatment of suspected methicillin-resistant Staphylococcus aureus nosocomial pneumonia: A systematic review employing meta-analysis
26. New Perspectives in Clostridium difficile Disease Pathogenesis
27. Outpatient parenteral antimicrobial therapy in pediatrics: An opportunity to expand antimicrobial stewardship
28. Potential Sources of Clostridium difficile in Human Infection
29. Predictive Values of Models of Clostridium difficile Infection
30. Preventing central venous catheter-related bloodstream infection
31. The contribution of strains and hosts to outcomes in clostridium difficile infection
32. The Epidemiology of Clostridium difficile Infection Inside and Outside Health Care Institutions
33. The Morbidity, Mortality, and Costs Associated with Clostridium difficile Infection
34. The potential for emerging therapeutic options for Clostridium difficile infection
35. The Potential of Probiotics to Prevent Clostridium difficile Infection
36. The prospect for vaccines to prevent clostridium difficile infection
37. The relationship between hand hygiene and health care-associated infection: It's complicated
38. Treatment of Clostridium difficile Infections
39. Treatment of recurrent and severe clostridium difficile infection
40. Universal treatment success among healthcare workers diagnosed with occupationally acquired acute hepatitis C
41. What is new in the diagnosis and prevention of spine surgical site infections
42. Working practices and success of infection prevention and control teams: A scoping study

1. Title: A quality improvement initiative to reduce needlestick injuries
Citation: Nursing Standard, Jan 2015, vol. 29, no. 22, p. 37-42, 0029-6570 (January 28, 2015)
Author(s): Beynon, Anthony
Abstract: Peterborough and Stamford Hospitals NHS Foundation Trust introduced sharp-safe needles in January 2013; these became a part of general practice by April 2013. A service evaluation was undertaken to investigate whether the introduction of sharp-safe needles had reduced the incidence of needlestick injuries. Results showed that 608 percutaneous injuries were sustained during the use and disposal of sharps between April 2010 and March 2014. A total of 122 injuries occurred following the introduction of the new sharp-safe needles (2013-2014), which was a 26% reduction compared with the previous year (2012-2013, n = 165). These results could mean that the sharp-safe needles reduced the rate of injuries. A definitive evaluation of the effectiveness of the sharp-safe needles was not possible given the limited data available since their introduction. [PUBLICATION] 25 references
Source: BNI

2. Title: Antimicrobial stewardship - Can we afford to do without it?
Citation: British Journal of Clinical Pharmacology, February 2015, vol./is. 79/2(173-181), 0306-5251;1365-2125 (01 Feb 2015)
Author(s): Aryee A., Price N.
Language: English
Abstract: Antimicrobial resistance (AMR) is a rapidly developing and alarming global threat which has been highlighted by national governments and public health bodies including the World Health Organization. The spectre of a ‘post-antibiotic era’ is a real possibility unless curtailing the development and spread of these organisms is given high priority. Numerous studies have shown that AMR is associated with worse outcomes for patients and higher healthcare costs. While clinical data from low and middle income countries is lacking, there is increasing evidence that the problem in these areas is as great, or even greater, than in high income nations. Of the many drivers behind the development of AMR, the most significant is selection pressure caused by antibiotic use. Antimicrobial
stewardship programmes are a set of interventions that aim to ensure the judicious use of antimicrobials by preventing their unnecessary use, and by providing targeted and limited therapy in situations where they are warranted. The ultimate goal of these programmes is to provide effective antimicrobial therapy whilst safeguarding their effectiveness for future generations. Whilst they do require an initial investment, they have been shown to be an effective way of controlling antimicrobial use, and have been associated with improved patient outcomes and reduced healthcare costs.

**Publication type:** Journal: Article  
**Source:** EMBASE

---

3. **Title:** Antimicrobial stewardship in outpatient settings: A systematic review  
**Citation:** Infection Control and Hospital Epidemiology, 2015, vol./is. 36/2(142-152), 0899-823X (2015)  
**Author(s):** Drekonja D.M., Filice G.A., Greer N., Olson A., MacDonald R., Rutks I., Wilt T.J.  
**Language:** English  
**Abstract:** Objective. Evaluate the effect of outpatient antimicrobial stewardship programs on prescribing, patient, microbial outcomes, and costs. design. Systematic review methods. Search of MEDLINE (2000 through November 2013), Cochrane Library, and reference lists of relevant studies. We included English language studies with patient populations relevant to the United States (eg, infectious conditions, prescription services) evaluating stewardship programs in outpatient settings and reporting outcomes of interest. Data regarding study characteristics and outcomes were extracted and organized by intervention type. results. We identified 50 studies eligible for inclusion, with most (29 of 50; 58%) reporting on respiratory tract infections, followed by multiple/unspecified infections (17 of 50; 34%). We found medium-strength evidence that stewardship programs incorporating communication skills training and laboratory testing are associated with reductions in antimicrobial use, and low-strength evidence that other stewardship interventions are associated with improved prescribing. Patient-centered outcomes, which were infrequently reported, were not adversely affected. Medication costs were generally lower with stewardship interventions, but overall program costs were rarely reported. No studies reported microbial outcomes, and data regarding outpatient settings other than primary care clinics are limited. conclusions. Low- to moderate-strength evidence suggests that antimicrobial stewardship programs in outpatient settings improve antimicrobial prescribing without adversely effecting patient outcomes. Effectiveness depends on program type. Most studies were not designed to measure patient or resistance outcomes. Data regarding sustainability and scalability of interventions are limited.

**Publication type:** Journal: Article  
**Source:** EMBASE

---

4. **Title:** Association between students' personality traits and hand hygiene compliance during objective standardized clinical examinations.  
**Citation:** Journal of Hospital Infection, March 2015, vol./is. 89/3(210-4), 0195-6701;1532-2939 (2015 Mar)  
**Author(s):** Schuttpelz-Brauns K, Obertacke U, Kaden J, Hagl CI  
**Language:** English  
**Abstract:** BACKGROUND: Although the need for hand hygiene (HH) is generally accepted, studies continue to document inadequate compliance. Medical students are taught about the importance of HH to prevent nosocomial infections, and receive training in the correct procedures for HH. However, personality traits (social orientation and achievement orientation) may influence HH compliance. People with high social orientation feel socially responsible and act cooperatively, and people with high achievement orientation are ambitious and competitive. AIM: To evaluate the relationship between HH compliance and personality traits of medical students. METHODS: The HH compliance of 155 students was observed during objective standardized clinical examinations (OSCEs). Social orientation and achievement orientation were measured using the corresponding scales of the Freiburg Personality Inventory - Revised. FINDINGS: Social orientation did not differ between students with high HH compliance and students with low HH compliance [F(1) = 3.87, P = 0.052, (2) = 0.045]. For achievement orientation, a moderate effect was found between low and high HH compliance [F(1) = 11.242, P = 0.001, (2) = 0.119], and students with high HH compliance were found to be more achievement orientated than students with low HH compliance. CONCLUSION: Achievement orientation plays a major role during OSCEs, while social orientation is less emphasized. To the authors' knowledge, this is the first study to show that HH compliance is associated with achievement orientation in achievement situations. Copyright &©xa9; 2014 The Healthcare Infection Society. Published by Elsevier Ltd. All rights reserved.

**Publication type:** Journal Article  
**Source:** MEDLINE
5. Title: Beyond Best Practice: Implementing a Unit-Based CLABSI Project
Citation: Journal of Nursing Care Quality, Jan 2015, vol. 30, no. 1, p. 24-30, 1057-3631 (Jan-Mar 2015)
Author(s): Jones, Carla M, Stewart, Cheryl, Roszell, Sheila Serr
Abstract: This article describes a hospital unit's successful central line-associated bloodstream infection reduction project. The focus is on decreasing and sustaining a low rate of infection by targeting improvement in central line maintenance. The Consolidated Framework for Implementation Research's 5 interacting domains (the intervention, inner and outer settings, individuals involved, and process) were used to guide the selection of 4 Plan-Do-Study-Act interventions. The rate decreased the rate from 3.2 to 0.6 infections per 1000 catheter-days. [PUBLICATION] 16 references
Source: BNI

6. Title: Chlorhexidine bathing and health care-associated infections: A randomized clinical trial
Citation: JAMA - Journal of the American Medical Association, January 2015, vol./is. 313/4(369-378), 0098-7484;1538-3598 (27 Jan 2015)
Author(s): Noto M.J., Domenico H.J., Byrne D.W., Talbot T., Rice T.W., Bernard G.R., Wheeler A.P.
Language: English
Abstract: IMPORTANCE Daily bathing of critically ill patients with the broad-spectrum, topical antimicrobial agent chlorhexidine is widely performed and may reduce health care-associated infections. OBJECTIVE To determine if daily bathing of critically ill patients with chlorhexidine decreases the incidence of health care-associated infections.
DESIGN, SETTING, AND PARTICIPANTS A pragmatic cluster randomized, crossover study of 9340 patients admitted to 5 adult intensive care units of a tertiary medical center in Nashville, Tennessee, from July 2012 through July 2013.
INTERVENTIONS Units performed once-daily bathing of all patients with disposable cloths impregnated with 2%chlorhexidine or nonantimicrobial cloths as a control. Bathing treatments were performed for a 10-week period followed by a 2-week washout period during which patients were bathed with nonantimicrobial disposable cloths, before crossover to the alternate bathing treatment for 10 weeks. Each unit crossed over between bathing assignments 3 times during the study.
MAIN OUTCOMES AND MEASURES The primary prespecified outcome was a composite of central line-associated bloodstream infections (CLABSI), catheter-associated urinary tract infections (CAUTI), ventilator-associated pneumonia (VAP), and Clostridium difficile infections. Secondary outcomes included rates of clinical cultures that tested positive for multidrug-resistant organisms, blood culture contamination, health care-associated bloodstream infections, and rates of the primary outcome by ICU. RESULTS During the chlorhexidine bathing period, 55 infections occurred: 4 CLABSI, 21 CAUTI, 17 VAP, and 13 C difficile. During the control bathing period, 60 infections occurred: 4 CLABSI, 32 CAUTI, 8 VAP, and 16 C difficile. The primary outcome rate was 2.86 per 1000 patient-days during the chlorhexidine and 2.90 per 1000 patient-days during the control bathing periods (rate difference, -0.04; 95%CI, -1.10 to 1.01; P = .95). After adjusting for baseline variables, no difference between groups in the rate of the primary outcome was detected. Chlorhexidine bathing did not change rates of infection-related secondary outcomes including hospital-acquired bloodstream infections, blood culture contamination, or clinical cultures yielding multidrug-resistant organisms. In a prespecified subgroup analysis, no difference in the primary outcome was detected in any individual intensive care unit. CONCLUSION AND RELEVANCE In this pragmatic trial, daily bathing with chlorhexidine did not reduce the incidence of health care-associated infections including CLABSI, CAUTI, VAP, or C difficile. These findings do not support daily bathing of critically ill patients with chlorhexidine.
Publication type: Journal: Article
Source: EMBASE
Full text: Available American Medical Association at JAMA

7. Title: Colonization Versus Carriage of Clostridium difficile
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(13-28), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Donskey C.J., Kundrapu S., Deshpande A.
Language: English
Abstract: Asymptomatic carriage of toxigenic strains of Clostridium difficile is common in health care facilities and the community. However, infection control efforts have traditionally focused almost entirely on symptomatic patients. There is now growing concern that asymptomatic carriers may be an underappreciated source of transmission. This article provides an overview of the pathogenesis and epidemiology of C difficile colonization, reviews the evidence that asymptomatic carriers shed spores and contribute to transmission, and examines practical issues related to prevention of transmission from carriers.
Publication type: Journal: Review
Source: EMBASE
8. Title: Comorbidities, exposure to medications, and the risk of community-acquired clostridium difficile infection: A systematic review and meta-analysis

Citation: Infection Control and Hospital Epidemiology, 2015, vol./is. 36/2(132-141), 0899-823X (2015)


Language: English

Abstract: Background. Clostridium difficile infection (CDI) has been extensively described in healthcare settings; however, risk factor associated with community-acquired (CA) CDI remain uncertain. This study aimed to synthesize the current evidence for an association between commonly prescribed medications and comorbidities with CA-CDI methods. A systematic search was conducted in 5 electronic databases for epidemiologicstudies examining the association between the presence of comorbidities and exposure to medications with the risk of CA-CDI. Pooled odds ratios were estimated using 3 meta-analytic methods. Subgroup analyses by location of studies and by life stages were conducted. Results. Twelve publications (n=56,776 patients) met inclusion criteria. Antimicrobial (odds ratio, 6.18; 95% CI, 3.80-10.04) and corticosteroid (1.81; 1.15-2.84) exposure were associated with increased risk of CA-CDI. Among the comorbidities, inflammatory bowel disease (odds ratio, 3.72; 95% CI, 1.52-9.12), renal failure (2.64; 1.23-5.68), hematologic cancer (1.75; 1.02-5.68), and diabetes mellitus (1.15; 1.05-1.27) were associated with CA-CDI. By location, antimicrobial exposure was associated with a higher risk of CA-CDI in the United States, whereas proton-pump inhibitor exposure was associated with a higher risk in Europe. By life stages, the risk of CA-CDI associated with antimicrobial exposure greatly increased in adults older than 65 years. Conclusions. Antimicrobial exposure was the strongest risk factor associated with CA-CDI. Further studies are required to investigate the risk of CA-CDI associated with medications commonly prescribed in the community. Patients with diarrhea who have inflammatory bowel disease, renal failure, hematologic cancer, or diabetes are appropriate populations for interventional studies of screening.

Publication type: Journal: Article

Source: EMBASE

9. Title: Comparison of different hand-drying methods: the potential for airborne microbe dispersal and contamination.

Citation: Journal of Hospital Infection, March 2015, vol./is. 89/3(215-7), 0195-6701;1532-2939 (2015 Mar)

Author(s): Best EL, Redway K

Language: English

Abstract: Efficient washing and drying of hands is important in prevention of the transfer of micro-organisms. However, knowledge surrounding the potential for microbial contamination according to hand-drying methods is limited. This study assessed the potential for airborne microbe dispersal during hand drying by four methods (paper towels, roller towel, warm air and jet air dryer) using three different models. The jet air dryer dispersed liquid from users’ hands further and over a greater range (up to 1.5m) than the other drying methods (up to 0.75m), demonstrating the differing potential risks for airborne microbe dissemination, particularly if handwashing is suboptimal. Copyright © 2015 The Healthcare Infection Society. Published by Elsevier Ltd. All rights reserved.

Publication type: Journal Article

Source: MEDLINE

10. Title: Control of hospital acquired infections in the ICU: A service perspective

Citation: Medical Journal Armed Forces India, 2015, vol./is. 71/1(28-32), 0377-1237 (2015)

Author(s): Singh S., Goyal R., Ramesh G.S., Ravishankar >V., Sharma R.M., Bhargava D.V., Singh S.K., John M.K., Sharma A.

Language: English

Abstract: Background: The service setting has some unique strengths and weaknesses that must be kept in mind when organizing Hospital acquired infections (HAI) prevention interventions. Methods: Following an initial study to gather data regarding HAI in the Surgical intensive care unit (ICU) we put into place various infection control interventions. The present study was carried out to analyse the effect of these interventions on the incidence of HAI in the ICU. Results: The total admissions to the ICU were 253 patients. Eighty eight patients (34.78%) were admitted for more than 48 hr, 165 patients stayed for less than 48 h. The frequency of HAI was 7.95% (95% CI 3.54, 15). Hospital acquired pneumonia was observed in 2 of the 88 patients (2.27%) (95% CI 0.38, 7.30) which amounted to 9.70 infections per 1000 ventilator days. Bloodstream infection was detected in 3 out of 88 patients (3.4%) (95% CI 0.87, 8.99) amounting to 6.54 fresh infections per 1000 Central Venous Catheter days. Urinary tract infection was observed in 2 (2.27%) (95% CI 0.38, 7.30) at 2.86 fresh infections per 1000 catheter days. As compared to the
previous study we found that there was a decline of HAI ranging from 60 to 70%. Conclusion: Our study demonstrated that by meticulously following infection control protocols especially tailored to the service setting the incidence of HAI's can be reduced. However, the challenge is in maintaining the gains achieved since there is a rapid turnover of manpower in the ICU and a lack of a structured ICU design model.

Publication type: Journal: Article
Source: EMBASE

11. Title: Controlling antibiotic resistance in intensive care units
Citation: Netherlands Journal of Critical Care, 2015, vol./is. 19/1(12-16), 1569-3511 (2015)
Author(s): Derde L.P.G., Bonten M.J.M.
Language: English
Abstract: Colonisation with multidrug resistant bacteria, especially resistant Gram-negatives, occurs frequently and increasingly in intensive care units (ICUs), also in the Netherlands. Infections caused by (resistant) microorganisms increase morbidity and mortality in this vulnerable patient group. This necessitates more effective control measures. Current infection control strategies include hand hygiene programs, body washing with chlorhexidine, screening plus isolation of identified carriers and selective digestive (and oral) decontamination. Hand hygiene is generally low in ICUs. Most evidence on the effect of improved hand hygiene on infection rates stems from observational studies. However, it is likely futile to implement costly, labour-intensive interventions without optimising basic hygiene. Chlorhexidine body washing has been proven effective in reducing methicillin-resistant Staphylococcus aureus (MRSA) and vancomycin-resistant Enterococci, but not resistant Gramnegatives. Reported effects of rapid screening plus isolation are conflicting, and mostly include just MRSA. Selective digestive (and oral) decontamination reduced the 28-day mortality in Dutch ICUs in a large trial, and is considered standard of care in most ICUs in the Netherlands. Hand hygiene, despite a lack of rigorously performed trials, should be improved in ICUs as part of normal hygienic measures. Our findings do not support the use of chlorhexidine body washing in Dutch ICUs, as MRSA prevalence is low. For patients at high risk for MRSA carriage, rapid screening can reduce unnecessary isolation days. The control of resistant Gram-negative bacteria will be a major challenge in the coming years, also in the Netherlands. We will need new methods to control the spread of these microorganisms, as current strategies have not proven effective.

Publication type: Journal: Review
Source: EMBASE

12. Title: Current and future approaches to the prevention and treatment of staphylococcal medical device-related infections
Citation: Current Pharmaceutical Design, December 2015, vol./is. 21/1(100-113), 1381-6128;1873-4286 (01 Dec 2015)
Author(s): Hogan S., Stevens N.T., Humphreys H., O'Gara J.P., O'Neill E.
Language: English
Abstract: Staphylococci, in particular Staphylococcus aureus and Staphylococcus epidermidis, are a leading cause of healthcareassociated infections. Patients who have a medical device inserted are at particular risk of an infection with these organisms as staphylococci possess a wide range of immune evasion mechanisms, one of which being their ability to form biofilm. Once embedded in a biofilm, bacteria are inherently more resistant to treatment with antibiotics. Despite advances in our understanding of the pathogenesis of staphylococcal biofilm formation, medical devices colonised with biofilms frequently require removal. New and novel approaches to prevent and treat biofilm infections are urgently required. In recent years, progress has been made on approaches that include antiadhesive strategies to prevent surface adhesion or production of bacterial adhesins, dissolution of already established biofilm, targeting of biofilm matrix for degradation and interference with biofilm regulation. Several obstacles need to be overcome in the further development of these and other novel anti-biofilm agents. Most notably, although in vitro investigation has progressed over recent years, the need for biofilm models to closely mimic the in vivo situation is of paramount importance followed by controlled clinical trials. In this review we highlight the issues associated with staphylococcal colonisation of medical devices and potential new treatment options for the prevention and control of these significant infections.

Publication type: Journal: Article
Source: EMBASE

13. Title: Diagnosis and Management of Clostridium difficile Infection
Citation: Seminars in Respiratory and Critical Care Medicine, February 2015, vol./is. 36/1(31-43), 1069-3424;1098-9048 (February 2015)
Author(s): Korman T.M.
Abstract: There have been dramatic changes in the epidemiology of Clostridium difficile infection (CDI), with increases in incidence and severity of disease, attributed to the emergence of a fluoroquinolone-resistant hypervirulent strain, ribotype 027. C. difficile is now the most common pathogen causing hospital-acquired infection in U.S. hospitals, and community-acquired infections are increasing. The diagnosis of CDI is based on a combination of signs and symptoms, confirmed by laboratory tests. Clinical manifestations of CDI can range from asymptomatic colonization to severe pseudomembranous colitis and death. Many aspects of laboratory diagnosis of CDI remain contentious. Toxin enzyme immunoassays are too insensitive to be used alone, while nucleic acid amplification tests have emerged as an option, either as a stand-alone test or as part of a multistest algorithm. Oral vancomycin and metronidazole have been the recommended antimicrobial therapy options, and fidaxomicin is an effective new alternative. There is ongoing concern regarding the potential inferiority of metronidazole, in particular for severe CDI. Management of severe CDI and recurrent CDI continue to represent major treatment challenges. Biological therapies for the restoration of the intestinal microbiota (e.g., fecal microbiota transplantation) and monoclonal antibody therapy are promising approaches for CDI management, in particular troublesome recurrent CDI. This review will concentrate on the diagnosis and management of CDI in adults.

Publication type: Journal: Article
Source: EMBASE

14.Title: Diagnosis and treatment of clostridium difficile in adults: A systematic review
Citation: JAMA - Journal of the American Medical Association, January 2015, vol./is. 313/4(398-408), 0098-7484;1538-3598 (27 Jan 2015)
Author(s): Bagdasarian N., Rao K., Malani P.N.
Language: English
Abstract: IMPORTANCE Since 2000, the incidence and severity of Clostridium difficile infection (CDI) have increased. OBJECTIVE To review current evidence regarding best practices for the diagnosis and treatment of CDI in adults (age>18 years). EVIDENCE REVIEW Ovid MEDLINE and Cochrane databases were searched using keywords relevant to the diagnosis and treatment of CDI in adults. Articles published between January 1978 and October 31, 2014, were selected for inclusion based on targeted keyword searches, manual review of bibliographies, and whether the article was a guideline, systematic review, or meta-analysis published within the past 10 years. Of 4682 articles initially identified, 196 were selected for full review. Of these, the most pertinent 116 articles were included. Clinical trials, large observational studies, and more recently published articles were prioritized in the selection process. FINDINGS Laboratory testing cannot distinguish between asymptomatic colonization and symptomatic infection with C difficile. Diagnostic approaches are complex due to the availability of multiple testing strategies. Multistep algorithms using polymerase chain reaction (PCR) for the toxin gene(s) or single-step PCR on liquid stool samples have the best test performance characteristics (for multistep: sensitivity was 0.68-1.00 and specificity was 0.92-1.00; and for single step: sensitivity was 0.86-0.92 and specificity was 0.94-0.97). Vancomycin and metronidazole are first-line therapies for most patients, although treatment failures have been associated with metronidazole in severe or complicated cases of CDI. Recent data demonstrate clinical success rates of 66.3%formetronidazole vs 78.5%for vancomycin for severe CDI. Newer therapies show promising results, including fidaxomicin (similar clinical cure rates to vancomycin, with lower recurrence rates for fidaxomicin, 15.4% vs vancomycin, 25.3%; P = .005) and fecal microbiota transplantation (response rates of 83%-94%for recurrent CDI). CONCLUSIONS AND RELEVANCE Diagnostic testing for CDI should be performed only in symptomatic patients. Treatment strategies should be based on disease severity, history of prior CDI, and the individual patient’s risk of recurrence. Vancomycin is the treatment of choice for severe or complicated CDI, with or without adjunctive therapies. Metronidazole is appropriate for mild disease. Fidaxomicin is a therapeutic option for patients with recurrent CDI or a high risk of recurrence. Fecal microbiota transplantation is associated with symptom resolution of recurrent CDI but its role in primary and severe CDI is not established.

Publication type: Journal: Article
Source: EMBASE
Full text: Available American Medical Association at JAMA

15.Title: Diagnostic Pitfalls in Clostridium difficile Infection
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(63-82), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Planche T., Wilcox M.H.
Language: English
Abstract: Accurate diagnosis of Clostridium difficile infection (CDI) is important not only for patient care but also for epidemiology and disease research. As it is not possible clinically to reliably differentiate CDI from other causes of
health care-associated diarrhea, the laboratory confirmation of CDI is essential. Rapid commercial assays, including nucleic acid amplification tests and immunoassays for C difficile toxin and glutamate dehydrogenase, have largely superseded the use of older assays. Although assays that detect the presence of free C difficile toxin in feces are less frequently positive than tests for organism, they are preferable for the detection of CDI.

Publication type: Journal: Review
Source: EMBASE

16. Title: Environmental interventions to control clostridium difficile
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(83-91), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Loo V.G.
Language: English
Abstract: The control of Clostridium difficile infection is paramount. C difficile spores are difficult to eradicate and can survive on surfaces for prolonged periods of time. Hand washing with either plain or antimicrobial soap is effective in removing C difficile spores from hands. Patients should be placed in private rooms and under contact precautions to prevent transmission to other patients. Regular hospital germicides are not sporicidal and hypochlorite solutions are required for surface disinfection. In outbreak situations, a multifaceted approach is required.
Publication type: Journal: Review
Source: EMBASE

17. Title: Fecal Microbiota Transplantation for the Management of Clostridium difficile Infection
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(109-122), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Rao K., Young V.B.
Language: English
Abstract: This article discusses the use of fecal microbiota transplantation (FMT) for the treatment of recurrent Clostridium difficile infection (CDI). The disruption of the normal gut microbiota is central to the pathogenesis of CDI, and disruption persists in recurrent disease. The use of FMT for recurrent CDI is characterized by a high response rate and short term safety is excellent, although the long-term effects of FMT are as yet unknown.
Publication type: Journal: Review
Source: EMBASE

18. Title: Guidelines for the diagnosis, prevention and management of implantable cardiac electronic device infection. Report of a joint Working Party project on behalf of the British Society for Antimicrobial Chemotherapy (BSAC, host organization), British Heart Rhythm Society (BHRS), British Cardiovascular Society (BCS), British Heart Valve Society (BHVS) and British Society for Echocardiography (BSE).
Citation: Journal of Antimicrobial Chemotherapy, February 2015, vol./is. 70/2(325-59), 0305-7453;1460-2091 (2015 Feb)
Language: English
Abstract: Infections related to implantable cardiac electronic devices (ICEDs), including pacemakers, implantable cardiac defibrillators and cardiac resynchronization therapy devices, are increasing in incidence in the USA and are likely to increase in the UK, because more devices are being implanted. These devices have both intravascular and extravascular components and infection can involve the generator, device leads and native cardiac structures or various combinations. ICED infections can be life-threatening, particularly when associated with endocardial infection, and all-cause mortality of up to 35% has been reported. Like infective endocarditis, ICED infections can be difficult to diagnose and manage. This guideline aims to (i) improve the quality of care provided to patients with ICEDs, (ii) provide an educational resource for all relevant healthcare professionals, (iii) encourage a multidisciplinary approach to ICED infection management, (iv) promote a standardized approach to the diagnosis, management, surveillance and prevention of ICED infection through pragmatic evidence-rated recommendations, and (v) advise on future research projects/audit. The guideline is intended to assist in the clinical care of patients with suspected or confirmed ICED infection in the UK, to inform local infection prevention and treatment policies and guidelines and to be used in the development of educational and training material by the relevant professional societies. The questions covered by the guideline are presented at the beginning of each section. Copyright © The Author 2014. Published by Oxford University Press on behalf of the British Society for Antimicrobial Chemotherapy. All rights
19. Title: Gut check: Clostridium difficile testing and treatment in the molecular testing era
Citation: Infection Control and Hospital Epidemiology, 2015, vol./is. 36/2(217-221), 0899-823X (2015)
Author(s): Buckel W.R., Avdic E., Carroll K.C., Gunaseelan V., Hadhazy E., Cosgrove S.E.
Language: English
Abstract: We evaluated the impact of nursing education and stewardship interventions on Clostridium difficile testing and treatment appropriateness. Diarrhea documentation increased for those with positive tests (45% to 70%); pretreatment laxative use decreased (50% to 19%). Appropriate treatment increased for severe infection (57% to 93%), but all asymptomatically colonized patients were treated.

20. Title: Hospital organisation, management, and structure for prevention of health-care-associated infection: A systematic review and expert consensus
Citation: The Lancet Infectious Diseases, February 2015, vol./is. 15/2(212-224), 1473-3099;1474-4457 (01 Feb 2015)
Language: English
Abstract: Despite control efforts, the burden of health-care-associated infections in Europe is high and leads to around 37 000 deaths each year. We did a systematic review to identify crucial elements for the organisation of effective infection-prevention programmes in hospitals and key components for implementation of monitoring. 92 studies published from 1996 to 2012 were assessed and ten key components identified: organisation of infection control at the hospital level; bed occupancy, staffing, workload, and employment of pool or agency nurses; availability of and ease of access to materials and equipment and optimum ergonomics; appropriate use of guidelines; education and training; auditing; surveillance and feedback; multimodal and multidisciplinary prevention programmes that include behavioural change; engagement of champions; and positive organisational culture. These components comprise manageable and widely applicable ways to reduce health-care-associated infections and improve patients’ safety.

21. Title: Implications and emerging control strategies for ventilator-associated infections
Citation: Expert Review of Anti-Infective Therapy, March 2015, vol./is. 13/3(379-393), 1478-7210;1744-8336 (01 Mar 2015)
Author(s): Loo C.-Y., Lee W.-H., Young P.M., Cavaliere R., Whitchurch C.B., Rohanizadeh R.
Language: English
Abstract: Ventilator-associated pneumonia (VAP) remains a major burden to the healthcare system and intubated patients in intensive care units. In fact, VAP is responsible for at least 50% of prescribed antibiotics to patients who need mechanical ventilation. One of the factors contributing to VAP pathogenesis is believed to be rapid colonization of biofilm-forming pathogens such as Pseudomonas aeruginosa and Staphylococcus aureus on the surface of inserted endotracheal tubes. These biofilms serve as a protective environment for bacterial colonies and provide enhanced resistance towards many antibiotics. This review presents and discusses an overview of current strategies to inhibit the colonization and formation of biofilm on endotracheal tubes, including antibiotic treatment, surface modification and antimicrobial agent incorporation onto endotracheal tube materials.

22. Title: Influence of staff behavior on infectious risk in operating rooms: What is the evidence?
Citation: Infection Control and Hospital Epidemiology, January 2015, vol./is. 36/1(93-106), 0899-823X (01 Jan 2015)
Author(s): Birgand G., Saliou P., Lucet J.-C.
Language: English
Abstract: A systematic literature review was performed to assess the impact of surgical-staff behaviors on the risk of surgical site infections. Published data are limited, heterogeneous, and weakened by several methodological flaws,
underlying the need for more studies with accurate tools

Objective. To assess the current literature regarding the impact of surgical-staff behaviors on the risk of surgical-site infection (SSI) Design. Systematic literature review

Methods. We searched the Medline, EMBASE, Ovid, Web of Science, and Cochrane databases for original articles about the impact of intraoperative behaviors on the risk of SSI published in English before September 2013

Results. We retrieved 27 original articles reporting data on number of people in the operating room (n = 14), door openings (n = 14; number [n= 6], frequency [n =7], reasons [n =4], or duration [n= 3]), surgical-team discipline (evidence of distraction; n=4), compliance with traffic measures (n= 6), or simulated behaviors (n =3). Most (59%) articles were published in 2009-2013. End points were the 30-day SSI rate (n = 8), air-particle count (n =2), or microbiological air counts (n =6); 11 studies were only descriptive. Number of people in the operating room and SSI rate or airborne contaminants (particle/bacteria) were correlated in 2 studies. Door openings and airborne bacteria counts were correlated in 2 observational studies and 1 experimental study. Two cohort studies showed a significant association between surgeon interruptions/distraction or noise and SSI rate. The level of evidence was low in all studies

Conclusions. Published data about the impact of operating-room behaviors on the risk of infection are limited and heterogeneous. All studies exhibit major methodological flaws. More studies with accurate tools should be performed to address the influence of operating room behaviors on the infectious risk.

Publication type: Journal: Article

Source: MEDLINE

25. Title: Linezolid versus vancomycin for the treatment of suspected methicillin-resistant Staphylococcus aureus nosocomial pneumonia: A systematic review employing meta-analysis

Citation: European Journal of Clinical Pharmacology, January 2015, vol./is. 71/1(107-115), 0031-6970;1432-1041 (January 2015)

Author(s): Wang Y., Zou Y., Xie J., Wang T., Zheng X., He H., Dong W., Xing J., Dong Y.
Abstract: Purpose: The optimal therapy involving linezolid or vancomycin for suspected methicillin-resistant Staphylococcus aureus (MRSA) nosocomial pneumonia (NP) remains controversial. This study compared the efficacy and safety of linezolid and vancomycin therapies in patients with NP. Methods: A systematic review of randomized controlled trials with meta-analyses performed by searching PubMed, EMBASE, MEDLINE, and the Cochrane Central Register of Controlled Trials. We screened for relevant randomized controlled studies in which patients with NP were enrolled and linezolid and vancomycin therapies were compared. Results: Nine trials involving 2618 pneumonia patients were reviewed. Linezolid was not found to be superior to vancomycin for clinical cure when categories of pathogen were not considered and in a subgroup of NP patients with MRSA infection [relative risk (RR)=1.16, 95 % confidence interval (CI)=0.95-1.43, P=0.15]. Compared with vancomycin, linezolid has no difference in the overall microbiological eradication rate (RR=1.12, 95 % CI=0.96-1.30, P=0.15) and specific MRSA eradication rate (RR=1.16, 95 % CI=0.93-1.45, P=0.19) in NP patients. In addition, nephrotoxicity was more frequent with vancomycin (RR=0.50, 95 % CI=0.31-0.81, P=0.005), but no differences between the treatments were found for all-cause mortality, thrombocytopenia, gastrointestinal effects, and drug discontinuation due to adverse events. Conclusion: These results suggest that linezolid is not superior to vancomycin with respect to both clinical and microbiological cure rates in patients with MRSA NP.

Publication type: Journal: Article
Source: EMBASE

26. Title: New Perspectives in Clostridium difficile Disease Pathogenesis
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(1-11), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Monaghan T.M.
Language: English
Abstract: Clostridium difficile is associated with a spectrum of clinical manifestations ranging from asymptomatic carriage to severe life-threatening pseudomembranous colitis. Current perspectives indicate that C difficile pathogenesis is a multifactorial disease process dictated by pathogenic toxin production, gut microbial dysbiosis, and altered host inflammatory responses. This article summarizes recent findings underpinning the cellular and molecular mechanisms regulating bacterial virulence and sheds new light on the critical roles of the host immune response, intestinal microbiota, and metabolome in mediating disease pathogenesis.
Publication type: Journal: Review
Source: EMBASE

27. Title: Outpatient parenteral antimicrobial therapy in pediatrics: An opportunity to expand antimicrobial stewardship
Citation: Infection Control and Hospital Epidemiology, 2015, vol./is. 36/2(222-224), 0899-823X (2015)
Author(s): Knackstedt E.D., Stockmann C., Davis C.R., Thorell E.A., Pavia A.T., Hersh A.L.
Language: English
Abstract: We reviewed patient discharges with outpatient parenteral antimicrobial therapy (OPAT) to determine whether outpatient parenteral antimicrobial therapy was modifiable or unnecessary at a large tertiary care children's hospital. At least one modification definitely or possibly would have been recommended for 78% of episodes. For more than 40% of episodes, outpatient parenteral antimicrobial therapy was potentially not indicated.
Publication type: Journal: Article
Source: EMBASE

28. Title: Potential Sources of Clostridium difficile in Human Infection
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(29-35), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Bauer M.P., Kuijper E.J.
Language: English
Abstract: The view of Clostridium difficile infection as a hospital-acquired infection transmitted only by symptomatic patients is changing. Although C difficile is present in food for human consumption, food-borne infection caused by C difficile has never been confirmed. More information on the infective dose and the level of contamination is needed to determine the risk for food-borne exposure to C difficile in humans. The emergence of C difficile polymerase chain reaction (PCR) ribotype 078 in humans is epidemiologically linked to its presence in piglets and calves and their environment, suggesting zoonotic transmission.
Publication type: Journal: Review
29. Title: Predictive Values of Models of Clostridium difficile Infection
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(163-177), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Chilton C.H., Freeman J.
Language: English
Abstract: Invivo and invitro models are widely used to simulate Clostridium difficile infection (CDI). They have made considerable contributions in the study of C difficile pathogenesis, antibiotic predisposition to CDI, and population dynamics as well as the evaluation of new antimicrobial and immunologic therapeutics. Although CDI models have greatly increased understanding of this complicated pathogen, all have limitations in reproducing human disease, notably their inability to generate a truly reflective immune response. This review summarizes the most commonly used models of CDI and discusses their pros and cons and their predictive values in terms of clinical outcomes.
Publication type: Journal: Review
Source: EMBASE

30. Title: Preventing central venous catheter-related bloodstream infection
Citation: Nursing Standard, Jan 2015, vol. 29, no. 19, p. 37-43, 0029-6570 (January 7, 2015)
Author(s): Wilson, Charlotte
Abstract: Nurses should be able to apply evidence-based practice in a way that is appropriate for the individual patient. This article discusses one area, the incidence of central venous catheter-related bloodstream infection in acute care, to examine the available evidence and identify ways in which this evidence can be applied to practice. Research indicates that implementing best practice at the time of insertion is a principal determinant in minimising the risk of catheter-related bloodstream infection. [PUBLICATION] 46 references
Source: BNI

31. Title: The contribution of strains and hosts to outcomes in clostridium difficile infection
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(51-61), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Martin J.
Language: English
Abstract: Acquisition of Clostridium difficile spores can be followed by a spectrum of clinical outcomes ranging from asymptomatic transit through the bowel to severe colitis and death. This clinical variability is a product of bacterial virulence and host susceptibility to the pathogen. It is important to identify patients at high risk of poor outcome so that increased monitoring and optimal treatment strategies can be instigated. This article discusses the evidence linking strain type to clinical outcome, including the importance of toxin and nontoxin virulence factors. It reviews host factors and their relationship with C difficile infection susceptibility, recurrence, and mortality.
Publication type: Journal: Review
Source: EMBASE

32. Title: The Epidemiology of Clostridium difficile Infection Inside and Outside Health Care Institutions
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(37-50), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Gerding D.N., Lessa F.C.
Language: English
Abstract: This article describes the global changes in Clostridium difficile epidemiology since the late twentieth century and into the twenty-first century when the new epidemic strain BI/NAP1/027 emerged. The article provides an overview of how understanding of C difficile epidemiology has rapidly evolved since its initial association with colitis in 1974. It also discusses how C difficile has spread across the globe, the role of asymptomatic carriers in disease transmission, the increased recognition of C difficile outside health care settings, the changes in epidemiology of C difficile infection in children, and the risk factors for disease.
Publication type: Journal: Review
Source: EMBASE

33. Title: The Morbidity, Mortality, and Costs Associated with Clostridium difficile Infection
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(123-134), 0891-5520;1557-9824 (01 Mar 2015)
34. **Title:** The potential for emerging therapeutic options for Clostridium difficile infection  
**Citation:** Gut Microbes, January 2015, vol./is. 5/6(696-710), 1949-0976;1949-0984 (26 Jan 2015)  
**Author(s):** Mathur H., Rea M.C., Cotter P.D., Paul Ross R., Hill C.  
**Language:** English  
**Abstract:** Clostridium difficile is mainly a nosocomial pathogen and is a significant cause of antibiotic-associated diarrhea. It is also implicated in the majority of cases of pseudomembranous colitis. Recently, advancements in next generation sequencing technology (NGS) have highlighted the extent of damage to the gut microbiota caused by broad-spectrum antibiotics, often resulting in C. difficile infection (CDI). Currently the treatment of choice for CDI involves the use of metronidazole and vancomycin. However, recurrence and relapse of CDI, even after rounds of metronidazole/ vancomycin administration is a problem that must be addressed. The efficacy of alternative antibiotics such as fidaxomicin, rifaximin, nitazoxanide, ramoplanin and tigecycline, as well as faecal microbiota transplantation has been assessed and some have yielded positive outcomes against C. difficile. Some bacteriocins have also shown promising effects against C. difficile in recent years. In light of this, the potential for emerging treatment options and efficacy of anti-C. difficile vaccines are discussed in this review.  
**Publication type:** Journal: Review  
**Source:** EMBASE

35. **Title:** The Potential of Probiotics to Prevent Clostridium difficile Infection  
**Citation:** Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(135-144), 0891-5520;1557-9824 (01 Mar 2015)  
**Author(s):** Allen S.J.  
**Language:** English  
**Abstract:** Exposure to antibiotics is the major risk factor for Clostridium difficile diarrhea (CDD), suggesting that impairment of colonization resistance due to depletion of the gut flora is a significant underlying disease susceptibility factor. Many properties of probiotic organisms indicate that they may be able to replenish the depleted gut flora and restore colonization resistance. However, despite numerous clinical trials, the evidence base for probiotics in the prevention of CDD remains weak. A recent large trial of a multistrain, high-dose probiotic did not show clear evidence of efficacy. The role of probiotics in the prevention of CDD remains unclear.  
**Publication type:** Journal: Review  
**Source:** EMBASE

36. **Title:** The prospect for vaccines to prevent clostridium difficile infection  
**Citation:** Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(145-162), 0891-5520;1557-9824 (01 Mar 2015)  
**Author(s):** Ghose C., Kelly C.P.  
**Language:** English  
**Abstract:** Clostridium difficile is a spore-forming anaerobic gram-positive organism that is the leading cause of antibiotic-associated nosocomial infectious diarrhea in the Western world. This article describes the evolving epidemiology of C difficile infection (CDI) in the twenty-first century, evaluates the importance of vaccines against the disease, and defines the roles of both innate and adaptive host immune responses in CDI. The effects of passive immunotherapy and active vaccination against CDI in both humans and animals are also discussed.  
**Publication type:** Journal: Review  
**Source:** EMBASE

37. **Title:** The relationship between hand hygiene and health care-associated infection: It's complicated  
**Citation:** Infection and Drug Resistance, 2015, vol./is. 8/(7-18), 1178-6973;1178-6973 (2015)  
**Author(s):** McLaws M.-L.  
**Language:** English  
**Abstract:** The reasoning that improved hand hygiene compliance contributes to the prevention of health care-
associated infections is widely accepted. It is also accepted that high hand hygiene alone cannot impact formidable risk factors, such as older age, immunosuppression, admission to the intensive care unit, longer length of stay, and indwelling devices. When hand hygiene interventions are concurrently undertaken with other routine or special preventive strategies, there is a potential for these concurrent strategies to confound the effect of the hand hygiene program. The result may be an overestimation of the hand hygiene intervention unless the design of the intervention or analysis controls the effect of the potential confounders. Other epidemiologic principles that may also impact the result of a hand hygiene program include failure to consider measurement error of the content of the hand hygiene program and the measurement error of compliance. Some epidemiological errors in hand hygiene programs aimed at reducing healthcare-associated infections are inherent and not easily controlled. Nevertheless, the inadvertent omission by authors to report these common epidemiological errors, including concurrent infection prevention strategies, suggests to readers that the effect of hand hygiene is greater than the sum of all infection prevention strategies. Worse still, this omission does not assist evidence-based practice.

Publication type: Journal: Review
Source: EMBASE

38.Title: Treatment of Clostridium difficile Infections
Citation: Infectious Disease Clinics of North America, March 2015, vol./is. 29/1(93-108), 0891-5520;1557-9824 (01 Mar 2015)
Author(s): Soriano M.M., Johnson S.
Language: English
Abstract: Vancomycin and metronidazole were historically considered equivalent therapies for the management of Clostridium difficile infections (CDI); however, recent data confirm more favorable outcomes with vancomycin. Fidaxomicin is a narrow spectrum antibiotic that has an advantage in reducing recurrence rates compared with vancomycin, possibly owing to its sparing effect on normal colonic microbiota. Data are limited for guiding management of CDI recurrences, particularly multiple recurrences. Several empiric approaches to manage these cases are reviewed.
Publication type: Journal: Review
Source: EMBASE

39.Title: Treatment of recurrent and severe clostridium difficile infection
Citation: Annual Review of Medicine, January 2015, vol./is. 66/(373-386), 0066-4219;1545-326X (14 Jan 2015)
Author(s): Keller J.J., Kuijper E.J.
Language: English
Abstract: Clostridium difficile infection (CDI) is a serious complication of hospitalization and antibiotic use with a high mortality and very high costs. Despite appropriate treatment, a subset of patients develop chronic recurrent CDI. Some other patients develop severe and life-threatening colitis. The risk factors, pathogenesis, and treatment of recurrent CDI and severe CDI are discussed in this review. In particular, fecal microbiota transplantation (FMT) as a treatment strategy is outlined and a treatment algorithm incorporating FMT is described.
Publication type: Book Series: Article
Source: EMBASE
Full text: Available Annual review of medicine at Annual Review of Medicine

40.Title: Universal treatment success among healthcare workers diagnosed with occupationally acquired acute hepatitis C
Citation: Journal of Hospital Infection, January 2015, vol./is. 89/1(69-71), 0195-6701;1532-2939 (01 Jan 2015)
Author(s): Tomkins S.E., Rice B.D., Roy K., Cullen B., Ncube F.M.
Language: English
Abstract: Healthcare workers (HCWs) are at risk of occupationally acquired hepatitis C. In the UK, 17 HCWs were diagnosed with occupationally acquired acute hepatitis C between 2002 and 2011. All 17 cases involved percutaneous injuries from hollowbore needles, 16 known to be contaminated with blood. Of these 17 HCWs, 15 received antiviral therapy and 14 are known to have achieved viral clearance. Treatment success was irrespective of genotype. The successful treatment of HCWs emphasizes the need for UK guidelines on the management of occupationally acquired acute hepatitis C.
Publication type: Journal: Article
Source: EMBASE

41.Title: What is new in the diagnosis and prevention of spine surgical site infections
Abstract: Background context Surgical site infection (SSI) after spinal surgery can result in several serious secondary complications, such as pseudoarthrosis, neurological injury, paralysis, sepsis, and death. There is an increasing body of literature on risk factors, diagnosis, and specific intraoperative interventions, including attention to sterility of instrumentation, application of minimally invasive fusion techniques, intraoperative irrigation, and application of topical antibiotics, that hold the most promise for reduction of SSI. Purpose The purpose of this review is to identify and summarize the recent literature on the incidence, risk factors, diagnosis, prevention, and treatment of SSIs after adult spine surgery. Study design The study design included systematic review and literature synthesis. Methods For the systematic reviews, a search was performed in Medline and Scopus using keywords derived from a preliminary review of the literature and Medline MeSH terms. These studies were then manually filtered to meet the study criteria outlined in each section. Studies were excluded via predetermined criteria, and the majority of articles reviewed were excluded. Results There are a number of patient- and procedure-specific risk factors for SSI. Surgical site infection appears to have significant implications from the patients' perspective on outcome of care. Diagnosis of SSI appears to rely primarily on clinical factors, while laboratory values such as C-reactive protein are not universally sensitive. Similarly, novel methods of perioperative infection prophylaxis such as local antibiotic administration appear to be modestly effective. Conclusions Surgical site infections are a common multifactorial problem after spine surgery. There is compelling evidence that improved risk stratification, detection, and prevention will reduce SSIs.
News

NHS Choices

'Game changer' HIV drug cuts infection risk by 86%
Wednesday Feb 25 2015
"Scientists hail discovery of 'game-changer' that cuts the risk of infection among gay men by 86%," The Independent reports. The drug, Truvada, has proved very successful in a "real-world" trial...

Flu jab is not a 'waste of time'
Friday Feb 6 2015
“Flu jab given to millions is 'useless',” and "Flu jab is a waste of time," are the irresponsible headlines in The Daily Telegraph and the Daily Mail...

Disclaimer and Feedback

This current awareness bulletin contains a selection of information which is not intended to be exhaustive, and although library staff have made every effort to link only to reputable and reliable websites, the information contained in this bulletin has not been critically appraised by library staff. It is therefore the responsibility of the reader to appraise this information for accuracy and relevance.

This bulletin was produced by Caroline Thomas, Librarian, Salisbury NHS Foundation Trust Healthcare Library. If you have any comments to make about this bulletin please contact Caroline.thomas@salisbury.nhs.uk.