

Central venous catheter (CVC) management: evidence round-up

Sarah Chapman for Evidently Cochrane 03 July 2020, updated 19 July 2022

References and further reading

Balain M, Oddie SJ, McGuire W. Antimicrobial-impregnated central venous catheters for prevention of catheter-related bloodstream infection in newborn infants. Cochrane Database of Systematic Reviews 2015, Issue 9. Art. No.: CD011078. DOI: 10.1002/14651858.CD011078.pub2
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD011078.pub2/full>

Bradford NK, Edwards RM, Chan RJ. Normal saline (0.9% sodium chloride) versus heparin intermittent flushing for the prevention of occlusion in long-term central venous catheters in infants and children. Cochrane Database of Systematic Reviews 2020, Issue 4. Art. No.: CD010996. DOI: 10.1002/14651858.CD010996.pub3
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010996.pub3/full>

Gavin NC, Webster J, Chan RJ, Rickard CM. Frequency of dressing changes for central venous access devices on catheter-related infections. Cochrane Database of Systematic Reviews 2016, Issue 2. Art. No.: CD009213. DOI: 10.1002/14651858.CD009213.pub2
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009213.pub2/full>

Lai NM, Taylor JE, Tan K, Choo YM, Ahmad Kamar A, Muhamad NA. Antimicrobial dressings for the prevention of catheter-related infections in newborn infants with central venous catheters. Cochrane Database of Systematic Reviews 2016, Issue 3. Art. No.: CD011082. DOI: 10.1002/14651858.CD011082.pub2.
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD011082.pub2/full>

Lai NM, Chaiyakunapruk N, Lai NA, O'Riordan E, Pau WSC, Saint S. Catheter impregnation, coating or bonding for reducing central venous catheter-related infections in adults. Cochrane Database of Systematic Reviews 2016, Issue 3. Art. No.: CD007878. DOI: 10.1002/14651858.CD007878.pub3
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD007878.pub3/full>

Lai NM, Lai NA, O'Riordan E, Chaiyakunapruk N, Taylor JE, Tan K. Skin antisepsis for reducing central venous catheter-related infections. Cochrane Database of Systematic Reviews 2016, Issue 7. Art. No.: CD010140. DOI: 10.1002/14651858.CD010140.pub2.
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010140.pub2/full>

López-Briz E, Ruiz Garcia V, Cabello JB, Bort-Martí S, Carbonell Sanchis R. Heparin versus 0.9% sodium chloride locking for prevention of occlusion in central venous catheters in adults. Cochrane Database of Systematic Reviews 2022, Issue 7. Art. No.: CD008462. DOI: 10.1002/14651858.CD008462.pub4. Accessed 19 July 2022.
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD008462.pub4/full>

Loveday HP, Wilson JA, Pratt RJ, Golsorkhi M, Tingle A, Bak A, Browne J, Prieto J, Wilcox M. epic3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England. *Journal of Hospital Infection* 2014;86(S1):S1-S70. Available from: [https://www.journalofhospitalinfection.com/article/S0195-6701\(13\)60012-2/pdf](https://www.journalofhospitalinfection.com/article/S0195-6701(13)60012-2/pdf)

Loveday HP, Wilson JA, Prieto J, Wilcox MH. epic3: revised recommendation for intravenous catheter and catheter site care. *J Hosp Infect* 2016;92(4):346-348. doi:10.1016/j.jhin.2015.11.011. Available from: [https://www.journalofhospitalinfection.com/article/S0195-6701\(15\)00488-0/fulltext](https://www.journalofhospitalinfection.com/article/S0195-6701(15)00488-0/fulltext)

National Institute for Health and Care Excellence. Cochrane Quality and Productivity Case Study: heparin versus 0.9% sodium chloride intermittent flushing for prevention of occlusion in central venous catheters in adults. Belfast: Queen's University Belfast; 2015. Available from: <https://www.nice.org.uk/savingsandproductivityandlocalpracticeresource?id=2610>

National Institute for Health and Care Excellence. Healthcare-associated infections: prevention and control in primary and community care. London: National Institute for Health and Care Excellence; 2017. (NICE CG139) [Issued March 2012; last updated February 2017]. Available from: <https://www.nice.org.uk/guidance/cg139>

Ullman AJ, Cooke ML, Mitchell M, Lin F, New K, Long DA, Mihala G, Rickard CM. Dressings and securement devices for central venous catheters (CVC). *Cochrane Database of Systematic Reviews* 2015, Issue 9. Art. No.: CD010367. DOI: 10.1002/14651858.CD010367.pub2 <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010367.pub2/full>

Ullman AJ, Cooke ML, Gillies D, Marsh N, Daud A, McGrail MR, O'Riordan E, Rickard CM. Optimal timing for intravascular administration set replacement. *Cochrane Database of Systematic Reviews* 2013, Issue 9. Art. No.: CD003588. DOI: 10.1002/14651858.CD003588.pub3. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003588.pub3/full>

Vasudevan C, Oddie SJ, McGuire W. Early removal versus expectant management of central venous catheters in neonates with bloodstream infection. *Cochrane Database of Systematic Reviews* 2016, Issue 4. Art. No.: CD008436. DOI: 10.1002/14651858.CD008436.pub3 <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD008436.pub3/full>