Supplementary Document S1. List of original articles included in the scoping review of bacterial contamination of antiseptics, disinfectants and products used for hand hygiene

Outbreak reports

1. Archibald, L.K.; Shah, B.; Schulte, M.; Arduino, M.J.; Aguero, S.; Fisher, D.J.; Stechenberg, B.W.; Banerjee, S.N.; Jarvis, W.R. Serratia Marcescens Outbreak Associated with Extrinsic Contamination of 1% Chlorxylenol Soap. *Infect. Control Hosp. Epidemiol.* **1997**, *18*, 704–709. https://doi.org/10.1086/647516.
2. Bassett, D.C.J.; Stokes, K.J.; Thomas, W.R.G. Wound Infection with Pseudomonas Multivorans: A Water-Borne Contaminant of Disinfection Solutions. *Lancet* **1970**, 1188–1191. https://doi.org/10.1016/S0140-6736(70)91783-6.
3. Buffet-Bataillon, S.; Rabier, V.; Bétrémieux, P.; Beuchée, A.; Bauer, M.; Pladys, P.; Le Gall, E.; Cormier, M.; Jolivet-Gougeon, A. Outbreak of Serratia Marcescens in a Neonatal Intensive Care Unit: Contaminated Unmedicated Liquid Soap and Risk Factors. *J. Hosp. Infect.* **2009**, *72*, 17–22. https://doi.org/10.1016/j.jhin.2009.01.010.
4. Cascio, G. Lo; Bonora, M.G.; Zorzi, A.; Mortani, E.; Tessitore, N.; Loschiavo, C.; Lupo, A.; Solbiati, M.; Fontana, R.; Patologia, D.; et al. A Napkin-Associated Outbreak of Burkholderia Cenocepacia Bacteraemia in Haemodialysis Patients. *J. Hosp. Infect.* **2006**, *64*, 56–62. https://doi.org/10.1016/j.jhin.2006.04.010.
5. Centers for Disease Control and Prevention, (CDC). Contaminated Detergent Solution. *Morb. Mortal. Wkly. Rep.* **1969**, *18*, 366.
6. Centers for Disease Control and Prevention, (CDC). Contamination of Alcohol Prep Pads with Bacillus Cereus Group and Bacillus Species — Colorado, 2010. *Morb. Mortal. Wkly. Rep.* **2011**, *60*, 347.
7. Centers for Disease Control and Prevention, (CDC). Epidemiologic Notes and Reports Pseudomonas Aeruginosa Peritonitis Attributed to a Contaminated Iodophor Solution -- Georgia. *Morb. Mortal. Wkly. Rep.* **1982**, *31*, 197–198.
8. Coyle-Gilchrist, M.M.; Crewe, P.; Roberts, G. Flavobacterium Meningosepticum in the Hospital Environment. *J. clin. Path.* **1976**, *29*, 824–826. https://doi.org/10.1136/jcp.29.9.824.
9. de Frutos, M.; Lopez-Urrutia, L.; Dominguez-Gil, M.; Arias, M.; Munoz-Bellido, J.L.; Eiros, J.M.; Ramos, C. Serratia Marcescens Outbreak Due to Contaminated 2% Aqueous Chlorhexidine. *Enferm. Infecc. Microbiol. Clin.* **2017**, *35*, 624–629. https://doi.org/10.1016/j.eimc.2016.06.016.
10. Dixon, R.E.; Kaslow, R.A.; Mackel, D.C.; Fulkerson, C.C.; Mallison, G.F. Aqueous Quaternary Ammoniums Antiseptics and Disinfectants Use and Misuse. *JAMA* **1976**, *236*, 2415–2417. https://doi.org/10.1001/jama.1976.03270220035031.
11. Dolan, S.A.; Littlehorn, C.; Glodé, M.P.; Dowell, E.; Xavier, K.; Nyquist, A.-C.; Todd, J.K. Association of Bacillus Cereus Infection with Contaminated Alcohol Prep Pads . *Infect. Control Hosp. Epidemiol.* **2012**, *33*, 666–671. https://doi.org/10.1086/666334.
12. Dulake, C.; Kidd, E. Contaminated Irrigating Fluid. *Lancet* **1966**, 980. https://doi.org/10.1016/S0140-6736(66)90982-2.
13. Ehrenkranz, J.N.; Bolyard, E.A.; Wiener, M.; Clearry, T. Antibiotic-Sensitive Serratia Marcescens Infection Complicating Cardiopulmonary Operations: Contaminated Disinfectant as a Reservoir. *Lancet* **1980**, 1289–1291. https://doi.org/10.1016/S0140-6736(80)92349-1.
14. Falkiner, F.R.; Jacoby, G.A.; Keane, C.T.; Mccann, S.R. Amikacin, Gentamicin and Tobramycin Resistant Pseudomonas Aeruginosa in a Leukaemic Ward . Epidemiology and Genetic Studies. *J. Hosp. Infect.* **1982**, *3*, 253–261. https://doi.org/10.1016/0195-6701(82)90044-5.
15. Fanci, R.; Bartolozzi, B.; Sergi, S.; Casalone, E.; Pecile, P.; Cecconi, D.; Mannino, R.; Donnarumma, F.; Leon, A.G.; Guidi, S.; et al. Molecular Epidemiological Investigation of an Outbreak of Pseudomonas Aeruginosa Infection in an SCT Unit. *Bone Marrow Transplant.* **2009**,

43, 335–338. https://doi.org/10.1038/bmt.2008.319.
16. Fernandez, A.L.; Adrio, B.; Cereijo, J.M.M.; Monzonis, M.A.M.; El-Diasty, M.M.; Escudero, J.A. Clinical Study of an Outbreak of Postoperative Mediastinitis Caused by Serratia Marcescens in Adult Cardiac Surgery. *Interact. Cardiovasc. Thorac. Surg.* **2020**, *30*, 523–527. https://doi.org/10.1093/icvts/ivz312.
17. Frank, M.J.; Schaffner, W. Contaminated Aqueous Benzalkonium Chloride An Unnecessary Hospital Infection Hazard. *JAMA J. Am. Med. Assoc.* **1976**, *236*, 2418–2419. https://doi.org/10.1001/jama.1976.03270220038032.
18. Garcia-Erce, J.A..; Grasa, J.M..; Solano, V.M..; Gimeno, J.J..; Lopez, A..; Hernandez, M.J..; Marcot, M.L..; L.;, A.J.; Giralt, M. Bacterial Contamination of Blood Components Due to Burkholderia Cepacia Contamination from Clorhexidine Bottles. *Vox Sang.* **2002**, *83*, 70–71. https://doi.org/10.1046/j.1423-0410.2002.00195.x
19. Grohskopf, L.; Roth, V.; Feikin, D.; Arduino, M.; Carson, L.; JI, T.; Holt, S.; Jensen, B.; Hoffman, R.; Jarvis, W. Serratia Liquefaciens Bloodstream Infections from Contamination of Epoetin Alfa at a Hemodialysis Center. *N. Engl. J. Med.* **2001**, *344*, 1491–1497. https://doi.org/10.1056/NEJM200105173442001.
20. Grupo de estudio del brote Brote Por Serratia Marcescens Asociado a La Utilización de Un Antiséptico de Clorhexidina Contaminado. *Bol. Epidemiol. Semenal* **2016**, *24*, 85–101. https://hdl.handle.net/20.500.12105/14134
21. Guinness, M.; Levey, J. Contamination of Aqueous Dilutions of Resiguard Disinfectant with Pseudomonas. *Med. J. Aust.* **1976**, 392.
22. Hardy, P.C.; Ederer, G.M.; Mastsen, J.M. Contamination of Commercially Packaged Urinary Catheder Kits with Pseudomonas EO-1. *N. Engl. J. Med.* **1970**, *282*, 33–35. https://doi.org/10.1056/NEJM197001012820108.
23. Heo, S.T.; Kim, S.J.; Jeong, Y.G.; Bae, I.G.; Jin, J.S.; Lee, J.C. Hospital Outbreak of Burkholderia Stabilis Bacteraemia Related to Contaminated Chlorhexidine in Haematological Malignancy Patients with Indwelling Catheters. *J. Hosp. Infect.* **2008**, *70*, 241–245. https://doi.org/10.1016/j.jhin.2008.07.019.
24. Hervé, B.; Chomali, M.; Gutiérrez, C.; Luna, M.; Rivas, J.; Blamey, R. Brote de Infección Nosocomial Por Serratia Marcescens Asociado a Contaminación Intrínseca de Clorhexidina Acuosa. *Rev Chil. Infectol* **2015**, *32*, 517–522. https://doi.org/10.4067/S0716-10182015000600004.
25. Hugon, E.; Marchandin, H.; Poirée, M.; Fosse, T.; Sirvent, N. Achromobacter Bacteraemia Outbreak in a Paediatric Onco-Haematology Department Related to Strain with High Surviving Ability in Contaminated Disinfectant Atomizers. *J. Hosp. Infect.* **2015**, *89*, 116–122. https://doi.org/10.1016/j.jhin.2014.07.012.
26. Kahan, A.; Philippon, A.; Paul, G.; Weber, S.; Richard, C.; Hazebroucq, G.; Degeorges, M. Nosocomial Infection by Chlorhexidine Solution Contaminated with Pseudomonas Pickettii (Biovar VA - I). *J. Infect.* **1983**, *7*, 256–263. https://doi.org/10.1016/S0163-4453(83)97196-7.
27. Lanini, S.; D'Arezzo, S.; Puro, V.; Martini, L.; Imperi, F.; Piselli, P.; Montanaro, M.; Paoletti, S.; Visca, P.; Ippolito, G.; et al. Molecular Epidemiology of a Pseudomonas Aeruginosa Hospital Outbreak Driven by a Contaminated Disinfectant-Soap Dispenser. *PLoS One* **2011**, *6*, 1–10. https://doi.org/10.1371/journal.pone.0017064.
28. Lee, C.S.; Lee, H.B.; Cho, Y.G.; Park, J.H.; Lee, H.S. Hospital-Acquired Burkholderia Cepacia Infection Related to Contaminated Benzalkonium Chloride. *Hosp. Infect. Soc.* **2008**, 280–282. https://doi.org/10.1016/j.jhin.2007.11.016.
29. Lee, J.C.; Philip J, F. Benzalkonium Chloride - Source of Hospital Infection with Gram-Negative Bacteria. *JAMA J. Am. Med. Assoc.* **1961**, 144–145. https://doi.org/10.1001/jama.1961.73040360013012a.
30. Lee, S.; Han, S.W.; Kim, G.; Song, D.Y.; Lee, J.C.; Kwon, K.T. An Outbreak of Burkholderia Cenocepacia Associated with Contaminated Chlorhexidine Solutions Prepared in the Hospital. *Am. J. Infect. Control* **2013**, *41*, 93–96. https://doi.org/10.1016/j.ajic.2013.01.024.

31. Lehours, P..; Rogues, A.M..; Occhialini, A..; Boulestreau, H.; Gachie, J.P..; Mégraud, F. Investigation of an Outbreak Due to Alcaligenes Xylosoxydans Subspecies Xylosoxydans by Random Amplified Polymorphic DNA Analysis. *Eur J Clin Microbiol Infect Dis* **2002**, *21*, 108–113. https://doi.org/10.1007/s10096-001-0669-x.
32. Malizia, W.F.; Gangarosa, E.J.; Goley, A.F. Benzalkonium Chloride as a Source of Infection. *N. Engl. J. Med.* **1960**, *263*, 800–802. https://doi.org/10.1056/NEJM196010202631608.
33. McAllister, T.A.; Lucas, C.E.; Mocan, H.; Liddell, R.H.A.; Gibson, B.E.S.; Hann, I.M.; Platt, D.J. Serratia Marcescens Outbreak in a Paediatric Oncology Unit Traced to Contaminated Chlorhexidine. *Scott. Med. J.* **1989**, *34*, 525–528. https://doi.org/10.1177/003693308903400506.
34. McNaughton, M.; Mazinke, N.; Thomas, E. Newborn Conjuctivitis Associated with Triclosan 0.5% Antiseptic Intrinsically Contaminated with Serratia Marcescens. *Can. J. Infect. Control* **1995**, *10*, 7–8.
35. Merino, J.L.; Bouarich, H.; Pita, M.J.; Martínez, P.; Bueno, B.; Caldés, S.; Corchete, E.; Jaldo, M.T.; Espejo, B.; Paraíso, V. Serratia Marcescens Bacteraemia Outbreak in Haemodialysis Patients with Tunnelled Catheters Due to Colonisation of Antiseptic Solution. Experience at 4 Hospitals. *Nefrologia* **2016**, *36*, 667–673. https://doi.org/10.1016/j.nefro.2016.05.009.
36. Mitchell, R.G.; Oxon, B.; Hayward, A. Not Always , Effectively Maintained by a Collateral Despite Chloramphenicol Therapy , the Organism Persisted in the Urine for a Time But. *Lancet* **1966**, 793–795. https://doi.org/10.1016/S0140-6736(66)91866-6
37. Molina-Cabrillana, J.; Santana-Reyes, C.; González-García, A.; Bordes-Benítez, A.; Horcajada, I. Outbreak of Achromobacter Xylosoxidans Pseudobacteremia in a Neonatal Care Unit Related to Contaminated Chlorhexidine Solution. *Eur. J. Clin. Microbiol. Infect. Dis.* **2007**, *26*, 435–437. https://doi.org/10.1007/s10096-007-0311-7.
38. Morillo, A.; Torres, M.J.; Salas, M.T.A.; Conde, M.; Aznar, J.Y. Implicación de Un Brote Nacional de Infección Por Serratia Marcescens Asociado a Clorhexidina Contaminada En Un Hospital Pediátrico Implication of a National Outbreak of Serratia Marcescens Associated with a Contaminated Solution of Chlorhexidine in a Pae. *Cart. Cient.* **2017**, 171–172. https://doi.org/10.1016/j.anpedi.2017.04.007
39. Morris, S.; Gibbs, M.; Hansman, D.; Smyth, N.; Morris S, Gibbs M, Hansman DH, Smyth N, C.D. Contamination of Aqueous Dilutions of Resiguard Disinfectant with Pseudomonas. *1The Med. J. Aust.* **1976**, 110–111.
40. Nakashima, A.K.; McCarthy, M.A.; Martone, W.J.; Anderson, R.L. Epidemic Septic Arthritis Caused by Serratia Marcescens and Associated with a Benzalkonium Chloride Antiseptic. *J. Clin. Microbiol.* **1987**, *25*, 1014–1018. https://doi.org/10.1128/jcm.25.6.1014-1018.1987.
41. Noone, P.; Shafi, M.S. Controlling Infection in a District General Hospital. *J. Clin. Pathol.* **1973**, *26*, 140–145. https://doi.org/10.1136/jcp.26.2.140.
42. Oie, S.; Arakawa, J.; Furukawa, H.; Matsumoto, S.; Matsuda, N.; Wakamatsu, H. Microbial Contamination of a Disinfectant-Soaked Unwoven Cleaning Cloth. *J. Hosp. Infect.* **2012**, *82*, 61–63. https://doi.org/10.1016/j.jhin.2012.06.010.
43. Olson, R.K.; Voorhees, R.E.; Eitzen, H.E.; Rolka, H.; Sewell, C.M. Cluster of Postinjection Abscesses Related to Corticosteroid Injections and Use of Benzalkonium Chloride. *West. J. Med.* **1999**, *170*, 143–147.
44. Panlilio, A.L..; Beck-Sague, C.M..; Siegel, J.D..; Anderson, R.L..; Yetts, S.Y..; Clark, N.C..; Duer, P.N..; Thomassen, K.A..; Vess, R.W..; Hill, B.C..; et al. Infections and Pseudoinfections Due to Povidone-Iodine Solution Contaminated with Pseudomonas Cepacia. *Clin. Infect. Dis.* **1992**, *14*, 1078–1083. https://doi.org/10.1093/clinids/14.5.1078.
45. Parrott, P.L.; Terry, P.M.; Whitworth, E.N.; Frawley, L.W.; Coble, R.S. Pseudomonas Aeruginosa Peritonitis Associated with Contaminated Poloxamer-Iodine Solution. *Lancet* **1982**, *25*, 683–685. https://doi.org/10.1016/s0140-6736(82)90712-7.
46. Plotkin, S.; Austrian, R. Bacteremia Caused by Pseudomonas Sp. Following the Use of Materials Stored in Solutions of a Cationic Surface-Active Agent. *Am. J. Med. Sci.* **1958**, 621–

627. https://doi.org/10.1097/00000441-195806000-00001.
47. Poty, F.; Denis, C.; Baufine-Ducrocq, H. Infection Nosocomiale à Pseudomonas Pickettii. Danger de l'utilisation Des Résines Échangeuses d'ions. *Presse Med.* **2008**, *16*, 1185–1187.
48. Rabier, V.; Bataillon, S.; Jolivet-Gougeon, A.; Chapplain, J.M.; Beuchée, A.; Bétrémieux, P. Hand Washing Soap as a Source of Neonatal Serratia Marcescens Outbreak. *Acta Paediatr.* **2008**, *97*, 1381–1385. https://doi.org/10.1111/j.1651-2227.2008.00953.x.
49. Romero-Gomez, M.P..; Quiles-Melero, M.I..; Garcia, P.P..; Altes, G.A..; Garcia de Miguel, M.A..; Jimenez, C..; Valdezate, S.; Nieto, S.; Romero-Gómez, M.P.; Quiles-Melero, M.I..; et al. Outbreak of Burkholderia Cepacia Bacteremia Caused by Contaminated Chlorhexidine in a Hemodialysis Unit. *Infect. Control Hosp. Epidemiol.* **2008**, *229*, 377–378. https://doi.org/10.1086/529032.
50. Rudnick, J.R.; Beck-Sague, C.M.; Anderson, R.L.; Schable, B.; Miller, M.J. Gram-Negative Bacteremia in Open-Heart-Surgery Patients Traced to Probable Tap-Water Contamination of Pressure-Monitoring Equipment. *Infect. Control Hosp. Epidemiol.* **1996**, *17*, 281–285. https://doi.org/10.1086/647296.
51. Sartor, C.; Jacomo, V.; Duvivier, C.; Tissot-Dupont, H.; Sambuc, R.; Drancourt, M. Nosocomial Serratia Marcescens Infections Associated with Extrinsic Contamination of a Liquid Nonmedicated Soap. *Infect Control Hosp Epidemiol* **2000**, *21*, 196–199. https://doi.org/10.1086/501743.
52. Sautter, R.L.; Mattman, L.H.; Legaspi, R.C.; Control, S.I.; May, N.; Sautter, R.L.; Mattman, L.H.; Legaspi, R.C. Associated With a Contaminated Benzalkonium Chloride Solution Serratia Marcescens Meningitis. **2020**, *5*, 223–225. https://doi.org/10.1017/S019594170006015X.
53. Shickman, M.D.; Guze, L.B.; Pearge, M.L. Bacteremia Following Cardiac Catheterization: Report of a Case and Studies on the Source. *N. Engl. J. Med.* **1959**, *260*, 1164–1166. https://doi.org/10.1056/NEJM195906042602304.
54. Shigeta, S.; Yasunaga, Y.; Honzumi, K.; Okamura, H.; Kumata, R.; Endo, S. Cerebral Ventriculitis Associated with Achromobacter Xylosoxidans. *J. Clin. Pathol.* **1978**, *31*, 156–161. https://doi.org/10.1136/jcp.31.2.156.
55. Sobel, J.D..; Hashman, N.; Reinherz, G.; Merzbach, D. Nosocomial Pseudomonas Cepacia Infection Associated with Chlorhexidine Contamination. *Am. J. Med.* **1982**, *73*, 183–186. https://doi.org/10.1016/0002-9343(82)90176-0.
56. Speller, D.C.E.; Stephens, M.E.; Viant, A.C. Hospital Infection by Pseudomonas Cepacia. *Lancet* **1971**, 798–799. https://doi.org/10.1016/s0140-6736(71)91236-0.
57. Stirland, R.M..; Tooth, J.A. Pseudomonas Cepacia as Contaminant of Propamidine Disinfectants. *Br. Med. J.* **1976**, 1505. https://doi.org/10.1136/bmj.2.6050.1505-a.
58. Süer, K.; Meryem, G.; Otlu, B.B.; Tunç, E.; Güvenir, M.; Otlu, B.B.; Tunç, E. Outbreak of Burkholderia Cepacia Complex Associated with Contaminated Liquid Soap for Hospital Use: A Case Study. *African J. Microbiol. Res.* **2016**, *10*, 791–795. https://doi.org/10.5897/ajmr2015.7661.
59. Takahashi, H.; Kramer, M.H.; Yasui, Y.; Fujii, H.; Nakase, K.; Ikeda, K.; Imai, T.; Okazawa, A.; Tanaka, T.; Ohyanna, T.; et al. Nosocomial Serratia Marcescens Outbreak in Osaka, Japan, From 1999 to 2000. *Infect. Control Hosp. Epidemiol.* **2004**, *25*, 156–161. https://doi.org/10.1086/502367.
60. Tena, D.; Carranza, R.; Barberá, J.R.; Valdezate, S.; Garrancho, J.M.; Arranz, M.; Sáez-Nieto, J.A. Outbreak of Long-Term Intravascular Catheter-Related Bacteremia Due to Achromobacter Xylosoxidans Subspecies Xylosoxidans in a Hemodialysis Unit. *Eur. J. Clin. Microbiol. Infect. Dis.* **2005**, *24*, 727–732. https://doi.org/10.1007/s10096-005-0028-4.
61. Tiwari, T.S.P.; Ray, B.; Jost, K.C.; Rathod, M.K.; Zhang, Y.; Brown-Elliott, B.A.; Hendricks, K.; Wallace, R.J. Forty Years of Disinfectant Failure: Outbreak of Postinjection Mycobacterium Abscessus Infection Caused by Contamination of Benzalkonium Chloride. *Clin. Infect. Dis.* **2003**, *36*, 954–962. https://doi.org/10.1086/368192.

62. Vigeant, P.; Loo, V.G.; Bertrand, C.; Dixon, C.; Hollis, R.; Pfaller, M.A.; McLean, P.A.H.; Briedis, D.J.; Perl, T.M.; Robson, H.G. An Outbreak of Serratia Marcescens Infections Related to Contaminated Chlorhexidine. *Infect. Control Hosp. Epidemiol.* **1998**, *19*, 791–794. https://doi.org/10.1086/647728.
63. Villari, P.; Crispino, M.; Salvadori, A.; Scarcella, A. Molecular Epidemiology of an Outbreak of Serratia Marcescens in a Neonatal Intensive Care Unit. *Infect. Control Hosp. Epidemiol.* **2001**, *22*, 630–634. https://doi.org/10.1086/501834.
64. Vu-Thien, H..; Darbord, J.C..; Moissenet, D..; Dulot, C..; Dufourcq, J.B.; Marsol, P..; Garbarg-Chenon, A. Investigation of an Outbreak of Wound Infections Due to Alcaligenes Xylosoxidans Transmitted by Chlorhexidine in a Burns Unit. *Eur J Clin Microbiol Infect Dis* **1998**, *17*, 724–726. https://doi.org/10.1007/s100960050168.
65. Wishart, M.M.; Riley, T. V. Infection with Pseudomonas Matophilia Hospital Outbreak Due to Contaminated Disinfectant. *Med. J. Aust.* **1976**, 710–712. https://doi.org/10.5694/j.1326-5377.1976.tb128238.x.
66. Wong, S.C.Y.; Wong, S.; Chen, J.H.K.; Poon, R.W.S.; Hung, D.L.L.; Chiu, K.H.Y.; So, S.Y.C.; Leung, W.S.; Chan, T.M.; Yap, D.Y.H.; et al. Complex Outbreak in Peritoneal Dialysis Patients Caused by Contaminated Aqueous Chlorhexidine. *Emerg. Infect. Dis.* **2020**, *26*, 1987–1997. https://doi.org/10.3201/eid2609.191746.
67. Gleeson, S.; Mulroy, E.; Bryce, E.; Fox, S.; Taylor, S.L.; Talreja, H. Burkholderia Cepacia: An Outbreak in the Peritoneal Dialysis Unit. *Perit. Dial. Int.* **2019**, *39*, 92–95. https://doi.org/10.3747/pdi.2018.00095.
68. Hocevar, S.N.; Meites, E.; Williams, M.; Pascoe, N.; O'Connell, H.; Jensen, B.; Hatch, M.; MacCannell, T. Allergy Injection-Associated Mycobacterium Abscessus Outbreak, Texas, 2009. *Infect. Dis. Soc. Am.* **2010**, *48*, 109–110.

Pseudo-outbreak reports

1. Berger, S.A. Pseudobacteremia Due to Contaminated Alcohol Swabs. *J. Clin. Microbiol.* **1983**, *18*, 974–975. https://doi.org/10.1128/jcm.18.4.974-975.1983.
2. Berkelman, R.L.; Lewin, S.; Allen, J.R.; Anderson, R.L.; Budnick, L.D.; Shapiro, S.; Friedman, S.M.; Nicholas, P.; Holizman, R.S.; Haley, R.W. Pseudobacteremia Attributed to Contamination of Povidone-Iodine with Pseudomonas Cepacia. *Ann. Intern. Med.* **1981**, *95*, 32–36. https://doi.org/10.1086/647296.
3. Craven, D.E.; Moody, B.; Connolly, M.G.; Kollisch, N.R.; Stottmeier, K.D.; McCabe, W.R. Pseudobacteremia Caused by Povidone-Iodine Solution Contaminated with Pseudomonas Cepacia. *Syria Stud.* **1981**, *305*, 621–623. https://doi.org/10.1056/NEJM198109103051106.
4. Ebner, W.; Meyer, E.; Schulz-Huotari, C.; Scholz, R.; Zilow, G.; Daschner, F.D.; Schulz-Huotari, C.; Scholz, R.; Zilow, G.; Daschner, F.D. Pseudocontamination of Blood Components with Burkholderia Cepacia during Quality Controls. *Transfus. Med.* **2005**, *15*, 241–242. https://doi.org/10.1111/j.1365-3148.2005.00577.x.
5. Gosden, P.; Norman, P. Pseudobacteremia Associated with Contaminated Skin Cleaning Agent. *Lancet* **1985**, 671–672. https://doi.org/10.1016/S0140-6736(85)90039-X.
6. Hsueh, P.; Teng, L.; Yang, P.; Pan, H.; Ho, S. Nosocomial Pseudoepidemic Caused by Bacillus Cereus Traced to Contaminated Ethyl Alcohol from a Liquor Factory. *J. Clin. Microbiol.* **1999**, *37*, 2280–2284. https://doi.org/10.1128/JCM.37.7.2280-2284.1999.
7. Kaslow, R.A.; Mackel, D.C.; Mallison, G.F. Nosocomial Pseudobacteremia : Positive Blood Cultures Due to Contaminated Benzalkonium Antiseptic. *JAMA* **1976**, *236*, 2407–2409. https://doi.org/10.1001/jama.236.21.2407.
8. Ko, S.; Rn, H.A.; Hwan, J.; Park, S. American Journal of Infection Control An Outbreak of Burkholderia Cepacia Complex Pseudobacteremia Associated with Intrinsically Contaminated Commercial 0 . 5 % Chlorhexidine Solution. *Am. J. Infect. Control* **2015**, *43*, 266–

268. https://doi.org/10.1016/j.ajic.2014.11.010.
9. Maroye, P.; Doermann, H.P.; Rogues, A.M.; Gachie, J.P.; Mégraud, F. Investigation of an Outbreak of Ralstonia Pickettii in a Paediatric Hospital by RAPD. *J. Hosp. Infect.* **2000**, *44*, 267–272. https://doi.org/10.1053/jhin.1999.0691.
10. Serikawa, T.; Kobayashi, S.; Tamura, T.; Uchiyama, M.; Tsukada, H.; Takakuwa, K.; Tanaka, K.; Ito, M. Pseudo Outbreak of Burkholderia Cepacia in Vaginal Cultures and Intervention by Infection Control Team. *J. Hosp. Infect.* **2010**, *75*, 242–243. https://doi.org/10.1016/j.jhin.2009.11.013.
11. Siebor, E.; Llanes, C.; Lafon, I.; Ogier-Desserrey, A.; Duez, J.M.; Pechinot, A.; Caillot, D.; Grandjean, M.; Sixt, N.; Neuwirth, C. Presumed Pseudobacteremia Outbreak Resulting from Contamination of Proportional Disinfectant Dispenser. *Eur J Clin Microbiol Infect Dis* **2006**, *26*, 195–198. https://doi.org/10.1007/s10096-007-0260-1.
12. Song, J.E.; Kwak, Y.G.; Um, T.H.; Cho, C.R.; Kim, S.; Park, I.S.; Hwang, J.H.; Kim, N.; Oh, G.-B. Outbreak of Burkholderia Cepacia Pseudobacteraemia Caused by Intrinsically Contaminated Commercial 0 . 5 % Chlorhexidine Solution in Neonatal Intensive Care Units. *J. Hosp. Infect.* **2018**, *98*, 295–299. https://doi.org/10.1016/j.jhin.2017.09.012.
13. Verschraegen, G.; Claeys, G.; Meeus, G.; Delanghe, M. Pseudomonas Pickettii as a Cause of Pseudobacteremia. *J. Clin. Microbiol.* **1985**, *21*, 278–279. https://doi.org/10.1128/jcm.21.2.278-279.1985.

Cross-sectional

1. Anderson, K. The Contamination of Hexachlorophene Soap with Pseudomonas Pyocyanea. *Med. J. Aust.* **1962**, 463. https://doi.org/10.5694/j.1326-5377.1962.tb20451.x.
2. Anderson, K.; Keynes, R. Infected Cork Closures and the Apparent Survival of Organisms in Antiseptic Solutions. *Br. Med. J.* **1958**, 274–275. https://doi.org/10.1136/bmj.2.5091.274.
3. Baird, R.M.; Shooter, R.A. Pseudomonas Aeruginosa Infections Associated with Use of Contaminated Medicaments. *Br. Med. J.* **1976**, *2*, 349–350. https://doi.org/10.1136/bmj.2.6031.349.
4. Barry, M.A.; Craven, D.E.; Goularte, T.A.; Lichtenberg, D.A. Serratia Marcescens Contamination of Antiseptic Soap Containing Triclosan: Implicatons for Nosocomial Infection. *Infect. Control* **1984**, *5*, 427–430. https://doi.org/:10.1017/s0195941700060690.
5. Blanc, D.S.; Magalhaes, G.B.; Abdelbary, M.; Prod'hom, G.; Greub, G.; Wasserfallen, J.B.; Genoud, P.; Zanetti, G.; Senn, L. Hand Soap Contamination by Pseudomonas Aeruginosa in a Tertiary Care Hospital: No Evidence of Impact on Patients. *J. Hosp. Infect.* **2016**, *93*, 63–67. https://doi.org/10.1016/j.jhin.2016.02.010.
6. Boyce, J.M.; Havill, N.L. In-Use Contamination of a Hospital-Grade Disinfectant. *Am. J. Infect. Control* **2022**, *000*, 1–6. https://doi.org/10.1016/j.ajic.2022.03.008.
7. Brooks, S.E.; Walczak, M.A.; Malcom, S.; Hameed, R. Intrinsic Klebsiella Pneumoniae Contamination of Liquid Germicidal Hand Soap Containing Chlorhexidine. *Infect. Control Hosp. Epidemiol.* **2004**, *25*, 883–885. https://doi.org/10.1086/502314.
8. Bruun, J.N.; Digranes, A. Survival of Gram-Negative Bacicilli and Candida Albicans in Hexachlorophene Preparations and Other Disinfectants. *Scand J Infect Dis* **1971**, *3*, 235–238. https://doi.org/10.3109/inf.1971.3.issue-3.10.
9. Burdon, D.W.; Whitby, J.L.; Wmitbyt, J.L. Contamination of Hospital Disinfectants with Pseudomonas Species. *Br. Med. J.* **1967**, *2*, 153–155. https://doi.org/10.1136/bmj.2.5545.153.
10. Cragg, J.; Andrews, A. V Bacterial Contamination of Disinfectant. *Br. Med. J.* **1969**, 57. https://doi.org/10.1136/bmj.3.5661.57.
11. D'Errico, M.M.; Savini, S.; Prospero, E.; Annino, I. Report on a Packaged Handwashing Antiseptic Contaminated With Pseudomonas Aeruginosa. *Infect. Control Hosp. Epidemiol.* **2000**, *21*, 302. https://doi.org/10.1086/503222.
12. Dieckmann, R.; Hammerl, J.A.; Hahmann, H.; Wicke, A.; Kleta, S.; Dabrowski, P.W.; Nitsche, A.; Stämmler, M.; Al Dahouk, S.; Lasch, P. Rapid Characterisation of: Klebsiella Oxytoca

Isolates from Contaminated Liquid Hand Soap Using Mass Spectrometry, FTIR and Raman Spectroscopy. *R. Soc. Chem.* **2016**, *187*, 353–375. https://doi.org/10.1039/c5fd00165j.
13. Dott, W.; Exner, M.; Krizek, L. Identification of Bacteria from Use-Surface Disinfectant Solutions and Their Sensibility against Disinfectants. *Zbl Bakt Hyg* **1981**, *174*, 314–324.
14. Dunkelberg, H.; Peeiffer, E.; Werner, H.; Wittig, J. Hygienic and Bacteriological Comparative Studies in 50 Hospitals IV. The Bacterial Contamination of Fluids of Intensive Care Units, Wards for Premature Children and New-Born Wards. *Zbl Bakt Hyg* **1976**, *161*, 417–426.
15. Elliot, B.; Maters, P. Pseudomonas Contamination of Antiseptic/Disinfectant Solutions. *Med. J. Aust.* **1977**, 155–156. https://doi.org/10.5694/j.1326-5377.1977.tb130579.x.
16. Garcı´a-San Miguel, L.; Saez-Nieto, J.; Medina, M.J.; Lopez Hernandez, S.; Sanchez-Romero, I.; Ganga, B.; Asensio, A. Contamination of Liquid Soap for Hospital Use with Raoultella Planticola. *J. Hosp. Infect.* **2014**, *86*, 219–220. https://doi.org/10.1016/j.jhin.2013.10.009.
17. Gräf, W.; Kersch, D.; Scherzer, G. Microbial Contamination of Liquid-Soap Wall Dispensers with One-Way Bottles. *Zentralbl Bakteriol Mikrobiol Hyg B Umwelthyg Krankenhaushyg Arbeitshyg Prav Med* **1988**, *186*, 166–179.
18. Hakuno, H.; Yamamoto, M.; Oie, S.; Kamiya, A. Microbial Contamination of Disinfectants Used for Intermittent Self - Catheterization. *Jpn. J. Infect. Dis.* **2010**, *63*, 277–279. https://doi.org/10.1056/NEJM197001012820108.
19. Jarvis, J.D.; Wynne, C.D.; Enwright, L.; Williams, J.D. Handwashing and Antiseptic-Containing Soaps in Hospital. *J. Clin. Pathol.* **1979**, *32*, 732–737. https://doi.org/10.1136/jcp.32.7.732.
20. Kampf, G.; Degenhardt, S.; Lackner, S.; Jesse, K.; von Baum, H.; Ostermeyer, C.; Baum, H. von; Ostermeyer, C. Poorly Processed Reusable Surface Disinfection Tissue Dispensers May Be a Source of Infection. *BMC Infect. Dis.* **2014**, *14*, 1–8. https://doi.org/10.1186/1471-2334-14-37.
21. Kupfahl, C.; Walter, M.; Wendt, C.; Baum, H. von; Kupfah, C.; Walther, M.; Wendt, C.; Baum, H. von Identical Achromobacter Strain in Reusable Surface Disinfection Tissue Dispensers and a Clinical Isolate a Ck n Ow Le d g m e n t S. *Infect. Control Hosp. Epidemiol.* **2015**, *36*, 1362–1364. https://doi.org/10.1017/ice.2015.169.
22. Leigh, D.; Whittaker, C. Disinfectants and Plastic Mop Heads. *Br. Med. J.* **1967**, 435.
23. Lowbury, E.J.L. Contamination of Cetrimide and Other Fluids with Pseudomonas Pyocyanea. *Br. J. Ind. Med.* **1951**, *8*, 22–25. https://doi.org/10.1136/oem.8.1.22.
24. Marrie, T.J.; Costerton, J.W. Prolonged Survival of Serratia Marcescens in Chlorhexidine. *Appl. Environ. Microbiol.* **1981**, *42*, 1093–1102. https://doi.org/10.1128/aem.42.6.1093-1102.1981.
25. McBride, M.E. Microbial Flora of In-Use Soap Products. *Appl. Environ. Microbiol.* **1984**, *48*, 338–341. https://doi.org/10.1128/aem.48.2.338-341.1984.
26. Momeni, S.S.; Tomlin, N.; Ruby, J.D. Isolation of Raoultella Planticola from Refillable Antimicrobial Liquid Soap Dispensers in a Dental Setting. *J Am Dent Assoc.* **2015**, *146*, 241–245. https://doi.org/10.1016/j.adaj.2014.12.013.Isolation.
27. Newman, K.A.; Tenney, J.H.; Oken, H.A.; Moody, M.R.; Wharton, R.; Schimpff, S.C. Persistent Isolation of an Unusual Pseudomonas Species From a Phenolic Disinfectant System. *Infect. Control* **1984**, *5*, 219–222. https://doi.org/10.1017/s0195941700060148.
28. Nkibiassala, S.; Devleeschouwer, M.; Ganssbeke, V.B.; Rost, F.; Dony, J. Disinfectants Prepared in a Hospital Pharmacy - Assessment of Their Microbiological Purity and Antimicrobial Effectiveness. *J. Clin. Pharm. Ther.* **1989**, *14*, 465–473. https://doi.org/10.1111/j.1365-2710.1989.tb00271.x.
29. Oie, S.; Kamiya, A. Microbial Contamination of Antiseptic-Soaked Cotton Balls. *Biol. Pharm. Bull.* **1997**, *20*, 667–669. https://doi.org/10.1248/bpb.20.667.
30. Oie, S.; Kamiya, A. Microbial Contamination of Antiseptics and Disinfectants. *Am. J. Infect. Control* **1996**, *24*, 389–395. https://doi.org/10.1016/S0196-6553(96)90027-9.
31. Palmer, P.; McCracken, L. Contaminated Antiseptic Solutions. *Lancet* **1970**, *2*, 776–777. https://doi.org/10.1016/S0140-6736(70)90256-4

32. Prince, J.; Ayliffe, G.A.J. In-Use Testing of Disinfectants in Hospitals. *J. clin. Path.* **1972**, *25*, 586–589. https://doi.org/10.1136/jcp.25.7.586
33. Simmons, N.A.; Gardner, D.A. Bacterial Contamination of a Phenolic Disinfectant. *Br. Med. J.* **1969**, 668–669. https://doi.org/10.1136/bmj.2.5658.668.