



clinell®

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ENDOMED

CHLORHEXIDINE BATHING RANGE

Residual protection for up to six hours

Clinell Chlorhexidine Wash Cloths contain 2% chlorhexidine gluconate which reduces harmful bacteria that can be found on skin and also binds to the skin for many hours after application providing residual protection.

Ideal for daily bathing in an ITU setting

Also ideal as a bed bath for pre-admission patients.

Provides rapid bactericidal action

Helping to reduce against a wide variety of microorganisms that cause infections.

Full body wash

The pack contains 8 wipes which enables each area to be effectively cleaned without wiping more than one area with a single cloth.

Use hot or cold

Use at room temperature or place in a Clinell Warmer for a warm wash cloth.

Antibacterial barrier

Unlike conventional soaps and body washes, the binding of the chlorhexidine acts like an invisible antibacterial barrier which continues to reduce bacteria on the skin for many hours.

This gives an extra level of protection during the hospital stay and procedures.

SURGICAL SITE INFECTION

CHLORHEXIDINE BATHING PREOPERATIVELY

Surgical Site Infections (SSIs) are arguably the most preventable of all healthcare-associated infections (HCAs). The organisms responsible for these infections come from the skin of the patient in the great majority of patients and skin disinfection prior to surgery is a well-accepted intervention that aims to reduce the risk.

Although current guidelines do not recommend the use of preoperative bathing with antiseptics prior to surgery, this is because of issues with the methodology of many studies that mean that they are excluded from guidelines because of stringent inclusion criteria. The overwhelming balance of evidence is however in favour of the simple and cost-effective measure of skin decontamination with Chlorhexidine gluconate (CHG) that significantly reduces the risk of a costly and personally damaging avoidable healthcare-associated infection.

RESEARCH STUDIES

Preventing surgical-site infections in nasal carriers of *Staphylococcus aureus*.

Bode, L. G. et al (2010).
The New England journal of medicine 362(1): 9-17.

In a large, often-cited randomised placebo-controlled multicenter trial of targeted decolonisation of *S. aureus* carriers in the Netherlands the application of mupirocin nasal ointment twice daily and daily CHG body washing for a total of 5 days reduced the incidence of *S. aureus* SSI by 58% and even by 79% for deep SSI in nasal *S. aureus* carriers identified preoperatively with polymerase chain reaction-based testing.

Prevention of Surgical Site Infections: Decontamination With Mupirocin Based on Preoperative Screening for *Staphylococcus aureus* Carriers or Universal Decontamination?

Hetem, D. et al (2015). Clin Infect Dis.

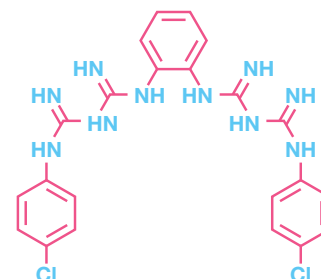
Perioperative decolonisation of *Staphylococcus aureus* nasal carriers with mupirocin together with CHG body washing reduces the incidence of *S. aureus* surgical site infection. A targeted strategy, applied in *S. aureus* carriers only, is costly, and implementation may reduce effectiveness. Universal decolonisation is more cost-effective but increases exposure of non-carriers to mupirocin and the risk of resistance to mupirocin in staphylococci. High-level mupirocin resistance in *S. aureus* can emerge through horizontal gene transfer originating from coagulase-negative staphylococci (CoNS) and through clonal transmission. Compared with a targeted strategy, universal decolonisation seems associated with an equally low risk of mupirocin resistance in *S. aureus*.

Effect of a preoperative decontamination protocol on surgical site infections in patients undergoing elective orthopedic surgery with hardware implantation.

Bebko, S. et al (2015). JAMA Surg 150(5): 390-395.

This study demonstrated that preoperative MRSA decontamination with CHG washcloths and oral rinse and intranasal povidone-iodine decreased the SSI rate by more than 50% among patients undergoing elective orthopaedic surgery with hardware implantation. Universal decontamination using this low-cost protocol may be considered as an additional prevention strategy for SSIs in patients undergoing orthopaedic surgery with hardware implantation.

Chlorhexidine gluconate has been proven to significantly reduce the risk of healthcare-associated infections.



Association of a bundled intervention with surgical site infections among patients undergoing cardiac, hip, or knee surgery.

Schweizer, M. L. et al (2015).
JAMA 313(21): 2162-2171.

This prospective, multi-centre study was designed to evaluate whether the implementation of an evidence-based bundle is associated with a lower risk of *S. aureus* SSIs in patients undergoing cardiac operations or hip or knee arthroplasty. Rates of SSIs were collected for a median of 39 months during the preintervention and a median of 21 months (range, 14-22) during the intervention period. Patients whose preoperative nares screens were positive for methicillin-resistant *S. aureus* (MRSA) or methicillin-susceptible *S. aureus* (MSSA) were asked to apply mupirocin intranasally twice daily for up to 5 days and to bathe daily with CHG for up to 5 days before their operations. Patients who were MRSA-negative and MSSA-negative bathed with CHG the night before and morning of their operations. After a 3-month phase-in period, bundle adherence was 83% (39% full adherence; 44% partial adherence). The complex *S. aureus* SSI rates decreased significantly among patients in the fully adherent group compared with the preintervention period (RR, 0.26 [95% CI, 0.10-0.69]), but rates did not decrease significantly in the partially adherent or nonadherent group (RR, 0.80 [95% CI, 0.49-1.31]).

Advance pre-operative CHG reduces the incidence of surgical site infections in knee arthroplasty.

Zywiell, M. G. et al (2011).
Int Orthop 35(7): 1001-1006.

This single site study evaluated the incidence of deep surgical site infections in knee arthroplasty patients who used an advance cutaneous disinfection protocol and who were compared to patients who had perioperative preparation only. Surgeons were asked to voluntarily provide patients with CHG-impregnated cloths and a printed sheet instructing their use the night before and morning of surgery. Overall, the advance pre-operative protocol was used in 136 of 912 total knee arthroplasties (15%). A lower incidence of surgical site infection was found in patients who used the advance cutaneous preparation protocol as compared to patients who used the in-hospital protocol alone. These findings were maintained when patients were stratified by surgical infection risk category. No surgical site infections occurred in the 136 patients who completed the protocol as compared to 21 infections in 711 procedures (3.0%) performed in patients who did not. Patient-directed skin disinfection using CHG-impregnated cloths the evening before, and the morning of, elective knee arthroplasty appeared to effectively reduce the incidence of surgical site infection when compared to patients who underwent in-hospital skin preparation only. This study demonstrates that compliance with the protocol is critical if an intervention is to be successful and that patient education and motivation should be part of a pre-operative prevention programme.

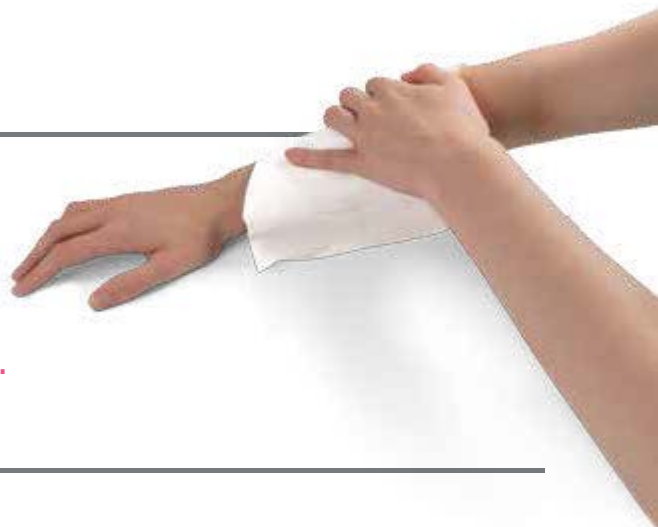
To bathe or not to bathe with CHG: is it time to take a stand for pre-admission bathing and cleansing?

Edmiston, C. E. et al (2015).
AORN J 101(5): 529-538.

These authors reviewed the body of evidence on CHG bathing preoperatively and provide a very useful and thoughtful critique of current guidelines. Their conclusion and recommendation is that pre-admission showering or cleaning with CHG should be implemented as a standard of practice for all patients undergoing elective surgery. Furthermore, they suggest that efforts to implement this practice within the ambulatory surgical environment would provide an additional benefit as more and more surgical procedures transition from inpatient facilities to the outpatient settings.

CHLORHEXIDINE BATHING

In 88 US hospitals 62.2% of bath basins were contaminated with commonly encountered hospital-acquired pathogens¹.



Safe solution

Clinell Chlorhexidine Bathing Range removes the risk of microorganism transmission associated with wash bowl contamination. This reduces the associated risk of lifting and carrying heavy bowls of solution and the risk of spills and potential falls^{1,2,3}.

Quick and easy to use

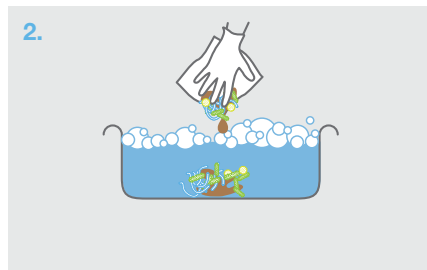
Wipes replace the need for cumbersome traditional patient cleansing methods which include preparing bowls, wash cloths, chlorhexidine solution and water. They require no towel drying which decreases waste, increases staff compliance and saves money.

Reduces transference

Improved patient cleanliness reduces the number of microorganisms available to transfer to healthcare workers, visitors and the environment.



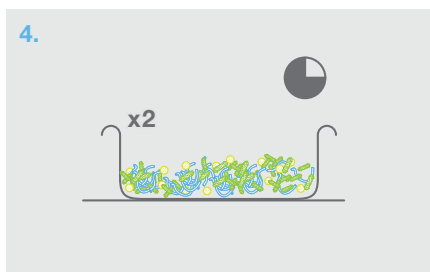
1. Wash basins can create spills which can lead to slips and accidents.



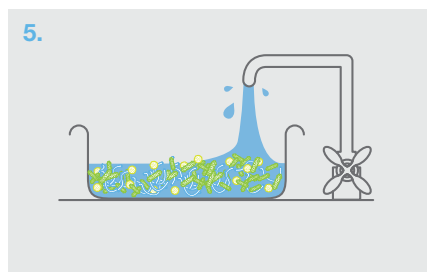
2. When a cloth is dipped back into the basin, organic matter and bacteria is introduced.



3. When the basin is emptied microorganism can be retained within the basin.



4. Microorganisms thrive in wet and warm conditions, multiplying exponentially over time.



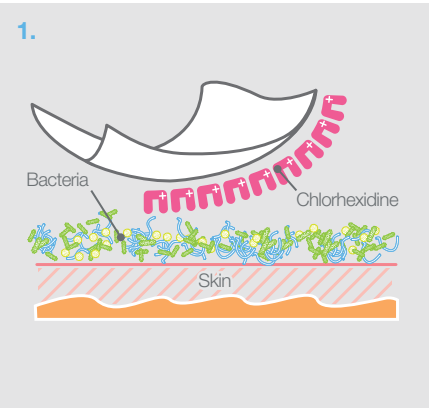
5. When the basin is refilled for the next patient, the microorganisms are viable within the water.



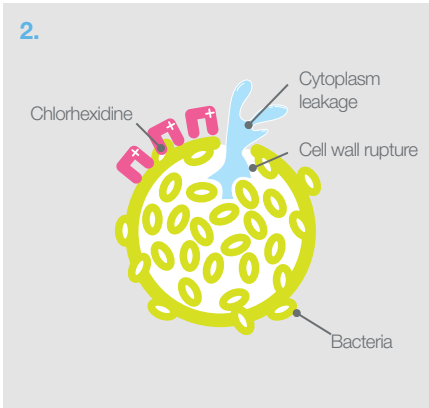
6. The next patient is then 'cleaned' with contaminated water.

Chlorhexidine gluconate wipes are proven to reduce the spread of pathogens in healthcare settings. Current evidence supports the usefulness of chlorhexidine wipes in an intensive care, hospital and pre-admission setting.

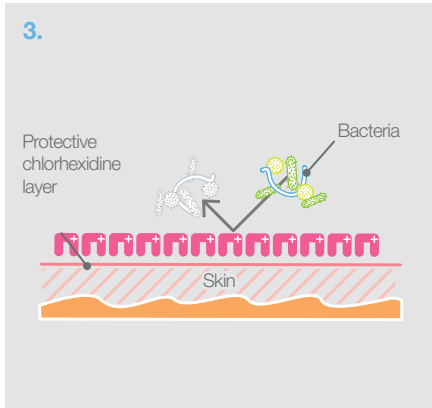
Why chlorhexidine gluconate is effective



The positively charged chlorhexidine molecule is attracted to the negatively charged cell wall of the bacteria.



The chlorhexidine binds to the cell wall causing it to rupture, leading to cytoplasm leakage, lysis and cell death.



Positively charged chlorhexidine molecules bind to the proteins in human tissues which consequently releases them slowly to provide a layer of prolonged protection.



The Clinell Warmer is suitable for CBB8, CBB10, CBBGL8, CSC1, CHGWC8, CHGWGL8 and CHGCS1.

Contains 2% chlorhexidine gluconate which kills harmful bacteria usually found on skin.

PRODUCT	UNIT OF ISSUE	CODE	NHSSC
Chlorhexidine Wash Cloths	Box of 12 packs (each containing 8 wipes)	CHGWC8	VJT406
Chlorhexidine Shampoo Cap	Single Unit	CHGSC1	VJT266

CHLORHEXIDINE BATHING RANGE

Large, disposable, antiseptic all over body cleansing cloths and shampoo cap provides the perfect solution for pre-admission or ITU bathing.



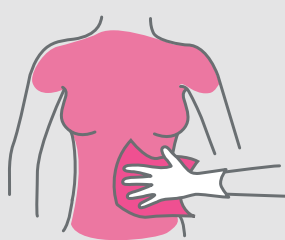
Directions for use

Use one cloth on each of the areas below, allow to air dry. Skin will feel sticky for a short while as the chlorhexidine binds to it. The pack can be heated in a Clinell Warmer, microwaved (750W) for 15 seconds or used un-warmed.

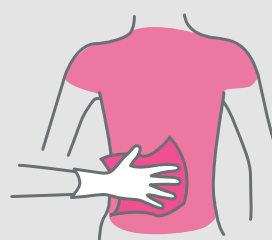
Have a bath or shower.



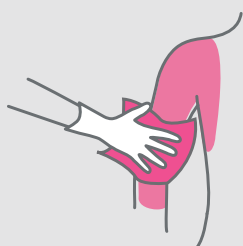
WIPE 1: Chest & neck



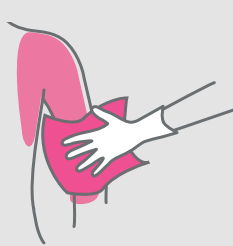
WIPE 2: Back



WIPE 3: Left arm & armpit



WIPE 4: Right arm & armpit



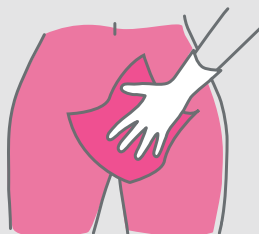
WIPE 5: Right leg



WIPE 6: Left leg



WIPE 7: Groin & perineum



WIPE 8: Buttocks



REFERENCES

1. Marchaim et al. Hospital bath basins are frequently contaminated with multidrug-resistant human pathogens. Am J Infect Control. 2012 Aug;40(6):562-4. doi: 10.1016/j.ajic.2011.07.014. Epub 2011 Dec 16.
2. Johnson, D. Lineweaver, Maze, L. Patients' Bath Basins as Potential Sources of Infection: A Multicenter Sampling Study. American Association of Critical Care nurses. 2012.
3. Ford, S. Clover, B. Antibiotic resistant bacteria risk from hospital sinks. The Department of Health. 2010.

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