

# clinell®

## Universal Range

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The Australian  
no.1 choice for  
one-step cleaning  
and disinfection



# Clinical findings

## Performance in practice

Clinell Universal Wipes' performance has been evidenced in peer-reviewed literature since their introduction in 2006.

**99.2%** ▼

reduction in **bacterial contamination**<sup>3</sup>

Ahmed et al. 2009.



**55%** ▼  
reduction  
in **MRSA**  
acquisitions<sup>1</sup>

Garvey et al. 2018.

**VRE contamination reduced by**

**97%**<sup>4</sup> ▼

Chang et al. 2017.



Saved  
“ **>5** ”  
minutes

per item decontaminated<sup>2</sup>

Shepherd et al. 2020.

“An effective  
alternative  
to standard  
cleaning and  
disinfection”<sup>5</sup>

Casini et al. 2018.

“  
**Clinically effective, environmentally friendly, and cost-saving** compared to disposable cuffs<sup>7</sup>

Zimmerman et al. 2018

**Improved** adherence to cleaning protocols<sup>8</sup>

Martin et al. 2018.

An **effective intervention** for reducing the overall microbiological burden<sup>6</sup>

Lobaz et al. 2012.

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# Environmental decontamination

## Contaminated surfaces act as reservoirs for pathogens<sup>9</sup>.

There's a cost to ineffective disinfection and healthcare-associated infections.

### Role of surfaces

The role of surfaces in the transmission of pathogenic microorganisms is well recognised<sup>10</sup>, with clinical evidence placing those causing healthcare-associated infections (HAI) in the healthcare environment<sup>11</sup>.

Lapses in infection control and environmental hygiene are recognised contributors to HAI rates<sup>12</sup>, and there is a growing body of knowledge which highlights how improved infection control practices can help break the chain of transmission<sup>13</sup>. Environmental decontamination is highlighted as a clinically effective method of managing methicillin-resistant *Staphylococcus aureus* (MRSA) in healthcare facilities<sup>14</sup>, according to guidelines from the Joint Healthcare Infection Society (HIS) and Infection Prevention Society (IPS).

As antimicrobial resistance soars in magnitude - with death rates as large as major diseases such as HIV and malaria, and potentially much larger<sup>15</sup> - ineffective disinfection is not an option.

### Ineffective disinfection

Traditional disinfectants such as chlorine present several user challenges<sup>16, 17</sup>:

- Require pre-cleaning
- Inactivated by organic matter
- Dilution errors
- Toxic fumes
- Adsorption: formulation-material interaction

### Understanding absorption

This process describes how molecules in the formulation interact with the material of the cloth or wipe. Once attached, the disinfectant agent cannot be applied to the surface and fail to effectively kill microorganisms<sup>18</sup>.

### Cost of infection

Estimates from recent Australian Point Prevalence Studies suggest that 9.9% of patients who enter a hospital acquire an infection that they didn't have when they arrived<sup>19</sup>.

Patients, healthcare workers and hospitals feel the weight of infections due to increasing costs caused by: increased length of stay, patient isolation, intensive care, outpatient and community care, increased screening and staff absence<sup>20</sup>.



**175,500**  
HAIs per year,  
resulting in

**7,500**  
deaths per year<sup>21</sup>

**\$37,539**  
additional cost

Each HAI results in a hospital stay that is 18.1 days longer, equalling \$37,539 of additional costs.<sup>22</sup>

# Selecting a wipe

**Pre-impregnated wipes are increasingly used in healthcare<sup>23</sup>.**

Choosing the right wipe is difficult and there are many factors to consider.

Peter Hoffman an author of the UK's Royal College of Nursing's publication 'Wipes it out: the selection and use of disinfectant wipes', outlined the criteria to effectively evaluate and select a wipe.



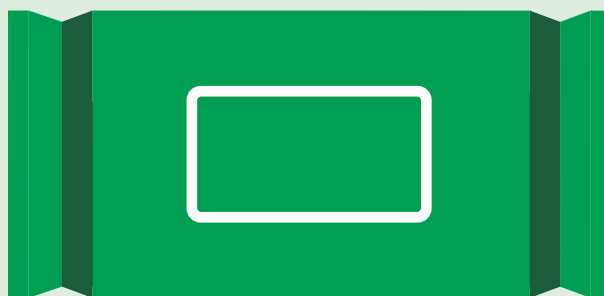
**Effective formulation**



**Clinically relevant microorganisms**



**Realistic contact times**



**Consistent quality**



**Published evidence**



**Surface compatibility**



**Training & implementation**

# Clinell Universal Wipes

## The clinically effective detergent-disinfectant wipe<sup>5</sup>.

Created by two UK NHS doctors, Clinell Universal Wipes were the first detergent-disinfectant used in the NHS and are now found in 9 out of 10 UK hospitals and 7 out of 10 Australian Hospitals.

### One step cleaning & disinfection

Patented detergent-disinfectant formulation: No pre-cleaning, no dilution errors, no unnecessary products and no wasted time<sup>2</sup>.

### Kills >99.99% of hospital pathogens

Log 5 kill rate against bacteria and >99.99% effective against bacteria, enveloped viruses and yeast.

### Proven to reduce infections

Evidenced to improve environmental decontamination compliance<sup>23</sup>, reduce microbial contamination<sup>7</sup>, and reduce HAI acquisitions<sup>1</sup>.

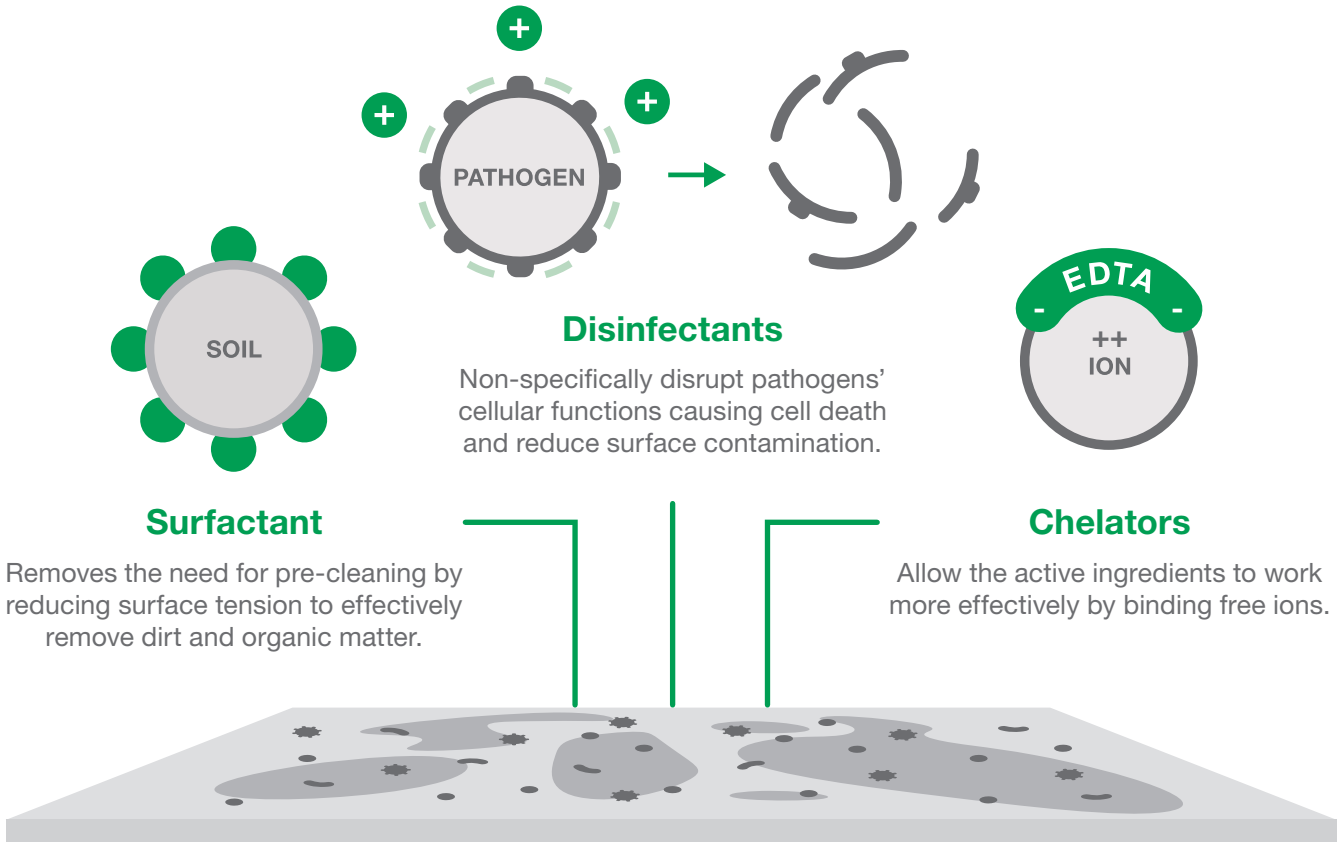
## Clinell Universal Wipes reduced MRSA by 55%<sup>1</sup>

University Hospital Birmingham, an NHS Foundation Trust that clinically services over a million patients per year introduced Clinell Universal Wipes; replacing a two wipe protocol: detergent and alcohol disinfectant.

MRSA acquisitions fell by 55% from 20.7 to 9.4 per 100,000 patient bed days. Plus, the process was faster, simpler and less resource intensive.

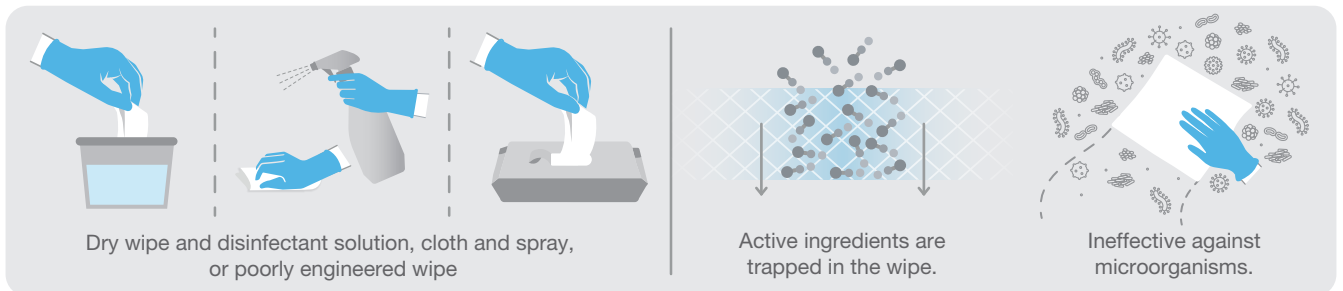


# Patented formulation

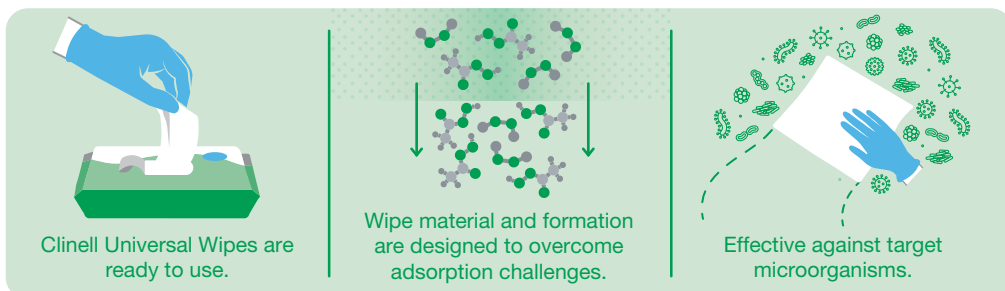


## Overcoming adsorption

Poorly engineered substrate



Clinell Universal Wipes



# Chlorine comparison

## Clinell Universal Wipes outperform chlorine<sup>4</sup>



Researchers compared two decontamination protocols for tackling contamination with VRE. Five rooms containing VRE patients were sampled before and after disinfection with either Clinell Universal Wipes or chlorine.

Chlorine failed to significantly reduce VRE contamination. By contrast, Clinell Universal Wipes removed VRE from 97% of sampled sites. Authors concluded Clinell Universal Wipes delivered improved disinfection compared with chlorine.



# Universal quality

## The gold standard of infection prevention.

From infection prevention specialists, GAMA Healthcare.

To deliver an effective product, the journey starts with raw materials and scientific theory. At GAMA Healthcare, we've been manufacturing and supplying infection prevention and control products to hospitals since 2006.

Using our depth of knowledge, we've built an end-to-end process which ensures that our customers receive the highest quality products.

### Dedicated research facilities

Our 14,000 ft<sup>2</sup> Research & Development laboratory in Yorkshire, UK is home to Clinell Universal's experts in formulation chemistry, material engineering and microbiology.

### Independent testing

We conduct our efficacy testing in accredited, independent laboratories complying with TGO 104 requirements. Plus, our products are frequently batch tested for microbiological assurance.

### Quality manufacturing

From lab to label, our products are sourced, manufactured and shipped by accredited partners who conform to our audited quality protocols, supporting our ISO 13485 status.

### Market-leading support

Our team are available to support and educate anyone using a GAMA product, across surface hygiene, skin disinfection, air purification and patient isolation.

## Microbiological safety controls

In order to protect patients, staff and hospitals, disinfectant wipes must be safe themselves.

From sourcing raw materials to pack construction, there are multiple opportunities for contamination in the production process. According to industry standards, wipes used in healthcare should comply to certain product regulations to validate their safety for use.

At GAMA Healthcare, we have standardised controls in our supply chain to minimise risks associated with poor manufacturing.



# Antimicrobial efficacy

## Designed to work, tested to prove it.

Clinell Universal Wipes are tested in dirty conditions and have realistic contact times.

Disinfectants should be tested against certain EN Standard Tests to qualify for use in healthcare<sup>23</sup>. Looking at testing alone, a great performance is indicated by:



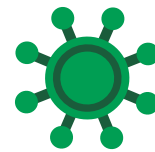
### Significant log reduction

Effectively reduces the number of viable microorganisms



### Realistic contact times

'Wet' time needed to reach a specific log reduction



### Real-world, dirty conditions

A harder test to pass compared to clean conditions, ensuring you do not need to pre-clean the surface

	Microorganism example	Contact time	EN test	Conditions
<b>Bacteria</b>	<i>Pseudomonas aeruginosa</i>	60 sec	EN13727, EN14561	Dirty
	<i>Enterococcus hirae</i>	60 sec	EN13727, EN14561	Dirty
	<i>Enterobacter cloacae</i> (CRE)	60 sec	EN14561	Dirty
	<i>Klebsiella pneumoniae</i> (CRE)	60 sec	EN13727, EN14561	Dirty
	<i>Acinetobacter baumannii</i>	60 sec	EN13727, EN14561	Dirty
	<i>Staphylococcus aureus</i> (MRSA)	60 sec	EN13727, EN14561	Dirty
	<i>Staphylococcus aureus</i>	60 sec	EN13727, EN14561	Dirty
<b>Viruses</b>	Norovirus (MNV surrogate)	60 sec	EN14476	Dirty
	Influenza (H1N1)	60 sec	EN14476 (modified)	Dirty
	Herpes Simplex Virus	60 sec	ASTM E1053-11	Dirty
	Coronavirus	30 sec	EN14476	Dirty
<b>Yeast</b>	<i>Candida auris</i>	10 sec	EN13624	Dirty

# Testing standards

## Reflecting real world performance in a laboratory.

Executed appropriately, standard laboratory tests help inform decisions.

Clinell Universal Wipes have been rigorously tested to evidence their antimicrobial capability. As well as meeting expectations, we challenge ourselves and our wipes to generate efficacy data that supports their true use in healthcare.

### We test wipe eluate

'Eluate' is the liquid that is squeezed from the product, rather than the solution that is loaded to the wipe. Testing the eluate gives a better indication of the product's true antimicrobial range. That's why we test wipe eluate, so we can be confident in the results our wipes deliver.

### We test latest EN standards

Our team of Formulation Chemists and Microbiologists are up to date with the most recent changes to EN Test methodologies. These tests are regularly reviewed and updated by their governing body and are key to demonstrating the efficacious performance of disinfectant wipes.

### We test clinically relevant pathogens

GAMA Healthcare's team of clinical experts are up to date with the most relevant clinical literature in the IPC world. By identifying emerging pathogens, we conduct testing and generate data that validates Clinell Universal Wipes' ability to kill causes of infection.

# Published evidence

## The evidence for selection and use of Clinell Universal Wipes.

Tested and proven in peer-reviewed literature to show true performance.

Testing alone may not give a true indication of real-world usage<sup>24</sup>, but peer-reviewed literature can be used to complete the picture.

Routine decontamination with Clinell Universal Wipes is proven to reduce environmental contamination. Resolving the costs involved with HAIs as well as reducing the number of products and time involved with standard disinfection practices.

### Economic evaluation of a €1.1 million CPE outbreak over 10 months<sup>25</sup>

Otter et al. Counting the cost of an outbreak of carbapenemase-producing *Enterobacteriaceae*: an economic evaluation from a hospital perspective. *Clin Microbiol Infect.* 2017 Mar;23(3):188-196.

Carbapenemase-producing *Enterobacteriaceae* (CPE) have emerged around the world through the 2000s. Building resistance, they have become a costly infection to treat as they are difficult to treat – even more so than other Gram-negative bacteria such as extended-spectrum  $\beta$ -lactamase-producing *Enterobacteriaceae*.

Extensive infection prevention efforts have been highlighted as a cost-effective method to control the threat of CPE, which in one outbreak across 5 hospitals in West London, England cost €1.1 million over a 10 month period.



# Evidence overview

Author	Overview	Benefit of using Clinell Universal Wipes
Garvey et al. <i>Antimicrob Resist Infect Control.</i> 2018.	Replacing two-step cleaning & disinfection using alcohol wipes with Clinell Universal Wipes at University Hospitals Birmingham.	MRSA acquisitions fell by 55% with additional operational benefits such as time saved and reduced stock storage requirements.
Shepherd et al. <i>J Infect Prev.</i> 2020.	Introducing Clinell Universal Wipes, Clinell Peracetic Acid Wipes and GAMA Healthcare training & support to NHS Lanarkshire.	Significant improvements were seen in time taken to clean and disinfect ( $P < 0.0001$ ) and in healthcare worker capability ( $P < 0.0001$ ) (reported training received); other improvements in the use of appropriate products.
Chang et al. <i>IPS.</i> 2017.	Comparison against chlorine. Five rooms of VRE patients were sampled before and after disinfection with either Clinell Universal Wipes or chlorine.	Chlorine did not significantly reduce VRE contamination. By contrast, Clinell Universal Wipes removed VRE from 97% of sampled sites. Authors concluded Clinell Universal Wipes delivered improved disinfection compared with chlorine.
Casini et al. <i>Int J Environ Res Public Health.</i> 2018.	Comparison with chlorine during a carbapenem-resistant <i>A. baumannii</i> (CRAB) outbreak.	Sampling of high-touch sites showed Clinell Universal Wipes were more effective at reducing Total Viable Count (TVC) of organisms from the environment. Authors concluded they represent an effective alternative to standard cleaning and disinfection.
Cheng et al. <i>J Hosp Infect.</i> 2018.	Decontamination of and sampling of heater-cooler units used during cardiopulmonary bypass – known potential reservoirs for <i>Mycobacterium chimaera</i> .	No contamination with <i>Mycobacterium chimaera</i> was observed on the outside surfaces, which were decontaminated with Clinell Universal Wipes.
Zimmerman et al. <i>J Infect Prev.</i> 2018.	Decontamination of non-disposable blood pressure cuffs.	97% reduction in contamination caused authors to conclude that using wipes to decontaminate non-disposable cuffs would be clinically effective, environmentally friendly and cost-saving compared with using disposable cuffs.
Ahmed et al. <i>Ann R Coll Surg Engl.</i> 2009.	Bacterial decontamination of tourniquets.	Bacterial contamination was reduced by 99.2%, authors concluded tourniquets should be disinfected after each use.
Lobaz et al. <i>Anaesthesia.</i> 2012.	Decontamination of staff badges and lanyards.	A mean 72% reduction in colony forming units (CFU) was seen. Authors concluded that Clinell Universal Wipes are an effective intervention against pathogens and in reducing overall microbiological burden.
Jenkins et al. <i>J Clin Audit.</i> 2012.	Environmental decontamination policy modification.	Available at the point of use, with supporting posters and audit findings: introducing Clinell Universal Wipes improved environmental decontamination compliance by 66%.
Martin et al. <i>Open Forum Infect Dis.</i> 2018.	Protocol comparison against chlorine on medical wards in acute hospitals.	Significantly more likely to remove fluorescent markers, Clinell Universal Wipes improved adherence to cleaning protocols and staff felt that the cleaning process was shortened.

# Surface safe

## Verified for compatibility with 100+ pieces of equipment.

Formulated for compatibility without compromising antimicrobial efficacy.

Clinell Universal Wipes benefit from a QUAT, quaternary ammonium compounds, based formula. QUATs are comparatively unreactive and have better surface compatibility than other disinfectants<sup>27</sup>.

### Corrosive chlorine

Reactions between chlorine-based disinfectants and organic matter produce, amongst other things, chloramines<sup>28</sup>. Chloramines are highly reactive amines which can be responsible for aminolysis of plastic surfaces; causing costly permanent damage and providing pathogens with a new reservoir to occupy.

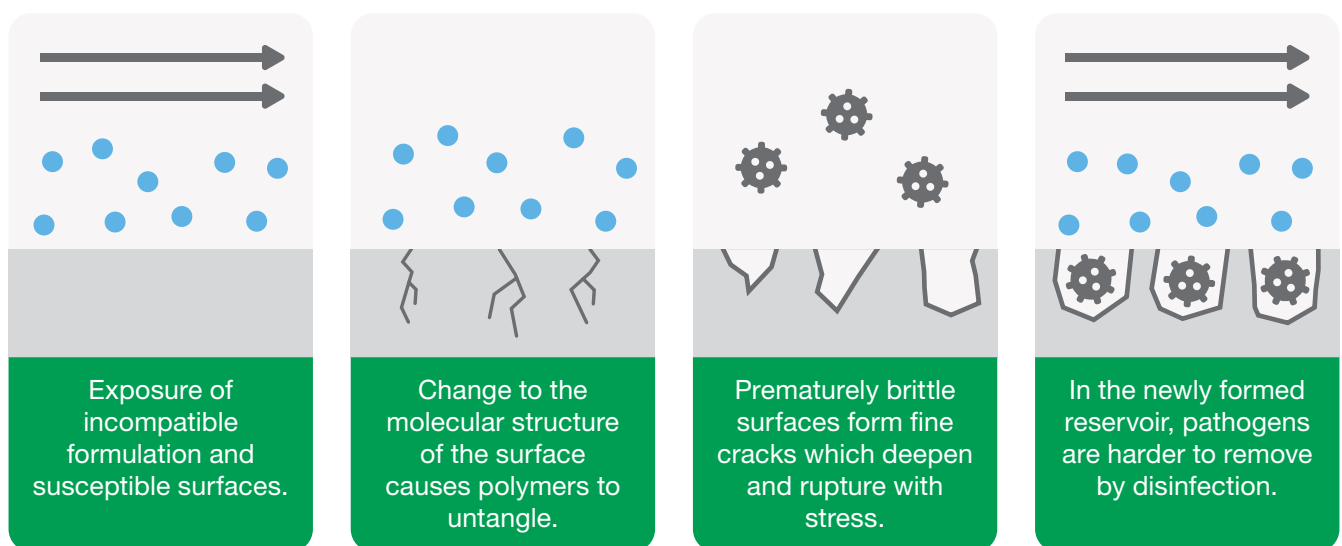
### Hidden actives

Some QUAT-based disinfectants may include hidden ingredients to supplement their antimicrobial efficacy. Third party testing of Clinell Universal Wipes shows that they do not produce harsh chemicals so do not cause environmental stress cracking.

### Extreme pH

High or low pH can contribute to the occurrence of environmental stress cracking. Clinell Universal Wipes' near neutral pH helps them overcome challenges associated with poor compatibility.

## Environmental stress cracking



# Removing reservoirs

## Effective decontamination for every surface.

### Bacterial contamination of tourniquets

Ahmed et al. A study of microbial colonisation of orthopaedic tourniquets. *Ann R Coll Surg Engl.* 2009;91(2):131-1343.

All tourniquets sampled in this study were found to be contaminated with bacteria. The authors hypothesised that this could be a source of cross-infection.

Disinfection using Clinell Universal Wipes reduced bacterial contamination by 99.2%.

### Colonisation of badges and lanyards

Lobaz et al. Pathogenic colonisation of hospital badges and neck lanyards in the theatre environment. *Anaesthesia.* 2012; 67(5): 562-5676.

A before-after study examining disinfection of badges and lanyards, of which >25% harboured HAI-causing pathogens. A mean 72% reduction in CFU was seen.

The authors concluded: Clinell Universal Wipes are an effective intervention for HAI-associated pathogens.



# Supporting implementation

## Adopting a new wipe requires a new protocol.

GAMA Healthcare provide free-of-charge face-to-face, virtual and online education, along with audit tools and dispensers to Clinell Universal Wipes users.

### Dispensers

Surfaces and equipment should be decontaminated regularly, especially between patient use, and using a dispenser makes sure Clinell Universal Wipes are placed where they're most needed.



**Promote best practice**



**Place at the point of use**



**See them, use them**



**Easy to clean**



**Store wipes correctly**

### Percentage improvement in environmental decontamination compliance<sup>8</sup>

Jenkins EK, Silman F, Gosden PE. Sharps Tray Cleaning after use - A completed audit cycle. *J Clin Audit*. 2012; 4(3).

A before-after audit evaluated the compliance with recommended cleaning of sharps trays.

#### Intervention

- Availability of Clinell Universal Wipes at point of care
- Audit findings shared with staff
- Decontamination awareness posters in clinical rooms

#### Result

Product availability, training and audit resulted in a completed cycle compliance with tray cleaning improved from 10% to 76% post-implementation.

**▲ 66%**

improvement in environmental decontamination compliance

### Chlorine vs. Clinell Universal Wipes: impact on compliance, protocol and time saving<sup>24</sup>

Martin et al. 1150. Cleaning High Touch Surfaces of Patients' Rooms: Make It Easier, and It Simply Gets Cleaner. *Open Forum Infect Dis*. 2018 Nov 26;5 (Suppl 1):S346.

A prospective intervention cross-over study to examine the impact of introducing Clinell Universal Wipes compared with chlorine solution on medical wards in an acute hospital.

#### Measure

Both disinfection methods were judged through the removal of fluorescent markers.

#### Result

Clinell Universal Wipes were significantly more likely to result in the removal of all fluorescent marks than the chlorine solution.

▲ Improved adherence to room cleaning protocols

▼ Less time taken to complete cleaning process

# Time saving

## The impact of right product and right training.

Published by Scotland's third largest health board<sup>2</sup>.

A clinical team in Lanarkshire, Scotland, evaluated the impact of an intervention to improve hospital cleaning and disinfection through the implementation of pre-impregnated wipes combined with enhanced training.

A survey of staff before and after the implementation identified significant benefits in terms of faster cleaning, and improved levels of training in staff doing the cleaning.

The intervention involved:

### Rationalising products for cleaning and disinfection

Clinell Universal Wipes and Clinell Peracetic Acid Wipes (formerly Clinell Sporocidal Wipes) replaces a protocol using detergent wipes and sodium hypochlorite.




### Delivering an environmental decontamination training course

Clinical Educators from GAMA Healthcare delivered a training course to all ward staff specifically related to the use of the wipes and how to clean key items of equipment.

### Providing supporting communication materials

Posters and instructions for use were provided by GAMA Healthcare to support good decision making around which wipe to use and how to use it correctly.

## Improvement in the time to decontaminate

	Before intervention	After intervention
 <b>Mattresses</b>	>10 minutes	6-10 minutes
 <b>Commodes</b>	6-10 minutes	1-5 minutes
 <b>Lockers</b>	6-10 minutes	1-5 minutes



# Frequently asked questions

## What makes them Clinell 'Universal' Wipes?

The wipes function as both disinfectant and detergent. They can also be used on all surfaces, ward-based equipment and non-invasive medical devices.

## Why are Clinell Universal Wipes better than chlorine?

- Clinell Universal Wipes offer several advantages over chlorine-based disinfectants.
- No pre-cleaning. Chlorine and alcohol is inactivated by organic matter, meaning chlorine-based and alcohol disinfectants require the surface to be cleaned before disinfecting.
- Time saving decontamination. Combining two manual processes (cleaning and disinfection) into one, Clinell Universal Wipes are proven to save time<sup>2</sup>.
- Fewer products required. Chlorine-based disinfectant solutions not only require products for pre-cleaning, but also accompanying cloths and buckets. These unnecessary products are not needed when using Clinell Universal Wipes.
- No toxic fumes. Chlorine can release toxic fumes which are hazardous to patients and staff.

## Are Clinell Universal Wipes wet?

Yes, Clinell Universal Wipes are pre-loaded with a patented formulation, which ensures a consistent effect with each wipe.

## Will Clinell Universal Wipes damage my surfaces?

Universal Wipes are safe to be used on all surfaces.

They will not damage rubbers, plastics or metals. Though alcohol-based wipes tend to damage materials after prolonged use, our patented, pH neutral formula ensures that this will not occur with Clinell Universal Wipes. Alongside surfaces, Universal Wipes can be used on all non-invasive medical devices.

If you are unsure about whether the wipes are suitable to use on a particular object or surface please contact us. Always follow medical equipment manufacturer's cleaning procedures and guidelines.

## When should I use Clinell Universal Wipes?

Routine decontamination of surfaces and shared equipment should be carried out after each use to prevent transmission.

Guidelines published in 2022 by the Healthcare Infection Society and Infection Prevention Society map out how to approach environmental decontamination of MRSA<sup>29</sup>.

## Where should I use Clinell Universal Wipes?

Surfaces, equipment and non-invasive medical devices.

Low-level instrument grade, Clinell Universal Wipes are classified as a medical device and are suitable for surface disinfection and cleaning of non-invasive medical devices.

## Should I use Clinell Universal Wipes instead of Clinell Sporicidal Wipes?

Clinell Universal Wipes kill most common causes of HAIs, making them perfect for routine and terminal decontamination. They are effective against microorganisms including Gram-negative and Gram-positive bacteria, enveloped viruses and emerging fungal pathogens such as *Candida auris*.

Clinell Sporicidal Wipes are designed to target specific high-risk and hard-to-kill microorganisms such as *Clostridioides difficile*. In particular, they are effective against bacterial spores.

Together, as part of a combined IPC strategy, Clinell Universal Wipes and Clinell Sporicidal Wipes provide unbeatable surface decontamination.

## Why should I use a dispenser?

Dispensers promote cleaning compliance.

Positioned at the point of use, staff are visually prompted to carry out proper decontamination as guided by IPC protocols. Mounted to the wall, Clinell Universal Wipes are always there when needed and also helps maintain consistent absorption of formulation throughout the wipes. They cannot be accidentally lost or left in other areas. This saves time for the user and increases compliance.

## Can they be used without gloves?

GAMA Healthcare's clinical recommendation is to wear gloves when using medical device-classified Clinell Universal Wipes.

# Order information

	Product	Wipe quantity	Product code
Wipes	Universal Wipes Our famous green wipes in convenient pack sizes	200	CW200AUS
		40	CW40AUS
	Universal Wipes Clip Pack 50 Clip to equipment for convenient access	50	CWCP50AUS
	Universal Wipes Pack 100 (Hospital Grade) Higher liquid loading for large surface areas	100	BCW100AUS
Tubs, buckets & refills	Universal Wipes Tub 100	100	CWTUB100AUS
	Universal Wipes Tub Refill 100	100	CWTUB100RAUS
	Universal Wipes Bucket 225	225	CWBUC225AUS
	Universal Wipes Bucket Refill 225	225	CWBUC225RAUS
Sprays	Universal Spray 500ml (Hospital Grade)	-	CDS500AUS
Accessories	Universal Wipes Dispenser	-	CWDAUS
	Indicator Notes Green	-	CCIN1000G
	Indicator Notes Red	-	CCIN1000R

To find out more, visit  
[www.gamahealthcare.com.au](http://www.gamahealthcare.com.au)

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Scan for more information

Use disinfectants safely.  
Always read the label and product information before use.

Always follow medical equipment manufacturer's cleaning procedures and guidelines.

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